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# Section 1

# General Information

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# General Information

## Introduction

### Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage




5030997

The vehicle identification number (VIN) plate (1) is the legal identifier of the vehicle. The VIN plate is located on the upper left corner of the instrument panel. The VIN number can be seen through the windshield from the outside of the vehicle:

**Vehicle Identification Number (VIN) System**

| Position | Definition | Character | Description |
|---|---|---|---|
| 1 | Country of Origin | 1 | United States |
| | | 2 | Canada |
| | | 3 | Mexico |
| 2 | Manufacturer | G | General Motors |
| 3 | Vehicle Brand/Type | T | GMC Truck |
| | | D | GMC Incomplete |
| 4 | GVWR/Brake System/Body Style | N | 6,001–7,000 lbs/Hydraulic/Standard Cab |
| | | P | 6,001–7,000 lbs/Hydraulic/Crew Cab |
| | | R | 6,001–7,000 lbs/Hydraulic/Extended Cab |
| | | U | 7,001–8,000 lbs/Hydraulic/Crew Cab |
| | | V | 7,001–8,000 lbs/Hydraulic/Extended Cab |

## Vehicle Identification Number (VIN) System (cont'd)

| Position | Definition | Character | Description |
|---|---|---|---|
| 5/6 | Line Chassis/Series | H/A | GMC Sierra 1500, Fleet/Base 2WD |
| | | H/B | GMC Sierra 1500, SLE 2WD |
| | | H/C | GMC Sierra 1500, Elevation 2WD |
| | | H/D | GMC Sierra 1500, SLT 2WD |
| | | H/F | GMC Sierra 1500, Denali 2WD |
| | | H/9 | GMC Sierra 2WD, (Non-US, Non-Canada) |
| | | U/A | GMC Sierra 1500, Fleet/Base 4WD |
| | | U/B | GMC Sierra 1500, SLE 4WD |
| | | U/C | GMC Sierra 1500, Elevation 4WD |
| | | U/D | GMC Sierra 1500, SLT 4WD |
| | | U/E | GMC Sierra 1500, AT4 4WD |
| | | U/F | GMC Sierra 1500, Denali 4WD |
| | | U/G | GMC Sierra 1500 Denali 4WD |
| | | U/H | GMC Sierra 1500 Denali Ultimate 4WD |
| | | U/J | GMC Sierra 1500 Elevation-L 4WD |
| | | U/9 | GMC Sierra 4WD, (Non-US, Non-Canada) |
| 7 | Restraint System | E | RPO AY0 – Active Manual Belts, Airbags – Driver and Passenger – Front (1st row), Front Seat Side (1st row), Roof Side (all seating rows) |
| 8 | Engine Type | D | RPO L84, Engine Gas, 8 Cylinder, 5.3L, DI, DFM*, Aluminum, GEN 5, VAR 2 |
| | | K | RPO L3B, Engine Gas, 4 Cylinder, L4, 2.7L, SIDI VVT, Turbo, DOHC, Aluminum |
| | | L | RPO L87, Engine Gas, 8 Cylinder, V8, 6.2L, DI AFM, Aluminum, GEN 5 |
| | | 8 | LZ0 - ENGINE DIESEL, 6CYL, 3.0L, CRI, L6, DOHC, TURBO, VGT, ALUM, CSS50V, VAR 2 |
| 9 | Check Digit | — | Check Digit |
| 10 | Model Year | P | 2023 |
| 11 | Plant Location | Z | Fort Wayne, Indiana, USA |
| | | 1 | Oshawa, Canada |
| | | G | Silao, Mexico |
| 12–17 | Plant Sequence Number | — | Plant Sequence Number |

**2.7L (L3B) Engine ID and VIN Derivative Location**

Engine Identification

**3.0L (LZ0) Diesel Engine ID and VIN Derivative Location**

Engine Identification

**5.3L (L84) or 6.2L (L87) Engine ID and VIN Derivative Location**

Engine Identification

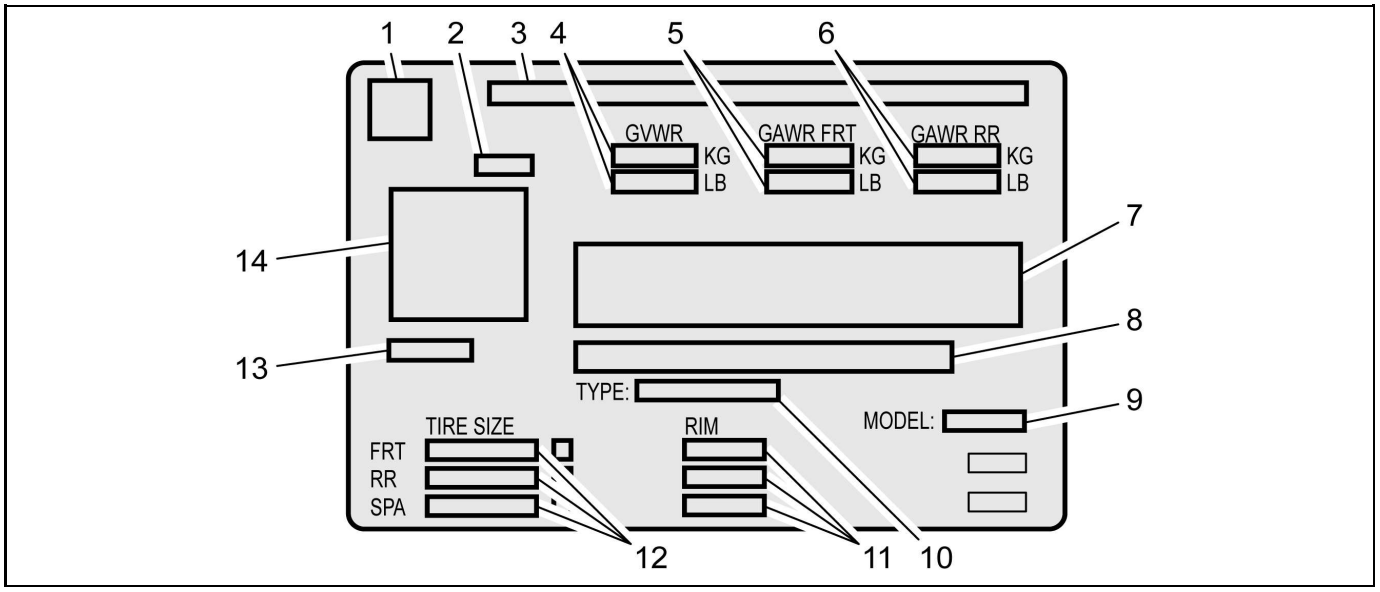
**10L80 (MHS, MHT, MI2, MQB, MQC) Transmission ID and VIN Derivative Location**

Transmission Identification Information

**8L90 (MQE) Transmission ID and VIN Derivative Location**

Transmission Identification Information

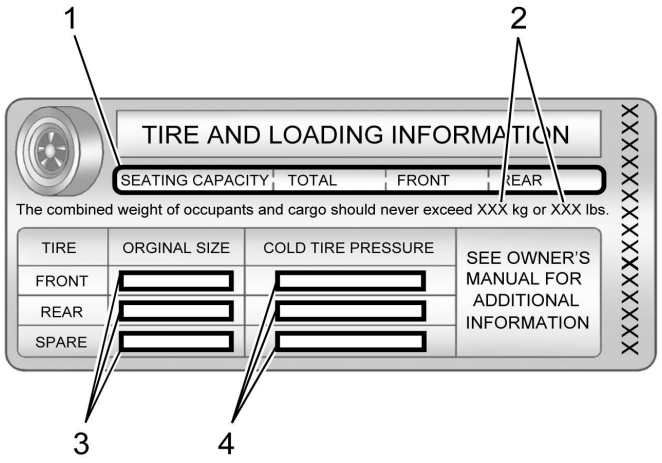
# Vehicle Certification, Tire Placard, and Anti-Theft Label




4992823

## Vehicle Certification Label

| Callout | Description |
|---|---|
| A vehicle-specific Certification label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments: | |
| 1 | Logo |
| 2 | Final Date of Manufacture (Month and Year MM/YY)<br>Date of manufacture is to reflect the date that the vehicle is counted as built. In those cases where a replacement label is needed, the replacement label should reflect the actual build date not the date of replacement. |
| 3 | Name of Manufacturer |
| 4 | Maximum Gross Vehicle Weight Rating (GVWR) |
| 5 | Maximum Gross Axle Weight Rating (GAWR) - Front |
| 6 | Maximum Gross Axle Weight Rating (GAWR) - Rear |
| 7 | Certification Statement |
| 8 | Vehicle Identification Number (VIN) |
| 9 | Engineering Model Number |
| 10 | Vehicle Class Type (Pass Car, etc.) |
| 11 | Original Equipment Rim Size |
| 12 | Original Equipment Tire Size |
| 13 | Paint Code |
| 14 | QR Code<br>Once the QR code is scanned, the information will appear in this order on your smartphone or laptop: VIN, Model Year, Model, Build Month, Year, Engineering Book, Vehicle Order Number, 3 Digit RPO Codes sorted alphanumerically and the Paint Code (same code appears the lower left of the QR code) |


1
2
TIRE AND LOADING INFORMATION
SEATING CAPACITY
TOTAL
FRONT
REAR
The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.
TIRE
ORGINAL SIZE
COLD TIRE PRESSURE
FRONT
REAR
SPARE
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
XXXX

## Anti-Theft Label

| Callout | Description |
|---|---|
| This legal identifier is in the front corner of the instrument panel, on the driver side of the vehicle. It can be seen through the windshield from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification and certificates of title and registration. | |
| 1 | Vehicle Identification Number (VIN) |

## RPO Code List

The following table provides the description of the Regular Production Option (RPO) codes that are available on the vehicle. The vehicle's RPO list is printed on the Service Parts Identification Label.

| RPO | Description |
|---|---|
| 00G | IDENTIFICATION-NOT EQUIPPED WITH HEATED STEERING WHEEL |
| 00H | IDENTIFICATION-EQUIPPED WITH HVAC MODULE WITH BRUSHED MOTOR |
| 00J | IDENTIFICATION-EQUIPPED WITH SENSING DIAGNOSTIC MODULE DESIGN 2 |
| 00M | IDENTIFICATION-NOT EQUIPPED W/ FRONT 4-WAY LUMBAR & MASSAGING SEAT |
| 00R | IDENTIFICATION-NOT EQUIPPED WITH REAR HEAT SEATS |
| 00V | IDENTIFICATION-NOT EQUIPPED WITH FRONT HEAT/VENT SEATS |
| 00Y | IDENTIFICATION-NOT EQUIPPED WITH REAR PARK ASSIST |
| 00Z | IDENTIFICATION-NOT EQUIPPED WITH FRONT AND REAR PARK ASSIST |
| 04O | IDENTIFICATION-NOT EQUIPPED WITH FRONT VENT SEATS |
| 1SA | PACKAGE-OPTION 01 |
| 3SA | PACKAGE-SLE OPTION 1 |
| 3SB | PACKAGE-SLE OPTION 2 |
| 3VL | PACKAGE-VL OPTION 3 |
| 4AA | INTERIOR TRIM-JET BLACK |
| 4B4 | INTERIOR TRIM-JET BLACK/CERAMIC WHITE |
| 4DK | INTERIOR TRIM-JET BLACK / VECCHIO BASE SAUVAGE PRINT |
| 4DL | INTERIOR TRIM-ATMOSPHERE / BROWNSTONE |
| 4F2 | INTERIOR TRIM-JET BLACK / KALAHARI |
| 4JJ | INTERIOR TRIM-GIDEON/VY DK ATMOSPHERE |
| 4SA | PACKAGE-SLT OPTION 1 |
| 4SB | PACKAGE-SLT OPTION 2 |
| 4SG | PACKAGE-AT4 OPTION 2 |
| 5A7 | WHEEL SPARE-NONE |
| 5JL | ACCESSORY-BRAKE UPGRADE PKG 1 - COMPLETE |
| 5JY | ACCESSORY-TONNEAU - RR COMPT - SOFT FOLDING |
| 5LE | ACCESSORY-GARAGE DOOR OPENER |
| 5SA | PACKAGE-DENALI OPTION 1 |
| 5SB | PACKAGE-DENALI OPTION 2 |
| 5VE | ACCESSORY-EXHAUST TIP - DESIGN 5 |
| 5VF | ACCESSORY-EXHAUST TIP - DESIGN 3 |
| 5VG | ACCESSORY-EXHAUST TIP - DESIGN 4 |
| 5VH | ACCESSORY-EXHAUST TIP - DESIGN 6 |
| 5VI | ACCESSORY-TIE DOWN RINGS - CARGO AREA |
| 5W4 | SALES PACKAGE-SPECIAL SERVICE, MUNICIPAL |
| 5W7 | ACCESSORY-AIR FILTER - PERFORMANCE |
| 63G | ACCESSORY-TAILGATE ASSIST LIGHTING |
| 65C | LABEL, WARNING-CALIFORNIA, PROP 65 COMPLIANT |
| 6K5 | SALES PACKAGE-CONVENIENCE II |
| 9J4 | BUMPER RR-(NONE) |
| 9L3 | TIRE SPARE-NONE |
| 9L7 | EQUIPMENT-ACSRY WRG JUNC BLK |
| A2S | ADJUSTER DRIVER SEAT-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT |
| A2X | ADJUSTER DRIVER SEAT-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT |
| A45 | MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION |
| A48 | WINDOW RR-FULL WIDTH, SLIDING, POWER |
| A50 | SEAT-FRT BKT |
| A60 | LOCK CONTROL RR CMPT-LID, TAILGATE, KEY ACTIVATED |
| A68 | SEAT RR-SPLIT, FOLDING |
| A7E | ADJUSTER PASS ST-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT |
| A7K | ADJUSTER PASS ST-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT |
| AAK | ACCESSORY-FLOOR LINER - CONTOURED - ALT DESIGN 1 |
| AAO | ACCESSORY-FLOOR LINER - CONTOURED - ALT DESIGN 2 |
| AED | WINDOW REG PASS DR-POWER OPERATED,EXPRESS DOWN |

| RPO | Description |
|---|---|
| AEF | WINDOW REG PASS DR-POWER OPERATED, EXPRESS UP/DOWN |
| AEQ | WINDOW REG REAR DR-POWER OPERATED, EXPRESS DOWN |
| AF6 | CONTROL-SEAT, MASSAGE, DRIVER |
| AHE | BOLSTER DRVR-SEAT, POWER |
| AHH | BOLSTER PASS-SEAT, POWER |
| AKE | CONTROL-SEAT, MASSAGE, PASSENGER |
| AKO | WINDOW TYPE-PRIVACY |
| AKP | WINDOW TYPE-SOLAR ABSORBING |
| AL0 | SENSOR INDICATOR-INFLATABLE RESTRAINT, FRT PASS/CHILD PRESENCE DETECTOR |
| AQQ | LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE (MY 09 AND FUTURE) |
| ASV | EQUIPMENT-SENSOR AIR MOISTURE & W/S TEMP |
| AU3 | LOCK CONTROL-SIDE DR, ELEC |
| AVI | RESTRAINT PROVISIONS-ADJUSTABLE GUIDE LOOP |
| AVJ | LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, FRONT DOORS |
| AVK | LUMBAR DRIVER-SEAT, POWER, 4 WAY |
| AVU | LUMBAR PASSENGER-SEAT, POWER, 4-WAY |
| AXG | WINDOW REG DRVR DR-POWER OPERATED, EXPRESS UP/DOWN |
| AXK | VEHICLE TYPE-TRUCK |
| AY0 | RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT, SEAT SIDE, ROOF SIDE |
| AZ3 | SEAT-FRT SPLIT, DRIVER, PASS, FULL FEATURE CENTER |
| B1J | LINER-RR WHEELHOUSE |
| B26 | SALES PACKAGE-SAFETY PACKAGE VAR. 1 |
| B30 | COVERING FLOOR-CARPET |
| B32 | COVERING FRT-FLOOR MATS, AUX |
| B33 | COVERING REAR-FLOOR MATS, AUX |
| B34 | COVERING FRT-FLOOR MATS, CARPETED INSERT |
| B35 | COVERING REAR-FLOOR MATS, CARPETED INSERT |
| B59 | SALES PACKAGE-FUNCTIONAL PACKAGE |
| BAQ | SALES PACKAGE-STYLE VAR 1 |
| BCY | IDENTIFICATION-EFFECTIVE POINT CONTROL, 2023 M.Y. |
| BG9 | COVERING FLOOR-RUBBER |
| BKE | COVERING REAR-FLOOR MATS, FLOOR LINER CARPET INSERT |
| BKF | COVERING FRT-FLOOR MATS, FLOOR LINER CARPET INSERT |

| RPO | Description |
|---|---|
| BN2 | SALES PACKAGE-SAFETY PACKAGE VAR. 3 |
| BRS | STEPS, RUNNINGBOARD-SIDE, RETRACTABLE, POWER, BRIGHT |
| BTM | SWITCH-START, KEYLESS |
| BTV | REMOTE START-VEHICLE |
| BVT | STEPS, RUNNINGBOARD-SIDE, CHROME |
| BWN | STEPS-CORNER ASSIST, BUMPER |
| C32 | HEATER AIR SYSTEM-HEATING/ DEFROSTER SYSTEM, REINFORCED, ELECTRIC |
| C49 | DEFOGGER-RR WINDOW, ELECTRIC |
| C59 | VENT-AIR, CONSOLE, RR |
| C67 | HVAC SYSTEM-AIR CONDITIONER FRT, ELECTRONIC CONTROLS |
| CE1 | WIPER SYS WINDSHIELD-PULSE, MOISTURE SENSITIVE |
| CF5 | ROOF-SUN, GLASS, SLIDING, ELEC |
| CGN | LINER-PUBX, SPRAY ON |
| CJ2 | HVAC SYSTEM-AIR CONDITIONER FRT, AUTO TEMP CONT, AUX TEMP CONT |
| CTT | HITCH ASSIST-GUIDELINES |
| CWM | SALES PACKAGE-TECHNOLOGY |
| CXH | SALES PACKAGE-INTERIOR LEATHER PACKAGE |
| D07 | CONSOLE-FRT COMPT, FLOOR, CUSTOM |
| D31 | MIRROR I/S R/V-TILT |
| D72 | HANDLE O/S DOOR-BLACK |
| D75 | HANDLE O/S DOOR-BODY COLOR |
| DD8 | MIRROR I/S R/V-LT SENSITIVE |
| DEN | MIRROR O/S-LH & RH, MANUAL, MANUAL FOLD, FLAT/DRVR, CNVX/PASS |
| DEZ | MIRROR O/S-LH & RH, ELEC REMOTE, POWER FOLD, HEAT, PERM LIGHT, LT SENSITIVE DRVR, FLAT/DRVR, CNVX/PASS |
| DH6 | MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM |
| DLF | MIRROR O/S-LH & RH, RC, ELEC, HEAT, MAN FOLD, FLAT/DRVR, CNVXPASS |
| DNS | EQUIPMENT-SUPPLIER INSTALLED |
| DP6 | MIRROR PROVISIONS-HOUSING, PAINTED |
| DP9 | MIRROR PROVISIONS-HOUSING, CHROME |
| DPO | MIRROR O/S-LH & RH, WIDE FIELD OF VIEW, MAN EXTEND, MAN FOLD, HEATED, REMOTE CONT, AUX CARGO LMP, AUX CLEAR LMP |
| DQS | MIRROR O/S-LH & RH, WIDE LOAD, VERT GLS,MAN EXT,PWR FLD,HTD,TURN SIG IND,R/CON,MEMORY,AUX CLEAR LP,AUX CARGO LP |
| DRZ | MIRROR I/S R/V-LT SENSITIVE, FULL VIDEO DISPLAY |

| RPO | Description |
|---|---|
| E20 | HANDLE O/S DOOR-CHROME |
| E35 | PICKUP BOX INNER-STEEL |
| E3Z | PICKUP BOX INNER-ALT MTL |
| E63 | BODY EQUIPMENT-FLEETSIDE PICK-UP BOX |
| EF7 | COUNTRY-UNITED STATES OF AMERICA (USA) |
| ENL | ENG CONTROL DISABLE-STOP/START, NON-LATCHING |
| EPH | TRANS RANGE SEL SYS-ELECTRONIC |
| F48 | CHASSIS DRIVE LINE-ALL WHEEL DRIVE (AWD)/FOUR WHEEL DRIVE(4WD), DRIVER SELECT |
| FE9 | CERTIFICATION-EMISSION, FEDERAL |
| FHS | VEHICLE FUEL-GASOLINE E85 |
| FHX | VEHICLE FUEL-DIESEL B20 |
| FJW | VEHICLE FUEL-GASOLINE E15 |
| FWI | PLANT CODE-FT WAYNE, IN, USA |
| G1W | PRIMARY COLOR-EXTERIOR, ABALONE WHITE TRICOAT(140X) |
| G6M | PRIMARY COLOR-EXTERIOR, RUSH MET-1 (618G) |
| G7C | PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X) |
| G80 | AXLE POSITRACTION-LIMITED SLIP |
| G93 | AXLE-FRT ELECTRONIC LOCKING DIFFERENTIAL, DRIVER SELECT |
| G94 | AXLE-RR ELECTRONIC LOCKING DIFFERENTIAL, DRIVER SELECT |
| GA0 | PRIMARY COLOR-EXTERIOR, SOME KINDA BLUE MET -1 (619D) |
| GA4 | TRIM PACKAGE-AT4 X |
| GAZ | PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624 |
| GBA | PRIMARY COLOR-EXTERIOR, BLACK (G) 8555 |
| GEY | HANDLING CHARGE-FROM FT WAYNE ASM, TO GROUND EFFECTS LTD., FT WAYNE, IN, BACK TO FT WAYNE ASM. |
| GFF | TRIM PACKAGE-BASE |
| GFG | TRIM PACKAGE-AT4 |
| GFI | TRIM PACKAGE-SLE |
| GFJ | TRIM PACKAGE-ELEVATION |
| GFS | TRIM PACKAGE-ELEVATION-L |
| GFU | TRIM PACKAGE-SLT |
| GFW | TRIM PACKAGE-DENALI |
| GFY | TRIM PACKAGE-DENALI ULTIMATE |
| GLT | PRIMARY COLOR-EXTERIOR, POW ZINGA MET-1 (327E) |
| GNT | PRIMARY COLOR-EXTERIOR, RADIANT RED TINT MET-1 (170H) |
| GT4 | AXLE REAR-3.73 RATIO |

| RPO | Description |
|---|---|
| GTL | PRIMARY COLOR-EXTERIOR, SAND DUNE MET-1 (661G) |
| GU5 | AXLE REAR-3.23 RATIO |
| GU6 | AXLE REAR-3.42 RATIO |
| GXD | PRIMARY COLOR-EXTERIOR, SHARKSKIN MET-1 (130H) |
| GXN | PRIMARY COLOR-EXTERIOR, RETROGRADE MET-1 (135H) |
| H0U | INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, JET BLACK |
| H0Y | INTERIOR TRIM CONFIG-LEATHER, LEVEL 1, JET BLACK |
| H1T | INTERIOR TRIM CONFIG-CLOTH, LEVEL 1, JET BLACK |
| H1Y | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK |
| H24 | INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, ATMOSPHERE/BROWNSTONE |
| H2G | INTERIOR TRIM CONFIG-VINYL, LEVEL 1, JET BLACK |
| H2X | INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, JET BLACK |
| H40 | INTERIOR TRIM CONFIG-LEATHER, LEVEL 10, JET BLACK/VECCHIO BASE SAUVAGE PRINT |
| H9J | INTERIOR TRIM CONFIG-LEATHER, LEVEL 9, JET BLACK/CERAMIC WHITE |
| HS1 | ALERT-SAFETY HAPTIC SEAT |
| HV5 | INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, GIDEON/VY DK ATMOSPHERE |
| HVC | INTERIOR TRIM CONFIG-LEATHER, LEVEL 1, GIDEON/VY DK ATMOSPHERE |
| HVD | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK/KALAHARI |
| HVE | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, GIDEON/VY DK ATMOSPHERE |
| IOK | RADIO-INFOTAINMENT SYSTEM - 3.X MID/ HIGH HMI,ENHANCED CONNECTIVITY 2.0, VOICE RECOGNITION |
| IOR | RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDLEVEL CONNECTIVITY 3.X |
| J23 | ENGINEERING YEAR-2023 |
| J61 | BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 17" |
| JBP | BRAKE LINING WEAR SY-LIFE SPAN PROGNOSTIC INDICATOR |
| JHD | BRK APL CTRL FEATURE-HILL DESCENT, GEAR HOLD |
| JL1 | BRK APL CTRL FEATURE-INTEGRATED TRAILER BRAKE |
| K05 | HEATER ENG-BLOCK |
| K34 | CRUISE CONTROL-AUTOMATIC, ELECTRONIC |
| K47 | AIR CLEANER-HIGH CAPACITY |
| K4C | CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE |

| RPO | Description |
|---|---|
| KA1 | HEATER SEAT FRT-DRVR & PASS |
| KA6 | HEATER SEAT-REAR |
| KC4 | COOLING SYSTEM-ENG OIL |
| KC5 | RECEPTACLE-ELECTRICAL, ACCESSORY |
| KC9 | RECEPTACLE PUBX-ELECTRICAL, 110 VOLT |
| KI3 | STEERING WHEEL HEAT-AUTOMATIC |
| KI4 | RECEPTACLE I/P-ELECTRICAL, 110 VOLT |
| KL9 | ENG CONTROL-STOP/START SYS, CONVENTIONAL AT, CONVENTIONAL MT OR BRAKE RELEASE LATE RESTART |
| KLF | ENG CONTROL-STOP/START SYS, DISABLE FUNCTION |
| KNP | COOLING SYSTEM-TRANS, HD |
| KQV | HEATER-SEAT, VENTED, FRT |
| KSG | CRUISE CONTROL-AUTOMATIC, ADAPTIVE, WITH STOP/GO |
| KW5 | GENERATOR-220 AMP |
| KW7 | GENERATOR-170 AMP |
| L3B | ENGINE-GAS, 4 CYL, L4, 2.7L, SIDI, VVT, TURBO, DOHC, ALUM |
| L84 | ENGINE-GAS, 8 CYL, 5.3L, V8, DI, DFM, ALUM, GEN 5 |
| L87 | ENGINE-GAS, 8 CYL, V8, 6.2L, DI, DFM, ALUM, GEN 5 |
| LZ0 | ENGINE-DIESEL, 6 CYL, 3.0L, CRI, L6, DOHC, TURBO, VGT, ALUM, CSS50V, VAR. 2 |
| MAH | MARKETING AREA-US, PUERTO RICO/USVI |
| MHS | TRANSMISSION-AUTO 10 SPD, 10L80, GRX, GEN 1, ATSS, ETRS, VAR 1 |
| MHT | TRANSMISSION-AUTO 10 SPD, 10L80, GRX, GEN 1, ATSS, VAR 1 |
| MI2 | TRANSMISSION-AUTO 10 SPD, 10L80, GRX, VAR 1, GEN 1 |
| MQB | TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, CPA, GEN 2 |
| MQC | TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, ETRS, CPA, GEN 2 |
| MQE | TRANSMISSION-AUTO 8 SPD, 8L90, ATSS, CPA, GEN 1 |
| MSL | PLANT CODE-SILAO, MEXICO |
| N06 | STEERING COLUMN LOCK-ELECTRICAL |
| N10 | EXHAUST SYSTEM-DUAL |
| N33 | STEERING COLUMN-TILT TYPE |
| N37 | STEERING COLUMN-TILT, TELESCOPING |
| N38 | STEERING COLUMN-TILT, TELESCOPING, POWER |
| N57 | STEERING WHEEL-SYNTHETIC, 4 SPOKE, THIN, ROUND |
| N5G | STEERING WHEEL-SYNTHETIC, 4 SPOKE, SPORT, ROUND |

| RPO | Description |
|---|---|
| NAA | ACCESSORY-ROCKER GUARD - TUBULAR |
| NB5 | EXHAUST SYSTEM-SINGLE |
| NE1 | CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION |
| NHT | PERFORMANCE PACKAGE-ENHANCED TOWING |
| NK5 | STEERING WHEEL-STANDARD |
| NP0 | TRANSFER CASE-ACTIVE, SINGLE SPEED,SWITCH ACTIVATED,ALUM |
| NP5 | STEERING WHEEL-LEATHER WRAPPED |
| NQH | TRANSFER CASE-ACTIVE, TWO SPEED, SWITCH ACTIVATED, ALUM |
| NTB | EMISSION SYSTEM-FEDERAL, TIER 3 |
| NUB | EMISSION SYSTEM-CALIFORNIA, ULEV70 |
| NUC | EMISSION SYSTEM-CALIFORNIA, ULEV50 |
| NUG | EMISSION SYSTEM-CALIFORNIA, SULEV30 |
| NZD | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 6 |
| NZH | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 8 |
| NZZ | SALES PACKAGE-SKID PLATE, "OFF ROAD" SPORT |
| PNF | ACCESSORY-PERFORMANCE AIR FILTER - REPLACEMENT |
| PPW | PHONE PROJECTION-PHONE PROJECTION WIRELESS |
| PTT | TRAILER TIRE PRESSUR-MANUAL LEARN |
| PXT | WHEEL-20 X 9.0, J, STEEL, DESIGN 1 |
| PZ8 | IMAGE ADJUSTMENT-HITCH VIEW |
| PZ9 | PLATE-SKID, FUEL TANK |
| PZG | PLATE-SKID FRT |
| PZL | PLATE-SKID RR DIFFERENTIAL |
| PZN | PLATE-SKID TRANSFER CASE |
| Q5U | WHEEL-17 X 8.0, J, ALUMINUM, DESIGN 2 |
| Q89 | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 19 |
| QAB | TIRE ALL-275/60R20 SL 115S BW AL2 |
| QAE | TIRE ALL-275/60R20 SL 115S BW AT |
| QAQ | TIRE SPARE-255/80R17 SL 115S BW SPR |
| QBN | TIRE ALL-255/70R17 SL 112S BW ALS VAR 1 |
| QBR | TIRE SPARE-255/70R17 SL 112S BW ALS VAR1 |
| QDF | TIRE ALL-265/65R18 SL 114T BW ALS VAR 1 |
| QDS | TIRE ALL-265/65R18 SL 114T WOL AT VAR 1 |
| QDV | TIRE ALL-265/70R17 SL 115S BW AT VAR 1 |
| QFL | TIRE ALL-LT275/70R18 C 115/112Q BW OOR, VAR1 |
| QFV | TIRE ALL-LT265/60R20 C 110/107S BW OOR, VAR 1 |

| RPO | Description |
|---|---|
| QK1 | GATE TYPE-PUBX END STANDARD |
| QK2 | GATE TYPE-PUBX END ENHANCED |
| QT2 | GATE FUNCTION-MANUAL |
| QT5 | GATE FUNCTION-MANUAL ASSIST POWER RELEASE |
| QT6 | GATE FUNCTION-POWER |
| R3O | TIRE ALL-LT275/65R18 C 113/110Q BW OOR, VAR1 |
| R7O | SEAT RR-SPLIT, FOLDING, BASE STORAGE |
| R88 | ACCESSORY-ILLUMINATED EMBLEM - EXTERIOR - DESIGN 2 |
| RBR | WHEEL-22 X 9.0, J, STEEL, DESIGN 1 |
| RC5 | TIRE ALL-LT265/70R17 C 112Q BW AT |
| RCP | ACCESSORY TIRE-TIRE ALL - LT275/65R18 C 113/110Q BW OOR VAR1 |
| RD3 | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 3 |
| RD6 | WHEEL-17 X 8.0, J, STEEL, DESIGN 2 |
| RDI | ACCESSORY-KEYLESS ENTRY |
| RGR | TIRE SPARE-LT275/65R18 C 113/110Q BW OOR |
| RHF | TIRE SPARE-LT275/70R18 C 115/112Q BW OOR |
| RHM | TIRE SPARE-LT265/70R17 C 112Q BW AT |
| RIA | ACCESSORY-FLOOR LINER - CONTOURED |
| RM7 | WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 1 |
| RN2 | ACCESSORY-ILLUMINATED EMBLEM - EXTERIOR - DESIGN 1 |
| RO2 | ACCESSORY-GRILLES/GRILLE INSERT - ALTERNATE DESIGN 4 |
| RQ8 | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 10 |
| RSR | OCCUPANT DETECT SYS-REAR SEAT, DOOR ACTIVATED |
| RT5 | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 1 |
| RTL | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 1 |
| RVG | ACCESSORY-ADAPTER - TRAILER HARNESS |
| RVP | ACCESSORY-ASSIST STEPS - REMOVABLE |
| RVQ | ACCESSORY-ASSIST STEPS - TUBULAR - OVAL - BLACK |
| RVS | ACCESSORY-ASSIST STEPS - TUBULAR - ROUND - BLACK |
| RW9 | ACCESSORY-BED STORAGE BOX - SIDE FULL LENGTH - COMPOSITE |
| RWL | CHASSIS DRIVE LINE-REAR WHEEL DRIVE (RWD) |
| RWR | ACCESSORY-CAMERA - REAR VISION |
| RWS | ACCESSORY-FLOOR MATS - CARPET |
| RXC | ACCESSORY-AIR, POLLUTANT, ODOR, FINE DUST, ALLERGEN |

| RPO | Description |
|---|---|
| RXH | ACCESSORY-CENTER CAP - WHEEL - DESIGN 1 |
| RXJ | ACCESSORY-CENTER CAP - WHEEL - DESIGN 2 |
| RXQ | ACCESSORY-CONVENIENCE NET - BED MOUNTED |
| RYT | ACCESSORY-FIRST AID KIT |
| S08 | ACCESSORY-HIGHWAY SAFETY KIT |
| S0M | ACCESSORY-ILLUMINATED DOOR SILLS |
| S0P | ACCESSORY-INSERT - FLOOR CONSOLE |
| S0T | ACCESSORY-INTERIOR TRIM KIT - ALTERNATE FINISH 1 |
| S0Y | ACCESSORY-LAMPS - CARGO AREA |
| S1H | ACCESSORY-OFF-ROAD RECOVERY KIT |
| S1O | ACCESSORY-CONTAINER - LOCKABLE STORAGE - INTERIOR |
| S1U | WHEEL SPARE-18 X 8.5, J, ALUMINUM, DESIGN 2 |
| S1V | ACCESSORY-HEADPHONES - RSE |
| S2B | WHEEL SPARE-17 X 7.0, J, ALUMINUM, DESIGN 1 |
| S3I | ACCESSORY-LAMPS - PERIMETER ILLUMINATION |
| S3U | ACCESSORY-LAMP KIT - FRONT FOG |
| S41 | ACCESSORY-LINER - WHEEL HOUSE |
| S47 | ACCESSORY-LUG NUTS |
| S4D | WHEEL SPARE-18 X 8.5, J, ALUMINUM, DESIGN 5 |
| S4X | ACCESSORY-MIRROR COVERS/SKULL CAPS - ALTERNATE FINISH - PAINTED |
| S4Z | ACCESSORY-MIRRORS - TRAILER EXTENSION |
| S54 | ACCESSORY-NAVIGATION MAP UPDATES |
| S6L | ACCESSORY-PROTECTOR - ROCKER PANEL |
| S6N | ACCESSORY-RECEIVER COVER - TRAILER HITCH |
| S6P | ACCESSORY-REMOTE START KIT |
| SAF | LOCK-SPARE TIRE, HOIST SHAFT |
| SAM | ACCESSORY-SKID PLATES |
| SAX | ACCESSORY-SPEAKER KIT - LEVEL 1 |
| SBY | ACCESSORY-SPORT BAR - BED MOUNTED - DESIGN 1 |
| SBZ | ACCESSORY-SPORT PEDAL KIT |
| SC1 | ACCESSORY-STABILIZER BAR KIT |
| SCZ | ACCESSORY-TAILGATE HANDLE - ALTERNATE FINISH - CHROME |
| SD5 | ACCESSORY-TIRE PRESSURE MONITOR |
| SDA | ACCESSORY-TOW HOOKS |
| SDE | ACCESSORY-TRAILER HITCH - REMOVABLE |
| SE5 | ACCESSORY-WHEEL - 18" - ALUMINUM - DESIGN 2 |

| RPO | Description |
|---|---|
| SEH | ACCESSORY-WHEEL - 20" - ALUMINUM - DESIGN 1 |
| SEM | ACCESSORY-WHEEL - 20" - ALUMINUM - DESIGN 5 |
| SES | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 1 |
| SEU | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 2 |
| SEV | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 3 |
| SEW | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 4 |
| SEZ | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 6 |
| SF0 | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 7 |
| SF1 | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 8 |
| SF6 | ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - PAINTED |
| SFE | ACCESSORY-WHEEL LOCKS |
| SFJ | ACCESSORY-WINDOW SHADES - REFLECTIVE |
| SFZ | ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1 |
| SG3 | ACCESSORY-SPRINGS - SPORT SUSPENSION |
| SGM | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 9 |
| SH0 | WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 7 |
| SHD | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 10 |
| SIE | ACCESSORY-PUBX TIERED STORAGE |
| SIL | ACCESSORY-RSE - PORTABLE MEDIA CONNECTIVITY PKG - W/INTEGRATED POWER |
| SKY | ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 1 |
| SKZ | ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 2 |
| SL7 | ACCESSORY-PUBX LADDER / UTILITY RACK STANCHIONS |
| SL8 | ACCESSORY-NAMEPLATE PACKAGE - EXTERIOR - DESIGN 1 |
| SMR | WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 16 |
| SMZ | ACCESSORY-OFF ROAD DRIVE SHAFT |
| SNR | SEAT RR-SPLIT, FOLDING, DELUXE STORAGE |
| SPY | ACCESSORY-LUG NUTS - ALT FINISH |
| SPZ | ACCESSORY-WHEEL LOCKS - ALT FINISH |
| SR3 | ACCESSORY-RSE - DUAL HEADREST DISPLAY W/WIRELESS CONNECTIVITY & DVD |
| SRL | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 13 |
| SRV | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 14 |
| SSI | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 15 |
| SSW | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 17 |
| SUR | ACCESSORY-TRAILER TIRE PRESSURE MONITOR |
| T3U | LAMP FRT FOG-FRT FOG |
| T4Z | SEAT BELT SAFETY SYS-SHIFTER INTERLOCK, GEN 1, NON-CUSTOMIZABLE |
| T8Z | SEAT BELT SAFETY SYS-SHIFTER INTERLOCK, GEN 3, INFOTAINMENT CUSTOMIZABLE |
| TDM | MODE DRIVER SETTINGS-TEEN DRIVER, INFOTAINMENT |
| TQ5 | HEADLAMP HIGH BEAM-AUTO CONTROL |
| TRG | VISION TRAILER-INSIDE VIEW, REAR VIEW |
| TRO | ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED |
| TT0 | ACCESSORY-TRAILERING HOOKUP ASSIST |
| TUF | ORNAMENTATION-EMBLEM, "TEXAS EDITION" |
| U12 | LAMP-EXTR, OSRV MIRROR, TASK |
| U2J | DIGITAL AUDIO SYSTEM-S-BAND - NONE |
| U2K | DIGITAL AUDIO SYSTEM-S-BAND |
| U73 | ANTENNA-FIXED, RADIO |
| U95 | SPEAKER SYSTEM-2, BASE |
| UBC | RECPT USB ARMREST-DUAL, CHARGE, DATA |
| UBD | RECPT USB FLR CNSL F-DUAL, CHARGE, DATA |
| UBI | RECPT USB FLR CNSL R-DUAL, CHARGE |
| UBJ | RECPT USB IP LWR-DUAL, CHARGE, DATA |
| UD5 | PARK ASSIST-FRONT AND REAR |
| UD7 | PARK ASSIST-REAR |
| UDC | DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (ONE COLOR GRAPHIC) |
| UDU | PROVISIONS-REAR CAMERA PREP |
| UDV | DISPLAY INSTRUMENT-DRIVER INFO ENHANCED, FULL CLUSTER (MULTI COLOR GRAPHIC) |
| UE0 | COMMUNICATION SYSTEM-VEHICLE - NONE |
| UE1 | COMMUNICATION SYSTEM-VEHICLE, ONSTAR |
| UE4 | SENSOR INDICATOR-FOLLOWING DISTANCE |
| UET | INDICATOR-SMART TRAILER INTEGRATION |

| RPO | Description |
|---|---|
| UEU | SENSOR INDICATOR-FORWARD COLLISION ALERT |
| UF2 | LAMP-CARGO |
| UFB | REAR CROSS TRAFFIC-ALERT, BRAKING |
| UG1 | OPENER-GARAGE DOOR, UNIVERSAL |
| UGA | HOOK-TOW, RED |
| UGN | COLL IMMINENT BRK-ALL SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST |
| UHL | VEHICLE-U-HAUL |
| UHN | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 3 |
| UHX | LANE ACTIVE SAFETY-KEEP ASSIST |
| UHY | COLL IMMINENT BRK-LOW SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST |
| UIR | INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 7", WVGA 800X480P |
| UJN | TIRE PRESS INDICATOR-AUTO LEARN |
| UK3 | CONTROL-STEERING WHEEL, ACCESSORY |
| UKC | SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED |
| UKJ | PED DETECTION FRT-BASIC, PEDESTRIANS |
| UKK | SENSOR INDICATOR-PEDESTRIAN DETECTION - REAR |
| UKL | LANE ACTIVE SAFETY-KEEP ASSIST, HANDS FREE LANE FOLLOWING(ENTIRE SPEED RANGE) |
| UKV | SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED, EXTENDED TRAILER VIEW |
| ULK | ACCESSORY-TOW HOOKS - RED |
| ULV | SALES PACKAGE-CHEVROLET BISON |
| UMN | SPEEDOMETER-INST, MILES & KILO, MILES ODOMETER |
| UQA | SPEAKER SYSTEM-PREMIUM AUDIO, BRANDED AMPLIFIER |
| UQF | SPEAKER SYSTEM-STANDARD AUDIO |
| UQS | SPEAKER SYSTEM-PREMIUM AUDIO, BRANDED SURROUND AMPLIFIER |
| URC | SWITCH-FLEXRIDE MODE SYSTEM |
| URD | INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT) ,13.4", 2400X960 |
| UTJ | THEFT DETERENT-ELECTRICAL, UNAUTHORIZED ENTRY |
| UV2 | VISION-360 VIEW, MONO, HD DIGITAL |
| UV6 | HEAD UP DISPLAY-WINDSHIELD |
| UVB | VISION-REAR VIEW, MONO, HD DIGITAL |
| UVN | VISION AUXILIARY-CARGO BED |
| V46 | BUMPER FRT-CHROME |
| V76 | HOOK-TOW |
| V8D | VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS |

| RPO | Description |
|---|---|
| VAV | ACCESSORY-FLOOR MATS - ALL WEATHER |
| VB5 | BUMPER FRT-COLOR |
| VBJ | ACCESSORY-UNDERSEAT STORAGE |
| VBN | ACCESSORY-PUBX CARPET |
| VBR | ACCESSORY-PUBX RUBBER MAT |
| VGC | PROTECTOR-FILM, PAINT ETCH PREVENTIVE |
| VH6 | BUMPER FRT-BLACK |
| VHU | BUMPER FRT-SPORT |
| VJG | BUMPER RR-BLACK |
| VJH | BUMPER RR-CHROME |
| VK3 | LICENSE PLATE FRONT-FRT MOUNTING PKG |
| VKU | ACCESSORY-MIRROR CAPS - CHROME |
| VKW | ACCESSORY-ORGANIZER - FRONT CONSOLE |
| VLQ | HOOK-TOW, CHROME |
| VMK | ACCESSORY-CARGO MANAGEMENT SYSTEM RAILS |
| VNI | ACCESSORY-REAR FASCIA APPLIQUE - ALTERNATIVE FINISH 1 |
| VOZ | ACCESSORY-TONNEAU - RR COMPT - HARD FOLDING - ALT DESIGN |
| VPB | ACCESSORY-TONNEAU - RR COMPT - VINYL W/ INTEGRAL CROSSBOW SUPPORTS |
| VPI | ACCESSORY-REAR FASCIA APPLIQUE - ALTERNATIVE FINISH 2 |
| VPS | BUMPER RR-SPORT |
| VQE | PROTECTOR-FILM, EXTERIOR FRT PANEL, VAR 2 |
| VQK | ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED |
| VQM | ACCESSORY-ASSIST STEPS - CHROME |
| VQO | ACCESSORY-ASSIST STEPS - BLACK |
| VQV | PROTECTOR-FILM, DOOR GUARDS, DOOR CUPS |
| VQY | ACCESSORY-TOW HOOKS - CHROME |
| VQZ | ACCESSORY-EXHAUST TIP - DESIGN 1 |
| VST | ACCESSORY-SILL PLATES - ALTERNATE DESIGN 1 |
| VSX | LABEL-TOWING |
| VT2 | ACCESSORY-ASSIST STEPS - ALTERNATE FINISH |
| VT5 | BUMPER RR-COLOR KEYED |
| VT7 | OWNERS MANUAL-ENGLISH LANGUAGE |
| VTA | ACCESSORY-EXHAUST TIP - DESIGN 2 |
| VTI | SHUTTERS-FRONT GRILLE, ACTIVE, UPR |
| VUK | ACCESSORY-TAILGATE LINER - PUBX |
| VV4 | COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY |

| RPO | Description |
|---|---|
| VW9 | ACCESSORY-CENTER CAP - WHEEL - DESIGN 3 |
| VWD | ACCESSORY-CENTER CAP - WHEEL - DESIGN 4 |
| VXH | ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - OVAL |
| VXJ | ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - ROUND |
| VXT | VEHICLE TYPE-INCOMPLETE |
| VXW | ACCESSORY-ASSIST STEPS - MOLDED |
| VYU | PROVISIONS-SNOW PLOW PREP |
| VZX | ACCESSORY-PUBX BEDLINER |
| W09 | ACCESSORY-TAILGATE GAP COVER |
| W2D | ACCESSORY-CARGO NET |
| WBC | ACCESSORY-EXHAUST UPGRADE |
| WBP | SALES PACKAGE-APPEARANCE |
| WLD | WINDOW CONTROL-REMOTE EXPRESS DOWN, ALL WINDOWS |
| WMI | SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR |
| WMX | VIN MODEL YEAR-2023 |
| WPC | SALES PACKAGE-COMFORT AND CONVENIENCE |
| X31 | APPEARANCE PACKAGE-GMC "X31 OFF ROAD" |
| XAH | ACCESSORY TIRE-TIRE ALL-P285/45R22 SL 110H BW AT -VAR 1 |
| XCE | TIRE ALL-275/50R22 SL 111T BW AL2 VAR 1 |
| XCK | TIRE ALL-265/65R18 SL 114T BW AT VAR1 |
| XCQ | TIRE SPARE-265/70R17 SL 115S BW SPR VAR1 |
| XD5 | ACCESSORY TIRE-TIRE ALL-275/50R22 SL 111T BW AL2 |
| XDF | ACCESSORY TIRE-TIRE ALL - 275/60R20 SL 115S BW AT |
| YD9 | LEAF SPRING-COMPOSITE MONO LEAF |
| YF5 | CERTIFICATION-EMISSION, CALIFORNIA |
| YK9 | IDENTIFICATION-NOT EQUIPPED WITH CYLINDER DEACTIVATION |
| Z45 | CHASSIS PACKAGE-CONTINUOUS DAMPING CONTROL |
| Z60 | CHASSIS PACKAGE-HIGH PERFORMANCE |
| Z71 | CHASSIS PACKAGE-"OFF ROAD" |
| Z7X | CHASSIS PACKAGE-"OFF ROAD" 2 INCH LIFT |
| Z82 | TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D. |
| Z85 | CHASSIS PACKAGE-INCREASED CAPACITY |
| Z88 | MARKET BRAND-GMC |
| ZL3 | SALES PACKAGE-CONVENIENCE |
| ZL6 | SALES PACKAGE-TRAILER INTEGRATION |
| ZLQ | SALES PACKAGE-LS FLEET |
| ZM9 | SALES PACKAGE-COMFORT & CONVENIENCE |
| ZRX | CHASSIS PACKAGE-HIGH PERFORMANCE LIFTED |
| ZW9 | BODY EQUIPMENT-BASE BODY OR CHASSIS |

# Section 2

# Body Systems

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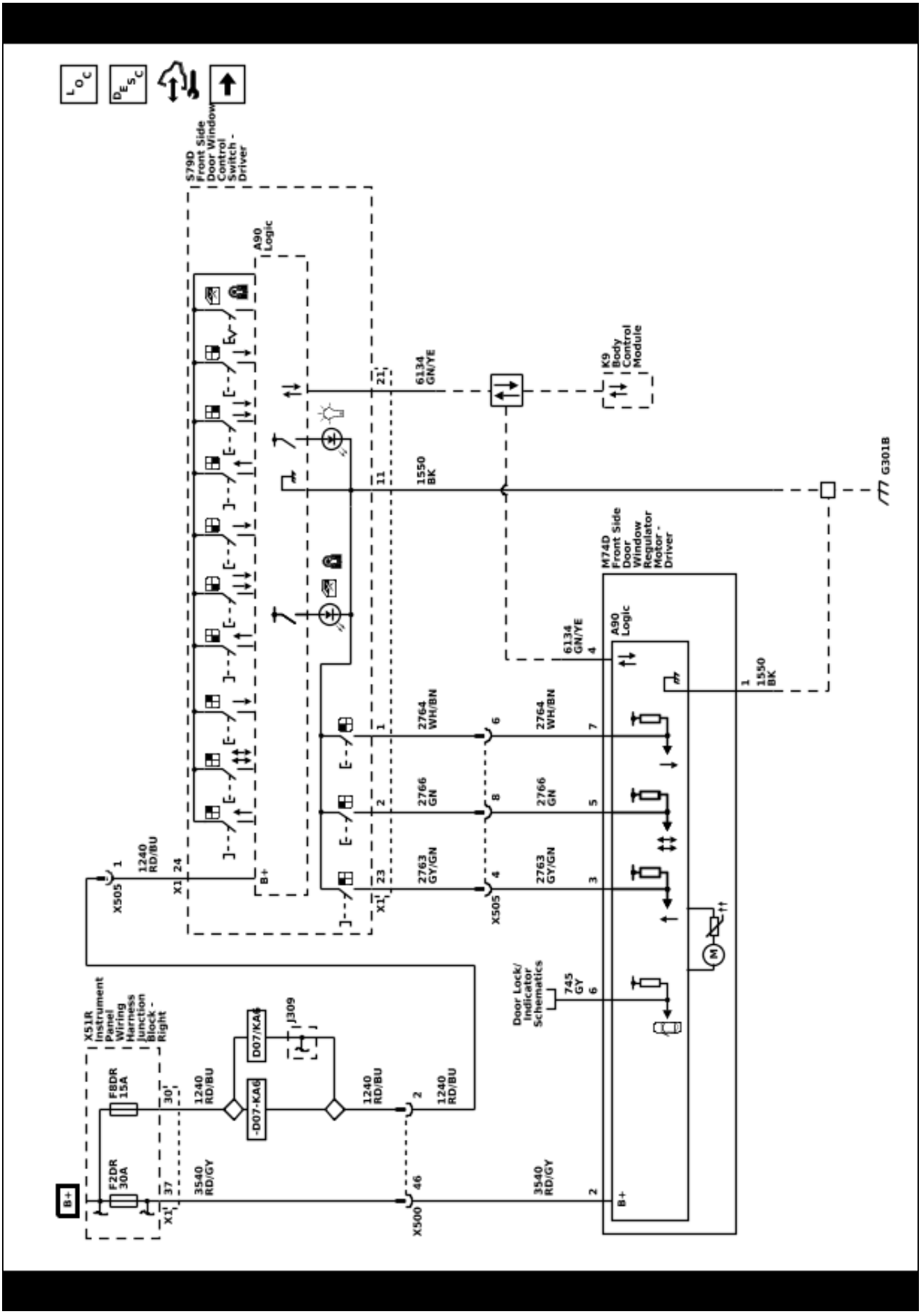
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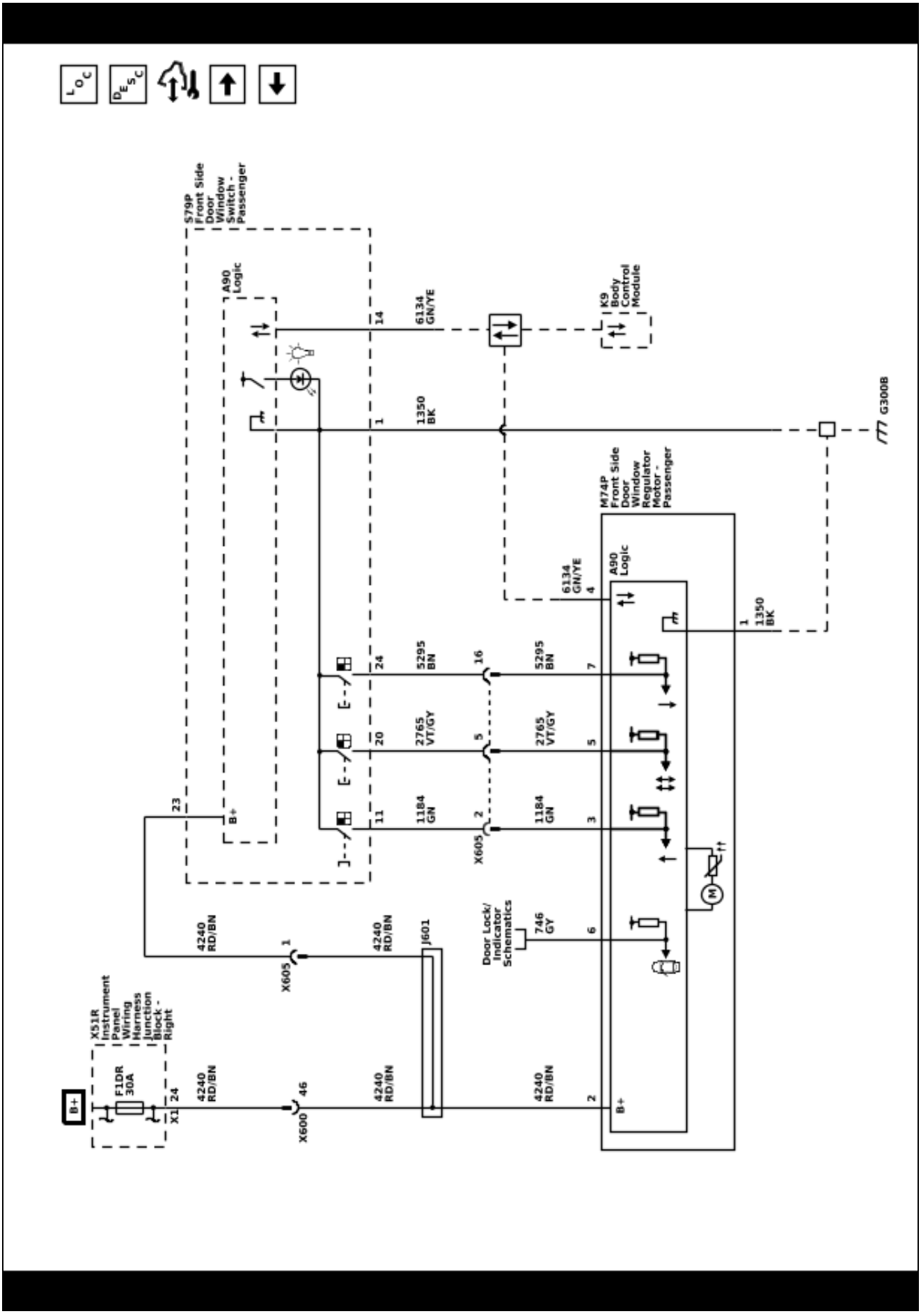
# Fixed and Moveable Windows

## Schematic and Routing Diagrams

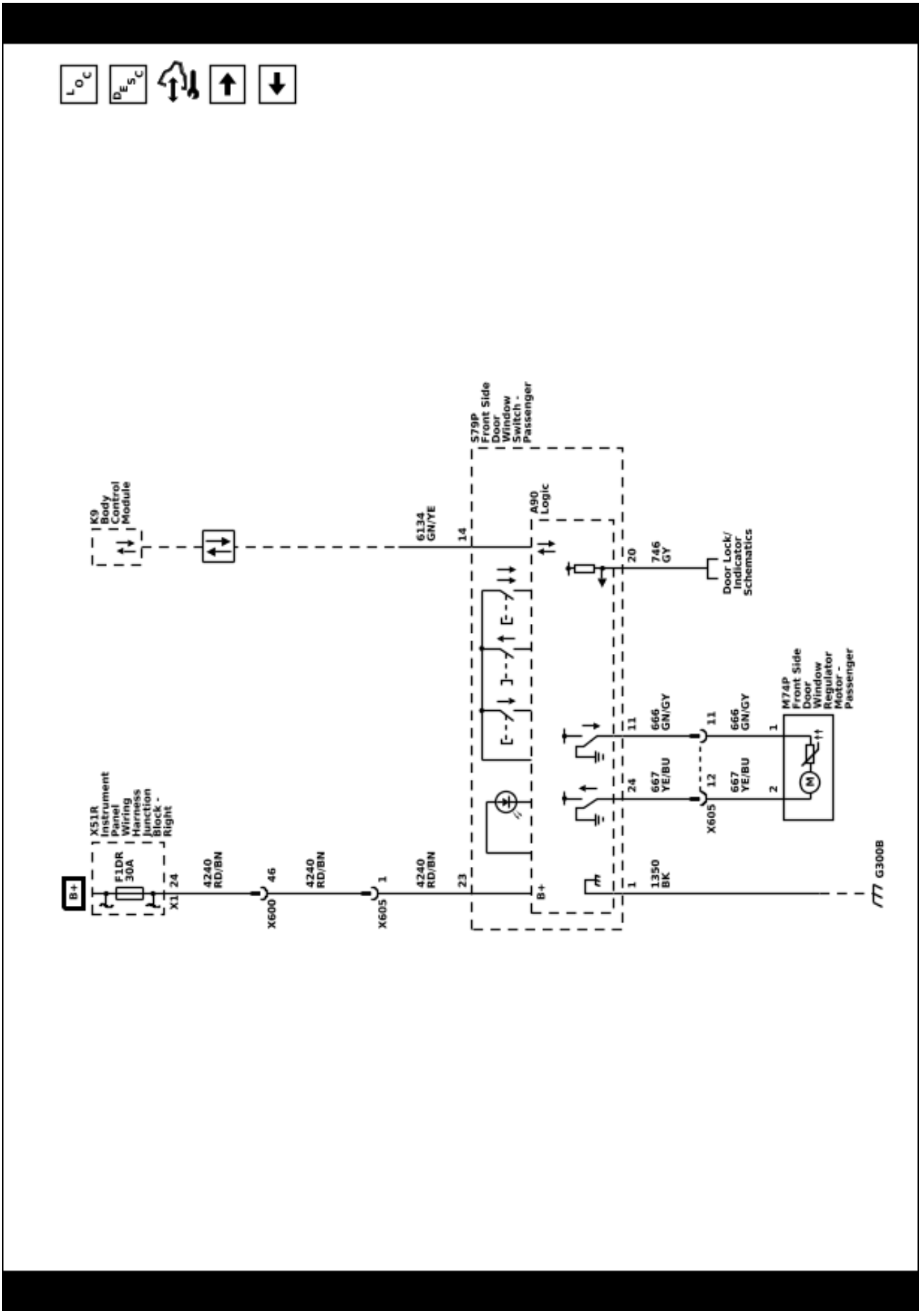
## Moveable Window Schematics (Driver Window (AXG))



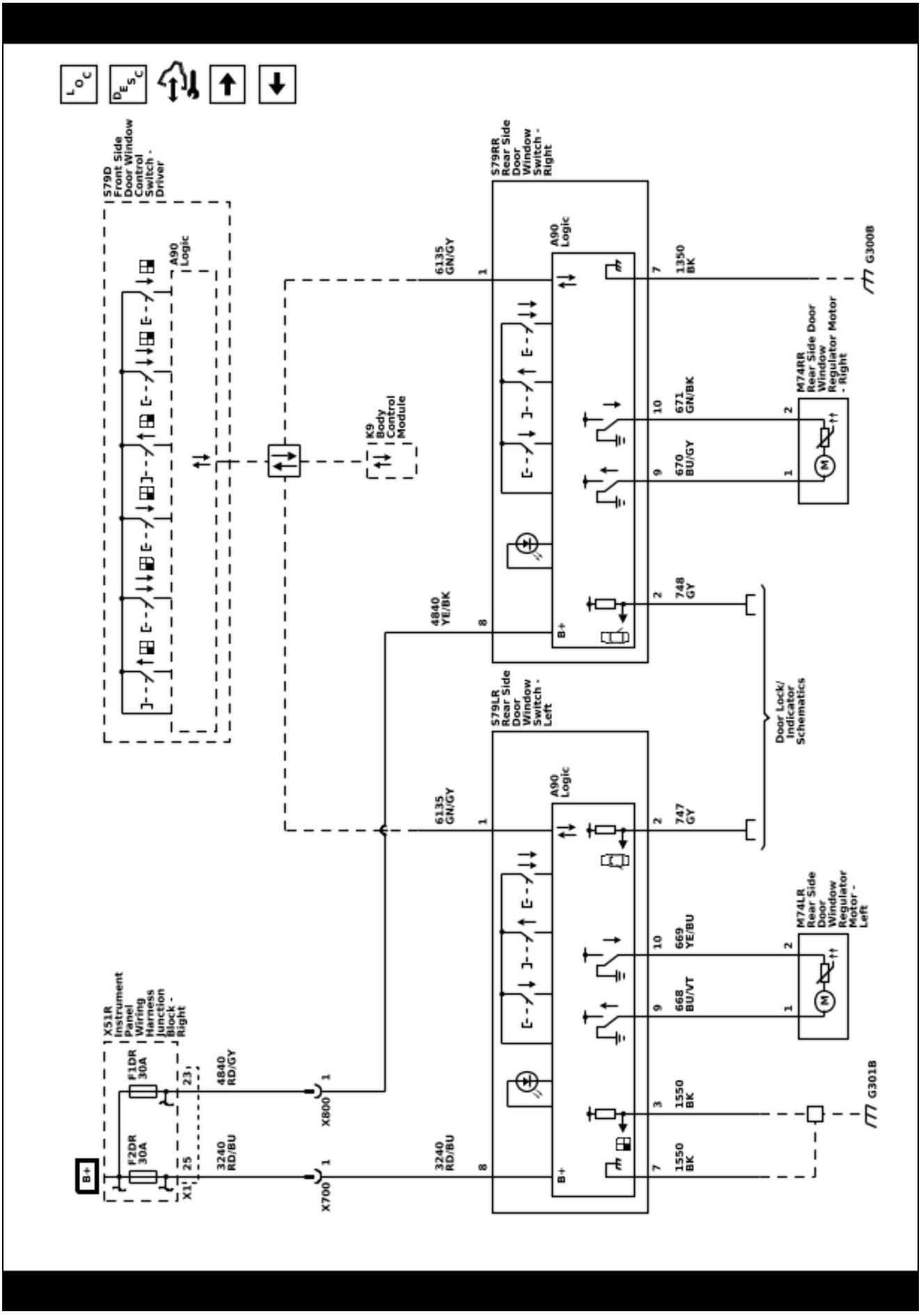
## Moveable Window Schematics (Passenger Window (AEF))



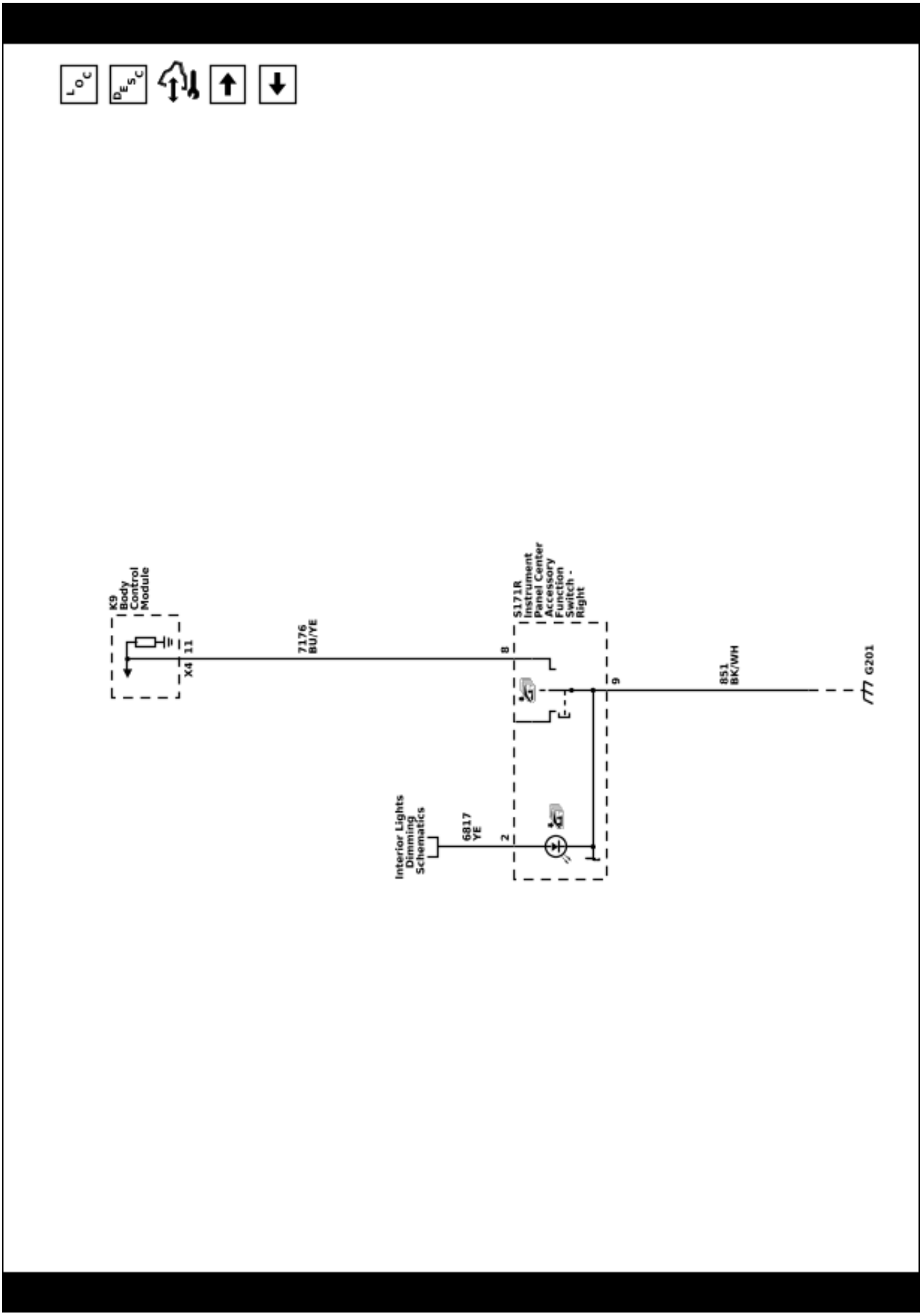
## Moveable Window Schematics (Passenger Window (AED))



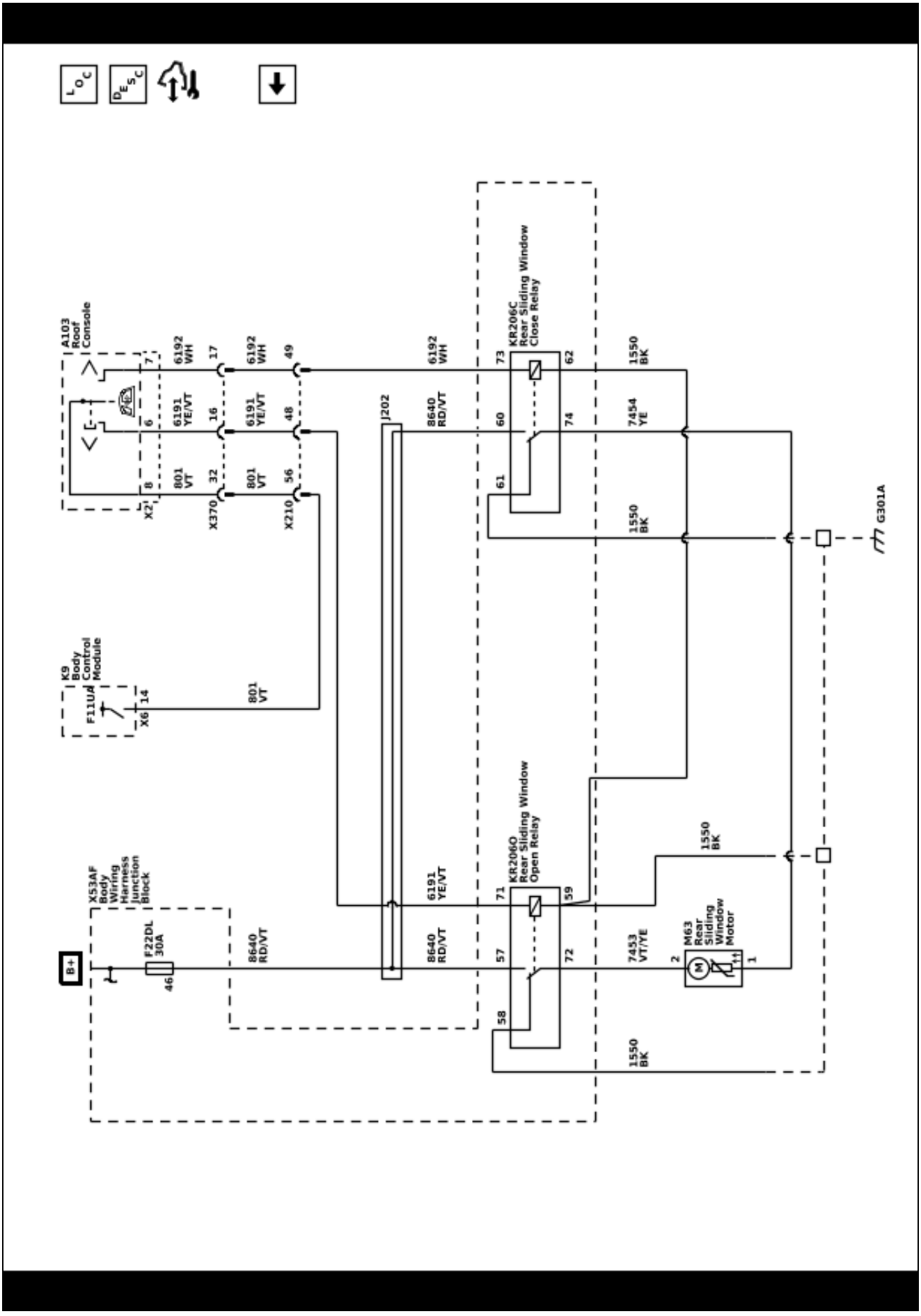
## Moveable Window Schematics (Rear Windows (AEQ))



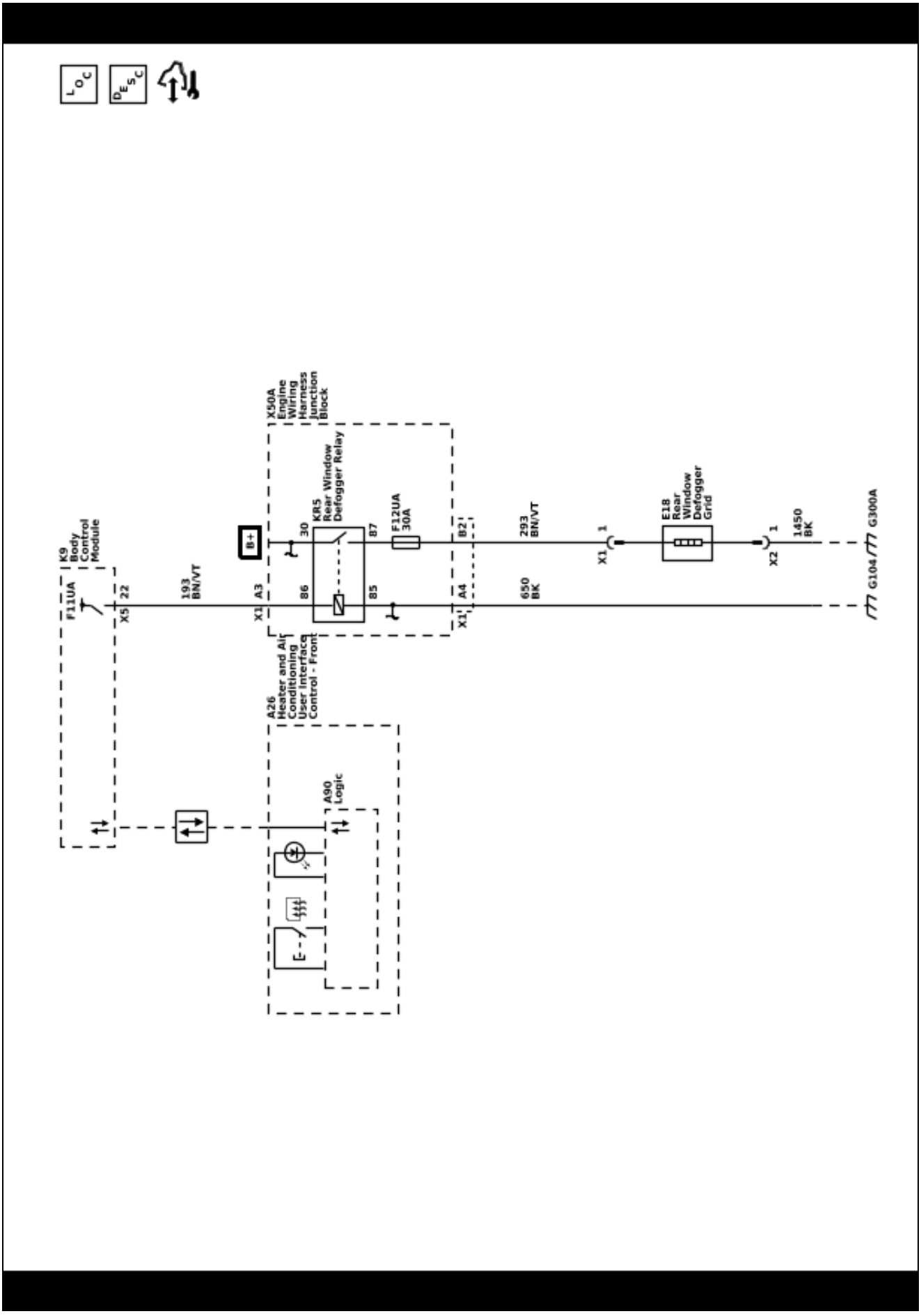
## Moveable Window Schematics (Global Window Express Down Switch (WLD))



## Moveable Window Schematics (Rear Sliding Window (A48))



## Defogger Schematics (Defogger)



# Description and Operation

## Power Windows Description and Operation

### Power Windows System Components

The power window system consists of the following components:

- Driver front side door window control switch
- Passenger front side door window control switch
- Left rear side door window switch
- Right rear side door window switch
- Window motors in each of the doors
- Body control module (BCM)

### Driver and Passenger Express Up and Express Down Power Window Motors

The driver and passenger doors contains a window motor is smart motor that will detect excessive resistance while performing the express up function and automatically reverse direction to prevent injury to any occupants that may become trapped between the closing window and the door frame. The automatic reverse safety feature can be overridden by pulling and holding the window switch.

The logic circuit within the window motor monitors the up, down and express signal circuits which are normally equal to B+ voltage. When a switch is used on the front side door window control switch, the contacts close causing a voltage drop within the appropriate signal circuit. The window motor will detect the voltage drop and will command the window to move in the direction requested.

The driver front side door window control switch communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger window, the driver will use the appropriate switch on the driver front side door window control switch. When this switch is used, a serial data message is sent to the BCM requesting the passenger window motor command, the BCM will then send a serial data message to the passenger window motor which will then move in the direction requested.

### Left Rear, Right Rear Express Down Window Motors

For the right rear and left rear doors, when their window switch is pressed in the down position, battery positive voltage is applied to their respective window motor control circuit and ground to the other window motor control circuit causing that window to open. When the individual window switch is pulled in the up position, voltage and ground is applied to the window motor in the opposite direction causing that window to close. The return path to ground is supplied through the inactive control circuit being normally grounded through the window switch.

Each rear side door window switch communicates to the BCM by a serial data circuit. When the driver wishes to control the left rear or right rear window, the driver will use the appropriate switch on the driver front side door window control switch. When this switch is used, a serial data message is sent to the BCM requesting a window motor command, the BCM will then send a serial data message to the appropriate rear side door window switch which will then command that window to move in the direction requested.

### Lockout Switch Feature

The driver front side door window control switch contains a window lockout switch, when the driver presses the window lockout switch, a serial data message is sent to the BCM which will send a disable command to the rear side door window switches, deactivating them. The rear windows will still function normally from the switches on the driver front side door window control switch.

## Rear Window Defogger Description and Operation

### Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- Body Control Module
- Front Heater and Air Conditioning User Interface Control
- Rear Body Wiring Harness Junction Block (Contains PCB Rear Defogger Relay
- Rear Defogger Grid
- 40A Fuse

### Rear Window Defogger Operation

The rear defog control system utilizes a single zone backlight design, driven with a single relay configuration. A switch for the customer to control the system is provided within the front heater and air conditioning user interface control. Also included in the front heater and air conditioning user interface control is an indicator to inform the customer with the current state of the system. The system is only operational when engine is running or during remote start.

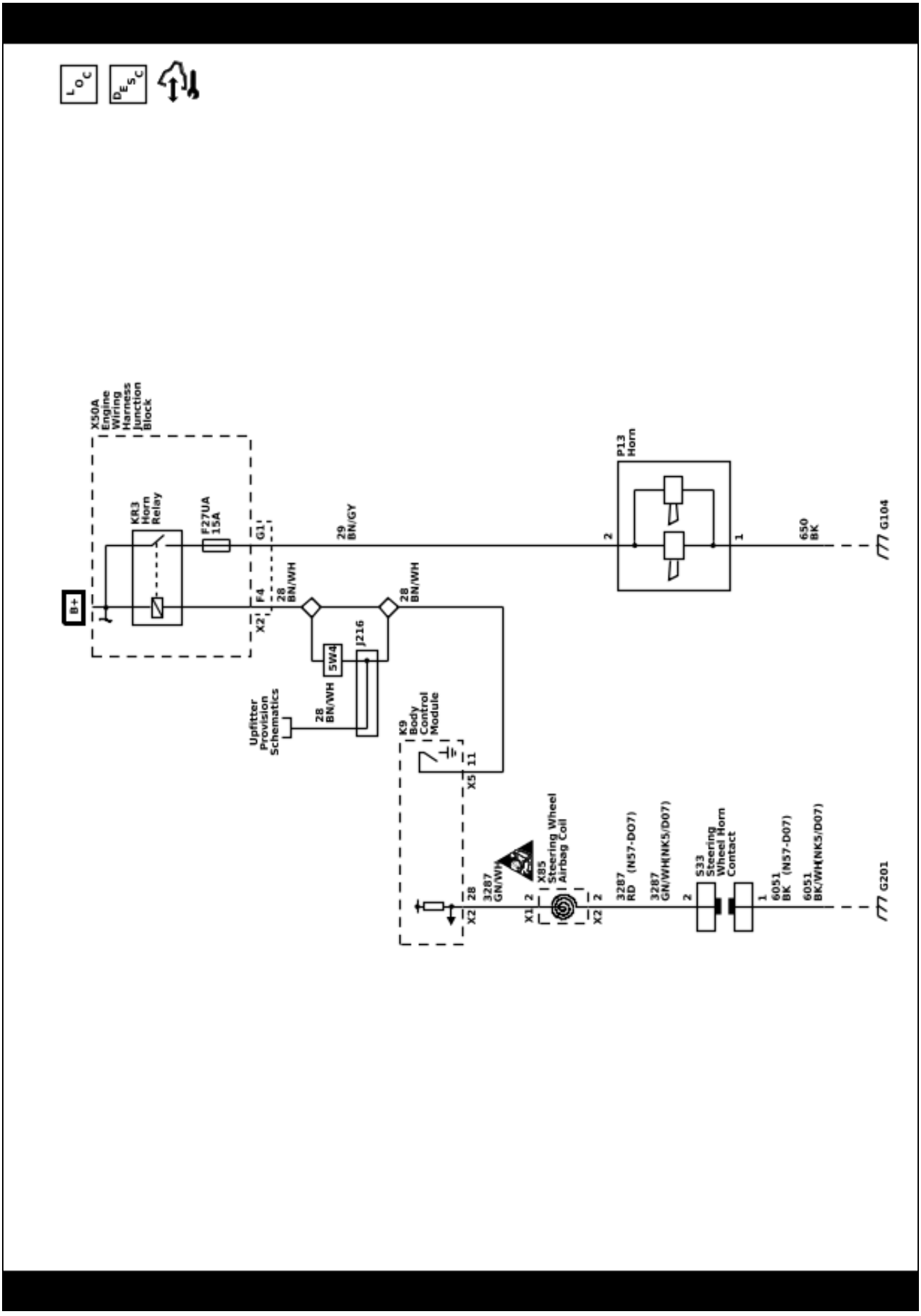
Pressing the heated rear window switch causes the front heater and air conditioning user interface control to send a serial data message to the body control module requesting rear window defog operation. The body control module upon receipt of the serial data message will provide voltage to the coil side of the rear defogger relay, this will energize the relay causing the relay switch contacts to close allowing B+ voltage to flow through the rear defogger grid control circuit to the rear defogger grid.

When the rear heated rear window switch is pressed and the engine is running, the rear window defogger grid will activate and will turn off automatically depending upon the vehicle speed (refer to owner’s manual for rear window defogger operation cycles)

# Horns and Pedestrian Alerts

## Schematic and Routing Diagrams

## Horn Schematics (Horn)



# Description and Operation

## Horns System Description and Operation

### System Description

The horn system consists of the following components:

- HORN fuse
- Engine wiring harness junction block (contains horn PCB relay
- Steering wheel horn contact
- Horn
- Body control module (BCM)

### System Operation

The vehicle horn system is activated under the following conditions:

- When the horn switch is depressed
- The BCM commands the horns ON under any of the following conditions:
  - When the content theft deterrent system detects a vehicle intrusion—For further information refer to Theft Systems Description and Operation.
  - When the panic button is depressed on the remote control door lock transmitter—For further information refer to *Keyless Entry System Description and Operation on page 8-17*.
  - When the keyless entry system is used to lock the vehicle, a horn chirp may sound to notify the driver that the vehicle has been locked. The notification feature may be enabled or disabled through personalization. For further information refer to *Keyless Entry System Description and Operation on page 8-17*.
  - When the OnStar® system is used to sound the horns if equipped—For further information, refer to OnStar Description and Operation.

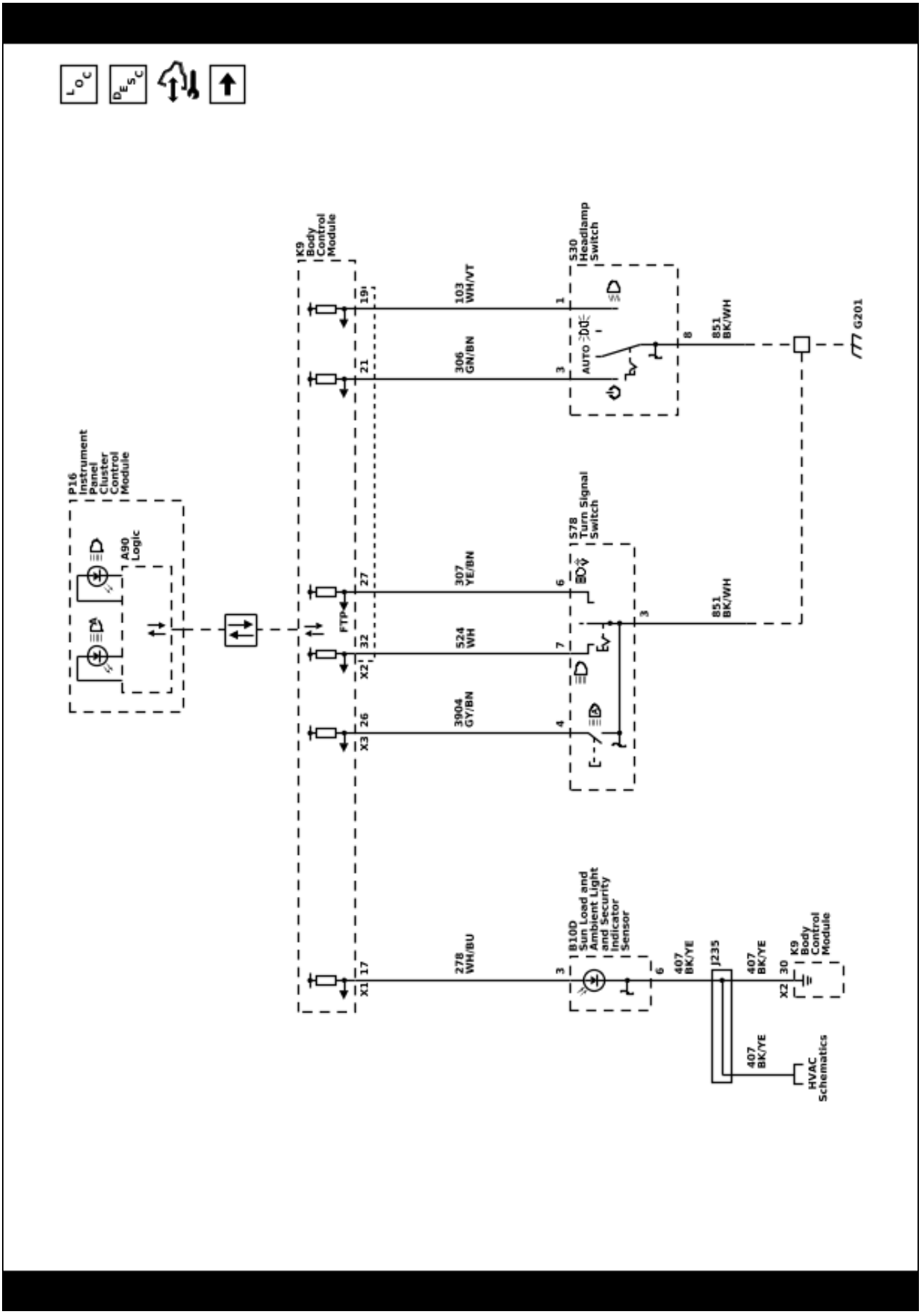
### Circuit Operation

Battery positive voltage is applied at all times to the horn relay coil and the horn relay switch. Pressing either of the horn switches applies ground to the horn relay control circuit. The BCM may also apply ground to the horn relay control circuit as described above. When the horn relay control circuit is grounded, the horn relay is energized and battery positive voltage is applied to the horns through the horn control circuit. The horns sound as long as ground is applied to the horn relay control circuit.

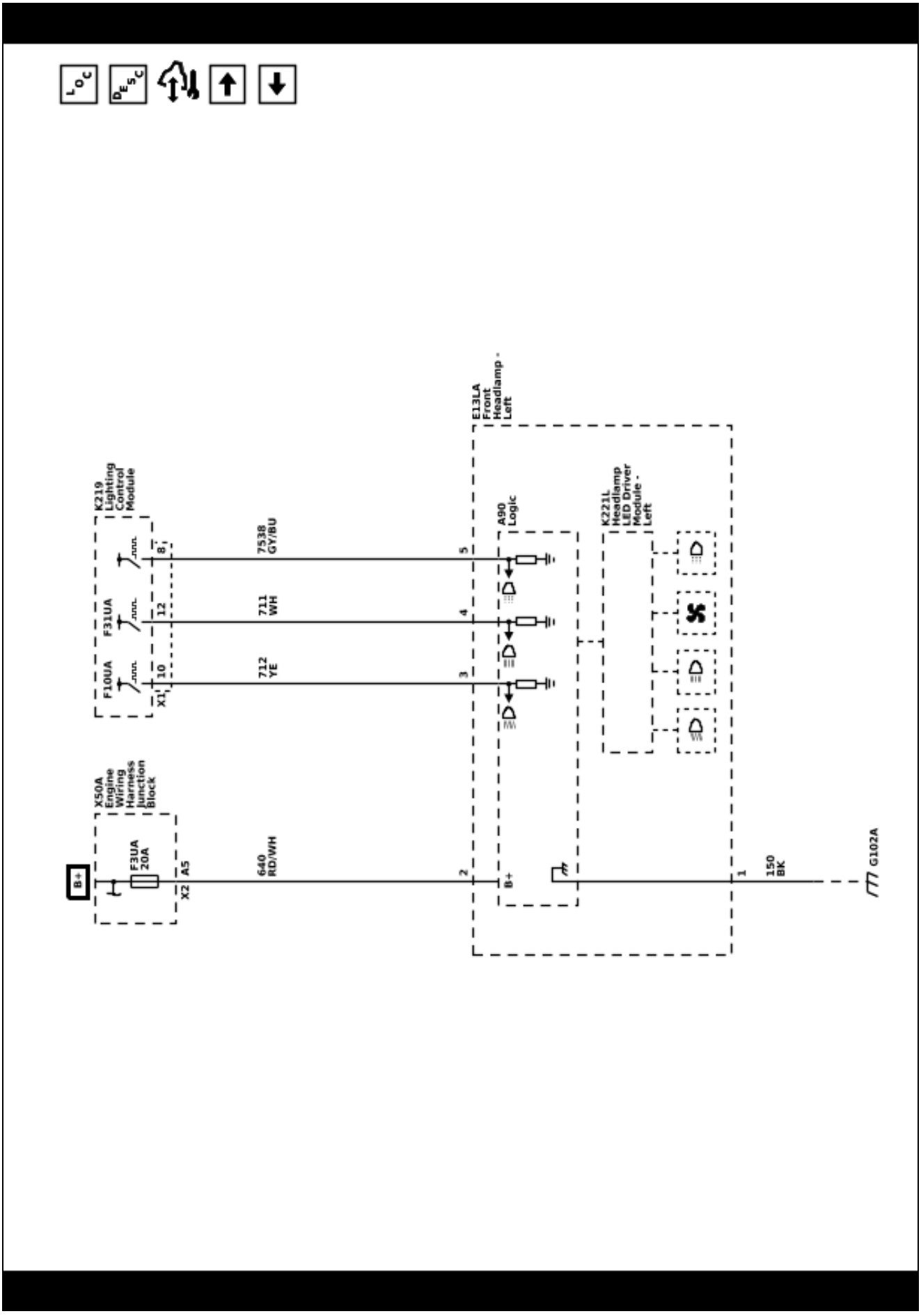
# Lighting

## Schematic and Routing Diagrams

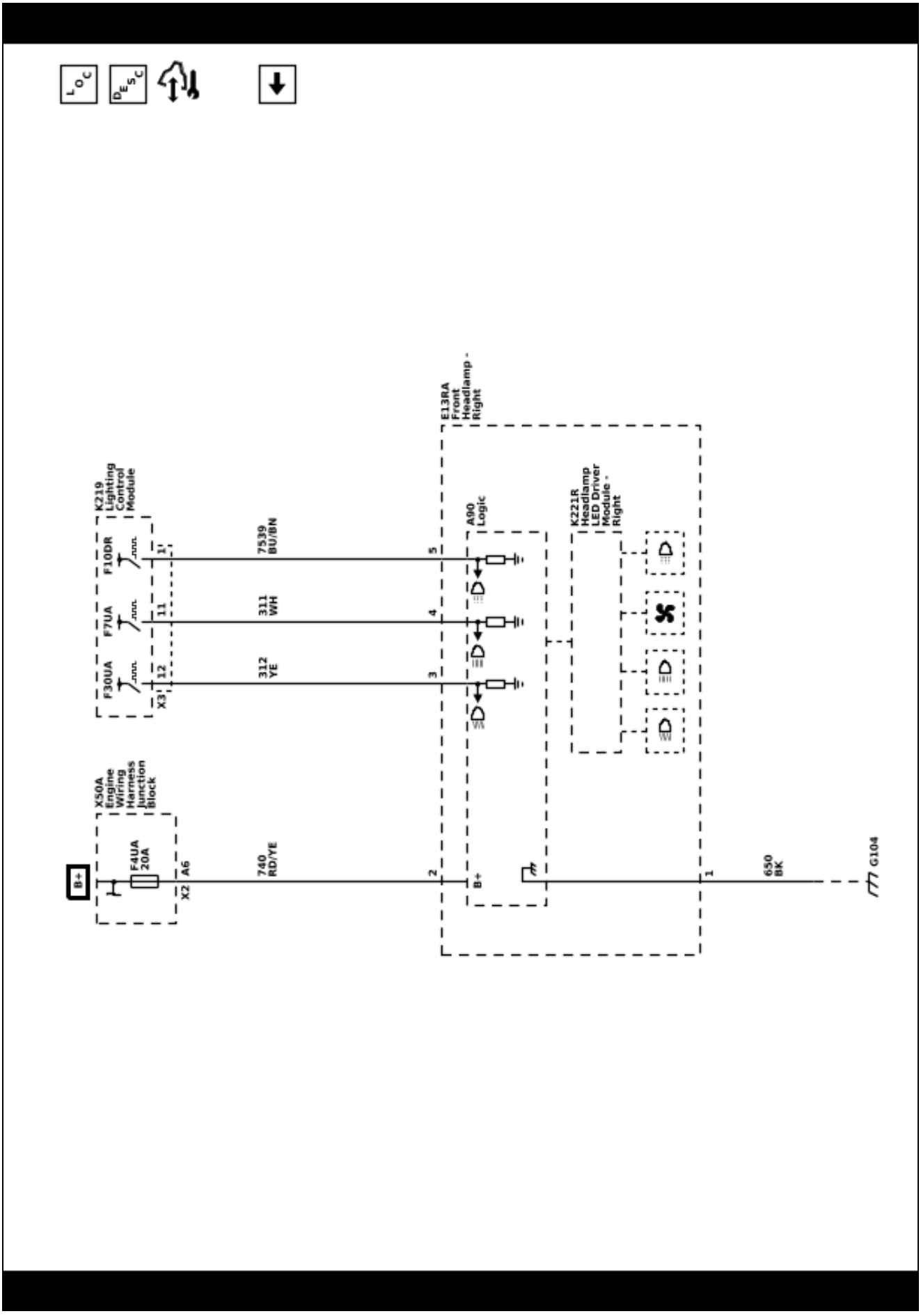
## Headlights/Daytime Running Lights (DRL) Schematics (Controls and Indicators)



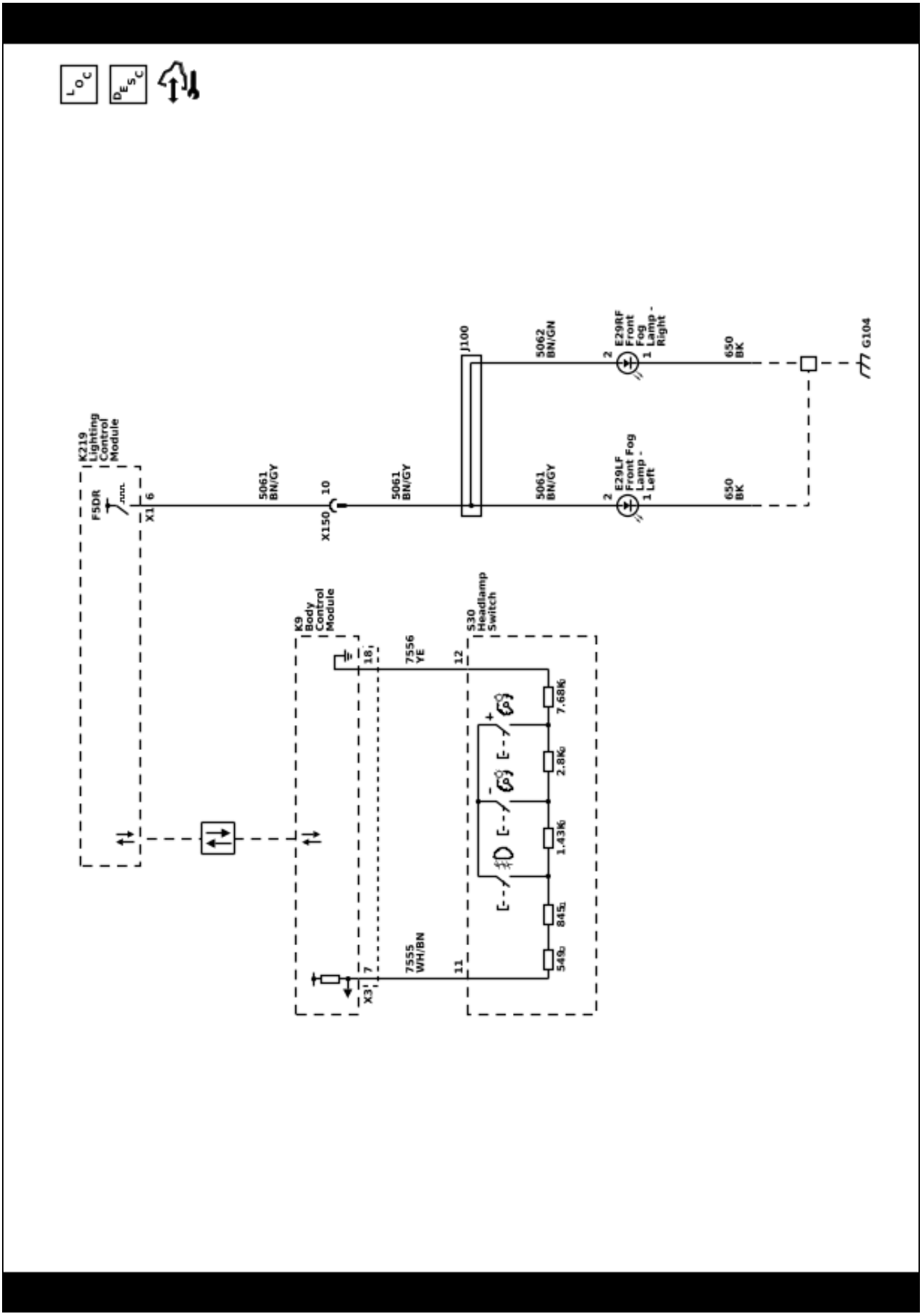
## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left)



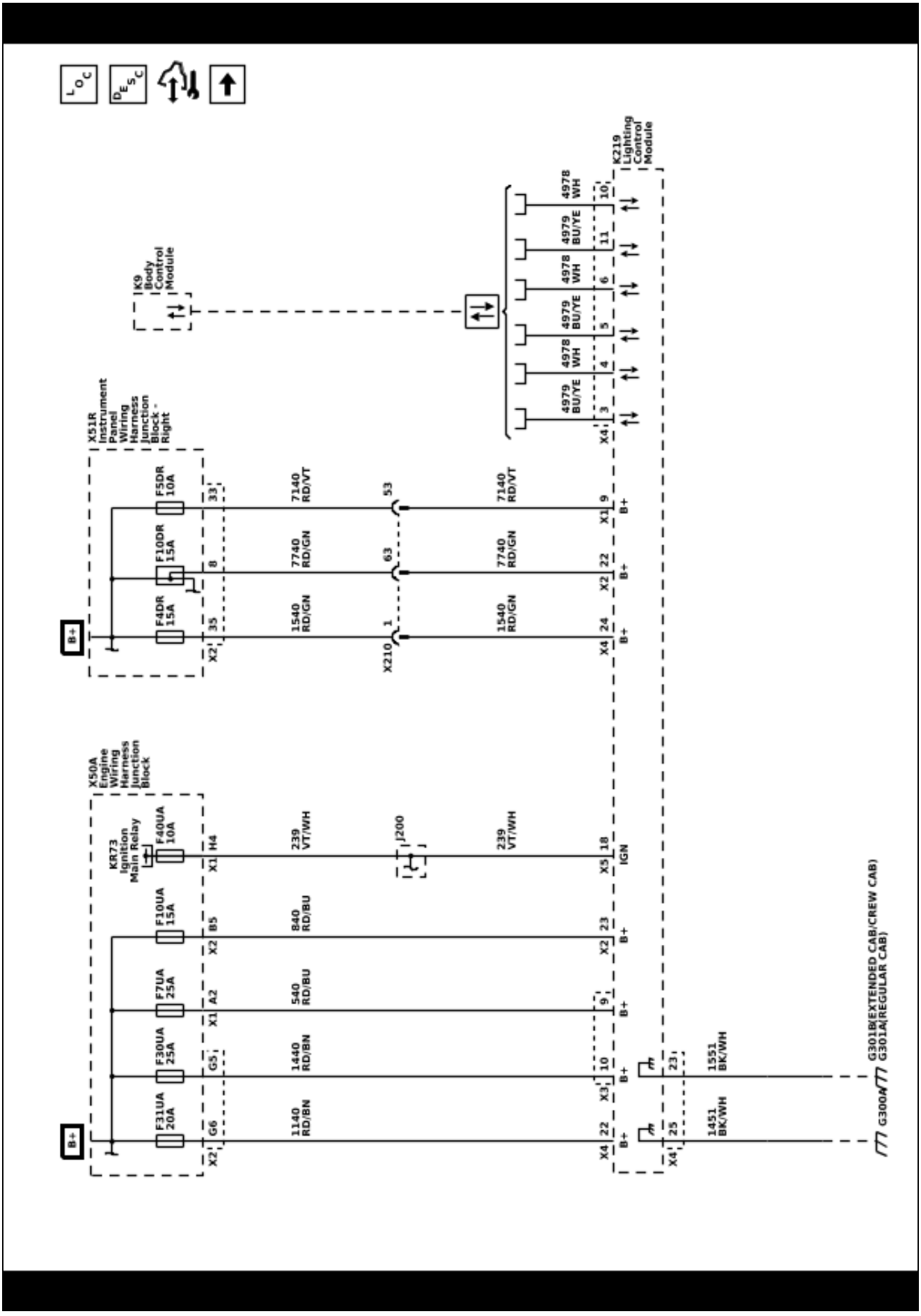
## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right)



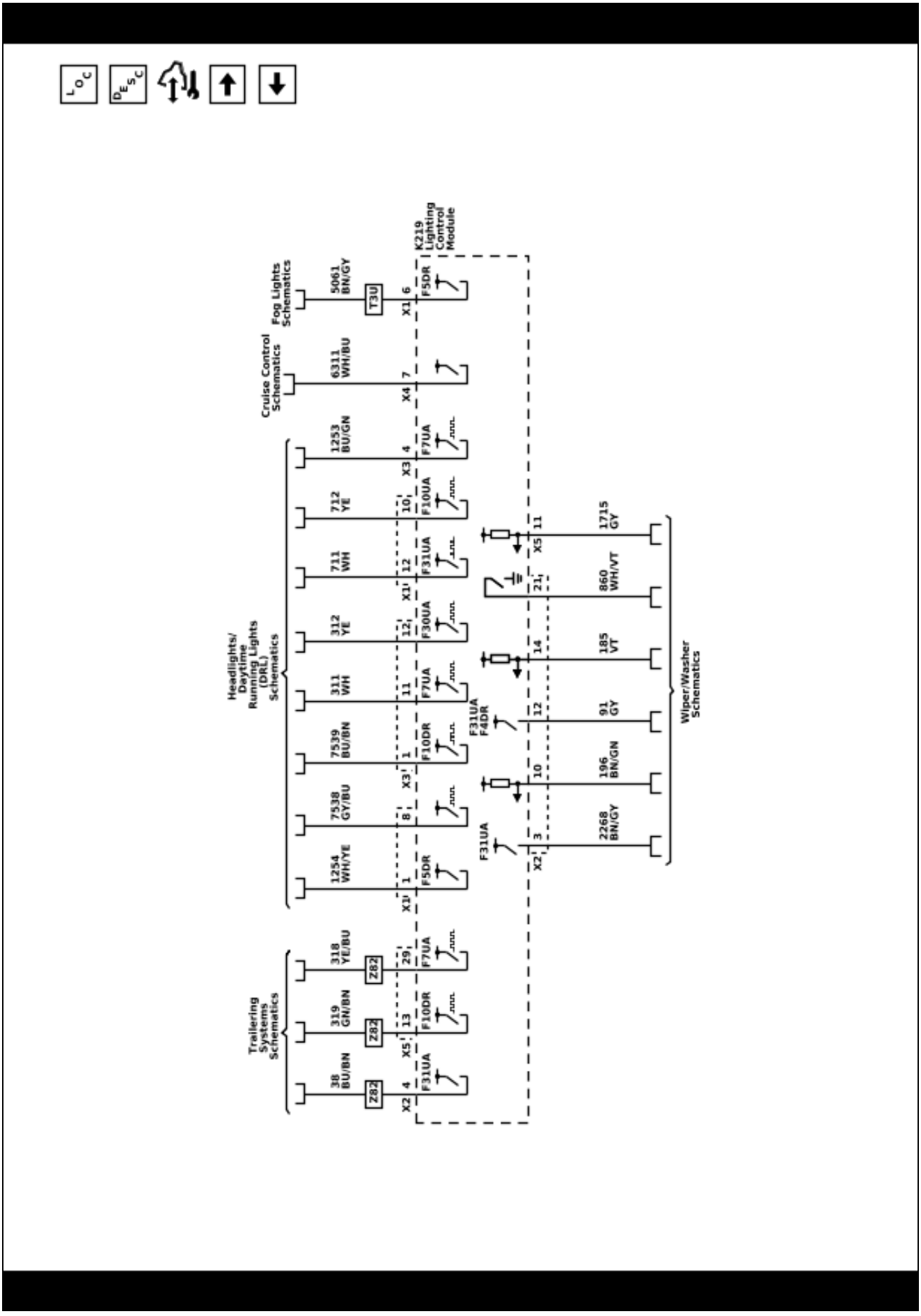
## Fog Lights Schematics (Fog Lamps (T3U))



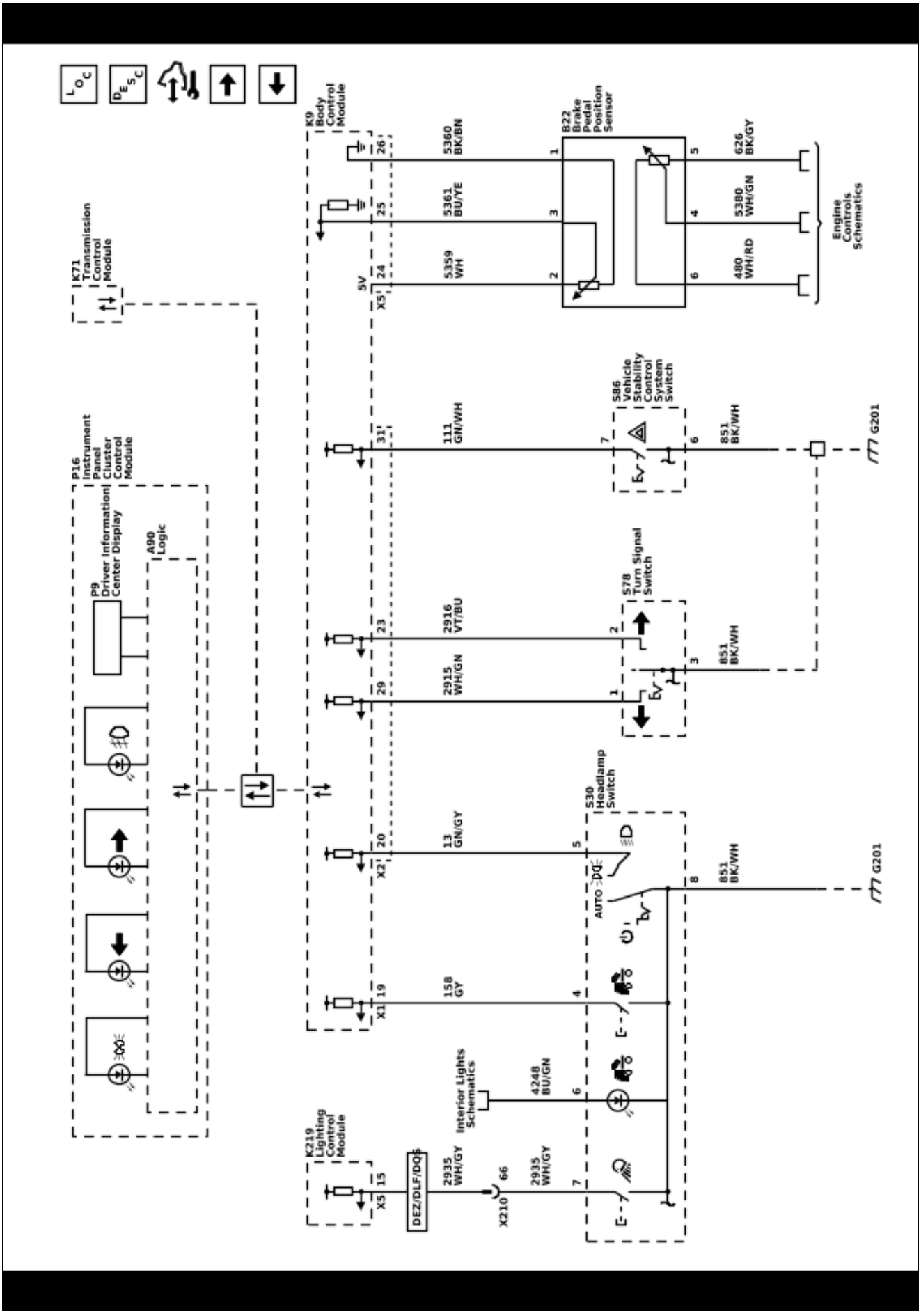
## Exterior Lights Schematics (Lighting Control Module Power, Ground, and Serial Data)



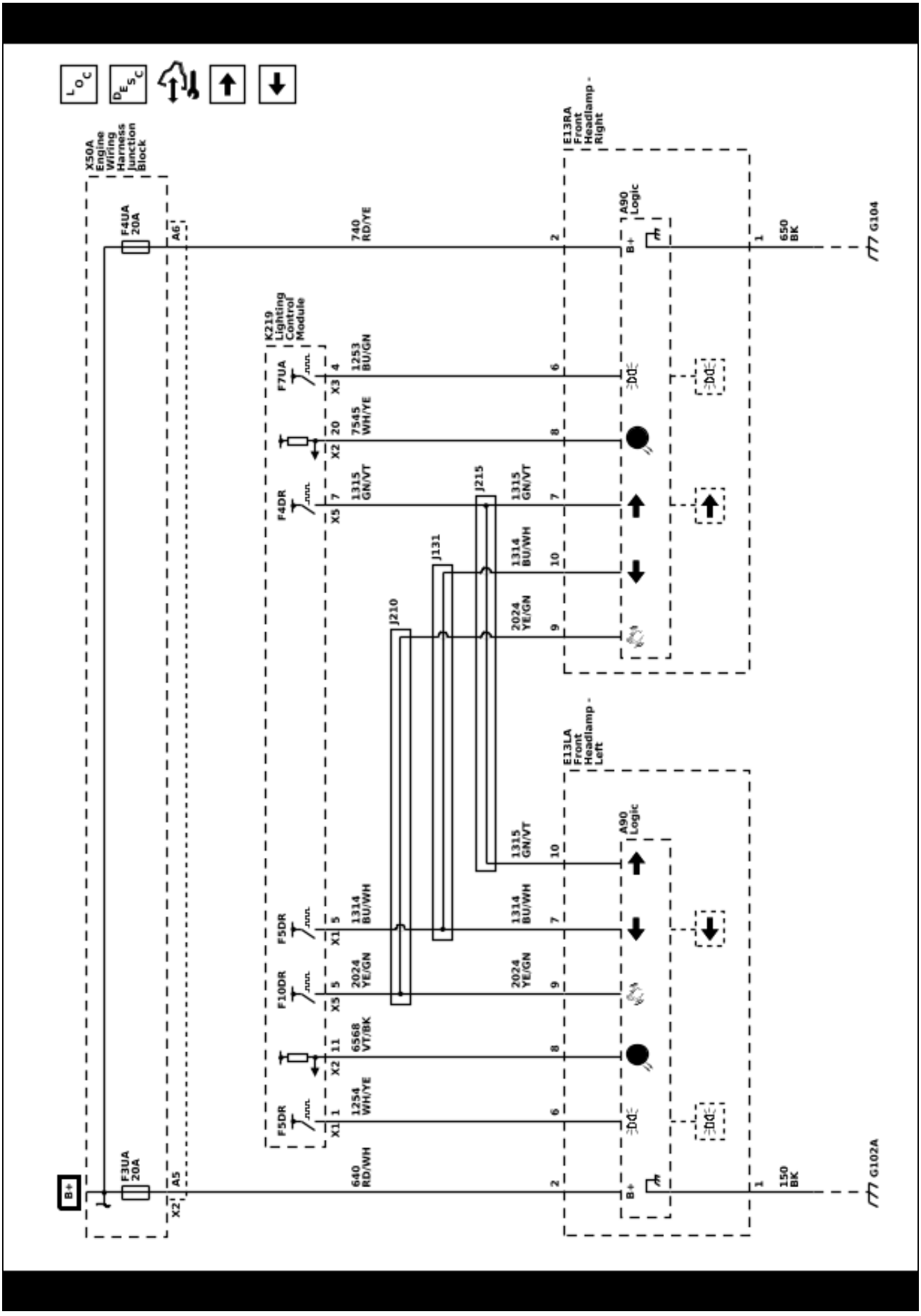
## Exterior Lights Schematics (Lighting Control Module Subsystem References)



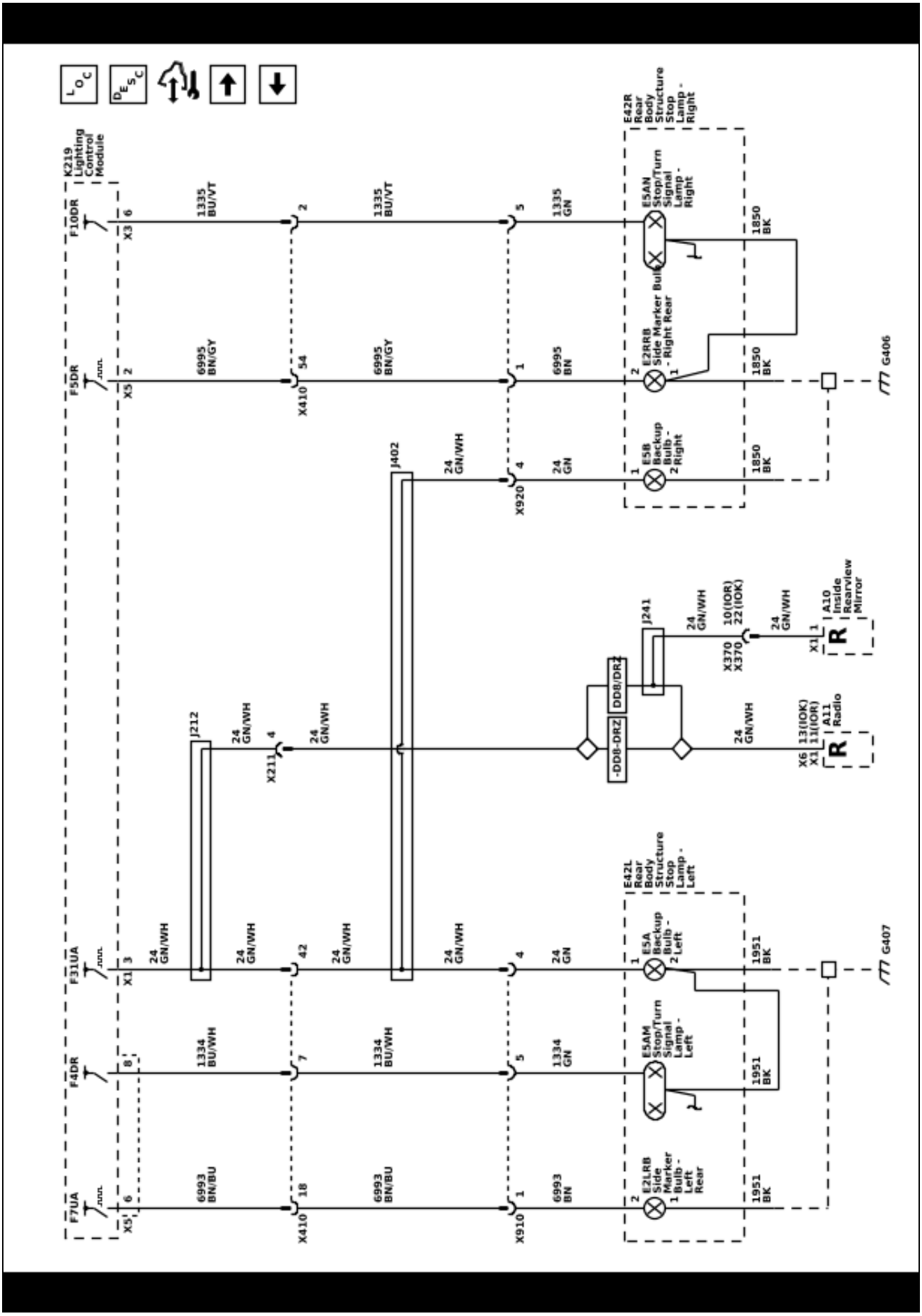
## Exterior Lights Schematics (Controls and Indicators)



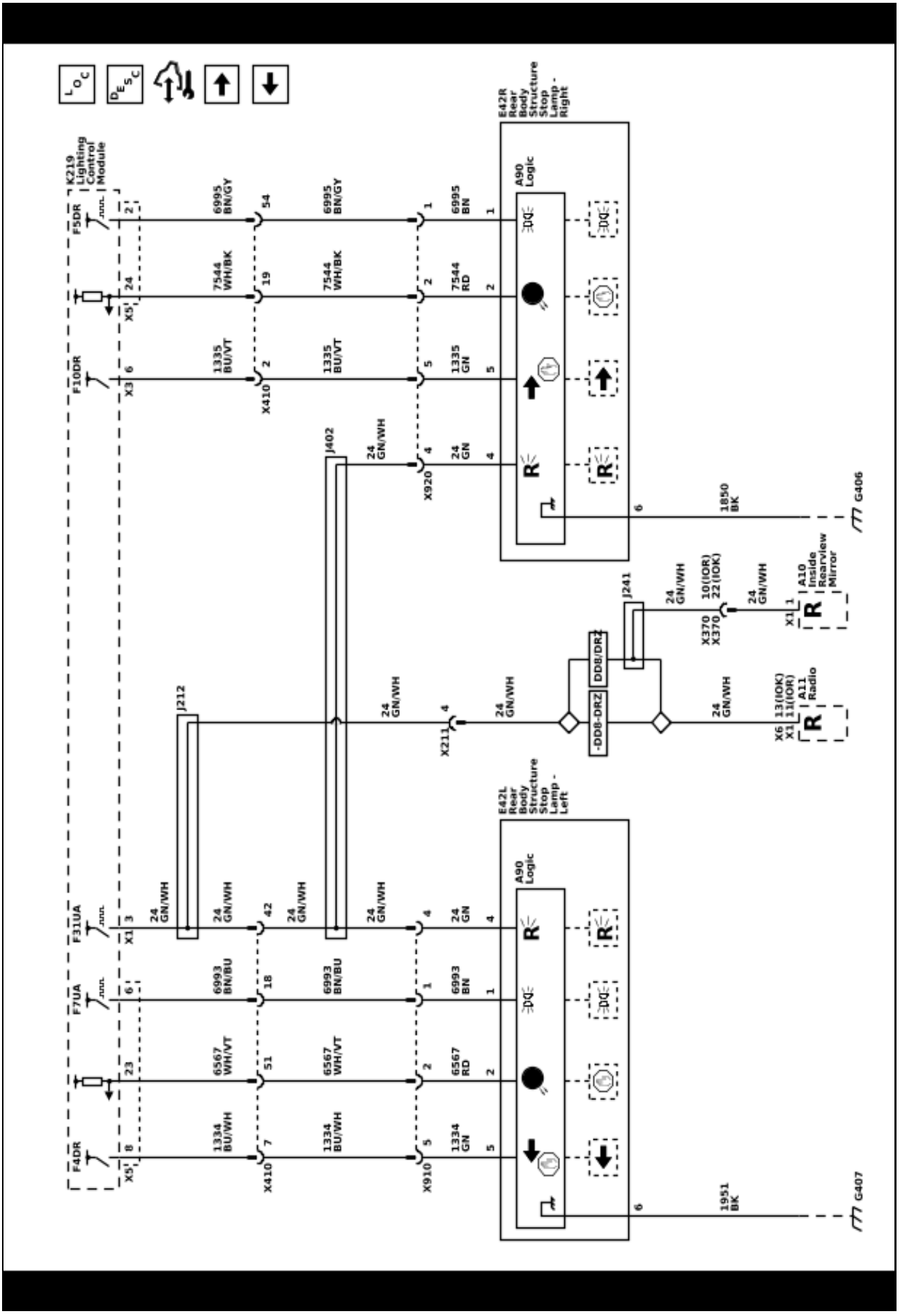
## Exterior Lights Schematics (Front Lights)



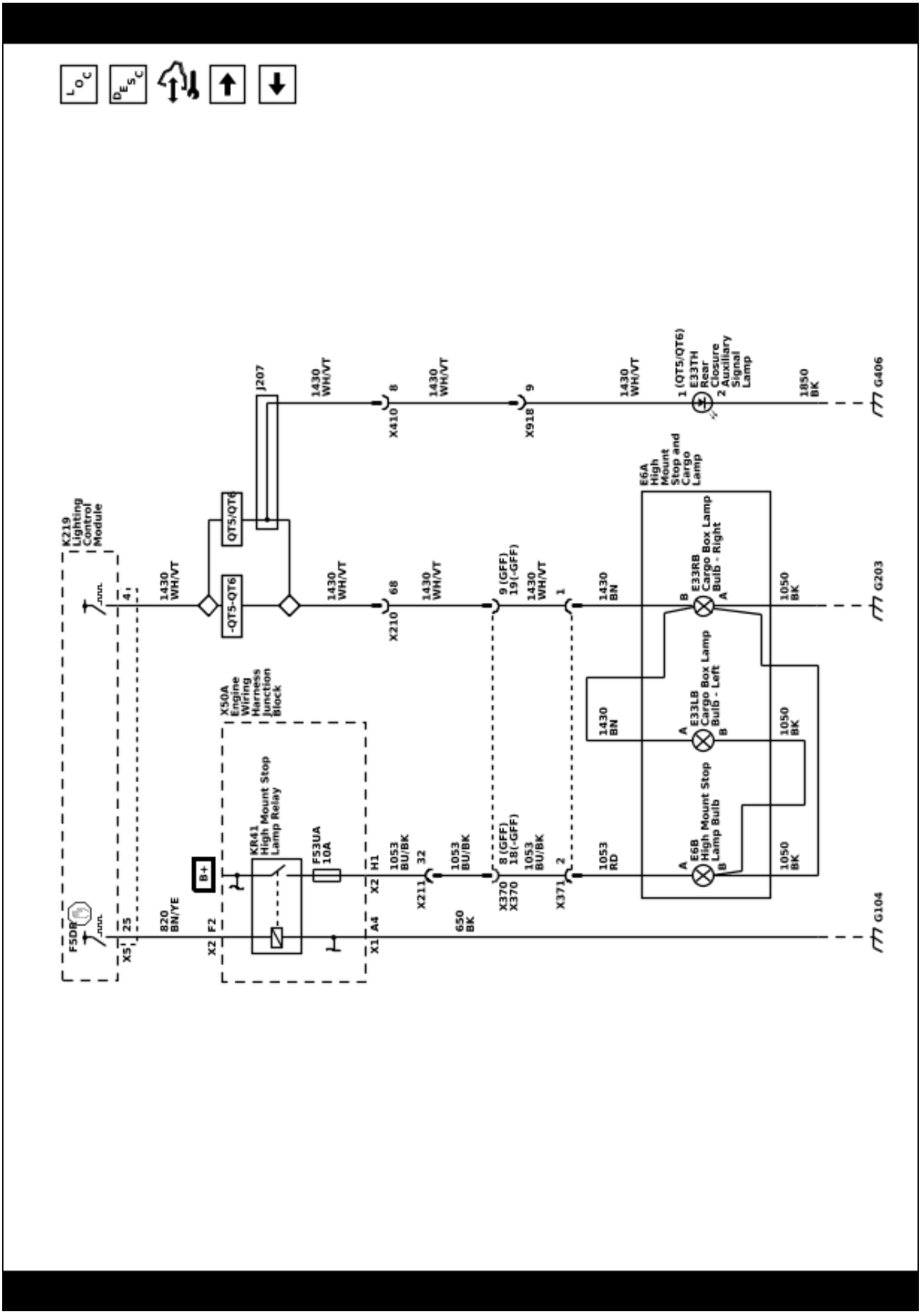
## Exterior Lights Schematics (Stop, Rear Turn, Tail, Backup, and Rear Side Marker Lamps (GFF/GFI/GFJ/GFS))



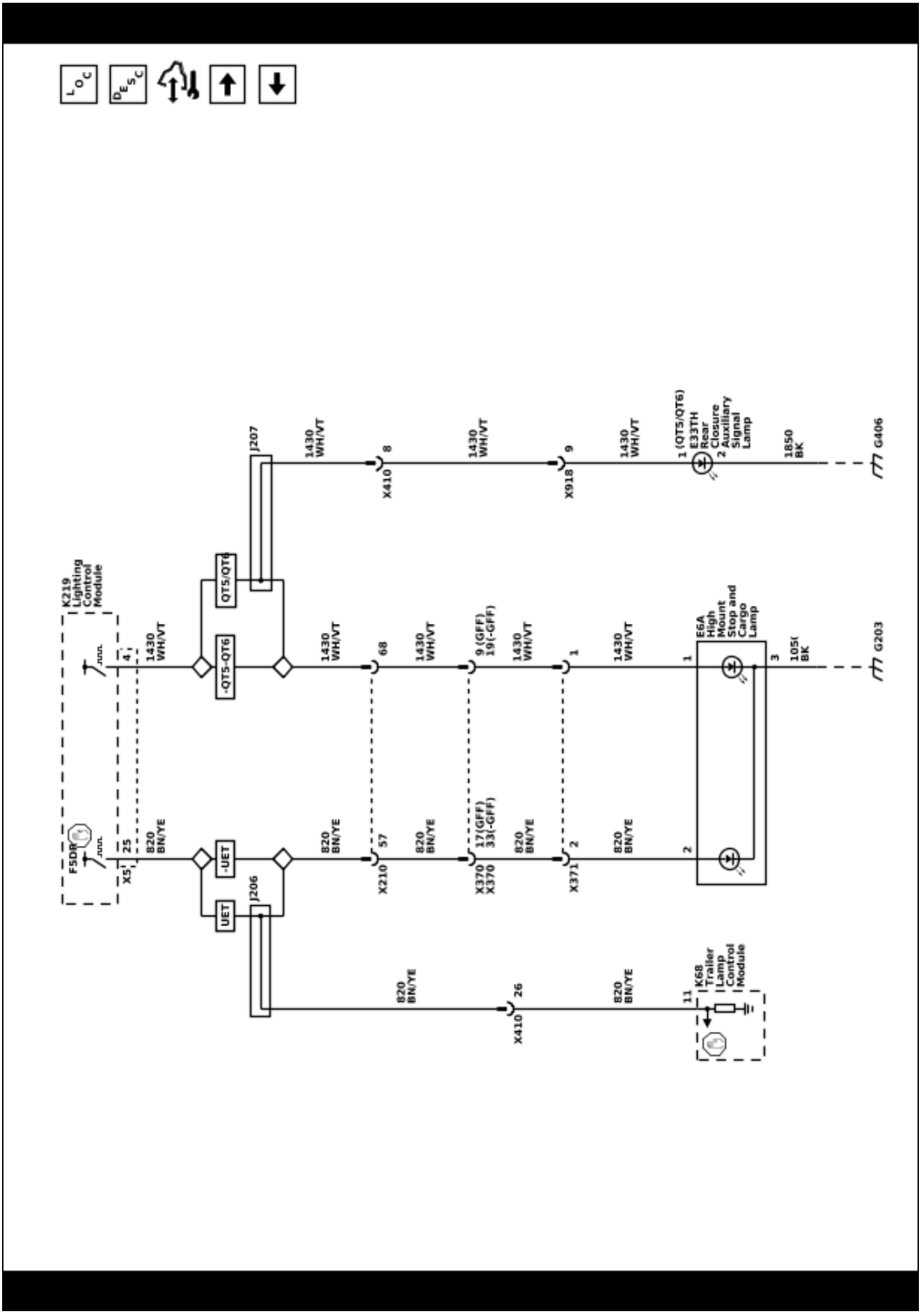
## Exterior Lights Schematics (Stop, Rear Turn, Tail, Backup, and Rear Side Marker Lamps (GA4/GFG/GFU/GFW/GFY))



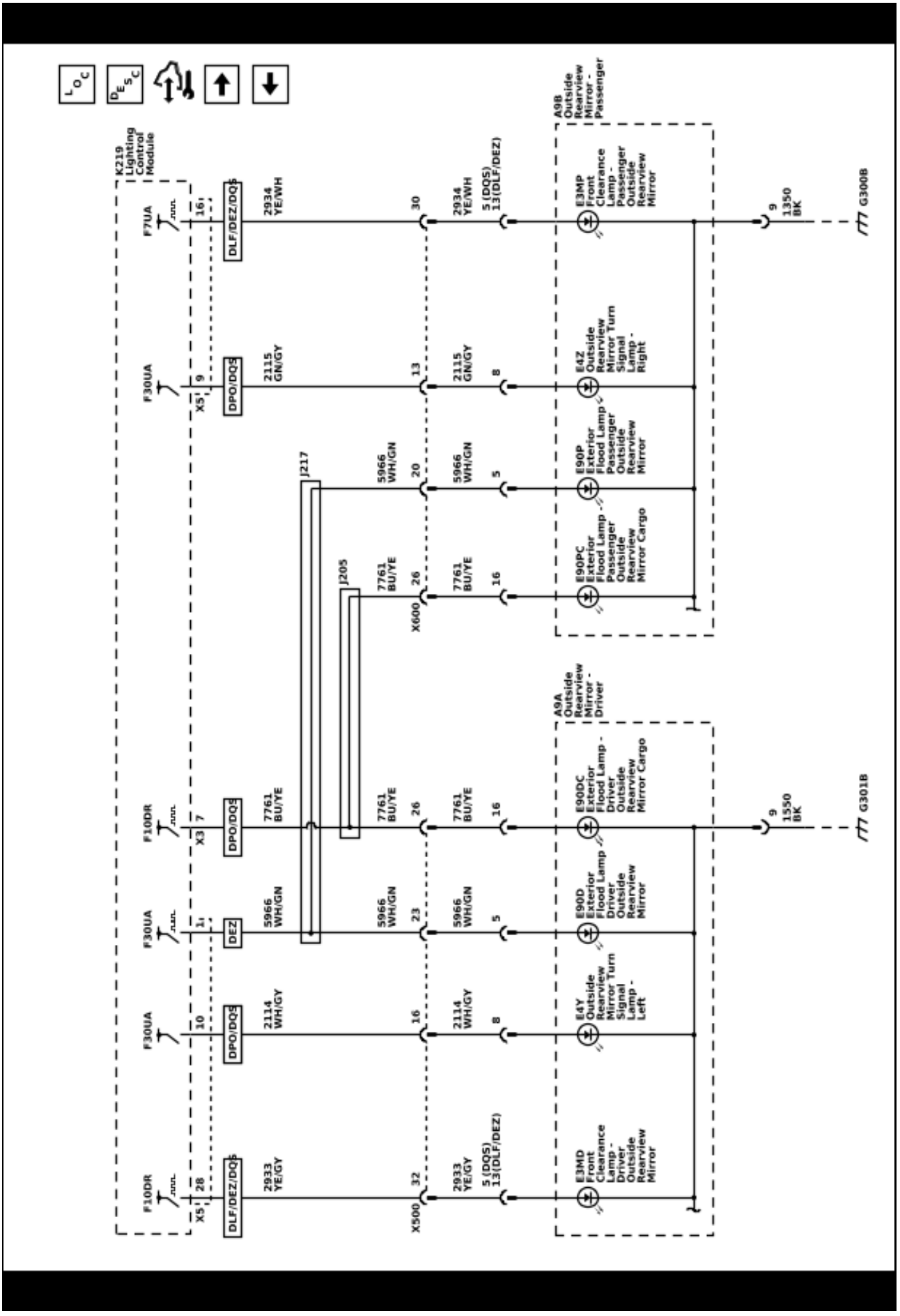
## Exterior Lights Schematics (Center High Mount Stop and Exterior Courtesy Lights - Regular Cab)



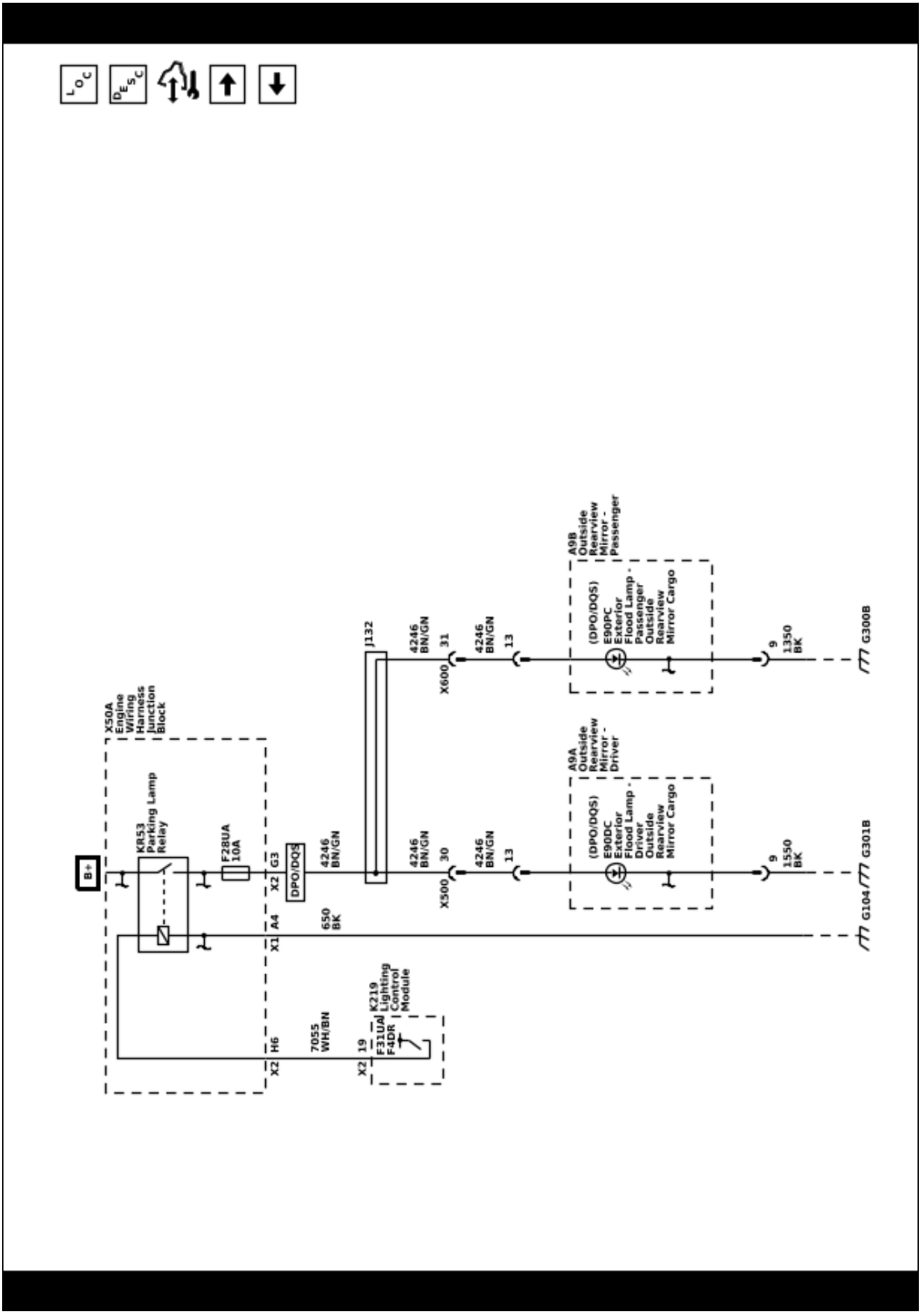
## Exterior Lights Schematics (Center High Mount Stop and Exterior Courtesy Lights - Extended Cab/Crew Cab)



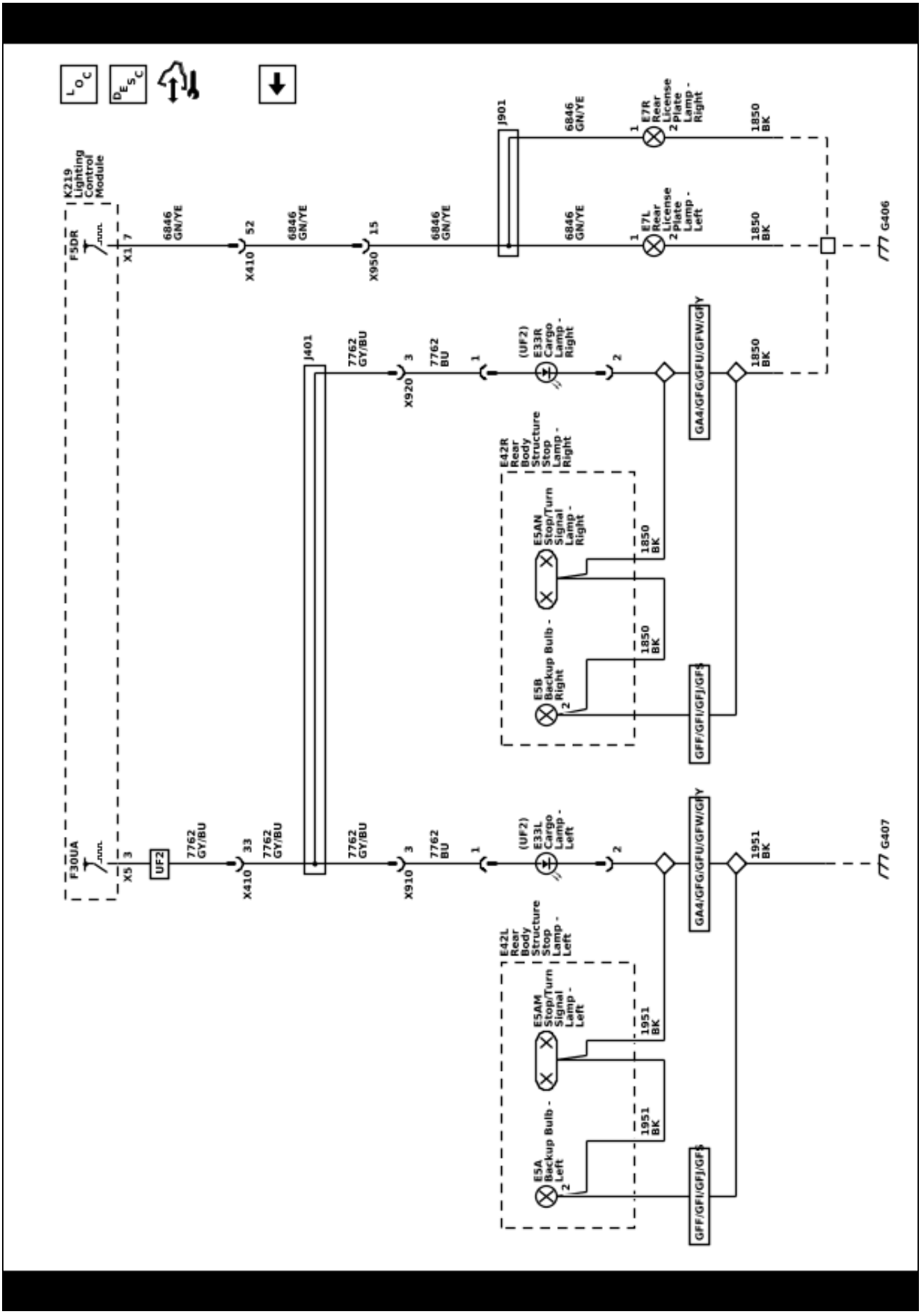
## Exterior Lights Schematics (Outside Rearview Mirror Task, Turn, Approach, and Flood Lights (DEZ/DLF/DPO/DQS))



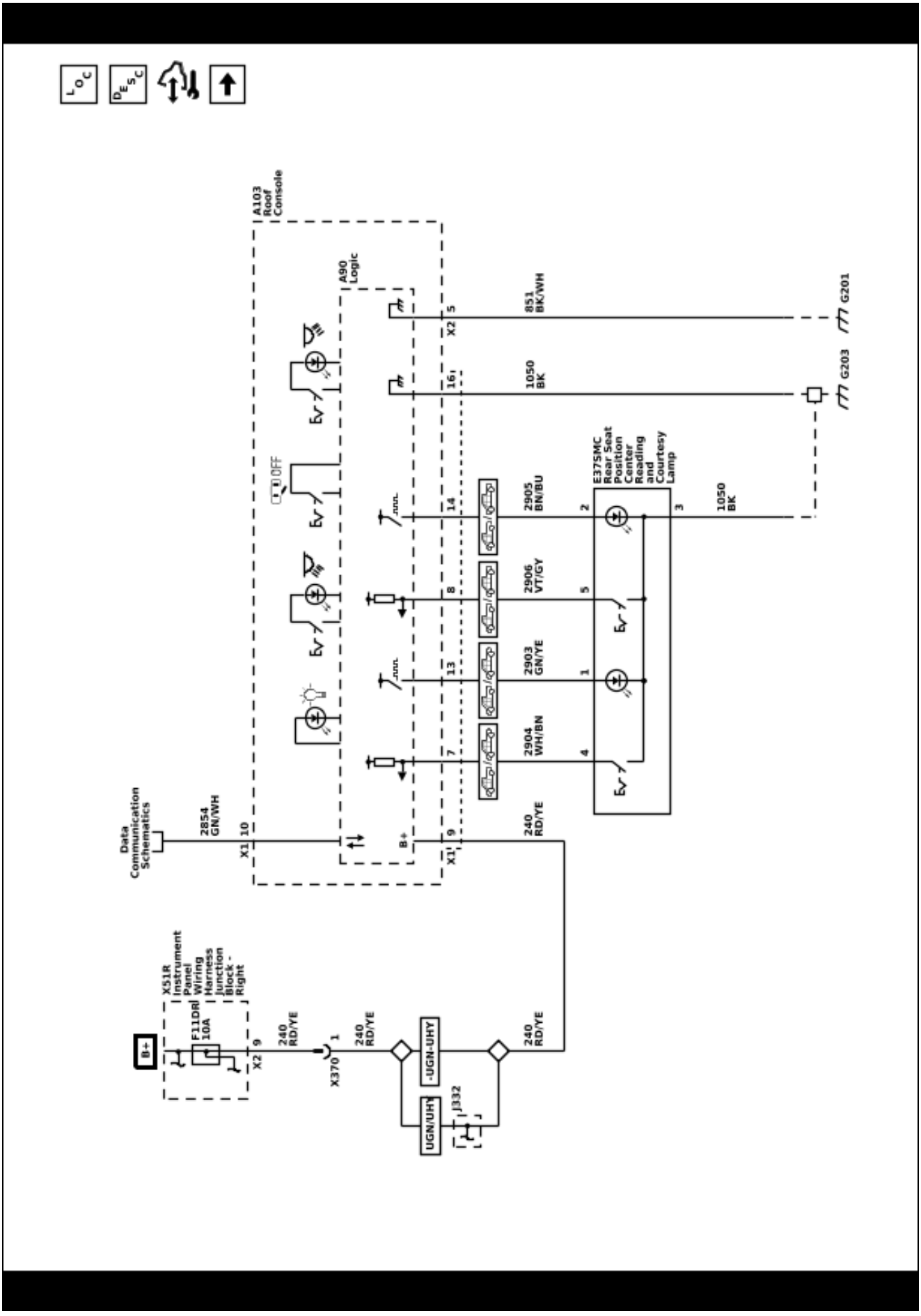
## Exterior Lights Schematics (Identification Lights (DPO/DQS/GRZ))



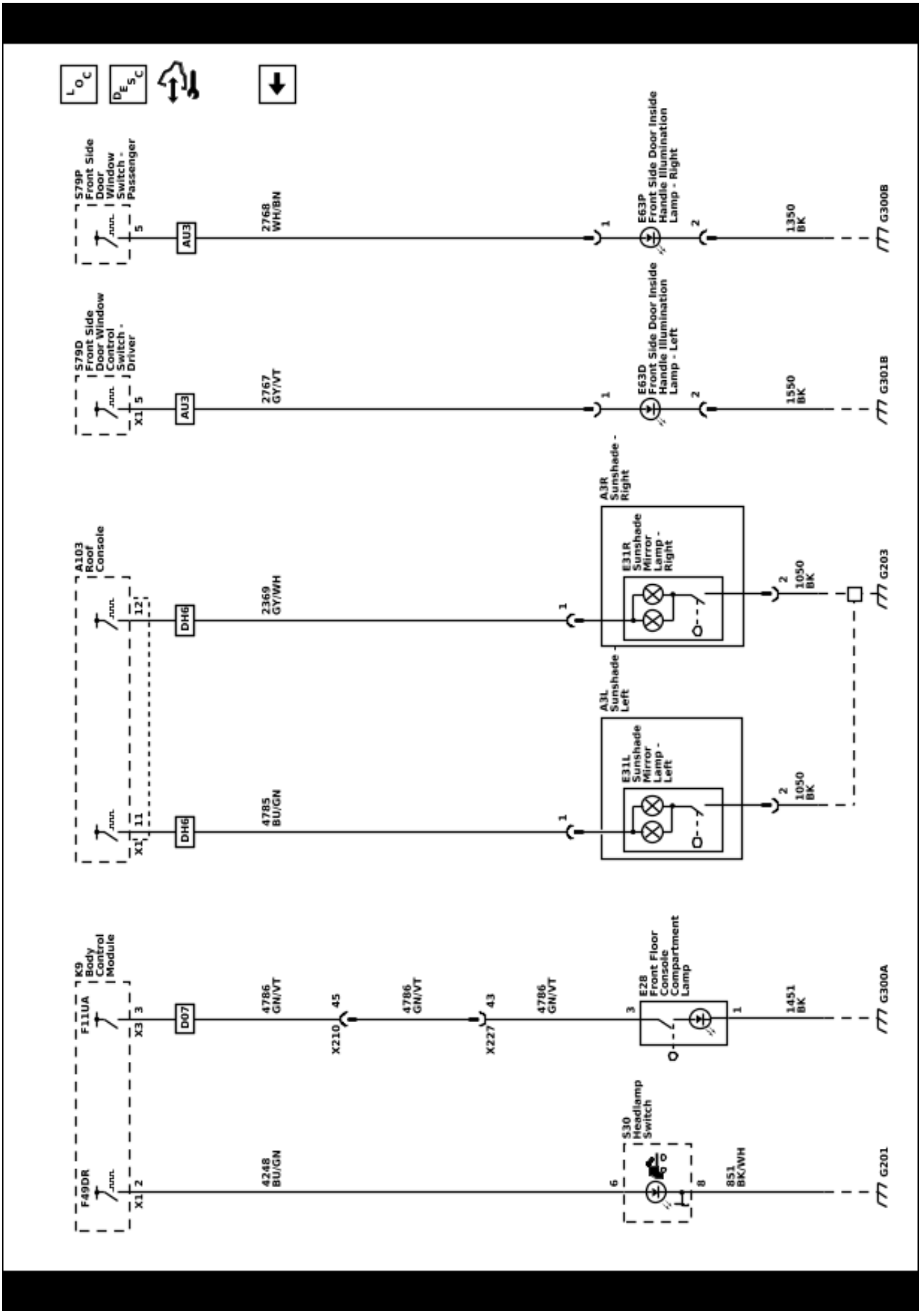
## Exterior Lights Schematics (Cargo Box and License Plate Lamps (UF2))



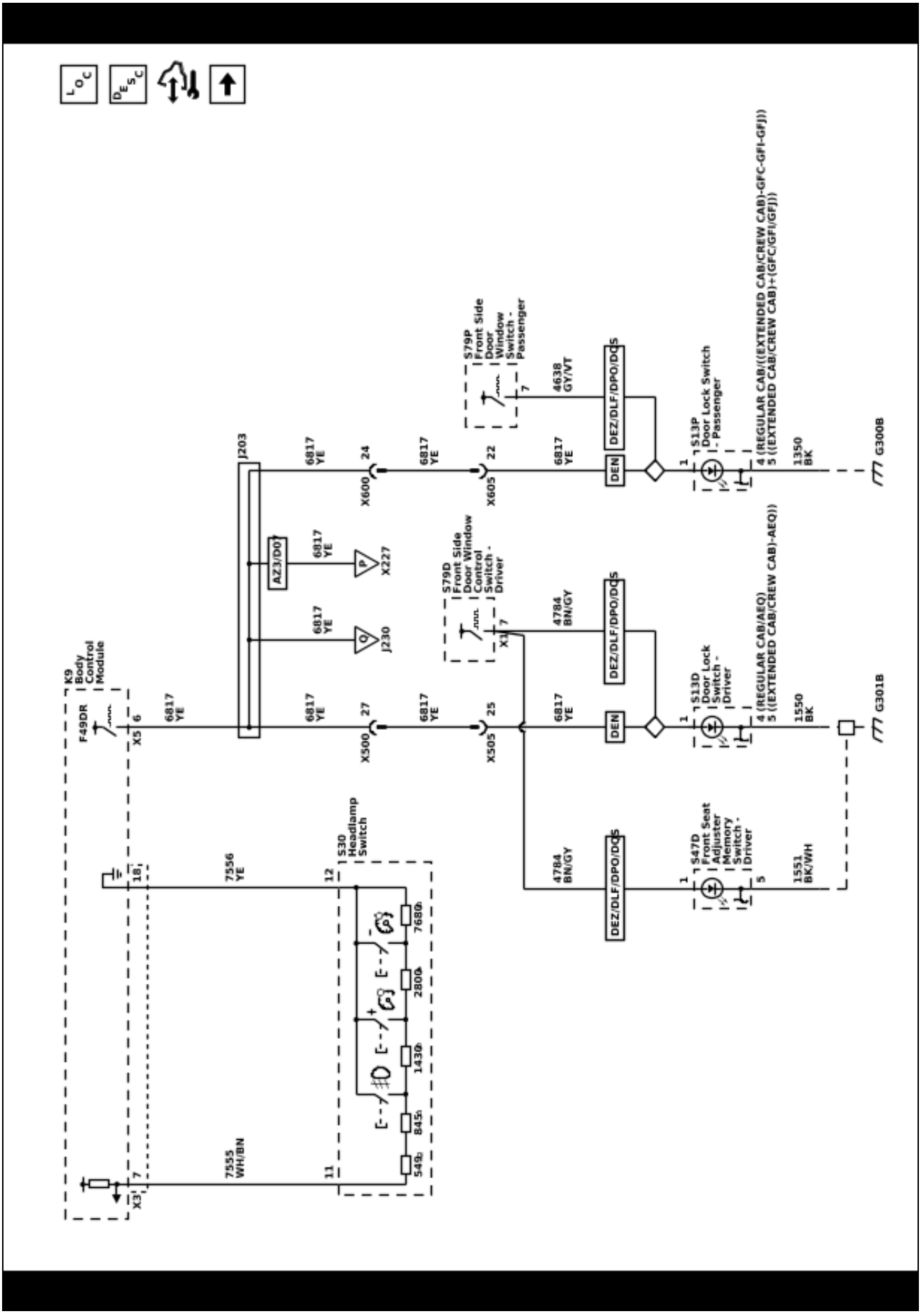
## Interior Lights Schematics (Roof Console and Rear Seat Reading and Courtesy Lamps - Extended Cab/Crew Cab)



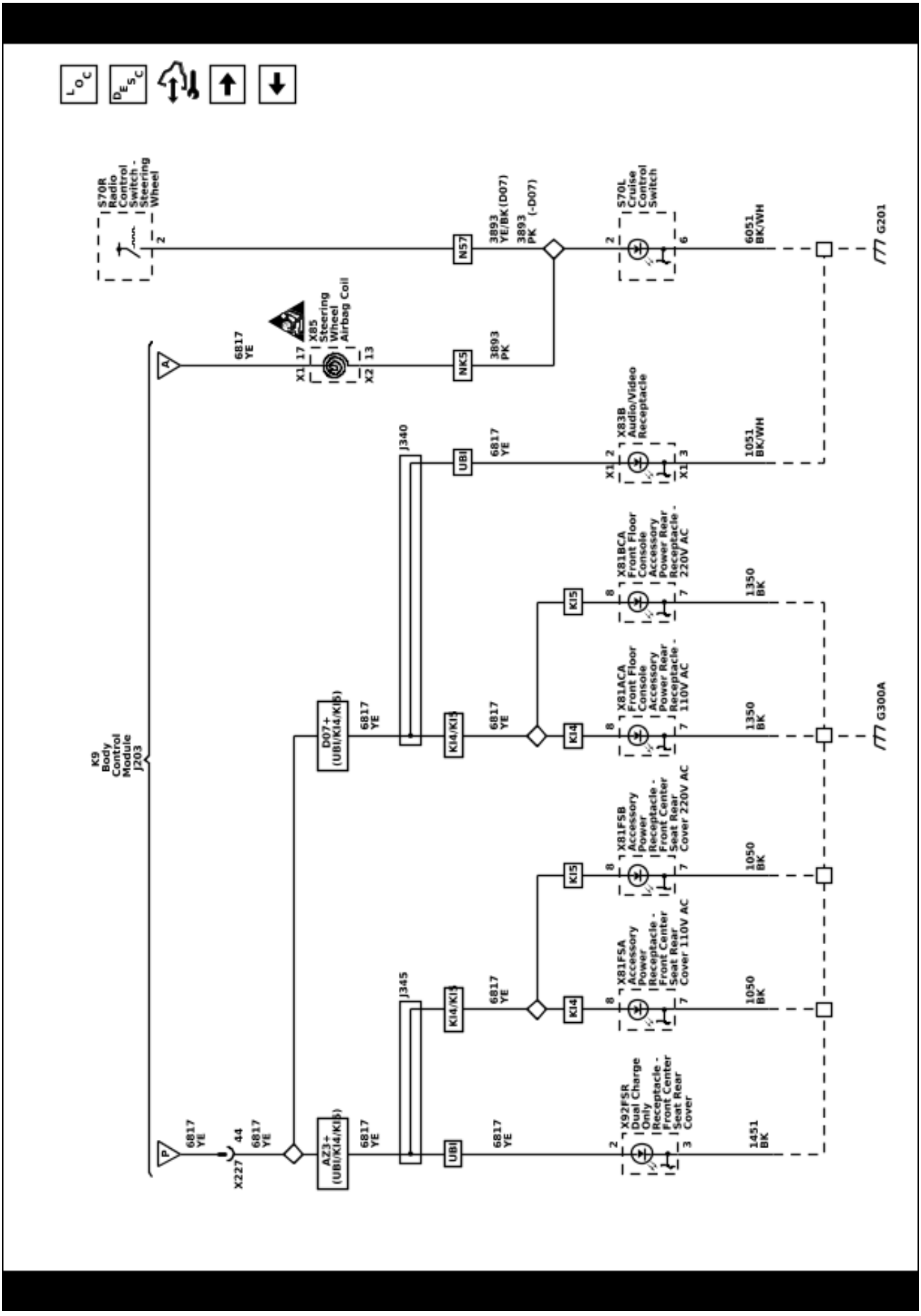
## Interior Lights Schematics (Cargo Lamp Indicator, Sunshade, Center Console, and Door Lamps)



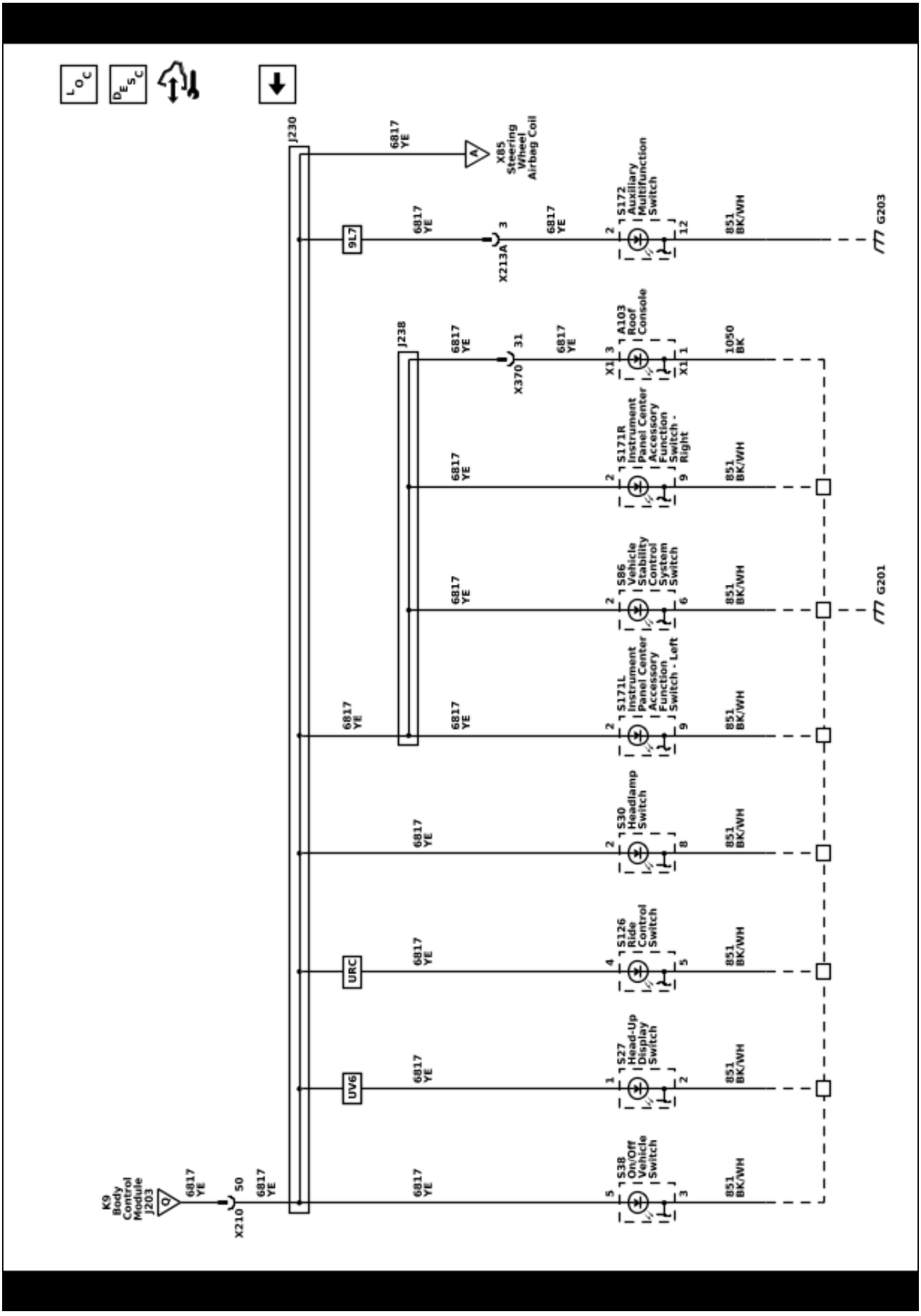
## Interior Lights Dimming Schematics (Controls and Front Door Backlights)



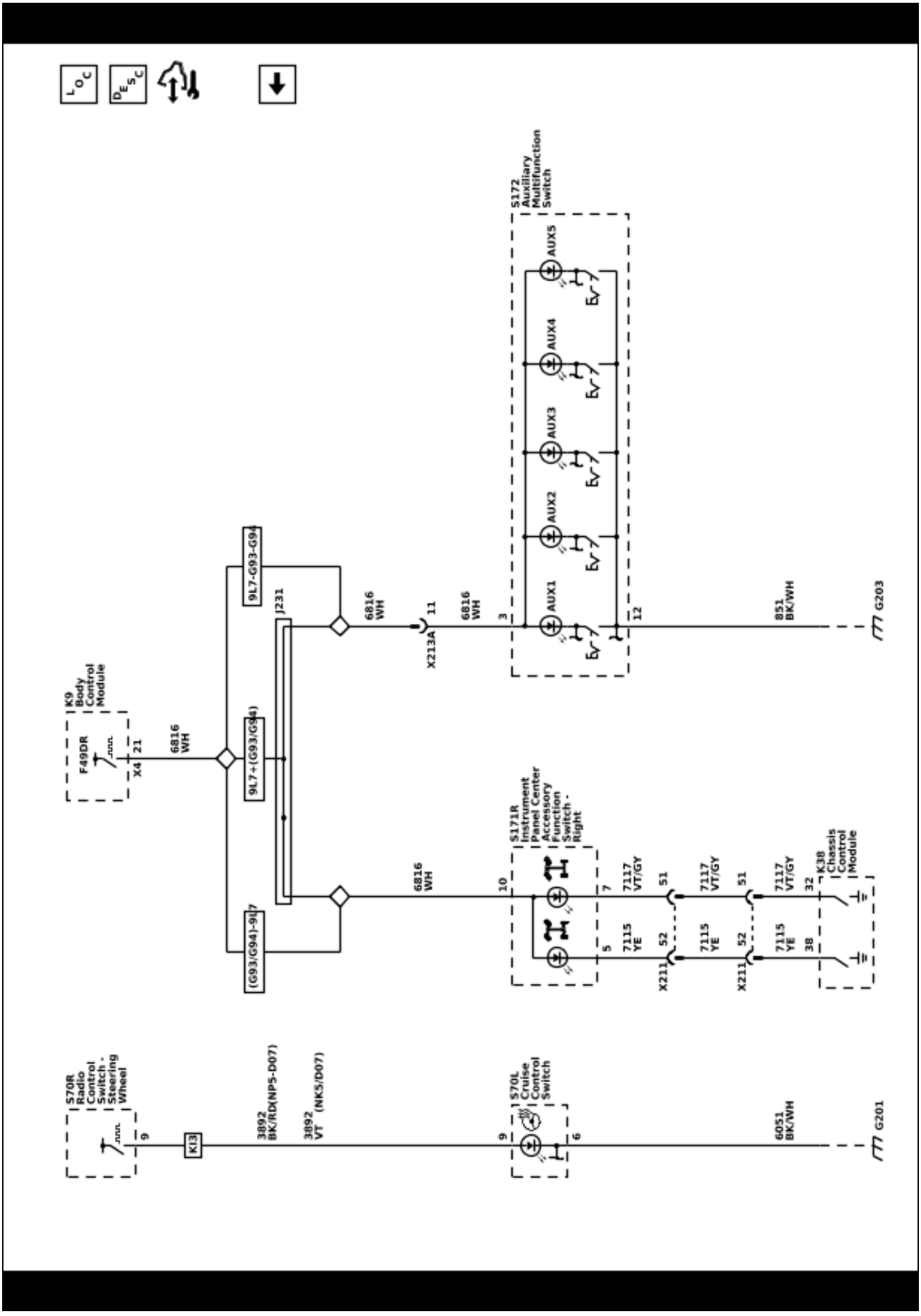
## Interior Lights Dimming Schematics (Steering Wheel, Floor Console, and Center Seat Backlights (D07/AZ3))



## Interior Lights Dimming Schematics (Instrument Panel Backlights)



## Interior Lights Dimming Schematics (Indicators)



# Description and Operation

## Exterior Lighting Systems Description and Operation

The exterior lighting system consist of the following lamps:

- Backup lamps
- Cargo lamps
- Daytime running lamps (DRL)
- Exterior courtesy lamps
- Hazard warning lamps
- Headlamps
- Park, tail, license, and marker lamps
- Front fog lamps (T3U)
- Stop lamps
- Task lamps
- Turn signal lamps
- Trailer lighting, refer to *Trailering Description and Operation on page 2-56* for more information.

### Low Beam Headlamps

The headlamps may be turned ON in 3 different ways:

- When the headlamp switch is placed in the ON position, for normal operation
- When the headlamp switch is placed in the AUTO position, for automatic lamp control during low ambient light conditions
- When the headlamp switch is placed in the AUTO position, with the windshield wipers ON in daylight conditions, after a 6 second delay

The K9 Body Control Module (BCM) monitors three signal circuits from the S30 Headlamp Switch. When the headlamp switch is in the AUTO position, the three signal circuits are unaffected (open) and the BCM relies on the B10D Sun Load and Ambient Light and Security Indicator Sensor input to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. When the headlamp switch is placed in the headlamp OFF position, the headlamp switch headlamps OFF signal circuit is grounded, indicating to the BCM that the exterior lamps should be turned OFF. With the headlamp switch in the PARK LAMPS position, the headlamp switch park lamps ON signal circuit is grounded, indicating that the park lamps have been requested. When the headlamp switch is in the HEADLAMP position, both the headlamp switch park lamps ON signal circuit and the headlamps ON signal circuit are grounded. The BCM responds to these inputs by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp low beam control circuits, illuminating the low beam headlamps. When the Lighting Control Module commands the low beam headlamps ON, the operator will notice the interior backlighting for the instrument cluster and the various other switches dim to the level of brightness selected by the instrument panel dimmer switch.

### High Beam Headlamps

The high beam and flash to pass (FTP) functions are contained within the S78 Turn Signal Switch. The K9 Body Control Module (BCM) provides the turn signal/multifunction switch with two signal circuits, the high beam signal circuit and the FTP signal circuit. When the low beam headlamps are ON, and the turn signal/multifunction switch is placed in either the high beam position or FTP position, ground is applied to the BCM through the high beam/FTP signal circuit. The BCM responds to the high beam request by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp high beam control circuits, illuminating the high beam headlamps. The status of the high beam lamps is shown by a blue indicator located on the instrument cluster. When high beams are commanded on, the indicator will be illuminated continuously. If the driver turns the high beams off, the indicator will also turn off.

### Flash to Pass

When the S78 Turn Signal Switch is momentarily placed in the flash to pass position, ground is applied to the turn signal/multifunction switch. The turn signal/multifunction switch applies ground to the K9 Body Control Module (BCM) through the flash to pass switch signal circuit. The BCM responds to the flash to pass request by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp high beam control circuits, illuminating the high beam headlamps. This causes the high beam headlamps to illuminate at full brightness until the turn signal/multifunction switch is returned to the at rest position.

### Automatic Headlamp Control

The K9 Body Control Module (BCM) monitors three signal circuits from the S30 Headlamp Switch. When the headlamp switch is in the AUTO position, the three signal circuits are unaffected (open) and the BCM relies on the B10D Sun Load and Ambient Light and Security Indicator Sensor input to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. During automatic lamp control, the headlamps will be off during daylight conditions but will turn on when the ambient light sensor detects low ambient light conditions. The ambient light sensor is a light sensitive transistor that varies the voltage signal to the BCM. The BCM provides a 5 volt reference signal and a low reference ground to the ambient light sensor. During low light conditions the BCM will request the low beam headlamps ON by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp low beam control circuits, illuminating the low beam headlamps.

### Intellibeam – Automatic High Beam Assist (TQ5)

The IntelliBeam system is activated by pressing the auto high beam assist button on the turn signal switch while the exterior lamp control is in AUTO mode and

the engine running. The AHBA system consists of a front camera module that detects light, and is able to identify approaching vehicles on an even, straight road at a distance of greater than 0.4 km (0.25 mi). The front camera module analyzes light color, intensity, and movement. The AHBA system will turn OFF the high beam headlamps when approaching vehicle headlamps or preceding vehicle taillights are detected by the front camera module. The AHBA system is turned off anytime the headlamp switch is moved out of the AUTO position.

**AHBA System Activation**

- Vehicle ON
- Headlamp switch placed in the AUTO position
- Outside lighting conditions must be dark
- Vehicle speed greater than 25 mph (40 km/h)

**AHBA System Operation**

The following are conditions that the AHBA system will turn the high beam headlamps off during operation:

- The system detects approaching traffic headlamps
- The system detects preceding traffic tail lamps
- Ambient light level too high due to towns or twilight situations
- The vehicle's speed drops below 13 mph (22 km/h)
- Delay

**Note:** AHBA may not operate properly if any of the following conditions exist:

- Approaching and preceding vehicles lamps are undetectable due to dirt, snow, road spray, smoke, fog, or any other airborne conditions.
- The front camera module is covered with ice, dirt, snow, haze, or is obstructed.
- The vehicle is being driven on winding or hilly road conditions which would make any on coming vehicle headlamps undetectable by the AHBA.

**AHBA System Deactivation**

- Manually operating the headlamp switch from neutral to high beam position
- AHBA is deactivated automatically when the front or rear fog lamps are turned ON

**AHBA System Indicator**

The status of the AHBA system is shown by a green indicator located on the instrument panel cluster. When AHBA is active, the indicator will be illuminated continuously. If the operator deactivates the AHBA system, the indicator will turn off.

## Daytime Running Lamps

The daytime running lamps (DRL) will illuminate continuously when the following conditions are met:

- Engine running
- The headlamp switch is in the AUTO position
- Ambient light conditions are daytime conditions

The B10D Sun Load and Ambient Light and Security Indicator Sensor is used to monitor outside lighting conditions. The ambient light sensor provides a voltage signal that will vary between 0.2 and 4.9 volts depending on outside lighting conditions. The K9 Body Control Module (BCM) provides a 5 volt reference signal and a low reference ground to the ambient light sensor. The BCM monitors the ambient light sensor signal circuit to determine if outside lighting conditions are correct for either daytime running lamps (DRL) or automatic lamp control when the headlamp switch is in the AUTO position. In daylight conditions the BCM will send a serial data message to the K219 Lighting Control Module to command the DRLs ON, the Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both DRL control circuits, illuminating the DRLs. During low light conditions the Lighting Control Module will command the low beam headlamps ON.

## Hazard Lamps

The hazard flashers may be activated in any power mode. The Hazard Warning Switch signal circuit is momentarily grounded when the hazard switch is pressed. The K9 Body Control Module (BCM) responds to the hazard switch signal input by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by supplying battery voltage to all turn signal lamps in an ON and OFF duty cycle. When the hazard switch is activated, the BCM also sends a serial data message to the instrument cluster requesting both turn signal indicators to be cycled ON and OFF.

## Park, Tail, and License Lamps

When the S30 Headlamp Switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the K9 Body Control Module (BCM). The BCM responds to the park lamp switch signal input by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying battery voltage to the park lamps, tail lamps, and license lamps control circuits illuminating the park, tail, and license lamps.

## Stop Lamps

The B22 Brake Pedal Position Sensor is used to sense the action of the driver application of the brake pedal. The K9 Body Control Module (BCM) provides the brake pedal position sensor with low reference, signal, and 5 volt reference circuits. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will respond by sending a serial data message to the K219 Lighting Control Module requesting the stop lamps to be turned ON. The Lighting Control Module responds by applying battery voltage to the left and right stop lamp control circuits as well as the center high mounted stop lamp control circuit illuminating the left and right stop lamps and the center high mounted stop lamp. If serial data communication is lost between the BCM and the Lighting Control Module, the Lighting Control Module will receive a serial data message from the Electronic Brake Control Module indicating that the brakes have been applied. If serial data communication is lost between all three modules, the Lighting Control Module also receives a hard wired voltage signal from the BCM to signal the brake lamps ON.

## Turn Signal Lamps

### Turn Signals

The K9 Body Control Module (BCM) provides the S78 Turn Signal Switch with left and right turn signal switch signal circuits. Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/ multifunction switch is placed in either the turn right or turn left position, ground is applied to the BCM through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying a pulsating voltage to the turn signal lamps through there respective control circuits. When a turn signal request is received by the BCM, a serial data message is also sent to the instrument cluster requesting the respective turn signal indicator be pulsed ON and OFF.

### Turn Signal Outage Detection

Vehicles with LED turn signals require additional turn signal outage detection circuits that provide turn signal feedback to the K219 Lighting Control Module. The Lighting Control Module uses the feedback information to send a serial data message to the instrument cluster to alert the driver anytime a turn signal fault is detected. If a fault is detected on a turn signal circuit or a turn signal feedback circuit, the turn signals will flash in a rapid manner to alert the driver of the fault.

## Backup Lamps

With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message to the multiple control modules. The message indicates that the gear selector is in the reverse position. The K9 Body Control Module (BCM) responds to the reverse position message by sending a serial data message to the K219 Lighting Control Module to request the backup lamps on. The Lighting Control Module responds by applying battery voltage to the backup lamps control circuit(s) illuminating the backup lamps. The applied voltage is also sent to the A11 Radio and A10 Inside Rearview Mirror for rearview camera purposes. Once the driver moves the gear selector out of the reverse position, a serial data message is sent by the TCM that the transmission is no longer in the reverse position. The BCM responds to the reverse position message by sending a serial data message to the Lighting Control Module to request the backup lamps off. The Lighting Control Module responds by removing battery voltage from the backup lamp circuits. The engine must be running for the backup lamps to operate.

## Cargo Lamps

### Cargo Lamps

When the K9 Body Control Module (BCM) receives a task lamp switch input from the S30 Headlaamp Switch, the BCM responds by sending a serial data message to the K219 Lighting Control Module. The lighting control module responds by applying pulse width modulated (PWM) voltage to the cargo lamp control circuits illuminating the cargo lamps. In the event that the cargo lamps were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position, the lighting control module will deactivate the cargo lamp control circuits to prevent total battery discharge.

### Task Lamps

When the K9 Body Control Module (BCM) receives a task lamp switch input from the S30 Headlaamp Switch, the BCM responds by sending a serial data message to the K219 Lighting Control Module. The lighting control module responds by applying pulse width modulated (PWM) voltage to the task lamp control circuits illuminating the task lamps in each outside rearview mirror assembly. When the task lamp switch is pressed a second time, the left task lamp control circuit will stay illuminated while the right side will be turned off. When the task lamp switch is pressed a third time, the left task lamp control circuit will be turned off while the right side will be turned back on. When the task lamp switch is pressed a fourth time, both task lamps will be turned off. In the event that the task lamps were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position, the lighting control module will deactivate the cargo lamp control circuit to prevent total battery discharge.

## Approach Lighting

Approach lighting is commanded ON when the unlock button is pressed on the keyless entry transmitter during dark ambient light conditions. When the keyless entry transmitter unlock button is pressed, a serial data message is sent by the K9 Body Control Module (BCM) that the vehicle is being unlocked. The K219 Lighting Control Module responds to the serial data message by applying voltage to the approach lamp control circuit illuminating the LED lighting located under each outside rearview mirror as part of approach lighting.

## Battery Run Down Protection/ Inadvertent Power

To provide battery run down protection, the exterior lamps will be deactivated automatically under certain conditions. The K9 Body Control Module (BCM) monitors the state of the S30 Headlamp Switch. If the headlamp switch is in the park or headlamp position when the ignition switch is ON and then the ignition switch is placed in the OFF position, the BCM initiates a 10 minutes timer. At the end of the 10 minutes, the BCM will send a serial data message to the K219 Lighting Control Module to deactivate the exterior lamps to prevent total battery discharge. This feature will be cancelled if any power mode other than OFF becomes active.

The BCM will disable battery run down protection if any of the following conditions exist:

- The park or headlamp switch is changed from the ON to OFF position, and back to the ON position during battery run down protection.
- The BCM determined that the park or headlamp switch was not active when the ignition was turned OFF.

# Interior Lighting Systems Description and Operation

## Interior Lamps

The interior lighting system consist of two groups. This first group includes lamps that are not be dimmed.

- Dome/reading lamps
- Instrument panel compartment lamp
- Instrument panel courtesy lamps
- Overhead console accent lamp
- Sunshade mirror lamps

### Dome Lamps

The dome lamps are controlled by door ajar inputs to the K9 Body Control Module (BCM). When any door is opened, the door ajar switch contacts close and the BCM receives a door-open input. The BCM responds by sending a serial data message to the A103 Roof Console. The Roof Console responds by applying battery voltage to the dome lamps illuminating the dome lamps. The BCM will also send a serial data message to request the dome lamps on when a door lock/unlock request is activated with the key fob. After all doors have been closed, the dome lamp will remain illuminated approximately 3 seconds after the last door closes. In the event that the dome lamp were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position, the BCM will deactivate the dome lamp control circuit to prevent total battery discharge. The dome lamps will turn OFF using the theater dimming feature when controlled by the BCM.

### Center Console Compartment Lamp

The K9 Body Control Module (BCM) supplies battery voltage to the center console lamp. When the center console lid is opened, the switch contacts close allowing battery voltage to flow illuminating the center console lamp. In the event that the center console lamp were to remain illuminated for more than 10 minutes with the ignition/vehicle off, the BCM will deactivate the courtesy lamp control circuit to prevent total battery discharge.

### Keyless Entry Interior Illumination

When the operator uses the keyless entry transmitter in order to unlock the doors, the K9 Body Control Module (BCM) receives a door-unlock signal. The BCM must receive inputs from various systems that indicate that the ignition switch is OFF, the courtesy lamp switch is OFF, and all doors are closed before the BCM will activate the interior lamps. After all doors have been closed, the courtesy lamps will turn OFF immediately if the ignition switch is turned to the ON position, the door locks are LOCKED, or approximately 20 seconds after the last door closes. The BCM will turn off the courtesy lamps through the theater dimming feature. The BCM keeps the courtesy lamps on for 40 seconds after an alarm event is completed.

### Reading Lamps

When a reading lamp button is pressed, the switch contacts close providing a path to ground for the signal circuit from the A103 Roof Console. The roof console responds by applying battery voltage to the appropriate reading lamp control circuit illuminating the reading lamp. If the operator inadvertently leaves a reading lamp ON, the BCM will send a serial data message to turn all interior lighting off after 10 minutes has passed to prevent total battery discharge.

### Sunshade Mirror Lamp

The inadvertent power supply voltage circuit from the K9 Body Control Module (BCM) provides battery voltage to the passenger side sunshade mirror lamp. When the sunshade mirror cover is opened, a switch closes providing ground and the sunshade lamp illuminates. If the operator inadvertently leaves the sunshade mirror cover open with the lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed to prevent total battery discharge.

## Interior Lamps Dimming

The second group includes lamps which may be dimmed. This group may use a combination of light emitting diodes (LED), incandescent lamps, and pulse width modulation (PWM) voltage illumination.

- Audio/Video Input Adapter
- Door lock switch – driver
- Door lock switch – passenger
- Hazard switch
- HVAC control head assembly
- Ignition mode switch
- Instrument panel dimmer switch
- Multifunction switch – center console
- Multifunction switch – instrument panel
- Outside rearview mirror switch
- Park brake switch
- Radio
- Seat memory switch – driver
- Seat memory switch – passenger
- Steering wheel controls switch – left
- Steering wheel controls switch – radio presets
- Steering wheel controls switch – radio volume
- Window switch – driver
- Window switch – passenger

With the S30 Headlamp Switch in the PARK or HEAD position, the park lamp switch signal circuit provides an input to the K9 Body Control Module (BCM). The BCM responds by applying voltage to the backlight dimming control circuits illuminating all components with interior backlighting. All interior backlighting turns on at the dimming level set by the dimmer buttons within the headlamp switch. The headlamp switch is used to increase and decrease the brightness of the interior backlighting components. The BCM provides a signal circuit and a low reference circuit to the headlamp switch for backlight dimming. When a dimming button is pressed, the signal circuit becomes grounded through the appropriate resistor internal to the headlight switch and voltage from the BCM will decrease accordingly. The BCM interprets the signal and responds in two ways. The BCM applies a pulse width modulated (PWM) voltage through the LED dimming control circuits illuminating the interior backlighting to the requested level of brightness. The BCM also sends a

serial data message to the appropriate control modules requesting all dimming components to be illuminated to the same level of brightness.

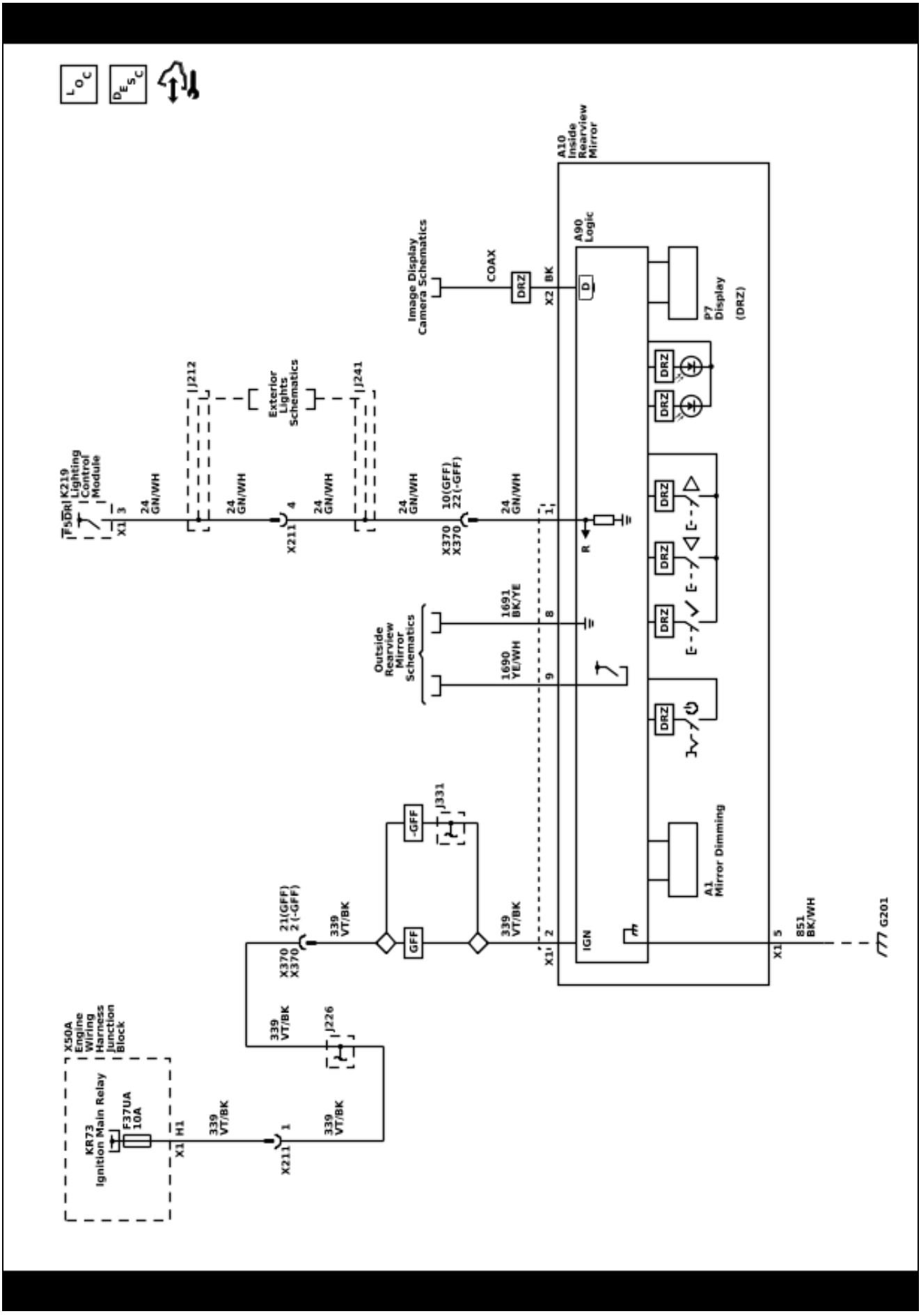
## Battery Rundown Protection/ Inadvertent Power

The K9 Body Control Module (BCM) inadvertent power supply voltage circuit provides battery voltage to all of the interior courtesy lamps. In the event that any of these lamps were to remain illuminated for a period of more than 10 minutes with the ignition switch in the OFF position, the BCM will deactivate the inadvertent power supply voltage circuit to prevent total battery discharge. If the ignition switch is turned to any position other than OFF, or if a lamp switch is activated during this 10 minute period, the timer resets for another 10 minutes.

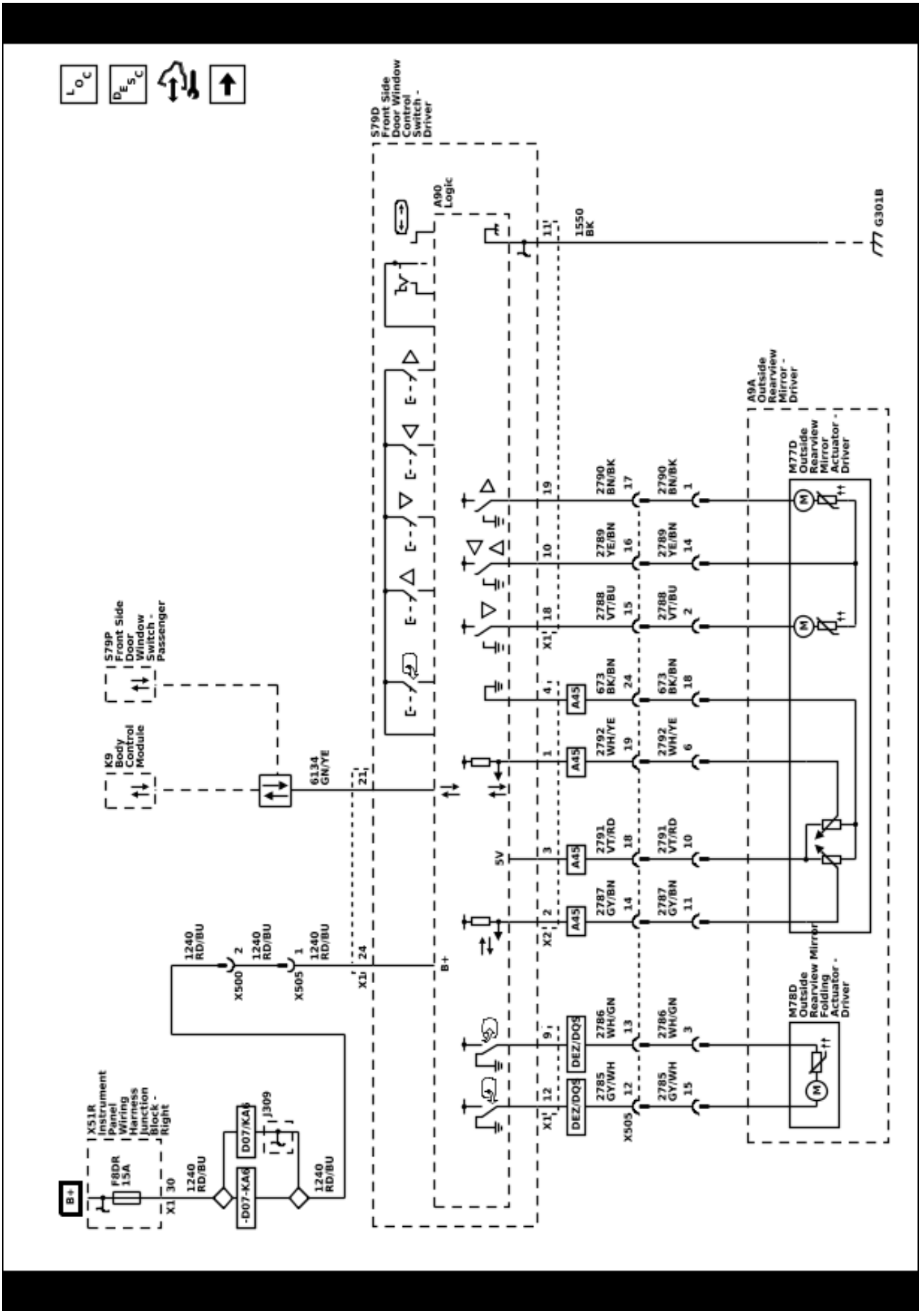
# Mirrors

## Schematic and Routing Diagrams

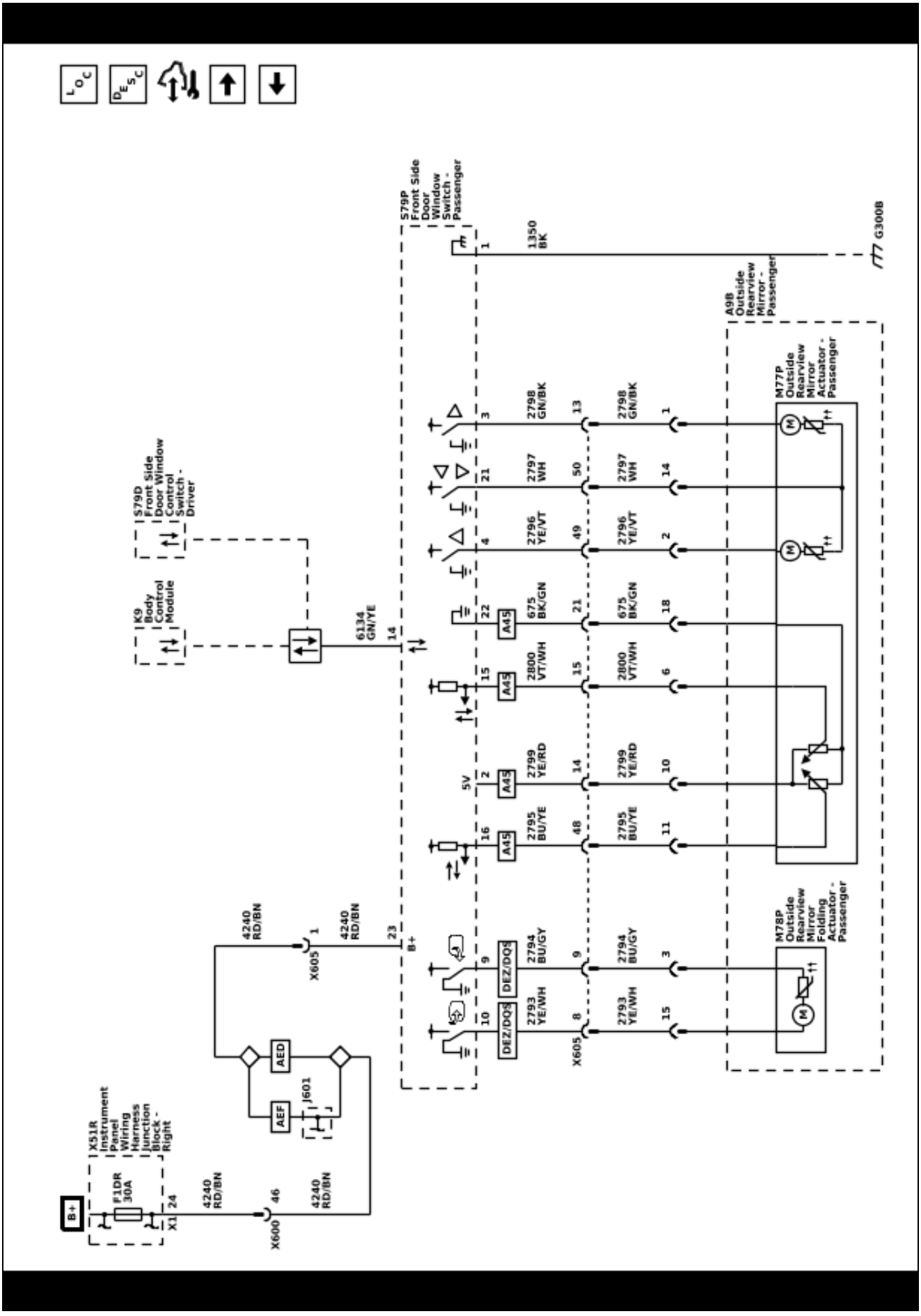
## Inside Rearview Mirror Schematics (Inside Rearview Mirror (DD8/DRZ))



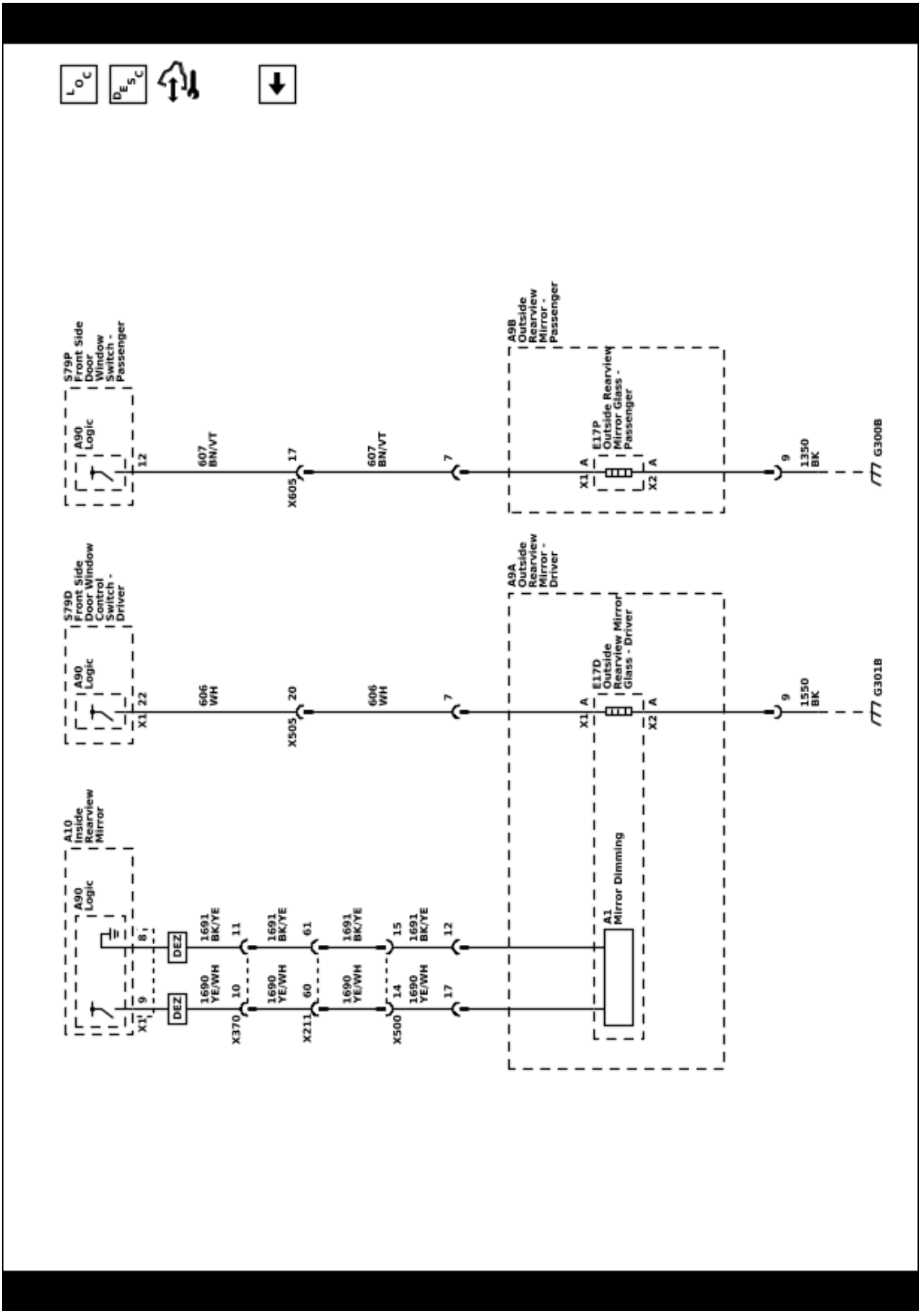
## Outside Rearview Mirror Schematics (Driver Controls, Position, and Folding)



## Outside Rearview Mirror Schematics (Passenger Controls, Position, and Folding)



## Outside Rearview Mirror Schematics (Dimming and Heating (DEZ))



# Description and Operation

## Automatic Day-Night Mirror Description and Operation

### Inside Rearview Mirror with the Automatic Day-Night Feature System Operation

The inside rearview mirror uses 2 photocell sensors. One sensor is the headlight sensor, located on the face side of the mirror. The headlight sensor is used to determine light conditions present at the mirror face. The other sensor is the ambient light sensor, located on the rear of the mirror or windshield side. The ambient light sensor is used to determine the exterior light conditions. With a low exterior light condition detected, and a high light condition from behind the car, at the headlight sensor, the inside rearview mirror will automatically darken the face of the mirror.

In the daytime, the mirror is in a normal state because of the high exterior light condition that is indicated by the ambient light sensor. With the gear selector lever in the REVERSE position and the Ignition ON/Vehicle in Service Mode, backup lamp supply voltage is supplied as an input to the inside rearview mirror. The mirror monitors this input to disable the automatic day-night feature. This allows the driver to see objects in the mirror clearly when backing up, even during the night.

### Driver Outside Rearview Mirror with Automatic Day-Night System Operation (If Equipped)

The automatic day-night feature of the driver outside rearview mirror is controlled by the inside rearview mirror. The inside rearview mirror supplies control and low reference to the driver outside rearview mirror. At night, with the automatic day-night feature enabled, the driver outside rearview mirror will automatically darken with the inside rearview mirror to reduce glare from headlamps behind the vehicle.

### Inside Rearview Camera Full Display Mirror System Operation

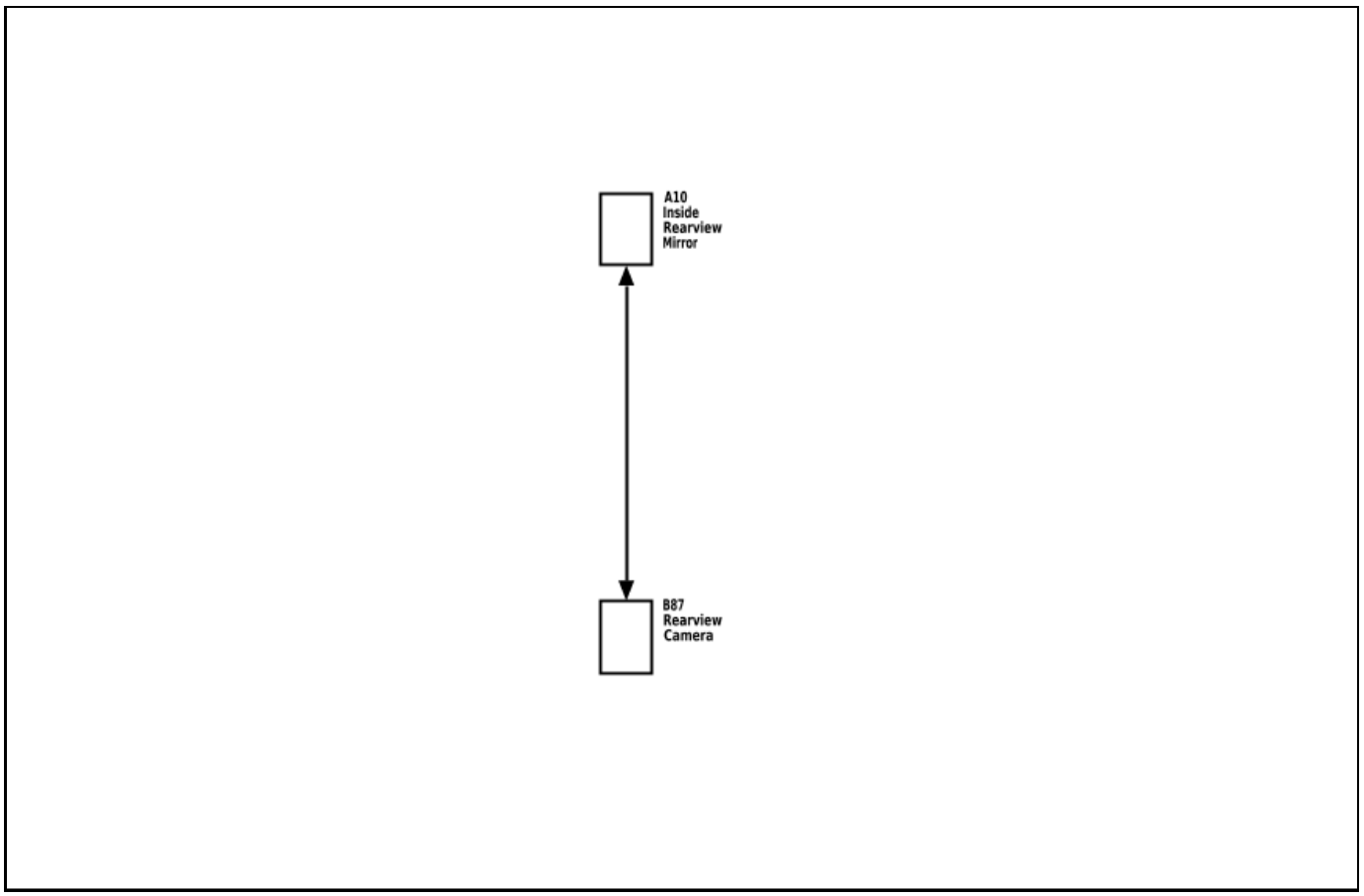
The inside rearview camera full display mirror is connected to the outside rearview camera via a shielded coaxial cable. When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror. Adjust the rearview mirror for a clear view of the area behind the vehicle before turning on full display mirror. Use the button on the back of the mirror to adjust the brightness of the display. Make sure the light sensor is not covered when adjusting the brightness.

The inside rearview camera full display mirror may not work properly or display a clear image if:.

- It is dark.
- The sun or the beam of headlamps are shining directly into the camera lens.
- Ice, snow, mud, or anything else builds up on the camera lens. Clean the lens, rinse it with water, and wipe it with a soft cloth.

When the mirror detects that the camera is not sending a valid video signal, it “blue screens” with a “no video” decal for 3 seconds, then reverts back to the mirror. Meanwhile, if a blue screen keeps on displaying instead of the camera view, take the vehicle to your dealer for service.

### Rearview Camera Full Display Mirror Block Diagram




4433072

# Outside Mirror Description and Operation

## Power Mirror System Components

The power mirror system consists of the following components:

- Body Control Module
- Driver Seat Adjuster Memory Module
- Outside Mirror Switch
- Passenger Window Switch
- Left Outside Rearview Mirror
- Right Outside Rearview Mirror

## Power Mirror System Controls

The outside rearview mirror switch is part of the S79D Driver Front Side Door Window Control Switch and uses serial data to control the passenger mirror through the S79P Passenger Front Side Door Window Control Switch. Each S79 Side Door Window Control Switch has it own 12V, ground and data communications circuit along with mirror directional control and mirror fold circuits.

## Driver Mirror Controls

The S79D Driver Front Side Door Window Control Switch has internal connections for the driver mirror. When the mirror position switch is active the driver mirror is commanded to move through bi-directional motor control circuits. The motor control circuits are floating while in an inactive state and the switches will apply power and ground to the control circuits as necessary to move the mirror in the commanded direction.

## Passenger Mirror Controls

The S79D Driver Front Side Door Window Control Switch uses serial data circuits to communicate the active states for the passenger mirror switch to the S79P Passenger Front Side Door Window Control Switch. The S79P Passenger Front Side Door Window Control Switch has internal connections for the passenger mirror. When the mirror position switch is active the passenger mirror is commanded to move through bi-directional motor control circuits. The motor control circuits are floating while in an inactive state and the switches will apply power and ground to the control circuits as necessary to move the mirror in the commanded direction.

## Mirror Position

Mirror position is determined by both horizontal and vertical position sensors in each of the power mirrors. Each S79 Front Side Door Window Control Switch supplies a 5 V reference, low reference, and horizontal and vertical position signal circuits to these sensors. The signal circuits are referenced from 5 V by the S79 Front Side Door Window Control Switch and the signal circuit voltage levels represent the mirror positions. The mirror positions are stored in each

S79 Front Side Door Window Control Switch for memory mirror operation. When the memory seat module receives a memory recall command, the memory seat control module will send the go to position to the S79 Front Side Door Window Control Switch. The S79 Front Side Door Window Control Switches will then drive the appropriate mirror motors to the commanded position sensor settings.

## Mirror Select

The S79D Driver Front Side Door Window Control Switch has internal connections for the mirror select switch. When the mirror select switch is active the S79 Front Side Door Window Control Switch will either control the driver mirror or send a serial data message to control the passenger mirror.

## Folding Mirrors

The S79D Driver Front Side Door Window Control Switch sends the mirror fold/unfold inputs to the K9 Body Control Module (BCM) through serial data. When the BCM receives a fold/unfold signal it will send a fold/unfold command to the S79 Driver Front Side Door Window Control Switch which will send a serial data message to the S79P Passenger Front Side Door Window Control Switch. The outside mirrors will fold or unfold depending on their current state. The BCM will also send a serial data message to unfold the mirrors when the vehicle is placed into gear. The S79 Front Side Door Window Control Switches control the fold/unfold motors through bi-directional control circuits

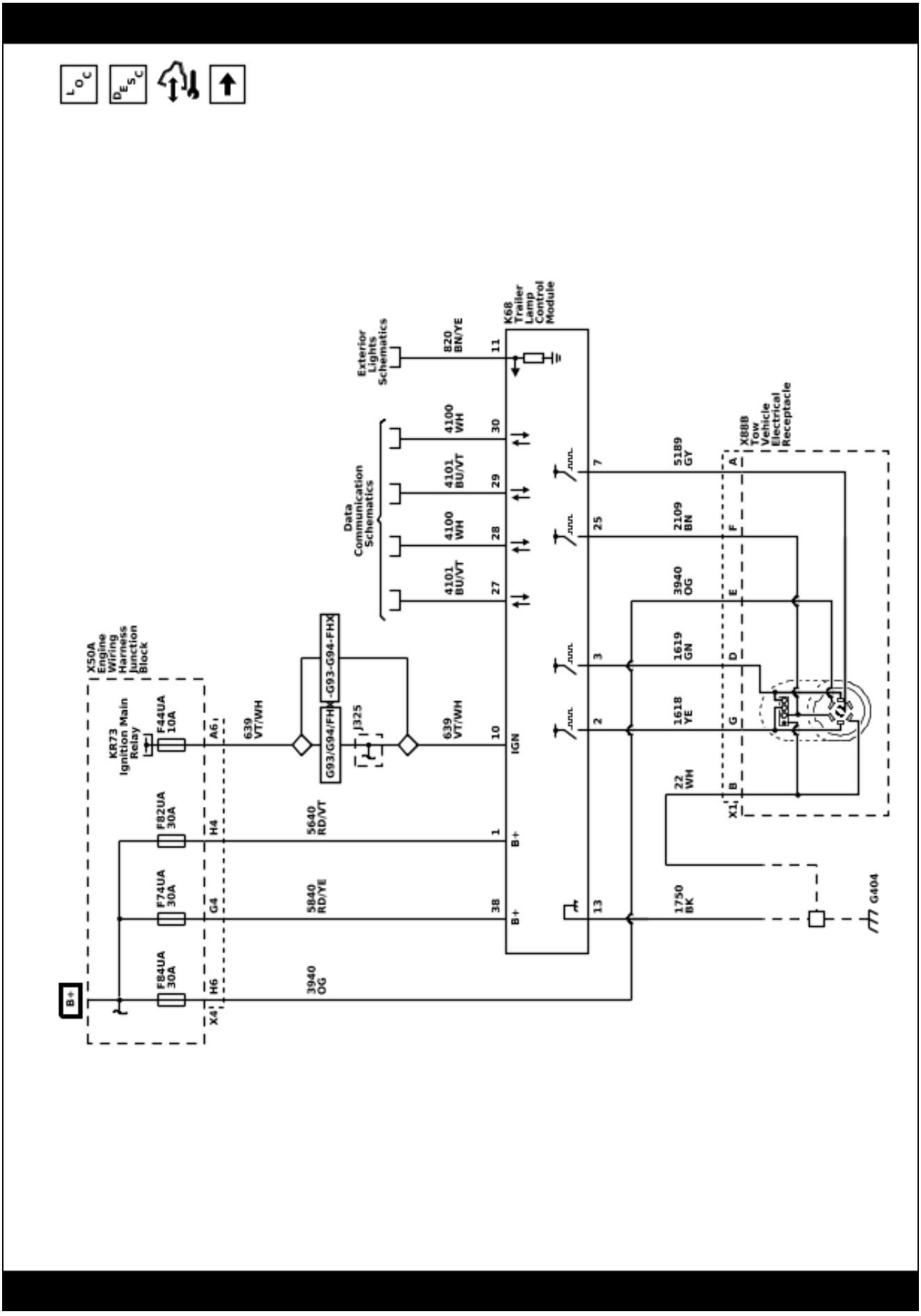
## Heated Mirrors

The heated mirrors are controlled through each S79 Front Side Door Window Control Switch. When the vehicle is running and the HVAC control module receives a rear window defog request from the radio/HVAC controls, the HVAC control module will send a serial data message to the S79D Driver Front Side Door Window Control Switch and S79P Passenger Front Side Door Window Control Switch. Each S79 Front Side Door Window Control Switch provide B + voltage to the driver and passenger outside rearview mirror heating elements.

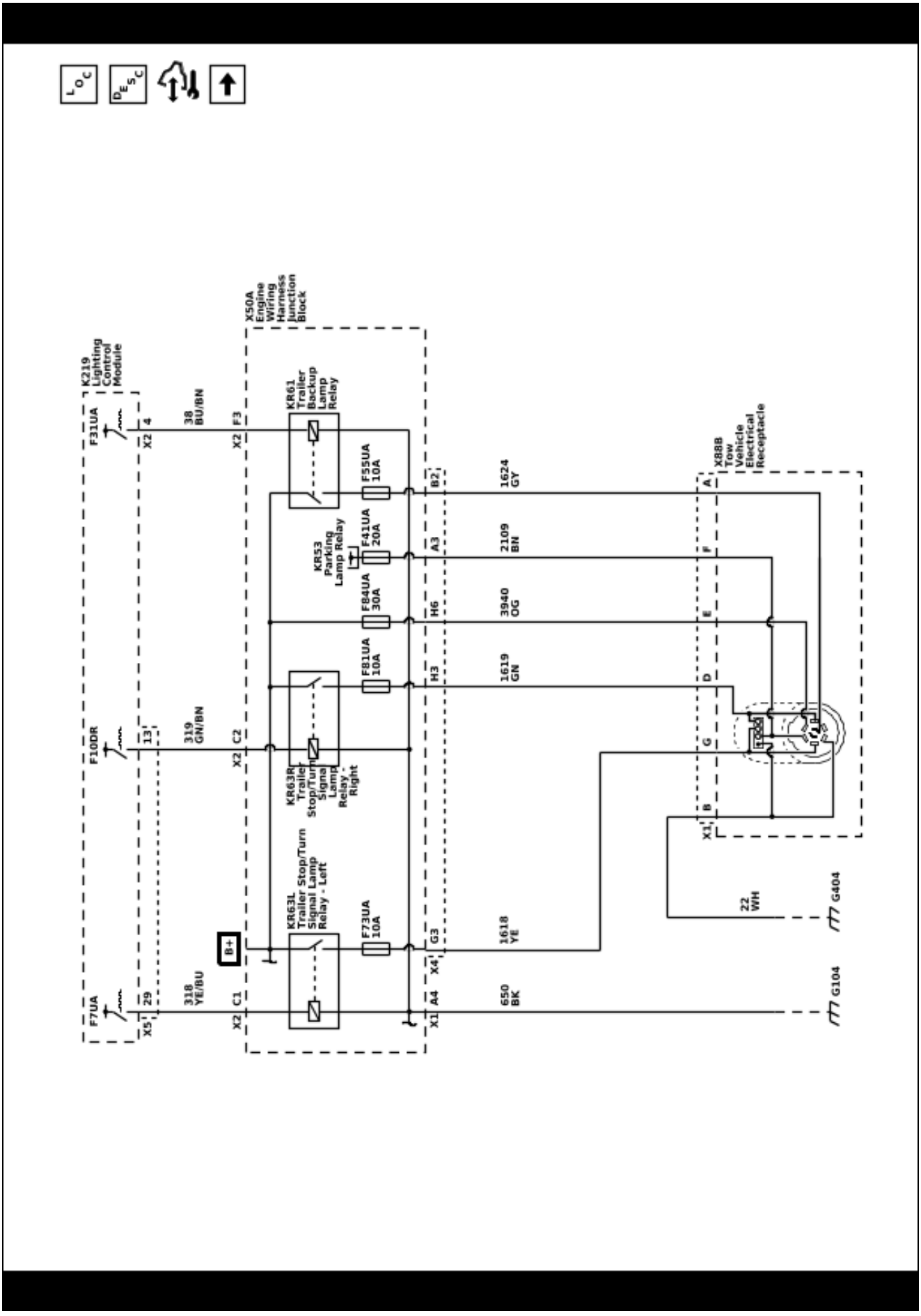
# Trailering Systems

## Schematic and Routing Diagrams

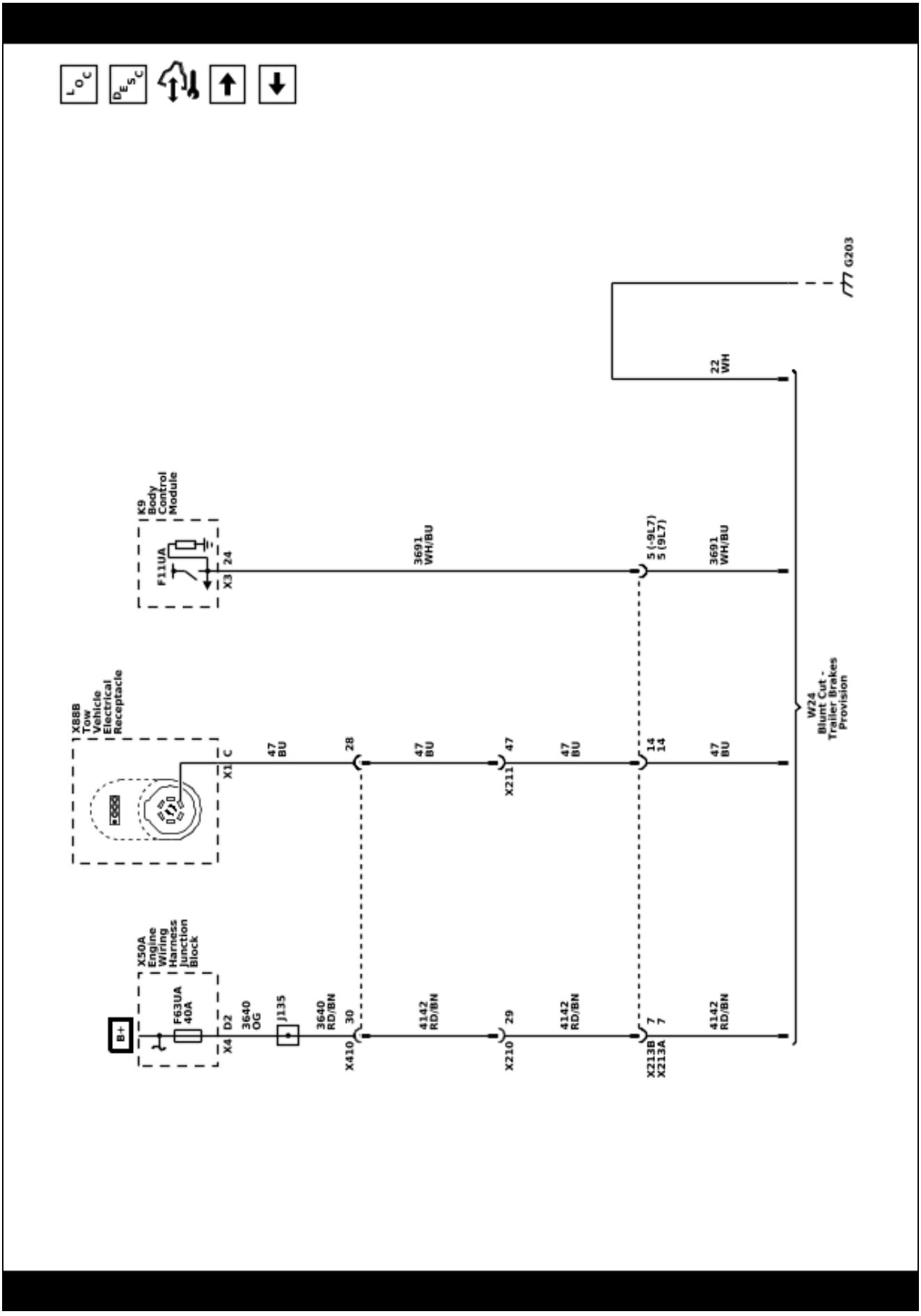
## Trailering Systems Schematics (Trailer Lighting Control Module (UET))



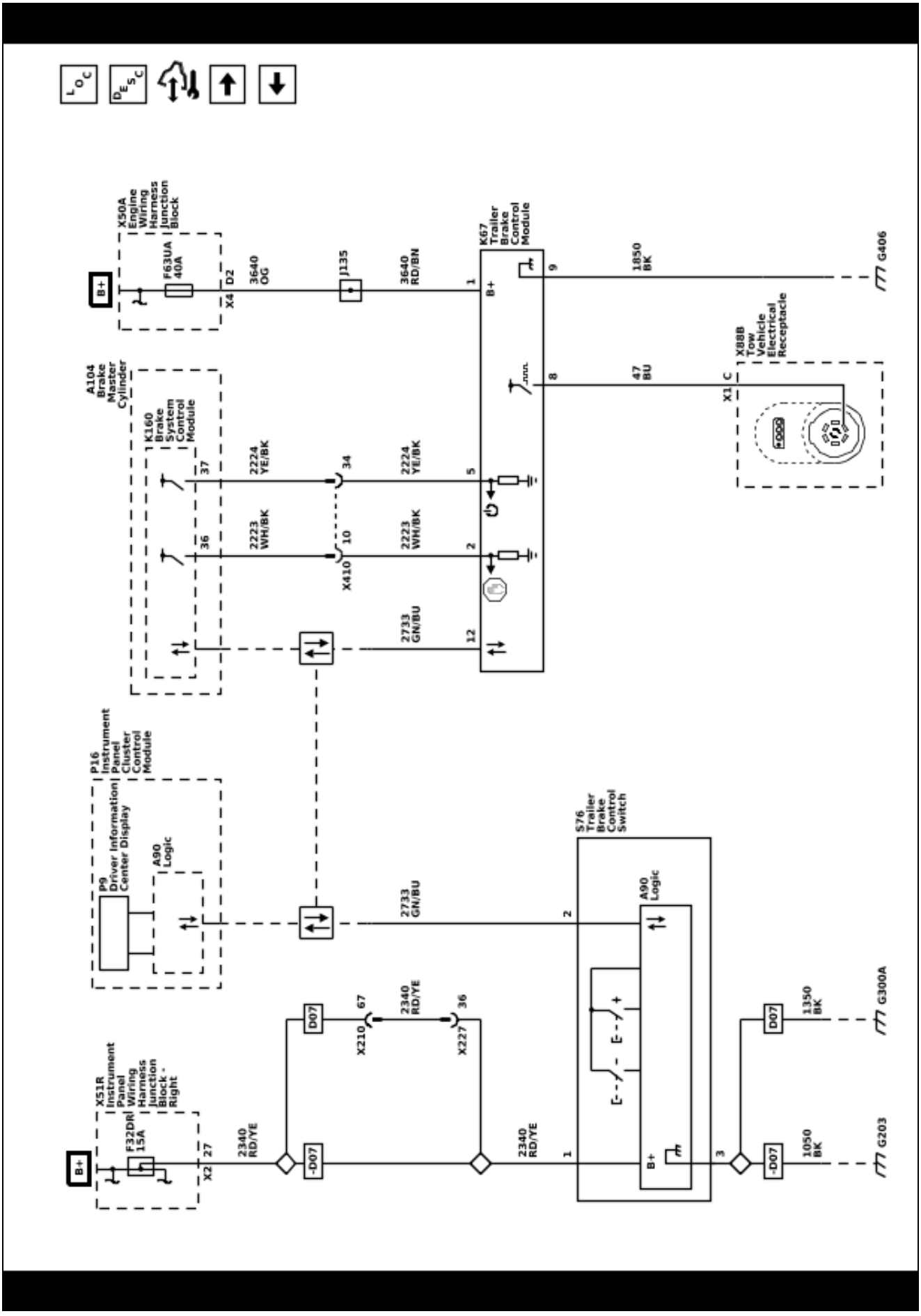
## Trailering Systems Schematics (Trailer Connector Pins: A, B, D, E, F, G (Z82-UET))



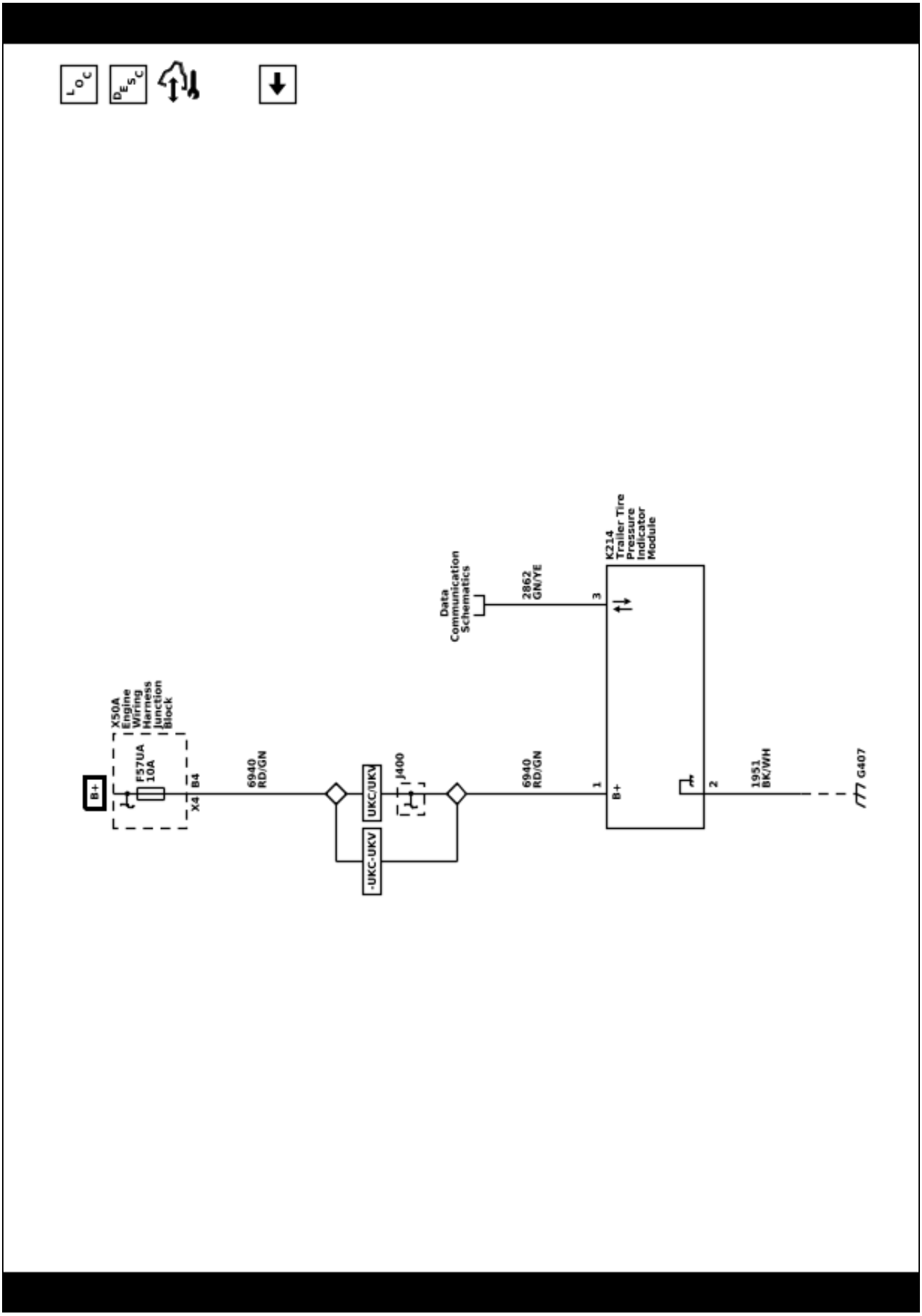
## Trailering Systems Schematics (Trailer Brake Provisions (Z82-JL1))



## Trailering Systems Schematics (Trailer Brake (JL1))



## Trailering Systems Schematics (Trailer Tire Pressure (UET))



# Description and Operation

## Trailering Description and Operation

### Trailering System Overview

Begin the trailering system diagnosis with Diagnostic System Check - Trailering. The Diagnostic System Check - Trailering will provide a complete strategy to locate and repair a vehicle trailering electrical fault. Not following this strategy may cause additional diagnostic time and/or misdiagnosis.

The trailering system consists of the following:

- Trailer Lighting
- Trailer Brakes
- Trailer Battery Charging System
- Trailer Detection
- Trailer Tire Pressure Monitoring System
- Trailer Theft Detection.

When a trailer is detected on a vehicle equipped with side blind zone detection, rear park assist, and/or rear cross traffic alert, the vehicle will automatically turn these features off. These features are turned off to prevent false detections due to the trailer obstructing the view of the sensors.

**7–Terminal Tow Vehicle Electrical Receptacle Pinout (North America)**

- Terminal A – Trailer Backup Lamp Control
- Terminal B – Ground
- Terminal C – Trailer Brake Control
- Terminal D – Right Trailer Stop/Turn Signal Lamp Control
- Terminal E – B+
- Terminal F – Trailer Park Lamp Control
- Terminal G – Left Trailer Stop/Turn Signal Lamp Control

**13–Terminal Tow Vehicle Electrical Receptacle Pinout (Export)**

- Terminal 1 – Left Trailer Turn Signal Lamp Control
- Terminal 2 – Trailer Fog Lamp Control
- Terminal 3 – Ground
- Terminal 4 – Right Trailer Turn Signal Lamp Control
- Terminal 5 – Right Trailer Park Lamps Control
- Terminal 6 – Trailer Stop Lamps Control
- Terminal 7 – Left Trailer Park Lamps Control
- Terminal 8 – Trailer Backup Lamp Control
- Terminal 9 – B+
- Terminal 10 – Ignition Voltage
- Terminal 11 – Ground
- Terminal 12 – Trailer Connected Signal
- Terminal 13 – Ground

### Connecting Aftermarket Accessories

- Some aftermarket accessories that connect to the X88 Tow Vehicle Electrical Receptacle will be recognized by the vehicle as a trailer connected, even if the accessory is not a trailer. As a result, side blind zone detection, rear park assist, and/or rear cross traffic alert will be turned off anytime the vehicle detects a trailer/accessory is connected.
- Vehicles equipped with U1D/UET have trailer theft detection that constantly monitors trailer connected status when enabled. This is done by randomly pulsing the lighting circuits of the trailer when the vehicle is parked. As a result, some aftermarket accessories may be turned ON/OFF when connected to the vehicle with theft detection enabled.
- Vehicles equipped with U1D/UET use pulse width modulation voltage (PWM) for trailer lighting functions. Some aftermarket accessories are incompatible with PWM and may not function correctly when connected to the trailer lighting circuits of the vehicle.

### Trailer Battery Charging System

Trailer battery charging is accomplished through constant battery voltage from the X50A Engine Wiring Harness Junction Block to the X88 Tow Vehicle Electrical Receptacle. Battery voltage is supplied to terminal E at the X88 Tow Vehicle Electrical Receptacle at all times. If equipped, the trailer battery will constantly be charged by the vehicle's electrical system anytime the trailer is connected. Some trailers require the B+ circuit to the X88 Tow Vehicle Electrical Receptacle for the trailer brakes to function.

### Trailer Lighting and Detection With U1D/UET

**Note:**

- Some trailers utilize a trailer mounted control module to operate some or all of the trailer lights. These trailers may use the B+ circuit from the trailer connector to power the trailer lighting circuits. These trailers may not always be detected by the Trailer Lighting Control Module and may set faults.
- Vehicles equipped with IOR/1FL do not come equipped with the trailering APP however may still be equipped with a K68 trailer Lamp Control Module.

**North America (7-Terminal connector)**

North American vehicles use a 7-way trailer connector for trailering features. The K68 Trailer Lamp Control Module is responsible for controlling the trailer lighting on vehicles with U1D/UET. The combined trailer stop/turn signal lamps of the trailer must draw at least 55mA of total current to be detected as a trailer or the Trailer Lamp Control Module will not control the lighting circuits. The Trailer Lamp Control Module receives serial data messages from the K9 Body Control Module (BCM) indicating what lamps have been activated on the vehicle. The Trailer Lamp Control Module responds by applying pulse width modulated voltage (PWM) to the appropriate control circuits for the requested lamps

illuminating the lamps on the attached trailer. The Trailer Lamp Control Module constantly monitors for trailer connection status, trailer lighting faults, and trailer theft deterrent purposes. This is accomplished through the lighting circuits of the trailer to determine if a trailer is connected. When a trailer is connected, the Trailer Lamp Control Module senses the trailer connection and alerts the driver by requesting a trailer profile setup through the Trailering App, which is displayed on the infotainment screen. If a trailer is disconnected with the ignition ON, the vehicle will display multiple trailer lighting messages until a trailer is reconnected or the message is dismissed by the user. With the key OFF, the Trailer Lamp Control Module will periodically pulse the lighting circuits of the trailer to verify it is still connected. The lights on the trailer may flash at different intervals with the key OFF depending on which type of lights the trailer is built with. If a trailer is disconnected with the key ON, the vehicle will display a trailer disconnected message until a trailer is reconnected or the ignition is cycled.

**Export (13-Terminal connector)**

Export vehicles use a 13-way trailer connector for trailering features. The K68 Trailer Lamp Control Module is responsible for controlling the trailer lighting on vehicles with U1D/UET. The combined trailer turn signal and park lamps of the trailer must draw at least 55mA of total current to be detected as a trailer or the Trailer Lamp Control Module will not control the lighting circuits. The Trailer Lamp Control Module receives serial data messages from the K9 Body Control Module (BCM) indicating what lamps have been activated on the vehicle. The Trailer Lamp Control Module responds by applying pulse width modulated voltage (PWM) to the appropriate control circuits for the requested lamps illuminating the lamps on the attached trailer. The Trailer Lamp Control Module constantly monitors for trailer connection status, trailer lighting faults, and trailer theft deterrent purposes. This is accomplished through the lighting circuits of the trailer to determine if a trailer is connected. With the key OFF, the Trailer Lamp Control Module will periodically pulse the lighting circuits of the trailer to verify it is still connected. The lights on the trailer may flash at different intervals with the key OFF depending on which type of lights the trailer is built with.

## Trailer Lighting Without U1D/UET

The K219 Lighting Control Module is responsible for controlling the trailer lighting on vehicles without U1D/UET. The lighting control module receives serial data messages from the K9 Body Control Module (BCM) indicating what lamps have been activated on the vehicle. The lighting control module responds by applying voltage to the appropriate relay control circuits for the requested lamps anytime the vehicle lamps are commanded ON. With the relay coil energized, the relay contacts close and allow voltage to flow through the relay illuminating the appropriate lamps on the attached trailer.

## North America 7–Way Trailer Connector Trailer Messages

The driver information center (P16 Instrument Cluster) or infotainment screen (P17 Info Display Module) may display one or more of the following messages to the user related to trailering.

### North America 7–Way Trailer Connector

| Trailering Message | Description |
|---|---|
| Check Trailer Left Turn Signal Lamp | The K68 Trailer Lighting Control Module detects a fault on the left trailer stop/turn lamp control circuit |
| Check Trailer Right Turn Signal Lamp | The K68 Trailer Lighting Control Module detects a fault on the right trailer stop/turn lamp control circuit |
| Check Trailer Rear Lamp | The K68 Trailer Lighting Control Module detects a fault on the trailer park lamp control circuit. |
| Check Trailer Reversing Lamp | The K68 Trailer Lighting Control Module detects a fault on the trailer backup lamp control circuit. |
| Check Trailer Brake Lamps | The K68 Trailer Lighting Control Module detects a fault on the left and/or right trailer stop/turn lamp control circuits |
| {JL1} Check Trailer Wiring | The K133 Trailer Brake Power Control Module detects a fault on the trailer brake control circuit or the trailer was disconnected. |
| Lane Change Alert Off | Reminder to the user that lane change alerts are turned off anytime a trailer is detected. |
| Rear Cross Traffic Alert Off | Reminder to the user that rear cross traffic alerts are turned off anytime a trailer is detected. |
| Rear Park Assist Off | Reminder to the user that rear park assist is turned off anytime a trailer is detected. |
| Remember to turn On Tow/Haul Mode | Reminder to the user to turn ON Tow/Haul Mode when towing. |
| {JL1} Service Trailer Brake System | The K133 Trailer Brake Power Control Module detects a fault on the trailer brake control circuit. |
| Service Trailer Tire Monitor System | The K214 Trailer Tire Pressure Indicator Module detects one or more issues with the trailer tire pressure monitoring system. |

### North America 7–Way Trailer Connector (cont'd)

| Trailering Message | Description |
|---|---|
| Trailer Detected | The K68 Trailer Lighting Control Module detects a trailer has been connected to the X88 Trailer Connector. |
| {JL1} Trailer Brakes Detected | The K133 Trailer Brake Power Control Module detects a trailer with trailer brakes has been connected to the X88 Trailer Connector. |
| Trailer Disconnected Check Connection | The K68 Trailer Lighting Control Module detects a trailer has been disconnected from the X88 Trailer Connector. |
| Trailer Tire Pressure High | The K214 Trailer Tire Pressure Indicator Module detects one or more of the trailer tire pressures is high. |
| Trailer Tire Pressure Low | The K214 Trailer Tire Pressure Indicator Module detects one or more of the trailer tire pressures is low. |
| Trailer Tire Sensor Fault | The K214 Trailer Tire Pressure Indicator Module detects one or more of the trailer tire pressure sensors has a fault. |
| Trailer Tire Temperature High | The K214 Trailer Tire Pressure Indicator Module detects one or more of the trailer tire temperatures is too high. |

## Export 13–Way Trailer Connector Trailer Messages

The driver information center (P16 Instrument Cluster) or infotainment screen (P17 Info Display Module) may display one or more of the following messages to the user related to trailering.

### Export 13–Way Trailer Connector

| Trailering Message | Description |
|---|---|
| Check Trailer Left Turn Signal Lamp | The K68 Trailer Lighting Control Module detects a fault on the left trailer turn lamp control circuit |
| Check Trailer Right Turn Signal Lamp | The K68 Trailer Lighting Control Module detects a fault on the right trailer turn lamp control circuit |
| Check Trailer Rear Lamp | The K68 Trailer Lighting Control Module detects a fault on one or both of the trailer park lamp control circuit(s). |
| Check Trailer Reversing Lamp | The K68 Trailer Lighting Control Module detects a fault on the trailer backup lamp control circuit. |
| Check Trailer Brake Lamps | The K68 Trailer Lighting Control Module detects a fault on the trailer stop lamp control circuit. |
| Check Trailer Rear Fog Lamp | The K68 Trailer Lighting Control Module detects a fault on the trailer fog lamp control circuit. |
| Lane Change Alert Off | Reminder to the user that lane change alerts are turned off anytime a trailer is detected. |
| Rear Cross Traffic Alert Off | Reminder to the user that rear cross traffic alerts are turned off anytime a trailer is detected. |
| Rear Park Assist Off | Reminder to the user that rear park assist is turned off anytime a trailer is detected. |

## Trailer Theft Detection (With U1D/ UET Only)

Trailer theft monitoring can be turned ON and OFF through the vehicle Trailer App. When enabled, any time the trailer theft deterrent system is armed, the trailer lighting circuits are constantly monitored to determine if a trailer is connected for trailer theft deterrent purposes. With the key OFF, the K68 Trailer Lamp Control Module will randomly pulse the lighting circuits of the trailer to verify it is still connected by monitoring the voltage drop of the circuit. Depending on the configuration of the trailer lights, the trailer lights may randomly flash as part of the trailer theft deterrent function. These flashes correspond to when the K68 Trailer Lamp Control Module pulses the lighting circuits to ensure the trailer is still connected and is considered normal. If the trailer is disconnected while the trailer theft deterrent system is armed, the vehicle will flash the exterior lights and cycle the horn to alert of a trailer theft event.

## Trailer Brakes (JL1)

**The vehicle is equipped with the following trailer braking components:**

- K160 Brake System Control Module
- K133 Trailer Brake Control Module

- S76 Trailer Brake Control Switch
- Manual Trailer Brake Apply
- Trailer Gain Adjustment
- Trailer Brake Driver Information Center Display

A trailer brake control system is used to control the amount of trailer braking power that is made available to trailers with brakes that require a controlled electrical output signal for actuation.

The power output to the trailer brakes is based on both the amount of braking being applied by the vehicle's brake system and on the type of trailer brakes detected.

**The Trailer Brake Control System is compatible with two types of Trailer Brake Systems as listed below:**

1. **Electric Brakes** A controlled electrical output signal energizes an electric-magnet/lever arm assembly that directly actuates the brake mechanism. The GDS name for this system is "Electromagnetic Brakes".
2. **Electric Over Hydraulic Brakes** A controlled electrical output signal energizes a remote, trailer mounted hydraulic pump to build brake pressure in a closed hydraulic system on the trailer. The hydraulic fluid pressure actuates the brake mechanism. The GDS name for this system is "Electrohydraulic Brakes".

**Trailer Brake Output Versus Trailer Brake Type**

- The trailer brake system characterizes the trailer brakes as either Electric Brake or Electric Over Hydraulic Brake automatically. This characterization may be affected by the number, type, and age of the trailer brake magnets, as well as any other devices installed on the trailer brakes (i.e. adapters for Electric Over Hydraulic brake functionality).
- The trailer brake system is fully operational with either characterization.
- Sliding the manual trailer brake apply lever will produce output at zero speed for either characterization.

The user gain allows the driver to adjust the amount of trailer brake output to match the trailer load and road surface. The controller determines the desired trailer brake output and provides a control signal to the K133 Trailer Brake Control Module (TBPM). The K133 Trailer Brake Control Module amplifies the signal and provides the output required to activate the Electric or Electric Over Hydraulic trailer brakes.

The trailer brake control can support up to a maximum of four axles with electric trailer brakes (8 brake magnets).

Connecting a trailer that is not compatible with the trailer brake system may result in reduced or complete loss of trailer braking. There may be an increase in stopping distance or trailer instability which could result in personal injury or damage to the vehicle, trailer or other property. An aftermarket controller may be available for use with incompatible trailer brake systems.

To determine the type of brakes on your trailer and the availability of controllers, check with your trailer manufacturer or dealer. Do not power up an aftermarket controller with the factory brake controller at the same time.

## Trailer Brake Control Panel

The S76 Trailer Brake Control Switch contains the trailer gain and manual apply switches. It is located in the vehicle center stack. Refer to the owner's manual for more information on the location. The control panel and switches allows you to adjust the amount of output, referred to as trailer gain, available to the Electric or Electric Over Hydraulic brakes. It also allows you to manually apply the trailer brakes. The trailer brake control switch is used along with the trailer brake display page on the driver information center to adjust and display power output to the trailer brakes.

## Manual Trailer Brake Apply

The manual trailer brake apply lever is located on the S76 Trailer Brake Control Switch and is used to apply the trailer's Electric or Electric Over Hydraulic brakes independent of the vehicle's brakes. This lever is used in the trailer gain adjustment procedure to properly adjust the power output to the trailer brakes.

Sliding the lever will apply only the trailer brakes. The power output to the trailer is indicated in the trailer brake display page in the Driver Information Center (DIC). If the vehicle's service brakes are applied while using the manual trailer brake apply lever, the trailer brake control output power will be the greater of the two.

The trailer and the vehicle's brake lamps will come on when either the vehicle's braking or manual trailer brakes are applied.

## Trailer Brake Gain Adjustment

Trailer gain should be set for a specific trailering condition and must be adjusted any time vehicle loading, trailer loading or road surface conditions change. It is important to re-adjust trailer gain any time the tow vehicle, trailer loading or road surface conditions change or if you notice trailer wheel lock-up at any time while you are towing.

Setting the trailer gain properly is needed for the best trailer stopping performance. A trailer that is over-gained may result in locked trailer brakes. A trailer that is under-gained may result in not enough trailer braking. Both of these conditions may result in poor stopping and stability of the vehicle and trailer.

**Trailer Gain Adjustment Procedure**

- Adjust trailer gain in 0.5 step increments up to 10 gain setting by using the gain adjustment +/− buttons on the trailer brake control panel switch. Pressing and holding a gain button will cause the trailer gain to continuously increment or decrement. To turn the output to the trailer off, set the gain to zero.
- Drive the tow vehicle and trailer combination on a level surface representative of the towing condition and free of traffic at approximately 32–40 km/h (20–25 mph) and fully apply the manual trailer brake apply lever mechanism located on the

trailer brake control panel switch. Adjusting the trailer gain at slower speeds may result in an incorrect gain setting.

- Adjust the trailer gain to just below the threshold of trailer wheel lock-up . Trailer wheel lock-up may not occur if towing a heavily loaded trailer. In this case, adjust the trailer gain to the highest allowable setting for the towing condition.

**Trailer Brake Gain and Output Display**

This display menu can be accessed by scrolling through the DIC menu, or any time the trailer gain +/− button is depressed, or the manual trailer brake apply lever is actuated. The trailer output is displayed from 0 to full output and indicates the output power provided to the trailer brakes, relative to the gain setting.

After the electrical connection is made to a trailer equipped with electric brakes or electric over hydraulic brakes, the TRAILER CONNECTED message will be displayed momentarily on the DIC. The Trailer Brake Display Page can be selected on the DIC showing TRAILER GAIN and OUTPUT, after all vehicle related service messages are acknowledged by the driver. Depending on which instrument panel cluster is in the vehicle, the DIC may display dashed lines, a greyed out display, or it may be blank signifying a disconnected trailer or a trailer brake fault condition.

## Trailer Brake Driver Information Center Indicators and Messages

**Trailer Brake Detection**

The K133 Trailer Brake Control Module constantly monitors the trailer auxiliary control circuit from Terminal C at the X88 Trailer connector. When a trailer is connected with trailer brakes, the K133 Trailer Brake Control Module senses the connection and alerts the driver with a Trailer Connected message. If the K133 Trailer Brake Control Module senses a fault, or the trailer becomes disconnected, the vehicle will alert the driver with a Check Trailer Wiring message.

The following indicators are used to inform the driver of several different conditions:

**Trailer Connected**

This message will be briefly displayed when a trailer with Electric or Electric Over Hydraulic brakes is first connected to the vehicle. This message will automatically turn off in about ten seconds. The driver can also acknowledge this message before it automatically turns off.

**Check Trailer Wiring**

This message will be displayed if:

- The system detects that a trailer with Electric or Electric Over Hydraulic brakes is connected to the vehicle and then the trailer harness becomes disconnected from the vehicle.
- The trailer connection is recognized initially and then a disconnect occurs while the vehicle is stationary. This message will automatically turn off in about thirty seconds. This message will also turn off if the driver selects to turn this message off or if the trailer harness is reconnected.
- A disconnect of the trailer wiring harness occurs while the vehicle is moving. The Check Trailer Wiring message will continue until the ignition is turned off. The message will also turn off if the driver selects to turn this message off or it the trailer harness is re-connected.
- There is an electrical fault in the wiring to the electric trailer brakes. The Check Trailer Wiring message will continue as long as there is an electrical fault in the trailer wiring. This message will also turn off if the driver acknowledges this message off.
- A poor connection at the 7–way connector may cause the Check Trailer Wiring message. Some aftermarket 7–way trailer side connector adapters or plugs may cause deformation or excessive wear to the vehicle's trailer terminals. It is recommended that you use an OEM or Pollak heavy duty 7–way trailer side connector adapter.

**Service Trailer Brake System**

This message will be displayed when there is a problem with the trailer brake control system. The trailer brake system may not be fully functional, or may not be functioning at all. The trailer brake system is designed to provide trailer braking, if possible, even when faults prevent it from being fully functional. This reduced functionality includes:

1. Providing trailer braking when the master cylinder pressure or brake pedal switch are faulted.
2. Providing trailer braking when hill start assist and trailer sway control communication is faulted.
3. Providing trailer braking when certain manual trailer brake apply lever faults are present.

## Trailer Tire Pressure Monitoring

**Special Tools**

- *EL-46079/J-46079* Tire Pressure Monitor Diagnostic Tool
- *EL-50448* Tire Pressure Monitor Sensor Activation Tool
- *EL-52641* Trailer Presence Simulator Tool

For equivalent regional tools, refer to Special Tools.

The Trailer Tire Pressure Monitor System is designed to monitor the pressure of the trailer tires, and warn the driver when a low pressure condition exists. Four Trailer Tire Pressure Monitor System sensors may be provided in the vehicle's glove box as an accessory when equipped. The system can accommodate a trailer with up to (6) tires if additional sensors are purchased from the dealership. Also, the system can be paired with up to (5) individual trailers. The sensors must be mounted onto each tire and wheel assembly, and the sensors must be learned by the vehicle by following the learning procedure as shown in the Trailering App section of this manual. For sensor installation assistance, please contact your trailer service center or tire service center. The Trailer Tire Pressure Monitor System sensors monitor the air pressure in the trailer tires and transmit the trailer tire pressure readings to a receiver located in the vehicle. The trailer tire pressure sensors can transmit up to 23 feet (7 meters) from the

hitch receiver of the vehicle. The tire pressure values can be viewed in the trailering app in the vehicle's center stack.

## Trailering Diagnostic Tools

In some situations when diagnosing trailer tire pressure monitoring, trailer lighting, or integrated trailer brakes, it may be necessary to connect the vehicle to a trailer to confirm proper operation. Performing this activity may prove difficult in the service environment since trailers are not often available for diagnostic use, may have existing electrical issues outside of the issues a technician is attempting to diagnose, or simply may be too unwieldily to connect for diagnosis.

With all this in mind, it may be helpful to build or create a tool that can be plugged into the vehicle's trailer connector and simulate a connected trailer. This tool would include park lamps, stop lamps, and a reverse lamp for lighting and trailer tire pressure monitoring diagnosis. It can be expanded to include trailer brake magnets to diagnose integrated trailer brake concerns. Also, an additional lamp can be included to diagnose the B+ circuit to the trailer.

Trailer issues are NOT covered under warranty, but these tools may be used to verify the vehicle is functioning properly and to help the customer understand and correct any trailer related issues if they so choose.

## Available Trailer Presence Simulator Tool

| Illustration | Tool Number/Description |
|---|---|
|  5166189 | *EL-52641* Trailer Presence Simulator Tool |

## Simulated Trailer Lighting

Creating a tool to simulate a connected trailer can be used to diagnose issues with trailer lighting, trailer brake (if equipped), the Trailering App (if equipped), and trailer tire pressure monitoring system (if equipped).

If the vehicle is equipped with a K68 Trailer Lamp Control Module (U1D/UET), the module monitors the current on the lighting circuits to determine a trailer has been connected. The Trailer Lamp Control Module pulses current on the trailer lighting circuits every 42 minutes to monitor for a connected trailer. If a current draw greater than 55mA is detected, the Trailer Lamp Control Module recognizes this as a connected trailer. This will enable any trailer lighting controlled by the Trailer Lamp Control Module. The Center Stack Module will also use this trailer detection as a cue to enable the Trailering App and trailer tire pressure monitoring functions.

**Creating a Simulated Trailer Lighting Tool**

Parts needed:

- 7-way RV trailer connector Qty: 1

  **Note:** The combination trailer stop/turn, and backup lamps must draw at least 55mA of total current to be detected as a trailer. Some LED combination lamps will not draw enough current. If an LED combination lamp is used, make sure it draws at least 55mA. A load resistor can be added to the circuit if necessary to obtain the correct load.
- Combination trailer park/stop/turn lamp (greater than 55mA drawn when on) Qty: 2
- Reverse lamp Qty: 1
- 12 gauge wire and terminals/connectors Qty: As needed
- 18 gauge wire and terminals/connectors Qty: As needed
- Mounting board Qty: 1

1. Connect a 12 gauge wire to the ground terminal of the 7-way trailer connector and the ground circuit of each combination trailer park/stop/turn lamp and the reverse lamp in parallel.
2. Connect an 18 gauge wire between the park lamp terminal of the 7-way trailer connector and the park lamp circuit of each combination trailer park/stop/turn lamp in parallel.
3. Connect an 18 gauge wire between the left turn/stop lamp terminal of the 7-way trailer connector and the turn/stop lamp circuit of left trailer park/stop/turn lamp.
4. Connect an 18 gauge wire between the right turn/stop lamp terminal of the 7-way trailer connector and the turn/stop lamp circuit of right trailer park/stop/turn lamp.
5. Connect an 18 gauge wire between the reverse lamp terminal of the 7-way trailer connector and the reverse lamp.

   **Note:** A combination trailer lighting and trailer brake tool can be created on the same mounting board.
6. Mount the left combination trailer park/stop/turn lamp, right combination trailer park/stop/turn lamp, and reverse lamp to the mounting board.
7. Plug the 7-way RV trailer connector to the vehicle and verify functionality.

## Simulated Trailer Brakes

Creating a tool to simulate trailer brakes can be used to diagnose trailer brake issues.

The trailer brake control system is compatible with two types of trailer brake systems: electromagnetic or electro-over hydraulic trailer brakes. The Brake System Control Module must determine which type of brakes the trailer is equipped with so the system can output correctly for the trailer's brake system. Because the Brake System Control Module has to determine the type of trailer brake system that is being used, it can be sensitive to a variety of trailer wiring issues.

The Trailer Brake Control Module continuously sends a test pulse out on the trailer brake control circuit (circuit 47) to determine if a trailer with trailer brakes has been

connected. How the pulse reacts when a trailer is connected is how the Trailer Brake Control Module determines which type of braking system the trailer is equipped with.

Even after the system detects the trailer, Trailer Brake Control Module will continue to send this test pulse on the trailer brake control circuit, which now is monitoring both the truck and trailer circuitry. The trailer brake control circuit continues to be monitored for any faults so the driver can be notified of any issues that may occur within the truck or trailer, as well as, to determine when the trailer is disconnected from the truck.

**Creating a Simulated Trailer Brake Tool**

Parts needed:

- 7-way RV trailer connector Qty: 1
- Electric trailer brake magnets Qty: 2, 4, 6, or 8
- Reverse lamp Qty: 1
- Mounting board Qty: 1
- 12 gauge wire and terminals/connectors Qty: As needed

1. Connect a 12 gauge wire to the ground terminal of the 7-way trailer connector.
2. Connect a 12 gauge wire to the brake controller output terminal of the 7-way trailer connector.

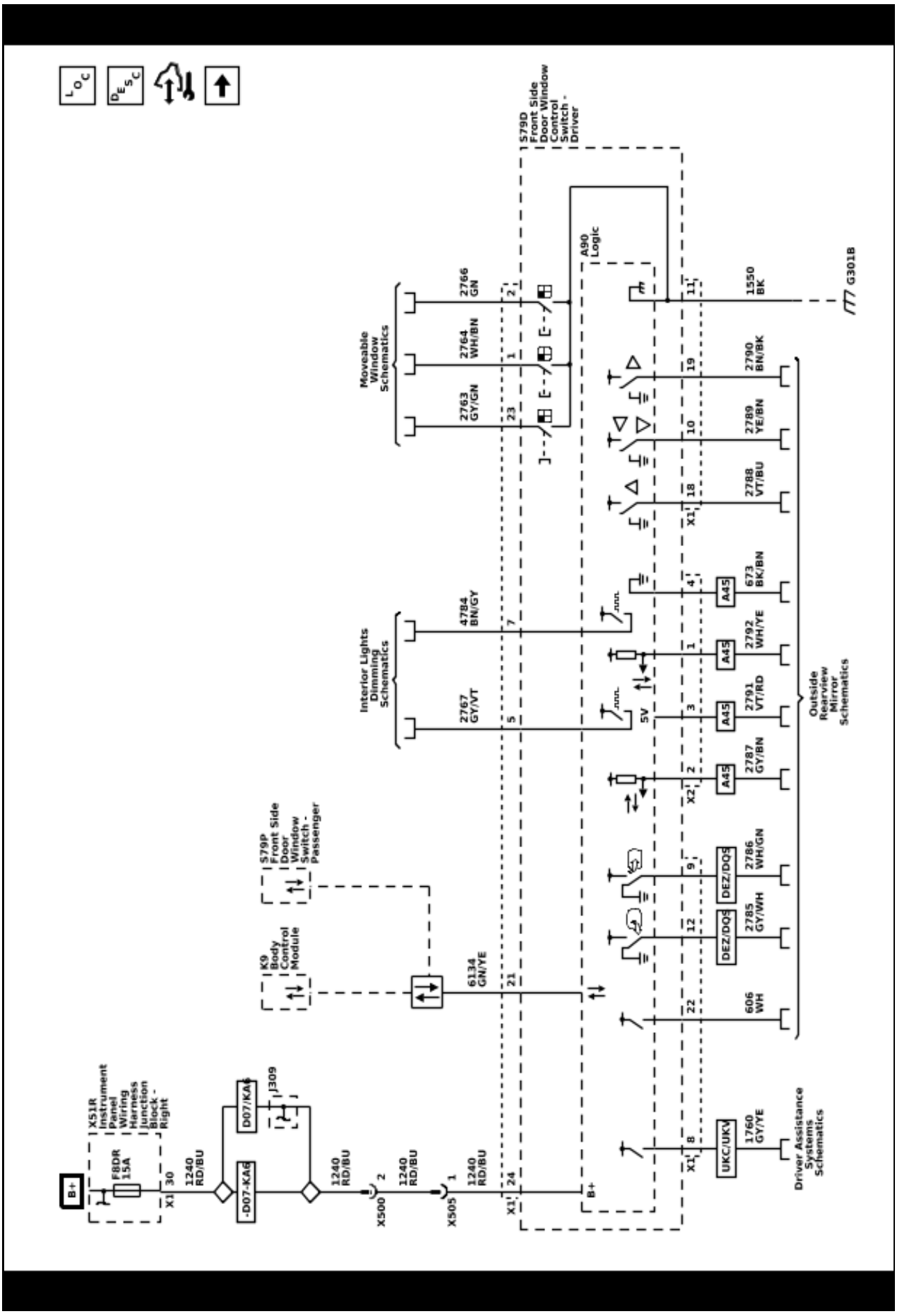
   **Note:** The trailer brake magnets must be connected in parallel. Connecting in series will create an excessive current draw and disable the trailer brake system.
3. Connect the trailer brake magnets to the 12 gauge wires from the 7-way trailer connector in parallel.

   **Note:** A combination trailer lighting and trailer brake tool can be created on the same mounting board.
4. Mount the trailer brake magnets to the mounting board.
5. Plug the 7-way RV trailer connector to the vehicle and verify functionality.

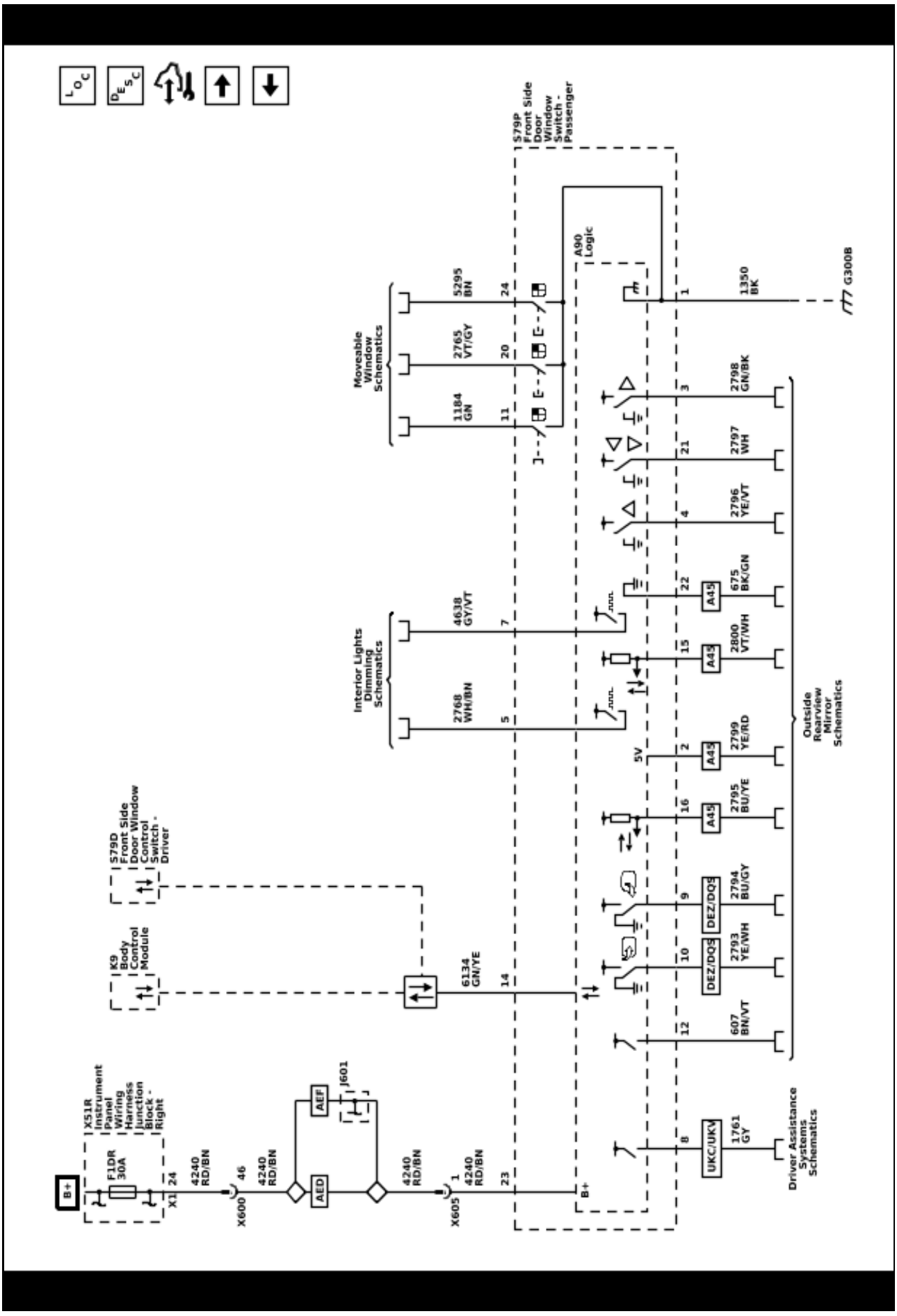
# Vehicle Access

## Schematic and Routing Diagrams

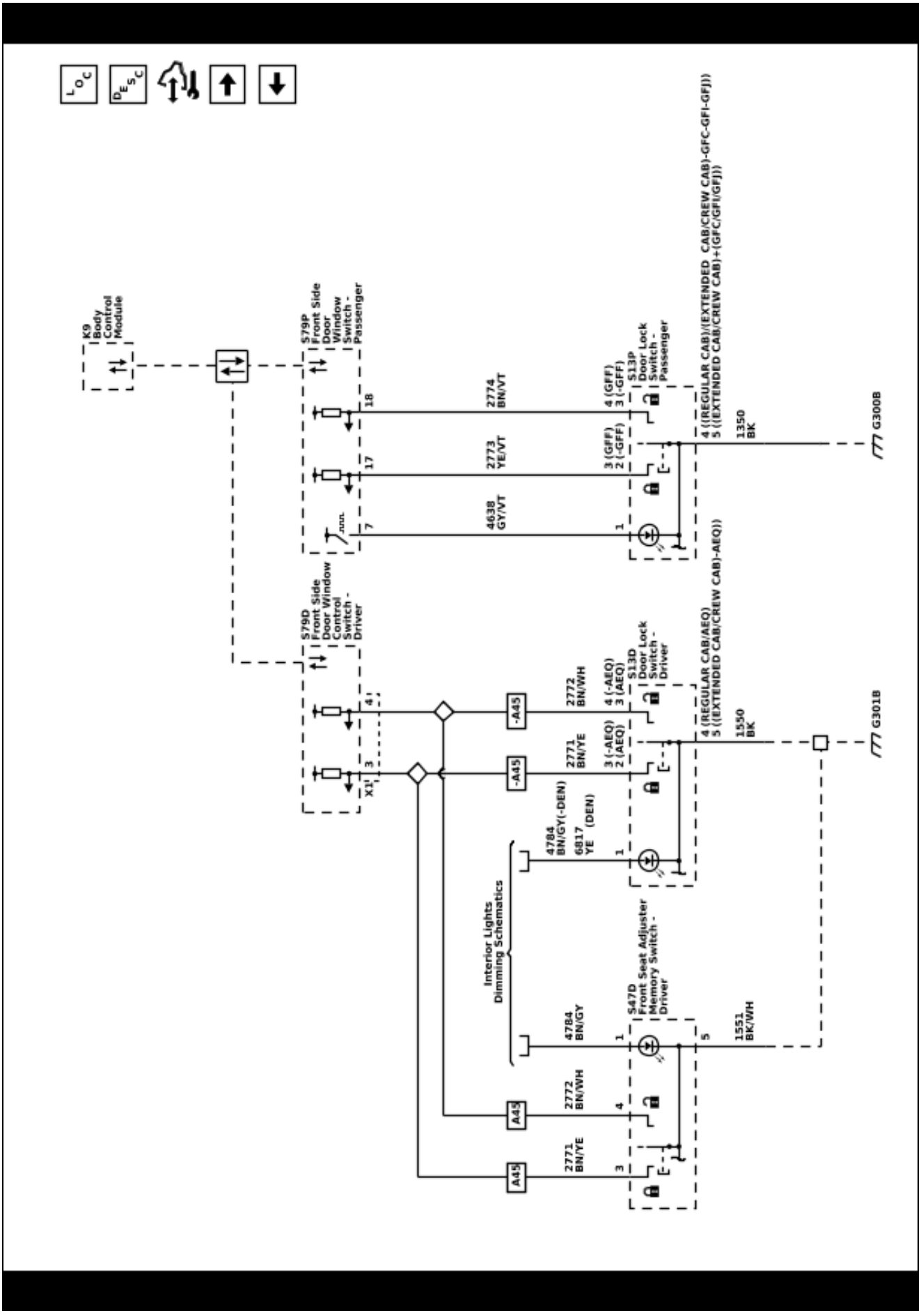
## Door Lock/Indicator Schematics (Driver Door Switch Panel Control Module Power, Ground, Serial Data, and Subsystem References)



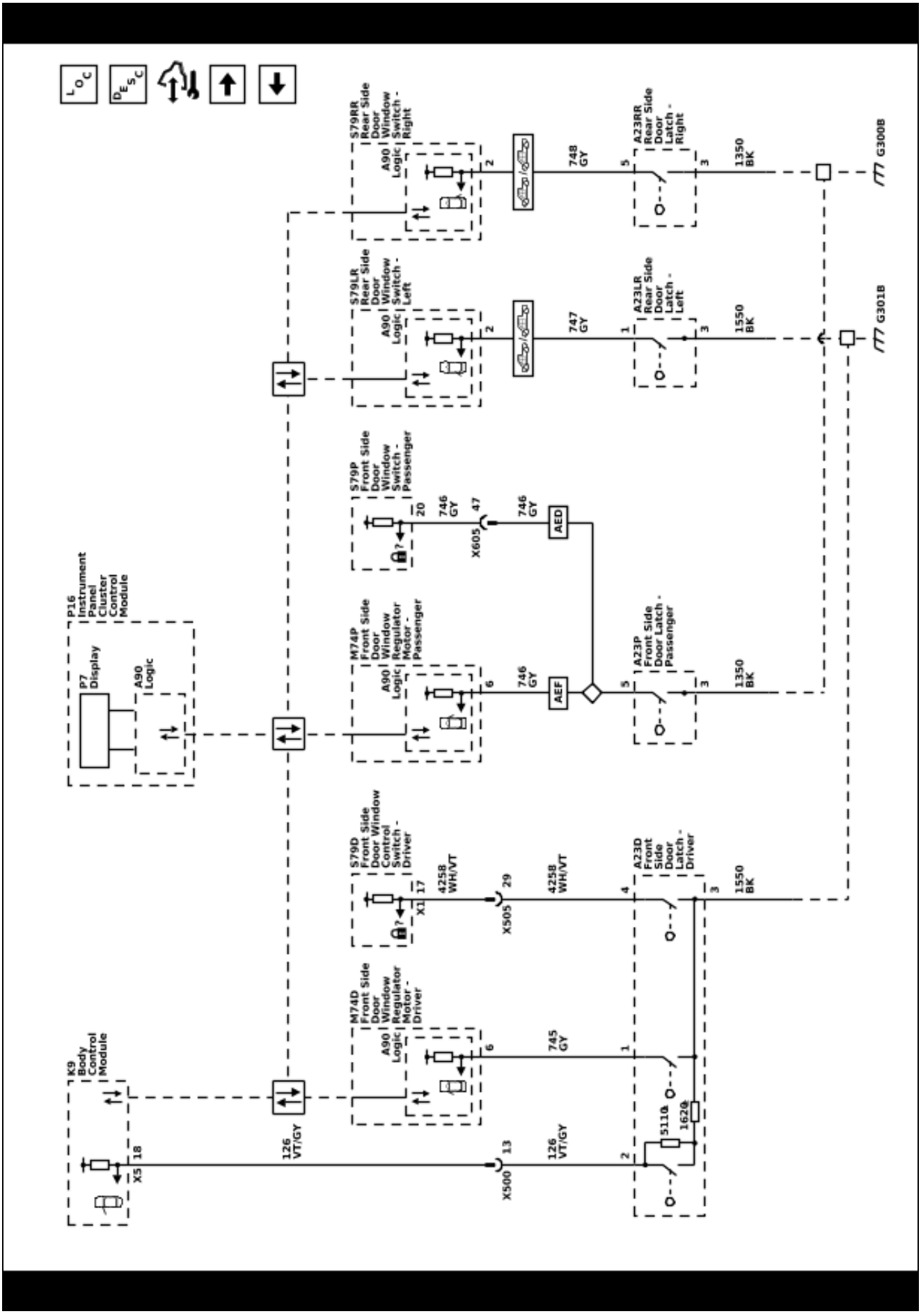
## Door Lock/Indicator Schematics (Passenger Door Switch Panel Control Module Power, Ground, Serial Data, and Subsystem References)



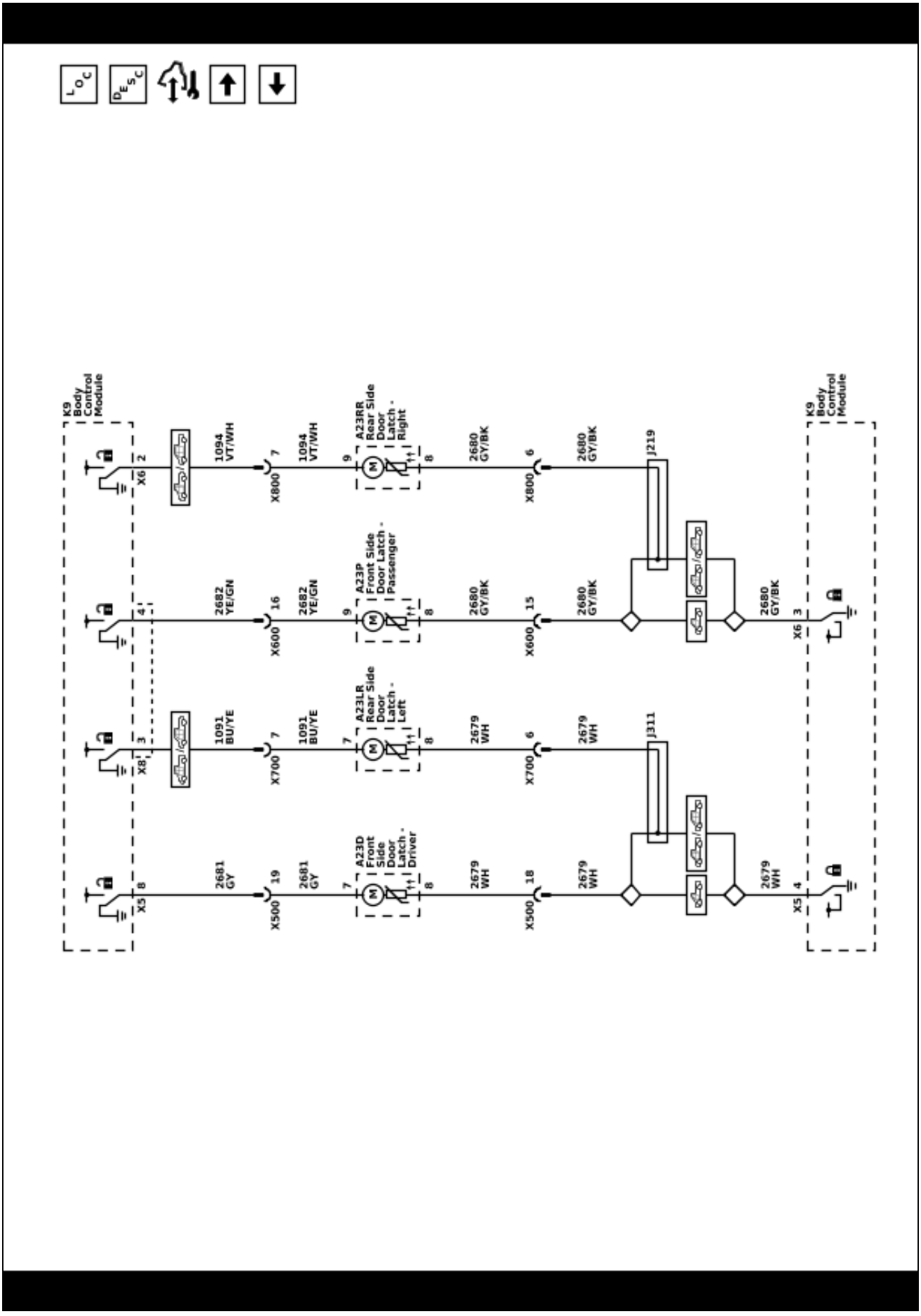
## Door Lock/Indicator Schematics (Door Lock Switches and Indicators)



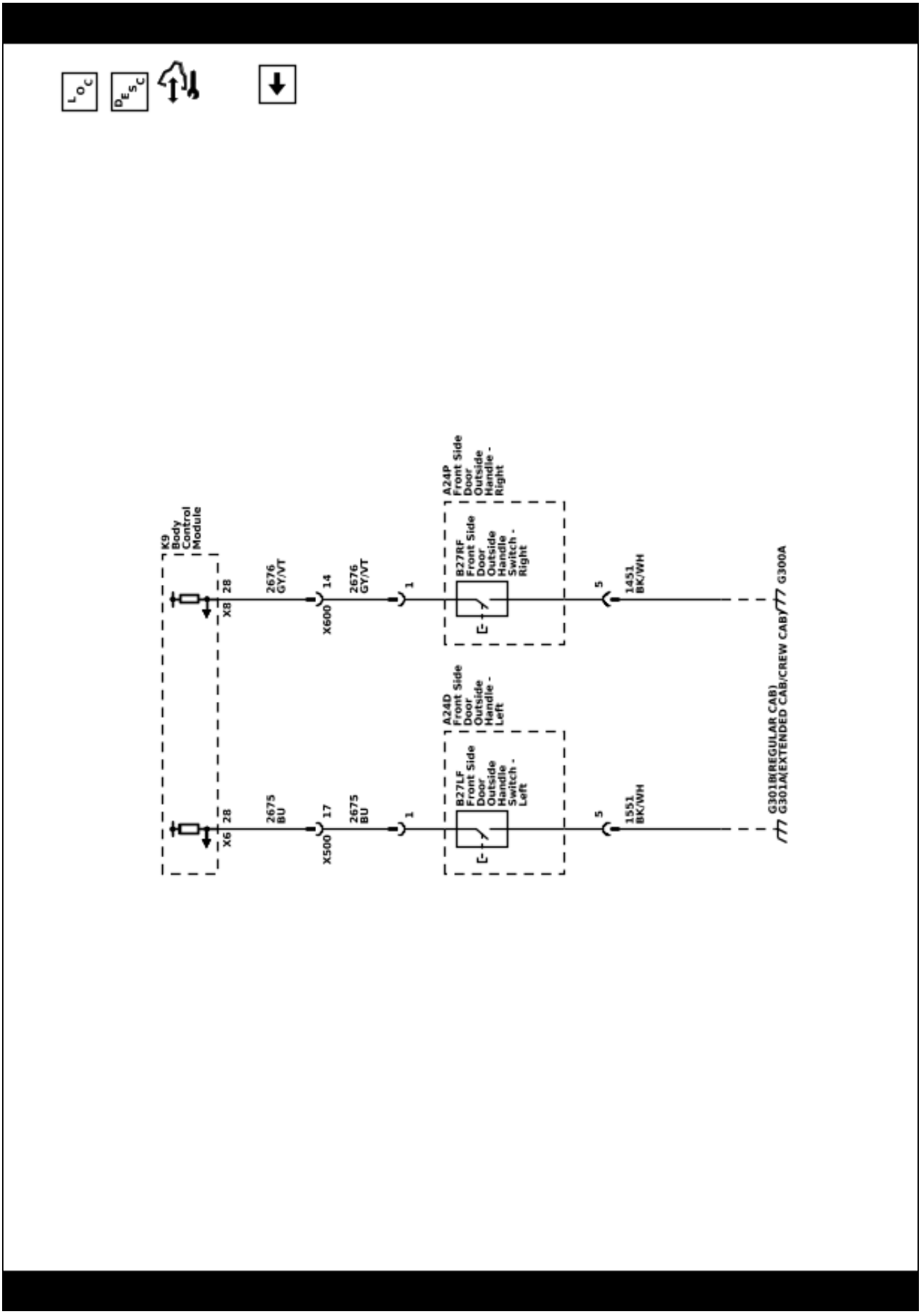
## Door Lock/Indicator Schematics (Ajar Switches, Lock Status and Child Lock Status)



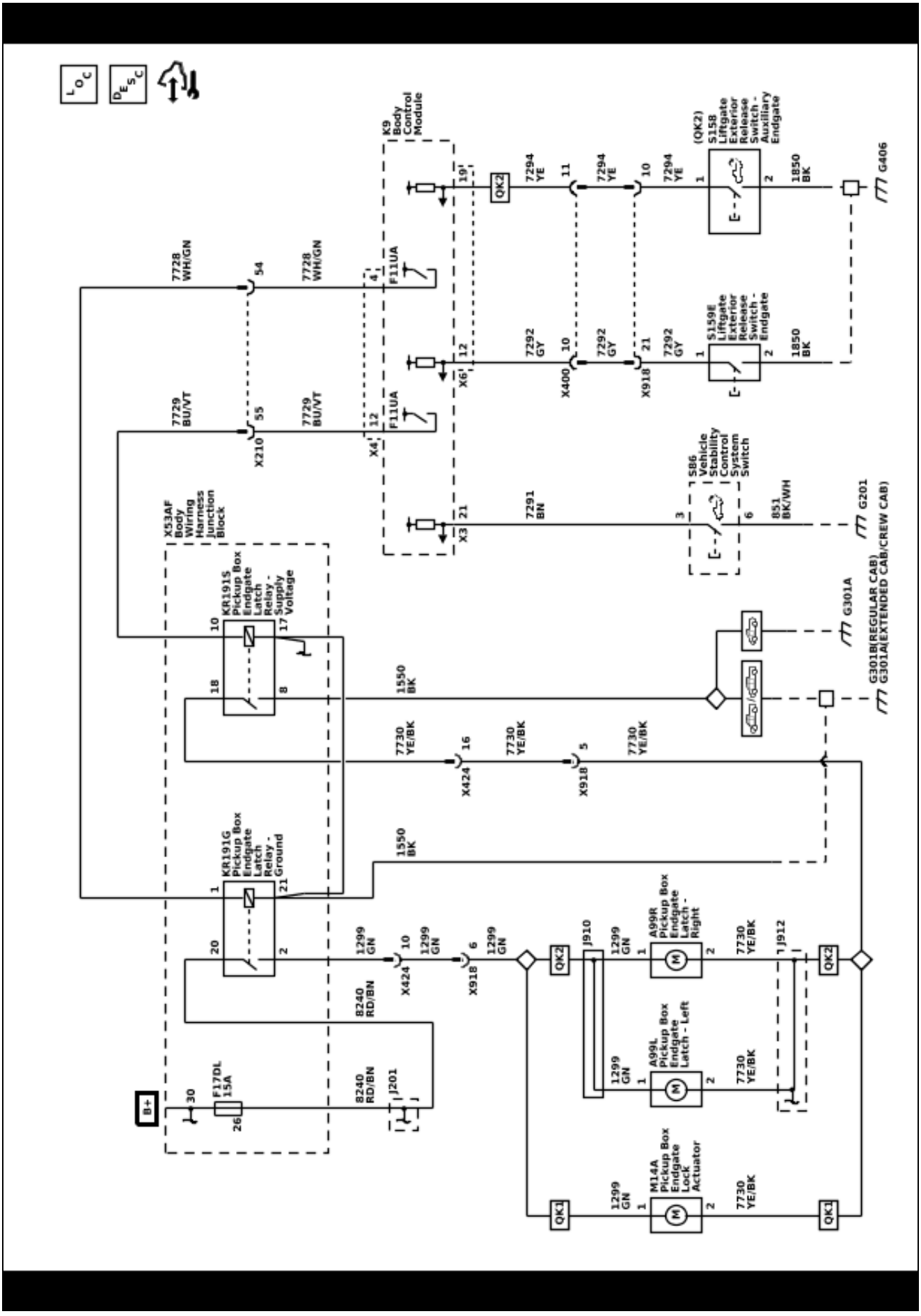
## Door Lock/Indicator Schematics (Actuators)



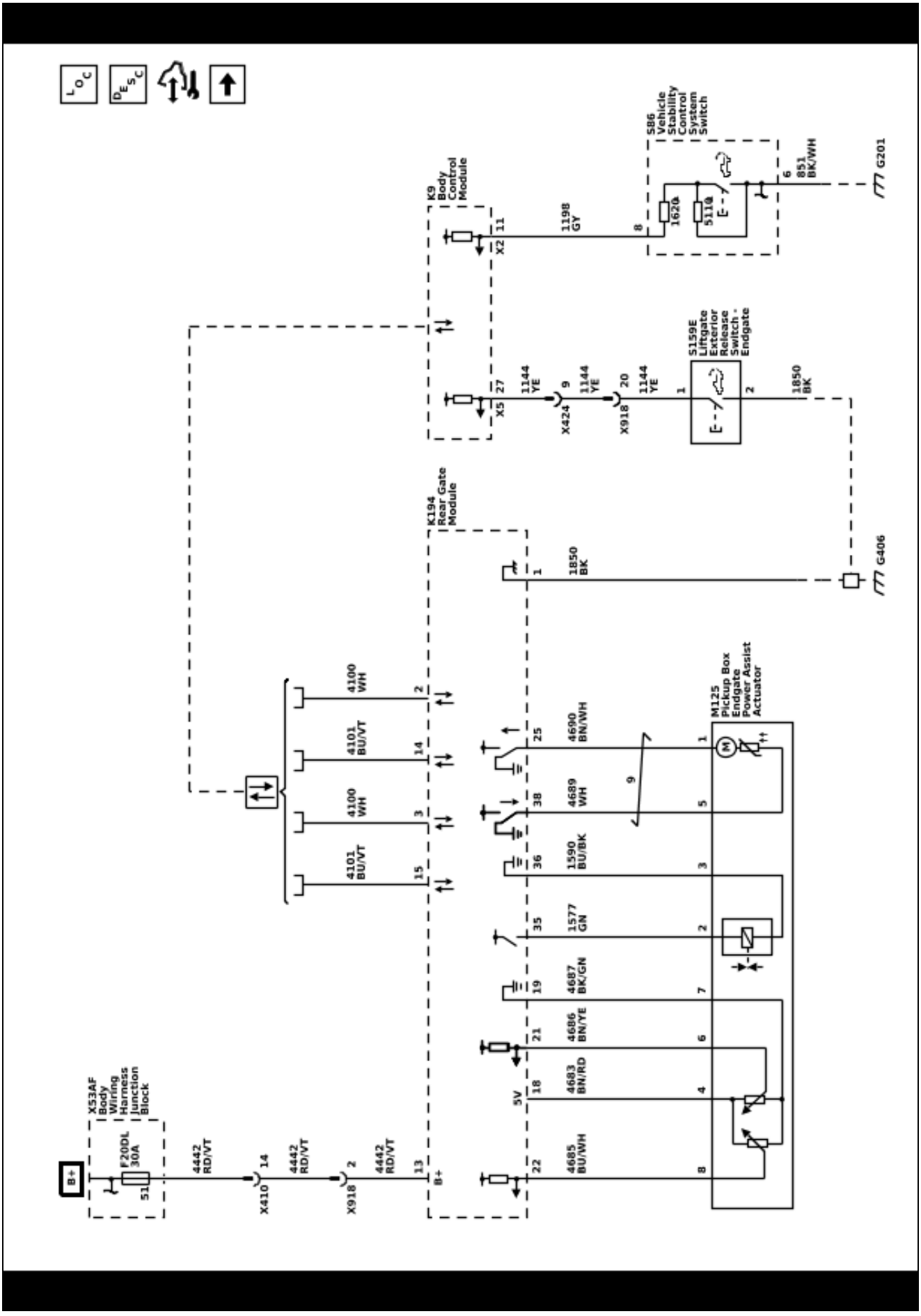
## Door Lock/Indicator Schematics (Door Handle Switches)



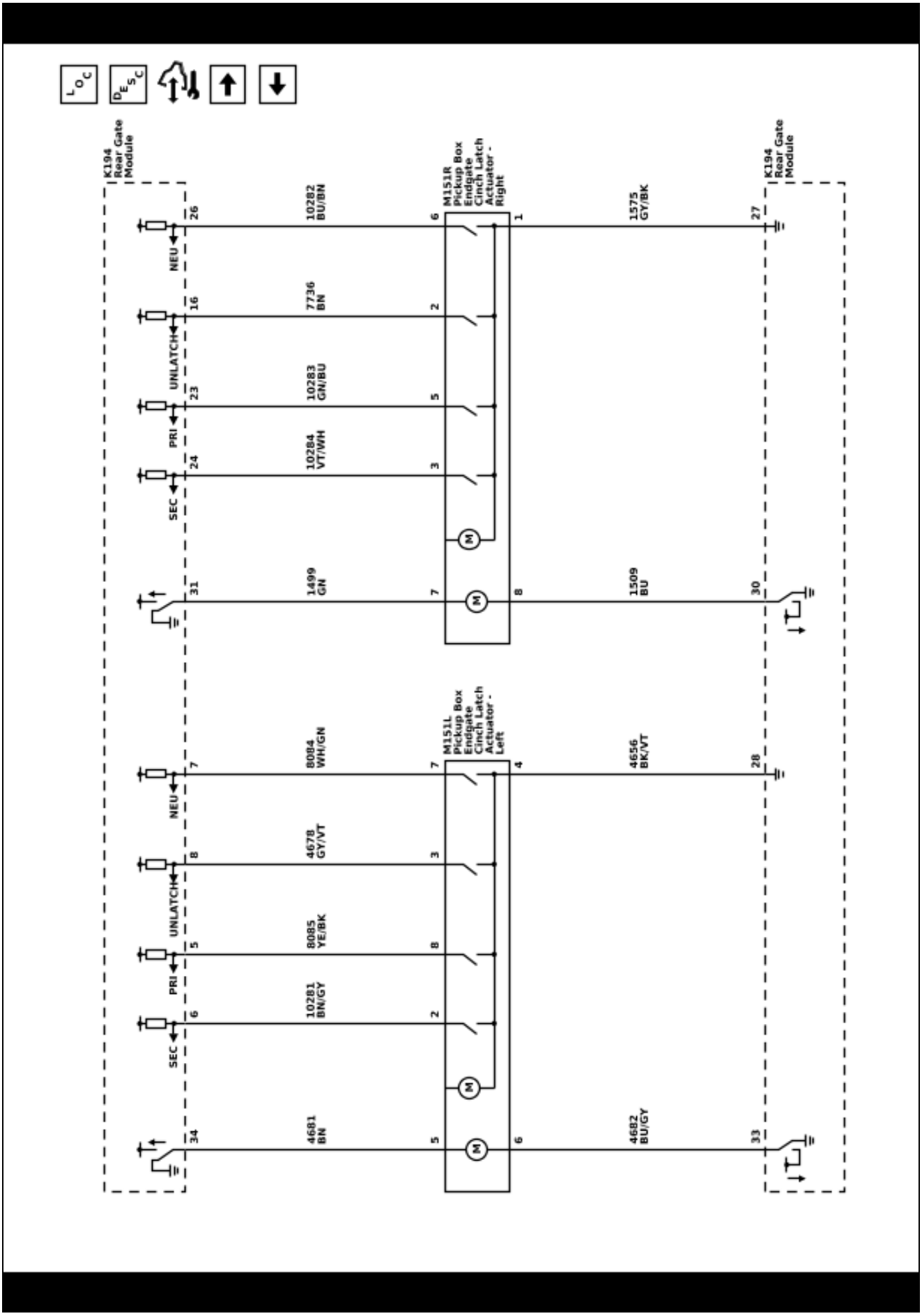
## Release Systems Schematics (Endgate Release (QT5))



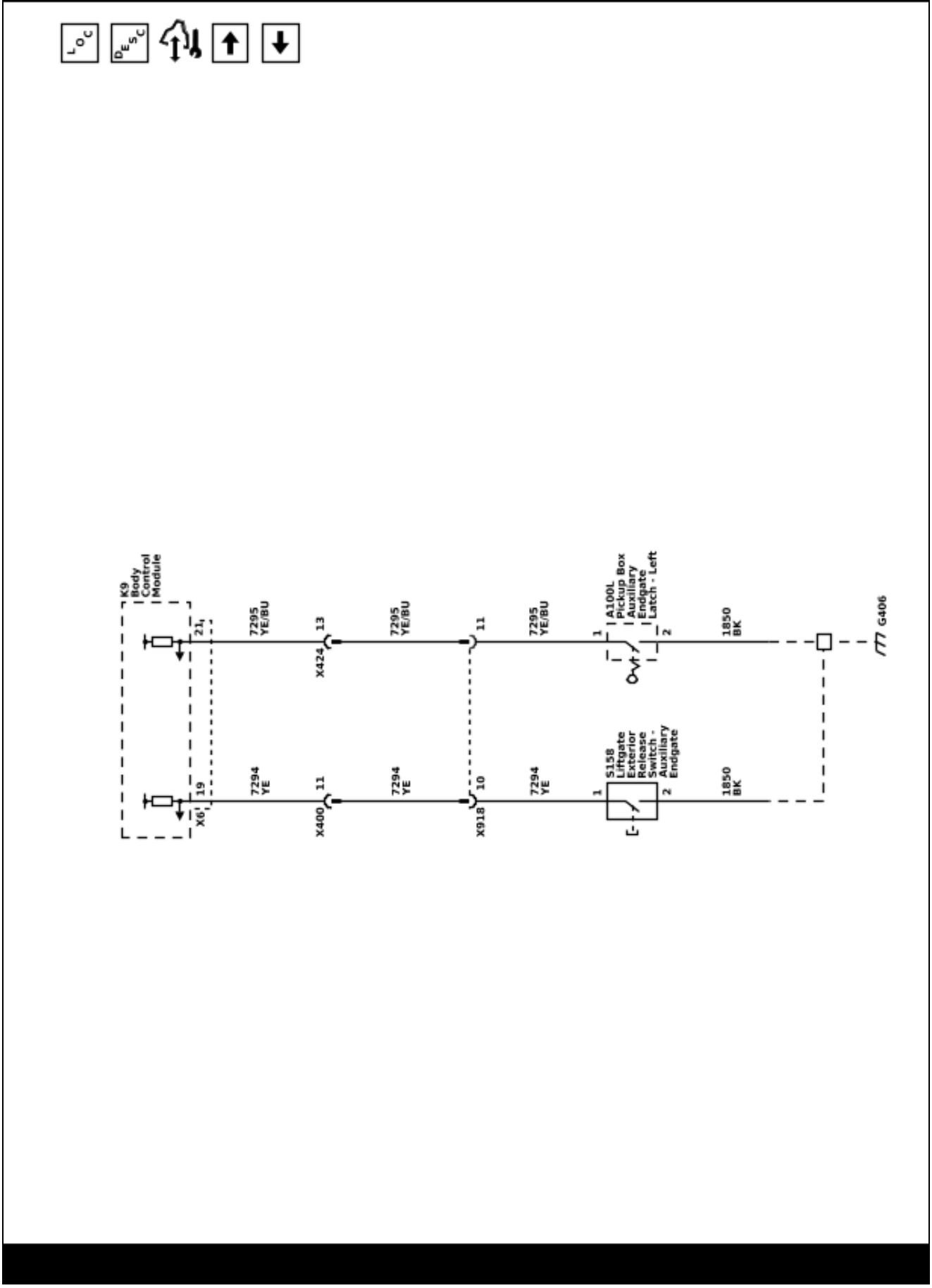
## Endgate Schematics (Power Endgate Controls (QT6))



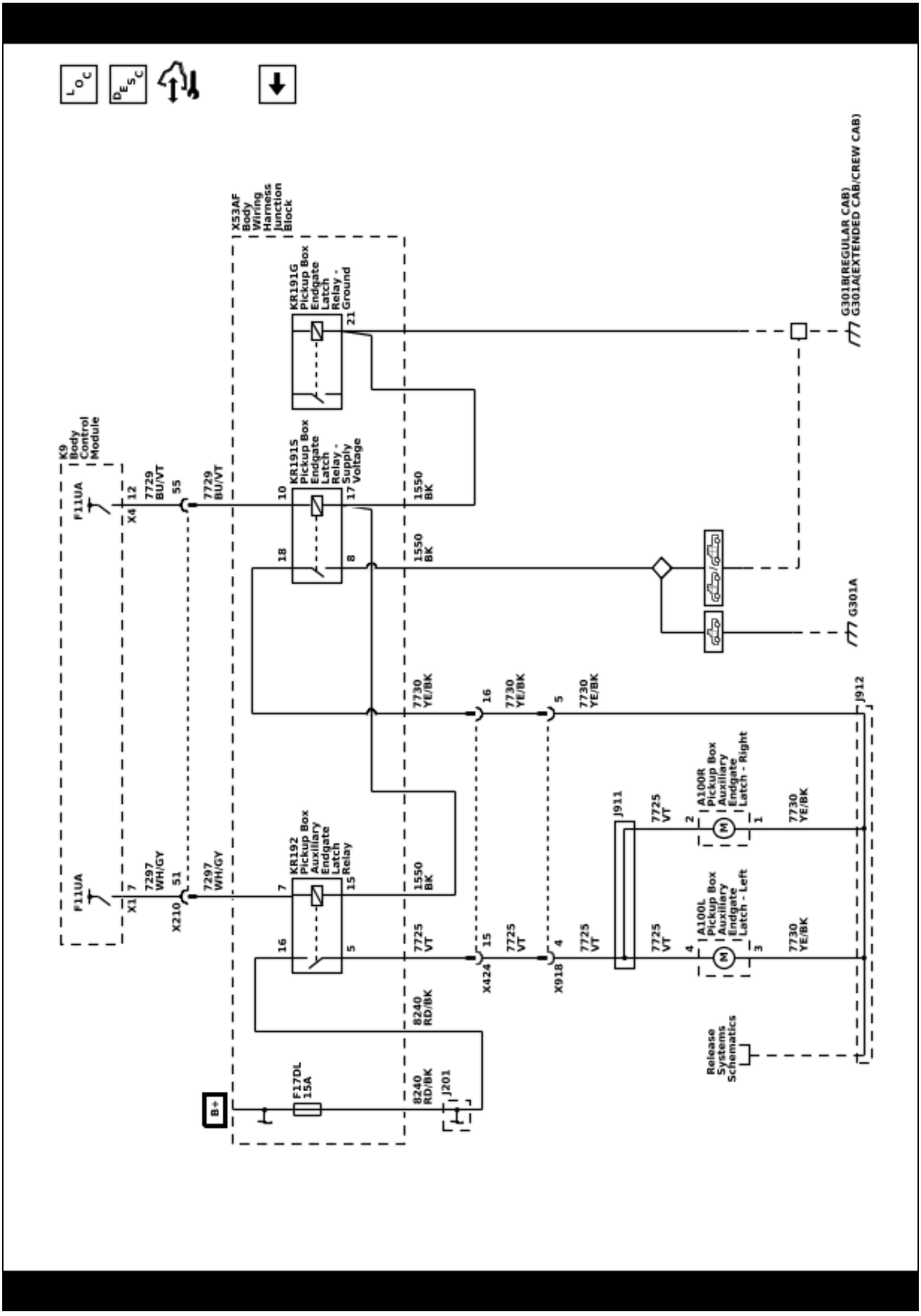
## Endgate Schematics (Power Endgate Latches (QT6))



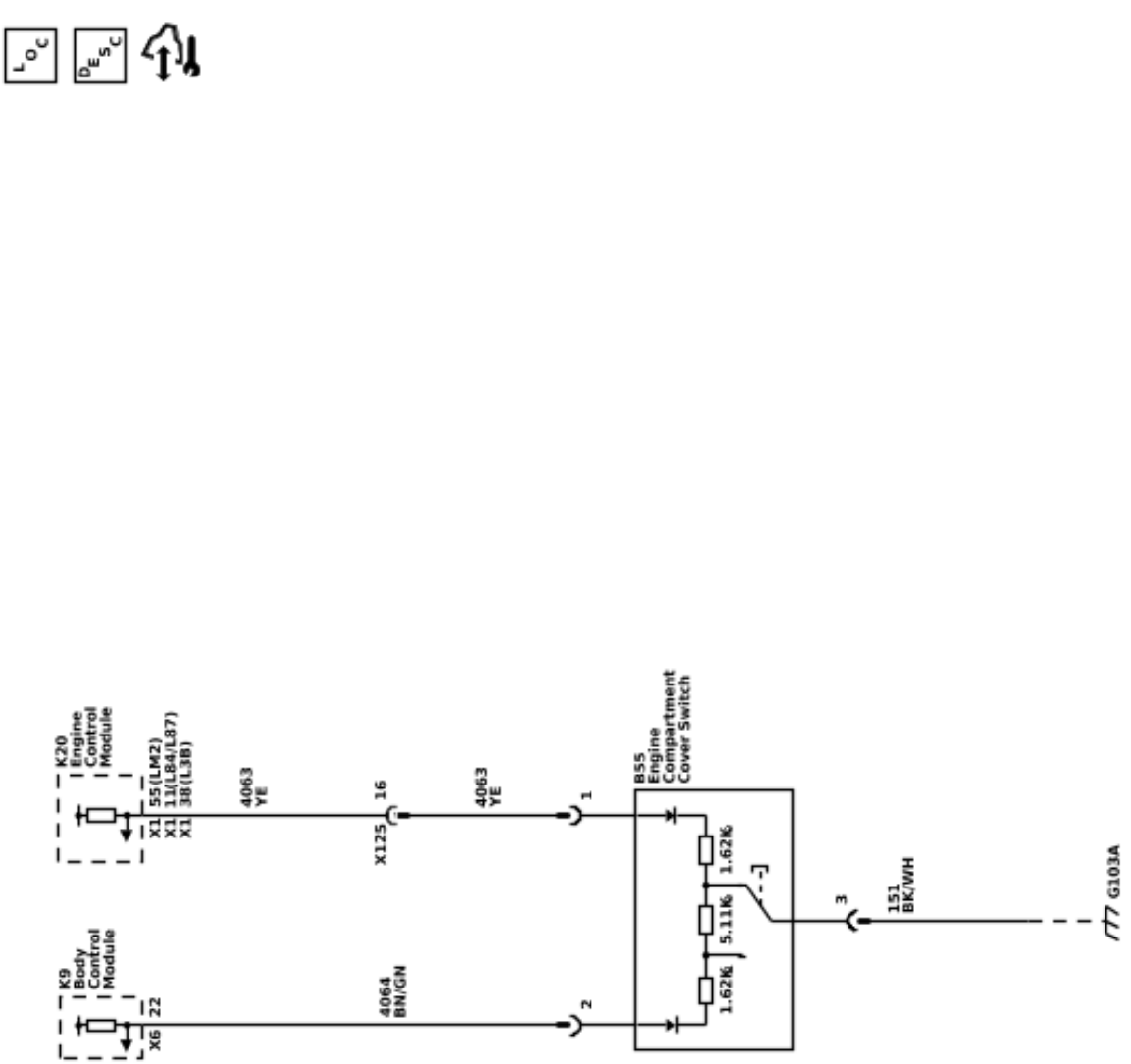
## Endgate Schematics (Auxiliary Endgate Latch Controls and Switches (QK2&QT5))



## Endgate Schematics (Auxiliary Endgate Latch Motors)



## Hood Latch Schematics (Engine Compartment Cover Switch)




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# Description and Operation

## Door Ajar Indicator Description and Operation

### Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module (BCM)
- Instrument cluster
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Driver window motor
- Passenger window motor
- Left rear side door window switch
- Right rear side door window switch

### Driver and Passenger Door Ajar

The window motor supplies a 12 V signal to the door ajar switch within the door latch, when a door is open the door ajar switch closes pulling the 12 V signal low. When the window motor detects the drop in the 12 V signal circuit, it will then communicate this status to the BCM via local interconnect network (LIN) bus. The BCM communicates with the instrument cluster via serial data message. The instrument cluster, upon receipt of this serial data message, will illuminate the door ajar indicator and also send a serial data message to the radio to activate the door ajar audible warning when the vehicle speed is greater then 8 km/h (5 mph).

### Rear Doors Ajar

The rear side door window switches each provide a 12 V signal to their respective door ajar switch signal circuits. The rear door ajar switches are integral to each rear door latch assembly. When a rear door is opened, the normally open door ajar switch closes. With the door ajar switch closed, ground is provided to the door ajar switch signal circuit and the voltage within the signal circuit drops. The rear side door window switches will detect the voltage drop and will send a serial data message to the body control module which will then send a message to the instrument cluster to command the door ajar message

## Endgate Description and Operation (QT6)

### System Description

The power endgate system consists of the following components:

- Rear gate module
- Pickup box endgate power assist actuator
- Pickup box endgate position sensor (part of the power assist actuator)
- Interior pickup box endgate control switch (Part of the Instrument panel multifunction switch)
- Exterior pickup box endgate control switch
- Right pickup box endgate latch assembly
- Left pickup box endgate latch assembly
- Keyless entry transmitter
- Remote control door lock receiver

### Operation

The power endgate can be commanded to power open by the following methods:

- Pressing the interior pickup box endgate control switch on the center stack
- Pressing the touch pad on the exterior endgate handle (vehicle doors must be unlocked)
- Pressing the endgate button on the RKE transmitter twice and holding until the endgate latches release

The power endgate can be commanded to power close by the following methods:

- Pressing and holding the interior pickup box endgate control switch on the center stack until the endgate is fully closed and latched
- Pressing the touch pad on the exterior endgate handle
- Pressing the endgate button on the RKE transmitter twice and holding until the endgate is fully closed and latched
- Lifting the tailgate at least 10 cm (4 in) above the full close position and holding momentarily

The vehicle must be in Park for any of the power tailgate functions to operate.

The rear gate module will respond to a request by commanding the left and right pickup box endgate latches to release the endgate and activate the pickup box endgate power assist actuator and lower the endgate or to raise and cinch the endgate closed.

### Power Latch

The rear gate module continuously monitors power endgate operation and calculates its location and direction of travel from an endgate position sensor (part of the power assist actuator). One input returns the position of the endgate relative to the x-axis and y-axis. The rear gate module then uses these 2 inputs together to calculate its angle relative to the endgate.

The left and right pickup box endgate latches are bi-directional motors and latch or unlatch operation is the result of the direction of the motor rotation. The rear gate module controls the left and right pickup box endgate latches through the control circuits by supplying power and ground in the appropriate polarity. The motor control circuits are monitored by the rear gate module prior to activation for a high or low condition and during motor operation for an insufficient current flow condition. The ratchet, pawl and sector switches are part of the left and right pickup box endgate latches and are used by the rear gate module to determine the state of the latch during the process of latching or unlatching. Each of the latch switch signal circuits are supplied battery voltage and monitored within the rear gate module. The latch switches share a common low reference circuit from the rear gate module and when the switch contacts close the signal circuit goes low and the rear gate module determines the switch to be active. The ratchet, pawl and unlatch

switches are inactive when the endgate is closed and will transition to active as the endgate is opened. The sector switch will be inactive when the endgate is closed, during opening of the endgate the sector switch will change to active and back to inactive when the endgate is in the fully open position.

The exterior pickup box endgate control switch signal circuit is supplied battery voltage by the rear gate module. When the switch is pressed the contacts close and the signal circuit goes low, the rear gate module will detect the voltage drop and will command the endgate to release and lower or to power raise the endgate to the closed position.

For vehicles without the optional passive keyless entry, when the exterior pickup box endgate control switch is pressed, the rear gate module will check the status of the vehicle door locks by sending a serial data message to the body control module requesting the door lock status. If the vehicle doors are locked, the rear gate module will ignore the signal from the exterior pickup box endgate control switch. If the vehicle doors are unlocked, the rear gate module will permit the endgate to unlatch and power open when the exterior pickup box endgate control switch is pressed.

For vehicles with the optional passive keyless entry system, the keyless entry control module monitors the proximity of the keyless entry transmitter. If the exterior pickup box endgate control switch is pressed and the keyless entry transmitter is within range, the keyless entry control module will send a serial data message to the rear gate module indicating the presence of the keyless entry transmitter and the rear gate module will permit the endgate to unlatch and power open. If the doors are locked and the keyless entry transmitter is not within range, the rear gate module will ignore the signal from the exterior pickup box endgate control switch.

## Manual Endgate Operation

The endgate can be manually closed from the full-open position when the endgate is lifted in a continuous motion. If the endgate motion is stopped between the full-open and half-closed positions, the lift to close feature can engage and power close the endgate. If the touch pad is pressed during power operation, the endgate will stop and allow manual operation. The endgate must be held after stopping, or it will continue to open

## Tailgate Release Unavailable Driver Information Center Message

### Power Endgate Functions Disabled Without Setting DTCs

The driver information center displays Tailgate Release Unavailable when a thermal inhibit occurs in the latch or drive unit or the position count is out of range.

The power endgate functions will be restored by performing the following actions:

- Closing the endgate which will reset the position counts
- Closing the endgate and removing the F20DL 30A fuse for greater than 5 minutes

### Power Endgate Functions Disabled With DTCs Current

The driver information center displays Tailgate Release Unavailable when the rear gate module control module detects a malfunction in the power endgate system and the system is disabled.

# Endgate Description and Operation (QT5 Without MultiPro Tailgate)

## Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Pickup box endgate unlatch actuator
- Pickup box endgate unlatch relay

## Endgate Release Operation (Without MutiPro Tailgate Option)

### Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the pickup box endgate unlatch relay.

### Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the pickup box endgate unlatch relay.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to *Keyless Entry System Description and Operation on page 8-17* for more information on the passive keyless entry system.

### Pickup Box Endgate Unlatch actuator

When body control module receives a endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the pickup box endgate unlatch relay control circuit, which energizes the coil side of the relay. The switch side of the pickup box endgate unlatch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the pickup box endgate unlatch actuator. The pickup box endgate unlatch actuator is continuously grounded and when it receives

the voltage pulse, it will become energized and the latch will activate releasing the endgate so that it may be manually lowered to an open position.

# Endgate Description and Operation (QT5 With MultiPro Tailgate)

## Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Left pickup box endgate latch
- Right pickup box endgate latch
- Left pickup box auxiliary endgate latch
- Right pickup box auxiliary endgate latch
- Left pickup box endgate latch relay
- Right pickup box endgate latch relay
- Left pickup box auxiliary endgate latch relay
- Right pickup box auxiliary endgate latch relay

## Endgate Release Operation (With MutiPro Tailgate Option)

### Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the left pickup box endgate latch relay and right pickup box endgate latch relay.

### Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the appropriate exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the major or minor endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the appropriate pickup box endgate latch relays.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to *Keyless Entry System Description and Operation on page 8-17* for more information on the passive keyless entry system.

### Major Pickup Box Endgate

**Note:** The auxiliary pickup box endgate must be in the latched position before commanding the major pickup box endgate to release. The body control module will disable the major pickup box endgate release function if the auxiliary pickup box endgate is open or ajar.

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box endgate latches. The left and right pickup box endgate latches will become energized and the latches will activate releasing the major endgate so that it may be manually lowered to an open position.

### Minor Pickup Box Endgate

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box auxiliary endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box auxiliary endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box auxiliary endgate latches. The left and right pickup box auxiliary endgate latches will become energized and the latches will activate releasing the minor endgate so that it may be manually lowered to an open position.

# Hood Ajar Indicator Description and Operation

## Hood Ajar Switch

The body control module (BCM) applies B+ to the hood ajar signal circuit and monitors the voltage to determine the position of the hood. When the hood is open, the switch is open and voltage remains high. When the hood is closed, the switch is closed and the voltage is pulled low.

The BCM uses the hood ajar switch as a content theft deterrent alarm trigger.

## Hood Ajar Indicator/Message

When the hood is ajar, a message is displayed on the DIC or the hood ajar indicator will be illuminated.

# Power Door Locks Description and Operation

## Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Left rear door lock switch
- Right rear door lock switch
- Driver front side door window control switch
- Passenger front side door window switch
- Driver front side door latch
- Passenger front side door latch
- Left rear side door latch
- Right rear side door latch
- Exterior door handle switches

- Body control module
- Lighting control module

## Door Lock System Controls

The power door lock system can be controlled by any of the following:

- Power door lock switch activation
- Keyless entry lock or unlock command
- Delayed locking command
- Automatic door lock command
- When the OnStar® system is used to unlock the driver door

## Door Lock and Unlock Operation

The driver or passenger front side door window control switch will monitor the voltage of their respective door lock switches, when the driver or passenger door lock switch is activated in the lock or unlock position the signal voltage will be pulled low, the corresponding front side door window control switch will detect the voltage drop in the signal circuit and will send a serial data message to the body control module requesting the door lock or unlock command.

The lighting control module will monitor the voltage of the left rear and right rear door lock switches, when the left rear or right rear door lock switch is activated in the lock or unlock position the signal voltage will be pulled low, the lighting control module will detect the voltage drop in the signal circuit and will send a serial data message to the body control module requesting the door lock or unlock command.

The body control module upon receipt of a lock or unlock request, will supply battery voltage to the door lock actuator lock or unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the doors, and fuel filler door will then lock or unlock as commanded.

The following control circuits are used to operate the door lock actuators:

- Driver door unlock only
- Passenger and rear door unlock
- All door lock

This sequence and be modified through the personalization settings

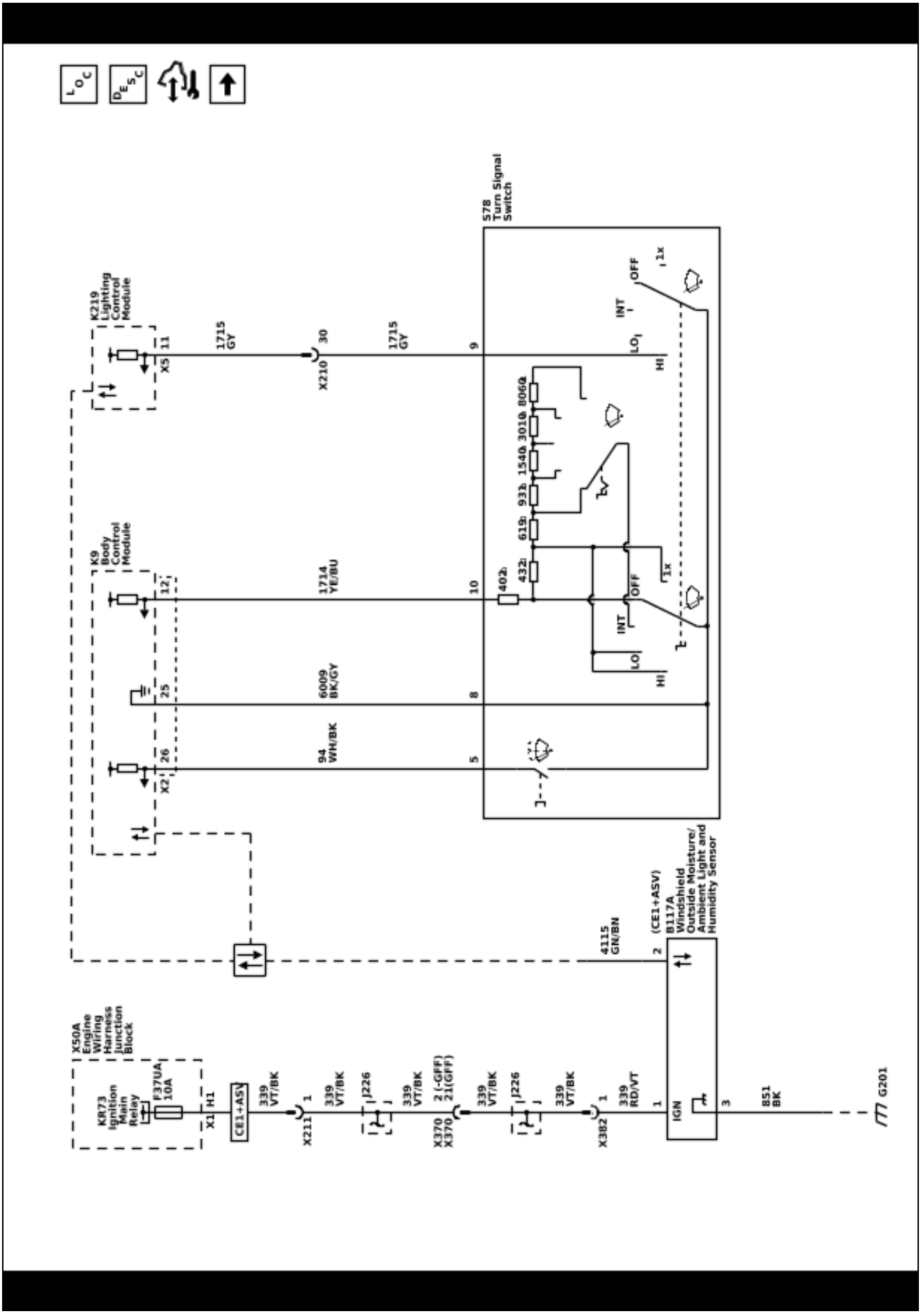
## Passive Door Lock/Unlock Operation

The exterior door handle switch signal circuits provide inputs to the body control module when the exterior door handle switches are activated. These inputs allow the body control module to detect a door lock or a door unlock request. The body control module provides a 7 V signal to each exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signal within the signal circuit is pulled to ground. The body control module will detect the voltage drop and a low frequency antenna will transmit a challenge to the keyless entry transmitter. If the challenge is met, the keyless entry transmitter will respond, and the body control module will command the door(s) to be locked or unlocked

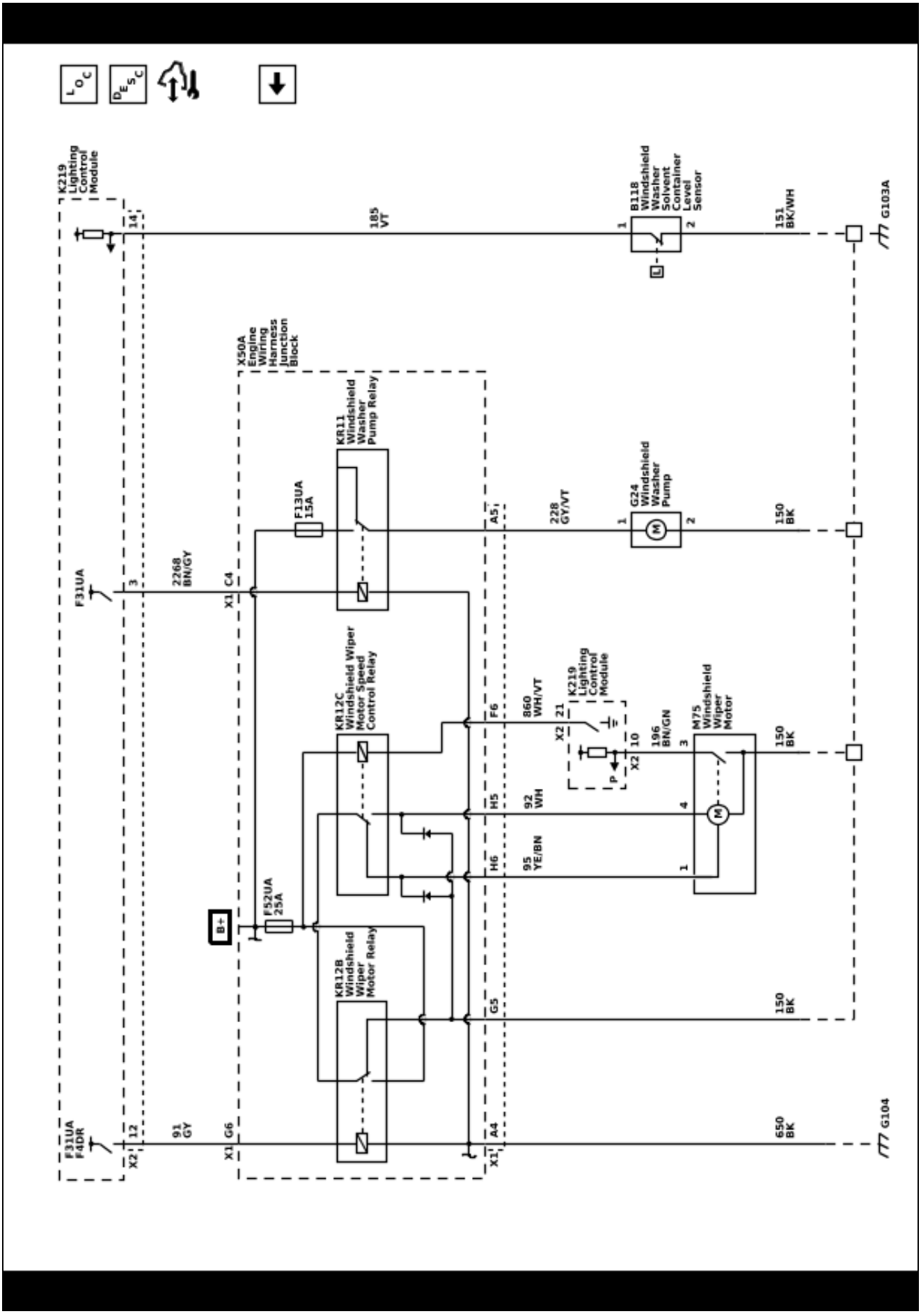
# Wipers and Washers

## Schematic and Routing Diagrams

## Wiper/Washer Schematics (Wiper/Washer Controls)



## Wiper/Washer Schematics (Wiper Motor and Washer Pump)



# Description and Operation

## Wiper/Washer System Description and Operation

### Front Windshield Wiper Operation

The windshield wipers system allows the driver to clear the vehicle's windshield using a discrete switch or through an automatic rain sensing system. The windshield wiper system functions through a primary control, but also allows redundant high speed-only operation in the event of a system fault. The wiper systems uses the S82 Windshield Wiper/Washer Switch as the primary means of driver control, along with the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor to modulate intermittent wiper operation. The S82 Windshield Wiper/Washer Switch is a discrete input to the K9 Body Control Module. The K9 Body Control Module communicates with the K219 Lighting Control Module over CAN, and with the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor over LIN, to control wiper activation.

#### Low Speed Wiper Operation

With the S82 Windshield Wiper/Washer Switch in the low speed position, the discrete signal circuit to the K9 Body Control Module is pulled down through two resistors in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module communicates with the K219 Lighting Control Module over CAN, requesting consistent low speed wiping operation. To initiate low speed operation, the K219 Lighting Control Module energizes the KR12B Windshield Wiper Relay. This allows battery voltage from the wiper fuse to be applied through the switched contacts of the KR12B Windshield Wiper Relay, through the normally closed contacts of the KR12C Windshield Wiper Speed Control Relay, to the windshield wiper low speed control circuit of the M75 Windshield Wiper Motor.

#### Intermittent Wiper Operation

With the S82 Windshield Wiper/Washer Switch in the intermittent position, the discrete signal circuit to the K9 Body Control Module is pulled down through a number of resistors within a resistor ladder to a low reference provided by the K9 Body Control Module. The number of resistors the signal travels through is dependent on the intermittent selection made on the S82 Windshield Wiper/Washer Switch. The K9 Body Control Module interprets this range of voltage pull-down as a request for intermittent wiper activation, with each pull-down voltage value equating an intermittent delay (sensitivity) level. If the rain sense is enabled the K9 Body Control Module communicates with the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor via LIN. The B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor utilizes windshield optics to determine the amount of water on the windshield and will communicate this info to the K9 Body Control Module, which will vary wiping cadence based on the intermittent sensitivity selection on the S82 Windshield Wiper/Washer Switch and the amount of water on the windshield. If the rain sense is disabled the K9 Body Control will vary the wiping cadence based on a preset amount of time determined by the intermittent delay selection on the S82 Windshield Wiper/Washer Switch. To initiate wiper operation, the K219 Lighting Control Module energizes the KR12B Windshield Wiper Relay. This allows battery voltage from the wiper fuse to be applied through the switched contacts of the KR12B Windshield Wiper Relay, through the normally closed contacts of the KR12C Windshield Wiper Speed Control Relay, to the low speed control circuit of the M75 Windshield Wiper Motor.

#### High Speed Wiper Operation

With the S82 Windshield Wiper/Washer Switch in the high speed position, the discrete signal circuit to the K9 Body Control Module is pulled down through two resistors in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module interprets this specific voltage pull-down as a request for wiper activation. In addition to this pull-down signal, a second switch in the S82 Windshield Wiper/Washer Switch is also pulled down to low reference. This signal is a discrete input to the K219 Lighting Control Module. The K219 Lighting Control Module requests wiping operation. To initiate high speed operation, the K219 Lighting Control Module energizes the KR12B Windshield Wiper Relay and grounds the KR12C Windshield Wiper Speed Control Relay. This allows battery voltage from the wiper fuse to be applied through the switched contacts of the KR12B Windshield Wiper Relay, through the switched contacts of the KR12C Windshield Wiper Speed Control Relay, to the windshield wiper motor high speed control circuit of the M75 Windshield Wiper Motor.

#### Mist (Single Wipe) Operation

The mist (single wipe) position is a momentary switch position that will return the S82 Windshield Wiper/Washer Switch to the off position as soon as the switch is released. With the S82 Windshield Wiper/Washer Switch in the mist (single wipe) position, the discrete signal circuit to the K9 Body Control Module is pulled down through two resistors in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module interprets this specific voltage pull-down as a request for wiper activation. The K9 Body Control Module communicates with the K219 Lighting Control Module via CAN, requesting consistent low speed wiping operation as long as the S82 Windshield Wiper/Washer Switch is held in the mist (single wipe) position. If the mist (single wipe) position is only briefly selected, the K9 Body Control Module will request only a single wipe.

#### Wiper Park Operation

With the S82 Windshield Wiper/Washer Switch in the off position, the discrete signal circuit to the K9 Body Control Module is pulled down through one resistor in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module interprets this specific voltage pull-down as a request to stop wiper activation. The K9 Body Control Module communicates with the K219 Lighting Control Module via CAN, requesting wiper operation stop. At this time, the K219 Lighting Control Module will deactivate the KR12B Windshield Wiper Relay and KR12C Windshield Wiper Speed Control Relay. The relay contacts will

switch back to their normally closed position and will apply ground to the wiper motor power inputs through the normally closed contacts of the wiper relays. This deactivates and dynamically brakes the wiper motor in the park position. When the wiper switch is turned to the OFF position while the wiper motor is somewhere in mid-cycle, the K219 Lighting Control Module will continue to operate the motor until the wipers reach the park position. If the ignition is turned OFF while the wipers are in mid-cycle, the wipers will stop immediately, regardless of position. The K219 Lighting Control Module will park the wipers next time the ignition is turned ON.

The windshield wiper system consists of the following electrical components:

- S82 Windshield Wiper/Washer Switch
- K9 Body Control Module
- K219 Lighting Control Module
- KR12B Windshield Wiper Relay
- KR12C Windshield Wiper Speed Control Relay
- B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor
- M75 Windshield Wiper Motor

## Front Windshield Wiper Components

### S82 Windshield Wiper/Washer Switch

The S82 Windshield Wiper/Washer Switch is the primary input to the K9 Body Control Module for the driver to control windshield wiper operation. The S82 Windshield Wiper/Washer Switch also provides discrete input to the K219 Exterior Lighting Control Module and M75 Windshield Wiper Motor during high speed wiper operation.

The S82 Windshield Wiper/Washer Switch contains three individual internal switch. One switch changes between mist (single wipe), off, intermittent, low speed, and high speed selection. The second switch changes with differing intermittent sensitivity selection. The third switch is only active when high speed wiper operation is selected. A resistor ladder is also used to determine switch selection and intermittent sensitivity selection. The high speed switch does not utilize the resistor ladder.

The K9 Body Control Module provides the S82 Windshield Wiper/Washer Switch with ground through a single low reference circuit and monitors the switch position through a single signal circuit. Voltage is applied by the K9 Body Control Module to this signal circuit and voltage drop is monitored to determine switch selection. This voltage drop will vary depending on the number of resistors in the resistor ladder, which changes depending on switch position. In the off position, current flows through a single resistor. In the mist (single wipe), low speed, and high speed position, current flows through two resistors. In the intermittent position, current flows through three or more resistors, depending on the intermittent sensitivity selected.

The S82 Windshield Wiper/Washer Switch provides a discrete switch input to the K219 Lighting Control Module during high speed wiper operation. Voltage is applied by the K219 Lighting Control Module to this signal circuit and voltage drop is monitored to determine switch selection. When high speed operation is selected, the signal circuit is pulled to ground (low reference).

### K9 Body Control Module

The K9 Body Control Module will send a CAN message to the K219 Lighting Control Module to request wiper operation. The K9 Body Control Module responds to input requests from the S82 Windshield Wiper/Washer Switch. The K9 Body Control Module provides a constant ground for the S82 Windshield Wiper/Washer Switch and monitors a signal circuit to determine the requested windshield wiper position.

The K9 Body Control Module communicates with the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor via LIN. Messages are received from the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor to indicate the amount of water on the windshield.

### K219 Lighting Control Module

The K219 Lighting Control Module controls the wiper motor via two PCB relays (KR12B Windshield Wiper Relay and KR12C Windshield Wiper Speed Control Relay). The K219 Lighting Control Module receives a message from K9 Body Control Module over CAN to determine what type of wiper operation is requested.

### KR12B Windshield Wiper Relay

The KR12B Windshield Wiper Relay supplies B+ to the M75 Windshield Wiper Motor and is controlled by the K219 Lighting Control Module. The coil side of the relay receives a constant chassis ground and the switch side receives a constant B+. When wiper operation is requested, the K219 Lighting Control Module will provide voltage to the coil side of the relay. This will energize the relay, closing the high current contact, and supply B+ to the M75 Windshield Wiper Motor through the KR12C Windshield Wiper Speed Control Relay, enabling wiper operation.

### KR12C Windshield Wiper Speed Control Relay

The KR12C Windshield Wiper Speed Control Relay controls B+ to the M75 Windshield Wiper Motor and is controlled by the K219 Lighting Control Module. The coil side of the relay receives a ground controlled by the K219 Lighting Control Module. The switch side of the relay receives B+ through the KR12B Windshield Wiper Relay. When high speed wiper operation is requested, the K219 Lighting Control Module will provide ground to the coil side of the relay. This will energize the relay, closing the high current contact, and supply the B+ to the M75 Windshield Wiper Motor high speed control, enabling high speed wiper operation.

### B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor

**Note:** Due to the sensitivity of the sensor, the wipers may swipe once upon start up or rapid lighting changes.

The B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor utilizes an internal infrared LED and an optic sensor to determine the amount of water on the windshield. The infrared LED bounces infrared light against the inside of the windshield. The optic sensor measures the amount of light returned after

bouncing off the windshield. With a dry windshield, all light bounced off the windshield is returned to the optic sensor. As water accumulates on the windshield, the light input to the optic sensor is diffused and reduced. The amount of light reduction corresponds directly to the amount of water on the windshield. The B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor interprets the amount of light returned and communicates this info to the K9 Body Control Module, which will control intermittent wiper operation based on the sensitivity selection of the S82 Windshield Wiper/Washer Switch and the amount of water on the windshield.

#### M75 Windshield Wiper Motor

The M75 Windshield Wiper Motor receives a constant chassis ground. B+ is controlled by the KR12B Windshield Wiper Relay and KR12C Windshield Wiper Speed Control Relay being operated by the K219 Lighting Control Module.

The M75 Windshield Wiper Motor includes a DC motor and an internal position switch to indicate the wiper park position. When wiper operation is requested, the DC motor spins. The spinning motor is directed to a wiping motion through the windshield wiper transmission. When wiper operation is no longer required, the M75 Windshield Wiper Motor will continue spinning until the internal position switch indicates it is in the park position.

## Rear Window Wiper Operation

The rear window wiper system allows the driver to clear the vehicle's rear window using a discrete switch. The rear wiper systems uses the S82 Windshield Wiper/Washer Switch as the means of control. The S82 Windshield Wiper/Washer Switch is a discrete input to the K9 Body Control Module. The K9 Body Control Module communicates with the M45 Rear Wiper Motor via LIN to control wiper activation.

#### Low Speed Wiper Operation

With the S82 Windshield Wiper/Washer Switch in the low speed position, the discrete signal circuit to the K9 Body Control Module is pulled down through one resistor in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module communicates with the M45 Rear Wiper Motor over LIN, requesting consistent low speed wiping operation.

#### Intermittent Wiper Operation

With the S82 Windshield Wiper/Washer Switch in the intermittent position, the discrete signal circuit to the K9 Body Control Module is pulled down through a two resistors in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module communicates with the M45 Rear Wiper Motor over LIN, requesting consistent intermittent wiping operation. The K9 Body Control will vary the wiping cadence based on a preset amount of time.

#### Mist (Single Wipe) Operation

The mist (single wipe) position is a momentary switch position that will return the S82 Windshield Wiper/Washer Switch to the off position as soon as the switch is released. With the S82 Windshield Wiper/Washer Switch in the mist (single wipe) position, the discrete signal circuit to the K9 Body Control Module is pulled down through three resistors in a resistor ladder to a low reference provided by the K9 Body Control Module. The K9 Body Control Module interprets this specific voltage pull-down as a request for wiper activation. The K9 Body Control Module communicates with the M45 Rear Wiper Motor via LIN, requesting consistent low speed wiping operation as long as the S82 Windshield Wiper/Washer Switch is held in the mist (single wipe) position. If the mist (single wipe) position is only briefly selected, the K9 Body Control Module will request only a single wipe.

#### Wiper Park Operation

With the S82 Windshield Wiper/Washer Switch in the off position, the discrete signal circuit to the K9 Body Control Module is opened. The K9 Body Control Module interprets this as a request to stop wiper activation. The K9 Body Control Module communicates with the M45 Rear Wiper Motor via LIN, requesting wiper operation stop. The M45 Rear Wiper Motor will park the rear window wiper in their lowest position. When the wiper switch is turned to the OFF position while the wiper motor is somewhere in mid-cycle, the K9 Body Control Module will continue to operate the motor until the wiper reaches the park position. If the ignition is turned OFF while the wipers are in mid-cycle, the wipers will stop immediately, regardless of position. The K9 Body Control Module will park the wipers next time the ignition is turned ON.

The rear window wiper system consists of the following electrical components:

- S82 Windshield Wiper/Washer Switch
- K9 Body Control Module
- M45 Rear Wiper Motor

## Rear Window Wiper Components

#### S82 Windshield Wiper/Washer Switch

The S82 Windshield Wiper/Washer Switch is the primary input to the K9 Body Control Module for the driver to control rear window wiper operation.

The S82 Windshield Wiper/Washer Switch contains one individual internal switch used to request mist (single wipe) off, intermittent, and low speed selection.

The K9 Body Control Module provides the S82 Windshield Wiper/Washer Switch with ground through a single low reference circuit and monitors the switch position through a single signal circuit. Voltage is applied by the K9 Body Control Module to this signal circuit and voltage drop is monitored to determine switch selection. This voltage drop will vary depending on the number of resistors in the resistor ladder, which changes depending on switch position. In the off position, current doesn't flow. In the mist (single wipe) position current flows through three resistors, in the intermittent speed position current flows through two resistors, and in the low speed position, current flows through one resistor.

#### K9 Body Control Module

The K9 Body Control Module will send a LIN message to the M45 Rear Wiper Motor to request wiper operation. The K9 Body Control Module responds to input requests from the S82 Windshield Wiper/Washer

Switch. The K9 Body Control Module provides a constant ground for the S82 Windshield Wiper/Washer Switch and monitors a signal circuit to determine the requested windshield wiper position.

### M45 Rear Wiper Motor

The M45 Rear Wiper Motor receives a constant B+ and chassis ground.

The M45 Rear Wiper Motor includes a DC motor and an internal position switch to indicate the wiper park position. When wiper operation is requested, the DC motor spins. The spinning motor is directed to a wiping motion through the windshield wiper transmission. When wiper operation is no longer required, the M45 Rear Wiper Motor will continue spinning until the internal position switch indicates it is in the park position.

## Windshield Washer Operation

The windshield washer system allows the driver to clean the vehicle's windshield or rear window using a discrete switch. The washer system uses the S82 Windshield Wiper/Washer Switch as the primary means of driver control. The S82 Windshield Wiper/Washer Switch is a discrete input to the K9 Body Control Module. The K9 Body Control Module communicates with the K219 Lighting Control Module over CAN to control G24 Windshield Washer Pump activation. The K9 Body Control Module also communicates with the K219 Lighting Control Module to control B+ to the M75 Windshield Wiper Motor during operation.

The windshield wiper system consists of the following electrical components:

- S82 Windshield Wiper/Washer Switch
- K9 Body Control Module
- K219 Lighting Control Module
- KR12B Windshield Wiper Relay
- KR6 Rear Window Washer Pump Relay
- KR11 Windshield Washer Pump Relay
- G24 Windshield Washer Pump
- M45 Rear Wiper Motor
- M75 Windshield Wiper Motor
- B118B Windshield Washer Fluid Level Switch

## Windshield Washer Components

### S82 Windshield Wiper/Washer Switch

The S82 Windshield Wiper/Washer Switch is the primary input to the K9 Body Control Module for the driver to control washer operation.

For front washers, the K9 Body Control Module provides the S82 Windshield Wiper/Washer Switch with ground through a single low reference circuit and monitors the two switch positions through two signal circuits. Voltage is applied by the K9 Body Control Module to the signal circuits and voltage drop is monitored to determine switch selection. For front washers, the S82 Windshield Wiper/Washer Switch contains an internal switch dedicated to front windshield washer operation. When the switch is closed, the signal circuit is pulled to ground, indicating front washer operation is requested. For rear washers, the switch is part of a resistor ladder. The voltage drop will vary depending on the number of resistors in the resistor ladder. When the switch is closed, the signal circuit is pulled to ground through three resistors, indicating rear washer operation is requested.

### K9 Body Control Module

The K9 Body Control Module responds to input requests from the S82 Windshield Wiper/Washer Switch. The K9 Body Control Module provides a constant ground for the S82 Windshield Wiper/Washer Switch and monitors a signal circuit to determine the requested windshield wiper position.

When front washer operation is requested, the K9 Body Control Module will send a CAN message to the K219 Lighting Control Module to enable the G24 Windshield Washer Pump through the KR11 Windshield Washer Pump Relay, as well as supply B+ to the M75 Windshield Wiper Motor for low speed wiper operation.

When rear washer operation is requested, the K9 Body Control Module will send a CAN message to the K219 Lighting Control Module to enable the G24 Windshield Washer Pump through the KR6 Rear Window Washer Pump Relay, as well as send a signal through LIN to the M45 Rear Wiper Motor for low speed wiper operation.

### K219 Lighting Control Module

The K219 Lighting Control Module controls B+ to the G24 Windshield Washer Pump. When washer operation is requested from a CAN message from the K9 Body Control Module, the K219 Lighting Control Module will apply voltage via a high side driver to the KR11 Windshield Washer Pump Relay or the KR6 Rear Window Washer Pump Relay. The K219 Lighting Control Module also controls B+ to the M75 Windshield Wiper Motor. When washer operation is requested, the K219 Lighting Control Module will apply voltage via a high side driver to the KR12B Windshield Wiper Relay.

The K219 Lighting Control Module also monitors the B118B Windshield Washer Fluid Level Switch through a discrete signal circuit.

### KR12B Windshield Wiper Relay

The KR12B Windshield Wiper Relay supplies B+ to the M75 Windshield Wiper Motor and is controlled by the K219 Lighting Control Module. The coil side of the relay receives a constant chassis ground and the switch side receives a constant B+. When wiper operation is requested, the K219 Lighting Control Module will provide voltage to the coil side of the relay. This will energize the relay, closing the high current contact, and supply B+ to the M75 Windshield Wiper Motor through the KR12C Windshield Wiper Speed Control Relay, enabling wiper operation.

### KR6 Rear Window Washer Pump Relay

The KR6 Rear Window Washer Pump Relay supplies B + to the G24 Windshield Washer Pump and is controlled by the K219 Lighting Control Module. The coil side of the relay receives a constant chassis ground and the switch side receives a constant B+. When washer operation is requested, the K219 Lighting Control Module will provide voltage to the coil side of

the relay. This will energize the relay, closing the high current contact, and supply B+ to the G24 Windshield Washer Pump, enabling washer pump operation.

### KR11 Windshield Washer Pump Relay

The KR11 Windshield Washer Pump Relay supplies B+ to the G24 Windshield Washer Pump and is controlled by the K219 Lighting Control Module. The coil side of the relay receives a constant chassis ground and the switch side receives a constant B+. When wiper operation is requested, the K219 Lighting Control Module will provide voltage to the coil side of the relay. This will energize the relay, closing the high current contact, and supply B+ to the G24 Windshield Washer Pump, enabling washer pump operation.

### G24 Windshield Washer Pump

The G24 Windshield Washer Pump is a reversible motor that receives a ground through the non activated relay. B+ is controlled by the KR11 Windshield Washer Pump Relay for front washer operation, or the KR6 Rear Window Washer Pump Relay for rear washer operation. With voltage applied, a DC motor spins, connecting and pressurizing washer fluid from the washer fluid reservoir. The pressurized washer fluid is deposited on the windshield or rear window through a series of lines and nozzles.

### M45 Rear Window Wiper Motor

The M45 Rear Wiper Motor communicates with the K9 Body Control Module via LIN and responds to requests to turn the rear wipers on and off. The M45 Rear Wiper Motor receives a constant B+ and chassis ground. In operation, the M45 Rear Wiper Motor monitors LIN messages to determine when washer operation is requested. The M45 Rear Wiper Motor will wipe at low speed when washer operation is requested.

The M45 Rear Wiper Motor includes a DC motor and an internal position switch to indicate the wiper park position. When washer operation is requested, the DC motor spins. When wiper operation is no longer required, the M45 Rear Wiper Motor will continue spinning until the internal position switch indicates it is in the park position.

### M75 Windshield Wiper Motor

The M75 Windshield Wiper Motor receives a constant chassis ground. B+ is controlled by the KR12B Windshield Wiper Relay and KR12C Windshield Wiper Speed Control Relay being operated by the K219 Lighting Control Module. The M75 Windshield Wiper Motor will wiper at low speed when washer operation is requested.

The M75 Windshield Wiper Motor includes a DC motor and an internal position switch to indicate the wiper park position. When wiper operation is requested, the DC motor spins. The spinning motor is directed to a wiping motion through the windshield wiper transmission. When wiper operation is no longer required, the M75 Windshield Wiper Motor will continue spinning until the internal position switch indicates it is in the park position.

### B118B Windshield Washer Fluid Level Switch

The B118B Windshield Washer Fluid Level Switch receives a constant chassis ground. A signal circuit is monitored by the K219 Lighting Control Module. The K219 Lighting Control Module applies voltage to the signal circuit. When the B118B Windshield Washer Fluid Level Switch is closed, voltage on the signal circuit is pulled to ground, indicating fluid in the washer fluid reservoir.

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# Section 3

# Brakes

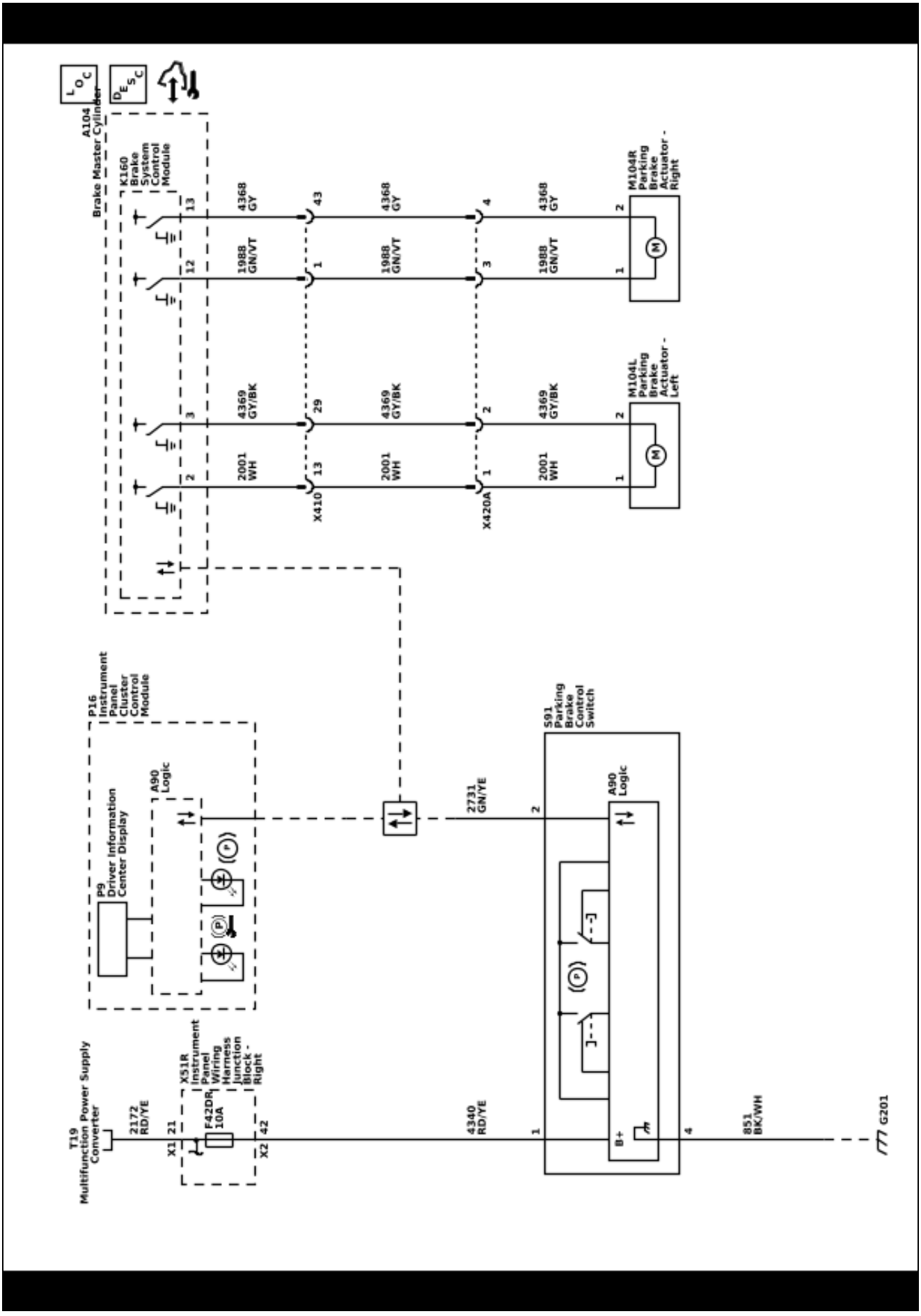
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# Park Brake

## Schematic and Routing Diagrams

## Park Brake System Schematics (Park Brake System Schematics)



# Description and Operation

## Electronic Parking Brake Description

Vehicles with the electric parking brake have a switch in the center console or on the dash, which takes the place of the manual parking brake system, the foot pedal and release handle. In case of insufficient electrical power, the electric parking brake cannot be applied or released.

## Electronic Brake Control Module/Brake System Control Module

The parking brake function is integrated into the Electronic Brake Control Module/Brake System Control Module. The module contains the logic for applying and releasing the parking brake when commanded by the Park Brake Switch.

When the Park Brake Switch is pulled, a signal is sent to the Electronic Brake Control Module which will supply 12 V to the apply control circuits and ground to the release control circuits which will cause the left and right park brake actuators to activate causing the park brakes to engage. When the Park Brake Switch is pressed, a signal is sent to the Electronic Brake Control Module which will supply 12 V to the released control circuits and ground to the apply control circuits which will cause the left and right park brake actuators to activate causing the park brakes to release. In some vehicles, the Park Brake Switch is a push-button style switch. When the switch is pressed, the park brakes are commanded to either apply or release based off of their current position.

The Electronic Brake Control Module/Brake System Control Module will diagnose the park brake motor circuits to verify that they are functioning properly. The park brake motor circuits are used to command actuator motor operation, which will apply and release the parking brake. These circuits are used to activate the actuator, which applies or releases pressure on the caliper pistons, ultimately applying and releasing the park brake.

The Park Brake Motor Position Sensor is an internal sensor to the park brake actuator, this sensor is used to monitor the park brake motor position.

## Electric Parking Brake Apply

The electric parking brake can be applied any time the vehicle is stopped or in motion. The electric parking brake is applied by momentarily operating the park brake control switch. The red park brake light will momentarily flash while the parking brake is being applied. Once fully applied, the red park brake light will turn on. If the electric parking brake is applied while the vehicle is in motion, the vehicle will decelerate as long as the switch is being operated. If the switch is operated until the vehicle comes to a stop, the park brake will remain applied.

If the red park brake light is flashing, the electric parking brake is only partially applied or released, or there is a problem with the electric parking brake. A DIC message will display.

The vehicle may automatically apply the electric parking brake in some situations when the vehicle is not moving. This is normal, and is done to periodically check the correct operation of the electric parking brake system.

## Electric Parking Brake Release

To release the electric parking brake, turn the ignition switch to the ON or RUN position, apply and hold the brake pedal, and push down momentarily on the park brake control switch. When the electric parking brake is released the red park brake light turns off.

## Automatic Electric Parking Brake Release

The parking brake will automatically release if the vehicle is running, placed into gear, and an attempt is made to drive away. Avoid rapid acceleration when the parking brake is applied to preserve parking brake lining life.

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# Section 4

# Driver Information and Entertainment

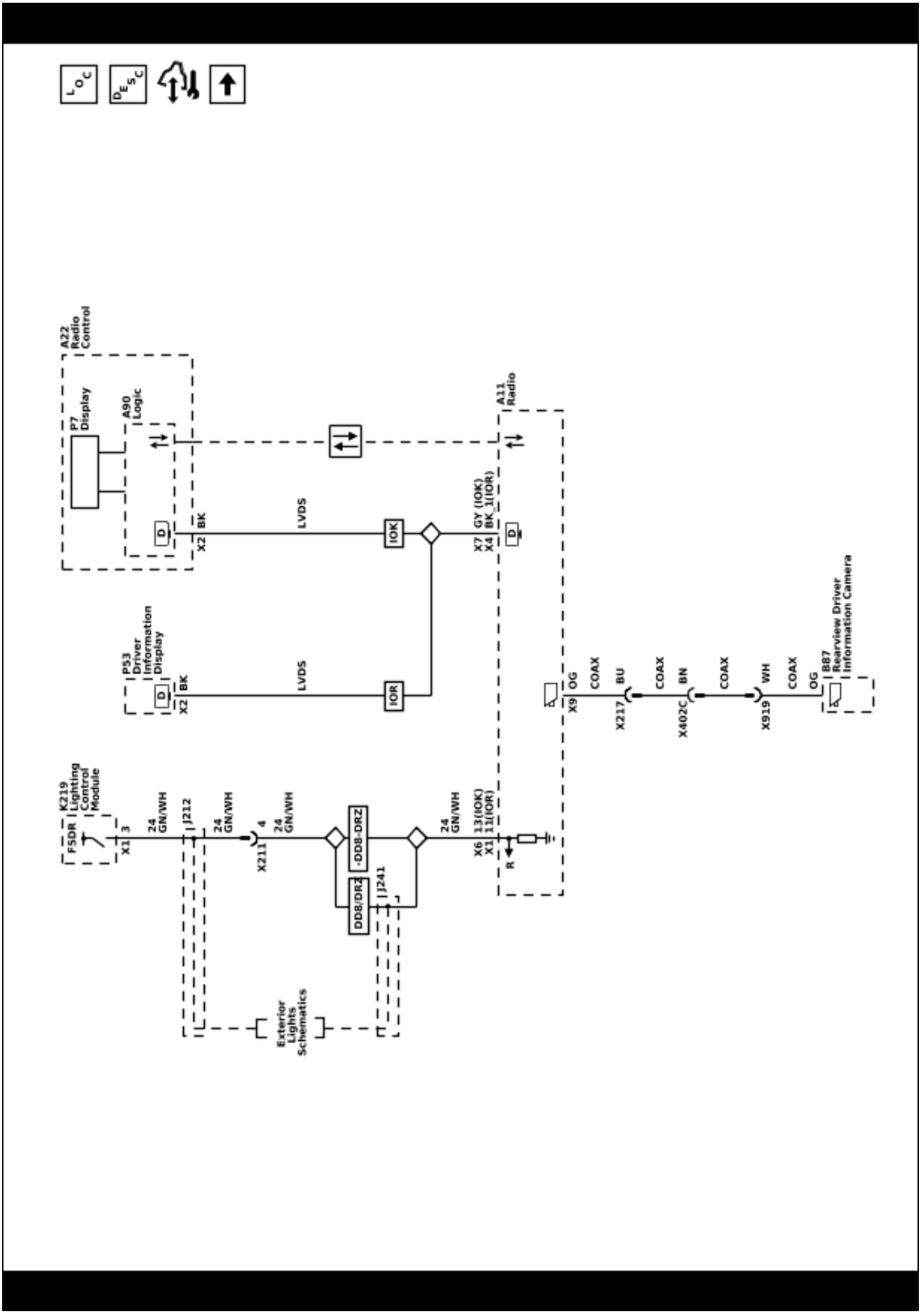
**Image Display Cameras** . . . . . 4-3
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Surround Vision Camera Description and Operation . . . . . 4-7

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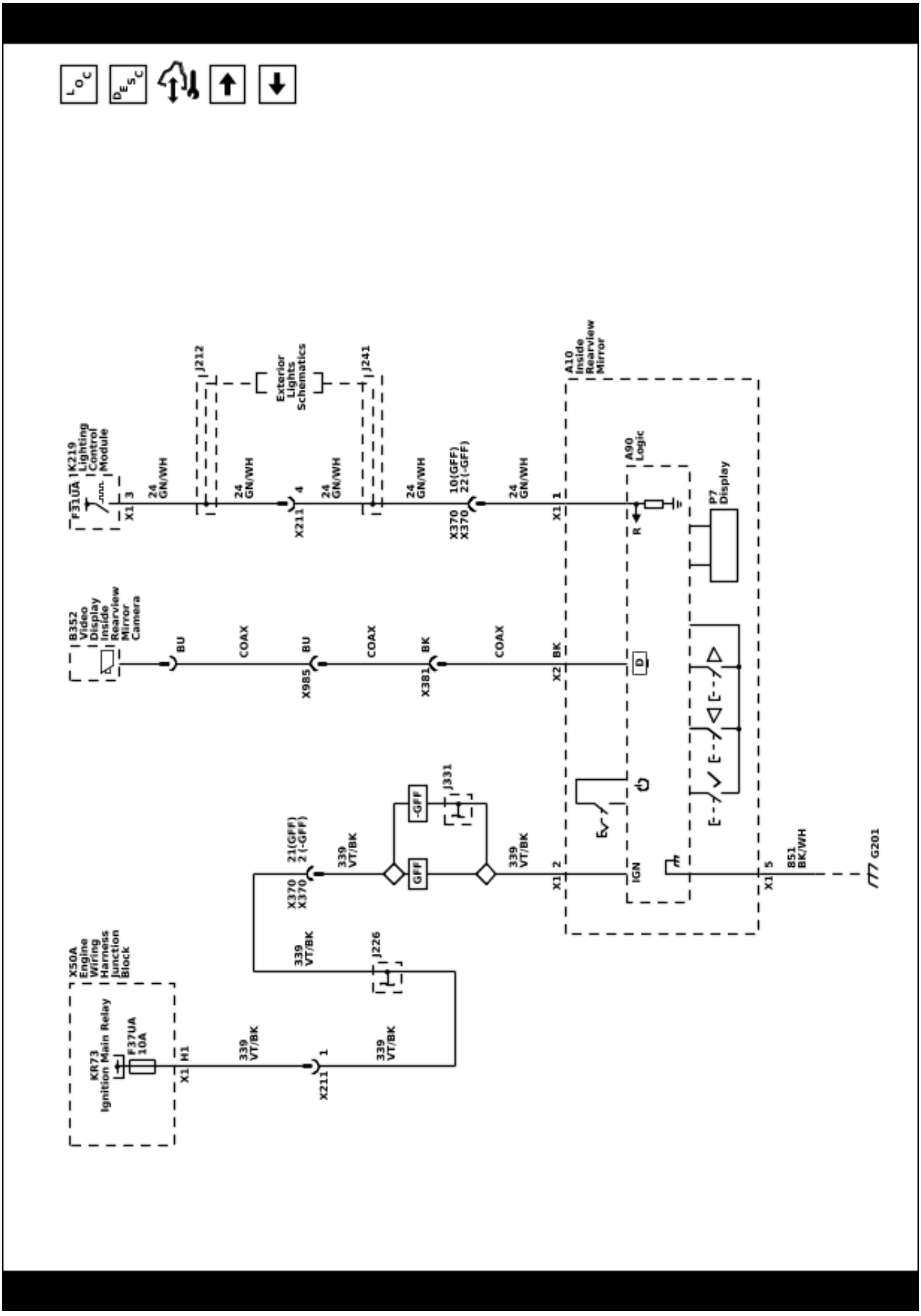
# Image Display Cameras

## Schematic and Routing Diagrams

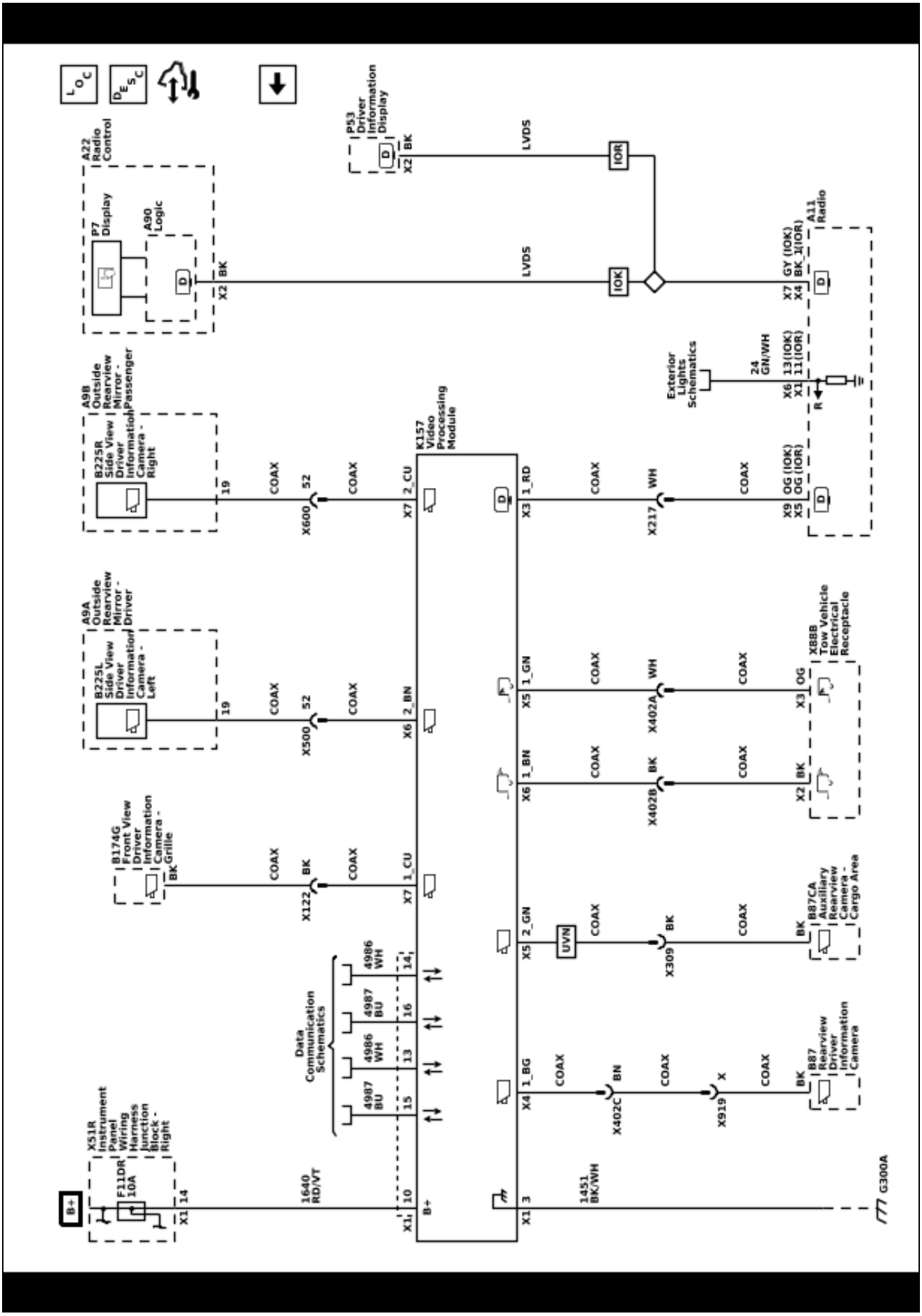
## Image Display Camera Schematics (Rearview Driver Information Camera (UVB))



## Image Display Camera Schematics (Inside Rearview Mirror Camera (DRZ))



## Image Display Camera Schematics (360 Degree Vision (UV2))



# Description and Operation

## Rearview Camera Full Display Mirror Description and Operation

If equipped, full display mirror provides a wider field of view than normally seen from the inside rearview mirror to assist when driving and changing lanes. When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror. The inside rearview camera full display mirror is connected to the outside rearview camera via a shielded coaxial cable.

When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror.

Adjust the rearview mirror for a clear view of the area behind the vehicle before turning on full display mirror. Use the three buttons on the bottom of the mirror to adjust the brightness, zoom, and tilt of the display. Make sure the light sensor is not covered when adjusting the brightness.

The inside rearview camera full display mirror may not work properly or display a clear image if:.

- It is dark.
- The sun or the beam of headlamps are shining directly into the camera lens.
- Ice, snow, mud, or anything else builds up on the camera lens. Clean the lens, rinse it with water, and wipe it with a soft cloth.

When the mirror detects that the camera is not sending a valid video signal, it “blue screens” with a “no video” decal for 3 seconds, then reverts back to the mirror.

## Rear Vision Camera Description and Operation

### Rear Vision Camera System Operation

The rear vision camera system consists of a video camera located at the rear of the vehicle and the Rado.

When the transmission is placed into REVERSE, a signal is sent to the Radio indicating that camera operation is requested. The rearview camera sends video information to the radio through a coax cable. The coax cable also provides power from the Radio to the rearview camera.

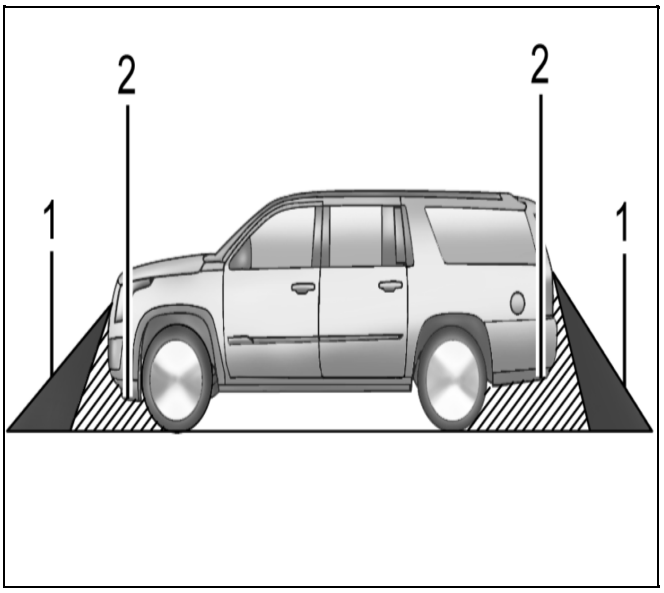
The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

If a malfunction is detected in the system, Service Rear Vision Camera may be displayed on the Info Display Module as an indicator to the customer that a problem exists that requires service.

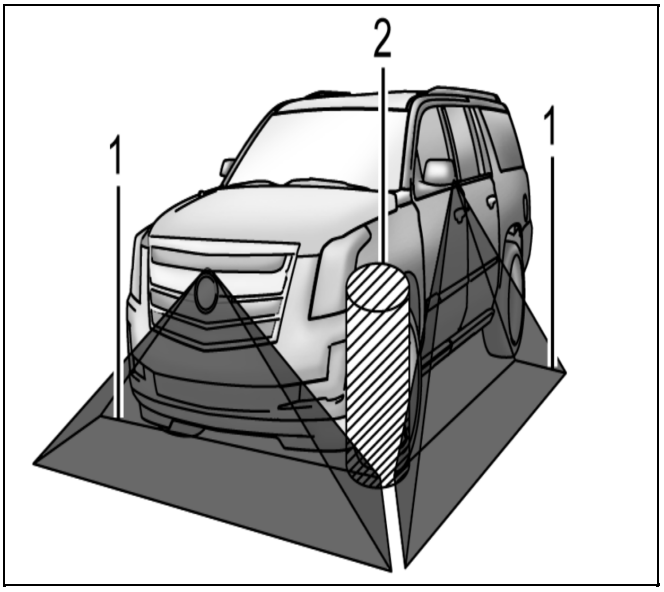
## Surround Vision Camera Description and Operation

***Warning: The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display surround view correctly. Always check around the vehicle when parking or backing.***




4291164

1. View Displayed by the Surround Vision Camera
2. Area Not Shown




4291749

1. View Displayed by the Surround Vision Camera
2. Area Not Shown

The surround vision camera system consists of the following components:

- B87 Rearview Camera
- B174G Frontview Camera – Grille
- K157 Video Processing Control Module

- A11 Radio **OR** K74 Human Machine Interface Module
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right
- X20 Memory Card Receptacle (with XVR)

When the vehicle is traveling at speeds slower than 6 mph (10kph) the video processing control module will power up the cameras and send a video signal to the radio or human machine interface module.

The following conditions may cause a degraded surround vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

Surround Vision displays an overhead view of the area surrounding the vehicle, along with the front or rear camera views in the center stack. The front camera is in the grille or near the front emblem, the side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate.

**Note:** Images from the Sideview Cameras are only displayed when both front doors are properly closed.

**Features of the Surround Vision System**

- Rear camera (B87 Rearview Camera) view alongside overhead view is displayed in reverse
- Front camera (B174G Frontview Camera – Grille) view alongside overhead view is displayed after shifting out of reverse to Neutral or Drive
- Will display front view when front park assist object is within trigger range calibration value (30 cm (12 in) in a forward gear
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch

**System Operation**

The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the processed image output to infotainment system via another coaxial cable.

The video processing module receives various vehicle information (such as steering wheel angle, object detection, etc) from other sources such as parking assist modules and the Body Control Module via serial data. This information is used to produce the enhanced surround vision system images that include a warning triangle that may display if an object is detected nearby. This triangle changes from amber to red and increases in size as the object gets closer to the vehicle. Also, dynamic guidelines are displayed in Reverse to show the projected path of the vehicle based on steering wheel angle. Due to this use of vehicle information, any faults or DTCs in these related systems can prohibit proper surround vision operation.

If equipped, the video processing control module system may have a memory card receptacle (with XVR) located in the trunk. The memory card receptacle interfaces with the video processing control module via a USB cable. The memory card receptacle also receives fused battery voltage and ground from the video processing control module. The video processing control module uses the memory card as a mass storage device, similar to a USB storage device.

# Section 5

# Engine/Propulsion

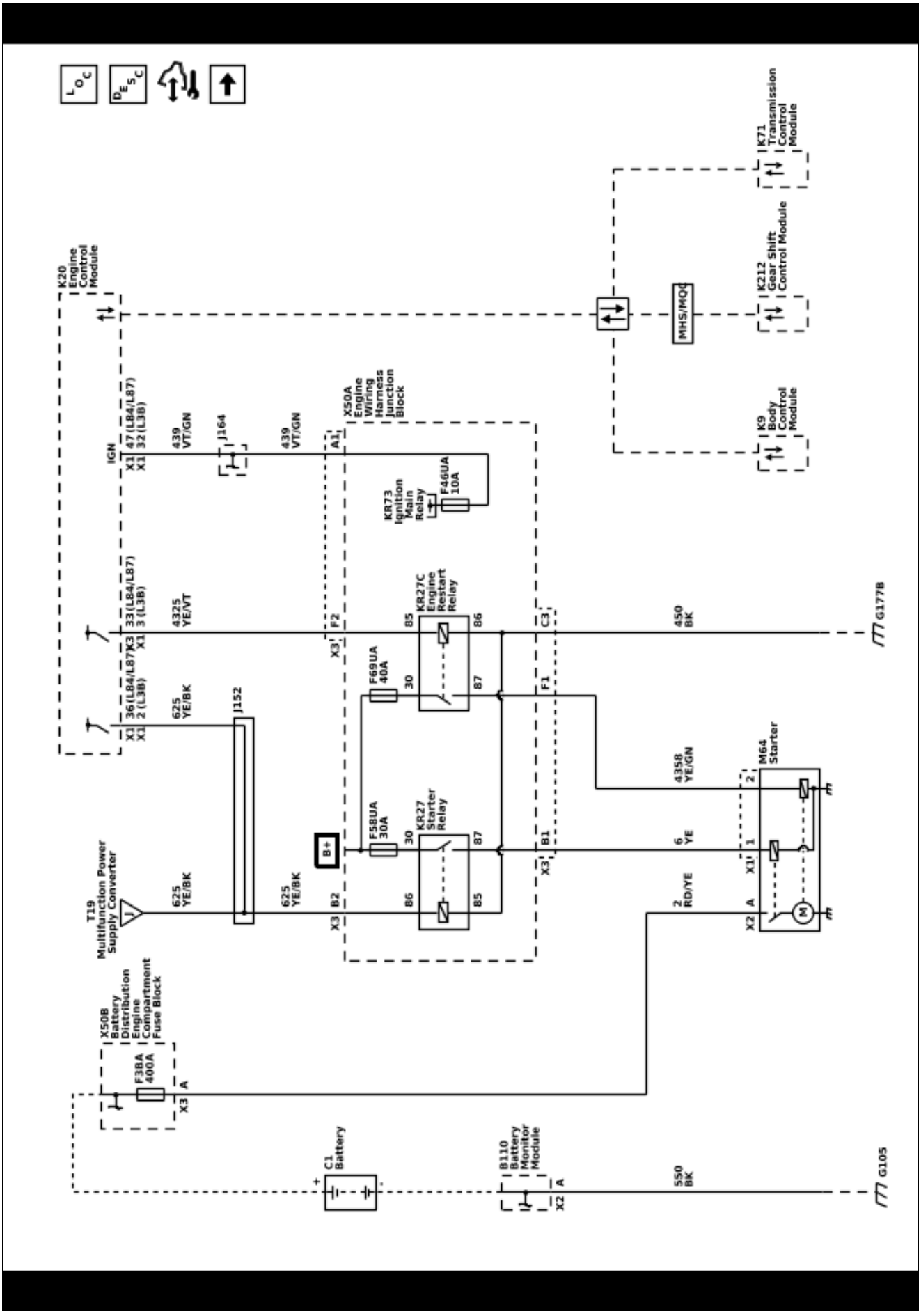
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Stop/Start System Description and Operation ..... 5-15

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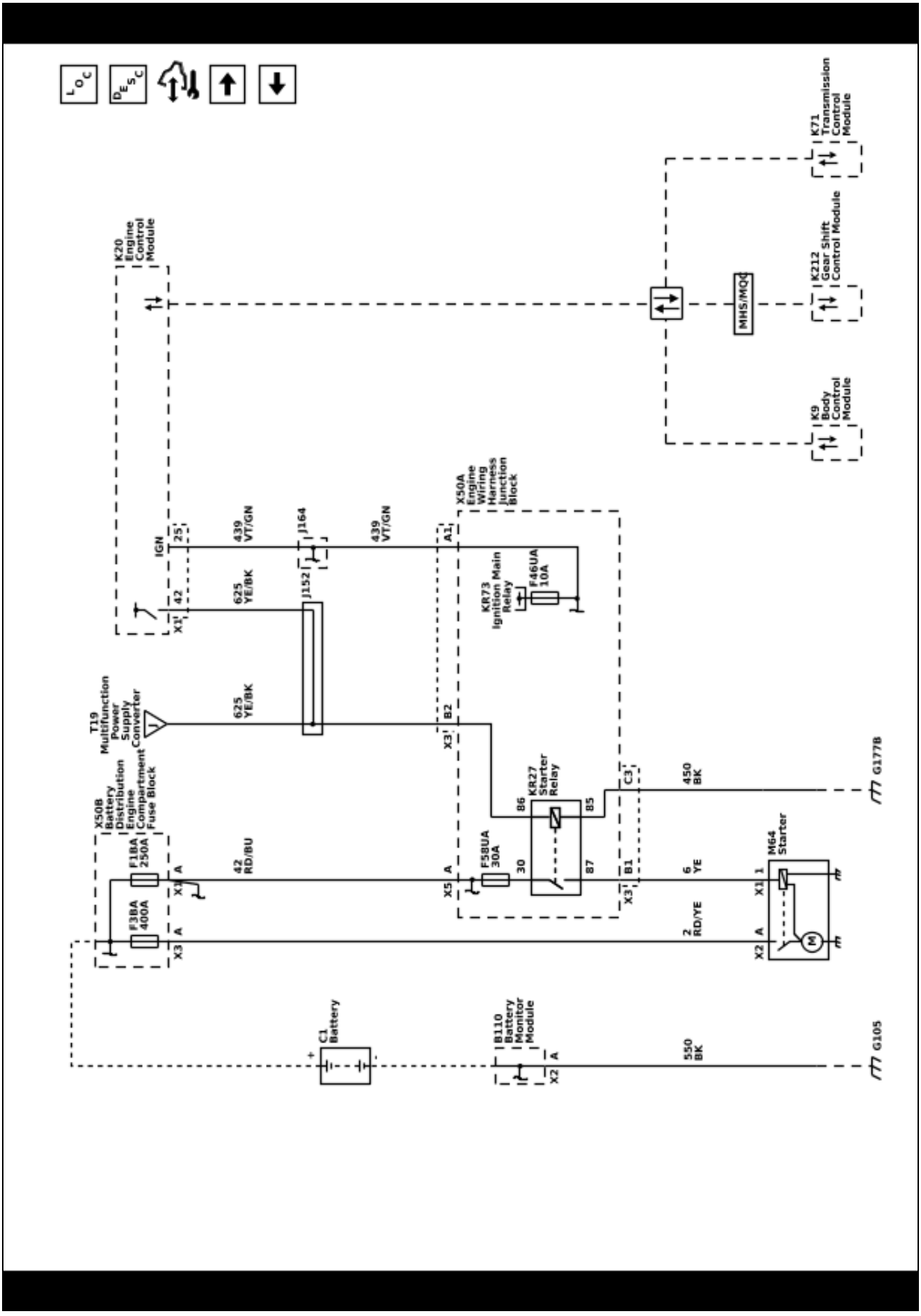
# 12 V Starting and Charging

## Schematic and Routing Diagrams

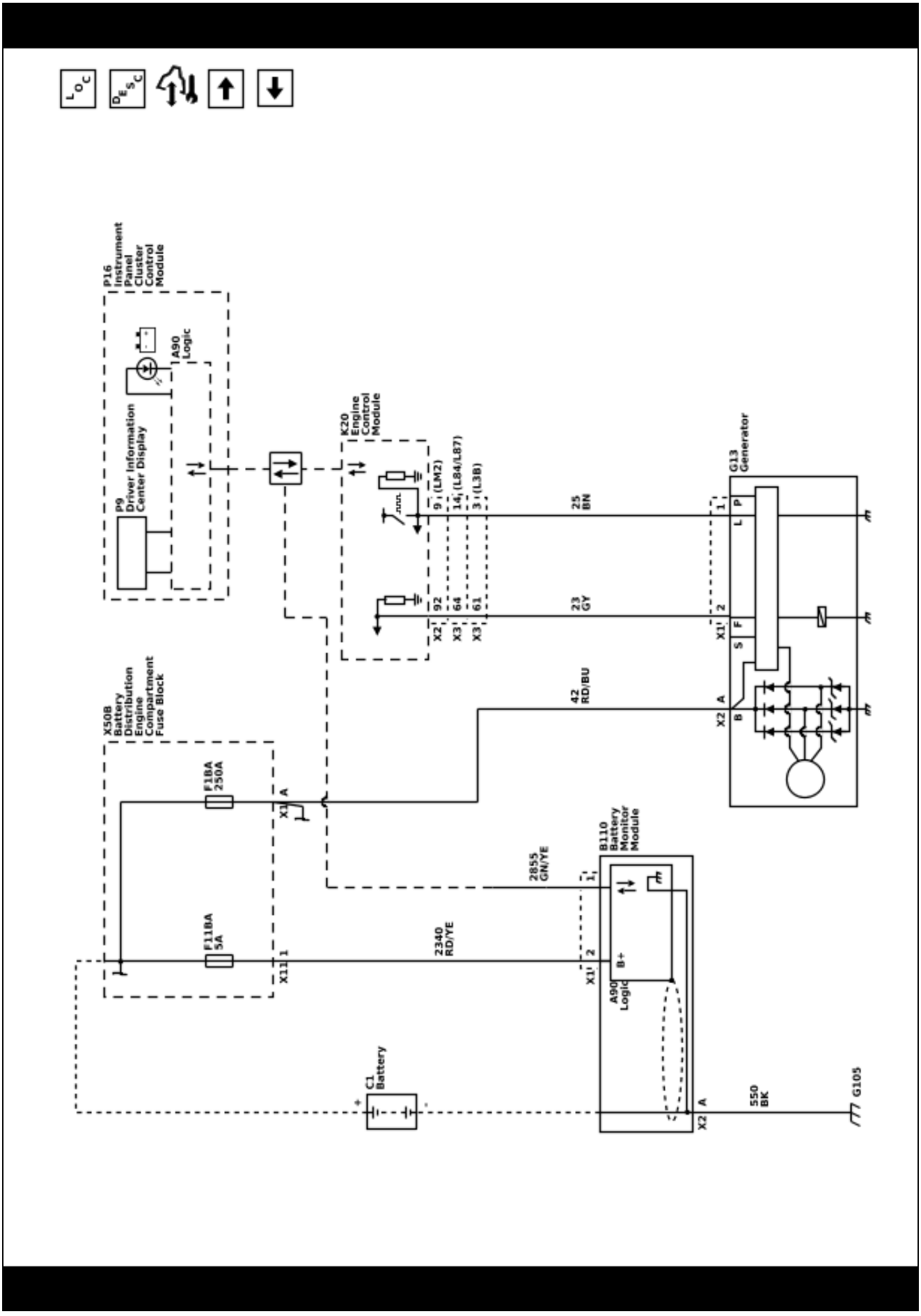
## Starting and Charging Schematics (Starting (L3B/L84/L87))



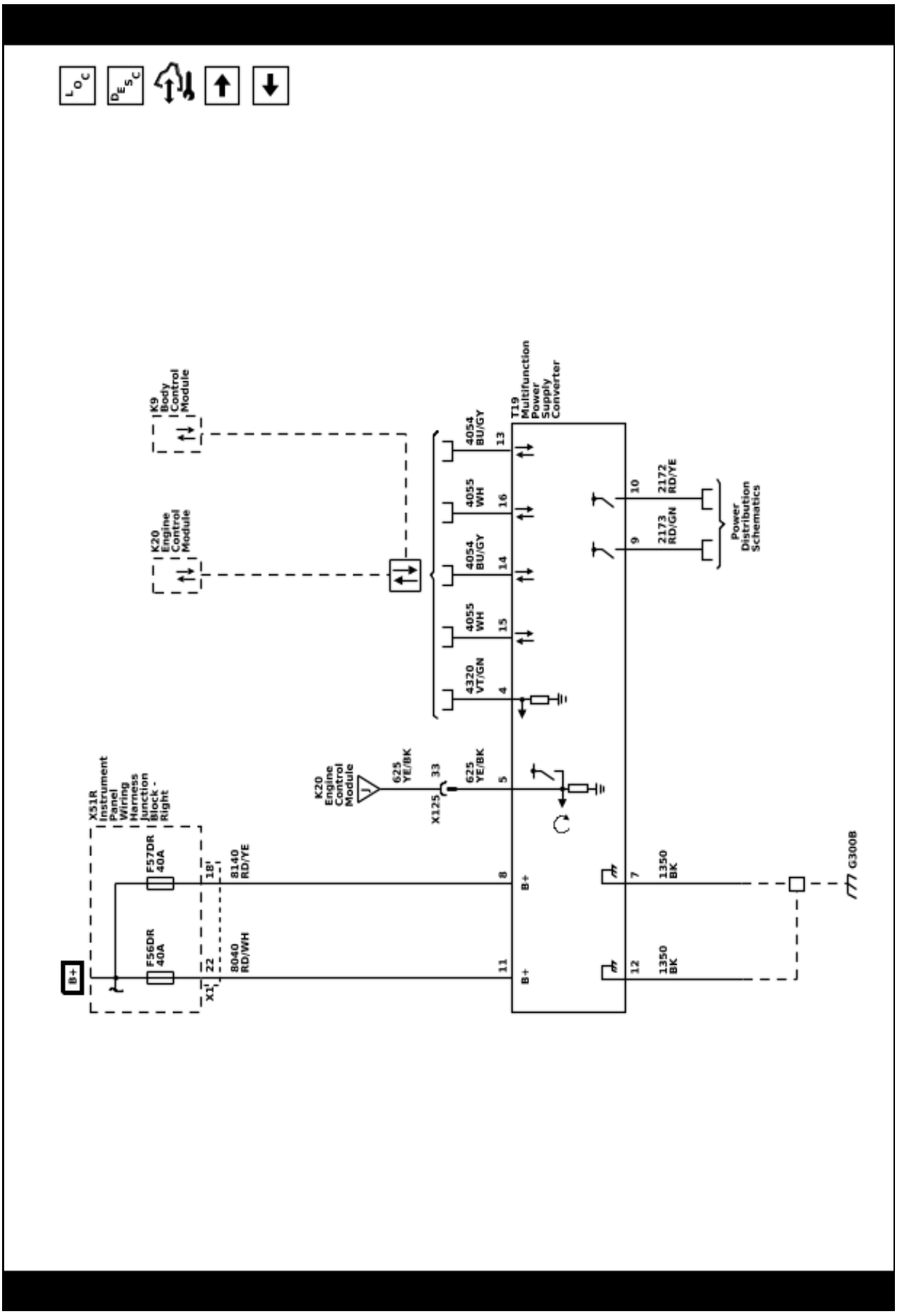
## Starting and Charging Schematics (Starting)



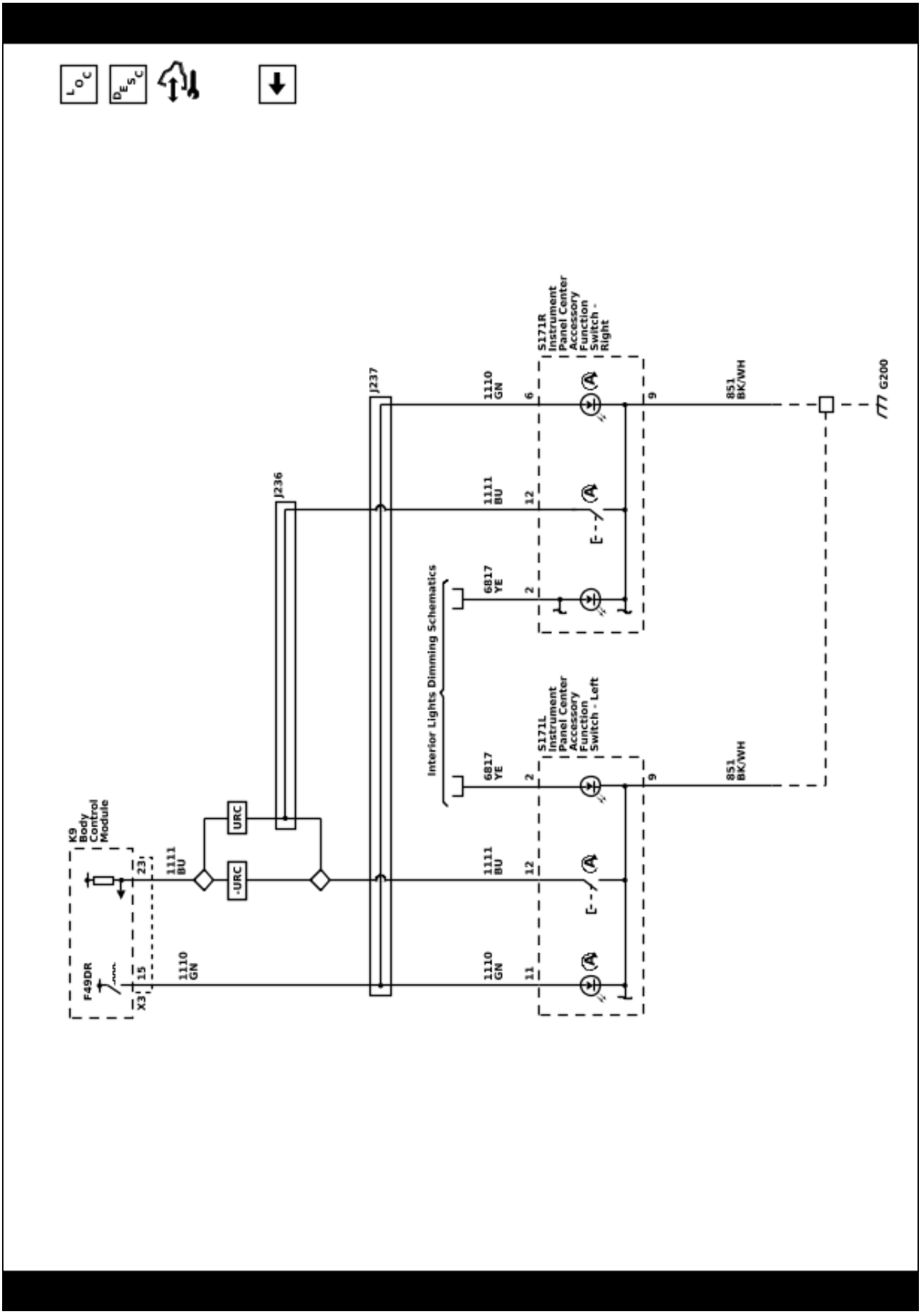
## Starting and Charging Schematics (Charging)



## Starting and Charging Schematics (Power Supply Transformer Power, Ground, Serial Data, and Subsystem References (KL9))



## Starting and Charging Schematics (Stop/Start Controls (KL9))



# Description and Operation

## Battery Description and Operation

***Warning: Batteries produce explosive gases, contain corrosive acid, and supply levels of electrical current high enough to cause burns. Therefore, to reduce the risk of personal injury when working near a battery:***

- ***Always shield your eyes and avoid leaning over the battery whenever possible.***
- ***Do not expose the battery to open flames or sparks.***
- ***Do not allow the battery electrolyte to contact the eyes or the skin. Flush immediately and thoroughly any contacted areas with water and get medical help.***
- ***Follow each step of the jump starting procedure in order.***
- ***Treat both the booster and the discharged batteries carefully when using the jumper cables.***

Batteries that are no longer wanted must be disposed of by an approved battery recycler and must never be thrown in the trash or sent to a landfill.

Batteries that are not part of the vehicle itself, not the battery under the hood, must only be transported on public streets for business purposes via approved hazardous material transportation procedures.

Battery storage, charging and testing facilities in repair shops must meet various requirements for ventilation, safety equipment, material segregation, etc.

The maintenance free battery is standard. There are no vent plugs in the cover. The battery is completely sealed except for 2 small vent holes in the side. These vent holes allow the small amount of gas that is produced in the battery to escape.

The battery has 3 functions as a major source of energy:

- Engine cranking
- Voltage stabilizer
- Alternate source of energy with generator overload

### Battery Low Start Vehicle Message

The body control module (BCM) monitors battery positive voltage to determine battery state of charge. If one or more of the BCM battery positive voltage terminals measure less than approximately 11.6V compared to the BCM ground circuits, this message will display and four chimes may sound. Start the vehicle immediately. If the vehicle is not started and the battery continues to discharge, the climate controls, heated seats, and audio systems will shut off and the vehicle may require a jump start. These systems will function again after the vehicle is started.

### Battery Ratings

A battery has 2 ratings:

- Cold cranking amperage
- Amperage hours

When a battery is replaced use a battery with similar ratings. See battery specification label on the original battery.

### Amperage Hours

The amperage hour rating tells you how much amperage is available when discharged evenly over a 20 hour period. The amperage hour rating is cumulative, so in order to know how many constant amperage the battery will output for 20 h, you have to divide the amperage hour rating by 20. Example: If a battery has an amperage hour rating of 74, dividing by 20 = 3.75. Such a battery can carry a 3.75 A load for 20 hours before dropping to 10.5 V. (10.5 V is the fully discharged level, at which point the battery needs to be recharged.) A battery with an amperage hour rating of 55 will carry a 2.75 A load for 20 hours before dropping to 10.5 V.

### Cold Cranking Amperage

The cold cranking amperage is an indication of the ability of the battery to crank the engine at cold temperatures. The cold cranking amperage rating is the minimum amperage the battery must maintain for 30 seconds at −18°C (0°F) while maintaining at least 7.2 V. See battery label for the cold cranking amperage rating of this battery.

## Charging System Description and Operation

### Electrical Power Management Overview

The electrical power management system is designed to monitor and control the charging system and send diagnostic messages to alert the driver of possible problems with the battery and generator. This electrical power management system primarily utilizes existing on-board computer capability to maximize the effectiveness of the generator, to manage the load, improve battery state-of-charge and life, and minimize the system's impact on fuel economy. The electrical power management system performs 3 functions:

- Monitor the battery voltage and estimate the battery condition
- Take corrective actions by boosting idle speeds, and adjusting the regulated voltage
- Perform diagnostics and driver notification

The battery condition is estimated during ignition/vehicle off and during ignition/vehicle on. During ignition/vehicle off the state-of-charge of the battery is determined by measuring the open-circuit voltage. The state-of-charge is a function of the acid concentration and the internal resistance of the battery, and is estimated by reading the battery open circuit voltage when the battery has been at rest for several hours.

Any time the ignition/vehicle is on, the vehicle algorithm continuously estimates battery state-of-charge based on adjusted net amp hours, battery capacity, initial state-of-charge, and calculated temperature.

While the engine is running, the battery degree of discharge is primarily determined by the integrated battery current sensor, to obtain net amp hours.

In addition, the electrical power management function is designed to perform regulated voltage control to improve battery state-of-charge, battery life, and fuel economy. This is accomplished by using knowledge of the battery state-of-charge and temperature to set the charging voltage to an optimum battery voltage level for recharging without detriment to battery life.

## Charging System Components

### G13 Generator

The engine drive belt drives the generator. When the rotor is spun, it induces an alternating current (AC) into the stator windings. The AC voltage is then sent through a series of diodes for rectification. The rectified voltage has been converted into a direct current (DC) for use by the vehicles electrical system to maintain electrical loads and the battery charge. The voltage regulator integral to the generator controls the output of the generator; It is not serviceable. The voltage regulator controls the amount of current provided to the rotor. If the generator has field control circuit fault, the generator defaults to an output voltage of 13.8 V.

The generator is serviced as a complete assembly. If there is a diagnosed fault in the generator, it must be replaced as an assembly.

### Generator Pulley

The pulley drives the Generator via the engine drive belt. There are 2 types of pulleys:

1. Conventional solid Pulley which is bolted to the Generator stator shaft. This Pulley can be serviced separately.

2. One Way Clutch Pulley or Overrunning Alternator Decoupler Pulley allows the Generator to spin freely when the engine rapidly slows down on sudden deceleration. This part is not serviceable and the Generator needs to be replaced as an assembly.

### K9 Body Control Module (BCM)

The K9 Body Control Module communicates with the K20 Engine Control Module and the instrument cluster for electrical power management operation. The BCM determines the output of the generator and sends the information to the ECM for control of the generator turn on signal circuit. It monitors the generator field duty cycle signal circuit information sent from the ECM for control of the generator. It monitors the battery current sensor, the battery positive voltage circuit, and estimates battery temperature to determine battery state of charge. The BCM also performs idle boost.

### B110 Battery Monitor Module

The Battery Monitor Module communicates to the BCM via LIN. The BCM shares this information with the ECM. The purpose of the battery sensor module is to transmit battery information that the BCM/ECM can use to make decisions regarding stop/start, battery saver mode, and load shedding.

### K20 Engine Control Module (ECM)

When the engine is running, the generator turn-on signal is sent to the generator from the ECM, turning on the regulator. The generator's voltage regulator controls current to the rotor, thereby controlling the output voltage. The rotor current is proportional to the electrical pulse width supplied by the regulator. When the engine is started, the regulator senses generator rotation by detecting AC voltage at the stator through an internal wire. Once the engine is running, the regulator varies the field current by controlling the pulse width. This regulates the generator output voltage for proper battery charging and electrical system operation. The generator field duty terminal is connected internally to the voltage regulator and externally to the ECM. When the voltage regulator detects a charging system problem, it grounds this circuit to signal the ECM that a problem exists. The ECM monitors the generator field duty cycle signal circuit, and receives control decisions based on information from the BCM.

### P16 Instrument Cluster

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

The instrument cluster also provides customer notification if there is a concern with the charging system. There are two means of notification: a charge indicator on the instrument cluster and/or a service system message displayed on the Driver Information Center (DIC) if equipped.

## Charging System Operation

The purpose of the charging system is to maintain the battery charge and vehicle loads. There are 6 modes of operation and they include:

- Battery Sulfation Mode
- Charge Mode
- Fuel Economy Mode
- Head lamp Mode
- Start Up Mode
- Voltage Reduction Mode

The ECM Controls the Generator through the generator turn–on signal circuit, also known as the Generator L-terminal. The ECM monitors the generator performance though the Generator field duty cycle signal circuit, also known as the generator F-terminal.

The Generator turn–on signal (Generator L-terminal) is a Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. 0–5% and 95–100% are for diagnostic purposes, with 0–5% monitoring for an open circuit and 95–100% monitoring for a short to ground at a fixed 13.8 V. The following table shows the commanded duty cycle and output voltage of the Generator:

| Commanded Duty Cycle | Generator Output Voltage (+/- .25 V) |
|---|---|
| 0–5% | 13.8 V |
| 10% | 11 V |
| 20% | 11.56 V |
| 30% | 12.13 V |
| 40% | 12.69 V |
| 50% | 13.25 V |
| 60% | 13.81 V |

| Commanded Duty Cycle | Generator Output Voltage (+/- .25 V) |
|---|---|
| 70% | 14.38 V |
| 80% | 14.94 V |
| 90% | 15.5 V |
| 95–100% | 13.8 V |

The Generator provides a PWM feedback signal of the Generator voltage output through the Generator field duty cycle signal circuit to the ECM. This information is sent to the Body Control Module (BCM). The Generator field duty cycle signal (Generator F-terminal) is a PWM signal of 60–460 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–100%. 0–5% is reserved for diagnostic purposes.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage displayed in the DIC to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

## Charging System Modes

### Battery Sulfation Mode

The BCM will enter this mode when the interpreted Generator output voltage is less than 13.2 V for 45 minutes. When this condition exists the BCM will enter Charge Mode for 2–3 minutes. The BCM will then determine which mode to enter depending on voltage requirements.

### Charge Mode

The BCM will enter Charge Mode when ever one of the following conditions are met:

- Windshield wipers are ON for more than 3 s.
- Climate Control Voltage Boost Mode Request is true, as sensed by the HVAC control module via serial data. High speed cooling fan, rear defogger, and HVAC high speed blower operation can cause the BCM to enter the Charge Mode.
- The estimated battery temperature is less than 0° C (32°F).
- Battery State of Charge is less than 80%.
- Vehicle speed is greater than 145 km/h (90 mph)
- A current sensor malfunction exists.
- System voltage is determined to be below 12.56 V

When any one of these conditions is met, the system will set targeted generator output voltage to a charging voltage between 13.9–15.5 V, depending on the battery state of charge and estimated battery temperature.

### Fuel Economy Mode

The BCM will enter Fuel Economy Mode when the estimated battery temperature is at least 0°C (32°F) but less than or equal to 80°C (176°F), the calculated battery current is less than 15 A and greater than −8 A, and the battery state-of-charge is greater than or equal to 80%. Its targeted generator output voltage is the open circuit voltage of the battery and can be between 12.5–13.1 V. When fuel economy mode is active, the generator is not charging, only maintaining open circuit battery voltage. The BCM will exit this mode and enter Charge Mode when any of the conditions described above are present.

### Headlamp Mode

The BCM will enter Headlamp Mode when ever the head lamps are ON (high or low beams). Voltage will be regulated between 13.9–14.5 V.

### Start Up Mode

When the engine is started the BCM sets a targeted generator output voltage of 14.5 V for 30 s.

### Tow/Haul Mode (if applicable)

Pressing the Tow/Haul Mode button located on the center stack, the vehicle system voltage is raised and the remote (non-vehicle) battery will be charged. Having the headlamps on will raise the system voltage and if the Tow/Haul button is applied it will not serve any purpose. The voltage is regulated between 13.9-14.5 V.

## Instrument Cluster Operation

### Charge Indicator Operation

The instrument cluster illuminates the charge indicator and displays a warning message in the driver information center if equipped, when the one or more of the following occurs:

- The ECM detects that the generator output is less than 11 V or greater than 16 V. The instrument cluster receives a serial data message from the ECM requesting illumination.
- The instrument cluster determines that the system voltage is less than 11 V or greater than 16 V for more than 30 s. The instrument cluster receives a serial data message from the BCM indicating there is a system voltage range concern.
- The instrument cluster performs the displays test at the start of each ignition cycle. The indicator illuminates for approximately 3 s.

### Driver Information Center Message: BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM

The BCM and the ECM will send a serial data message to the driver information center for the BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM message to be displayed. It is displayed when a charging system DTC is a current DTC. The message is turned off when the conditions for clearing the DTC have been met.

### Voltmeter Gauge and/or System Voltage Display (if equipped)

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage display in the driver information center to fluctuate or change. This does not indicate a

malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

# Electrical Power Management Description and Operation

## Electrical Power Management

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is activated in incremental steps. For example, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

**Idle Boost and Load Shed With Current Sensor**

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Idle Boost 1 Start | Less Than −15°C (5°F) | Less Than 13 V | — | First level Idle boost requested |
| Idle Boost 1 Start | — | — | Battery has a net loss greater than 0.6 Ah | First level Idle boost requested |
| Idle Boost 1 Start | — | Less Than 11 V | — | First level Idle boost requested |
| Idle Boost 1 End | Greater Than −10°C (14°F) | Greater Than 12 V | Battery has a net loss less than 0.2 Ah | First level Idle boost request cancelled |
| Idle Boost 2 Start | — | — | Battery has a net loss greater than 1.6 Ah | Second level Idle boost requested |
| Idle Boost 2 Start | — | Less Than 11 V | — | Second level Idle boost requested |
| Idle Boost 2 End | — | Greater Than 12 V | Battery has a net loss less than 0.8 Ah | Second level Idle boost request cancelled |
| Load Shed 1 Start | — | — | Battery has a net loss of 4 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 End | — | Greater Than 12 V | Battery has a net loss of less than 2 Ah | Clear Load Shed 1 |
| Idle Boost 3 Start | — | — | Battery has a net loss of 10 Ah | Third level Idle boost requested |
| Idle Boost 3 Start | — | Less Than 11 V | — | Third level Idle boost requested |
| Idle Boost 3 End | — | Greater Than 12 V | Battery has a net loss of less than 6.0 Ah | Third level Idle boost request cancelled |

## Idle Boost and Load Shed With Current Sensor (cont'd)

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Load Shed 2 Start | — | — | Battery has a net loss greater than 12 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 End | — | Greater Than 12 V | Battery has a net loss of less than 8 Ah | Clear Load Shed 2 |
| Load Shed 3 Start | — | Less Than 11.9 V | Battery has a net loss greater than 20 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 End | — | Greater Than 12.6 V | Battery has a net loss of less than 13 Ah | Clear Load Shed 3 |

## Idle Boost and Load Shed Without Current Sensor (based on battery voltage)

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Action Taken |
|---|---|---|---|
| Idle Boost 1 Start | Less Than −15°C (5°F) | Less Than 13 V | First level Idle boost requested |
| Idle Boost 1 Start | — | Less Than 12.6 V | First level Idle boost requested |
| Idle Boost 1 End | Greater Than −15°C (5°F) | — | First level Idle boost request cancelled |
| Idle Boost 1 End | — | Greater Than 13 V | First level Idle boost request cancelled |
| Idle Boost 2 Start | — | Less Than 12.4 V | Second level Idle boost requested |
| Idle Boost 2 End | — | Greater Than 12.5 V | Second level Idle boost request cancelled |
| Load Shed 1 Start | — | Less Than 12.3 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 End | — | Greater Than 12.4 V | Clear Load Shed 1 |
| Idle Boost 3 Start | — | Less Than 10 V | Third level Idle boost requested |

**Idle Boost and Load Shed Without Current Sensor (based on battery voltage) (cont'd)**

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Action Taken |
|---|---|---|---|
| Idle Boost 3 End | — | Greater Than 12.3 V | Third level Idle boost request cancelled |
| Load Shed 2 Start | — | Less Than 12.1 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 End | — | Greater Than 12.2 V | Clear Load Shed 2 |
| Load Shed 3 Start | — | Less Than 11.9 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 End | — | Greater Than 12.0 V | Clear Load Shed 3 |

# Starting System Description and Operation

## Starter Motor Operation (Without KL9)

The starter motors are non-repairable. They have pole pieces that are arranged around the armature. Both solenoid windings are energized. The pull-in winding circuit is completed to the ground through the starter motor. The windings work together magnetically to pull and hold in the plunger. The plunger moves the shift lever. This action causes the starter drive assembly to rotate on the armature shaft spline as it engages with the flywheel ring gear on the engine. Moving at the same time, the plunger also closes the solenoid switch contacts in the starter solenoid. Full battery voltage is applied directly to the starter motor and it cranks the engine.

As soon as the solenoid switch contacts close, current stops flowing thorough the pull-in winding because battery voltage is applied to both ends of the windings. The hold-in winding remains energized. Its magnetic field is strong enough to hold the plunger, shift lever, starter drive assembly, and solenoid switch contacts in place to continue cranking the engine. When the engine starts, pinion overrun protects the armature from excessive speed until the switch is opened.

When the crank signal is removed, the starter relay opens and battery voltage is removed from the starter solenoid S terminal. Current flows from the motor contacts through both windings to the ground at the end of the hold-in winding. However, the direction of the current flow through the pull-in winding is now opposite the direction of the current flow when the winding was first energized.

The magnetic fields of the pull-in and hold-in windings now oppose one another. This action of the windings, along with the help of the return spring, causes the starter drive assembly to disengage and the solenoid switch contacts to open simultaneously. As soon as the contacts open, the starter circuit is turned off.

## Enhanced Starter Motor Operation (KL9)

The Engine Stop/Start system in GM vehicles automatically turns off the engine when the vehicle comes to a stop under certain driving conditions, and can quickly restart the engine in about 0.3 seconds when commanded to do so.

In order to smoothly restart the engine as quickly as possible while managing the greater number of engine starts, the Stop/Start system uses an enhanced starter motor that operates differently from a conventional starter motor. It has a high performance electric motor and a stronger pinion engagement mechanism than a conventional starter. It also has independent control of the pinion and motor.

The enhanced starter motor continues using the typical pinion engagement mechanism with a starter solenoid that drives the pinion gear to engage or disengage the flywheel of the engine. When engaged, the starter motor can rotate the engine flywheel and, in turn, the crankshaft.

On the enhanced starter of a Stop/Start system the operation is done in two separate functions inside the solenoid, Starter Motor and Pinion Actuator. Each function controlled individually by the ECM. There are two separate relays to control the two separate parts of the enhanced solenoid:

- KR27 Starter Motor Relay
- KR27C Starter Pinion Actuator Relay

The two individually-controlled relays allow for smooth engagement of the pinion gear into the flywheel with minimum noise and wear.

When the vehicle is coming to a stop, just before the engine stops rotating (at approximately 50 RPM) during stop/start operation, the ECM energizes the Starter Pinion Solenoid Actuator Relay to easily push the pinion gear into the flywheel gear without gear clash. (Fig. 8) When the engine stops rotating during Stop/Start operation (Auto Stop mode), the starter pinion gear is fully engaged, ready for the starter motor to become energized to quickly start the engine again.

A secondary need for the starter pinion to be driven into the flywheel gear before the engine stops rotating is to address quickly changing demands on the engine. For example, when a driver is slowing nearly to a stop — and the Stop/Start system is preparing for Auto Stop mode — but suddenly decides to release the brake and accelerate

In this situation, the engine has already stopped rotating, or nearly so. A conventional starter cannot restart the engine until the engine has completely stopped. However, with the enhanced starter, the starter pinion gear is fully engaged and ready to begin rotating the engine even before it fully stops turning. Otherwise, the engine would actually have to stop rotating before the pinion can engage smoothly to begin a restart.

To prevent a lag in engine operation, the ECM uses predictive speed matching of the flywheel gear speed and the pinion gear speed to engage the pinion gear into the flywheel gear without gear clash before the engine fully stops. By predicting how long it takes the starter motor to spin up using an algorithm, the pinion gear speed can be matched to the flywheel gear speed. The result is an almost instant restart that is possible at extremely low engine speeds.

## Circuit Description

### Keyless Start

When the Ignition mode switch is placed in the crank position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the crank position. The BCM then sends a serial data message to the engine control module (ECM) that crank has been requested. The ECM then verifies that the brake pedal is applied and for manual transmission the clutch is fully depressed or for automatic transmission is in Park/Neutral. If it is, the ECM then supplies 12 V to the control circuit of the starter relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

### Key Start

When the ignition switch is placed in the Start position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the Start position. The BCM then sends a message to the engine control module (ECM) notifying it that CRANK has been requested. The ECM verifies that the transmission is in Park or Neutral. If it is, the ECM then supplies 12 V to the control circuit of the crank relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

## Stop/Start System Description and Operation

The Stop/Start System is used to improve fuel efficiency in stop/start driving. The vehicle automatically shuts down the engine in appropriate conditions at a traffic light, for example, resulting in zero tail pipe emissions and saving fuel which otherwise is used idling the engine when stationary. The engine instantly restarts when the driver is ready to move away.

As soon as the driver prepares to move away (by releasing the brake pedal and/or depressing the accelerator pedal), the engine will start; it only takes the system around 0.3 s to start the engine.

To support the increased number of engine starts, the starter motor is upgraded with a high performance electric motor and a stronger pinion engagement mechanism with reduced noise levels.

Along with the upgraded starter motor, advanced battery technology is required to ensure the vehicles battery can handle the frequent charge and discharge cycles common with stop/start operation. There is battery sensor module connected to the battery which continually monitors the battery charge and healthy state. The Engine Control Module (ECM) uses this information from the battery sensor module to determine if the battery charge and health is sufficient for an Stop/Start condition.

The Stop/Start system can reduce fuel consumption and carbon dioxide (CO2) emissions by up to 5% in mixed driving conditions. In an urban environment and in heavy traffic with frequent stops the savings may increase to as much as 10%.

There are also sophisticated controls in place to help ensure the Stop/Start System does not compromise the needs of either the driver or vehicle. For the engine to shutdown, the vehicle must be below 5 km/h (3 MPH), the selector lever in position D, and brake pedal depressed. To restart, the driver simply releases the brake pedal and the enhanced starter motor engages the engine. When the engine has been shut down by the Stop/Start System, a control indicator will be illuminated in the Driver Information Center (DIC). When the engine is restarted, the control indicator in the DIC extinguishes.

To ensure neither the needs of the driver or vehicle are compromised the engine will not shut down in the following circumstances:

- Ambient and coolant temperature correlation does not match specified values.
- Ambient temperature is less than −10°C (14°F)
- Battery temperature is less than 0°C (32°F) or greater than 55°C (131°F)
- Driver seat belt is not fastened and the drivers door is not fully closed (not applicable to vehicles in North America)
- HVAC system demand is high
- HVAC defrost has been selected
- Battery charge is low

Likewise the engine will automatically restart if:

- Driver door opened and driver seat belt unbuckled (not applicable to vehicles in North America)
- Engine hood opened
- Battery charge is low
- HVAC demand increases
- Vehicle speed increases
- Brake booster vacuum has been reduced
- Engine coolant temperature is greater than 125° C (257°F)
- Economy mode turned OFF by driver
- Autostop time exceeded 2 min

When the Stop/Start System has shut down the engine, and the ambient temperature is below 15°C (59°F), the ECM will activate the Stop/Start auxiliary relay which controls the electric engine coolant pump motor to continually circulate the engine coolant through the engine while the engine is off. This is to ensure the engine and passenger compartment temperature is maintained while off. Once the Stop/Start System has restarted the engine, the ECM will turn off the electric coolant pump motor, thus allowing the engines internal coolant pump to circulate the engine coolant. The Stop/Start System is automatically activated each time the ignition switch is turned on.

Through the climate control system, the vehicle can be cycled between off, comfort, and eco air conditioning modes (if equipped). In comfort mode, the priority for Stop/Start operation is on customer comfort. Depending on ambient temp, humidity, cabin temperature and cabin temperature setpoint, the least amount of autostops occur in this mode. In eco mode, the priority is on fuel economy. There are more frequent autostops with some sacrificing of cabin temperature control. With the HVAC turned off, the maximum autostops occur since there will be no A/C compressor requests.

## Autostop Criteria

The ECM will send an Autostop state message to the body control module (BCM) and shut down the engine when all of the following criteria is met. The BCM will transmit the Autostop state message to the instrument cluster which will display the Autostop indicator in the tachometer display.

- Initial minimum vehicle speed during drive cycle must be 19 km/h (12 MPH) or greater. Subsequent autostop minimum speed may vary from 2-10 km/h (1-6 MPH), depending on vehicle
- Ambient and engine coolant temperature correlation meets specified values.
- Ambient and transmission fluid temperature correlation meets specified values.
- Hood switch status is closed
- Driver door status is closed
- Driver seat belt status is buckled
- Brake booster vacuum is greater than 45 kPa (7 PSI)
- Transmission gear selector is in the Drive position
- Vehicle speed is less than 5 km/h (3 MPH)
- Engine speed is below 1,500 RPM
- Engine coolant temperature is less than 120° C (248°F)
- Ambient temperature is greater than −10°C (14°F)
- No A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage greater than 12 V
- Battery state of charge greater than 75% (changes with state of health)

**Autostop Enable Ambient and Engine Coolant Temperature Table**

| Ambient Temperature | inimum Coolant Temperature | Autostop Enable |
|---|---|---|
| −10°C (14°F) | 60°C (140°F) | Yes |
| 0°C (32°F) | 50°C (122°F) | Yes |
| 6°C (43°F) | 40°C (104°F) | Yes |
| 12°C (54°F) | 30°C (86°F) | Yes |
| 20°C (68°F) | 18°C (64°F) | Yes |
| 30°C (86°F) | 18°C (64°F) | Yes |

## Autostart Criteria

The ECM will send an Autostart state message to the BCM. If all of the following conditions are true the ECM and BCM will restart the vehicle.

Driver Enabled Conditions that will engage Autostart:

- Driver removes pressure from the brake or depresses the accelerator pedal while the vehicle is in the forward Drive gear

System Enabled Conditions that will engage Autostart

**Note:** If one or more of the following conditions occur, the system will force the engine to restart.

- Brake booster vacuum is less than 40 kPa (6 PSI)
- A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage less than 11 V,
- Battery state of charge is less than 73% (changes with state of health)
- Driver door status changes to open and driver seat belt status changes to unbuckled (not applicable to vehicles in North America)
- Hood switch status changes to open
- Autostop time exceeded 2 min

If the crank time exceeds 2 s, a manual ignition switch restart will be necessary.

## System Components

### Engine Control Module (ECM)

The ECM monitors the inputs from the Engine Coolant Temperature (ECT) sensor, Vehicle Speed Sensor (VSS), Battery Sensor Module, hood ajar switch, brake booster vacuum sensor, and engine speed to determine Autostart and Autostop conditions. The ECM also controls the auxiliary coolant pump motor (if equipped).

### Transmission Control Module (TCM)

The TCM monitors the inputs from the transmission neutral safety switch to determine the driver selected gear. This information is transmitted to the ECM via serial data to support the Auto Stop Start algorithm.

### Engine Coolant Temperature sensor (ECT)

The ECT sensor is used to determine engine operating temperature.

### Intake Air Temperature Sensor (IAT)

The ECM uses this sensor to monitor ambient air temperature. If too cold, the Autostop will not occur.

### Inside air temperature sensor

The HVAC control module monitors the passenger compartment temperature sensor to determine the temperature inside the passenger compartment. The HVAC control module sends this temperature reading to the ECM on the data communication circuit. The ECM uses this temperature values to determine if a restart is requires based on the temperature inside the passenger compartment.

### Vehicle speed sensor

The vehicle speed sensor is used to determine vehicle speed. If vehicle speed is detected above a calculated value during an Autostop condition, the ECM will start the engine.

### Hood Ajar Switch

If the hood switch is in the open position, the vehicle will not Autostop. If the hood is opened during Autostop, the vehicle will automatically restart.

### Brake Booster Vacuum Sensor

The ECM monitors vacuum in order to ensure proper power assist for the brake pedal. If the ECM determines vacuum is too low, it will restart the engine.

### Brake Pedal Position Sensor (BPPS) & Accelerator Pedal Position Sensor (APP)

The ECM monitors both the brake pedal position sensor and the accelerator pedal position sensor to determine the level of activation for each. While the accelerator pedal is in it's at rest position with no pressure applied by the operator, a partially depressed Brake pedal will cause the ECM to prepare the engine for an Autostop event. When the vehicle is in an auto stop event and the status of the brake pedal position sensor changes from meeting the autostop criteria to not meeting this criteria the engine will be restarted provided all of the other conditions to allow an autostart are met. If the Accelerator pedal is moved from its at rest position the vehicle will also enter an auto start event if all other conditions to support an autostart event, except for the brake pedal position, are met.

### Transmission Gear Shift Position Switch

The transmission gear shift position switch is used to determine if the transmission is in the proper state to allow an auto stop/start event. The ECM will not allow Autostop until the brake is engaged, the transmission is in the forward gear position and then the vehicle slows to below the minimum speed required to allow and autostop while meeting all of the other minimum criteria to support an autostop event.

### Coolant Pump Motor

The ECM will turn on the auxiliary coolant pump motor during Autostop to maintain engine operating temperature and HVAC temperature. Once the engine is running, the ECM will turn off the coolant pump motor.

### Body Control Module (BCM)

The Body Control Module (BCM) monitors the Autostop Disable switch in order to enable or disable the system. It sends the appropriate messages to the ECM Via serial data to enable or disable the system.

### Battery Sensor Module

The Battery Sensor Module monitors the battery current load, state of health, and state of charge, the information is sent to the BCM Via LIN then to the ECM Via Serial Data. If the module detects high current load, the battery is in a poor state of health or a low charge condition, the ECM will not allow Autostop to occur.

### Autostop Disable Switch

The disable switch is an input to the BCM, it allows the customer to disable or re-enable the Autostop system. After the vehicle is turned off the Autostop system will turn back on the next time the vehicle is started.

### Power Supply Transformer

The DC to DC converter monitors battery voltage and will maintain operating voltage to the radio, instrument cluster and instrument panel displays. The DC to DC converter will provide a boosted voltage to sensitive loads during Autostart to ensure proper operation of the driver informational displays.

### Instrument Cluster

In order to differentiate between a normal engine shut down (engine speed 0 RPM) and when the engine has been shut down by the Stop/Start System, the tachometer needle will rest at the Autostop indicator icon (500 RPM point) indicating the engine has been shut down by the Stop/Start System. Once the engine is restarted, or the ECO button has disengaged Autostop, the tachometer will function normally.

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# Section 6

# HVAC

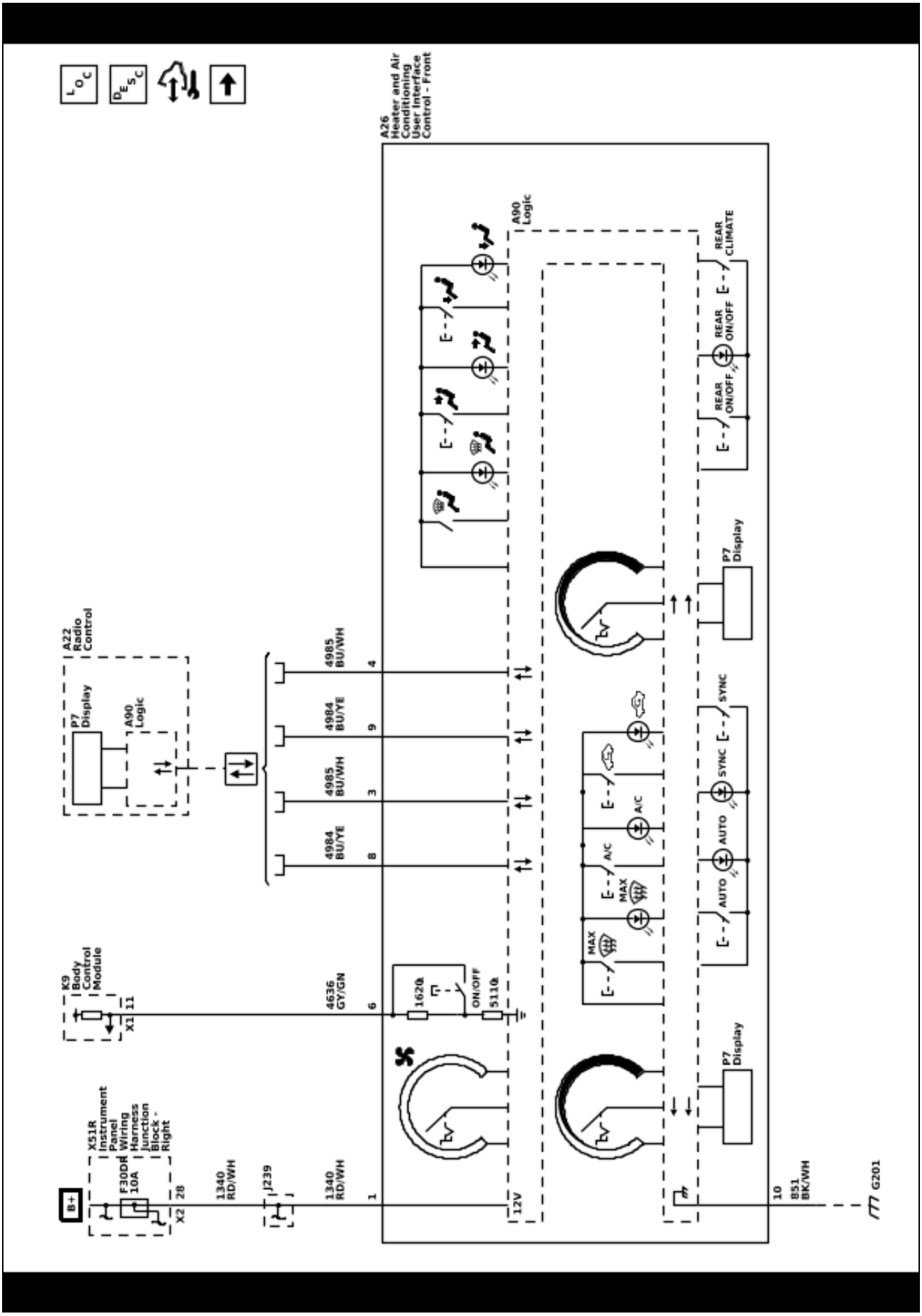
**HVAC - Automatic** ..... 6-3
**Schematic and Routing Diagrams** ..... 6-3
HVAC Schematics ..... 6-4
**Description and Operation** ..... 6-10
Automatic HVAC Description and Operation .... 6-10
**HVAC - Manual** ..... 6-14
**Schematic and Routing Diagrams** ..... 6-14
HVAC Schematics ..... 6-15
**Description and Operation** ..... 6-21
Manual HVAC Description and Operation ..... 6-21

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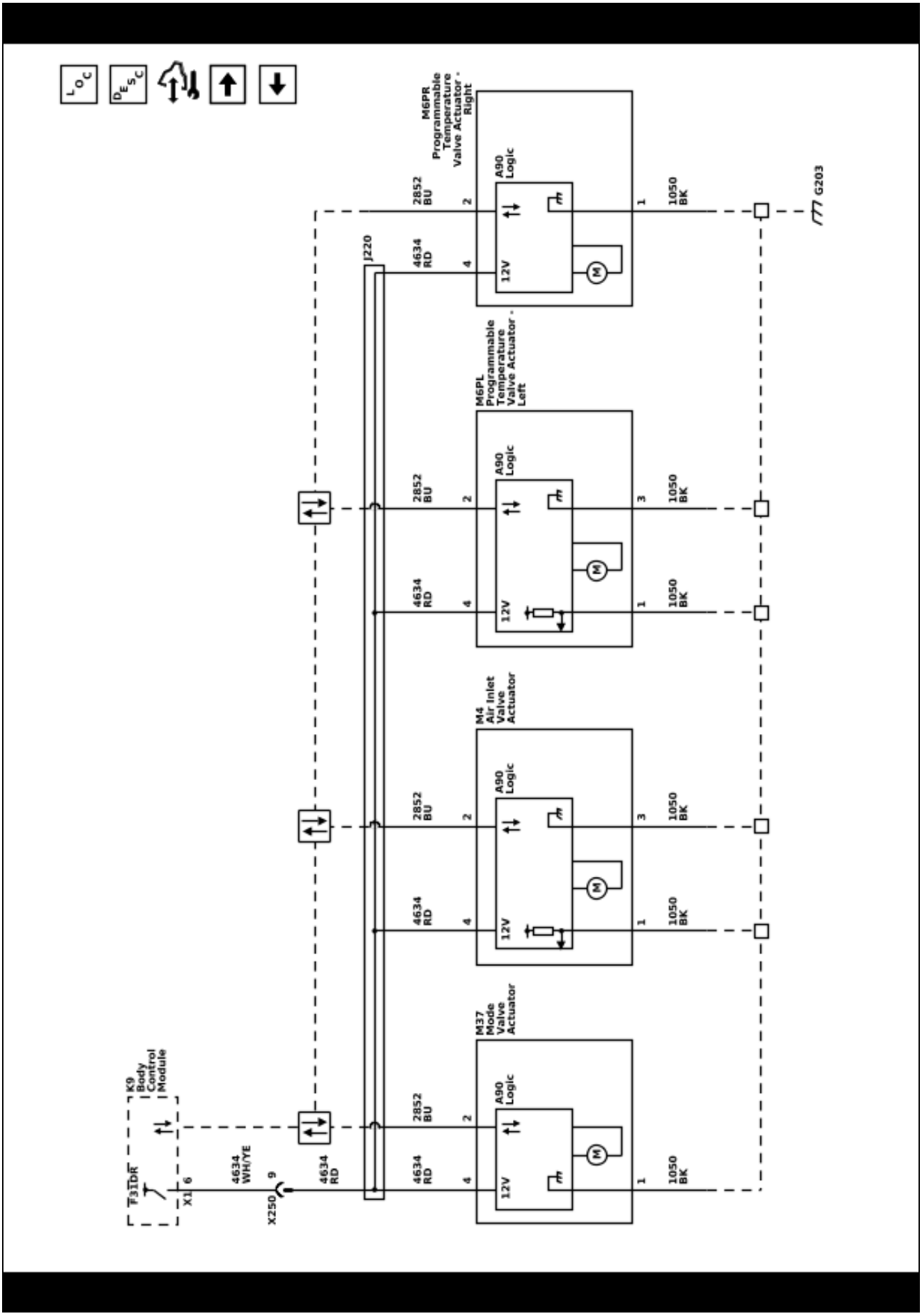
# HVAC - Automatic

## Schematic and Routing Diagrams

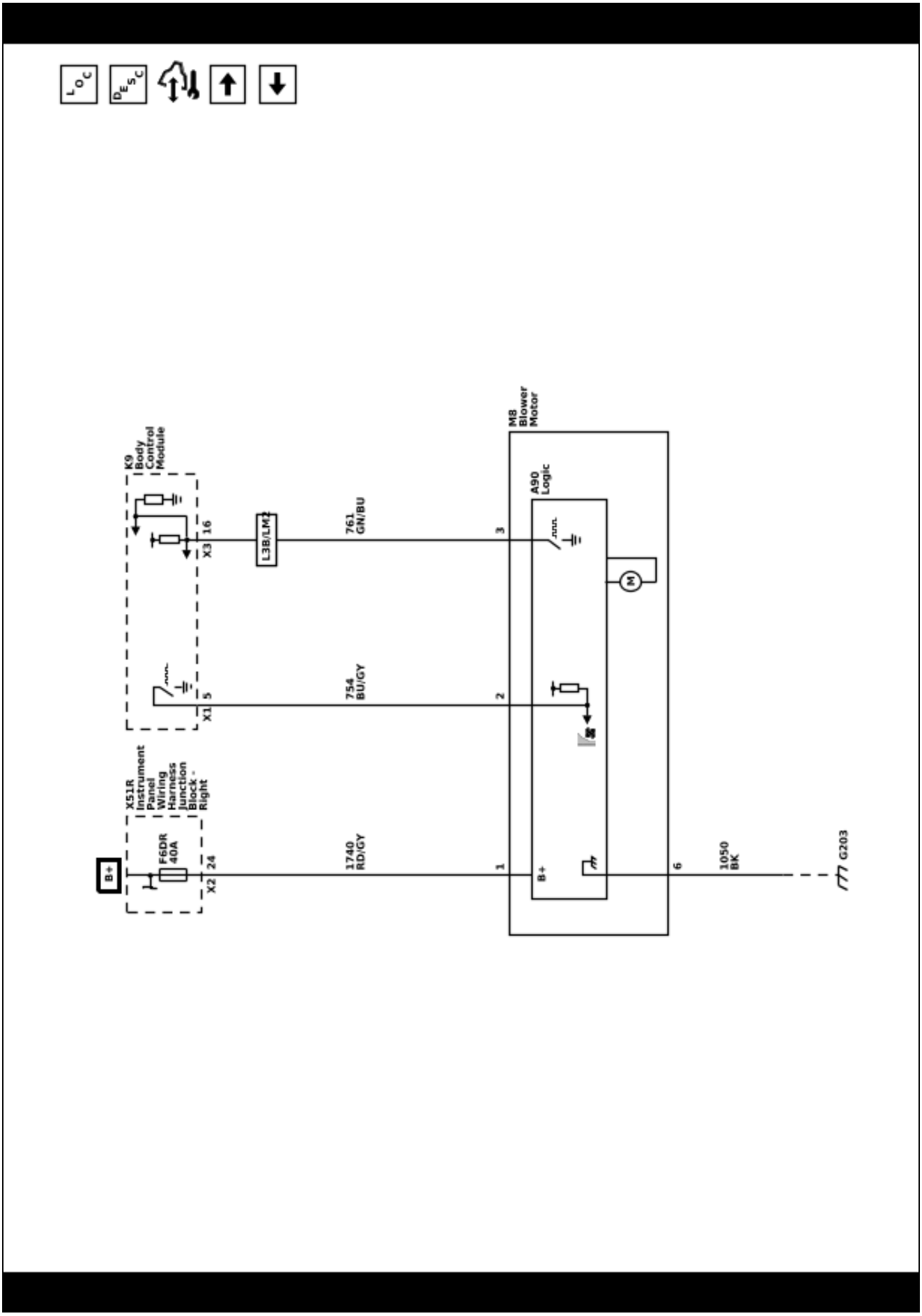
## HVAC Schematics (HVAC Controls)



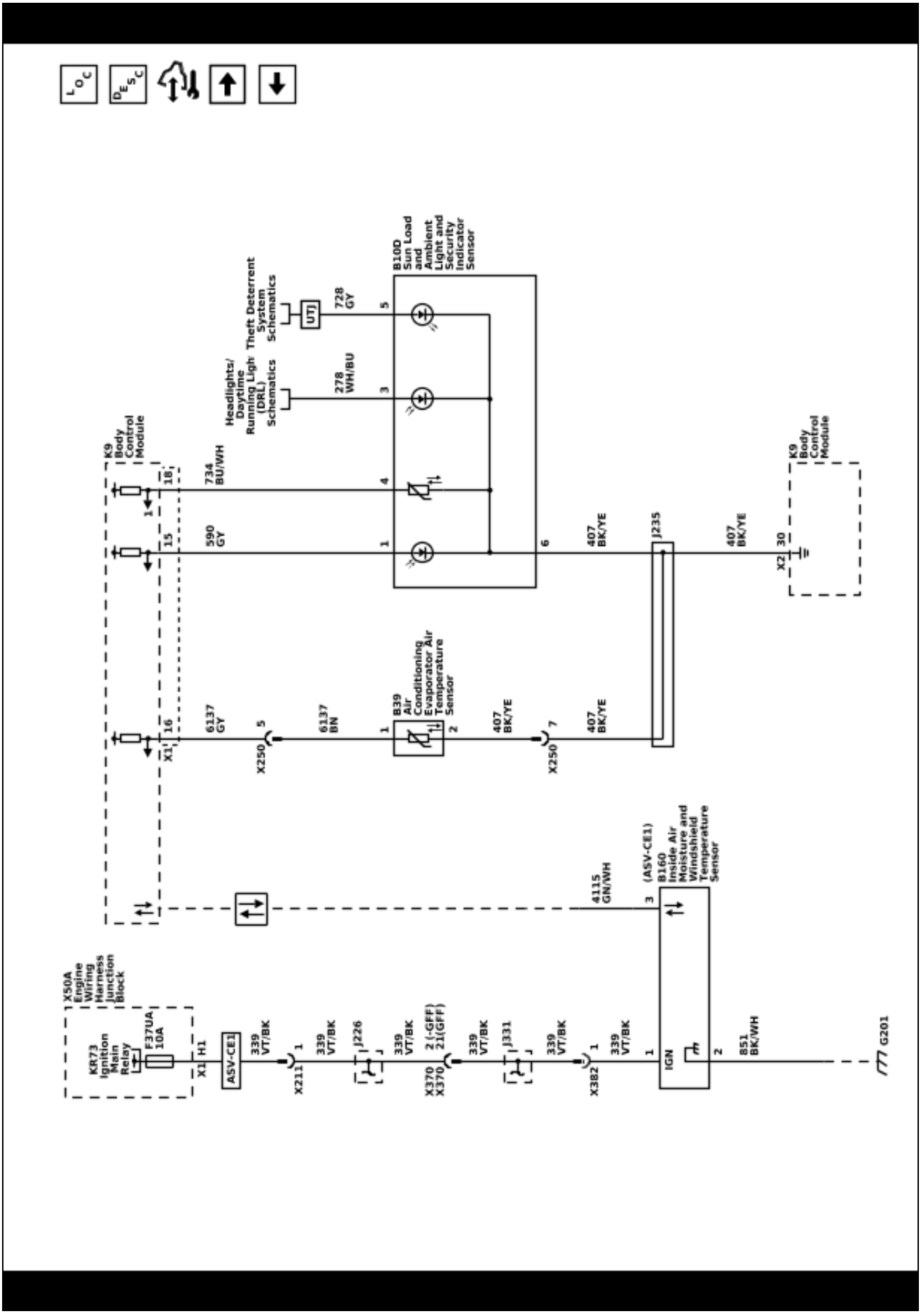
## HVAC Schematics (Actuators)



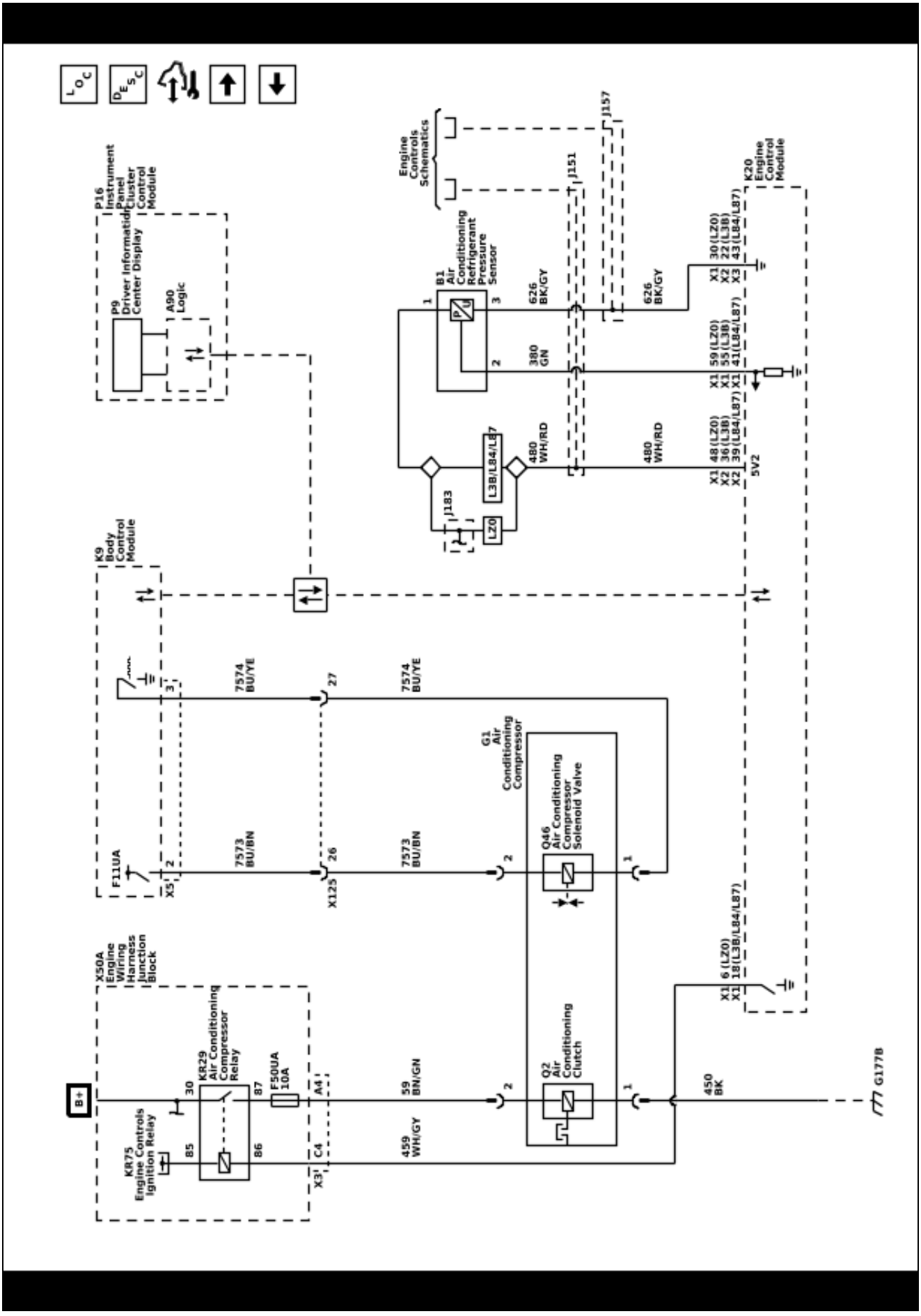
## HVAC Schematics (Blower Motor)



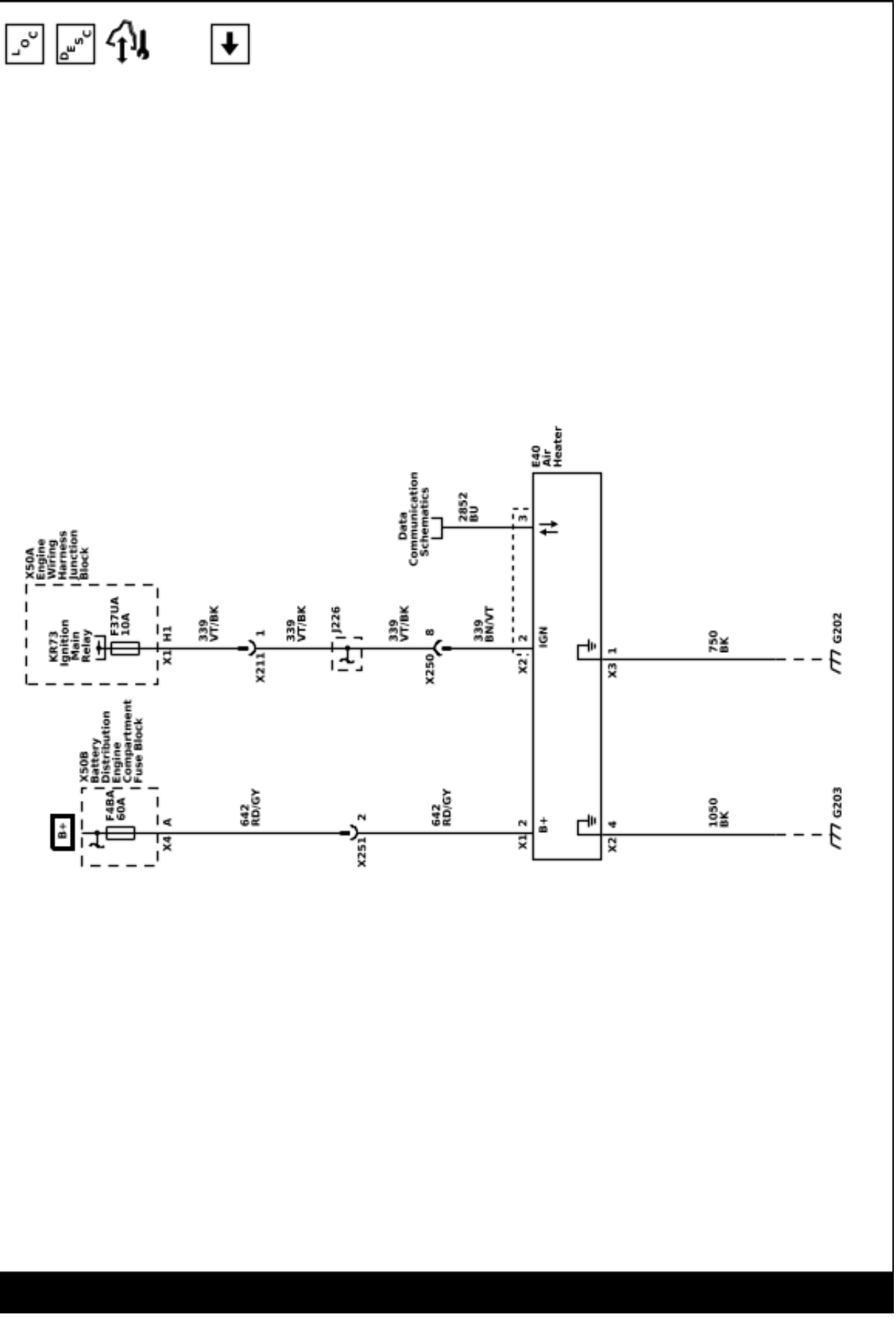
## HVAC Schematics (Windshield Sensors and A/C Evaporator Temperature Sensor)



## HVAC Schematics (A/C Compressor Controls)



## HVAC Schematics (Air Heater (C32))



# Description and Operation

## Automatic HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into the following:

- HVAC Control Components
- Air Speed and Blower Motor
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Automatic Operation
- Engine Coolant and A/C System Refrigerant

## HVAC Control Components

### K9 Body Control Module

The body control module (BCM) is a CAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The BCM provides a device ON-Signal for the HVAC controls. The BCM provides blower, air delivery mode and air temperature control.

### A26 Heater and Air Conditioning User Interface Control - Front

The HVAC control contains all switches which are required to control the functions of HVAC and serve as interface between the operator and the BCM. The selected values are passed to the BCM via serial data.

### Actuators

Doors in the HVAC case assembly are used to control air flow. The BCM operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, left and right temperature, and recirculation.

Each actuator used in the system is a LIN device controlled by the BCM. The BCM supplies a 12 V reference voltage to the actuators, and ground is provided by the wiring harness. When the BCM sends a request message to the actuator, the actuator then operates internal stepper motors to move the door to the required position.

### Air Speed and M8 Blower Motor

The selected blower motor speed is passed from the controls to the BCM via serial data.

The motor uses a fused B+, ground, control, and speed output signal circuits to operate. The blower motor speed is controlled by increasing or decreasing the voltage drop on the ground side of the blower motor speed control circuit. The BCM provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor internal circuitry translates the PWM signal and drives the motor accordingly.

The blower motor has a signal wire used to output a speed signal. The signal is monitored by the BCM. The BCM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. The HVAC Blower Speed is monitored so that the ECM can optimize engine coolant flow for fuel economy and emissions.

### Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF under certain conditions. This reduces the amount of microbial growth that can create undesirable odors. For additional information on afterblow, the default setting, and changing the setting, refer to Afterblow Configuration.

### Duct Air Temperature

Physical duct air temperature sensors are not used with the front system. The air temperature in the air distribution ducts is calculated by the BCM based on the engine coolant temperature, coolant flow, evaporator temperature, outside air temperature, solar load, blower motor speed, air inlet door position, and temperature door position information. The BCM uses the values to calculate actuator position.

### B39 Air Conditioning Evaporator Air Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature coefficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed near the evaporator core to measure the air temperature exiting the core.

Based on vehicle operating conditions and operator settings, the HVAC software algorithms will determine a target evaporator air temperature. The operation of the compressor solenoid will be adjusted as needed to quickly reach and maintain the targeted temperature.

### B1 Air Conditioning Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

### G1 Air Conditioning Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the BCM sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The BCM provides both battery voltage and a pulse width modulated ground to the Q46 Air Conditioning

Compressor Solenoid Valve. When the A/C switch is pressed, the BCM grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

**B160 Inside Air Moisture and Windshield Temperature Sensor**

The windshield temperature and inside moisture sensor includes the relative humidity sensor, windshield temperature sensor and humidity sensing element temperature sensor.

This sensor assembly provides information about:

- Relative humidity level at windshield (passenger compartment side)
- Temperature of the windshield (passenger compartment side)
- Temperature of the humidity sensor element

The relative humidity sensor measures the relative humidity of the passenger compartment side of the windshield. It also detects the temperature of the windshield surface on the passenger compartment side. Both values are used as control inputs for the BCM application to calculate the fog risk on windshield compartment side and ability to reduce fuel consumption by decreasing A/C compressor power to a minimum without causing any fog. The sensor will also enable partial recirculation mode in order to improve heat-up performance of the passenger compartment under cold ambient temperature conditions without the risk of mist build-up on the windshield. The humidity sensor element temperature sensor supplies the temperature of the humidity sensor element. It is only needed if the thermal contact between the humidity sensing element and the inside windshield surface is not sufficient.

The sensor is a LIN device, and the sensor values are transmitted to the BCM via serial data.

When equipped with CE1, the sensor is part of the B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor LIN windshield sensor array, and the windshield temperature and humidity values are transmitted to the BCM via serial data.

**B10D Sun Load Temperature and Ambient Light and Security Indicator Sensor**

The ambient light/sunload sensor includes the solar sensor and passenger compartment temperature sensor.

The solar sensor is connected to a low reference and 5 V supply through the BCM. As the sunload increases, the sensor signal voltage also increases and vice versa. The signal provided to the BCM varies between 1.2–4.85 V.

The passenger compartment temperature sensor is a negative temperature coefficient thermistor, connected to a low reference and 5 V supply through the BCM. As the air temperature increases, the sensor resistance decreases. The signal varies between 0–5 V.

Bright or high intensity light can cause the vehicles interior temperature to increase. The HVAC system uses the sensor values and compensates for the increased temperature to maintain the system settings.

**E40 Air Heater (C32)**

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to operating temperature. The air heater is a LIN device. The heater uses an ignition circuit, battery voltage circuit, ground circuit, and a serial data signal from the BCM to operate.

The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The system will activate the heater when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

## Air Delivery

The BCM controls the distribution of air by the use of recirculation and mode door actuators. The modes that may be selected are:

- Defrost: windshield outlet
- Panel: dashboard outlets
- Floor: front footwell outlets
- Defog: defrost + floor
- Bi-level: panel + floor
- Tri-level: panel + defrost + floor
- Hi-level: panel + defrost

The desired air distribution mode can be selected with the air distribution switches at the HVAC control. The HVAC control delivers the values to the BCM via serial data. The BCM sends a request to the mode door actuator to move the door to the required position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. When defrost airflow is active, the BCM will move the recirculation actuator to outside air, to aid in reducing window fogging. When defrost is selected the blower motor will be activated, regardless of the coolant temperature. A/C is available in all modes.

Refer to the owners manual for operation of the HVAC controls and mode selection.

**Recirculation Operation**

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the BCM via serial data. The BCM controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

In automatic mode the values of the sensors are used as inputs for the BCM to calculate the fog risk on the passenger compartment side of the windshield. The A/C compressor and the defrost mode may be activated to prevent or remove fog on the passenger compartment side of the windshield.

In automatic mode, a partial recirculation mode may be commanded to accelerate cabin heating or cooling and reduce energy usage. The recirculation indicator remains illuminated at all times, regardless of the actual operating mode determined by the system.

## Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following may affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting
- Dashboard outlet open/closed position

When the A/C switch or the AUTO switch is pressed, the HVAC control sends a signal to the BCM via serial data. The BCM evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the BCM. The A/C compressor is activated by the BCM. The BCM supplies battery voltage to the A/C compressor solenoid. When the A/C switch is pressed, the BCM provides a pulse width modulation (PWM) signal to the A/C compressor solenoid in order to command the performance of the A/C compressor. The performance of the A/C compressor is regulated using evaporator temperature and engine load.

The A/C indicator does not indicate the compressor is currently active. The A/C indicator shows that A/C has been requested and the system will activate the compressor as needed.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to direct the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

## Automatic Operation

In automatic operation, the BCM maintains the comfort level inside of the vehicle by controlling the A/C compressor solenoid, the blower motor, the air temperature actuators, mode actuator and recirculation actuator.

The automatic mode indicator shows that the system is in full automatic operation. If an individual setting is changed (excluding temperature), the automatic indicator will turn off, and that function will enter manual control. All other functions will remain under automatic control unless manually changed.

To put the HVAC system in automatic mode, the following is required:

1. The auto switch must be activated.
2. The air temperature switch must not be in either the full hot or full cold position.

Once the desired temperature is reached, the blower motor, mode, recirculation and temperature actuators automatically adjust to maintain the temperature selected. The BCM performs the following functions to maintain the desired air temperature:

- Monitors the following:
  - Ambient (outside) air temperature sensor
  - Passenger compartment temperature sensor
  - Calculated front duct air temperatures
  - Windshield temperature and inside moisture sensor
  - Evaporator temperature sensor
  - Ambient light/sunload sensor
- Regulate the blower motor speed
- Position the air temperature actuators
- Position the mode door actuators
- Position the recirculation actuator
- Control of the A/C compressor solenoid

When the temperature setting is set to full hot, the blower speed will increase gradually as the coolant warms to normal operating temperature. When normal engine operating temperature is reached the blower stays on high speed and the air temperature actuators stays in the full heat position.

When the temperature setting is set to full cold, the blower will immediately operate at high speed and the air temperature actuators move to full cold position. The mode actuator moves to the panel position and the recirculation actuator moves to the recirculation position.

Under cold ambient temperatures, the automatic HVAC system provides heat in the most efficient manner. The operator can select an extreme temperature setting but the system will not warm the vehicle any faster. Under

warm ambient temperatures, the automatic HVAC system also provides air conditioning in the most efficient manner. Selecting an extreme cool temperature will not cool the vehicle any faster.

In automatic mode the values of the windshield temperature and inside moisture sensor are used as control inputs for the BCM application to calculate the fog risk on the passenger compartment side of the windshield and ability to reduce fuel consumption by decreasing A/C compressor power to a minimum without causing any fog. The A/C compressor and the defrost mode are activated to prevent or remove fog on the passenger compartment side of the windshield. The sensor will also enable partial recirculation mode in order to improve heat-up performance of the passenger compartment under cold ambient temperature conditions without the risk of mist build-up on the windshield.

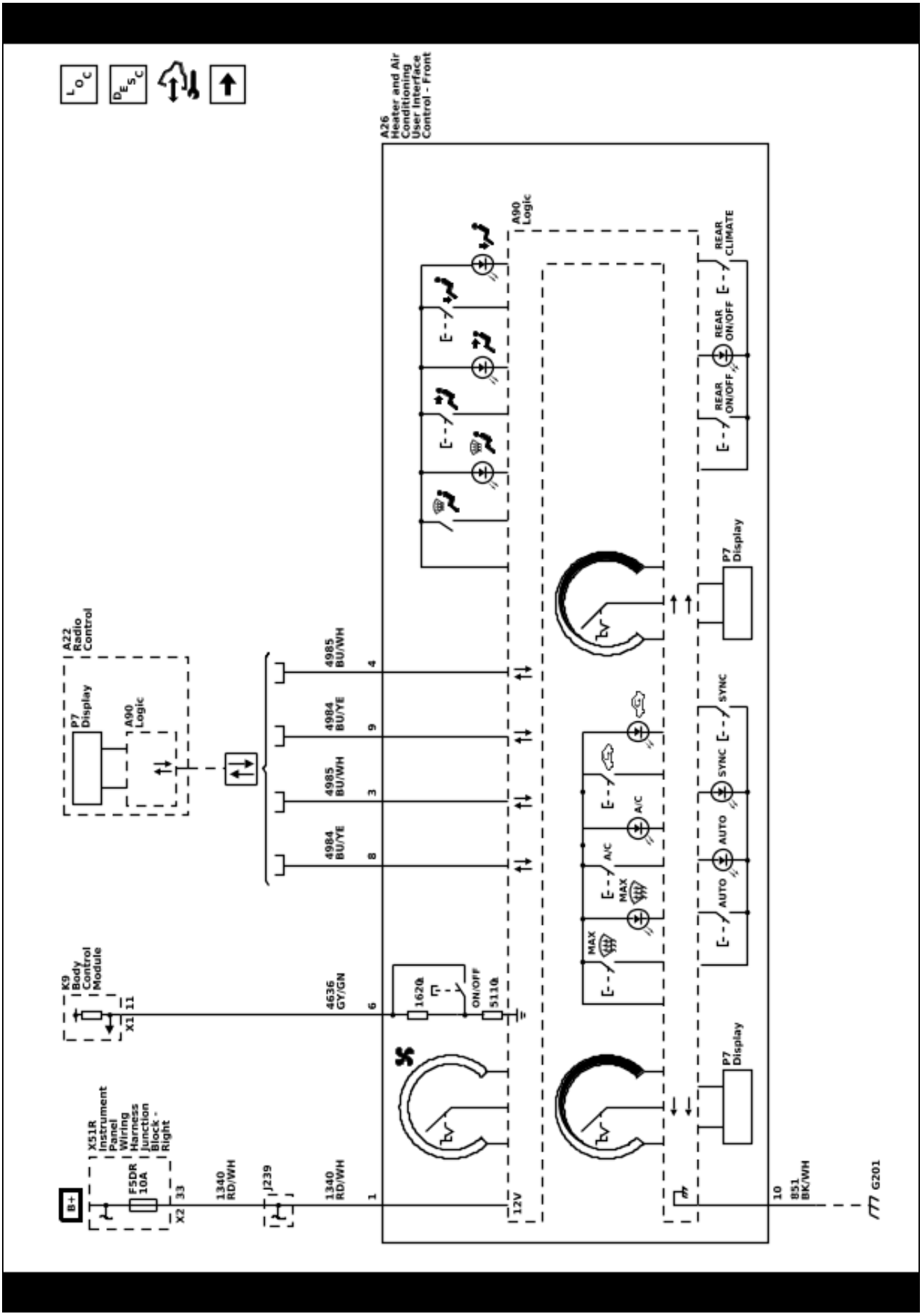
## Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to Heating and Air Conditioning System Description and Operation.

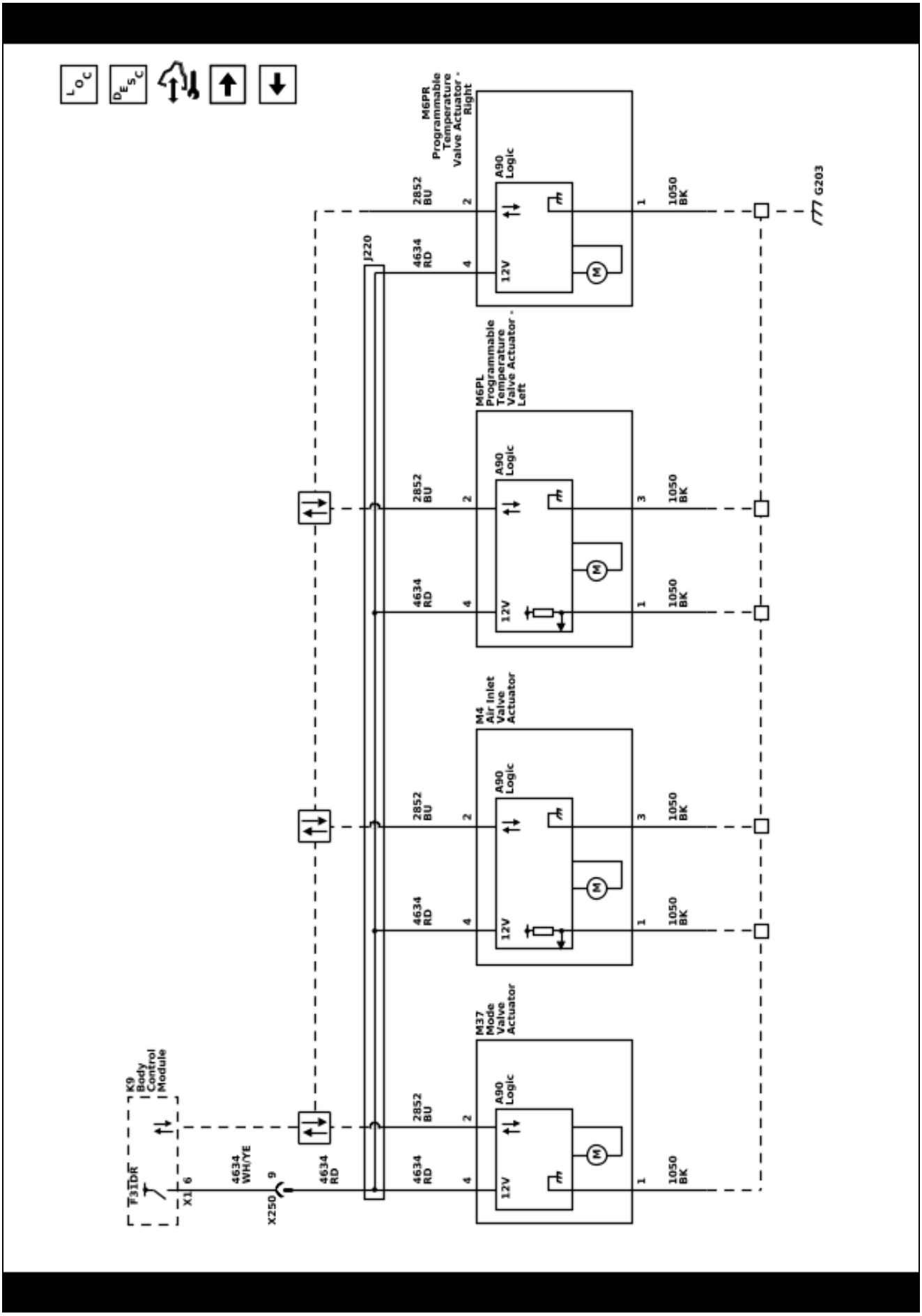
# HVAC - Manual

## Schematic and Routing Diagrams

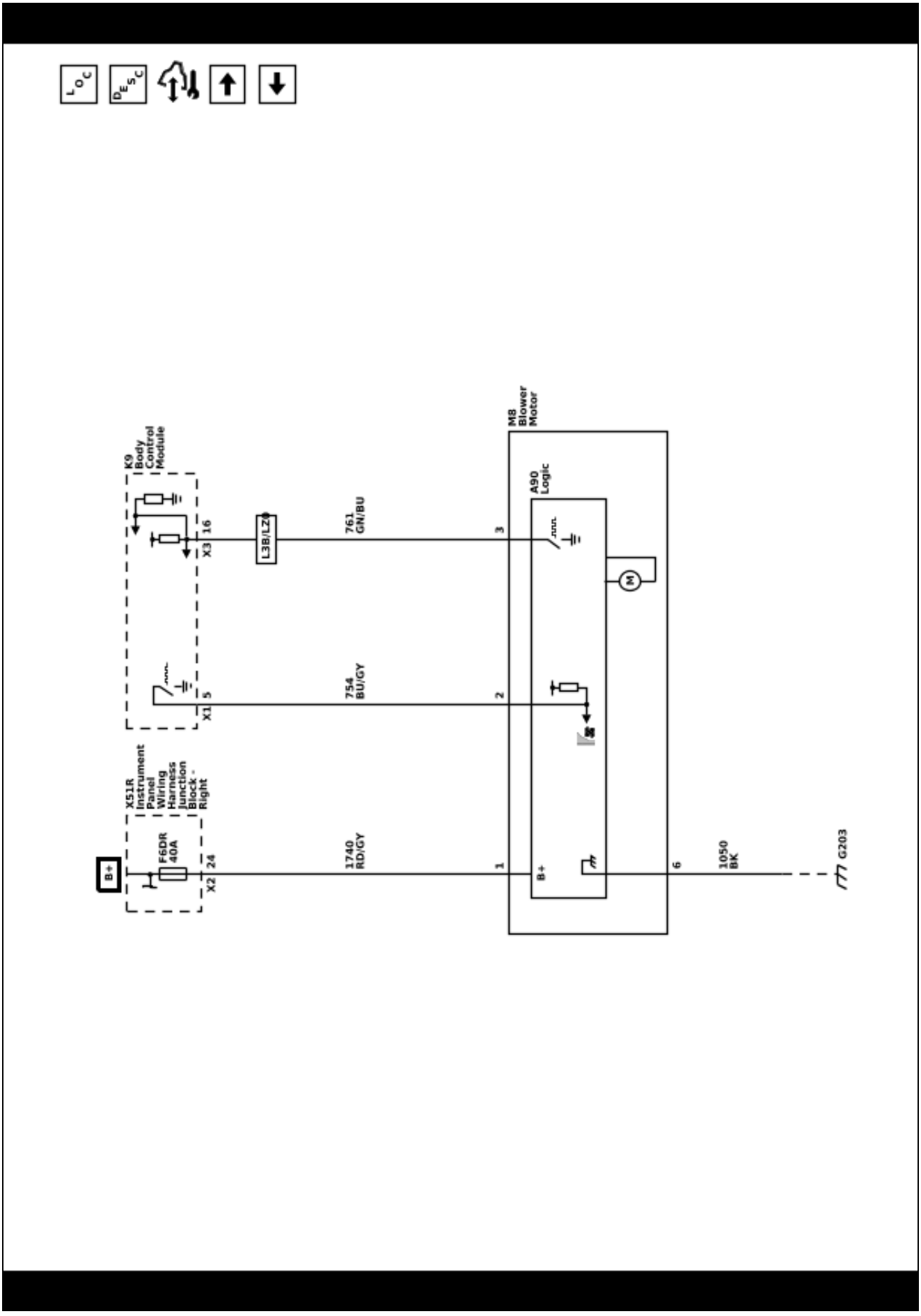
## HVAC Schematics (HVAC Controls)



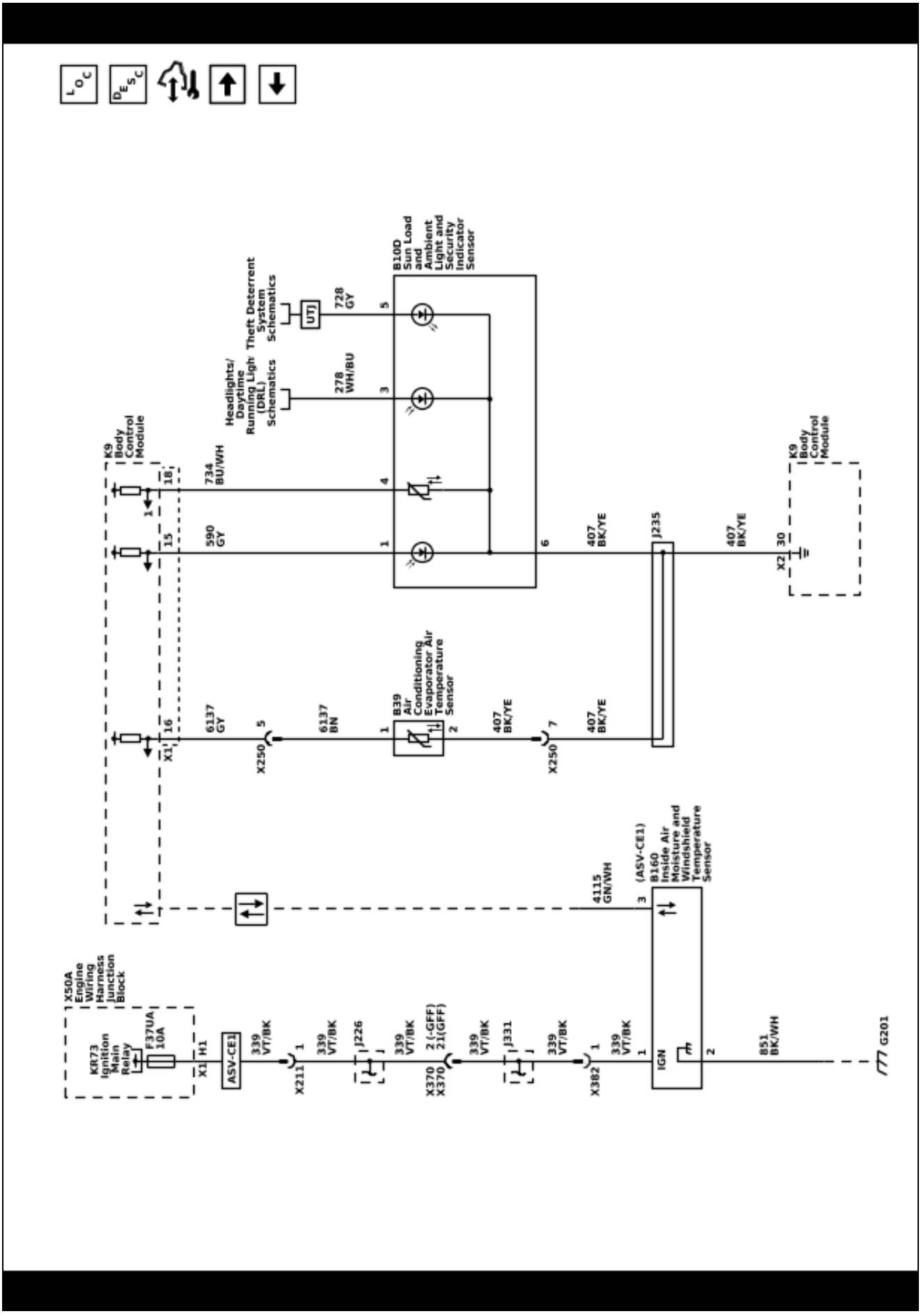
## HVAC Schematics (Actuators)



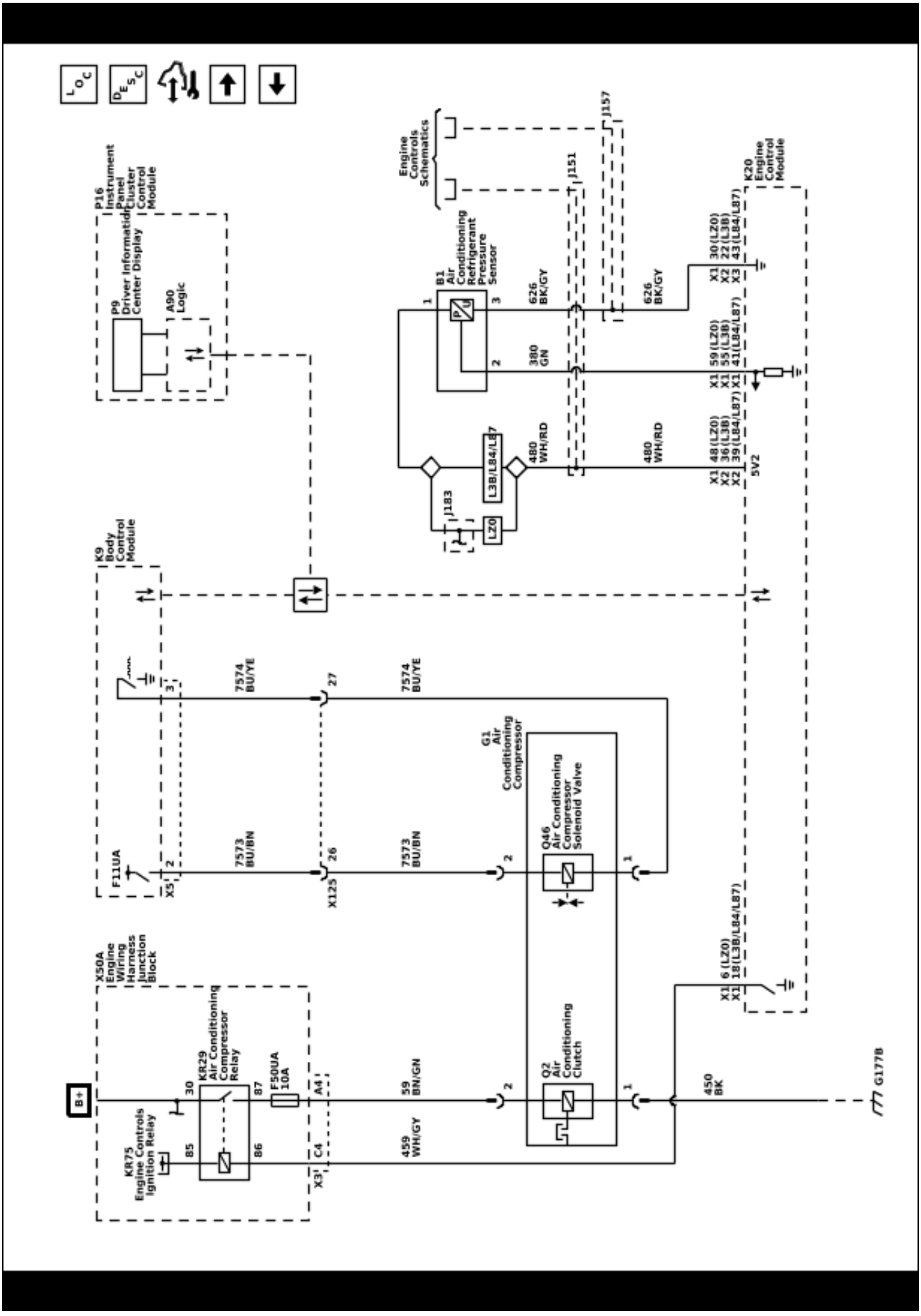
## HVAC Schematics (Blower Motor)



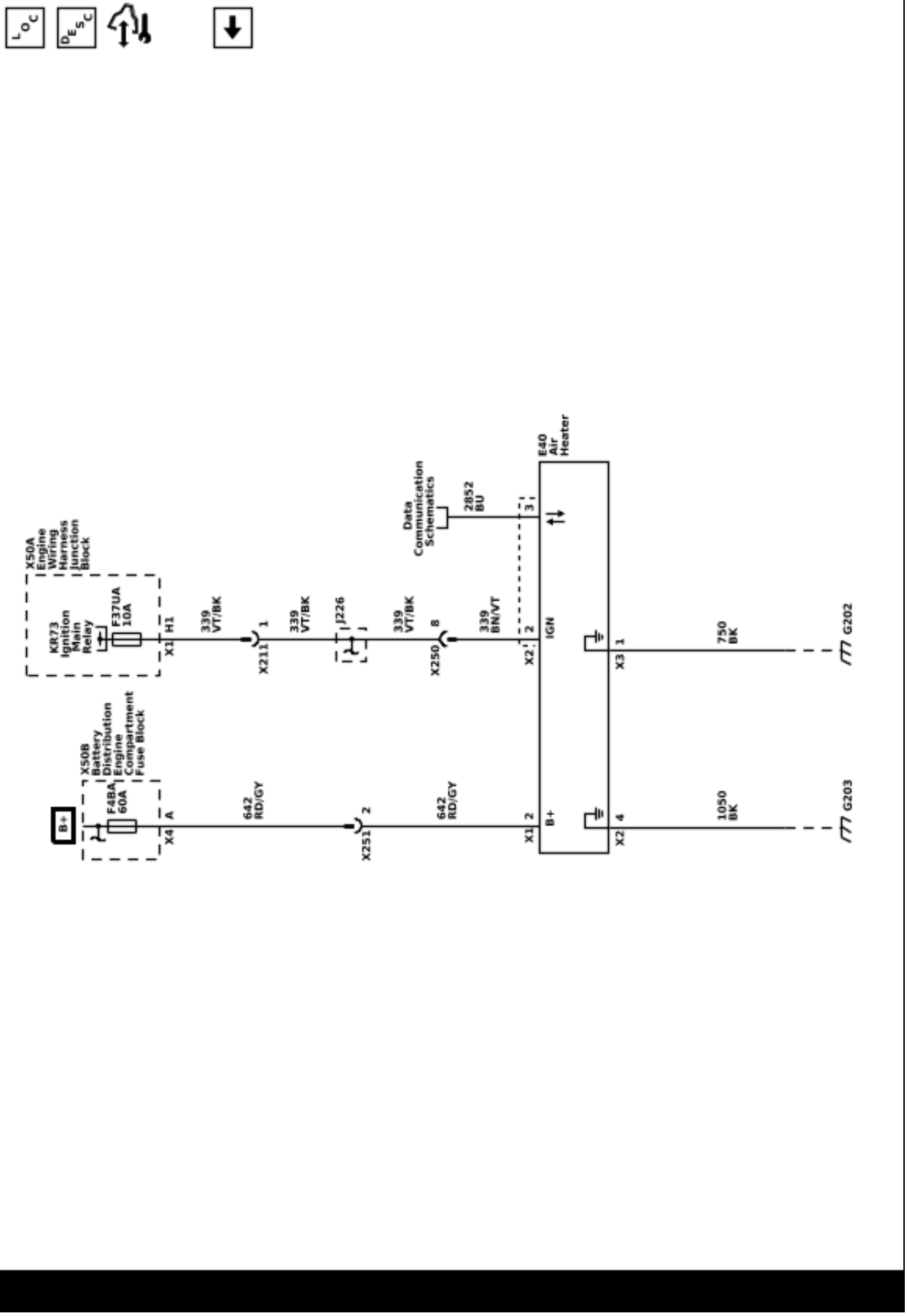
## HVAC Schematics (Windshield Sensors and A/C Evaporator Temperature Sensor)



## HVAC Schematics (A/C Compressor Controls)



## HVAC Schematics (Air Heater (C32))



# Description and Operation

## Manual HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into the following:

- HVAC Control Components
- Air Speed and Blower Motor
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Engine Coolant and A/C System Refrigerant

## HVAC Control Components

### K9 Body Control Module

The body control module (BCM) is a CAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The BCM provides a device ON-Signal for the HVAC controls. The BCM provides blower, air delivery mode and air temperature control.

### A26 Heater and Air Conditioning User Interface Control - Front

The HVAC control contains all switches which are required to control the functions of HVAC and serve as interface between the operator and the BCM. The selected values are passed to the BCM via serial data.

### Actuators

Doors in the HVAC case assembly are used to control air flow. The BCM operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, and recirculation.

Each actuator used in the system is a LIN device controlled by the BCM. The BCM supplies a 12 V reference voltage to the actuators, and ground is provided by the wiring harness. When the BCM sends a request message to the actuator, the actuator then operates internal stepper motors to move the door to the required position.

### Air Speed and M8 Blower Motor

The selected blower motor speed is passed from the controls to the BCM via serial data.

The motor uses a fused B+, ground, control, and speed output signal circuits to operate. The blower motor speed is controlled by increasing or decreasing the voltage drop on the ground side of the blower motor speed control circuit. The BCM provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor internal circuitry translates the PWM signal and drives the motor accordingly.

The blower motor has a signal wire used to output a speed signal. The signal is monitored by the BCM. The BCM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. The HVAC Blower Speed is monitored so that the ECM can optimize engine coolant flow for fuel economy and emissions.

### Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF under certain conditions. This reduces the amount of microbial growth that can create undesirable odors. For additional information on afterblow, the default setting, and changing the setting, refer to Afterblow Configuration.

### B39 Air Conditioning Evaporator Air Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature coefficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed near the evaporator core to measure the air temperature exiting the core.

Based on vehicle operating conditions and operator settings, the HVAC software algorithms will determine a target evaporator air temperature. The operation of the compressor solenoid will be adjusted as needed to quickly reach and maintain the targeted temperature.

### B1 Air Conditioning Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

### G1 Air Conditioning Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the BCM sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The BCM provides both battery voltage and a pulse width modulated ground to the Q46 Air Conditioning Compressor Solenoid Valve. When the A/C switch is pressed, the BCM grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

### E40 Air Heater (C32)

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to

operating temperature. The air heater is a LIN device. The heater uses an ignition circuit, battery voltage circuit, ground circuit, and a serial data signal from the BCM to operate.

The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The system will activate the heater when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

## Air Delivery

The BCM controls the distribution of air by the use of recirculation and mode door actuators. The modes that may be selected are:

- Defrost: windshield outlet
- Panel: dashboard outlets
- Floor: front footwell outlets
- Defog: defrost + floor
- Bi-level: panel + floor
- Tri-level: panel + defrost + floor
- Hi-level: panel + defrost

The desired air distribution mode can be selected with the air distribution switches at the HVAC control. The HVAC control delivers the values to the BCM via serial data. The BCM sends a request to the mode door actuator to move the door to the required position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. When defrost airflow is active, the BCM will move the recirculation actuator to outside air, to aid in reducing window fogging. When defrost is selected the blower motor will be activated, regardless of the coolant temperature. A/C is available in all modes.

Refer to the owners manual for operation of the HVAC controls and mode selection.

### Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the BCM via serial data. The BCM controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

## Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following may affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting
- Dashboard outlet open/closed position

When the A/C switch or the AUTO switch is pressed, the HVAC control sends a signal to the BCM via serial data. The BCM evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the BCM. The A/C compressor is activated by the BCM. The BCM supplies battery voltage to the A/C compressor solenoid. When the A/C switch is pressed, the BCM provides a pulse width modulation (PWM) signal to the A/C compressor solenoid in order to command the performance of the A/C compressor. The performance of the A/C compressor is regulated using evaporator temperature and engine load.

The A/C indicator does not indicate the compressor is currently active. The A/C indicator shows that A/C has been requested and the system will activate the compressor as needed.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to direct the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

## Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to Heating and Air Conditioning System Description and Operation.

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# Section 7

# Power and Signal Distribution

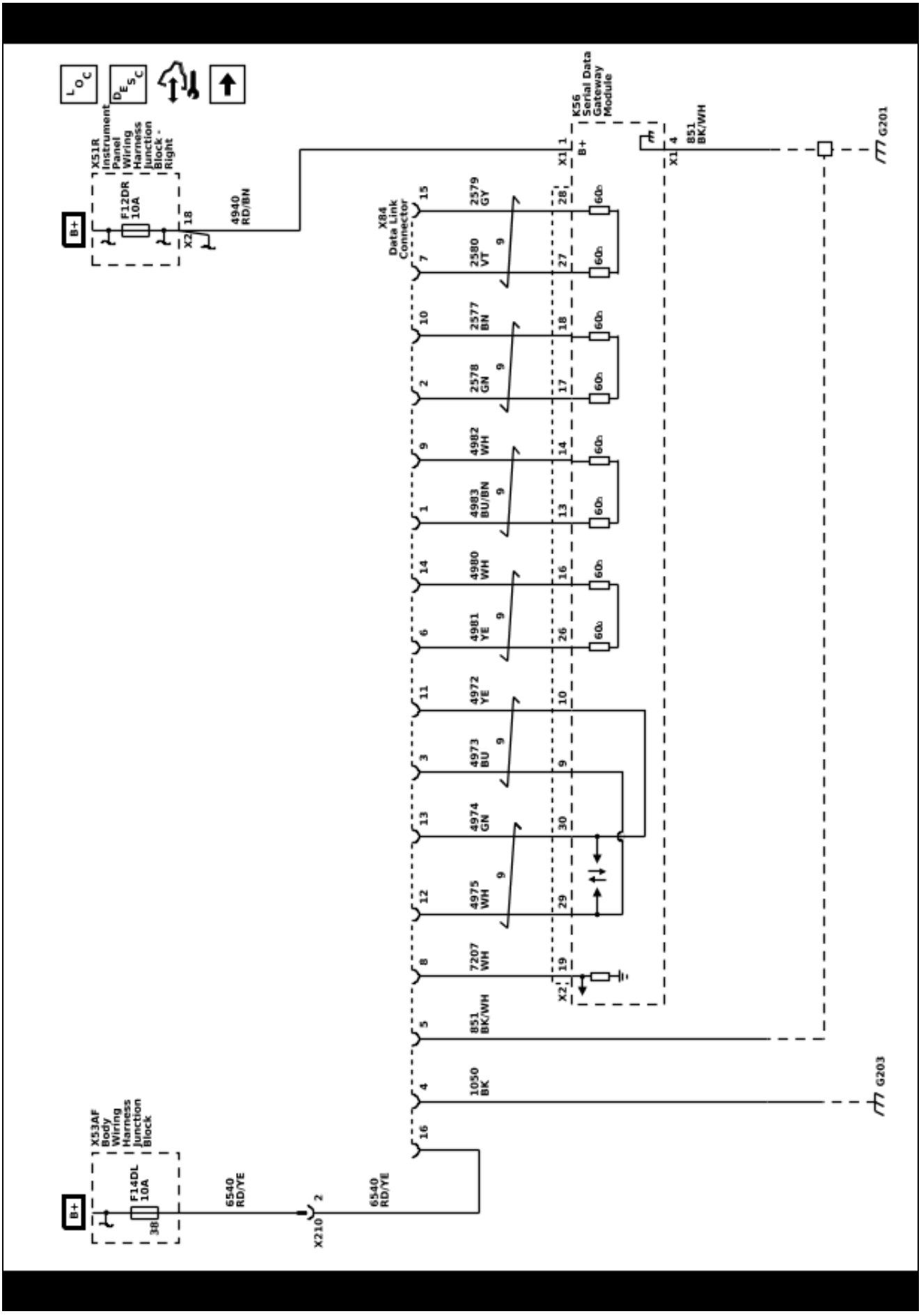
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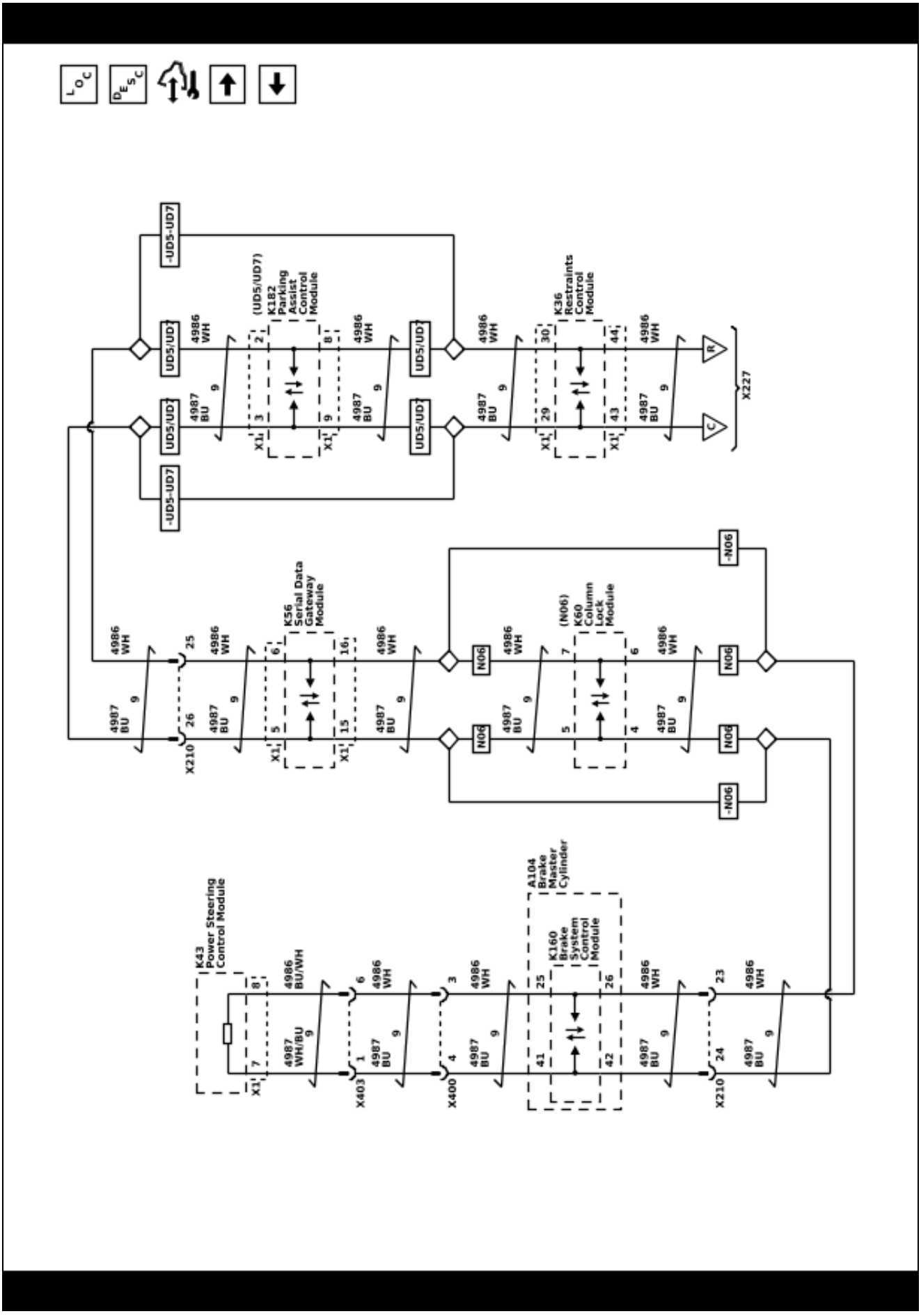
# Data Communications

## Schematic and Routing Diagrams

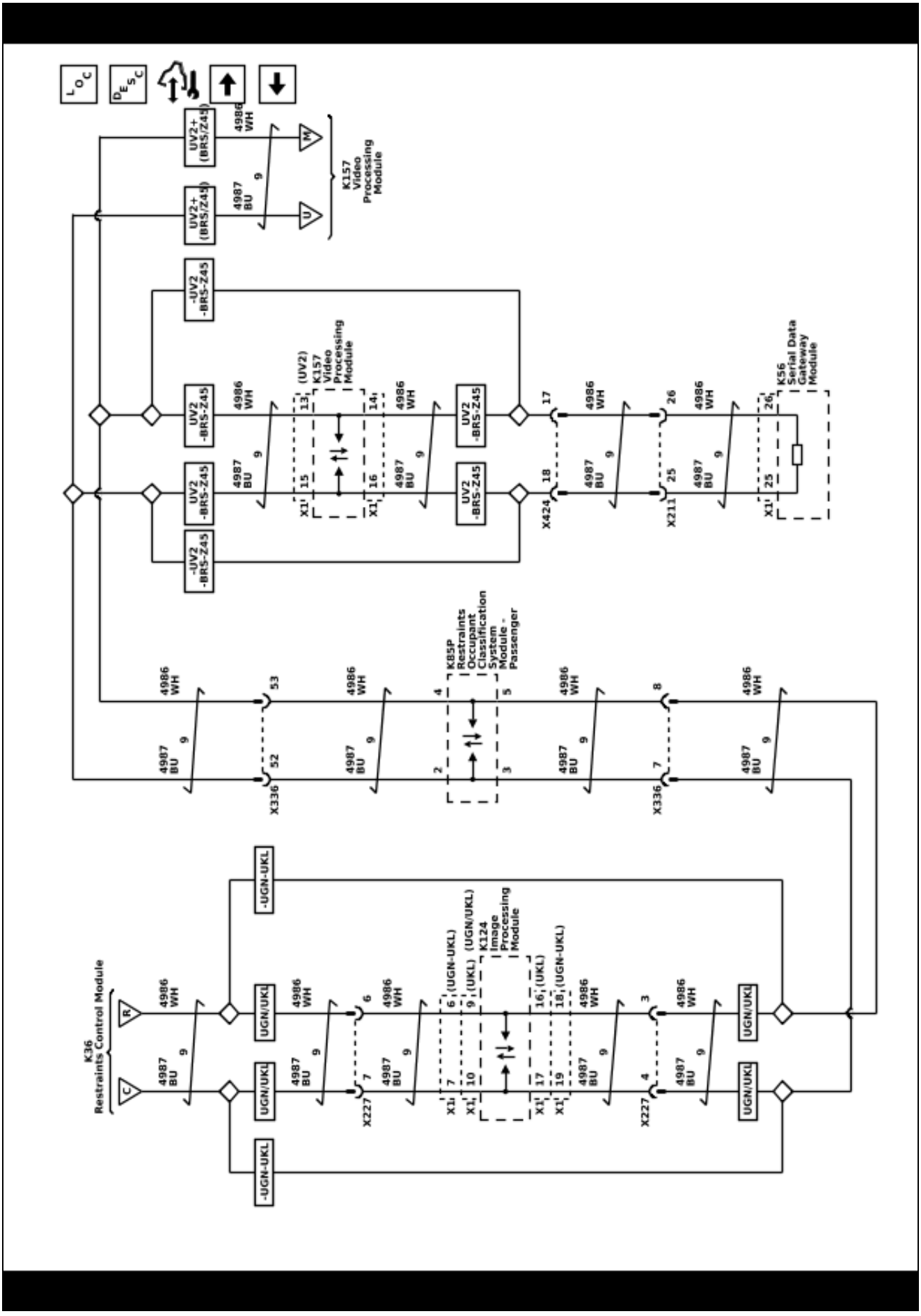
## Data Communication Schematics (Data Link Connector and Serial Data Gateway Module Power and Ground)



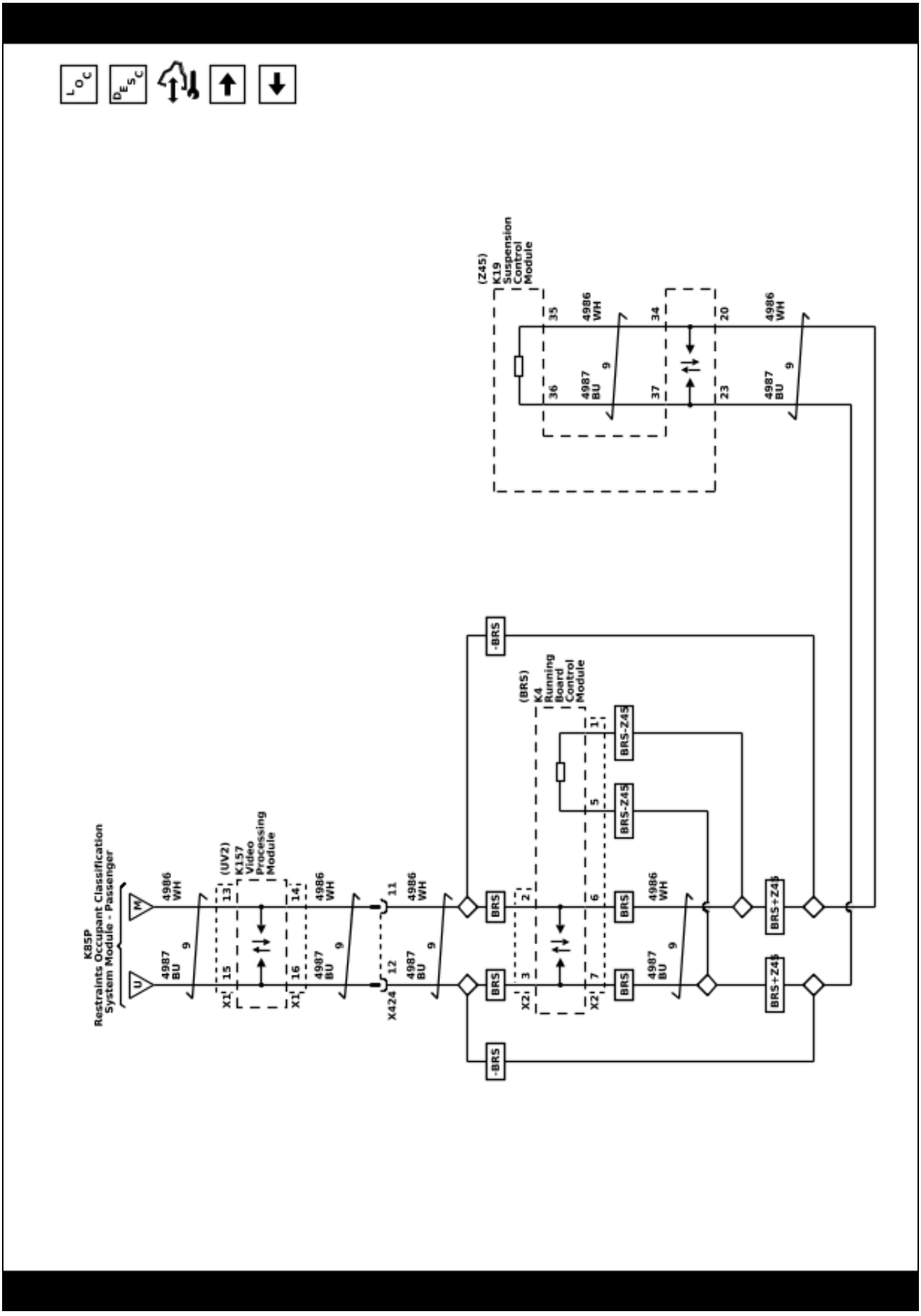
## Data Communication Schematics (CAN 1 - 1 of 3)



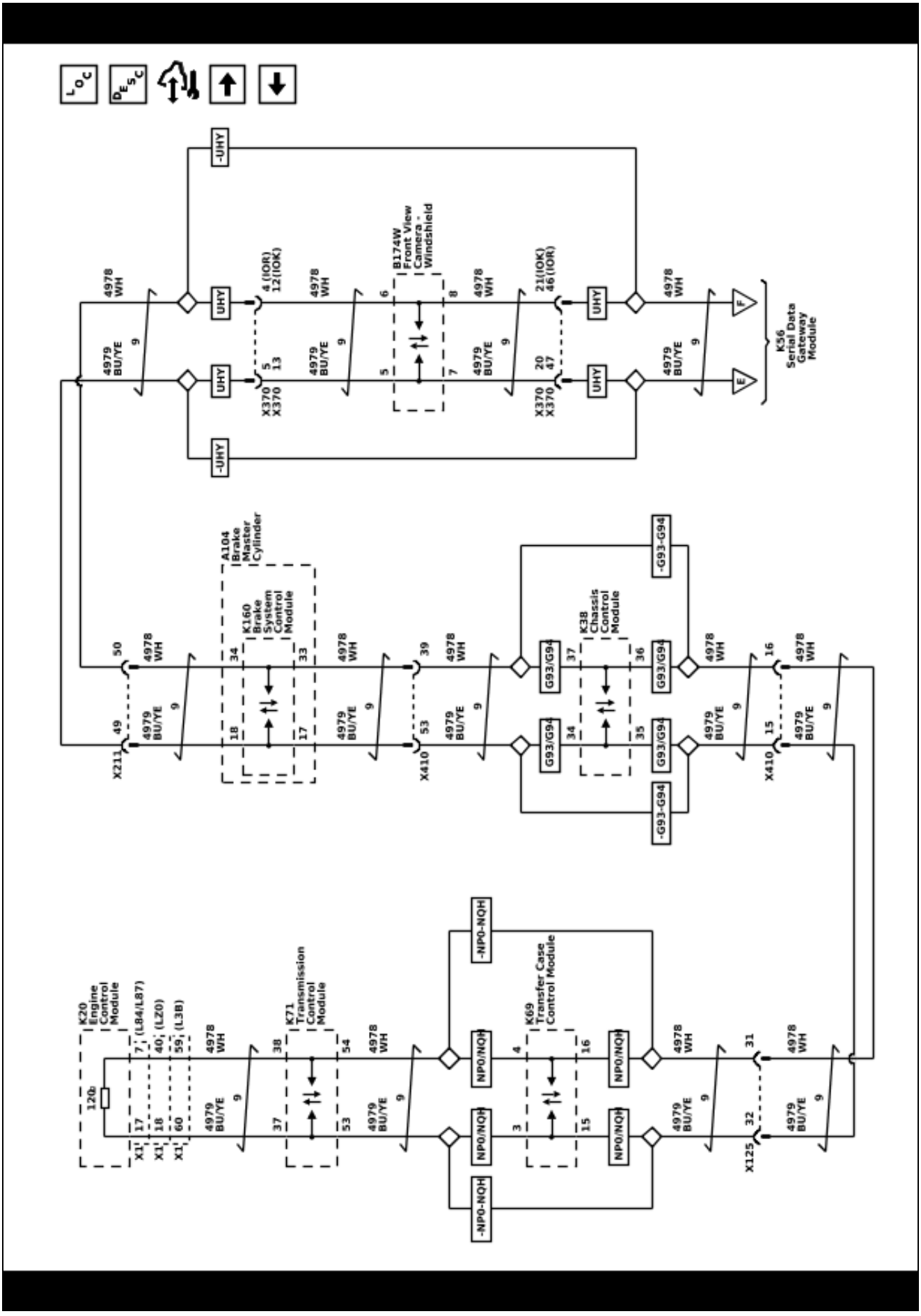
## Data Communication Schematics (CAN 1 - 2 of 3)



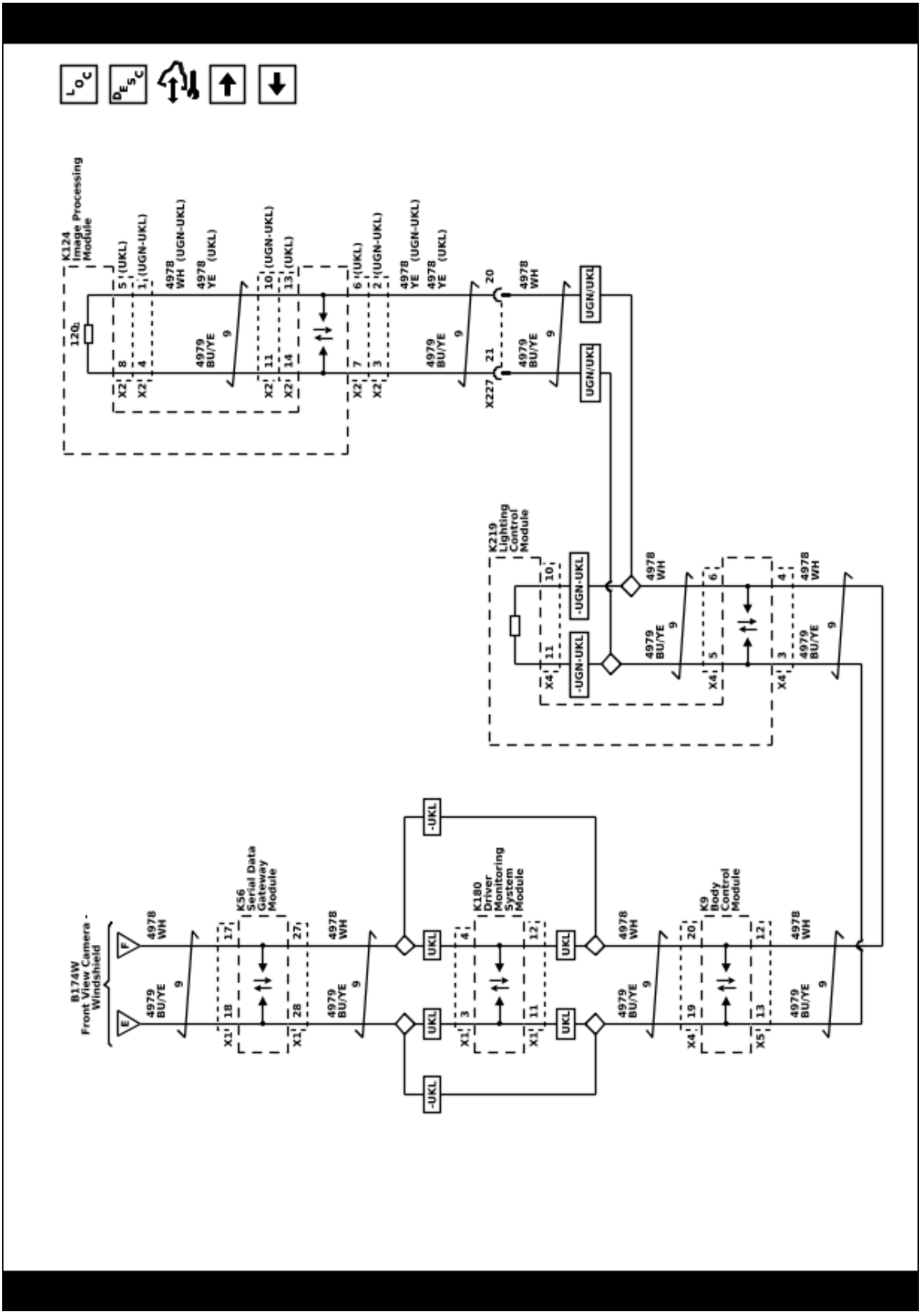
## Data Communication Schematics (CAN 1 - 3 of 3)



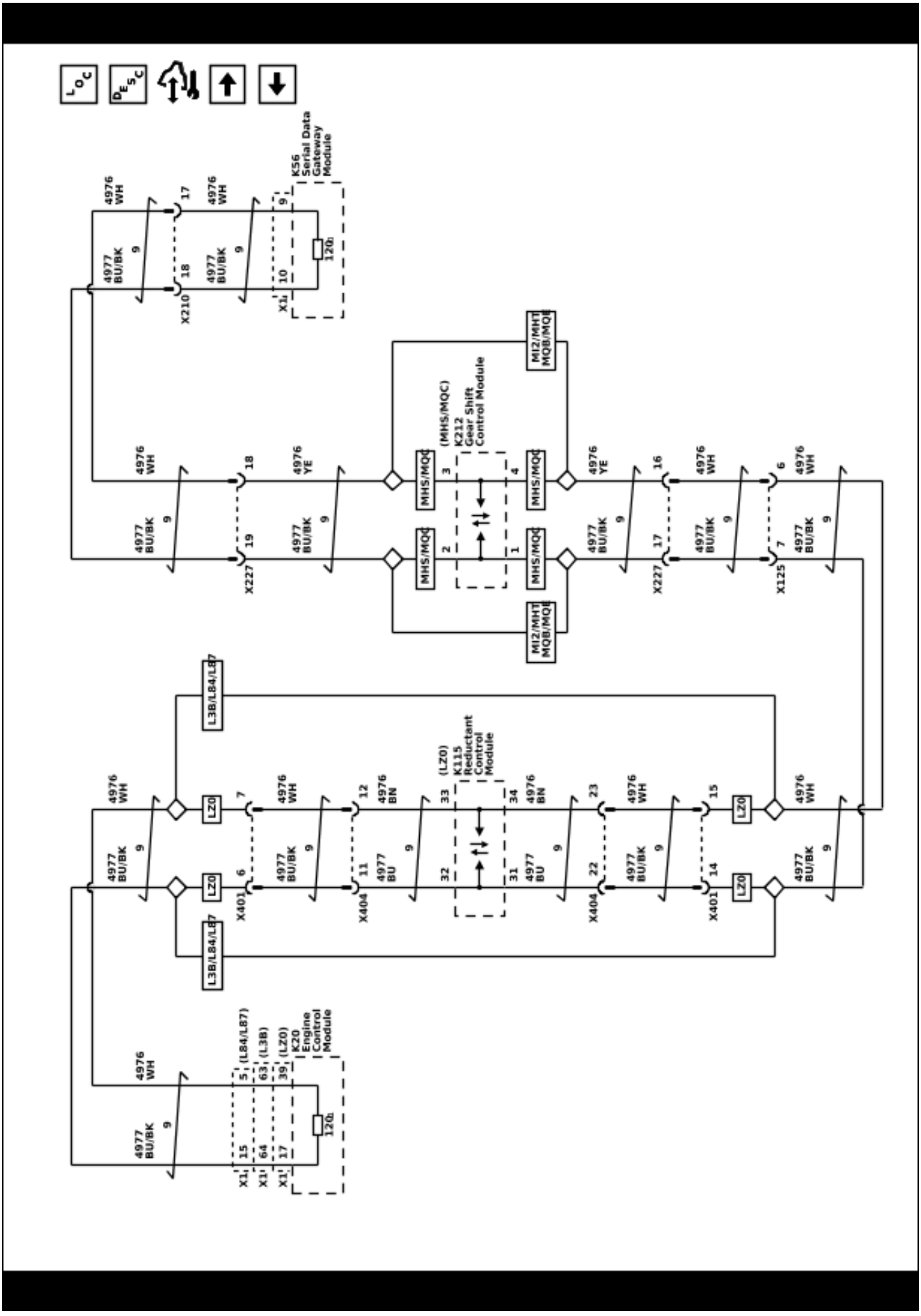
## Data Communication Schematics (CAN 2 - 1 of 2)



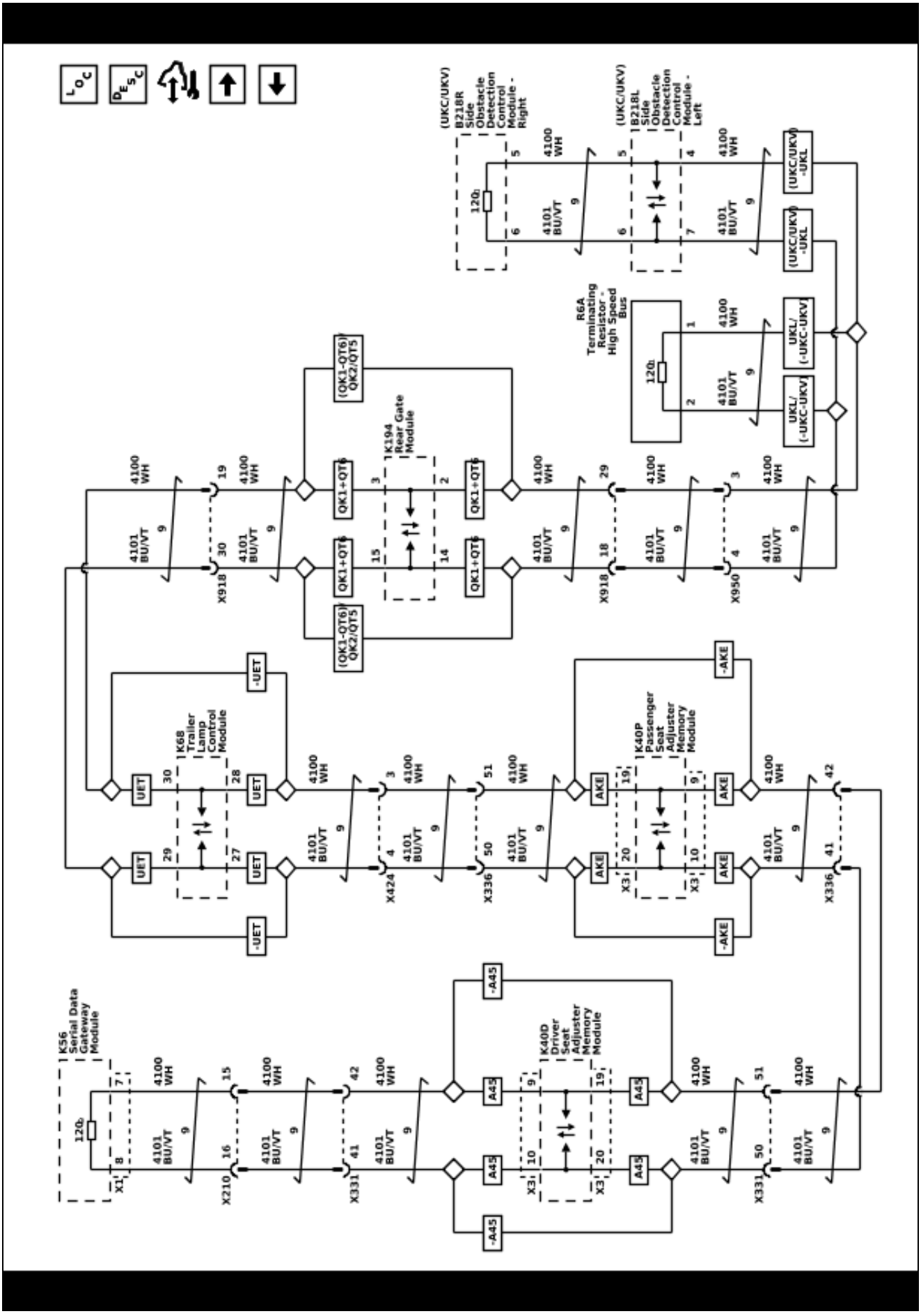
## Data Communication Schematics (CAN 2 - 2 of 2)



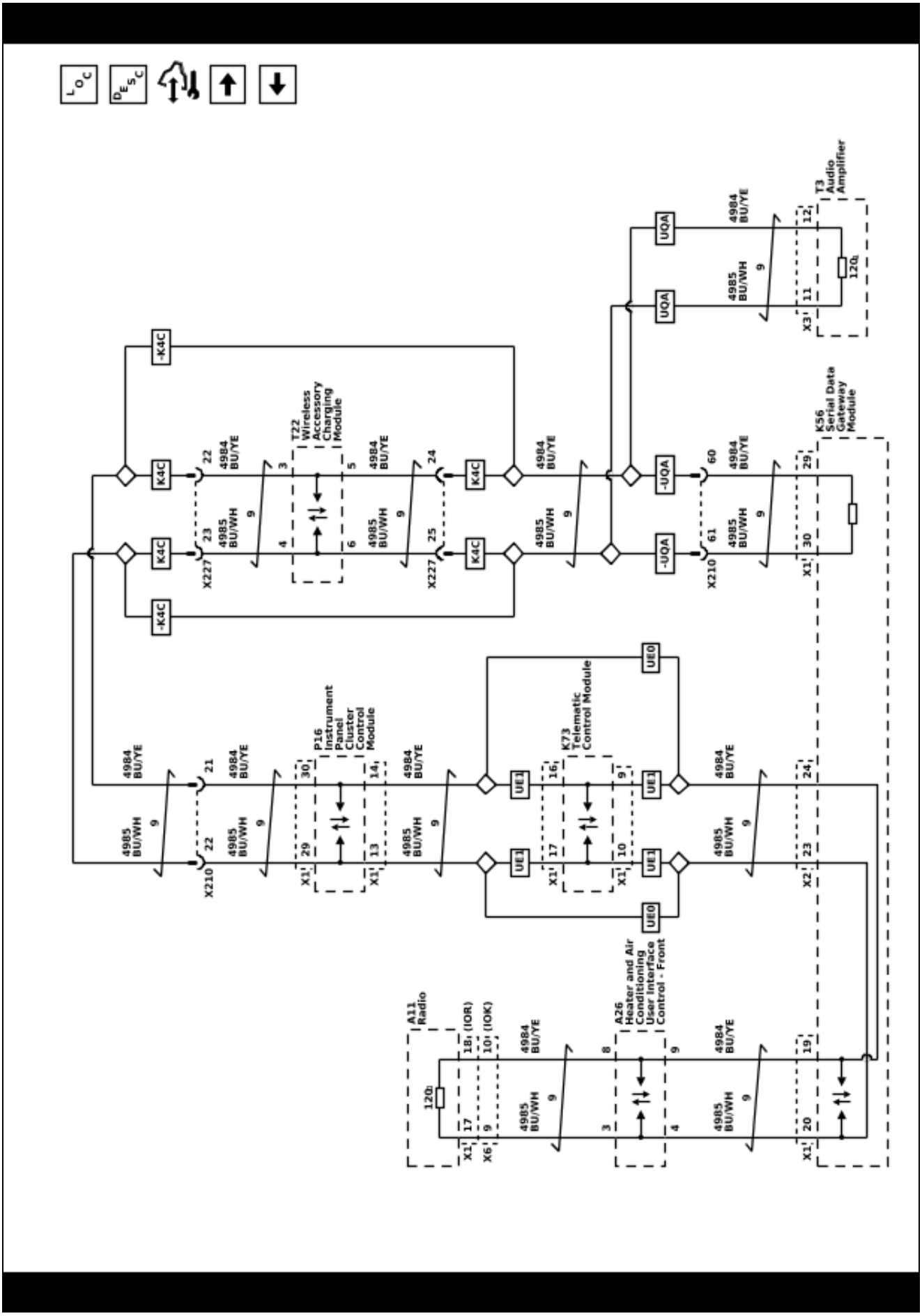
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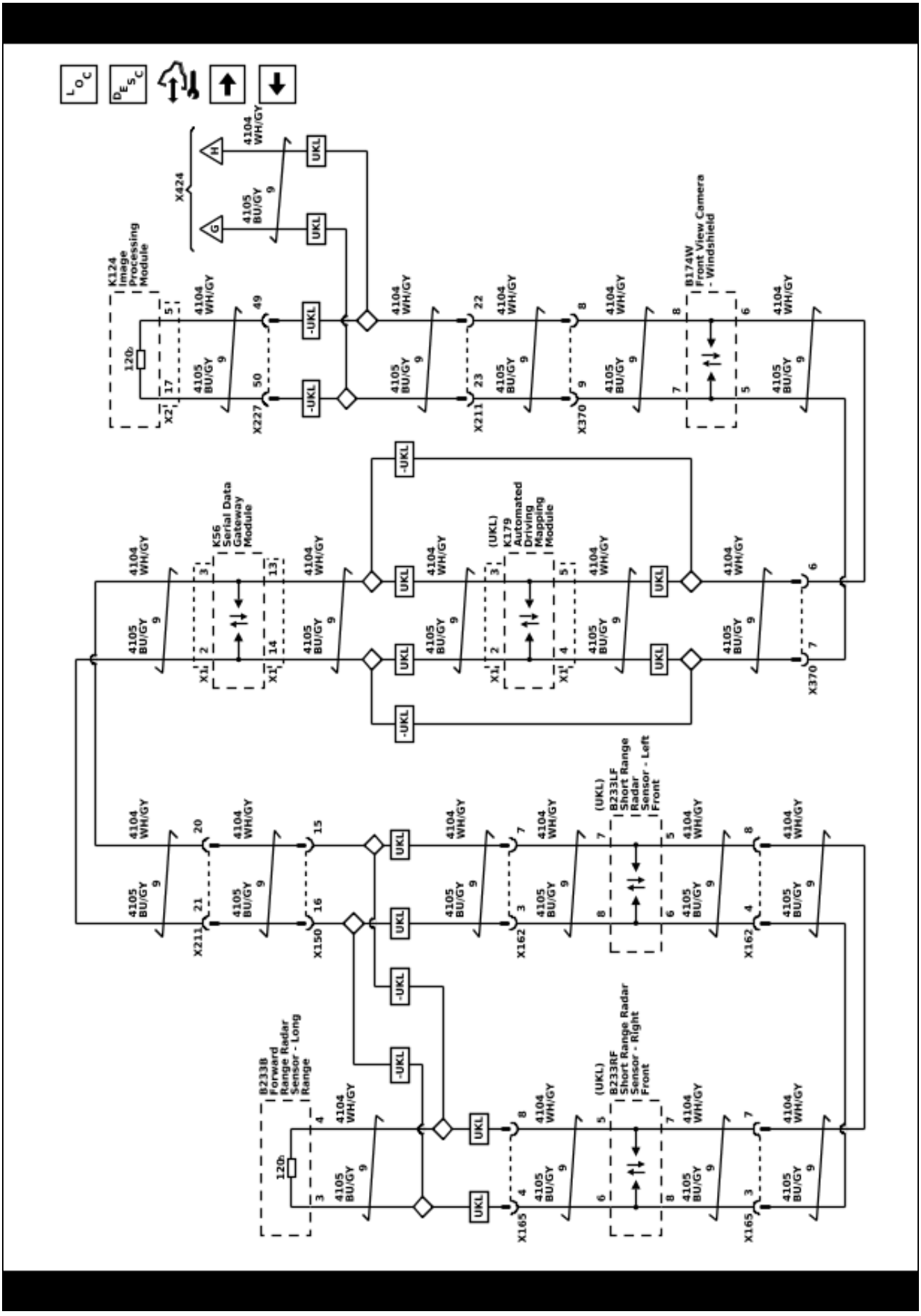
## Data Communication Schematics (CAN 4)



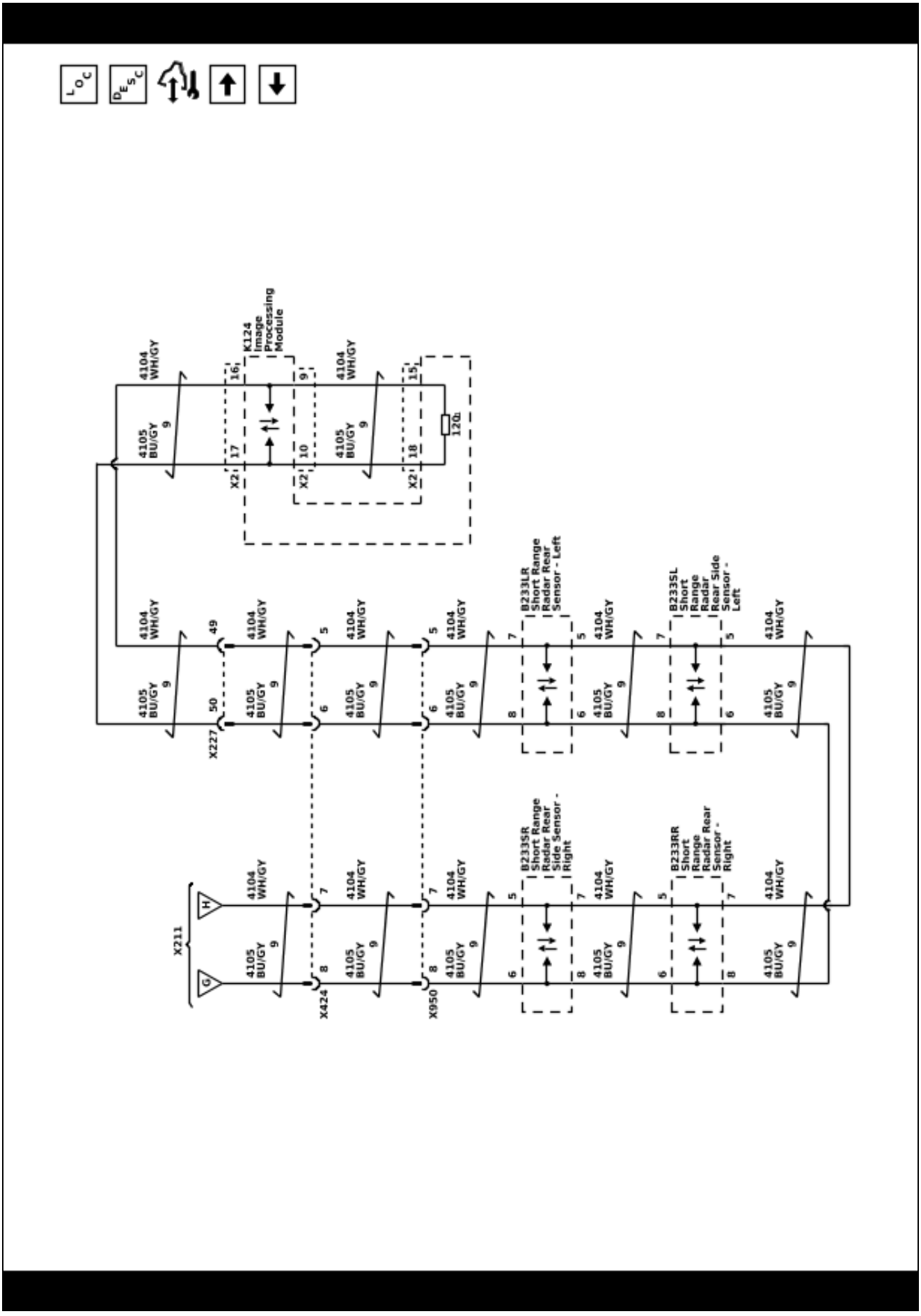
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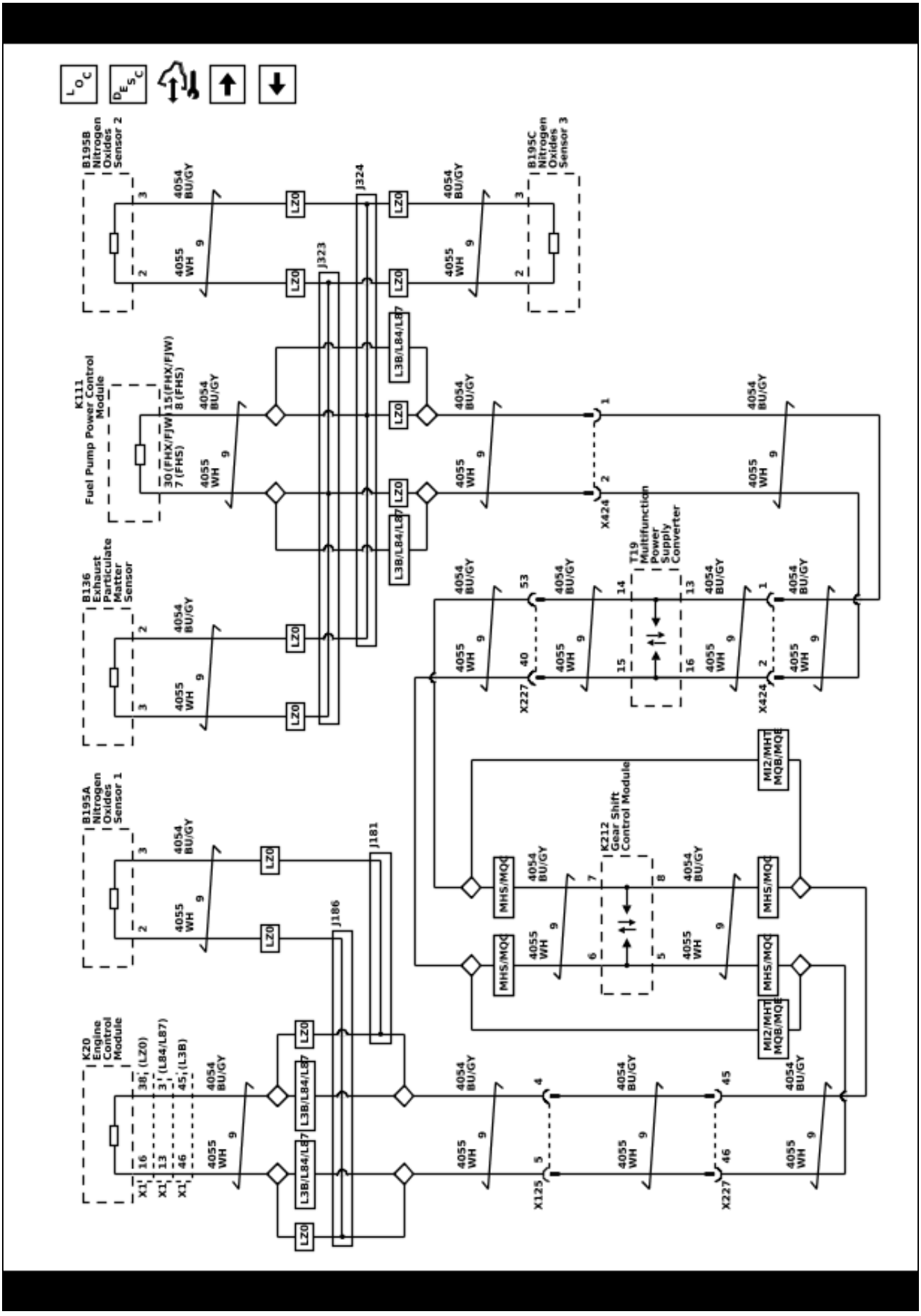
## Data Communication Schematics (CAN 8 - 1 of 2 (UGN/UKL))



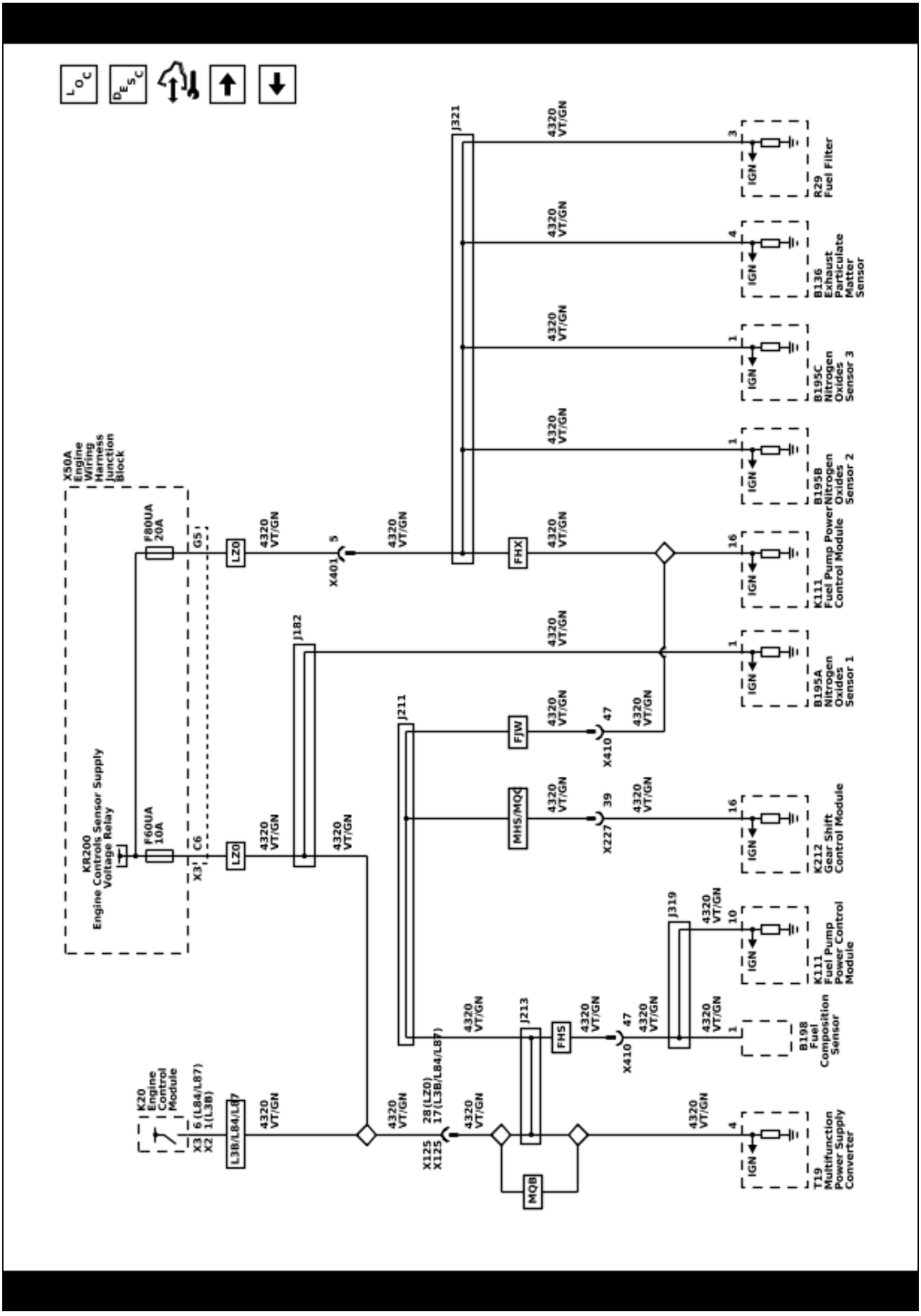
## Data Communication Schematics (CAN 8 - 2 of 2 (UKL))



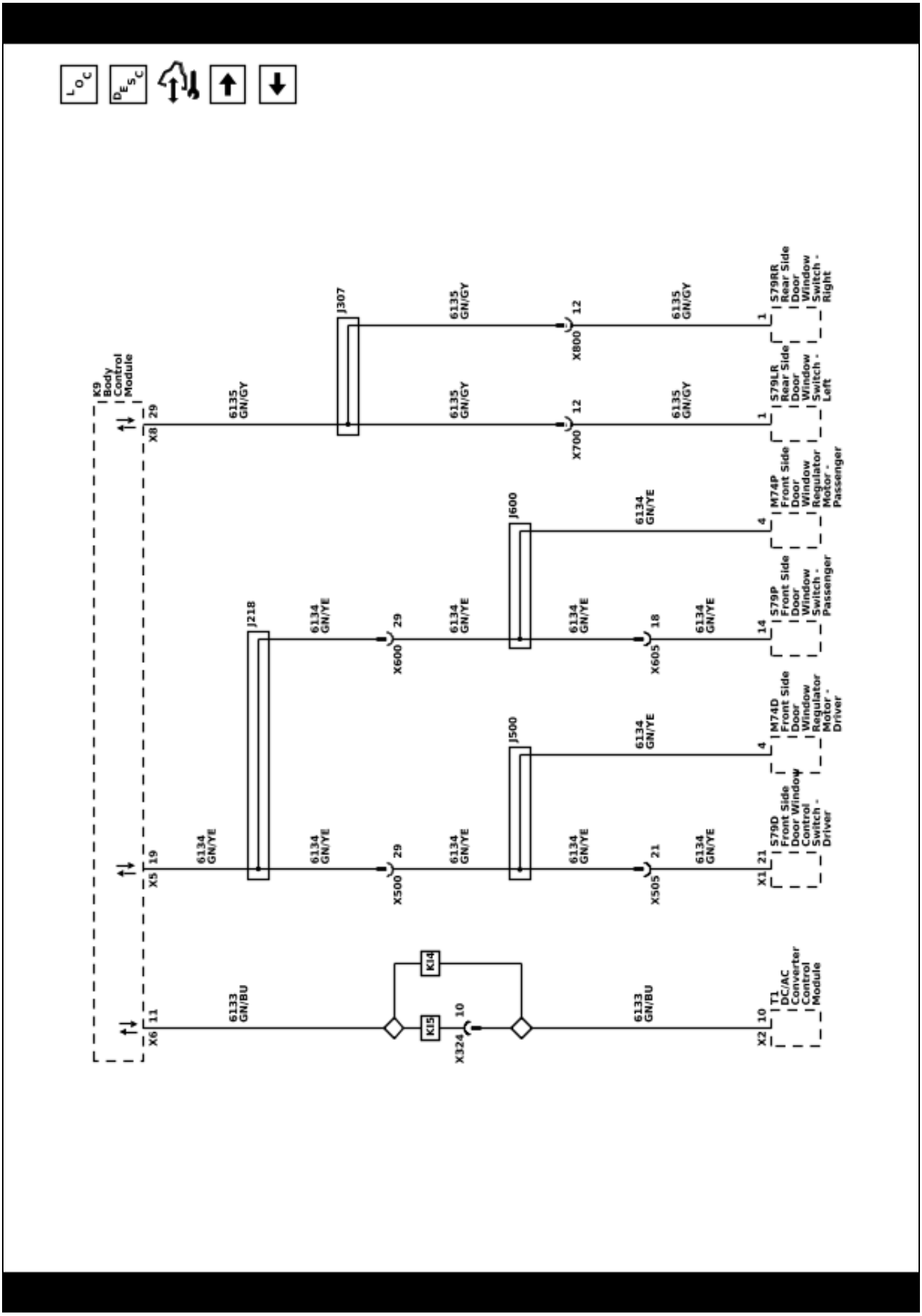
## Data Communication Schematics (Powertrain CAN)



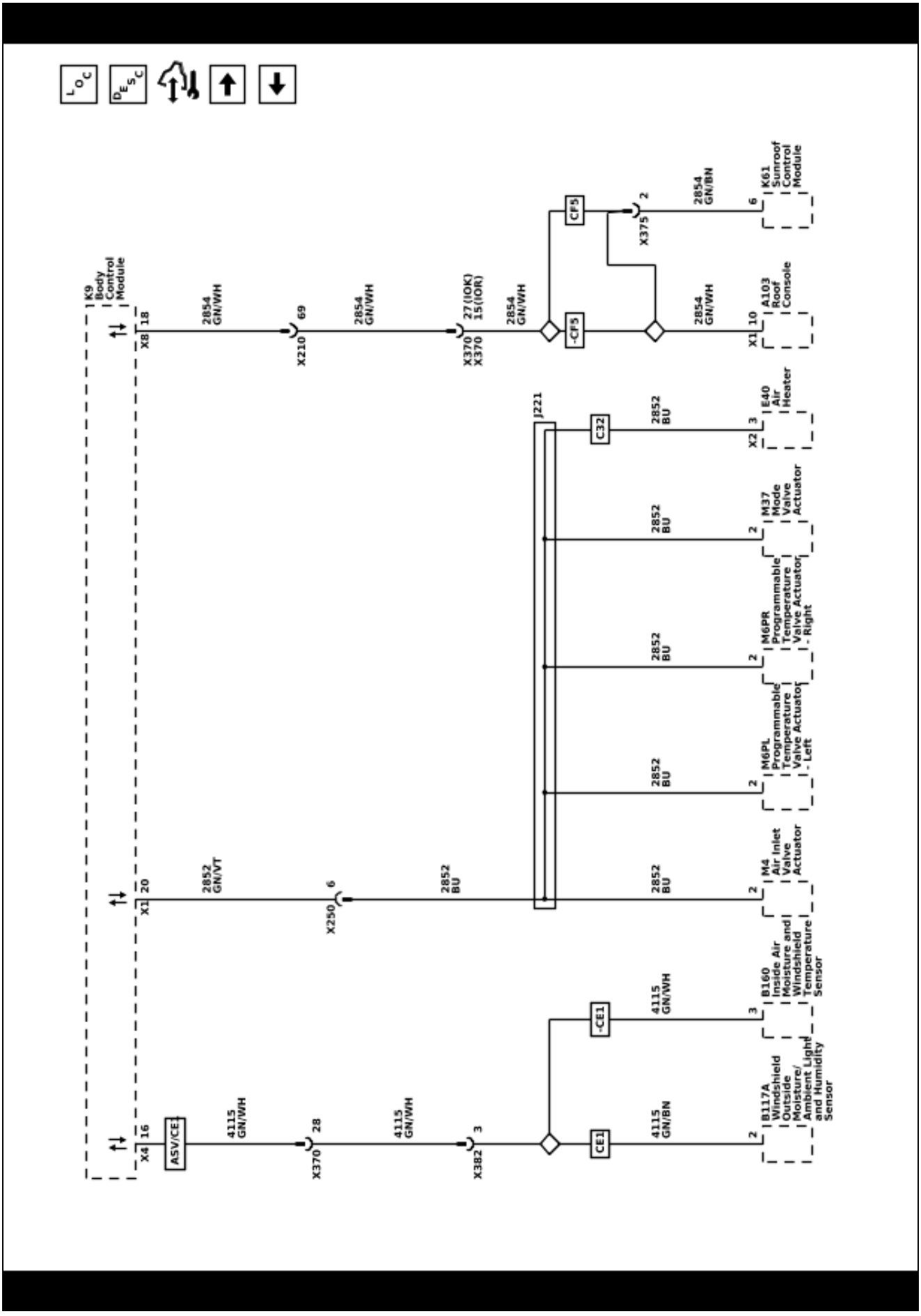
## Data Communication Schematics (Powertrain CAN Enable)



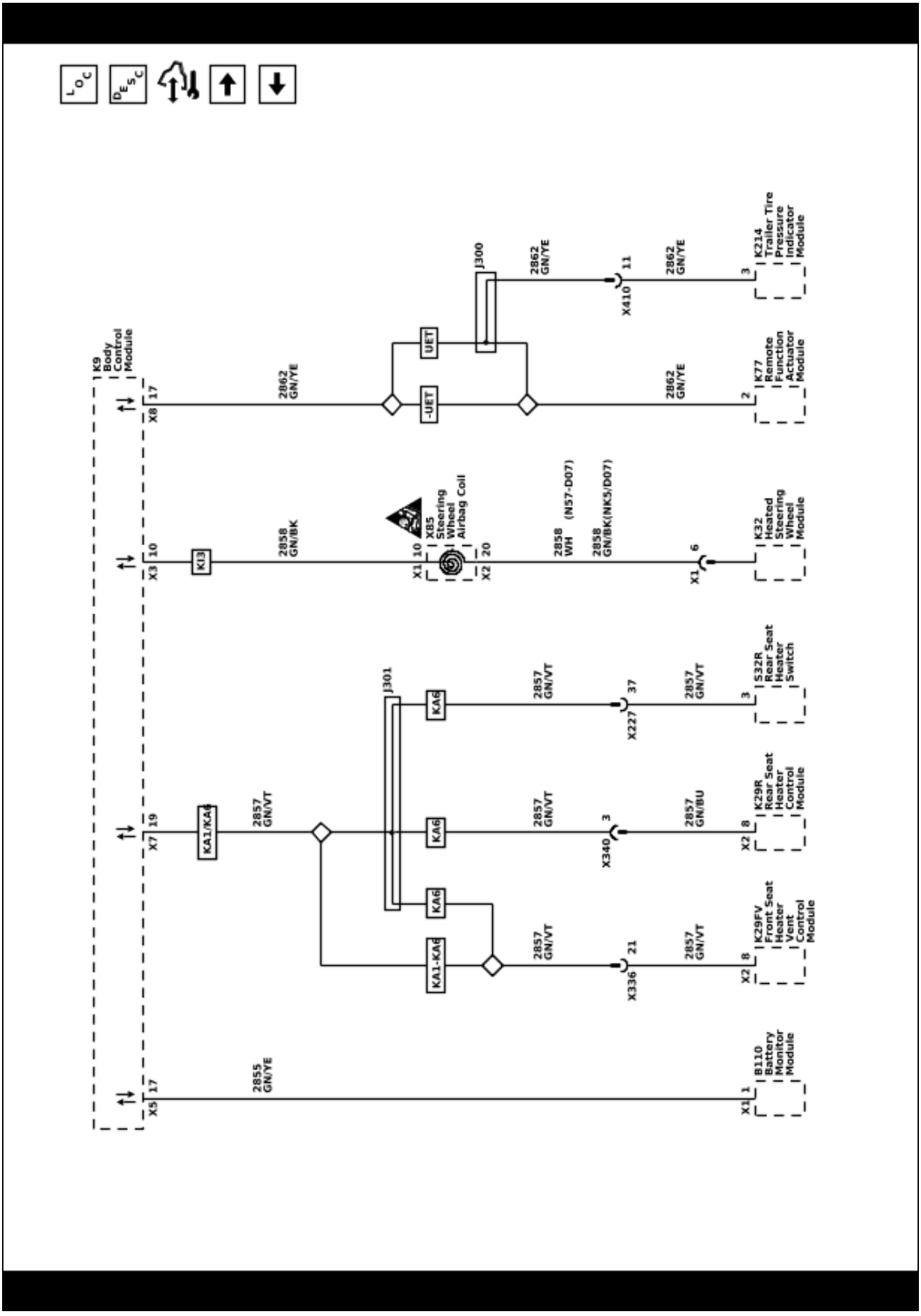
## Data Communication Schematics (Body Control Module Local Interconnect Network LIN Busses 2, 3, and 4)



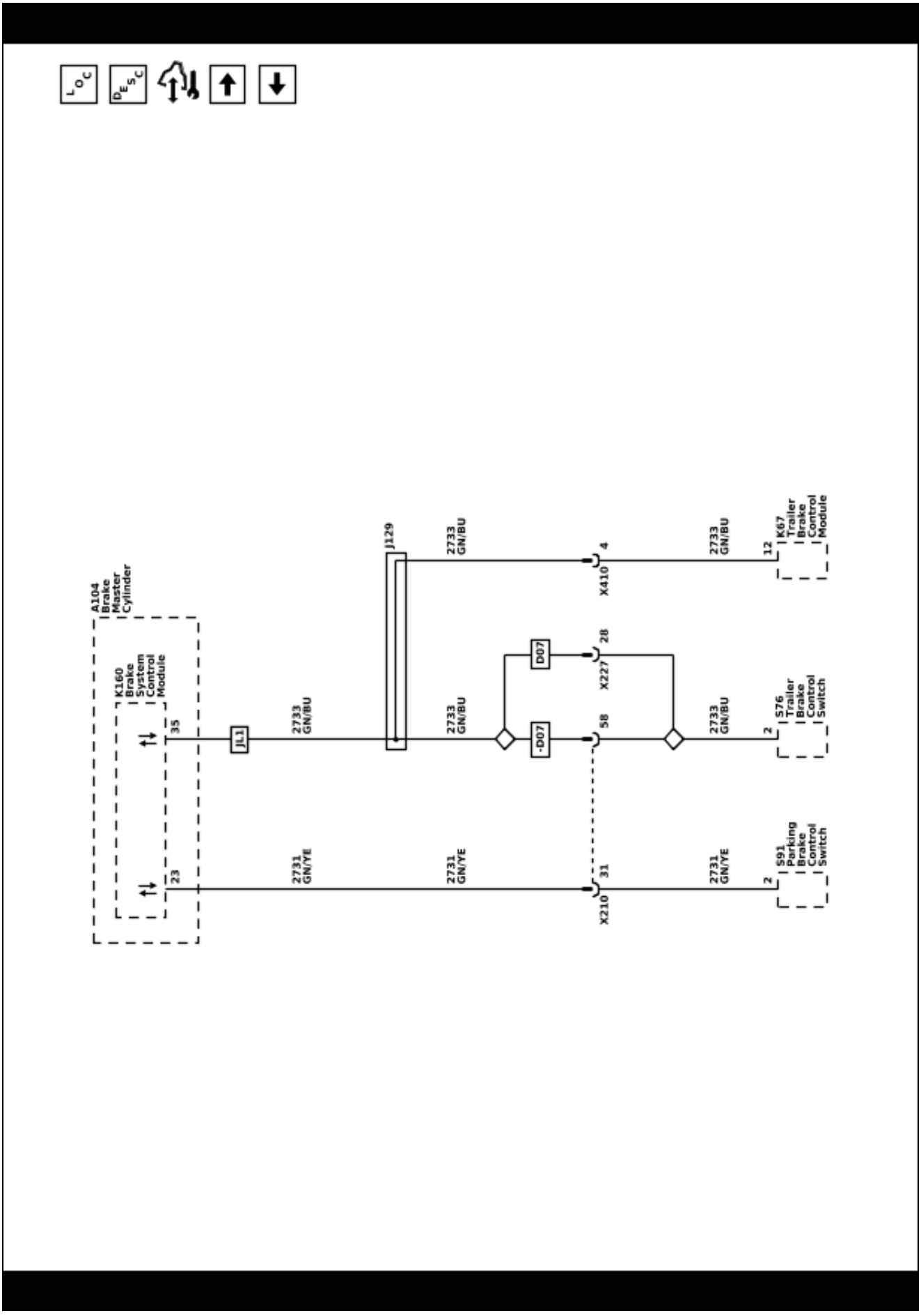
## Data Communication Schematics (Body Control Module Local Interconnect Network LIN Busses 5, 6, and 8)



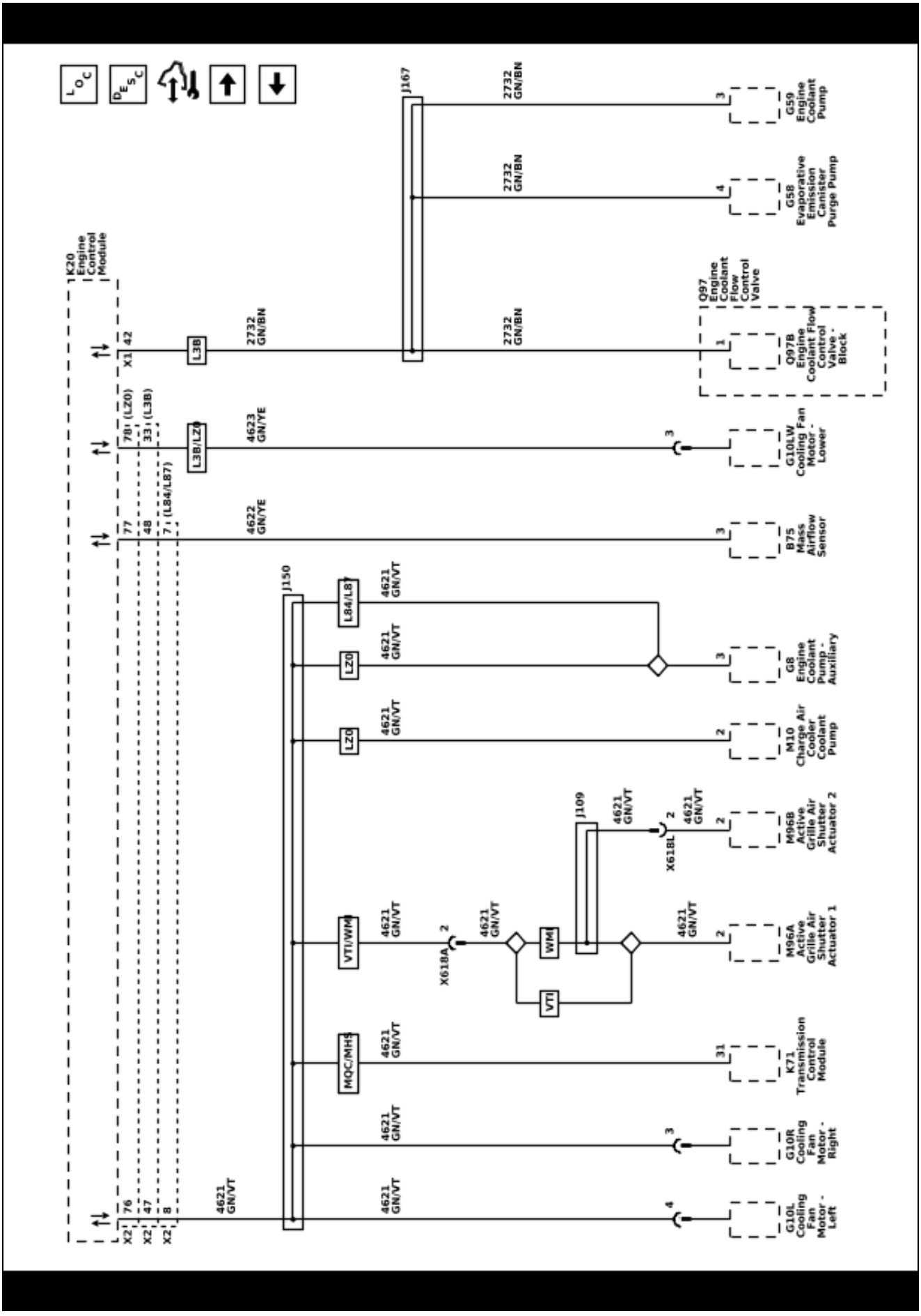
## Data Communication Schematics (Body Control Module Local Interconnect Network LIN Busses 9, 11, 12, and 16)



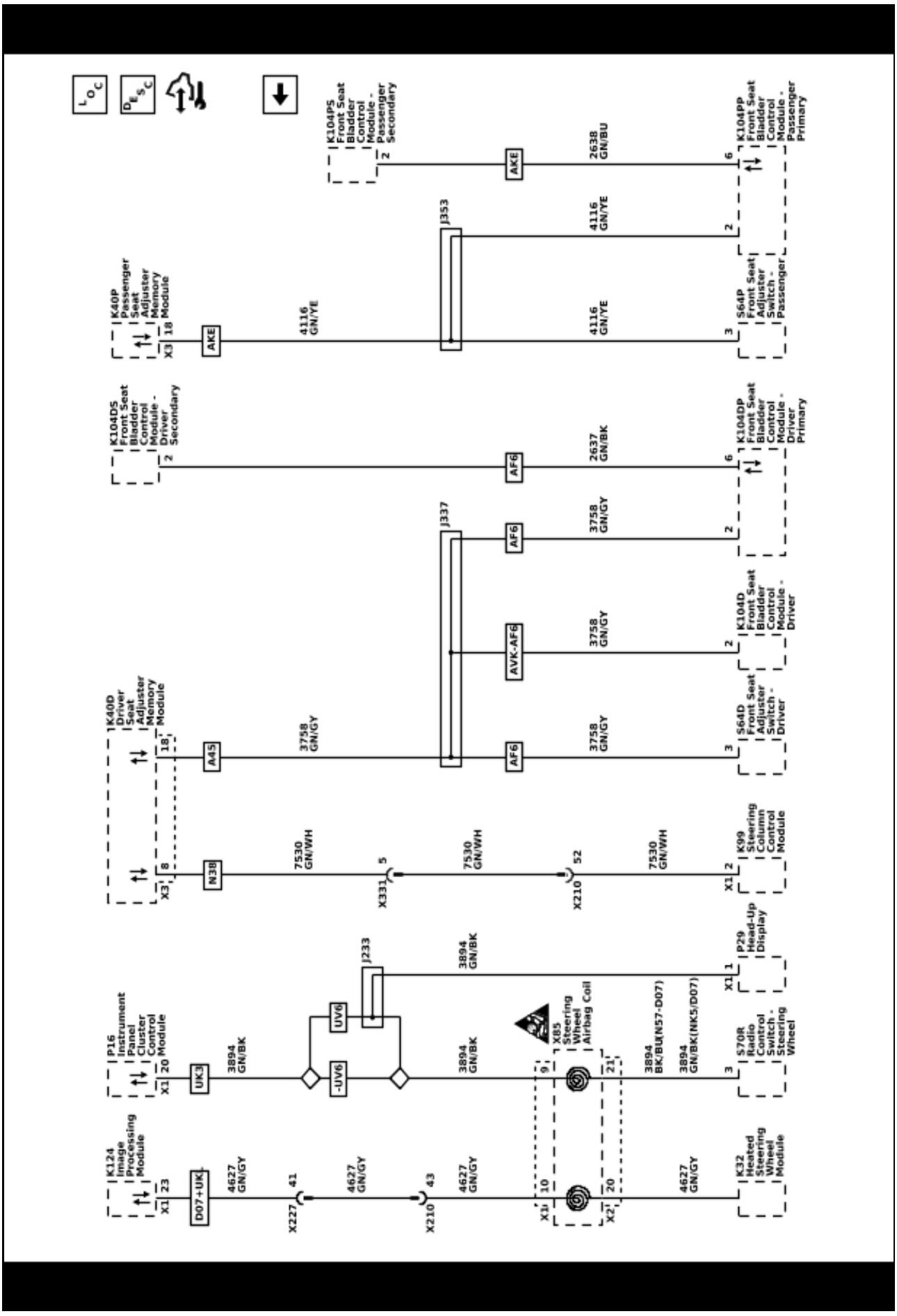
## Data Communication Schematics (Brake System Control Module Local Interconnect Network LIN Busses)



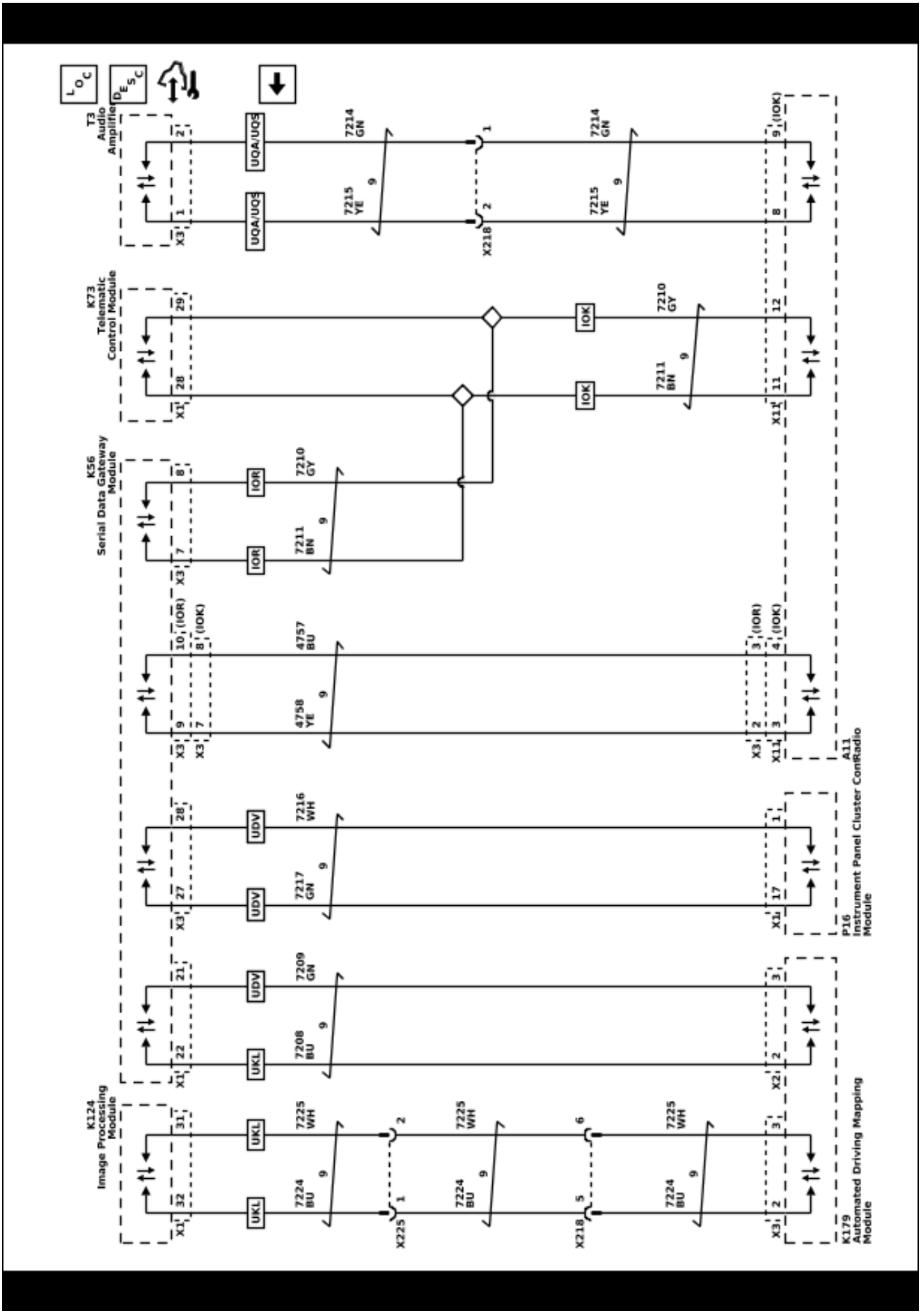
## Data Communication Schematics (Engine Control Module Local Interconnect Network LIN Busses)



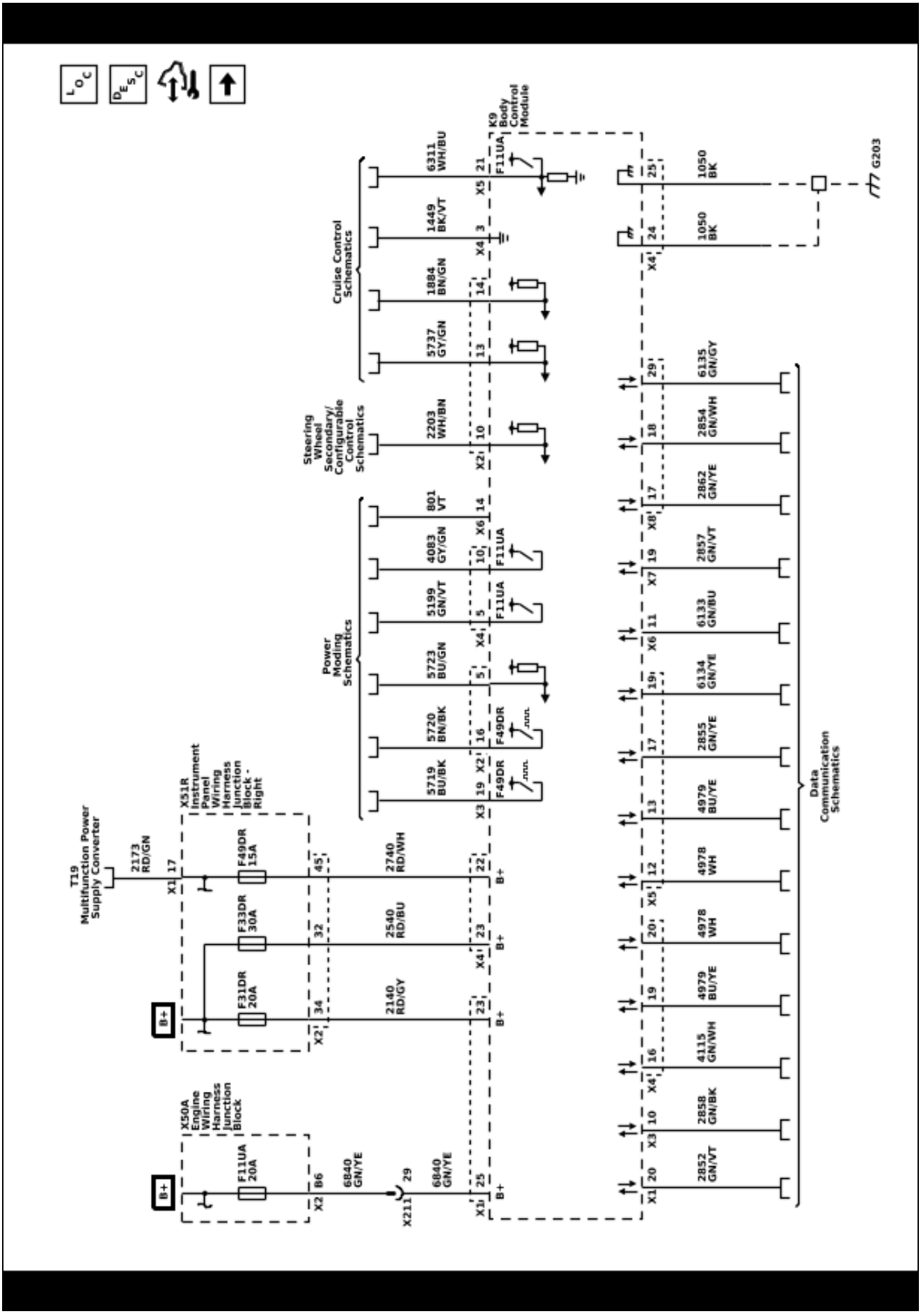
## Data Communication Schematics (Image Processing Module, Instrument Panel Cluster, and Seat Memory Module Local Interconnect Network LIN Busses)



## Data Communication Schematics (Ethernet Bus)

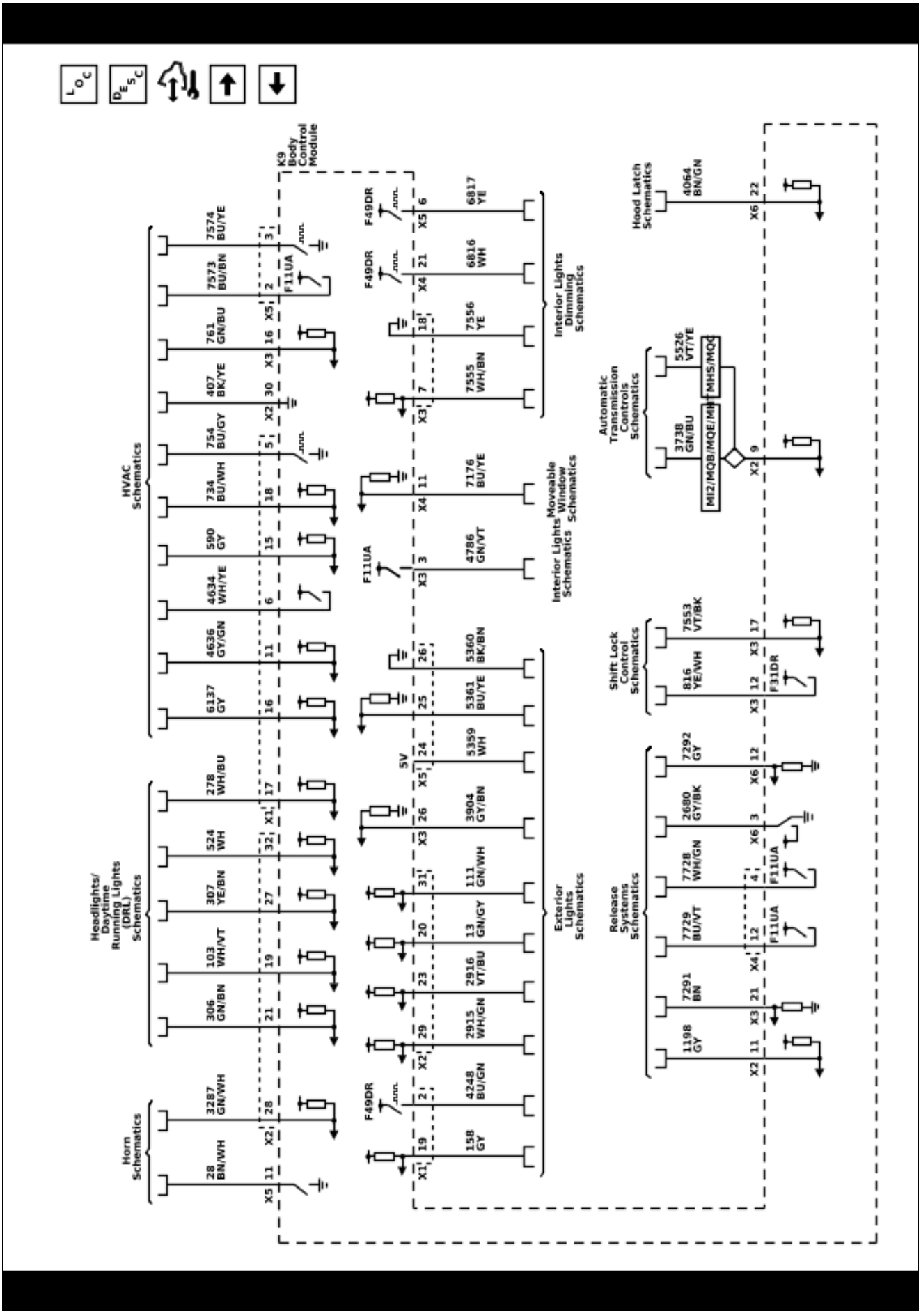


## Body Control System Schematics (Power, Ground, Serial Data, and Subsystem References - 1 of 3)

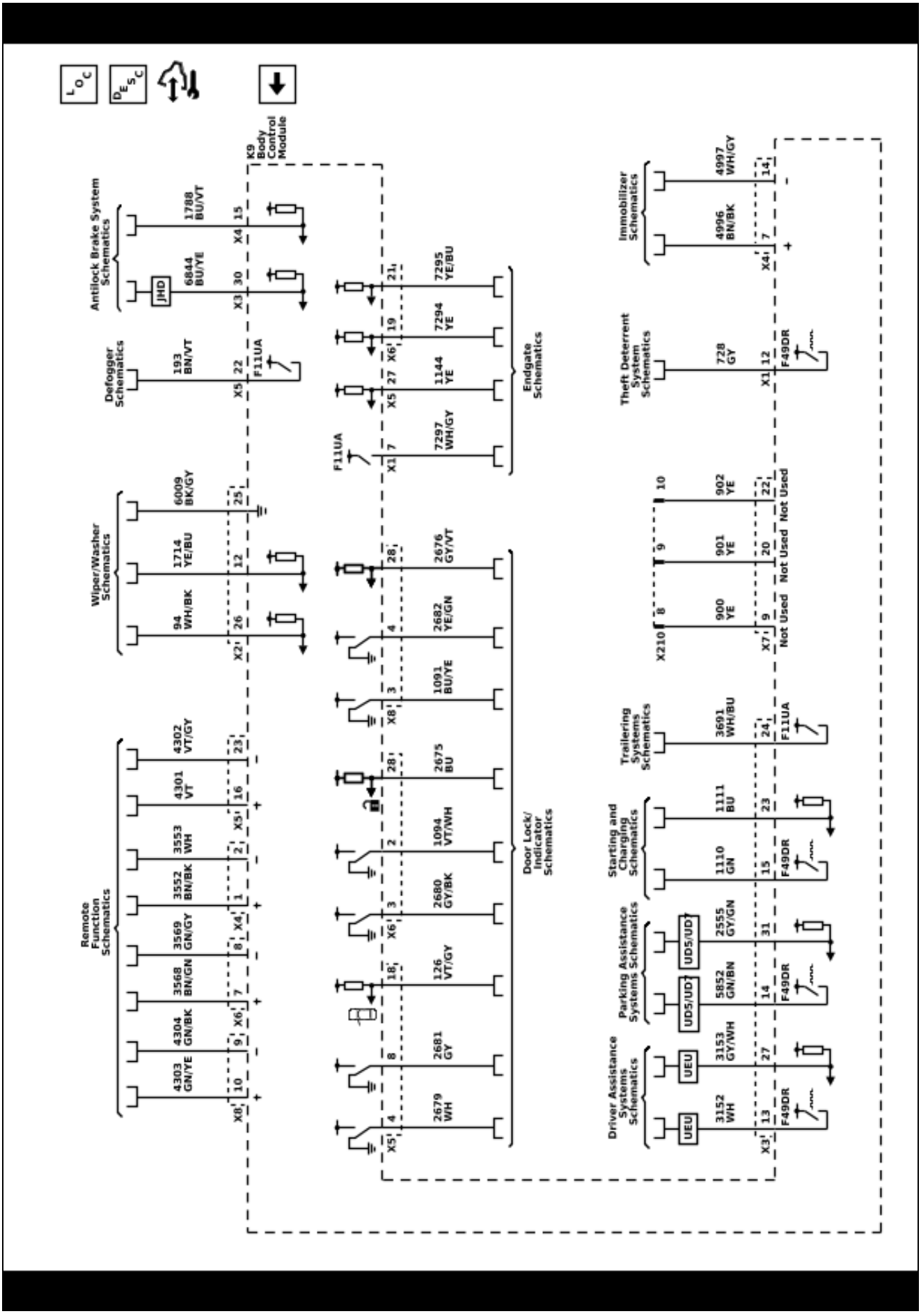



6041071

## Body Control System Schematics (Subsystem References - 2 of 3)



## Body Control System Schematics (Subsystem References - 3 of 3)



# Description and Operation

## Data Link Communications Description and Operation

**Note:** This is an overview of different serial data buses used by control modules to communicate with each others. Use *Data Communication Schematics on page 7-4* to find out which serial data buses are configured for a specific vehicle.

## Data Link Communications Overview

There are many components in a vehicle that rely on information from other sources, transmit information to other sources, or both. Serial data communication networks provide a reliable, cost effective, way for various components of the vehicle to “talk” to one another and share information.

General Motors uses a number of different communication buses to insure the timely and efficient exchange of information between control modules. When compared to each other, some of these buses are different in nature as far as speed, signal characteristics, and behavior.

On the other hand, when other buses are compared to each other they have similar characteristics and simply operate in parallel. In this case they are used to group together components which have high interaction. Examples are the Controller Area Network (CAN), private CAN, and LIN buses. This allows them to communicate with each other on a bus with reduced message congestion insuring faster and the more timely exchange of information than if all vehicle control modules were on a single bus.

The majority of information that exists within a given network generally stays local; however some information will have to be shared on other networks. Control modules designated as Gateway’s perform the function of transferring information between the various buses. A Gateway module is connected to at least 2 buses and will interact with each network according to its message strategy and transmission models.

CAN provides the capability for a receiving control module to monitor message transmissions from other control modules in order to determine if messages of interest are not being received. The primary purpose is to allow reasonable default values to be substituted for the information no longer being received. Additionally, a control module may set a Diagnostic Trouble Code (DTC) to indicate that the control module it is expecting information from is no longer communicating.

## K9 Body Control Module (BCM)

The body control system consists of the K9 Body Control Module, communications, and various input and outputs. Some inputs, outputs and messages require other control modules to interact with the K9 Body Control Module. The K9 Body Control Module also has discrete input and output terminals to control the vehicle's body functions. The K9 Body Control Module is wired to CAN bus and multiple Local Interconnect Network (LIN) buses and acts as a gateway between them.

The various K9 Body Control Module input and output circuits are illustrated in the corresponding functional areas on the K9 Body Control Module electrical schematics. Refer to the *Body Control System Schematics on page 7-24* for more detailed information.

## K56 Serial Data Gateway Module

The K56 Serial Data Gateway Module gates messages between the CAN networks described in the Controller Area Network (CAN) Bus Description section below. The K56 Serial Data Gateway Module needs to know what CAN control modules are present on a given vehicle in order to enable/disable loss of communication DTCs and to know what CAN control modules to track for their communication status. The K56 Serial Data Gateway Module has the ability to learn the diagnostic addresses list of CAN control modules to identify what CAN control modules are equipped on the vehicle and what CAN buses they are on. If the K56 Serial Data Gateway Module is replaced, this learn/verification process will have to be done again through K56 Serial Data Gateway Module programming and setup procedure in SPS. This learn process will not cause any previously learned contents to be forgotten/overwritten. If the learn process is not done on a new K56 Serial Data Gateway Module, DTC U1977 will be set until the learn procedure is executed. If the learn is invalid due to control module internal malfunction or a K56 Serial Data Gateway Module swap, DTC U3000 42 or DTC U3002 56 will be set. If any of these DTCs sets, the K56 Serial Data Gateway Module will enable loss of communication for all CAN control modules. This will result in loss of communication DTCs being set against CAN control modules that are not equipped on the vehicle.

A fault can be localized by monitoring the normal mode messages on a CAN bus. The K56 Serial Data Gateway Module will monitor one signal per CAN control module per CAN bus to determine control module status. When a signal times out, a loss of communication event will be started.

## Controller Area Network (CAN) Bus Description

The CAN buses are used where data needs to be exchanged at a high enough rate to minimize the delay between the occurrence of a change in sensor value and the reception of this information by a control device using the information to adjust vehicle system performance.

Each CAN serial data network consists of two twisted wires. One signal circuit is identified as CAN-High and the other signal circuit is identified as CAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the CAN-High and CAN-Low circuits. Most CAN control modules have an internal resistance of 4.950K Ω. There may be one or two CAN control modules that have a higher internal resistance like the K60 Column Lock Module which has an internal resistance of 77.4K Ω. The internal resistance of CAN control modules causes lower terminating resistor reading when splitting the CAN network to check for faults. The more CAN control modules on the network the lower the terminating resistor will read.

The data to be transmitted over a CAN bus is represented by the voltage difference between the CAN-High signal voltage and the CAN-Low signal voltage. Data symbols (1's and 0's) are transmitted sequentially at the following rate:

- CAN 1 (circuits 4986 & 4987) = 500 Kbit/s
- CAN 2 (circuits 4978 & 4979) = 2 Mbit/s
- CAN 3 (circuits 4976 & 4977) = 500 Kbit/s
- CAN 4 (circuits 4100 & 4101) = 500 Kbit/s
- CAN 5 (circuits 4984 & 4985) = 500 Kbit/s
- CAN 6 (circuits 4980 & 4981) = 5 Mbit/s
- CAN 7 (circuits 4982 & 4983) = 5 Mbit/s
- CAN 8 (circuits 4104 & 4105) = 2 Mbit/s
- CAN 9 (circuits 4102 & 4103) = 2 Mbit/s

When the two wire bus is at rest the CAN-High and CAN-Low signal circuits are not being driven and this represents a logic "1". In this state both signal circuits are at the same voltage of 2.5 V. The differential voltage is approximately 0 V.

When a logic "0" is to be transmitted, the CAN-High signal circuit is driven higher to about 3.5 V and the CAN-Low circuit is driven lower to about 1.5 V. The differential voltage becomes approximately 2.0 (+/- 0.5) V.

The CAN 1, CAN 2, CAN 3, CAN 4, CAN 5, CAN 8, and CAN 9 buses are used to communicate between the K56 Serial Data Gateway Module and other CAN control modules.

The CAN 8, and CAN 9 buses are reserved for the following systems:

- The CAN 8 bus is reserved for most control modules and sensors related to active safety system, if applicable.
- The CAN 9 bus is reserved for most control modules and sensors related to Hybrid/EV system, if applicable.

The following CAN buses are between the X84 Data Link Connector and the K56 Serial Data Gateway Module:

- The CAN 6 bus is used for CAN diagnostics and programming.
- The CAN 7 bus is used for programming by assembly plant only.
- The Private Presentation CAN 1 bus (circuits 2577 & 2578) is used by Engineering to observe data communications on CAN buses not directly accessible at the X84 Data Link Connector. It requires special security access and will not be used in a service environment.
- The Private Presentation CAN 2 bus (circuits 2579 & 2580) is used by Engineering to observe data communications on CAN buses not directly accessible at the X84 Data Link Connector. It requires special security access and will not be used in a service environment.

## Private Powertrain CAN Bus Description

The Private Powertrain CAN bus (circuits 4054 & 4055) is reserved for Powertrain components. It has a transmission rate of 500 Kbit/s. Sometimes communication is required between the Private Powertrain CAN bus and another CAN bus. This is accomplished by using the K20 Engine Control Module (for gas vehicles) or K16 Battery Energy Control Module (for electric vehicles) as the Gateway module. Since the Private Powertrain CAN bus and other CAN buses operate in the same manner, the diagnostics for each are similar.

## Local Interconnect Network (LIN) Bus Description

The LIN Bus consists of a single wire with a transmission rate of 10.417 Kbit/s. This bus is used to exchange information between a master control module and other smart devices which provide supporting functionality. This type of configuration does not require the capacity or speed of a CAN bus and is thus relatively simpler.

The data symbols (1's and 0's) to be transmitted are represented by different voltage levels on the communication bus. When the LIN Bus is at rest and is not being driven, the signal is in a high voltage state of approximately Vbatt. This represents a logic "1". When a logic "0" is to be transmitted, the signal voltage is driven low to about ground (0.0 V).

## Ethernet Bus Description

Ethernet is a data communication technology that uses a single twisted copper pair of wires at speeds of 100 Mbit/s and 1000 Mbit/s. The Ethernet system uses point-to-point communication that is connected via an Ethernet switch [Module <–> Switch <–> Module]. The Ethernet bus does not use terminating resistors.

The K56 Serial Data Gateway Module and the A11 Radio have an Ethernet switch that connects to other Ethernet modules. The K56 Serial Data Gateway Module and the A11 Radio communicate with other devices and systems in the vehicle via CAN and LIN buses. Diagnostic Trouble Codes will be read on CAN to diagnose Ethernet, LIN and system faults.

**Note:** Ethernet harness failures should only be repaired using an appropriate kit to perform de-pin/re-pin overlays or in cases where the wiring harness repair kits are not available, the entire harness should be replaced. No crimps or splicing should be performed on the Ethernet wiring harness.

### Ethernet 1

Ethernet bus 1 consists of 2 twisted pair of wires [1 pair for Ethernet bus 1R (circuits 4972 & 4973) and 1 pair for Ethernet bus 1T (circuits 4974 & 4975)]. It is connected between X84 Data Link Connector (DLC) and K56 Serial Data Gateway Module. This bus is used for diagnostics and service programming of control modules using Ethernet instead of CAN. The K56 Serial Data Gateway Module will convert Ethernet serial data to CAN as necessary, and vice versa. There is an Ethernet enable circuit (circuit 7207) which can be used to wake up the K56 Serial Data Gateway Module for Ethernet diagnostic and programming.

### Ethernet 2

Ethernet bus 2 (circuits 4757 & 4758) is for connection between the A11 Radio and the K56 Serial Data Gateway Module.

**Ethernet 3**

Ethernet bus 3 (circuits 7208 & 7209) is for connection between the K56 Serial Data Gateway Module and K179 Automated Driving Mapping Module.

**Ethernet 4**

Ethernet bus 4 (circuits 7210 & 7211) is for connection between the following control modules:

- K56 Serial Data Gateway Module and K73 Communication Interface Module for vehicles equipped with IOR radio.
- A11 Radio and K73 Communication Interface Module for vehicles equipped with other radios.

**Ethernet 5**

Ethernet bus 5 (circuits 7212 & 7213) is for connection between the A11 Radio and P22F Video Display - Right Front Seat Back.

**Ethernet 6**

Ethernet bus 6 (circuits 7214 & 7215) is for connection between the A11 Radio and T3 Audio Amplifier.

**Ethernet 7**

Ethernet bus 7 (circuits 7216 & 7217) is for connection between the K56 Serial Data Gateway Module and P16 Instrument Panel Cluster Control Module.

**Ethernet 11**

Ethernet bus 11 (circuits 7224 & 7225) is for connection between the K124 Image Processing Module and K179 Automated Driving Mapping Module.

**Ethernet 14**

Ethernet bus 14 (circuits 7230 & 7231) is for connection between the A11 Radio and P29 Head-Up Display.

**Ethernet 15**

Ethernet bus 15 (circuits 7232 & 7233) is for connection between the K56 Serial Data Gateway Module, K161 Vehicle Performance Data Recorder, and P22F Video Display - Passenger Seat Back.

## X84 Data Link Connector (DLC)

The X84 Data Link Connector is a standardized 16-cavity connector. Connector design and location is dictated by an industry wide standard, and is required to provide the following:

- Terminal 1: CAN Bus 7 Serial Data [+]
- Terminal 2: Private Presentation CAN Bus 1 Serial Data [+]
- Terminal 3: Ethernet Bus 1R [+]
- Terminal 4: Scan tool power ground
- Terminal 5: Common signal ground
- Terminal 6: CAN Bus 6 Serial Data [+]
- Terminal 7: Private Presentation CAN Bus 2 Serial Data [+]
- Terminal 8: Ethernet Bus 1 Enable Signal
- Terminal 9: CAN Bus 7 Serial Data [-]
- Terminal 10: Private Presentation CAN Bus 1 Serial Data [-]
- Terminal 11: Ethernet Bus 1R [-]
- Terminal 12: Ethernet Bus 1T [+]
- Terminal 13: Ethernet Bus 1T [-]
- Terminal 14: CAN Bus 6 Serial Data [-]
- Terminal 15: Private Presentation CAN Bus 2 Serial Data [-]
- Terminal 16: Scan tool power, B+

## Serial Data Reference

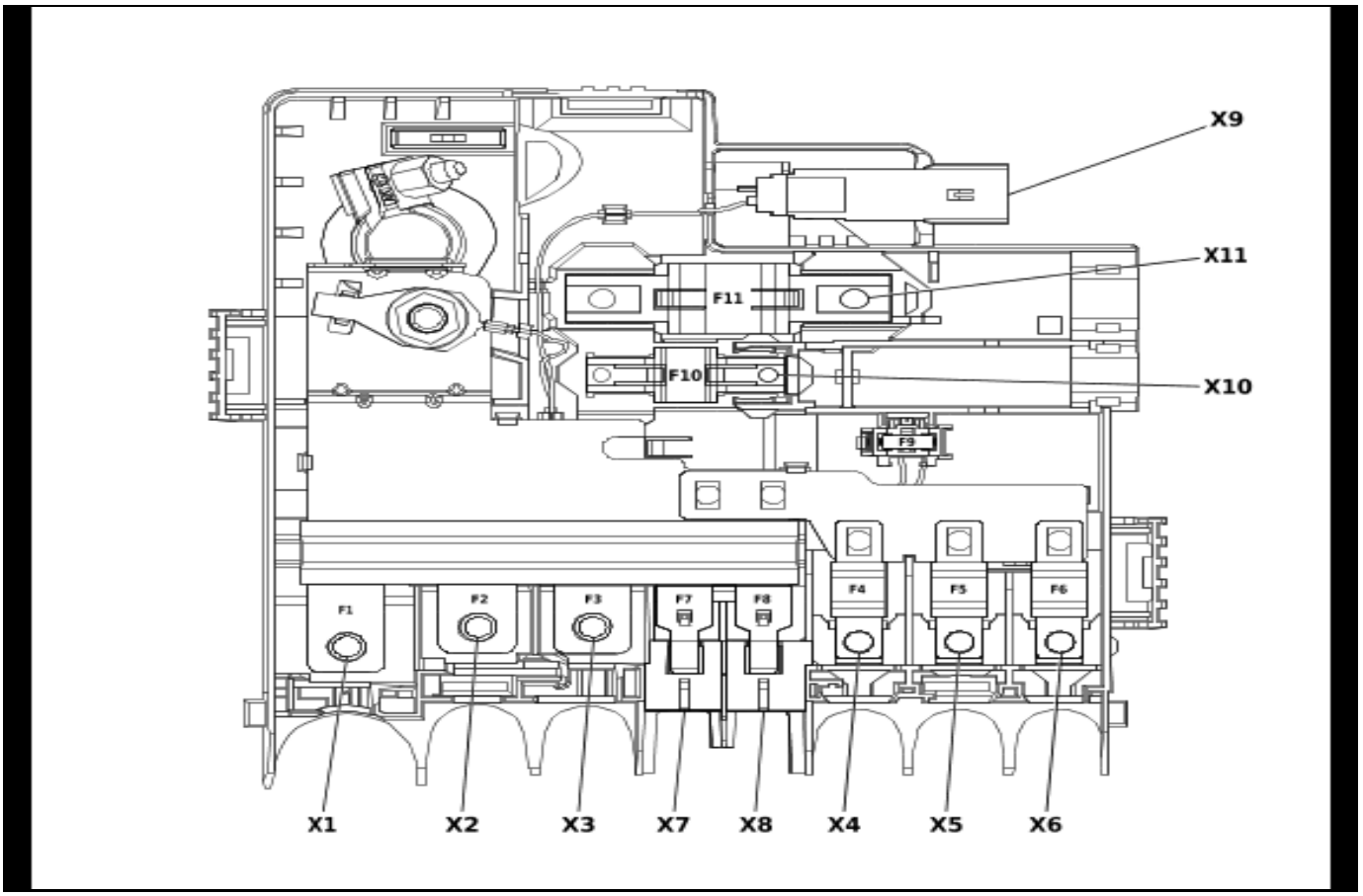
The scan tool communicates over the various buses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every control module that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Communication for that optional control module. In order to avert misdiagnoses of No Communication with a specific control module, refer to Data Link References for a list of control modules and the buses they communicate with. Use schematics and specific vehicle build RPO codes to determine optional control modules.

# Electrical Component and Inline Harness Connector End Views

## Component Locator

### Electrical Center Identification Views

#### X50B Battery Distribution Engine Compartment Fuse Block Top View




5070128

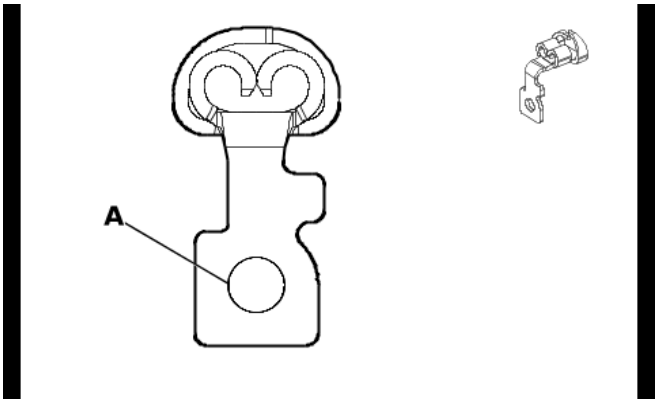
**Usage Table**

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | — | F1BA | 250A | • G13 Generator<br>• X50A Engine Wiring Harness Junction Block |
| F2 | — | F2BA | 250A | • K43 Power Steering Control Module |
| F3 | — | F3BA | 400A | • M64 Starter Motor |
| F4 | — | F4BA | 60A | • E40 Air Heater (C3A) |
| F5 | — | F5BA | 60A | • K20 Engine Control Module (LZ0) |
| F6 | — | F6BA | 80A | • G10R Cooling Fan Motor - Right (LZ0)<br>• G59 Engine Coolant Pump (L3B) |
| F7 | — | F7BA | 60A | • X51AX Instrument Panel Wiring Harness Junction Block - Right (9L7) |
| F8 | — | F8BA | 60A | • X51R Instrument Panel Wiring Harness Junction Block - Right |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F9 | — | F9BA | 60A | • K160 Brake System Control Module<br>• X140 |
| F10 | — | F10BA | 5A | • B110 Battery Sensor Module |

# X50B Battery Distribution Engine Compartment Fuse Block X1 (L84/L87)




5911326

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386516
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

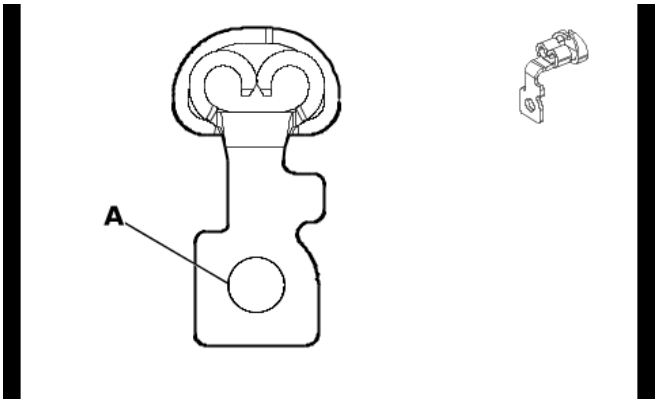
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |
| | 35 | RD / BU | 42 | Battery Positive Voltage | II | — |

# X50B Battery Distribution Engine Compartment Fuse Block X1 (LZ0)




5911326

## Connector Part Information

Harness Type: Generator Battery Jumper Cable
OEM Connector: 84386516
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

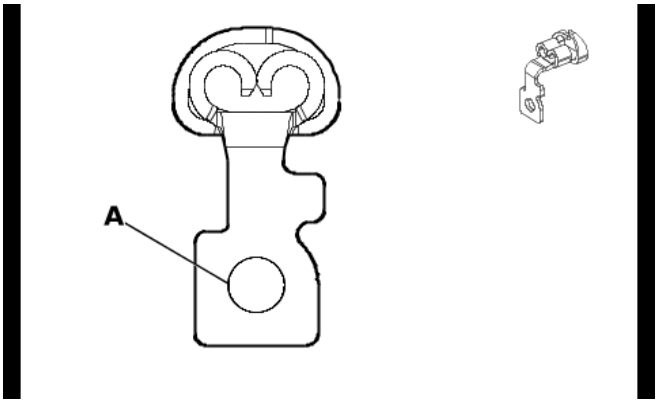
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |
| | 35 | RD / BU | 42 | Battery Positive Voltage | II | — |

# X50B Battery Distribution Engine Compartment Fuse Block X1 (L3B)




5911326

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386516
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

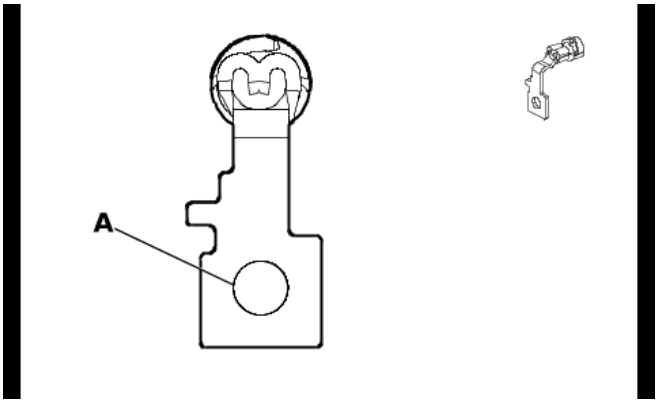
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X2




5664311

## Connector Part Information

Harness Type: Power Steering Wiring Harness
OEM Connector: 84386514
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

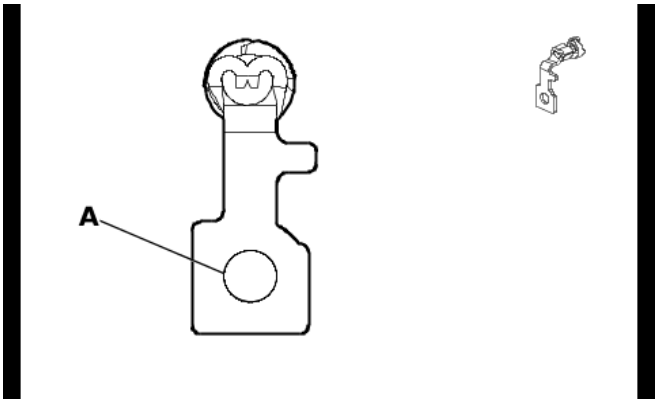
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 25 | RD / VT | 3542 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X3 (L3B)




5881244

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386515
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

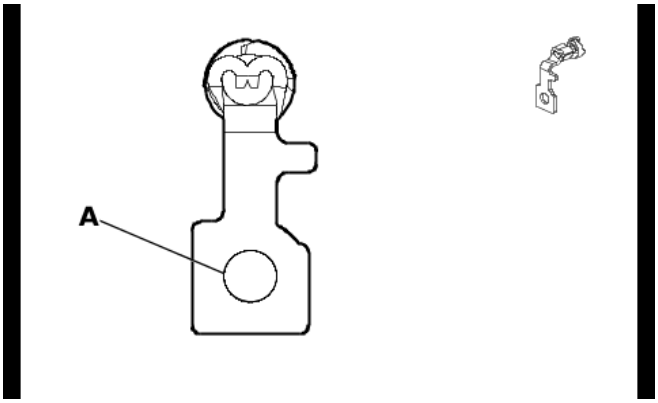
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X3 (L84/L87)




5881244

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386515
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

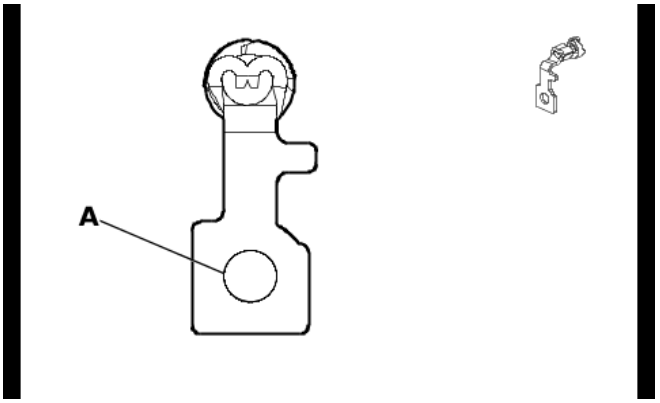
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X3 (LZ0)




5881244

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386515
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

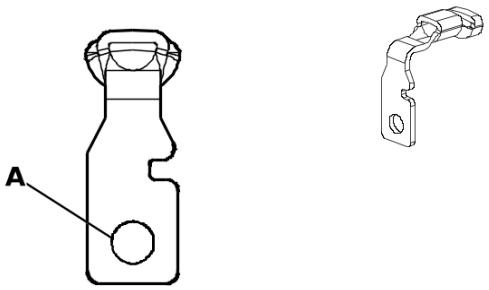
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X4 (C32)




5194789

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35085117
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

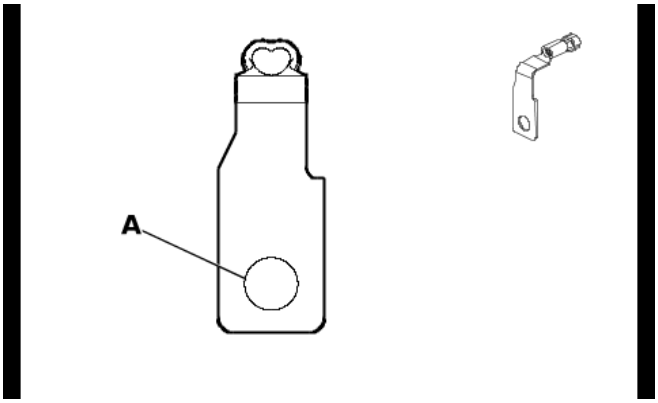
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X4 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 10 | RD / GY | 642 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X5 (LZ0)




5373306

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35169508
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

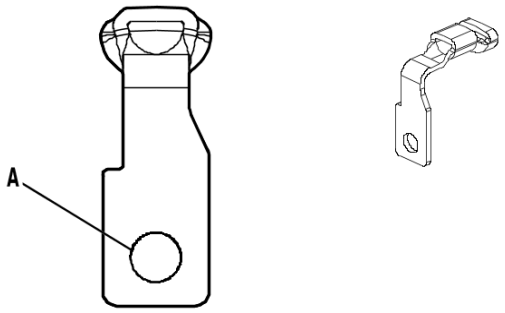
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X5 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 6 | BN / BU | 104 | Glow Plug Control | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X6 (L3B)




4994507

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

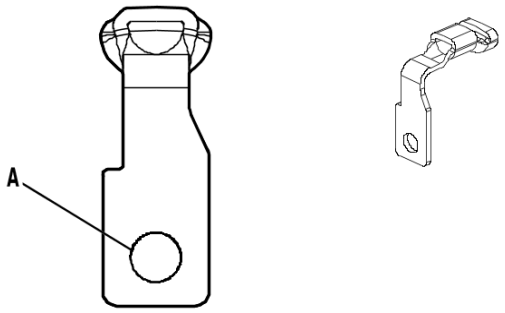
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X6 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 10 | RD / BN | 1742 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X6 (LZ0)




4994507

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

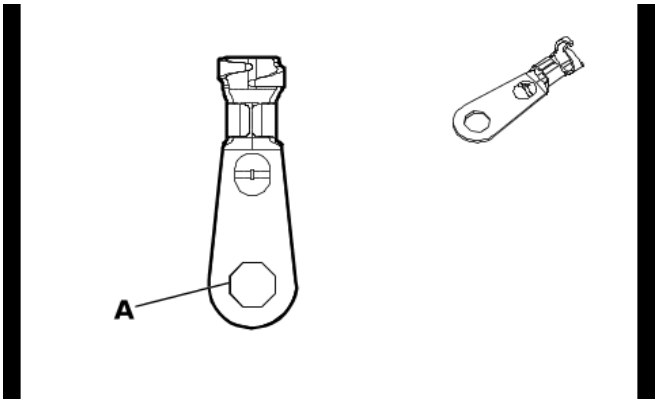
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X6 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 8 | RD / BN | 1742 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X7 (9L7)




5920578

## Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 13624367
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

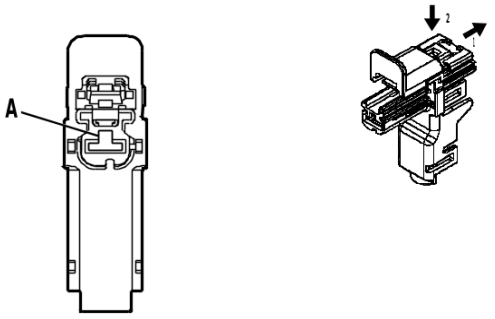
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X7 (9L7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 10 | RD / VT | 542 | Battery Positive Voltage | I | — |
| A | — | — | — | Not Occupied | — | — |

# X50B Battery Distribution Engine Compartment Fuse Block X8




4994171

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33297579
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Series( BU)

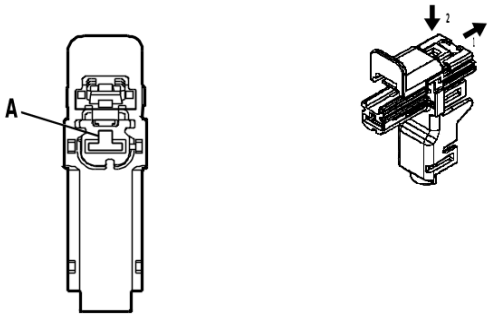
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X8

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 5 | RD / YE | 1442 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X9




4994183

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33297578
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Series( BK)

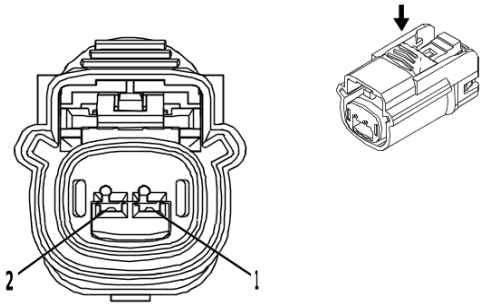
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X9

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 6 | RD / WH | 1642 | Battery Positive Voltage | I | — |

# X50B Battery Distribution Engine Compartment Fuse Block X11




4332222

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33314786
Service Connector: 19368124
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

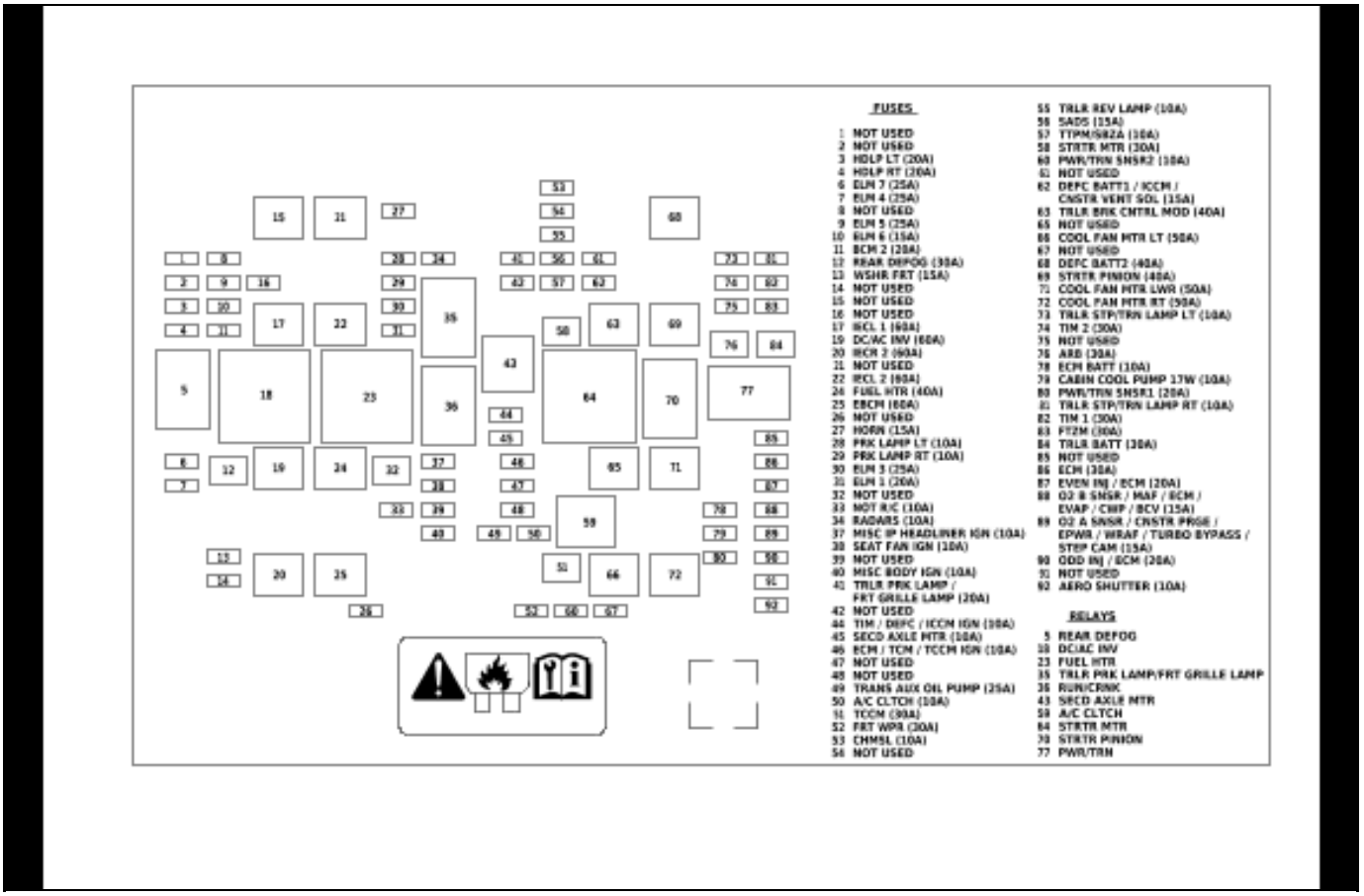
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## X50B Battery Distribution Engine Compartment Fuse Block X11

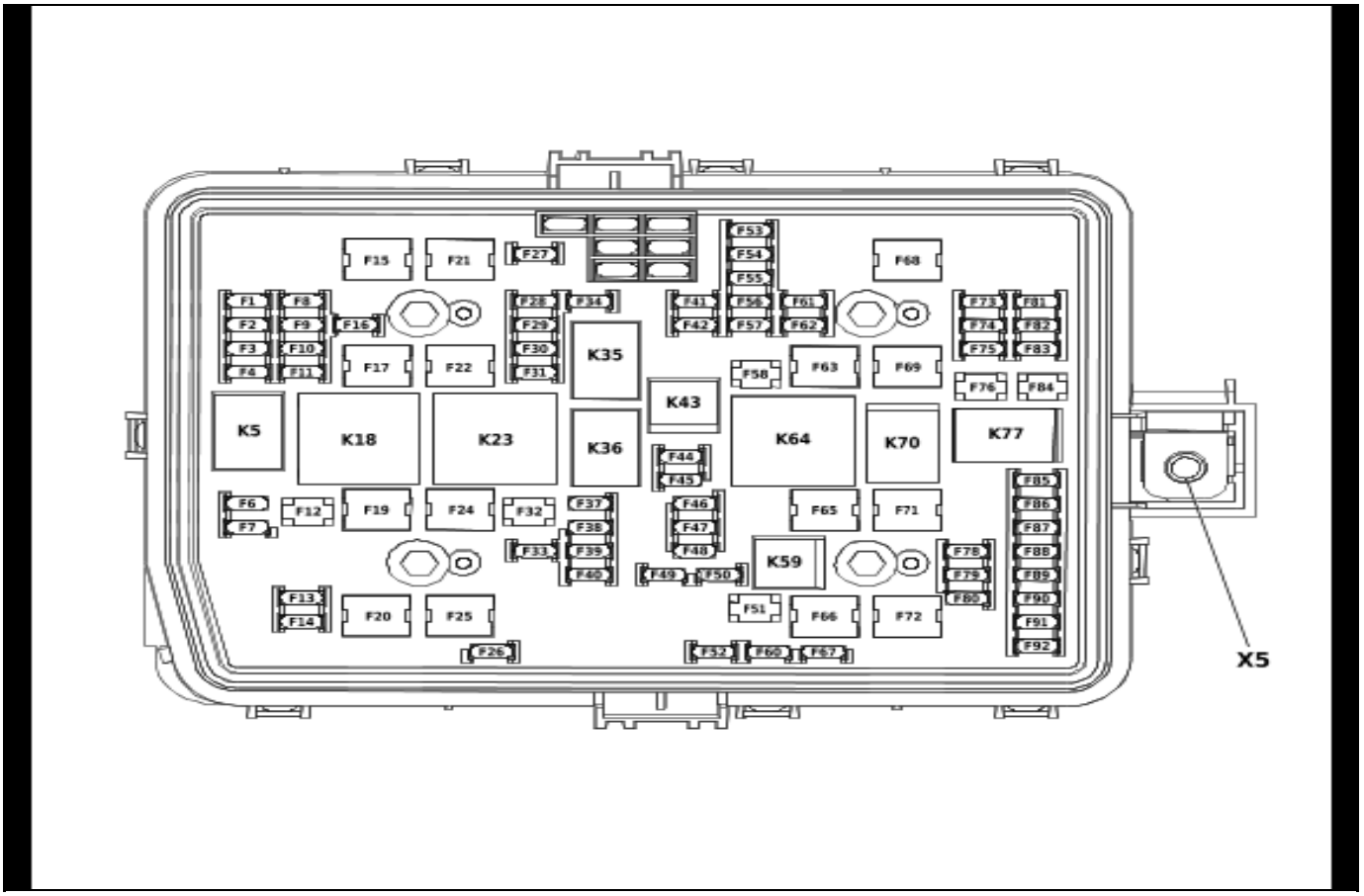
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD / YE | 2340 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |

# X50A Engine Wiring Harness Junction Block Label




5969415

## X50A Engine Wiring Harness Junction Block Top View




6013389

### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | NOT USED | F1UA | — | • Not Used |
| F2 | NOT USED | F2UA | — | • Not Used |
| F3 | HDLP LT | F3UA | 20A | • E13LA Front Headlamp - Left |
| F4 | HDLP RT | F4UA | 20A | • E13RA Front Headlamp - Right |
| F6 | ELM 7 | F6UA | 25A | • K219 Lighting Control Module |
| F7 | ELM 4 | F7UA | 25A | • K219 Lighting Control Module |
| F8 | NOT USED | F8UA | — | • Not Used |
| F9 | ELM 5 | F9UA | 25A | • K219 Lighting Control Module |
| F10 | ELM 6 | F10UA | 15A | • K219 Lighting Control Module |
| F11 | BCM 2 | F11UA | 20A | • K9 Body Control Module |
| F12 | REAR DEFOG | F12UA | 30A | • E18 Rear Window Defogger Grid |
| F13 | WSHR FRT | F13UA | 15A | • G24 Windshield Washer Pump |
| F14 | NOT USED | F14UA | — | • Not Used |
| F15 | NOT USED | F15UA | — | • Not Used |
| F16 | NOT USED | F16UA | — | • Not Used |
| F17 | IECL 1 | F17UA | 60A | • X53AF Body Wiring Harness Junction Block |
| F19 | DC/AC INV | F19UA | 60A | • T1 DC/AC Converter Control Module (KI4/KI5) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F20 | IECR2 | F20UA | 60A | • X51R Instrument Panel Wiring Harness Junction Block - Right |
| F21 | NOT USED | F21UA | — | • Not Used |
| F22 | IECL 2 | F22UA | 60A | • X53AF Body Wiring Harness Junction Block |
| F24 | FUEL HTR | F24UA | 40A | • R29 Fuel Filter (LZ0) |
| F25 | EBCM | F25UA | 60A | • K160 Brake System Control Module |
| F26 | NOT USED | F26UA | — | • Not Used |
| F27 | HORN | F27UA | 15A | • P13 Horn |
| F28 | PARK LAMP LT | F28UA | 10A | • A9A Outside Rearview Mirror - Driver (DPO/DQS)<br>• A9B Outside Rearview Mirror - Passenger (DPO/DQS) |
| F29 | PARK LAMP RT | F29UA | 10A | • Not Used |
| F30 | ELM 3 | F30UA | 25A | • K219 Lighting Control Module |
| F31 | ELM 1 | F31UA | 20A | • K219 Lighting Control Module |
| F32 | NOT USED | F32UA | — | • Not Used |
| F33 | NOT R/C | F33UA | 10A | • K60 Column Lock Module |
| F34 | RADARS | F34UA | 10A | • B233B Forward Range Radar Sensor - Long Range (UKL/(UGN-UKL))<br>• B233LF Short Range Radar Sensor - Left Front (UKL)<br>• B233RF Short Range Radar Sensor - Right Front (UKL)<br>• B233LR Short Range Radar Rear Sensor - Left (UKL)<br>• B233RR Short Range Radar Rear Sensor - Right (UKL)<br>• B233SL Short Range Radar Rear Side Sensor - Left (UKL)<br>• B233SR Short Range Radar Rear Side Sensor - Right (UKL) |
| F37 | MISC IP HEAD-LINER IGN | F37UA | 10A | • A10 Inside Rearview Mirror<br>• B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor (ASV+CE1)<br>• B160 Inside Air Moisture and Windshield Temperature Sensor (ASV-CE1)<br>• E40 Air Heater (C32)<br>• P16 Instrument Panel Cluster Control Module<br>• P43 Forward Collision Alert Display ((UEU/UHX)-UV6)<br>• X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary (9L7) |
| F38 | SEAT FAN IGN | F38UA | 10A | • M73A Front Seat Back Ventilation Blower - Driver (KQV)<br>• M73B Front Seat Back Ventilation Blower - Passenger (KQV)<br>• M73D Front Seat Cushion Ventilation Blower - Driver (KQV)<br>• M73P Front Seat Cushion Ventilation Blower - Passenger (KQV) |
| F39 | NOT USED | F39UA | — | • Not Used |
| F40 | MISC BODY IGN | F40UA | 10A | • K36 Restraints Control Module<br>• K160 Brake System Control Module<br>• K212 Gear Shift Control Module (MHS/MQC)<br>• K219 Lighting Control Module<br>• T1 DC/AC Converter Control Module (KI4/KI5) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F41 | TRLR PRK LAMP / GRT GRILLE LAMP | F41UA | 20A | • X88B Tow Vehicle Electrical Receptacle (Z82-UET) |
| F42 | NOT USED | F42UA | — | • Not Used |
| F44 | TIM / DEFC / ICCM IGN | F44UA | 10A | • K38 Chassis Control Module (G93/G94)<br>• K68 Trailer Lamp Control Module (UET)<br>• K115 Reductant Control Module (FHX) |
| F45 | SECD AXLE MTR | F45UA | 10A | • M26 Front Drive Axle Actuator (NP0/NQH) |
| F46 | ECM / TCM / TCCM IGN | F46UA | 15A | • K20 Engine Control Module<br>• K69 Transfer Case Control Module (NP0/NQH)<br>• K71 Transmission Control Module |
| F47 | NOT USED | F47UA | — | • Not Used |
| F48 | NOT USED | F48UA | — | • Not Used |
| F49 | TRANS AUX OIL PUMP | F49UA | 25A | • G5 Automatic Transmission Auxiliary Fluid Pump (MQB/MQC/MHT/MHS) |
| F50 | A/C CLTCH | F50UA | 10A | • Q2 Air Conditioning Clutch |
| F51 | TCCM | F51UA | 30A | • K69 Transfer Case Control Module (NP0/NQH) |
| F52 | FRT WPR | F52UA | 30A | • M75 Windshield Wiper Motor |
| F53 | CHMSL | F53UA | 10A | • E6A High Mount Stop and Cargo Lamp (Regular Cab) |
| F54 | NOT USED | F54UA | — | • Not Used |
| F55 | TRLR REV LAMP | F55UA | 10A | • X88B Tow Vehicle Electrical Receptacle (Z82-UET) |
| F56 | SADS | F56UA | 15A | • K19 Suspension Control Module (Z45) |
| F57 | TTPM/SBZA | F57UA | 10A | • B218L Side Obstacle Detection Control Module - Left (UKC/UKV)<br>• B218R Side Obstacle Detection Control Module - Right (UKC/UKV)<br>• K214 Trailer Tire Pressure Indicator Module (UET) |
| F58 | STRTR MTR | F58UA | 30A | • M64 Starter Motor |
| F60 | PWR/TRN SNSR2 | F60UA | 10A | • B195A Nitrogen Oxides Sensor 1 (LZ0)<br>• K212 Gear Shift Control Module (LZ0+MQC)<br>• T19 Multifunction Power Supply Converter (LZ0) |
| F61 | NOT USED | F61UA | — | • Not Used |
| F62 | DEFC BATT1 / ICCM / CNSTR VENT SOL | F62UA | 15A | • K115 Reductant Control Module (LZ0)<br>• Q13 Evaporative Emission Canister Vent Solenoid Valve (L3B/L84/L87) |
| F63 | TRLR BRK CNTRL MOD | F63UA | 40A | • K67 Trailer Brake Control Module (JL1)<br>• W24 Blunt Cut - Trailer Brakes Provision (Z82-JL1) |
| F65 | NOT USED | F65UA | — | • Not Used |
| F66 | COOL FAN MTR LT | F66UA | 50A | • G10L Cooling Fan Motor - Left |
| F67 | NOT USED | F67UA | — | • Not Used |
| F68 | DEFC BATT2 | F68UA | 40A | • K115 Reductant Control Module (LZ0) |
| F69 | STRTR PINION | F69UA | 40A | • M64 Starter Motor (L3B/L84/L87) |
| F71 | COOL FAN MTR LWR | F71UA | 50A | • G10LW Cooling Fan Motor - Lower (L3B/LZ0) |
| F72 | COOL FAN MTR RT | F72UA | 50A | • G10R Cooling Fan Motor - Right (L3B/L84/L87) |
| F73 | TRLR STP/TRN LAMP LT | F73UA | 10A | • X88B Tow Vehicle Electrical Receptacle (Z82-UET) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F74 | TIM 2 | F74UA | 30A | • K68 Trailer Lamp Control Module (UET) |
| F75 | NOT USED | F75UA | — | • K38 Chassis Control Module (G93/G94) |
| F76 | ARB | F76UA | 30A | • K4 Running Board Control Module (BRS) |
| F78 | ECM BATT | F78UA | 10A | • K20 Engine Control Module |
| F79 | CABIN COOL PUMP 17W | F79UA | 10A | • G8 Engine Coolant Pump - Auxiliary (L84/L87/LZ0) |
| F80 | PWR/TRN SNSR1 | F80UA | 20A | • B195B Nitrogen Oxides Sensor 2 (LZ0)<br>• B195C Nitrogen Oxides Sensor 3 (LZ0)<br>• B136 Exhaust Particulate Matter Sensor (LZ0)<br>• K111 Fuel Pump Power Control Module (LZ0)<br>• R29 Fuel Filter (LZ0) |
| F81 | TRLR STP/TRN LAMP RT | F81UA | 10A | • X88B Tow Vehicle Electrical Receptacle (Z82-UET) |
| F82 | TIM 1 | F82UA | 30A | • K68 Trailer Lamp Control Module (UET) |
| F83 | FTZM | F83UA | 30A | • K111 Fuel Pump Power Control Module |
| F84 | TRLR BATT | F84UA | 30A | • X88B Tow Vehicle Electrical Receptacle (Z82) |
| F85 | NOT USED | F85UA | — | • Not Used |
| F86 | ECM | F86UA | 30A | • K20 Engine Control Module |
| F87 | EVEN INJ / ECM | F87UA | 20A | • K20 Engine Control Module (L84/L87)<br>• T8B Ignition Coil 2 (L84/L87)<br>• T8D Ignition Coil 4 (L84/L87)<br>• T8F Ignition Coil 6 (L84/L87)<br>• T8H Ignition Coil 8 (L84/L87) |
| F88 | O2 B SNSR / MAF / ECM / EVAP / CWP / BCV | F88UA | 15A | • B75 Mass Airflow Sensor<br>• B52B Heated Oxygen Sensor 2 (L3B/L84/L87)<br>• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L84/L87)<br>• B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L84/L87)<br>• G58 Evaporative Emission Canister Purge Pump (L3B)<br>• K20 Engine Control Module<br>• M10 Charge Air Cooler Coolant Pump (LZ0)<br>• Q97B Engine Coolant Flow Control Valve - Block (L3B/LZ0) |
| F89 | O2 A SNSR / CNSTR PRGE / EPWR / WRAF / TURBO BYPASS / STEP CAM | F89UA | 15A | • B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L3B/L84/L87)<br>• B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L84/L87)<br>• M129A Intake Camshaft Profile Actuator 1 (L3B)<br>• M129B Intake Camshaft Profile Actuator 2 (L3B)<br>• M129C Intake Camshaft Profile Actuator 3 (L3B)<br>• M129D Intake Camshaft Profile Actuator 4 (L3B)<br>• M130B Exhaust Camshaft Profile Actuator 2 (L3B)<br>• M130C Exhaust Camshaft Profile Actuator 3 (L3B)<br>• Q12 Evaporative Emission Canister Purge Solenoid Valve (L3B/L84/L87)<br>• Q40 Turbocharger Bypass Valve Solenoid (L3B)<br>• Q44 Engine Oil Pressure Control Solenoid Vlave (L3B/L84/L87) |

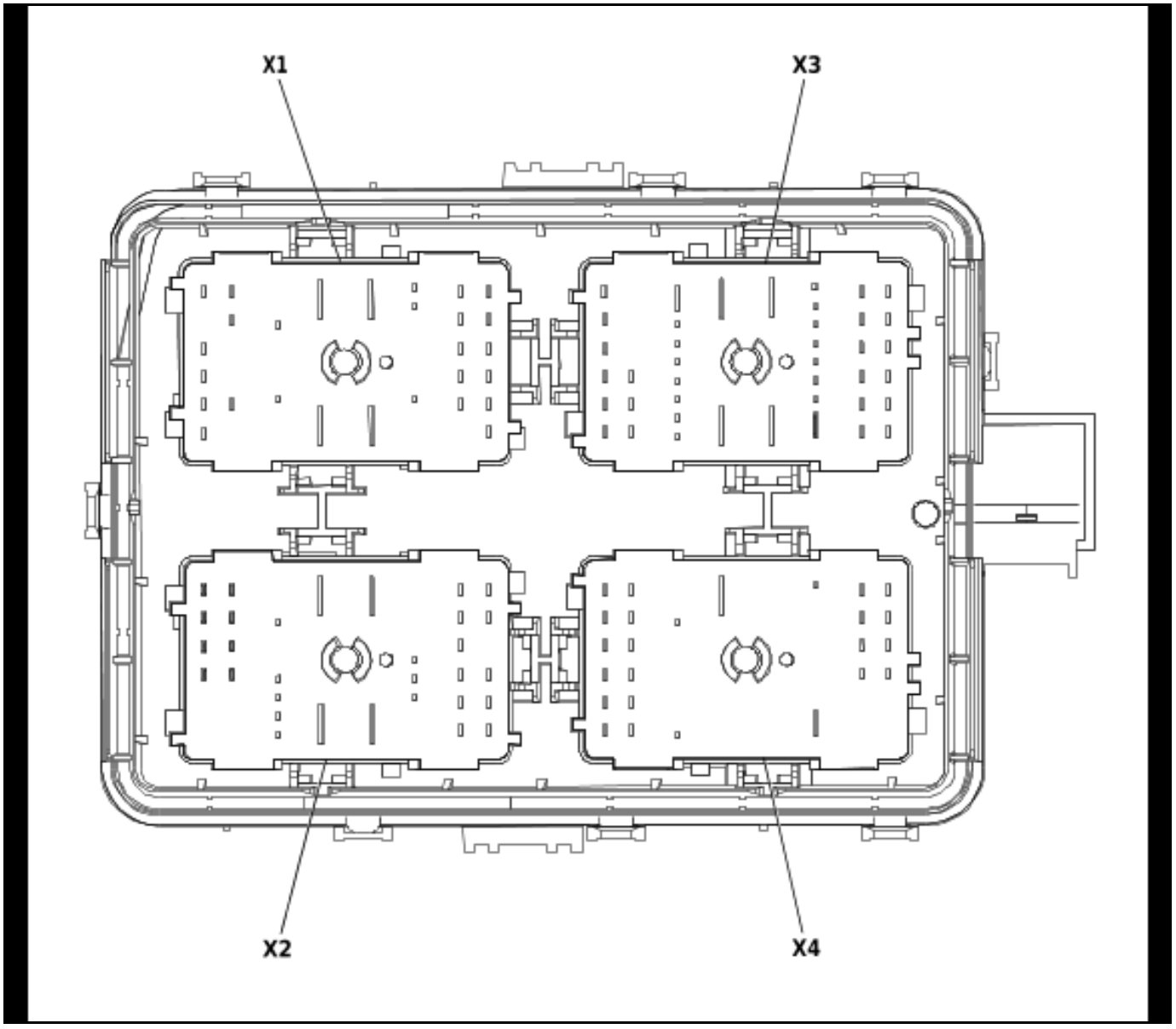
## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F90 | ODD INJ / ECM | F90UA | 20A | • K20 Engine Control Module<br>• T8A Ignition Coil 1 (L3B/L84/L87)<br>• T8B Ignition Coil 2 (L3B)<br>• T8C Ignition Coil 3 (L3B/L84/L87)<br>• T8D Ignition Coil 4 (L3B)<br>• T8E Ignition Coil 5 (L84/L87)<br>• T8G Ignition Coil 7 (L84/L87) |
| F91 | NOT USED | F91UA | — | • Not Used |
| F92 | AERO SHUTTER | F92UA | 10A | • M96 Active Grille Air Shutter Actuator (VTI/WMI)<br>• M96B Active Grille Air Shutter Actuator 2 (WMI) |
| **Relays** | | | | |
| K5 | REAR DEFOG | KR5 Rear Window Defogger Relay | — | • F12UA |
| K18 | DC/AC INV | KR202 Accessory AC and DC Power Control Module Relay | — | • F19UA |
| K23 | FUEL HTR | KR22 Fuel Heater Relay | — | • R29 Fuel Filter (LZ0) |
| K35 | TRLR PRK LAMP/ FRT GRILLE LAMP | KR53 Parking Lamp Relay | — | • F28UA<br>• F41UA |
| K36 | RUN/CRNK | KR73 Ignition Main Relay | — | • F33UA<br>• F37UA<br>• F38UA<br>• F40UA<br>• F44UA<br>• F46UA |
| K43 | SECD AXLE MTR | KR203 Front Drive Axle Actuator Relay | — | • F45UA (NP0/NQH) |
| K59 | A/C CLTCH | KR29 A/C Compressor Clutch Relay | — | • F50UA |
| K64 | STRTR MTR | KR27 Starter Motor | — | • M64 Starter Motor |
| K70 | STRTR PINION | KR27C Engine Restart Relay | — | • M64 Starter Motor (L3B/L84/L87) |
| K77 | PWR/TRN | KR75 Engine Controls Ignition Relay | — | • F86UA<br>• F87UA<br>• F88UA<br>• F89UA<br>• F90UA<br>• F92UA<br>• KR29 Air Conditioning Compressor Relay |
| **Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.** | | | | |
| — | — | KR3 Horn Relay | — | • F27UA |
| — | — | KR11 Windshield Washer Pump Relay | — | • G24 Windshield Washer Pump |
| — | — | KR12B Windshield Wiper Motor Relay | — | • M75 Windshield Wiper Motor |
| — | — | KR12C Windshield Wiper Motor Speed Control Relay | — | • M75 Windshield Wiper Motor |

## Usage Table (cont'd)

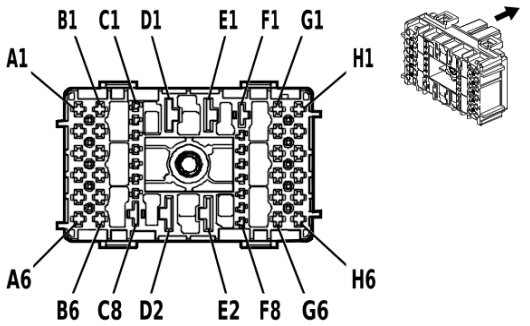
| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| — | — | KR41 High Mount Stop Lamp Relay | — | • F53UA |
| — | — | KR61 Trailer Back-up Lamp Relay | — | • F55UA |
| — | — | KR63L Trailer Stop/Turn Signal Lamp Relay - Left | — | • F73UA |
| — | — | KR63R Trailer Stop/Turn Signal Lamp Relay - Right | — | • F81UA |
| — | — | KR200 Engine Controls Sensor Supply Voltage Relay | — | • F60UA<br>• F80UA |

## X50A Engine Wiring Harness Junction Block Bottom View




5041382

# X50A Engine Wiring Harness Junction Block X1




4994109

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33384590
Service Connector: 19370824
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764079 | J-35616-44 (YE) | J-38125-11A |
| III | 84779405 | J-35616-35 (VT) | J-38125-215A |
| IV | Not required | J-35616-44 (YE) | No Tool Required |

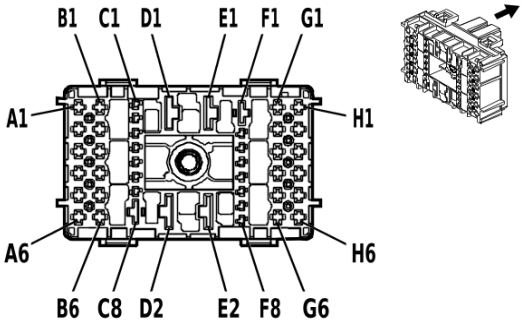
## X50A Engine Wiring Harness Junction Block X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | — | — | — | Not Occupied | — | — |
| A2 | 1.5 | RD / BU | 540 | Battery Positive Voltage | III | — |
| A3 | 0.35 | BN / VT | 193 | Rear Defogger Relay Control | III | — |
| A4 | 0.5 | BK | 650 | Ground | III | — |
| A5 | 0.75 | GY / VT | 228 | Windshield Washer Pump Control | III | — |
| A6 - B1 | — | — | — | Not Occupied | — | — |
| B2 | 2.5 | BN / VT | 293 | Rear Defogger Grid Control | III | — |
| B3 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.5 | WH / GN | 4628 | DC/AC Inverter Relay Control | I | — |
| C4 | 0.35 | BN / GY | 2268 | Windshield Washer Relay Control | I | — |
| C5 - C8 | — | — | — | Not Occupied | — | — |
| D1 | 5 | BN / BK | 4629 | DC/AC Inverter Control | II | — |
| D2 | 10 | RD / WH | 342 | Battery Positive Voltage | IV | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 6 | RD / WH | 1040 | Battery Positive Voltage | II | — |
| F1 - F5 | — | — | — | Not Occupied | — | — |
| F6 | 0.35 | WH / VT | 860 | Windshield Wiper Switch High Signal | I | — |
| F7 - G2 | — | — | — | Not Occupied | — | — |
| G3 | 0.35 | BU / VT | 807 | Ignition Off/Accessory Ignition Voltage | III | — |

## X50A Engine Wiring Harness Junction Block X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| G4 | 0.5 | GN / VT | 5199 | Run/Crank Relay Coil Control | III | — |
| G5 | 2 | BK | 150 | Ground | III | — |
| G6 | 0.35 | GY | 91 | Windshield Wiper Motor Relay Coil Control | III | — |
| H1 | 0.5 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | III | — |
| H2 | 0.75 | VT / WH | 1139 | Run/Crank Ignition 1 Voltage | III | — |
| H3 | 0.5 | VT / WH | 639 | Run/Crank Ignition 1 Voltage | III | — |
| H4 | 0.5 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | III | — |
| H5 | 2 | WH | 92 | Windshield Wiper Motor High Speed Control | III | — |
| H6 | 2 | YE / BN | 95 | Windshield Wiper Motor Low Speed Control | III | — |

# X50A Engine Wiring Harness Junction Block X2




4994132

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33384594
Service Connector: 19371174
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84779405 | J-35616-35 (VT) | J-38125-215A |
| III | Not required | J-35616-44 (YE) | No Tool Required |

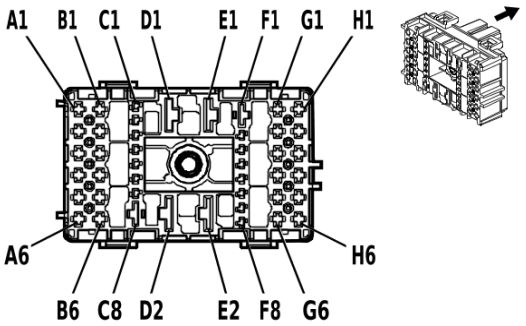
## X50A Engine Wiring Harness Junction Block X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 - A4 | — | — | — | Not Occupied | — | — |
| A5 | 1.5 | RD / WH | 640 | Battery Positive Voltage | II | — |
| A6 | 1.5 | RD / YE | 740 | Battery Positive Voltage | II | — |
| B1 - B4 | — | — | — | Not Occupied | — | — |
| B5 | 0.5 | RD / BU | 840 | Battery Positive Voltage | II | — |
| B6 | 1 | GN / YE | 6840 | Auxiliary Device 2 Switched Voltage | II | — |
| C1 | 0.35 | YE / BU | 318 | Left Rear Trailer Stop/Turn Lamp Control | I | — |
| C2 | 0.35 | GN / BN | 319 | Right Rear Trailer Stop/Turn Lamp Control | I | — |
| C3 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD / GY | 142 | Battery Positive Voltage | III | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 10 | RD / GN | 242 | Battery Positive Voltage | III | — |
| F1 | — | — | — | Not Occupied | — | — |
| F2 | 0.35 | BN / YE | 820 | Center High Mounted Stop Lamp Supply Voltage | I | — |
| F3 | 0.35 | BU / BN | 38 | Backup Lamp Relay Control | I | — |
| F4 | 0.35 | BN / WH | 28 | Horn Relay Control | I | — |
| F5 - F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.75 | BN / GY | 29 | Horn Control | II | — |
| G2 | — | — | — | Not Occupied | — | — |
| G3 | 1.5 | BN / GN | 4246 | Identification Lamp Control | II | — |

## X50A Engine Wiring Harness Junction Block X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| G4 | — | — | — | Not Occupied | — | — |
| G5 | 1.5 | RD / BN | 1440 | Battery Positive Voltage | II | — |
| G6 | 1 | RD / BN | 1140 | Battery Positive Voltage | II | — |
| H1 | 0.5 | BU / BK | 1053 | Center High Mounted Stop Lamp Control 3 | II | — |
| H2 | — | — | — | Not Occupied | — | — |
| H3 | 0.5 | RD / GN | 3140 | Battery Positive Voltage | II | — |
| H4 - H5 | — | — | — | Not Occupied | — | — |
| H6 | 0.35 | WH / BN | 7055 | Auxiliary Park Lamp Relay Control | II | — |

# X50A Engine Wiring Harness Junction Block X3 (L3B)




4992608

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33384584
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764078 | J-35616-42 (RD) | J-38125-215A |
| III | 84764079 | J-35616-44 (YE) | J-38125-11A |
| IV | 84779405 | J-35616-35 (VT) | J-38125-215A |

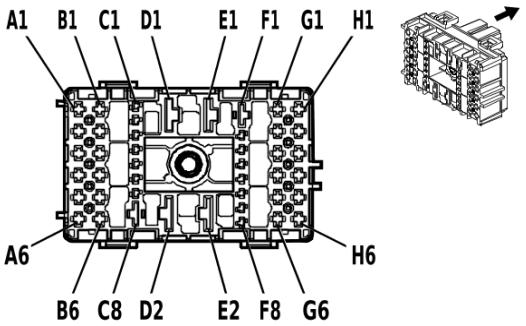
## X50A Engine Wiring Harness Junction Block X3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.75 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | IV | — |
| A2 - A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | IV | — |
| A5 | — | — | — | Not Occupied | — | — |
| A6 | 0.5 | GN | 8016 | Secondary Axle Motor Control | IV | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | IV | — |
| B2 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | IV | — |
| B3 | 0.5 | VT / GY | 8017 | Secondary Axle Motor Relay Control | IV | — |
| B4 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | GN / RD | 6042 | Cruise Control Switch 5V Reference | IV | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.5 | BK | 450 | Ground | I | — |
| C4 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | I | — |
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 5 | RD / GN | 3840 | Battery Positive Voltage | III | — |
| E1 | 5 | RD / GY | 4140 | Battery Positive Voltage | III | — |
| E2 | 5 | RD / PU | 4040 | Battery Positive Voltage | III | — |
| F1 | 2.5 | YE / GN | 4358 | Starter Pinion Solenoid Voltage | II | — |
| F2 | 0.5 | YE / VT | 4325 | Starter Pinion Solenoid Actuator Relay Control | I | — |

## X50A Engine Wiring Harness Junction Block X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F3 | 0.5 | RD / BN | 440 | Battery Positive Voltage | I | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | I | — |
| F5 - F6 | — | — | — | Not Occupied | — | — |
| F7 | 0.5 | VT / BU | 5705 | Powertrain Main Relay Control | I | — |
| F8 - G3 | — | — | — | Not Occupied | — | — |
| G4 | 0.75 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | IV | — |
| G5 | — | — | — | Not Occupied | — | — |
| G6 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | IV | — |
| H1 | 2.5 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | IV | — |
| H2 | — | — | — | Not Occupied | — | — |
| H3 | 1 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | IV | — |
| H4 | 0.75 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | IV | — |
| H5 - H6 | — | — | — | Not Occupied | — | — |

# X50A Engine Wiring Harness Junction Block X3 (L84/L87)




4992608

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33384584
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764078 | J-35616-42 (RD) | J-38125-215A |
| III | 84764079 | J-35616-44 (YE) | J-38125-11A |
| IV | 84779405 | J-35616-35 (VT) | J-38125-215A |

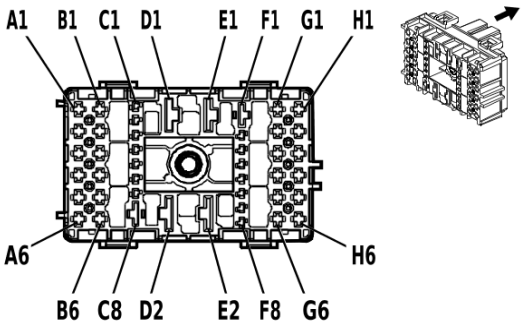
## X50A Engine Wiring Harness Junction Block X3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.75 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | IV | — |
| A2 - A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | IV | — |
| A5 | 1.5 | RD / GY | 8540 | Battery Positive Voltage | IV | — |
| A6 | 0.5 | GN | 8016 | Secondary Axle Motor Control | IV | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | IV | — |
| B2 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | IV | — |
| B3 | 0.5 | VT / GY | 8017 | Secondary Axle Motor Relay Control | IV | — |
| B4 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | GN / RD | 6042 | Cruise Control Switch 5V Reference | IV | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 1 | BK | 450 | Ground | I | — |
| C4 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | I | — |
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 5 | RD / GN | 3840 | Battery Positive Voltage | III | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 5 | RD / PU | 4040 | Battery Positive Voltage | III | — |
| F1 | 2.5 | YE / GN | 4358 | Starter Pinion Solenoid Voltage | II | — |
| F2 | 0.5 | YE / VT | 4325 | Starter Pinion Solenoid Actuator Relay Control | I | — |

## X50A Engine Wiring Harness Junction Block X3 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F3 | 0.5 | RD / BN | 440 | Battery Positive Voltage | I | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | I | — |
| F5 | 0.5 | RD / BU | 6040 | Battery Positive Voltage | I | — |
| F6 | — | — | — | Not Occupied | — | — |
| F7 | 0.5 | VT / BU | 5705 | Powertrain Main Relay Control | I | — |
| F8 - G1 | — | — | — | Not Occupied | — | — |
| G2 | 2 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | IV | — |
| G3 - G5 | — | — | — | Not Occupied | — | — |
| G6 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | IV | — |
| H1 | 2.5 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | IV | — |
| H2 | 0.75 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | IV | — |
| H3 | 1 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | IV | — |
| H4 | 0.75 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | IV | — |
| H5 - H6 | — | — | — | Not Occupied | — | — |

# X50A Engine Wiring Harness Junction Block X3 (LZ0)




4992608

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33384584
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764079 | J-35616-44 (YE) | J-38125-11A |
| III | 84779405 | J-35616-35 (VT) | J-38125-215A |

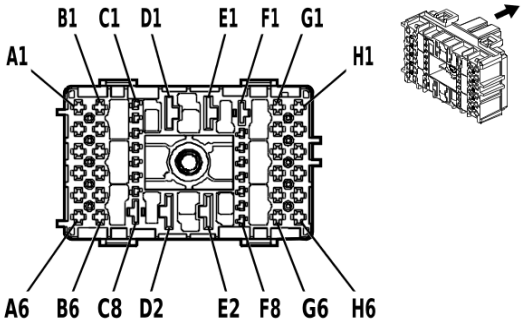
## X50A Engine Wiring Harness Junction Block X3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.75 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | III | — |
| A2 - A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | III | — |
| A5 | 1.5 | RD / GY | 8540 | Battery Positive Voltage | III | — |
| A6 | 0.5 | GN | 8016 | Secondary Axle Motor Control | III | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | III | — |
| B2 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | III | — |
| B3 | 0.5 | VT / GY | 8017 | Secondary Axle Motor Relay Control | III | — |
| B4 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | GN / RD | 6042 | Cruise Control Switch 5V Reference | III | — |
| C1 | 0.5 | BU | 3017 | Fuel Heater Relay 1 Control | I | — |
| C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.75 | BK | 450 | Ground | I | — |
| C4 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | I | — |
| C5 | 0.5 | GN / BU | 3889 | Powertrain Sensor Bus Relay Control | I | — |
| C6 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| C7 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 5 | RD / GN | 3840 | Battery Positive Voltage | II | — |
| E1 | 5 | RD / GY | 4140 | Battery Positive Voltage | II | — |
| E2 - F2 | — | — | — | Not Occupied | — | — |

## X50A Engine Wiring Harness Junction Block X3 (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F3 | 0.75 | RD / BN | 440 | Battery Positive Voltage | I | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | I | — |
| F5 | 0.5 | RD / BU | 6040 | Battery Positive Voltage | I | — |
| F6 | — | — | — | Not Occupied | — | — |
| F7 | 0.5 | VT / BU | 5705 | Powertrain Main Relay Control | I | — |
| F8 - G4 | — | — | — | Not Occupied | — | — |
| G5 | 1.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | III | — |
| G6 | — | — | — | Not Occupied | — | — |
| H1 | 2.5 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | III | — |
| H2 | — | — | — | Not Occupied | — | — |
| H3 | 1 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | III | — |
| H4 | — | — | — | Not Occupied | — | — |
| H5 | 2.5 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | III | — |
| H6 | — | — | — | Not Occupied | — | — |

# X50A Engine Wiring Harness Junction Block X4 (C32)




4993031

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33384574
Service Connector: 19371188
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764078 | J-35616-42 (RD) | J-38125-215A |
| III | 84764079 | J-35616-44 (YE) | J-38125-11A |
| IV | 84779405 | J-35616-35 (VT) | J-38125-215A |

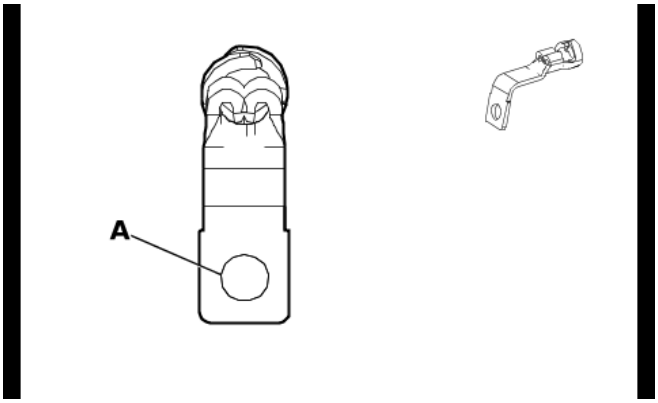
## X50A Engine Wiring Harness Junction Block X4 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | — | — | — | Not Occupied | — | — |
| A2 | 0.5 | RD / BU | 5240 | Battery Positive Voltage | IV | — |
| A3 | 1.5 | BN | 2109 | Trailer Park Lamp Control | IV | — |
| A4 - A5 | — | — | — | Not Occupied | — | — |
| A6 | 0.5 | VT / WH | 639 | Run/Crank Ignition 1 Voltage | IV | — |
| B1 | — | — | — | Not Occupied | — | — |
| B2 | 1 | GY | 1624 | Trailer Backup Lamp Control | IV | — |
| B3 | 0.75 | RD / GN | 2440 | Battery Positive Voltage | IV | — |
| B4 | 0.5 | RD / GN | 6940 | Battery Positive Voltage | IV | — |
| B5 - C6 | — | — | — | Not Occupied | — | — |
| C7 | 1.5<br>0.5 | RD / WH<br>RD / WH | 3440<br>3440 | Battery Positive Voltage<br>Battery Positive Voltage | I<br>I | FHX<br>FJW/ FHS |
| C8 | 2.5 | BN / YE | 2996 | Fuel Heater Control 1 | II | — |
| D1 | — | — | — | Not Occupied | — | — |
| D2 | 4 | OG | 3640 | Battery Positive Voltage | III | — |
| E1 - E2 | — | — | — | Not Occupied | — | — |
| F1 | 2.5 | RD / WH | 2040 | Battery Positive Voltage | II | — |
| F2 - G2 | — | — | — | Not Occupied | — | — |
| G3 | 1 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | IV | — |

## X50A Engine Wiring Harness Junction Block X4 (C32) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| G4 | 2.5 | RD / YE | 5840 | Battery Positive Voltage | IV | — |
| G5 | 1.5 | RD / WH | 5940 | Battery Positive Voltage | IV | — |
| G6 | 2.5 | RD / WH | 1040 | Battery Positive Voltage | IV | — |
| H1 - H2 | — | — | — | Not Occupied | — | — |
| H3 | 1 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | IV | — |
| H4 | 2.5 | RD / VT | 5640 | Battery Positive Voltage | IV | — |
| H5 | 2.5 | RD / VT | 1940 | Battery Positive Voltage | IV | — |
| H6 | 4 | OG | 3940 | Battery Positive Voltage | IV | — |

# X50A Engine Wiring Harness Junction Block X5 (L3B)




5525767

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386513
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

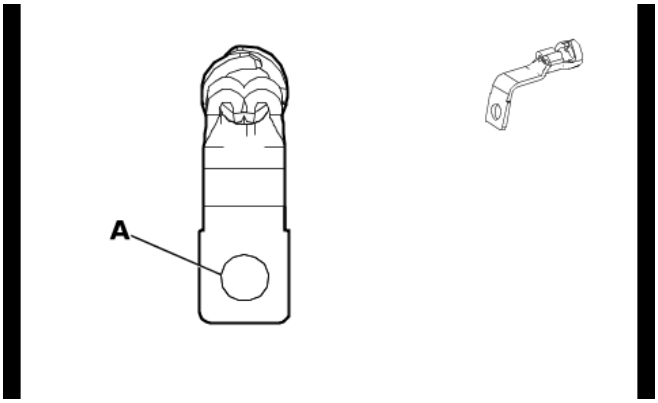
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50A Engine Wiring Harness Junction Block X5 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

# X50A Engine Wiring Harness Junction Block X5 (L84/L87)




5525767

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84386513
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X50A Engine Wiring Harness Junction Block X5 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

# X54 Accessory Wiring Junction Block - Snow Plow (VYU)

—

## Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 35028846
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## X54 Accessory Wiring Junction Block - Snow Plow (VYU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A4 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
| A6 | 0.75 | RD | 9026 | Snow Plow Voltage | I | — |
| B4 | 0.75 | WH / BU | 9030 | Snow Plow Switch Signal | I | — |
| B5 | 0.5 | BN | 9025 | Charge Indicator Control Switch Signal | I | — |

## X55SP Wiring Harness Fuse Holder - Snow Plow (VYU)

—

### Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 33391084
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

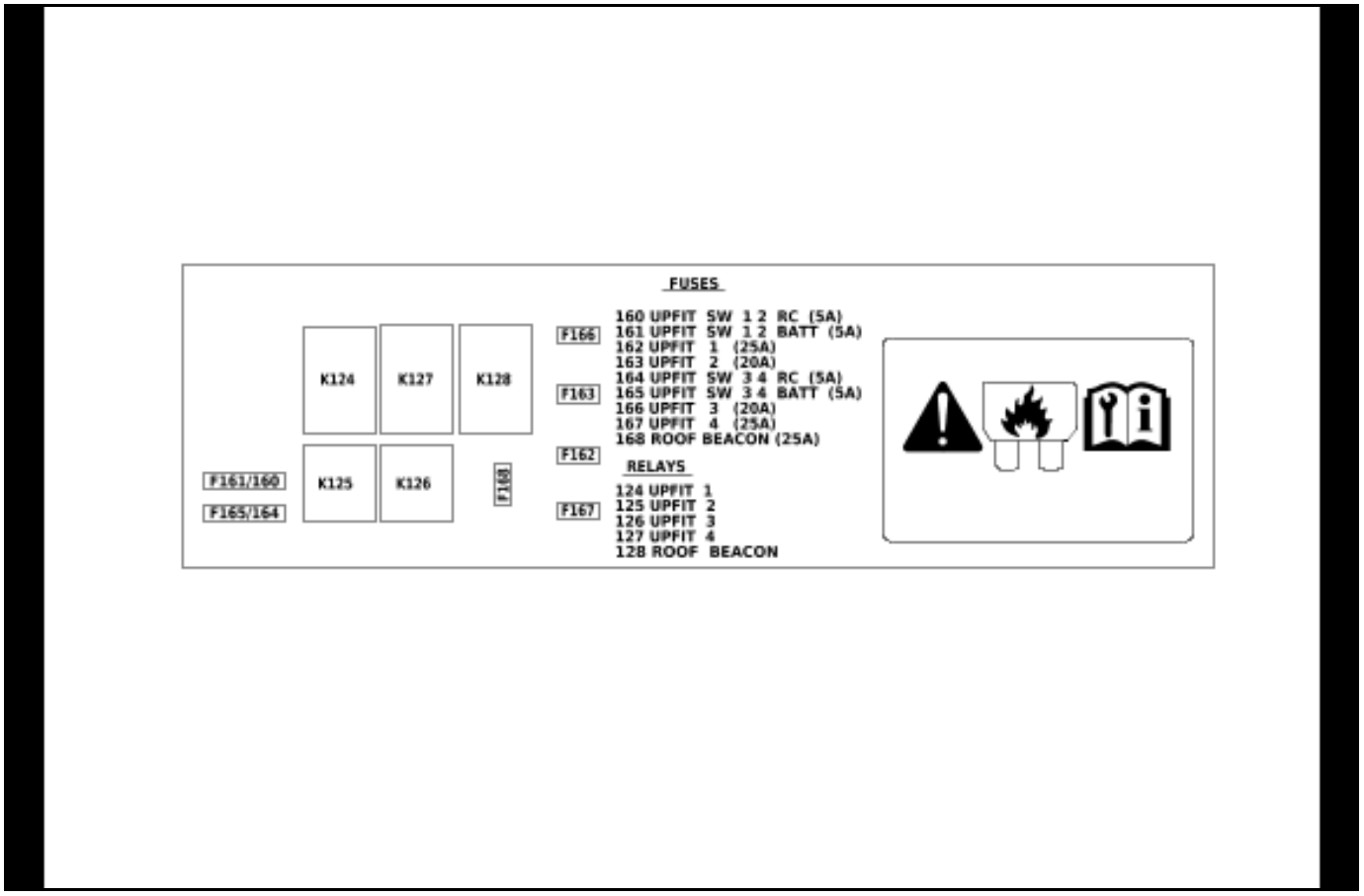
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

### X55SP Wiring Harness Fuse Holder - Snow Plow (VYU)

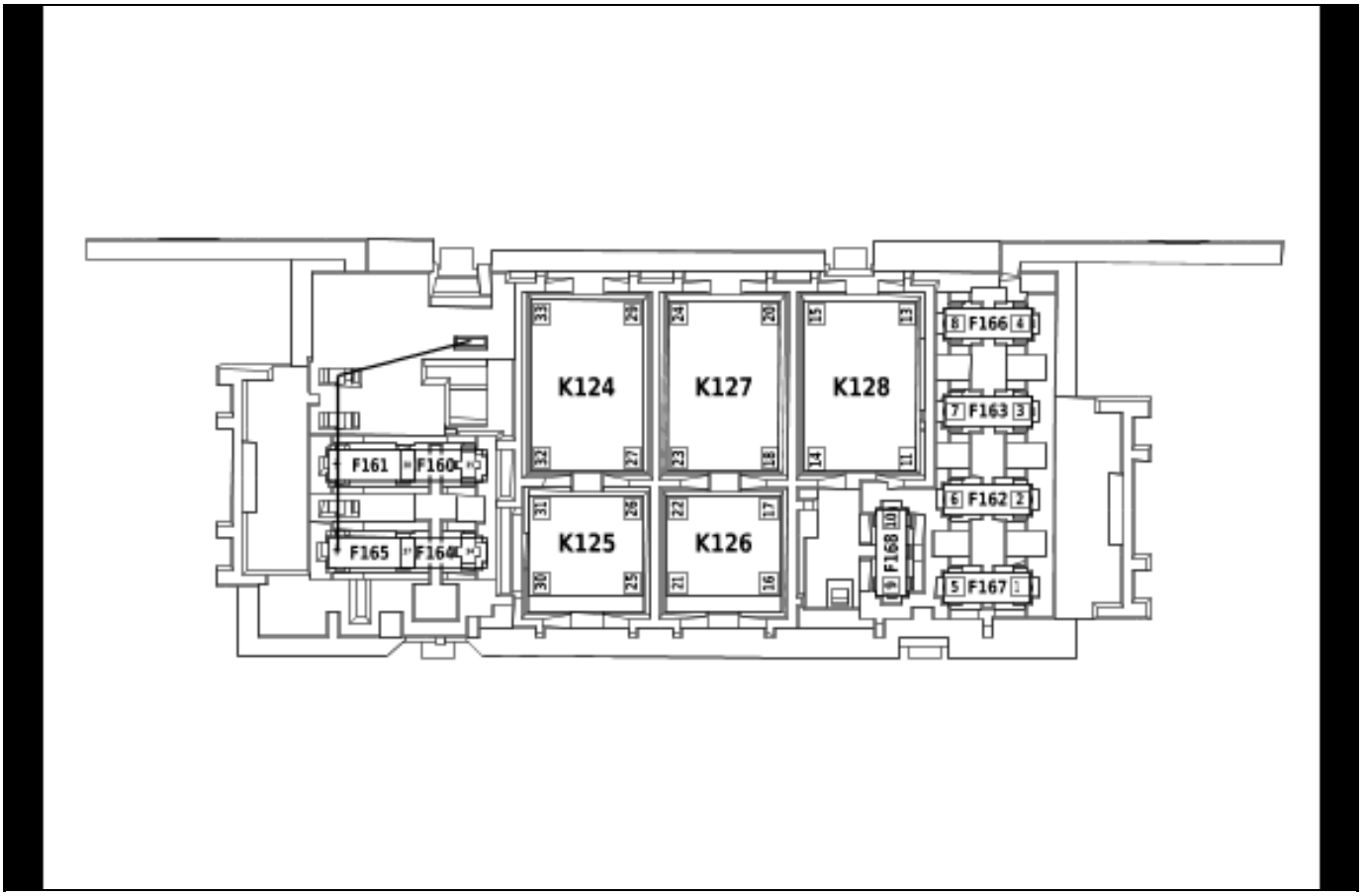
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1 | OG | 9026 | Snow Plow Voltage | I | — |
| B | 1 | OG | 9028 | Snow Plow Voltage | I | — |

## X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary Label (9L7)




5969422

# X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary Top View (9L7)




5988611

## Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F160 | UPFIT SW 1 2 RC | F160DA | 5A | • KR161AA Configurable/Accessory Provision Relay 1<br>• KR161BA Configurable/Accessory Provision Relay 2 |
| F161 | UPFIT SW 1 2 BATT | F161DA | 5A | • KR161AA Configurable/Accessory Provision Relay 1<br>• KR161BA Configurable/Accessory Provision Relay 2 |
| F162 | UPFIT 1 | F162DA | 25A | • X79A Configurable/Accessory Provision Supply Connector |
| F163 | UPFIT 2 | F163DA | 20A | • X79A Configurable/Accessory Provision Supply Connector |
| F164 | UPFIT SW 3 4 RC | F164DA | 5A | • KR161CA Configurable/Accessory Provision Relay 3<br>• KR161DA Configurable/Accessory Provision Relay 4<br>• KR161EA Configurable/Accessory Provision Relay 5 |
| F165 | UPFIT SW 3 4 BATT | F165DA | 5A | • KR161CA Configurable/Accessory Provision Relay 3<br>• KR161DA Configurable/Accessory Provision Relay 4<br>• KR161EA Configurable/Accessory Provision Relay 5 |
| F166 | UPFIT 3 | F166DA | 20A | • X79A Configurable/Accessory Provision Supply Connector |
| F167 | UPFIT 4 | F167DA | 25A | • X79A Configurable/Accessory Provision Supply Connector |
| F168 | ROOF BEACON | F168DA | 25A | • X79A Configurable/Accessory Provision Supply Connector |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Relays** | | | | |
| K124 | UPFIT 1 | KR161AA Configurable/Accessory Provision Relay 1 | — | • F162DA |
| K125 | UPFIT 2 | KR161BA Configurable/Accessory Provision Relay 2 | — | • F163DA |
| K126 | UPFIT 3 | KR161CA Configurable/Accessory Provision Relay 3 | — | • F166DA |
| K127 | UPFIT 4 | KR161DA Configurable/Accessory Provision Relay 4 | — | • F167DA |
| K128 | ROOF BEACON | KR161EA Configurable/Accessory Provision Relay 5 | — | • F168DA |

# X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary (9L7)

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## Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 33323307
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-22 (RD) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

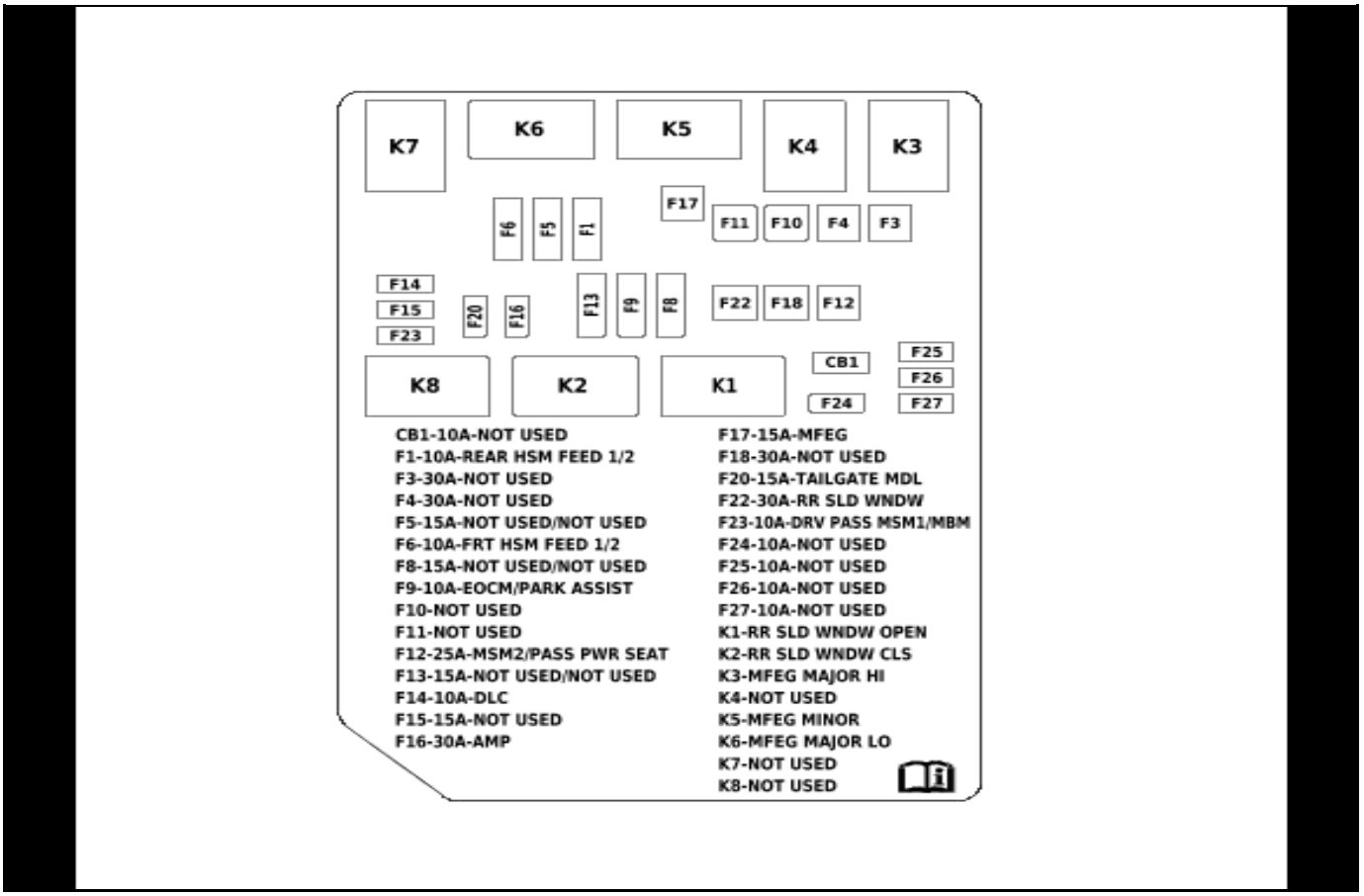
## X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary (9L7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE / BN | 10734 | Upfitter Accessory 4 Supply Voltage | II | — |
| 2 | 2.5 | BU | 10731 | Upfitter Accessory 1 Supply Voltage | II | — |
| 3 | 2.5 | GY / BK | 10732 | Upfitter Accessory 2 Supply Voltage | II | — |
| 4 | 2.5 | BN / WH | 10733 | Upfitter Accessory 3 Supply Voltage | II | — |
| 5 | 2.5 | YE | 10729 | Upfitter Accessory Fuse 4 Supply Voltage | II | — |
| 6 | 2.5 | BU / GN | 10726 | Upfitter Accessory Fuse 1 Supply Voltage | II | — |
| 7 | 2.5 | GY | 10727 | Upfitter Accessory Fuse 2 Supply Voltage | II | — |
| 8 | 2.5 | BN | 10728 | Upfitter Accessory Fuse 3 Supply Voltage | II | — |
| 9 | 2.5 | VT / BU | 10735 | Upfitter Accessory 5 Supply Voltage | II | — |
| 10 | 2.5 | VT | 10730 | Upfitter Accessory Fuse 5 Supply Voltage | II | — |
| 11 | 2.5 | VT | 10730 | Upfitter Accessory Fuse 5 Supply Voltage | II | — |
| 13 | 0.35 | VT / BN | 10723 | Upfitter Accessory Relay 3 Coil Supply Voltage | II | — |
| 14 | 0.35 | GY / VT | 10720 | Upfitter Accessory Relay 5 Coil Control | II | — |
| 15 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 16 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 17 | 0.35 | GN / BN | 10718 | Upfitter Accessory Relay 3 Coil Control | II | — |
| 18 | 2.5 | YE | 10729 | Upfitter Accessory Fuse 4 Supply Voltage | II | — |
| 20 | 0.35 | VT / BN | 10723 | Upfitter Accessory Relay 3 Coil Supply Voltage | II | — |
| 21 | 0.35 | VT / BN | 10723 | Upfitter Accessory Relay 3 Coil Supply Voltage | II | — |
| 22 | 2.5 | BN | 10728 | Upfitter Accessory Fuse 3 Supply Voltage | II | — |
| 23 | 0.35 | WH / YE | 10719 | Upfitter Accessory Relay 4 Coil Control | II | — |
| 24 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 25 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 26 | 0.35 | VT / GY | 10717 | Upfitter Accessory Relay 2 Coil Control | II | — |
| 27 | 2.5 | BU / GN | 10726 | Upfitter Accessory Fuse 1 Supply Voltage | II | — |
| 29 | 0.35 | BU / VT | 10721 | Upfitter Accessory Relay 1 Coil Supply Voltage | II | — |
| 30 | 0.35 | BU / VT | 10721 | Upfitter Accessory Relay 1 Coil Supply Voltage | II | — |
| 31 | 2.5 | GY | 10727 | Upfitter Accessory Fuse 2 Supply Voltage | II | — |
| 32 | 0.35 | BU / WH | 10716 | Upfitter Accessory Relay 1 Coil Control | II | — |
| 33 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 34 | 0.5 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | II | — |

## X51AX Instrument Panel Wiring Harness Junction Block - Auxiliary (9L7) (cont'd)

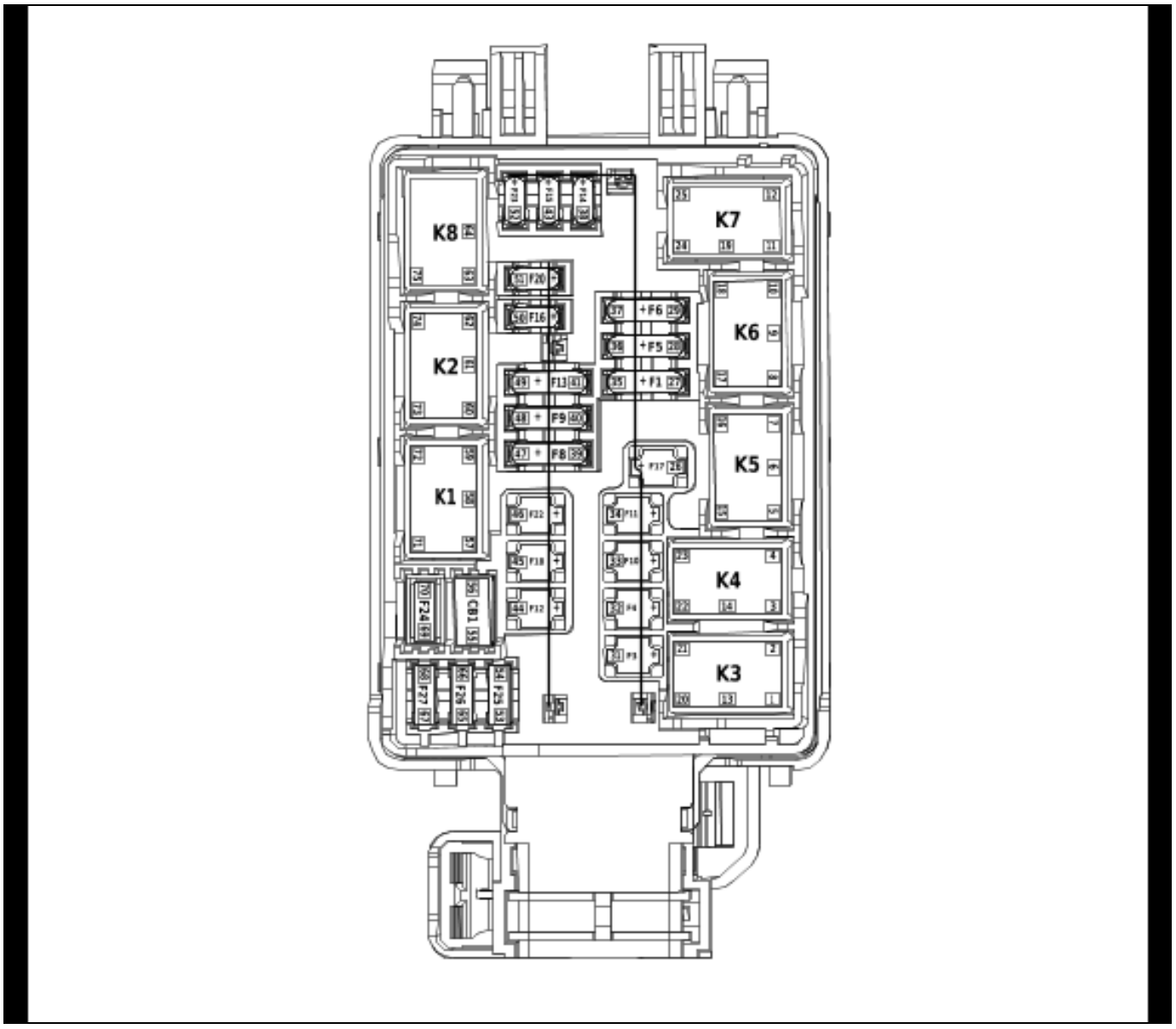
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 35 | 0.5 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | 10 | RD / VT | 542 | Battery Positive Voltage | I | — |
| 37 | 0.35 | VT / BN | 10723 | Upfitter Accessory Relay 3 Coil Supply Voltage | II | — |
| 38 | 0.35 | BU / VT | 10721 | Upfitter Accessory Relay 1 Coil Supply Voltage | II | — |
| 39 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 40 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 41 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 42 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |
| 43 | 2.5 | RD / VT | 542 | Battery Positive Voltage | II | — |

## X53AF Body Wiring Harness Junction Block Label




5969417

## X53AF Body Wiring Harness Junction Block Top View




6094371

### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | REAR HSM FEED 1/2 | F1DL | 10A | • K29R Rear Seat Heater Control Module (KA6) |
| F3 | NOT USED | F3DL | 30A | • Not Used |
| F4 | NOT USED | F4DL | 30A | • Not Used |
| F5 | NOT USED/NOT USED | F5DL | 15A | • Not Used |
| F6 | FRT HSM FEED 1/2 | F6DL | 10A | • K29FV Front Seat Heater Vent Control Module (KA1/KQV) |
| F8 | NOT USED/NOT USED | F8DL | 15A | • Not Used |
| F9 | EOCM/PARK ASSIST | F9DL | 10A | • K124 Image Processing Module (UGN)<br>• K182 Parking Assist Control Module (UD5/UD7) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F10 | NOT USED | F10DL | 30A | • Not Used |
| F11 | NOT USED | F11DL | 30A | • Not Used |
| F12 | MSM2/PASS PWR SEAT | F12DL | 25A | • K40P Passenger Seat Adjuster Memory Module (AKE)<br>• S64P Front Seat Adjuster Switch - Passenger (A7K-AKE) |
| F13 | NOT USED/NOT USED | F13DL | 15A | • Not Used |
| F14 | DLC | F14DL | 10A | • X84 Data Link Connector |
| F15 | NOT USED | F15DL | 15A | • Not Used |
| F16 | AMP | F16DL | 30A | • T3 Audio Amplifier (UQA) |
| F17 | MFEG | F17DL | 15A | • KR191G Pickup Box Endgate Latch Relay - Ground (QT5)<br>• KR192 Pickup Box Auxiliary Endgate Latch Relay (QK2+QT5) |
| F18 | NOT USED | F18DL | 30A | • Not Used |
| F20 | TAILGATE MDL | F20DL | 15A | • K194 Rear Gate Module (QT6) |
| F22 | RR SLD WNDW | F22DL | 30A | • KR206C Rear Sliding Window Close Relay (A48)<br>• KR206O Rear Sliding Window Open Relay (A48) |
| F23 | DRV PASS MSM1/ MBM | F23DL | 10A | • K104D Front Seat Bladder Control Module - Driver (AVK-AF6)<br>• K104DP Front Seat Bladder Control Module - Driver Primary (AF6)<br>• K104DS Front Seat Bladder Control Module - Driver Secondary (AF6)<br>• K40D Front Seat Adjuster Switch - Driver (A45)<br>• K104P Front Seat Bladder Control Module - Passenger (AVU-AKE)<br>• K104PP Front Seat Bladder Control Module - Passenger Primary (AKE)<br>• K104PS Front Seat Bladder Control Module - Passenger Secondary (AKE)<br>• K40P Passenger Seat Adjuster Memory Module (AKE)<br>• S64D Front Seat Adjuster Switch - Driver (A45)<br>• S64P Front Seat Adjuster Switch - Passenger (AKE)<br>• S65D Front Seat Lumbar Switch - Driver (AVK-A45)<br>• S65P Front Seat Lumbar Switch - Passenger (A7K-AVU-AKE) |
| F24 | NOT USED | F24DL | 10A | • Not Used |
| F25 | NOT USED | F25DL | 10A | • Not Used |
| F26 | NOT USED | F26DL | 10A | • Not Used |
| F27 | NOT USED | F27DL | 10A | • Not Used |
| **Circuit Breakers** | | | | |
| CB1 | NOT USED | CB1DL | 10A | • Not Used |
| **Relays** | | | | |
| K1 | RR SLD WNDW OPEN | KR206O Rear Sliding Window Open Relay | — | • M63 Rear Sliding Window Motor (A48) |
| K2 | RR WNDW CLS | KR206C Rear Sliding Window Close Relay | — | • M63 Rear Sliding Window Motor (A48) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| K3 | MFEG MAJOR HI | KR191G Pickup Box Endgate Latch Relay - Ground | — | • A99L Pickup Box Endgate Latch - Left (QK2+QT5)<br>• A99R Pickup Box Endgate Latch - Right (QK2+QT5)<br>• M14A Pickup Box Endgate Lock Actuator (QK1+QT5) |
| K4 | NOT USED | — | — | • Not Used |
| K5 | MFEG MINOR | KR192 Pickup Box Auxiliary Endgate Latch Relay | — | • A100L Pickup Box Auxiliary Endgate Latch - Left (QK2+QT5)<br>• A100R Pickup Box Auxiliary Endgate Latch - Right (QK2+QT5) |
| K6 | MFEG MAJOR LO | KR191S Pickup Box Endgate Latch Relay - Supply Voltage | — | • A99L Pickup Box Endgate Latch - Left (QK2+QT5)<br>• A99R Pickup Box Endgate Latch - Right (QK2+QT5)<br>• M14A Pickup Box Endgate Lock Actuator (QK1+QT5) |
| K7 | NOT USED | — | — | • Not Used |
| K8 | NOT USED | — | — | • Not Used |

# X53AF Body Wiring Harness Junction Block Wire Entry

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## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35232561
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575574 | J-35616-5 (PU) | J-38125-215A |
| II | Not required | J-35616-22 (RD) | No Tool Required |

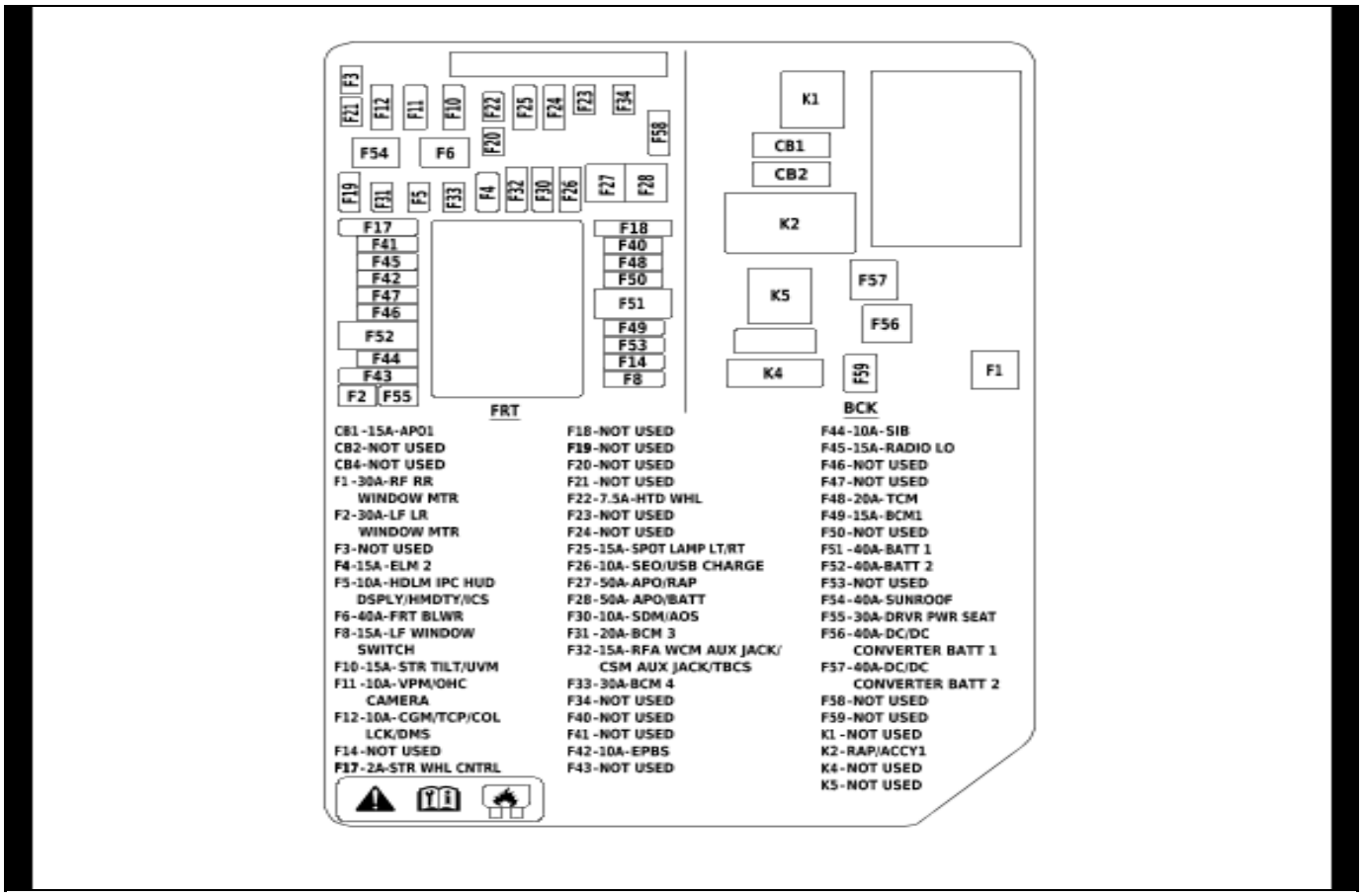
## X53AF Body Wiring Harness Junction Block Wire Entry

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / GN | 7728 | Major Endgate High Relay Control | I | — |
| 2 | 1 | GN | 1299 | Major Endgate Motor Control | I | — |
| 5 | 1 | VT | 7725 | Minor Endgate Motor Control | I | — |
| 7 | 0.75 | WH / GY | 7297 | Minor Endgate High Relay Control | I | — |
| 8 | 1 | BK | 1550 | Ground | I | — |
| 10 | 0.75 | BU / VT | 7729 | Major Endgate Low Relay Control | I | — |
| 15 | 0.5 | BK | 1550 | Ground | I | — |
| 16 | 1 | RD / BN | 8240 | Battery Positive Voltage | I | — |
| 17 | 0.5 | BK | 1550 | Ground | I | — |
| 18 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |
| 20 | 1 | RD / BN | 8240 | Battery Positive Voltage | I | — |
| 21 | 0.5 | BK | 1550 | Ground | I | — |
| 26 | 1 | RD / BN | 8240 | Battery Positive Voltage | I | — |
| 27 | 0.75 | RD / WH | 5740 | Battery Positive Voltage | I | — |
| 29 | 0.75 | RD / BN | 6640 | Battery Positive Voltage | I | — |
| 30 | 10 | RD / GY | 142 | Battery Positive Voltage | II | — |
| 35 | 0.75 | RD / BU | 6740 | Battery Positive Voltage | I | — |
| 37 | 0.75 | RD / GN | 6140 | Battery Positive Voltage | I | — |
| 38 | 0.5 | RD / YE | 6540 | Battery Positive Voltage | I | — |
| 42 | 10 | RD / GN | 242 | Battery Positive Voltage | II | — |
| 44 | 2.5 | RD / YE | 7440 | Battery Positive Voltage | I | — |
| 46 | 2.5 | RD / VT | 8640 | Battery Positive Voltage | I | — |
| 48 | 0.5 | RD / WH | 4740 | Battery Positive Voltage | I | — |
| 50 | 2.5 | RD / YE | 3740 | Battery Positive Voltage | I | — |
| 51 | 2.5 | RD / VT | 4442 | Primary Fused Battery Positive Voltage | I | — |
| 52 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 57 | 2.5 | RD / VT | 8640 | Battery Positive Voltage | I | — |
| 58 | 2.5 | BK | 1550 | Ground | I | — |
| 59 | 0.5 | BK | 1550 | Ground | I | — |
| 60 | 2.5 | RD / VT | 8640 | Battery Positive Voltage | I | — |
| 61 | 2.5 | BK | 1550 | Ground | I | — |

## X53AF Body Wiring Harness Junction Block Wire Entry (cont'd)

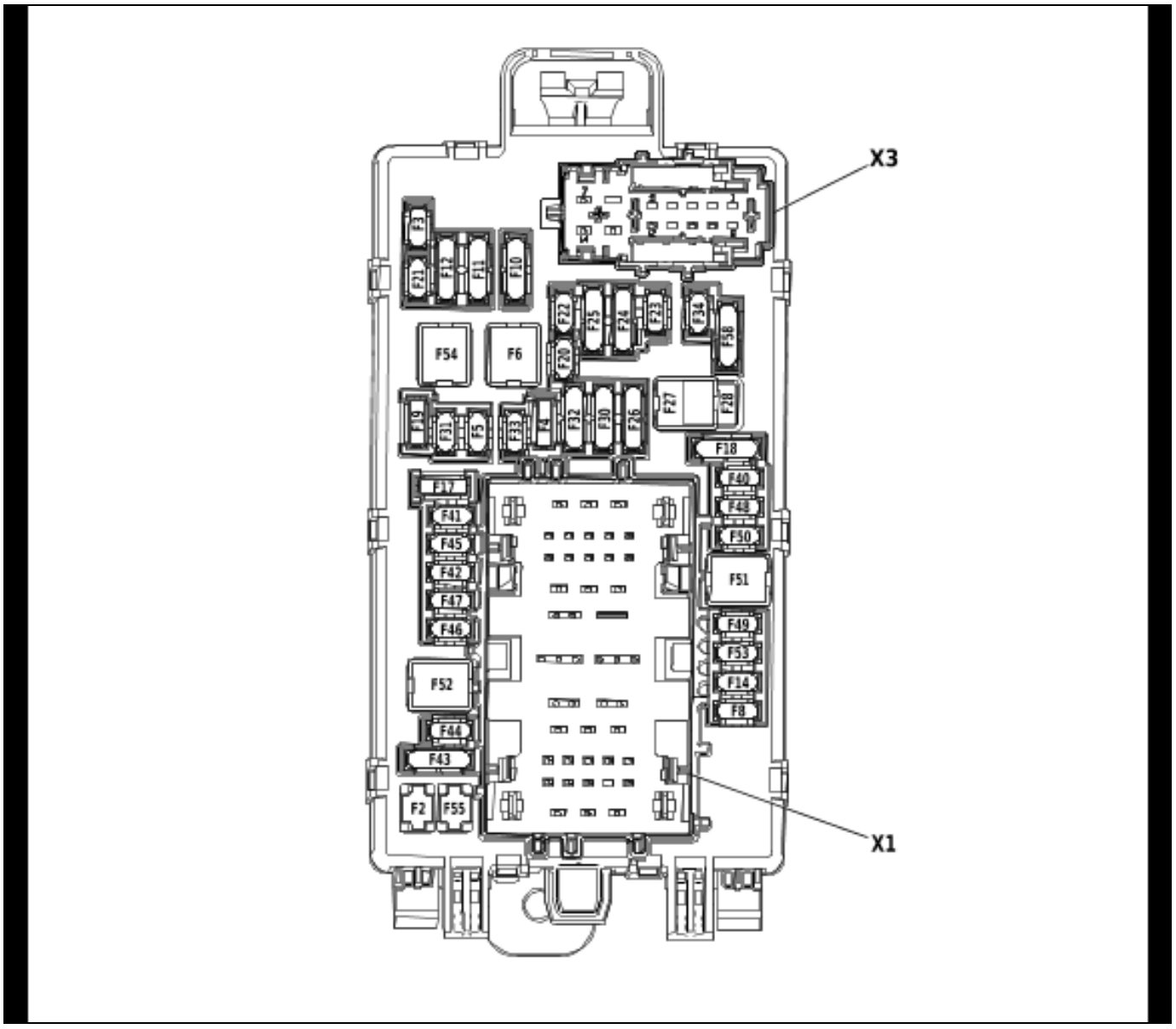
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 62 | 0.5 | BK | 1550 | Ground | I | — |
| 71 | 0.5 | YE / VT | 6191 | Power Rear Window Switch Open Signal | I | — |
| 72 | 2 | VT / YE | 7453 | Window Motor Rear Auxiliary Open Control | I | — |
| 73 | 0.5 | WH | 6192 | Sliding Rear Window Switch Close Signal | I | — |
| 74 | 2 | YE | 7454 | Window Motor Rear Auxiliary Close Control | I | — |

## X51R Instrument Panel Wiring Harness Junction Block - Right Label




5969420

## X51R Instrument Panel Wiring Harness Junction Block - Right Top View




5041376

### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Circuit Breakers** | | | | |
| CB4 | NOT USED | — | — | • Not Used |
| **Fuses** | | | | |
| F1 | RF RR WINDOW MTR | F1DR | 30A | • M74P Front Side Door Window Regulator Motor - Passenger (AEF)<br>• S79P Front Side Door Window Switch - Passenger (AED/AEF)<br>• S79RR Rear Side Door Window Switch - Right |
| F2 | LF LR WINDOW MTR | F2DR | 30A | • M74D Front Side Door Window Regulator Motor - Driver<br>• S79LR Rear Side Door Window Switch - Left |
| F3 | NOT USED | F3DR | — | • Not Used |
| F4 | ELM 2 | F4DR | 15A | • K219 Lighting Control Module |

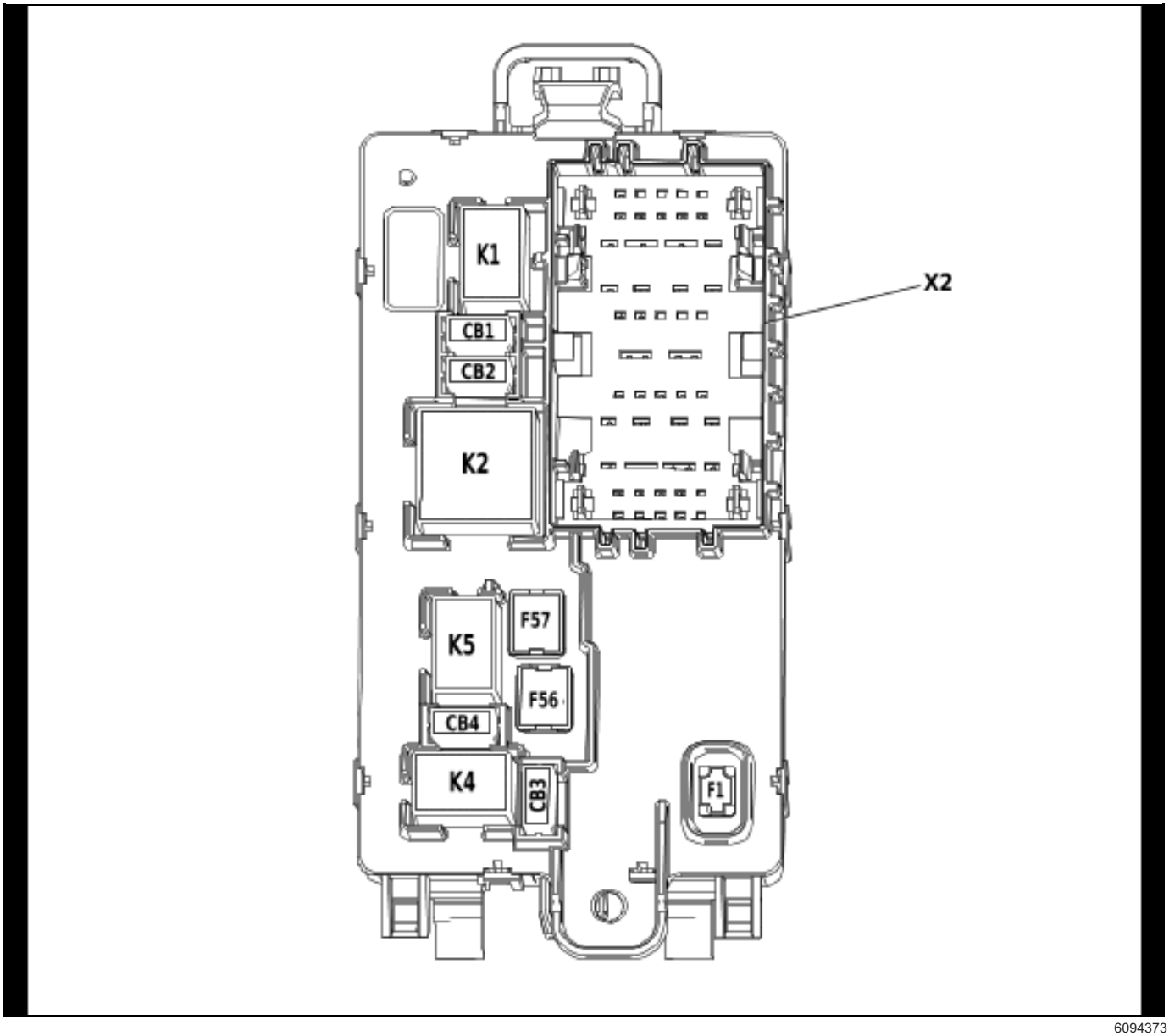
## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F5 | HDLM IPC HUD DSPLY/HMDTY/ ICS | F5DR | 10A | • A26 Heater and Air Conditioning User Interface Control - Front<br>• K179 Automated Driving Mapping Module (UKL)<br>• P16 Instrument Panel Cluster Control Module<br>• P29 Head-Up Display (UV6) |
| F6 | FRT BLWR | F6DR | 40A | • M8 Blower Motor |
| F8 | LF WINDOW SWITCH | F8DR | 15A | • S79D Front Side Door Window Control Switch - Driver<br>• S32R Rear Seat Heater Switch (KA6) |
| F10 | STR TILT/UVM | F10DR | 15A | • K99 Steering Column Tilt Wheel and Telescope Control Module (N38) |
| F11 | VPM/OHC CAM-ERA | F11DR | 10A | • A103 Roof Console<br>• B174W Front View Camera - Windshield (UGN/UHY)<br>• K157 Video Processing Module (UV2) |
| F12 | CGM/TCP/COL LCK/DMS | F12DR | 10A | • K56 Serial Data Gateway Module<br>• K60 Column Lock Module<br>• K73 Telematic Control Module (UDA/UE1)<br>• K180 Driver Monitoring System Module (UKL) |
| F14 | NOT USED | F14DR | — | • Not Used |
| F17 | STR WHL CNTRL | F17DR | 2A | • S70L Cruise Control Switch (KI3)<br>• S70R Radio Control Switch - Steering Wheel (KI3) |
| F18 | NOT USED | F18DR | — | • Not Used |
| F19 | NOT USED | F19DR | — | • Not Used |
| F20 | NOT USED | F20DR | — | • Not Used |
| F21 | NOT USED | F21DR | — | • Not Used |
| F22 | HTD WHL | F22DR | 7.5A | • K32 Steering Wheel Heating Control Module (KI3-UKL)<br>• K180S Driver Monitoring System Module - Steering Wheel (KI3+UKL) |
| F23 | NOT USED | F23DR | — | • Not Used |
| F24 | NOT USED | F24DR | — | • Not Used |
| F25 | SPOT LAMP LT/ RT | F25DR | 15A | • X219 (5W4)<br>• X220 (5W4) |
| F26 | SEO/USB CHARGE | F26DR | 10A | • X92CD Dual Charge Only Receptacle - Floor Console Rear (D07+UBI)<br>• X92FSR Dual Charge Only Receptacle - Front Center Seat Rear Cover (AZ3+UBI) |
| F27 | APO/RAP | F27DR | 50A | • Not Used |
| F28 | APO/BATT | F28DR | 50A | • Not Used |
| F30 | SDM/AOS | F30DR | 10A | • K36 Restraints Control Module<br>• K85P Restraints Occupant Classification System Module - Passenger |
| F31 | BCM 3 | F31DR | 20A | • K9 Body Control Module |
| F32 | RFA WCM AUX JACK/CSM AUX JACK/TBCS | F32DR | 15A | • A11 Radio (IOK)<br>• K77 Remote Function Actuator Module<br>• S76 Trailer Brake Control Switch<br>• T22 Wireless Accessory Charging Module (K4C)<br>• X83B Audio/Video Receptacle (D07)<br>• X92IP USB 2 Port Receptacle - Instrument Panel (d07) |
| F33 | BCM 4 | F33DR | 30A | • K9 Body Control Module |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F34 | NOT USED | F34DR | — | • Not Used |
| F40 | NOT USED | F40DR | — | • Not Used |
| F41 | NOT USED | F41DR | — | • Not Used |
| F42 | EPBS | F42DR | 10A | • S91 Parking Brake Control Switch |
| F43 | NOT USED | F43DR | — | • Not Used |
| F44 | SIB | F44DR | 10A | • K212 Gear Shift Control Module (MHS/MQC) |
| F45 | RADIO LO | F45DR | 15A | • A11 Radio (IOR) |
| F46 | NOT USED | F46DR | — | • Not Used |

## X51R Instrument Panel Wiring Harness Junction Block - Right Bottom View

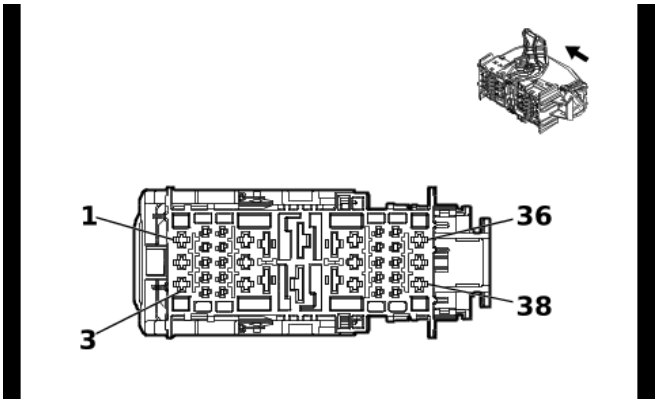



6094373

## Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Circuit Breakers** | | | | |
| CB1 | APO 1 | CB1DR | 15A | • X80G Accessory Power Receptacle - Instrument Panel (KC5) |
| CB2 | NOT USED | — | — | • Not Used |
| **Fuses** | | | | |
| F47 | NOT USED | F47DR | — | • Not Used |
| F48 | TCM | F48DR | 20A | • K71 Transmission Control Module |
| F49 | BCM 1 | F49DR | 15A | • K9 Body Control Module |
| F50 | NOT USED | F50DR | — | • Not Used |
| F51 | BATT 1 | F51DR | 40A | • Not Used |
| F52 | BATT 2 | F52DR | 40A | • Not Used |
| F53 | NOT USED | F53DR | — | • Not Used |
| F54 | SUNROOF | F54DR | 40A | • K61 Sunroof Control Module (CF5) |
| F55 | DRVR PWR SEAT | F55DR | 30A | • K40D Driver Seat Adjuster Memory Module (A45)<br>• S64D Front Seat Adjuster Switch - Driver (-A45) |
| F56 | DC/DC CONVERT-ER BATT 1 | F56DR | 40A | • T19 Multifunction Power Supply Transformer |
| F57 | DC/DC CONVERT-ER BATT 2 | F57DR | 40A | • T19 Multifunction Power Supply Transformer |
| F58 | NOT USED | F58DR | — | • Not Used |
| F59 | NOT USED | F59DR | — | • Not Used |
| **Relays** | | | | |
| K1 | NOT USED | — | — | • Not Used |
| K2 | RAP/ACCY 1 | KR76 Accessory Time Delay Cutoff Relay | — | • CB1DR<br>• F26DR |
| K4 | NOT USED | — | — | • Not Used |
| K5 | NOT USED | — | — | • Not Used |

# X51R Instrument Panel Wiring Harness Junction Block - Right X1




5402140

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35264615
Service Connector: 84941450
Description: 38-Way F 1.5, 2.8, 6.3 MCP, 9.5 MCON-LL Series( BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332366 | J-35616-35 (VT) | J-38125-212 |
| II | 19371175 | J-35616-2A (GY) | EL-38125-560A |
| III | 84764078 | J-35616-42 (RD) | J-38125-215A |
| IV | 84764079 | J-35616-22 (RD) | J-38125-11A |
| V | Not required | J-35616-22 (RD) | J-38125-11A |

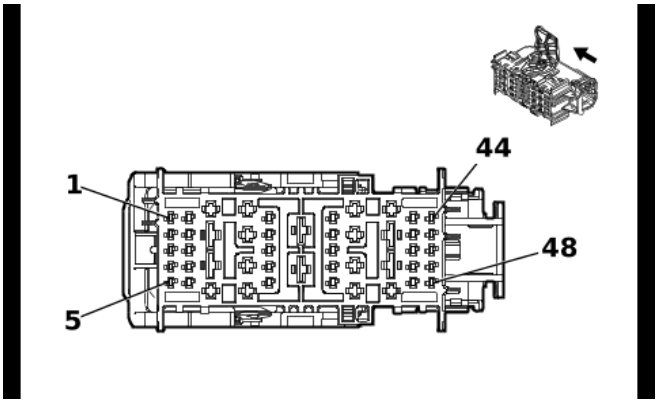
## X51R Instrument Panel Wiring Harness Junction Block - Right X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | RD / GN | 1840 | Battery Positive Voltage | I | — |
| 4 | 0.75 | RD / VT | 2640 | Battery Positive Voltage | II | — |
| 5 | 0.5 | RD / GN | 4440 | Battery Positive Voltage | II | — |
| 6 | 0.35 | VT | 4701 | Retained Accessory Power Control | II | — |
| 7 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | RD / VT | 1640 | Battery Positive Voltage | I | — |
| 15 - 16 | — | — | — | Not Occupied | — | — |
| 17 | 2.5 | RD / GN | 2173 | 12V Regulated Supply Voltage 2 | III | — |
| 18 | 2.5 | RD / YE | 8140 | Battery Positive Voltage | III | — |
| 19 | 5 | RD / YE | 1442 | Battery Positive Voltage | IV | — |
| 20 | 10 | RD / WH | 342 | Battery Positive Voltage | V | — |
| 21 | 2.5 | RD / YE | 2172 | 12V Regulated Supply Voltage 1 | III | — |
| 22 | 2.5 | RD / WH | 8040 | Battery Positive Voltage | III | — |
| 23 | 2.5 | RD / GY | 4840 | Battery Positive Voltage | I | — |
| 24 | 2.5 | RD / BN | 4240 | Battery Positive Voltage | I | — |
| 25 | 2.5 | RD / BU | 3240 | Battery Positive Voltage | I | — |
| 26 | — | — | — | Not Occupied | — | — |

## X51R Instrument Panel Wiring Harness Junction Block - Right X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 27 | 0.5 | RD / WH | 5440 | Battery Positive Voltage | II | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | RD / BU | 1240 | Battery Positive Voltage | II | — |
| 31 - 35 | — | — | — | Not Occupied | — | — |
| 36 | 2.5 | RD / YE | 5040 | Battery Positive Voltage | I | — |
| 37 | 2.5 | RD / GY | 3540 | Battery Positive Voltage | I | — |
| 38 | — | — | — | Not Occupied | — | — |

# X51R Instrument Panel Wiring Harness Junction Block - Right X2




5403539

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35264616
Service Connector: 19371180
Description: 48-Way F 1.5, 2.8, 6.3 CTS Series( GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19369711 | J-35616-14 (GN) | EL-38125-560A |
| II | 84764078 | J-35616-42 (RD) | J-38125-215A |
| III | 84779405 | J-35616-35 (VT) | J-38125-215A |

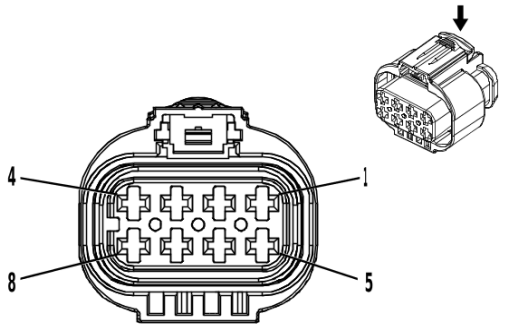
## X51R Instrument Panel Wiring Harness Junction Block - Right X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1050 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GY / GN | 4083 | Retained Accessory Power Relay 2 Coil Control | I | — |
| 4 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | RD / GN | 7740 | Battery Positive Voltage | I | — |
| 9 | 0.5 | RD / YE | 240 | Battery Positive Voltage | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.75 | RD / GN | 10240 | Secondary Fused Battery Positive Voltage 102 Police | III | — |
| 12 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35<br>0.5 | RD / YE<br>RD / YE | 3040<br>3040 | Battery Positive Voltage<br>Battery Positive Voltage | III | —<br>— |
| 15 | 0.5 | RD / BN | 10040 | Secondary Fused Battery Positive Voltage | III | — |
| 16 | 0.75 | RD / VT | 4640 | Battery Positive Voltage | III | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | RD / BN | 4940 | Battery Positive Voltage | III | — |
| 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.75 | RD / GY | 10340 | Secondary Fused Battery Positive Voltage 103 Police | I | — |
| 21 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 4 | RD / GY | 1740 | Battery Positive Voltage | II | — |

## X51R Instrument Panel Wiring Harness Junction Block - Right X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 2.5 | RD / BU | 4540 | Battery Positive Voltage | II | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | RD / YE | 2340 | Battery Positive Voltage | I | — |
| 28 | 0.5 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 29 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 1.5 | VT | 1001 | Retained Accessory Power Ignition Voltage | III | — |
| 32 | 2 | RD / BU | 2540 | Battery Positive Voltage | III | — |
| 33 | 0.5 | RD / VT | 7140 | Battery Positive Voltage | III | — |
| 34 | 1 | RD / GY | 2140 | Battery Positive Voltage | III | — |
| 35 | 0.5 | RD / GN | 1540 | Battery Positive Voltage | III | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 1 | RD / GY | 2840 | Battery Positive Voltage | II | — |
| 38 - 40 | — | — | — | Not Occupied | — | — |
| 41 | 0.5 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 42 | 0.35 | RD / YE | 4340 | Battery Positive Voltage | I | — |
| 43 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.5 | RD / WH | 2740 | Battery Positive Voltage | I | — |
| 46 - 48 | — | — | — | Not Occupied | — | — |

# Component Connector End Views
## A7 Fuel Tank Fuel Pump Module




3749582

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33180742
Service Connector: 19354078
Description: 8-Way F 2.8 Series, Sealed( L-GY)

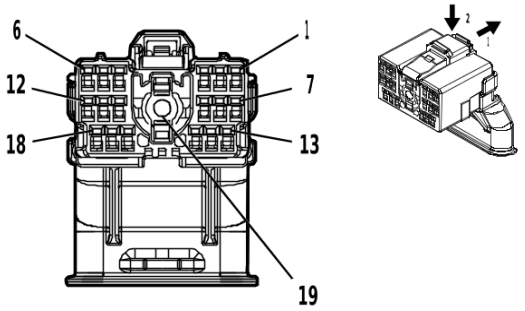
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

### A7 Fuel Tank Fuel Pump Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY | 120 | Fuel Pump Control | I | — |
| 2 | 2.5 | YE / GY | 4137 | Fuel Pump Supply Voltage Phase 2 | I | — |
| 3 | 2.5 | WH / BN | 4138 | Fuel Pump Supply Voltage Phase 3 | I | — |
| 4 | 0.5 | WH | 7444 | Fuel Pump Assembly Shield Ground | I | — |
| 5 | 0.5 | BU / GN | 1936 | Primary Fuel Level Sensor Signal | I | — |
| 6 | 0.5 | BK / GN | 6281 | Fuel Level Sensor Low Reference | I | — |
| 7 - 8 | — | — | — | Not Occupied | — | — |

# A9A Outside Rearview Mirror - Driver




4991775

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35077331
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way F 1.2 MCON, Coaxial Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

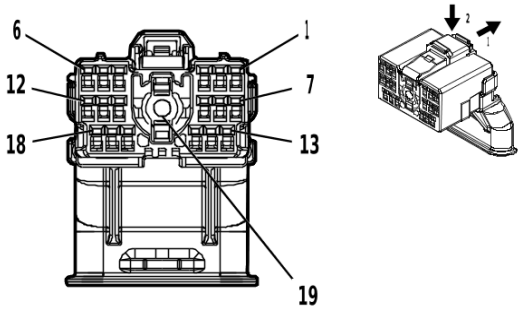
## A9A Outside Rearview Mirror - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BK | 2790 | Left Front Mirror Motor Right [+] Left [-] Control | I | — |
| 2 | 0.5 | VT / BU | 2788 | Left Front Mirror Motor Up [+] Down [-] Control | I | — |
| 3 | 0.5 | WH / GN | 2786 | Left Front Mirror Motor Fold In Control | I | — |
| 4 | 0.5 | GY / YE | 1760 | Left Side Object Detection LED Control | I | — |
| 5 | 0.5<br>0.5 | WH / GN<br>YE / GY | 5966<br>2933 | Approach Lamp Control<br>Task Lamp Control Left | I<br>I | DEZ<br>DQS |
| 6 | 0.5 | WH / YE | 2792 | Left Front Mirror Position Sensor Left [-] Right [+] Signal | I | — |
| 7 | 0.5 | WH | 606 | Left Outside Rearview Mirror Heater Control | I | — |
| 8 | 0.5 | WH / GY | 2114 | Left Turn Signal Lamp Control 2 | I | — |
| 9 | 0.5 | BK | 1550 | Ground | I | — |
| 10 | 0.5 | VT / RD | 2791 | Left Front Mirror Position Sensor High Reference | I | — |
| 11 | 0.5 | GY / BN | 2787 | Left Front Mirror Position Sensor Up [+] Down [-] Signal | I | — |
| 12 | 0.5 | BK / YE | 1691 | Automatic Day/Night Mirror Low Reference | I | — |
| 13 | 0.5<br>0.5 | YE / GY<br>BN / GN | 2933<br>4246 | Task Lamp Control Left<br>Identification Lamp Control | I<br>I | DLF/ DEZ<br>DPO/ DQS |
| 14 | 0.5 | YE / BN | 2789 | Left Front Mirror Motor Common Control | I | — |
| 15 | 0.5 | GY / WH | 2785 | Left Front Mirror Motor Fold Out Control | I | — |
| 16 | 0.5 | BU / YE | 7761 | Backup Illumination Lamp Control | I | — |
| 17 | 0.5 | YE / WH | 1690 | Mirror Dimming Signal | I | — |

## A9A Outside Rearview Mirror - Driver (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.5 | BK / BN | 673 | Left Outside Rearview Mirror Position Sensor Low Reference | I | — |
| 19 | — | BK | 4725 | Left Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | II | — |

# A9B Outside Rearview Mirror - Passenger




4991775

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35077331
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way F 1.2 MCON, Coaxial Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

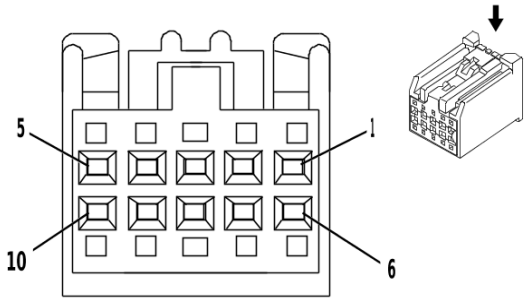
## A9B Outside Rearview Mirror - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / BK | 2798 | Right Front Mirror Motor Right [+] Left [-] Control | I | — |
| 2 | 0.5 | YE / VT | 2796 | Right Front Mirror Motor Up [+] Down [-] Control | I | — |
| 3 | 0.5 | BU / GY | 2794 | Right Front Mirror Motor Fold In Control | I | — |
| 4 | 0.5 | GY | 1761 | Right Side Object Detection LED Control | I | — |
| 5 | 0.5<br>0.5 | WH / GN<br>YE / WH | 5966<br>2934 | Approach Lamp Control<br>Task Lamp Control Right | I<br>I | DEZ<br>DQS |
| 6 | 0.5 | VT / WH | 2800 | Right Front Mirror Position Sensor Left [-] Right [+] Signal | I | — |
| 7 | 0.5 | BN / VT | 607 | Right Outside Rearview Mirror Heater Control | I | — |
| 8 | 0.5 | GN / GY | 2115 | Right Turn Signal Lamp Control 2 | I | — |
| 9 | 0.5 | BK | 1350 | Ground | I | — |
| 10 | 0.5 | YE / RD | 2799 | Right Front Mirror Position Sensor High Reference | I | — |
| 11 | 0.5 | BU / YE | 2795 | Right Front Mirror Position Sensor Up [+] Down [-] Signal | I | — |
| 12 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 13 | 0.5<br>0.5 | YE / WH<br>BN / GN | 2934<br>4246 | Task Lamp Control Right<br>Identification Lamp Control | I<br>I | DLF/ DEZ<br>DPO/ DQS |
| 14 | 0.5 | WH | 2797 | Right Front Mirror Motor Common Control | I | — |
| 15 | 0.5 | YE / WH | 2793 | Right Front Mirror Motor Fold Out Control | I | — |
| 16 | 0.5 | BU / YE | 7761 | Backup Illumination Lamp Control | I | — |
| 17 | 0.5 | BU / GY | 636 | Ambient Air Temperature Sensor Signal | I | — |

## A9B Outside Rearview Mirror - Passenger (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.5 | BK / GN | 675 | Right Outside Rearview Mirror Position Sensor Low Reference | I | — |
| 19 | — | BK | 4724 | Right Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | II | — |

# A10 Inside Rearview Mirror X1 (DD8 / DRZ)




2180211

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 13815336
Service Connector: 13577390
Description: 10-Way F 0.64 Kaizen Series( BK)

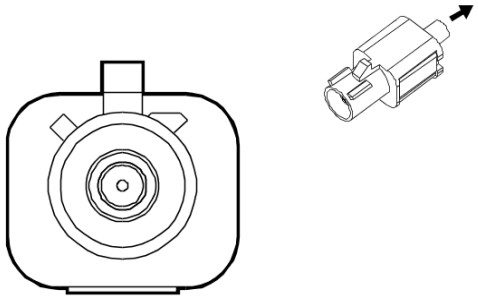
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575742 | J-35616-64B (L-BU) | J-38125-215A |

## A10 Inside Rearview Mirror X1 (DD8 / DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / WH | 24 | Backup Lamp Control | I | — |
| 2 | 0.5 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK / YE | 1691 | Automatic Day/Night Mirror Low Reference | I | — |
| 9 | 0.35 | YE / WH | 1690 | Mirror Dimming Signal | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A10 Inside Rearview Mirror X2 (DRZ)



4496217

## Connector Part Information

Harness Type: Inside Rearview Mirror Coaxial Cable COAX
OEM Connector: 13594293
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way M Coax Type( BK)

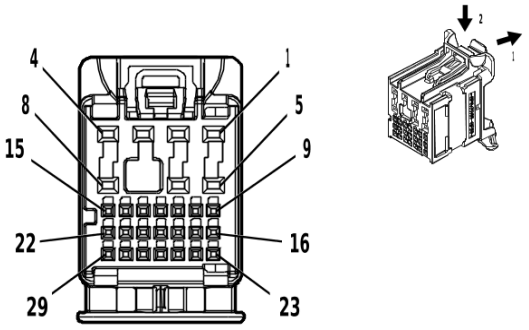
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A10 Inside Rearview Mirror X2 (DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Full Display Mirror Rear Camera Coaxial Video Signal | I | — |

# A11 Radio X1 (IOR)




4584346

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364128
Service Connector: 13534972
Description: 29-Way F 0.5 NANO, 1.2 MCON Series( GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

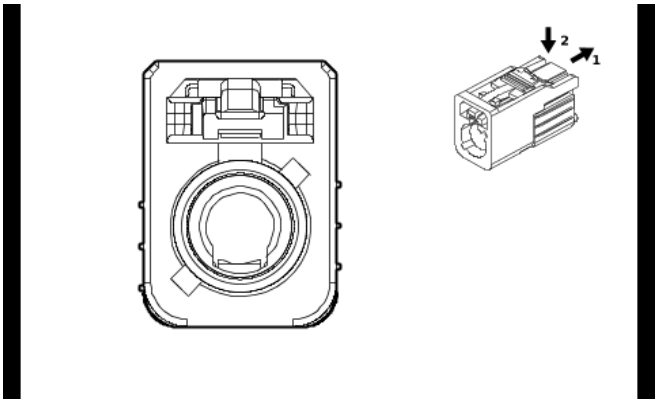
## A11 Radio X1 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD / GY | 2840 | Battery Positive Voltage | II | — |
| 2 | 0.75 | RD / GY | 2840 | Battery Positive Voltage | II | — |
| 3 | 0.75 | BK / WH | 1051 | Signal Ground | II | — |
| 4 | 0.35 | BU / RD | 11246 | Infotainment Display 5 Volt Reference | II | — |
| 5 | 0.35 | BK / WH | 11252 | Infotainment Display Low Reference | II | — |
| 6 | 0.75 | BK / WH | 1051 | Signal Ground | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | GN / BK | 116 | Left Rear Speaker [-] Control | II | — |
| 9 | 0.35 | GY / BU | 11247 | Infotainment Display LCD Enable Signal | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GN / WH | 24 | Backup Lamp Control | I | — |
| 12 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | BU / GY | 11244 | Radio Switch Dimming Control | I | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 18 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | GY / VT | 11249 | Infotainment Display Backlight Enable Control | I | — |
| 22 | 0.35 | BU / GN | 11248 | Infotainment Display Backlight Dimming Control | I | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.35 | BN / WH | 11233 | Radio Switch Power ON/OFF Switch Signal | I | — |

## A11 Radio X1 (IOR) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.35 | VT / WH | 11245 | Radio Switch Buttons Signal | I | — |
| 26 | 0.35 | BU | 11235 | Radio Switch Volume Up Signal | I | — |
| 27 | 0.35 | GY / BN | 11234 | Radio Switch Volume Down Signal | I | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X2 (IOK)




5793980

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340311
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BU)

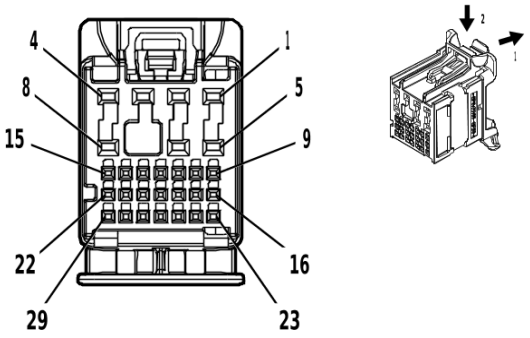
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X2 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (GPS only) Coaxial Antenna GPS Signal | I | — |

# A11 Radio X2 (IOR)




4584398

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364129
Service Connector: 13534973
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( GY)

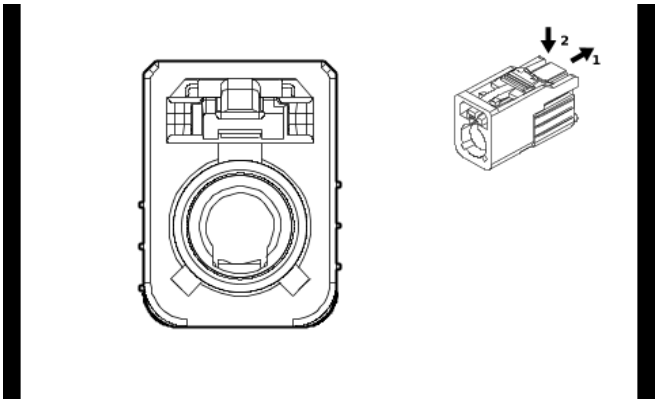
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

## A11 Radio X2 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 199 | Left Rear Speaker [+] Control | II | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | II | — |
| 3 | 0.75 | YE | 200 | Right Front Speaker 1 [+] Control | II | — |
| 4 | 0.75 | BU / BK | 115 | Right Rear Speaker [-] Control | II | — |
| 5 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | II | — |
| 6 | 0.75 | YE / BK | 117 | Right Front Speaker [-] Control 1 | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | WH | 46 | Right Rear Speaker [+] Control | II | — |
| 9 | 0.35<br>0.35 | BK / BN<br>BK / GY | 654<br>5152 | Cellular Telephone Microphone Low Reference<br>Voice Recognition Audio [-] Control | I<br>I | UE0<br>UE1/ UDA |
| 10 | 0.35<br>0.35 | BU<br>GY / YE | 655<br>5149 | Cellular Telephone Microphone Signal<br>Voice Recognition Audio Signal | I<br>I | UE0<br>UE1/ UDA |
| 11 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X3 (IOK)




5794617

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340318
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( CU)

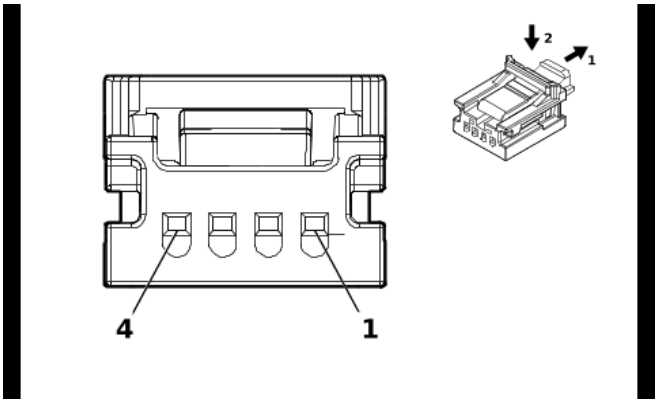
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X3 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

## A11 Radio X3 (IOR)




5493278

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33228283
Service Connector: 19354840
Description: 4-Way F Mini 50 Series( BK)

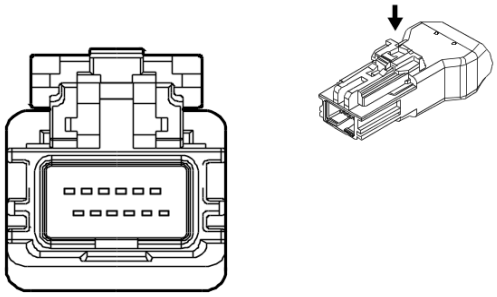
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

### A11 Radio X3 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | YE | 4758 | Ethernet Bus 2 [+] | I | — |
| 3 | 0.35 | BU | 4757 | Ethernet Bus 2 [-] | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# A11 Radio X4 (IOR)



4527210

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33358813
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series( BK)

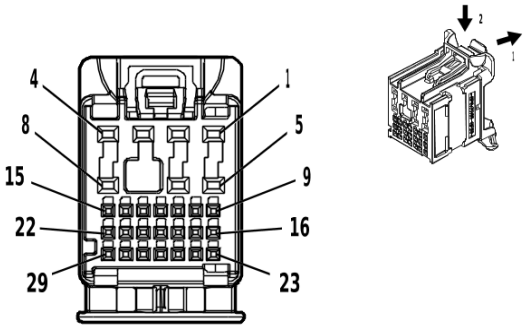
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X4 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | 4844 | Radio LVDS (Low Voltage Differential Signaling) Low Reference | I | — |
| 2 | — | — | 4845 | Radio LVDS (Low Voltage Differential Signaling) Signal [+] | I | — |
| 3 | — | — | 4846 | Radio LVDS (Low Voltage Differential Signaling) Signal [-] | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | — | — | 7899 | Auxiliary Audio/Video Jack USB Serial Data Supply Voltage | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | — | — | 7896 | Auxiliary Audio/Video Jack USB [+] Serial Data | I | — |
| 10 | — | — | 7897 | Auxiliary Audio/Video Jack USB [-] Serial Data | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | — | — | 7898 | Auxiliary Audio/Video Jack USB Low Reference | I | — |

# A11 Radio X5 (IOK)




4496253

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364134
Service Connector: 13534974
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( BK)

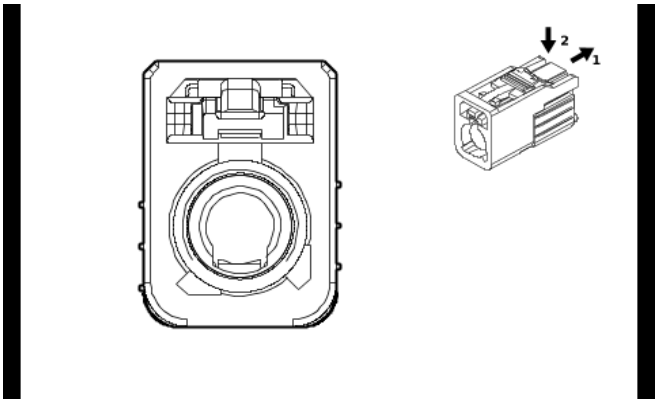
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

## A11 Radio X5 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 2340 | Battery Positive Voltage | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK / WH | 1051 | Signal Ground | II | — |
| 4 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | GN / BK | 116 | Left Rear Speaker [-] Control | II | — |
| 9 | 0.35<br>0.35 | BU<br>GY / YE | 655<br>5149 | Cellular Telephone Microphone Signal<br>Voice Recognition Audio Signal | I<br>I | UE0<br>UE1 |
| 10 | 0.35<br>0.35 | BK / BN<br>BK / GY | 654<br>5152 | Cellular Telephone Microphone Low Reference<br>Voice Recognition Audio [-] Control | I<br>I | UE0<br>UE1 |
| 11 | 0.35 | VT / YE | 7043 | Microphone [+] Signal | I | — |
| 12 | 0.35 | BU / BK | 7044 | Microphone [-] Signal | I | — |
| 13 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X5 (IOR)




5191842

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340320
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( OG)

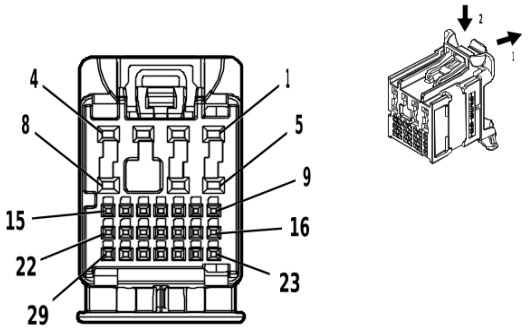
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X5 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Rear Vision Camera Coaxial Video Signal | I | — |

# A11 Radio X6 (IOK)




4578560

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364137
Service Connector: 13534971
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( GY)

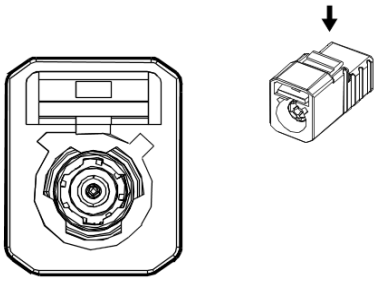
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

## A11 Radio X6 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 199 | Left Rear Speaker [+] Control | II | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | II | — |
| 3 | 0.75 | YE / BK | 117 | Right Front Speaker [-] Control 1 | II | — |
| 4 | 0.75 | BU / BK | 115 | Right Rear Speaker [-] Control | II | — |
| 5 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | II | — |
| 6 | 0.75 | YE | 200 | Right Front Speaker 1 [+] Control | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | WH | 46 | Right Rear Speaker [+] Control | II | — |
| 9 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 10 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | GN / WH | 24 | Backup Lamp Control | I | — |
| 14 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X6 (IOR)



5331855

## Connector Part Information

Harness Type: Radio Antenna Cable Extension Cable COAX
OEM Connector: 13581682
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

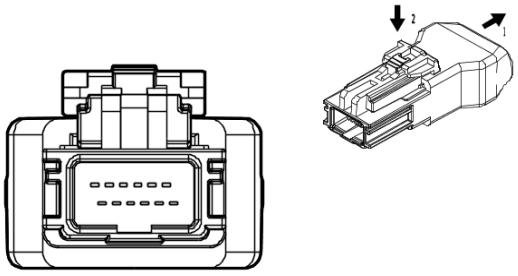
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X6 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (AM/FM) Antenna RF Signal | I | — |

# A11 Radio X7 (IOK)



4584321

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: VP000124
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series( GY)

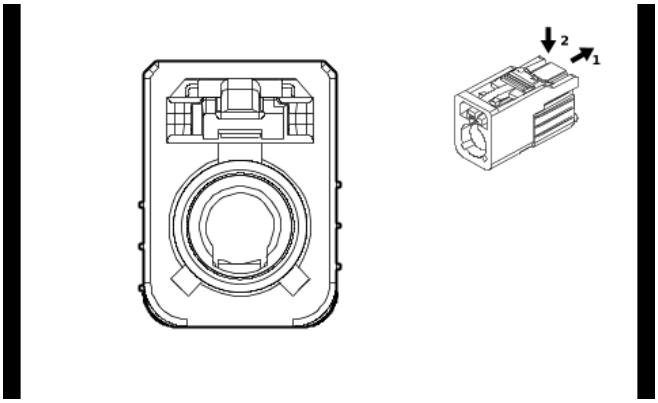
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X7 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | LVDS | — | (Infotainment) Infotainment Display Signal | I | — |

# A11 Radio X7 (IOR)




5794617

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340318
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( CU)

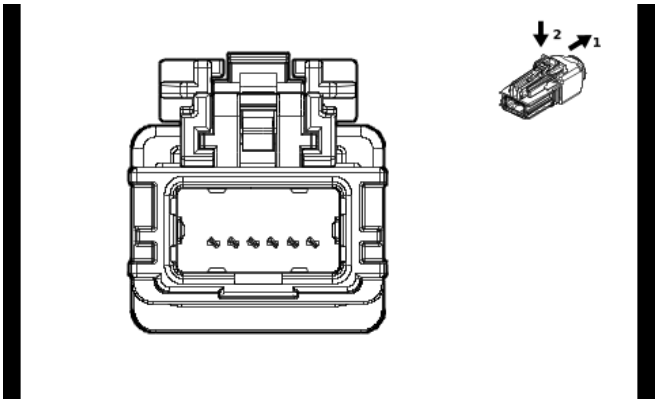
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X7 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

# A11 Radio X8 (IOK)




5987912

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: VP000221
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series( BK)

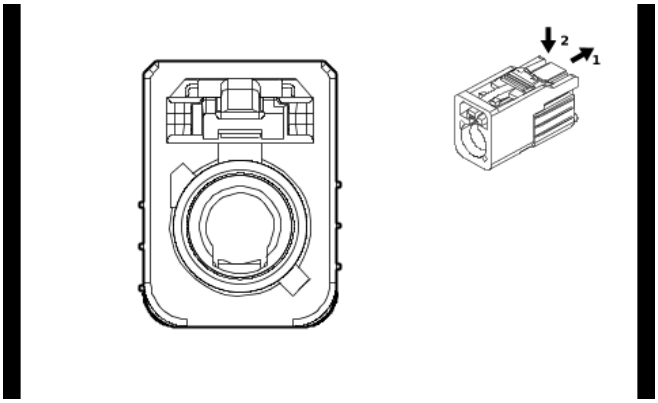
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X8 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# A11 Radio X8 (IOR)




5518456

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340317
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BG)

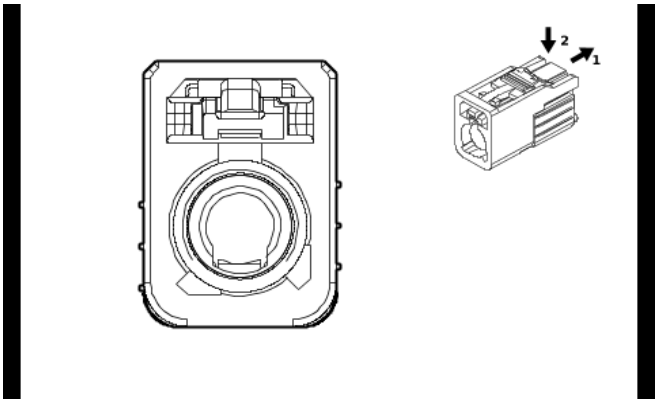
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X8 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | WiFi Antenna Coaxial Signal | I | — |

# A11 Radio X9 (IOK)




5191842

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340320
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( OG)

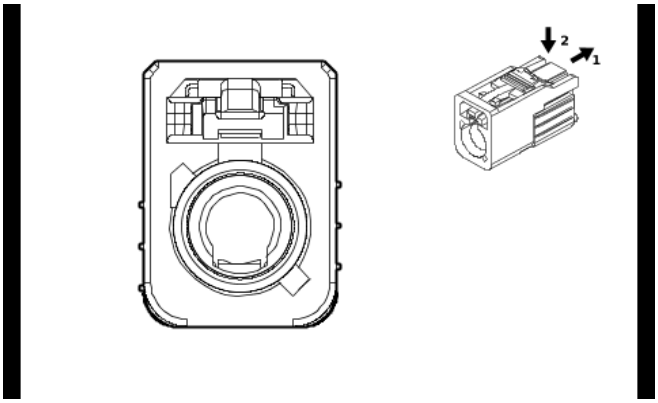
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X9 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Video Processing Module Coaxial Video Signal | I | — |

# A11 Radio X10 (IOK)




5518456

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340317
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BG)

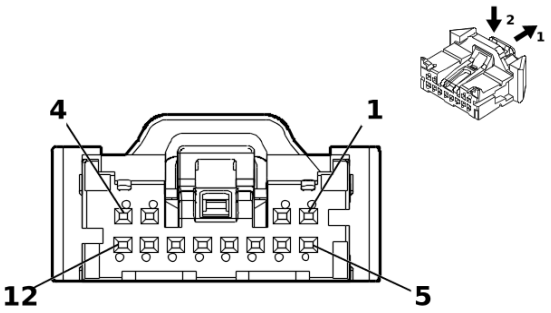
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A11 Radio X10 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | WiFi Antenna Coaxial Signal | I | — |

# A11 Radio X11 (IOK)




5360826

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068239
Service Connector: 13529935
Description: 12-Way F 050 CTS Series( BK)

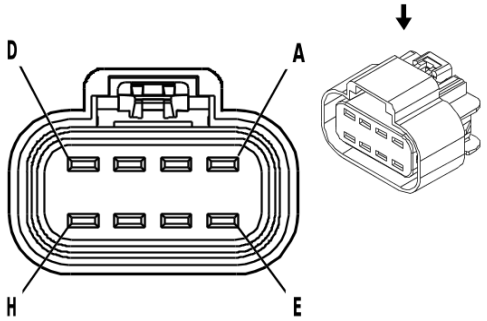
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84944580 | EL-35616-58 (BK) | EL-38125-58 |

## A11 Radio X11 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | YE | 4758 | Ethernet Bus 2 [+] | I | — |
| 4 | 0.35 | BU | 4757 | Ethernet Bus 2 [-] | I | — |
| 5 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | YE | 7215 | Ethernet Bus 6 [+] | I | — |
| 9 | 0.35 | GN | 7214 | Ethernet Bus 6 [-] | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BN | 7211 | Ethernet Bus 4 [+] | I | — |
| 12 | 0.35 | GY | 7210 | Ethernet Bus 4 [-] | I | — |

# A16 Transfer Case Four Wheel Drive Actuator (NP0/NQH)




646372

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13538370
Service Connector: 19369184
Description: 8-Way F 280 GT Series, Sealed( BK)

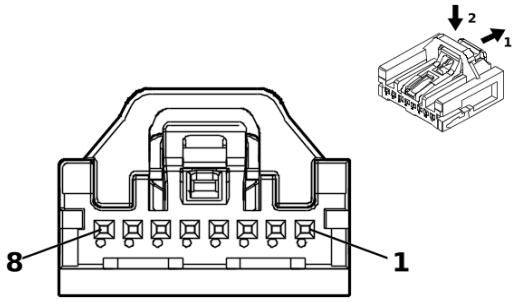
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## A16 Transfer Case Four Wheel Drive Actuator (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 2.5 | YE / GY | 1552 | Transfer Case Motor Clockwise Control | I | — |
| B | 0.75 | BU | 8013 | Transfer Case Lock Solenoid Control 2 | I | — |
| C | 0.75 | YE / BN | 1569 | Transfer Case Lock Solenoid Valve Control | I | — |
| D | 2.5 | YE / VT | 1553 | Transfer Case Motor Counter Clockwise Control | I | — |
| E | 0.5 | YE | 7474 | Incremental Encoder Direction Signal | I | — |
| F | 0.5 | BU / GY | 7473 | Incremental Encoder Impulse Signal | I | — |
| G | 0.5 | WH / GN | 7475 | Incremental Encoder Sensor Voltage Reference | I | — |
| H | 0.5 | VT | 7476 | Incremental Encoder Sensor Low Reference | I | — |

# A22 Radio Control X1 (IOK)




5200269

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

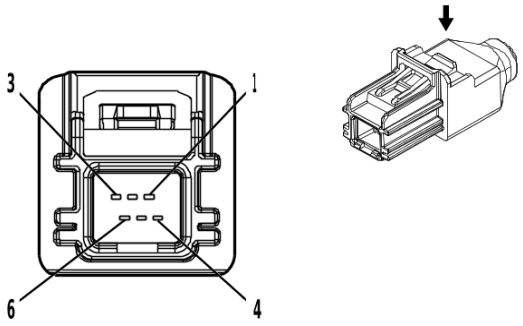
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## A22 Radio Control X1 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 2 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK / WH | 1051 | Signal Ground | I | — |

# A22 Radio Control X2 (IOK)




4806625

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: VP000160
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series( BK)

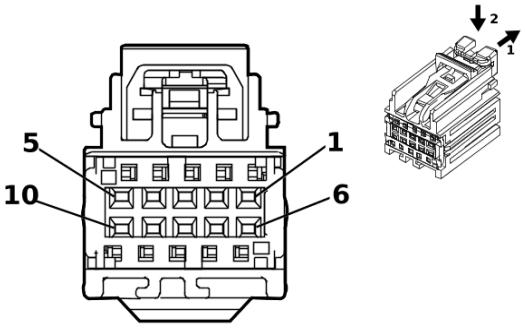
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## A22 Radio Control X2 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | LVDS | — | (Infotainment) Infotainment Display Signal | I | — |

# A23D Front Side Door Latch - Driver




4622549

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series( GN)

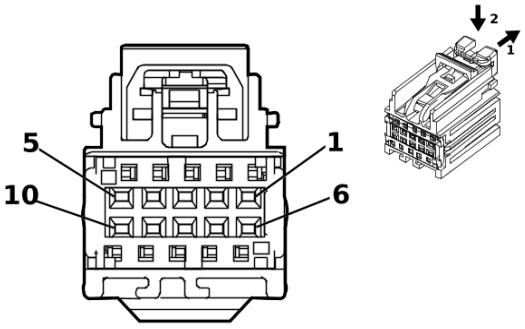
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## A23D Front Side Door Latch - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 745 | Left Front Door Ajar Switch Signal | I | — |
| 2 | 0.5 | VT / GY | 126 | Left Front Door Open Switch Signal | I | — |
| 3 | 0.5 | BK | 1550 | Ground | I | — |
| 4 | 0.5 | WH / VT | 4258 | Left Front Door Lock Status Signal | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | GY | 2681 | Left Front Door Lock Actuator Lock Control | I | — |
| 8 | 0.75 | WH | 2679 | Lock Actuators Unlock Control 1 | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# A23LR Rear Side Door Latch - Left - EXTENDED CAB/CREW CAB




4622549

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series( GN)

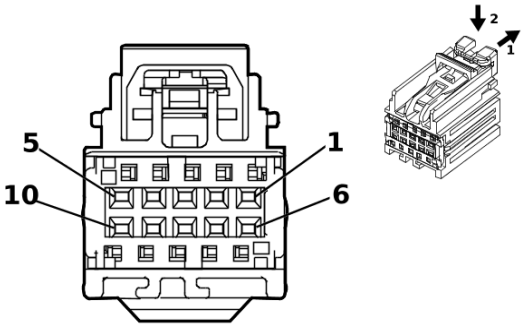
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## A23LR Rear Side Door Latch - Left - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 747 | Left Rear Door Ajar Switch Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK | 1550 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BU / YE | 1091 | Left Rear Door Lock Actuator Lock Control | I | — |
| 8 | 0.75 | WH | 2679 | Lock Actuators Unlock Control 1 | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# A23P Front Side Door Latch - Passenger




4622549

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series( GN)

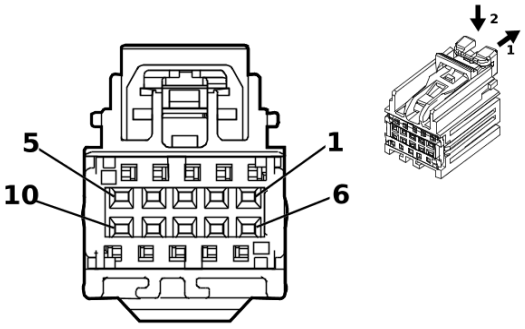
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## A23P Front Side Door Latch - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK | 1350 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GY | 746 | Right Front Door Ajar Switch Signal | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | GY / BK | 2680 | Lock Actuators Unlock Control 2 | I | — |
| 9 | 0.75 | YE / GN | 2682 | Right Front Door Lock Actuator Lock Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A23RR Rear Side Door Latch - Right - EXTENDED CAB/CREW CAB




4622549

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series( GN)

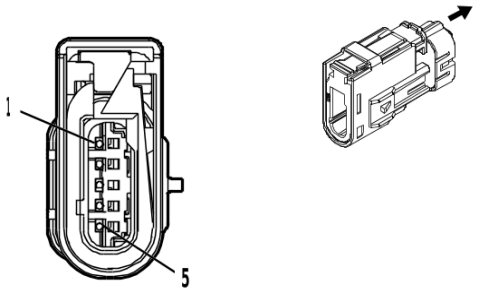
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## A23RR Rear Side Door Latch - Right - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK | 1350 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GY | 748 | Right Rear Door Ajar Switch Signal | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | GY / BK | 2680 | Lock Actuators Unlock Control 2 | I | — |
| 9 | 0.75 | VT / WH | 1094 | Right Rear Door Lock Actuator Lock Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A24D Front Side Door Outside Handle - Left




4808321

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed( NA)

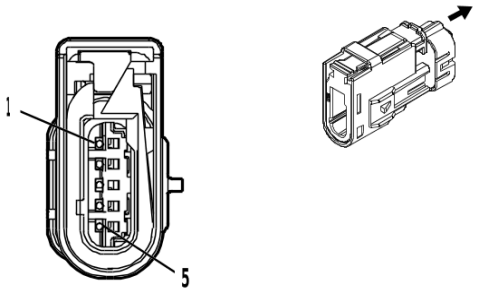
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-17 (L-GN) | No Tool Required |

## A24D Front Side Door Outside Handle - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 2675 | Left Front Exterior Door Handle Switch Unlock Signal | I | — |
| 2 | 0.5 | VT | 4301 | Passive Entry Left Front Antenna Signal High | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | VT / GY | 4302 | Passive Entry Left Front Antenna Signal Low | I | — |
| 5 | 0.5 | BK / WH | 1551 | Signal Ground | I | — |

# A24P Front Side Door Outside Handle - Right




4808321

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed( NA)

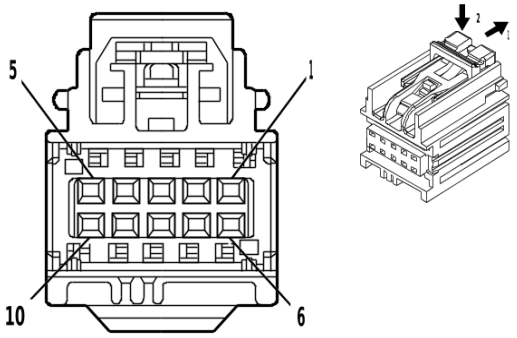
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-17 (L-GN) | No Tool Required |

## A24P Front Side Door Outside Handle - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / VT | 2676 | Right Front Door Exterior Switch Unlock Signal | I | — |
| 2 | 0.5 | GN / YE | 4303 | Passive Entry Right Front Door Antenna Signal High | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | GN / BK | 4304 | Passive Entry Right Front Door Antenna Signal Low | I | — |
| 5 | 0.5 | BK / WH | 1451 | Signal Ground | I | — |

# A26 Heater and Air Conditioning User Interface Control - Front




4891168

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33315379
Service Connector: 13509649
Description: 10-Way F 0.64 Kaizen Series( NA)

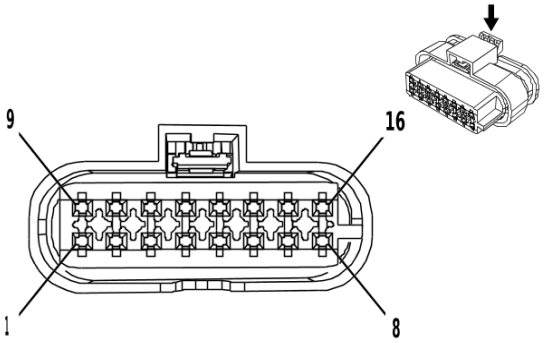
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300629 | J-35616-64B (L-BU) | J-38125-215A |

## A26 Heater and Air Conditioning User Interface Control - Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 4 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | GY / GN | 4636 | HVAC System Enable Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 9 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 10 | 0.5 | BK / WH | 851 | Signal Ground | I | — |

# A38 Reductant Tank Fluid Supply Pump Module (LZ0)




4259227

## Connector Part Information

Harness Type: Emission Reduction Fluid Tank Reservoir Wire Harness
OEM Connector: 33210848
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 MLK Series, Sealed( BK)

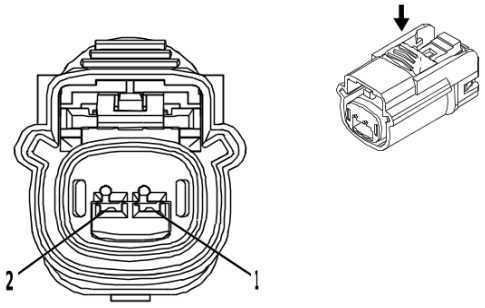
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## A38 Reductant Tank Fluid Supply Pump Module (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 3244 | Diesel Exhaust Fluid Tank Temperature Sensor Signal | I | — |
| 2 | 0.5 | BN | 3245 | Diesel Exhaust Fluid Tank Temperature Sensor Low Reference | I | — |
| 3 | 0.5 | BU | 3107 | Diesel Exhaust Fluid Pressure Sensor Low Reference | I | — |
| 4 | 0.5 | BU | 3108 | Diesel Exhaust Fluid Pressure Sensor Signal | I | — |
| 5 | 0.5 | BN | 3106 | Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 1 | WH | 3103 | Diesel Exhaust Fluid Smart Pump Control | I | — |
| 8 | 1 | BN | 3875 | Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2 | I | — |
| 9 | 1 | YE | 3677 | Diesel Exhaust Fluid Reservoir Heater Control | I | — |
| 10 | 1 | BN | 3676 | Diesel Exhaust Fluid Heating Tank 2 Heater Control | I | — |
| 11 | 1 | BU | 4318 | Diesel Exhaust Fluid Tank Heater Low Control | I | — |
| 12 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 1 | BU | 2937 | Diesel Exhaust Fluid Pump Motor Stator Low Reference | I | — |
| 15 | 1 | BN | 2936 | Diesel Exhaust Fluid Heating Tank 2 Heater Control Low | I | — |
| 16 | 1 | YE | 3876 | Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3 | I | — |

# A99L Pickup Box Endgate Latch - Left (QK2&QT5)




4332222

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 15514573
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

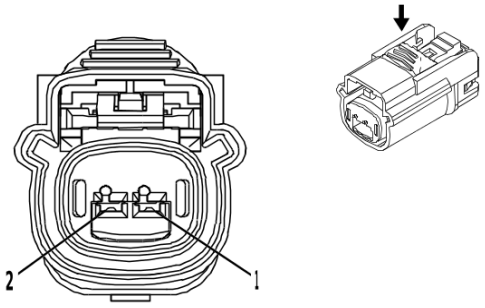
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## A99L Pickup Box Endgate Latch - Left (QK2&QT5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | GN | 1299 | Major Endgate Motor Control | I | — |
| 2 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |

# A99R Pickup Box Endgate Latch - Right (QK2&QT5)




4332222

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 15514573
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

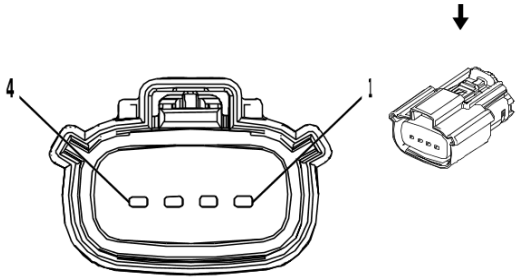
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## A99R Pickup Box Endgate Latch - Right (QK2&QT5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | GN | 1299 | Major Endgate Motor Control | I | — |
| 2 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |

# A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)




2474747

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

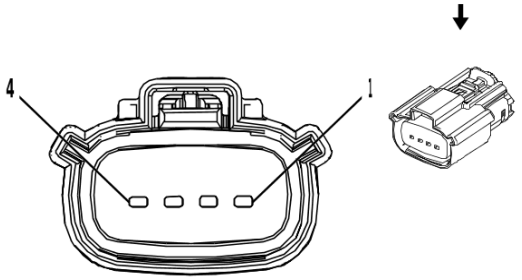
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / BU | 7295 | Left Minor Endgate Ajar Signal | I | — |
| 2 | 0.75 | BK | 1850 | Ground | I | — |
| 3 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |
| 4 | 1 | VT | 7725 | Minor Endgate Motor Control | I | — |

# A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)




2474747

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

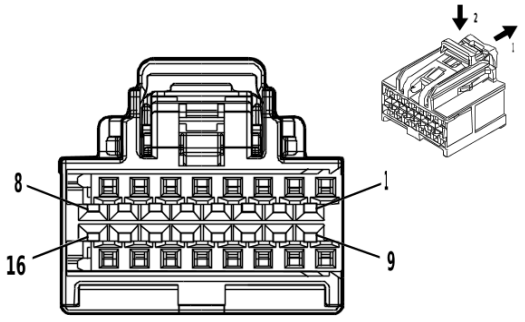
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |
| 2 | 1 | VT | 7725 | Minor Endgate Motor Control | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |

# A103 Roof Console X1




4873254

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35016344
Service Connector: 13519739
Description: 16-Way F 0.64 OCS Series( GY)

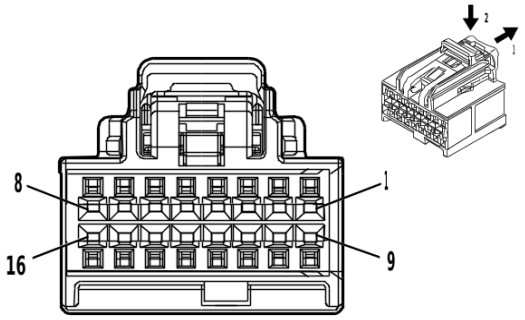
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300660 | J-35616-64B (L-BU) | J-38125-215A |

## A103 Roof Console X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1050 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | WH / BN | 2904 | Row 2 Dome Reading Lamp Switch Signal | I | — |
| 8 | 0.35 | VT / GY | 2906 | Row 2 Dome Reading Lamp 2 Switch Signal | I | — |
| 9 | 0.5 | RD / YE | 240 | Battery Positive Voltage | I | — |
| 10 | 0.5 | GN / WH | 2854 | Body Control Module LIN Bus 8 | I | — |
| 11 | 0.35 | BU / GN | 4785 | Interior Lamp Overhead Enable Signal | I | — |
| 12 | 0.35 | GY / WH | 2369 | Interior Lamp Overhead 2 Enable Signal | I | — |
| 13 | 0.35 | GN / YE | 2903 | Row 2 Dome Reading Lamp Interior Lamp Control | I | — |
| 14 | 0.35 | BN / BU | 2905 | Row 2 Dome Reading Lamp 2 Interior Lamp Control | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | BK | 1050 | Ground | I | — |

# A103 Roof Console X2




4873243

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series( BK)

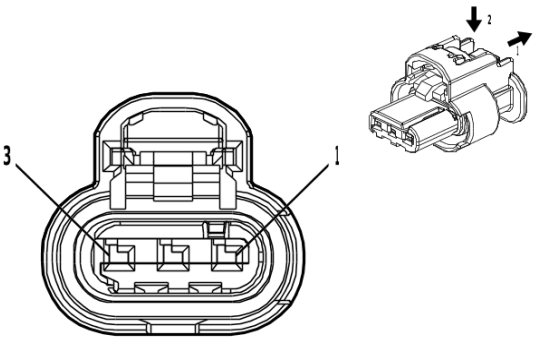
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19354230 | J-35616-64B (L-BU) | J-38125-215A |

## A103 Roof Console X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / VT | 2516 | Telematics Switch Green LED Indicator Control | I | — |
| 2 | 0.35 | BN / WH | 2517 | Telematics Switch Red LED Indicator Control | I | — |
| 3 | 0.35 | GN / WH | 2514 | Telematics Switch Signal | I | — |
| 4 | 0.35 | GN / BK | 2515 | Telematics Switch Supply Voltage | I | — |
| 5 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 6 | 0.35 | YE / VT | 6191 | Power Rear Window Switch Open Signal | I | — |
| 7 | 0.35 | WH | 6192 | Sliding Rear Window Switch Close Signal | I | — |
| 8 | 0.5 | VT | 801 | Retained Accessory Power Control | I | — |
| 9 - 16 | — | — | — | Not Occupied | — | — |

# B1 Air Conditioning Refrigerant Pressure Sensor




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

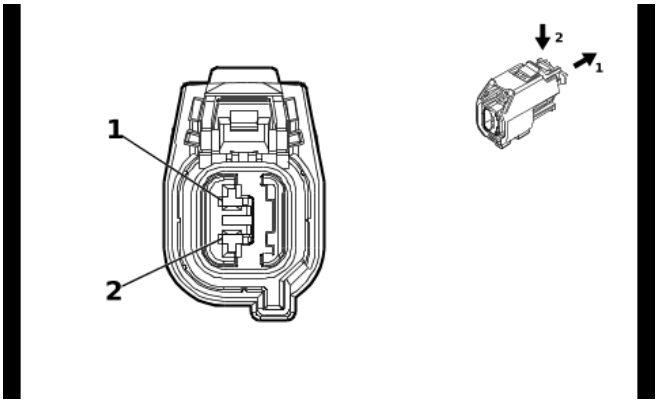
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B1 Air Conditioning Refrigerant Pressure Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | I | — |
| 3 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# B5LF Front Wheel Speed Sensor - Left




5666214

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33189092
Service Connector: 85526683
Description: 2-Way F 1.5 OCS Series, Sealed( GY)

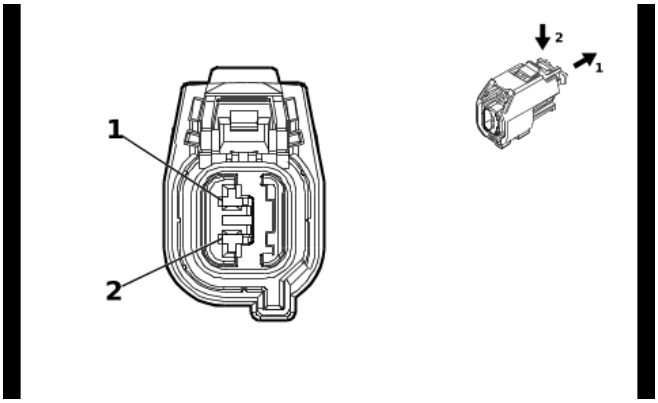
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B5LF Front Wheel Speed Sensor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 7064 | Left Front Wheel Speed Sensor Control | I | — |
| 2 | 0.5 | GY | 830 | Left Front Wheel Speed Sensor Signal | I | — |

## B5LR Rear Wheel Speed Sensor - Left




5666214

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33189092
Service Connector: 85526683
Description: 2-Way F 1.5 OCS Series, Sealed( GY)

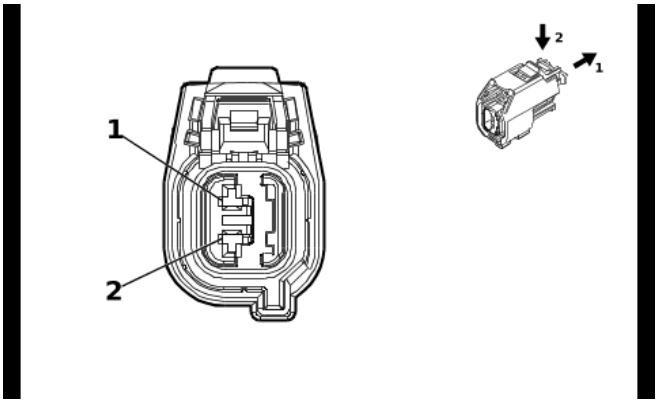
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

### B5LR Rear Wheel Speed Sensor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BK | 7127 | Left Rear Wheel Speed Sensor Control | I | — |
| 2 | 0.5 | BU | 884 | Left Rear Wheel Speed Sensor Signal | I | — |

# B5RF Front Wheel Speed Sensor - Right




5666214

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33189092
Service Connector: 85526683
Description: 2-Way F 1.5 OCS Series, Sealed( GY)

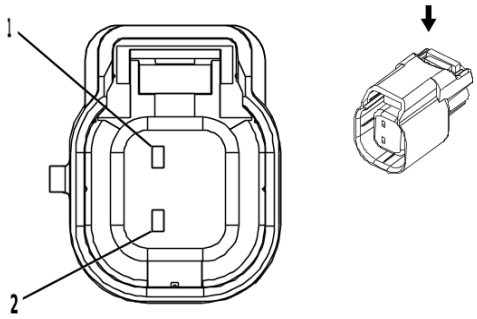
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B5RF Front Wheel Speed Sensor - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BN | 7065 | Right Front Wheel Speed Sensor Control | I | — |
| 2 | 0.5 | YE | 872 | Right Front Wheel Speed Sensor Signal | I | — |

# B5RR Rear Wheel Speed Sensor - Right




4115616

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33122852
Service Connector: 19366860
Description: 2-Way F 1.5 Series, Sealed( BK)

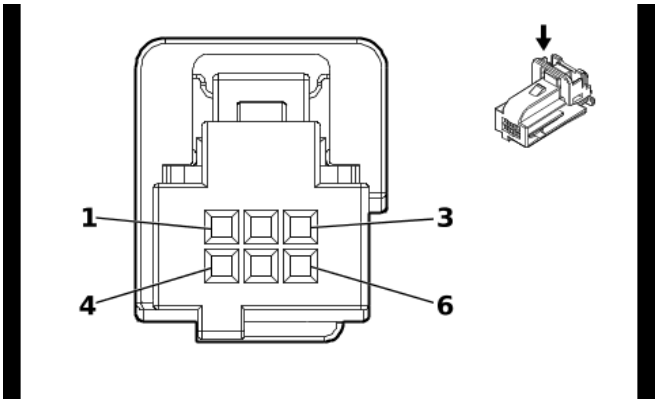
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B5RR Rear Wheel Speed Sensor - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / YE | 7128 | Right Rear Wheel Speed Sensor Control | I | — |
| 2 | 0.5 | VT | 882 | Right Rear Wheel Speed Sensor Signal | I | — |

# B10D Sun Load and Ambient Light and Security Indicator Sensor




2282896

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35289942
Service Connector: 85587649
Description: 6-Way F 0.64 Micro-Quadlock Series( BK)

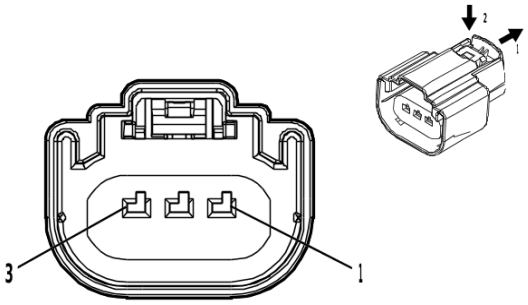
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B10D Sun Load and Ambient Light and Security Indicator Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY | 590 | Driver Solar Sensor Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | WH / BU | 278 | Ambient Light Sensor Signal | I | — |
| 4 | 0.35 | BU / WH | 734 | Inside Air Temperature Sensor Signal | I | — |
| 5 | 0.35 | GY | 728 | Security Indicator Control | I | — |
| 6 | 0.35 | BK / YE | 407 | Sensor Low Reference | I | — |

# B11LF Front Suspension 4 Corner Leveling System Position Sensor - Left (Z45)




4569745

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed( BK)

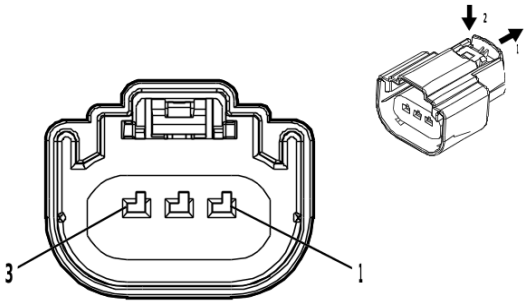
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B11LF Front Suspension 4 Corner Leveling System Position Sensor - Left (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 1205 | Left Front Suspension Position Sensor Voltage Reference | I | — |
| 2 | 0.5 | BK / BU | 1206 | Left Front Suspension Position Sensor Low Reference | I | — |
| 3 | 0.5 | BN / WH | 1207 | Left Front Suspension Position Sensor Signal | I | — |

# B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (Z45)




4569745

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed( BK)

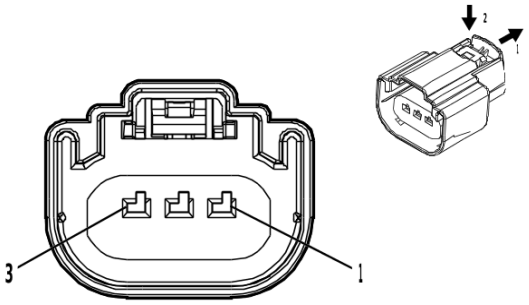
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / RD | 1208 | Left Rear Suspension Position Sensor Voltage Reference | I | — |
| 2 | 0.5 | BK / GN | 1209 | Left Rear Suspension Position Sensor Low Reference | I | — |
| 3 | 0.5 | GN / WH | 1210 | Left Rear Suspension Position Sensor Signal | I | — |

# B11RF Front Suspension 4 Corner Leveling System Position Sensor - Right (Z45)




4569745

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed( BK)

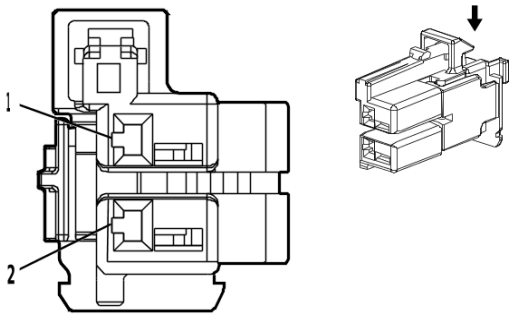
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B11RF Front Suspension 4 Corner Leveling System Position Sensor - Right (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / RD | 1211 | Right Front Suspension Position Sensor Voltage Reference | I | — |
| 2 | 0.5 | BK / GY | 1212 | Right Front Suspension Position Sensor Low Reference | I | — |
| 3 | 0.5 | YE / WH | 1213 | Right Front Suspension Position Sensor Signal | I | — |

# B13 Automatic Transmission Fluid Temperature Sensor (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B13 Automatic Transmission Fluid Temperature Sensor (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 2 | 0.5 | BN / YE | 585 | Transmission Fluid Temperature Sensor Signal | I | — |

# B13 Automatic Transmission Fluid Temperature Sensor (MQE)

—

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 312004
Service Connector: Service by Harness - See Part Catalog
Description: —

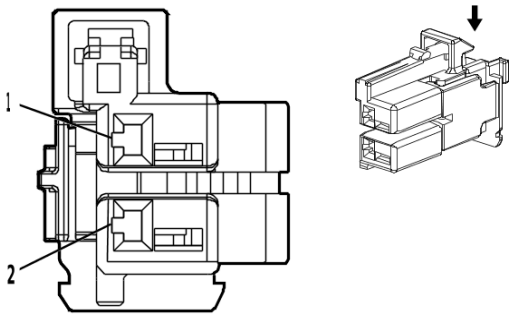
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B13 Automatic Transmission Fluid Temperature Sensor (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GY | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 2 | 0.5 | BK / GY | 585 | Transmission Fluid Temperature Sensor Signal | I | — |

# B13 Automatic Transmission Fluid Temperature Sensor (MHS / MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

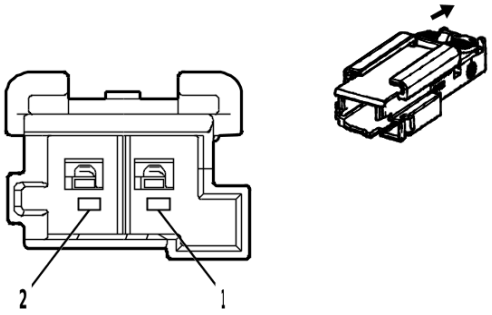
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B13 Automatic Transmission Fluid Temperature Sensor (MHS / MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 2 | 0.5 | BN / YE | 585 | Transmission Fluid Temperature Sensor Signal | I | — |

# B14A Automatic Transmission Output Speed Sensor (MI2)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

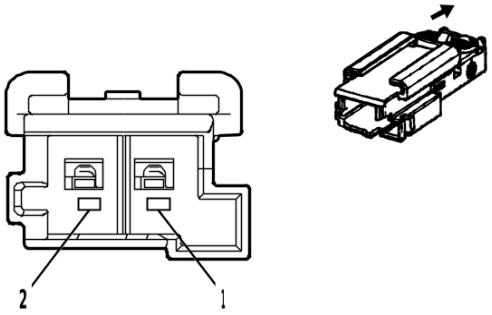
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14A Automatic Transmission Output Speed Sensor (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14A Automatic Transmission Output Speed Sensor (MHS/MQC)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

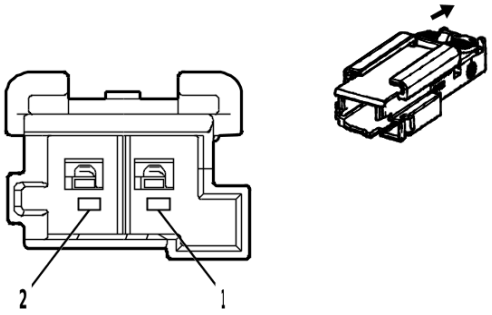
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14A Automatic Transmission Output Speed Sensor (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14A Automatic Transmission Output Speed Sensor (MHT/MQB)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

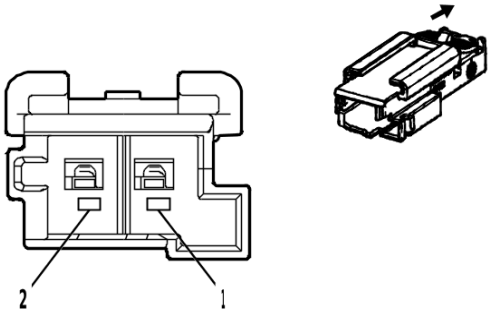
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14A Automatic Transmission Output Speed Sensor (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14C Transmission Input Shaft Speed Sensor (MHS/MQC)




4672611

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

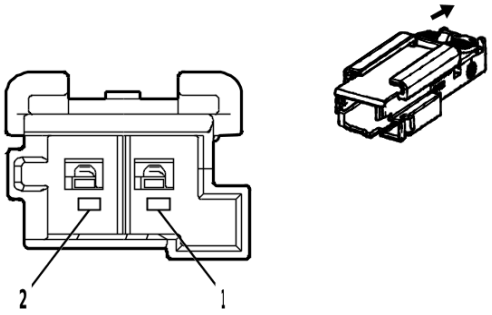
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14C Transmission Input Shaft Speed Sensor (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14C Transmission Input Shaft Speed Sensor (MHT/MQB)




4672611

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

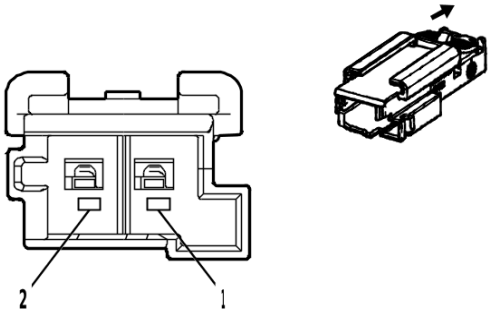
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14C Transmission Input Shaft Speed Sensor (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14C Transmission Input Shaft Speed Sensor (MI2)




4672611

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

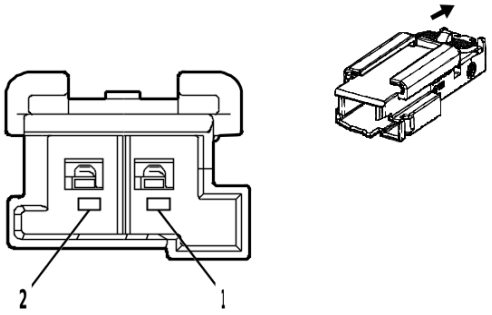
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14C Transmission Input Shaft Speed Sensor (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DA Transmission Intermediate Speed Sensor 1 (MHS/MQC)




4663490

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

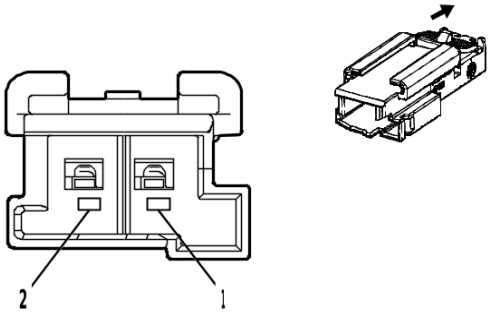
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DA Transmission Intermediate Speed Sensor 1 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DA Transmission Intermediate Speed Sensor 1 (MI2)




4663490

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

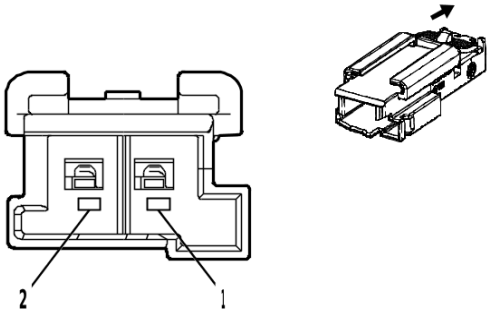
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DA Transmission Intermediate Speed Sensor 1 (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DA Transmission Intermediate Speed Sensor 1 (MHT/MQB)




4663490

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

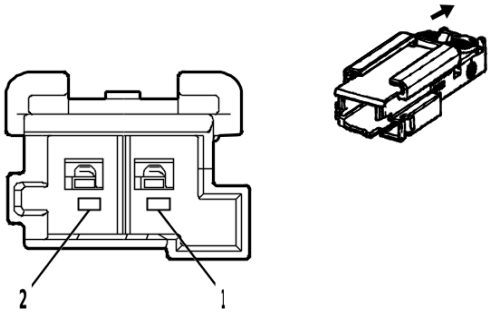
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DA Transmission Intermediate Speed Sensor 1 (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DB Transmission Intermediate Speed Sensor 2 (MHS/MQC)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

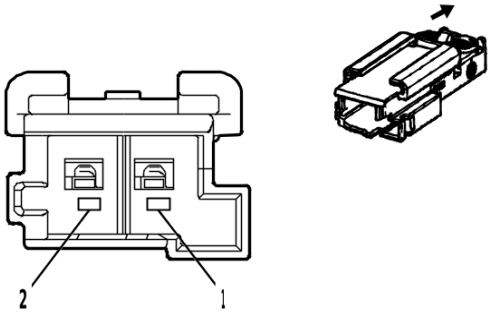
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DB Transmission Intermediate Speed Sensor 2 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DB Transmission Intermediate Speed Sensor 2 (MI2)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

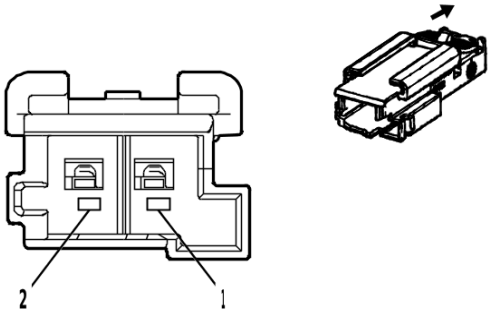
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DB Transmission Intermediate Speed Sensor 2 (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B14DB Transmission Intermediate Speed Sensor 2 (MHT/MQB)




4672593

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2340311-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M SLV WIR CONN MALE

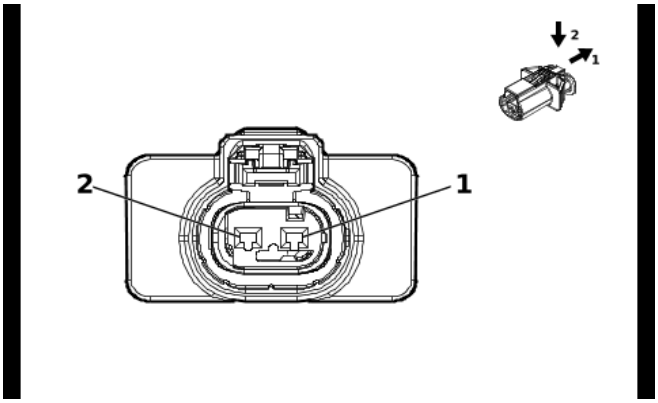
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B14DB Transmission Intermediate Speed Sensor 2 (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |

# B20A Brake Fluid Level Indicator Switch




5877143

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35242147
Service Connector: 85596543
Description: 2-Way F 1.2 MLK Series, Sealed( BK)

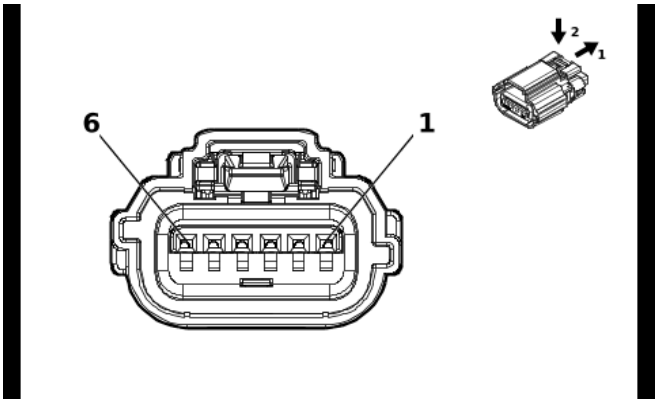
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B20A Brake Fluid Level Indicator Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / GY | 333 | Brake Fluid Level Signal | I | — |
| 2 | 0.5 | BK / WH | 151 | Signal Ground | I | — |

# B22 Brake Pedal Position Sensor




5921818

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35547326
Service Connector: 86825468
Description: 6-Way F 0.64 OCS Series, Sealed( NA)

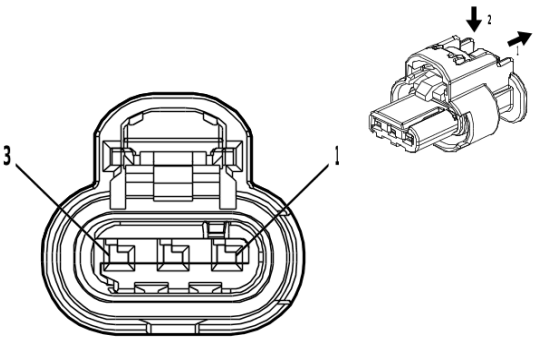
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B22 Brake Pedal Position Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / BN | 5360 | Brake Apply Sensor Low Reference | I | — |
| 2 | 0.35 | WH | 5359 | Brake Apply Sensor Control | I | — |
| 3 | 0.35 | BU / YE | 5361 | Brake Apply Sensor Signal | I | — |
| 4 | 0.35 | WH / GN | 5380 | Brake Position Sensor Signal | I | — |
| 5 | 0.35 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 6 | 0.35 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

## B23 Camshaft Position Sensor (LZ0)




4581126

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

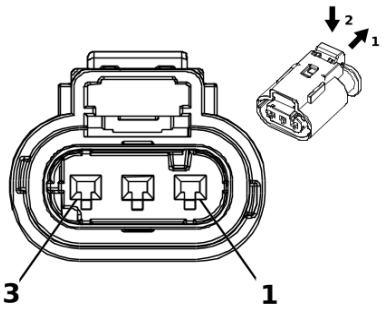
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### B23 Camshaft Position Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / YE | 5297 | Exhaust Camshaft Position Sensor 1 Voltage Reference | I | — |
| 2 | 0.5 | BK / GY | 5296 | Exhaust Camshaft Position Sensor Low Reference 1 | I | — |
| 3 | 0.5 | VT / BK | 5273 | Exhaust Camshaft Position Sensor 1 | I | — |

# B23 Camshaft Position Sensor (L84/L87)




2717069

## Connector Part Information

Harness Type: Camshaft Position Sensor Wire
OEM Connector: 13503570
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

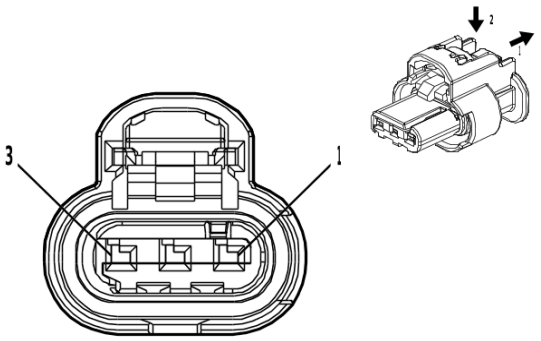
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B23 Camshaft Position Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BU | 5300 | Intake Camshaft Position Sensor 1 Voltage Reference | I | — |
| 2 | 0.5 | BK / GN | 5301 | Intake Camshaft Position Sensor Low Reference 1 | I | — |
| 3 | 0.5 | YE / VT | 5275 | Intake Camshaft Position Sensor 1 | I | — |

# B23E Camshaft Position Sensor - Exhaust (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

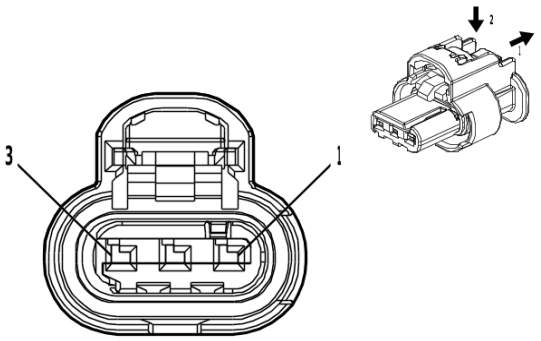
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B23E Camshaft Position Sensor - Exhaust (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / YE | 5297 | Exhaust Camshaft Position Sensor 1 Voltage Reference | I | — |
| 2 | 0.5 | BK / GY | 5296 | Exhaust Camshaft Position Sensor Low Reference 1 | I | — |
| 3 | 0.5 | VT / BK | 5273 | Exhaust Camshaft Position Sensor 1 | I | — |

# B23F Camshaft Position Sensor - Intake (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

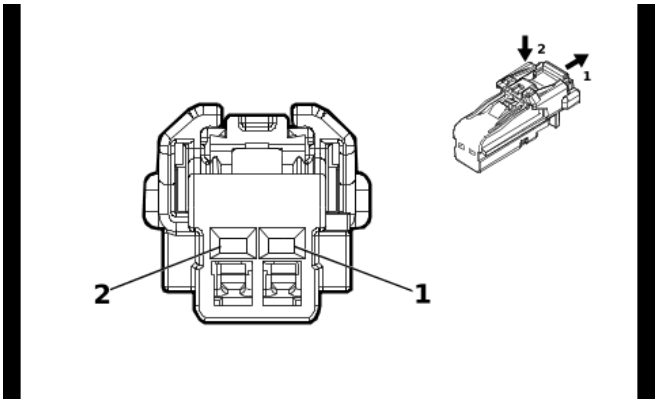
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B23F Camshaft Position Sensor - Intake (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BU | 5300 | Intake Camshaft Position Sensor 1 Voltage Reference | I | — |
| 2 | 0.5 | BK / GN | 5301 | Intake Camshaft Position Sensor Low Reference 1 | I | — |
| 3 | 0.5 | YE / VT | 5275 | Intake Camshaft Position Sensor 1 | I | — |

# B24LF Mobile Telephone Microphone - Left Front




4115691

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

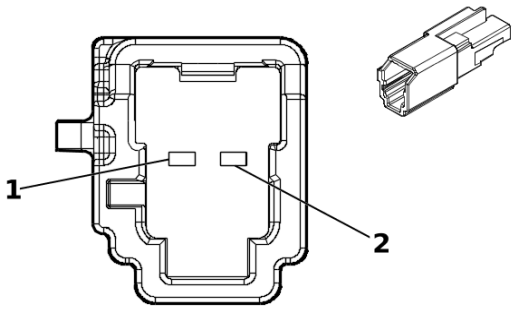
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B24LF Mobile Telephone Microphone - Left Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / BN | 654 | Cellular Telephone Microphone Low Reference | I | — |
| 2 | 0.35 | BU | 655 | Cellular Telephone Microphone Signal | I | — |

# B24RF Mobile Telephone Microphone - Right Front




5360948

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35264701
Service Connector: 84847259
Description: 2-Way M 1.2 MCON Series( GY)

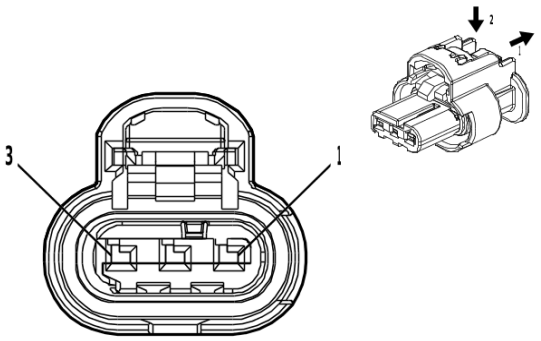
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B24RF Mobile Telephone Microphone - Right Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / BK | 7044 | Microphone [-] Signal | I | — |
| 2 | 0.35 | VT / YE | 7043 | Microphone [+] Signal | I | — |

## B26 Crankshaft Position Sensor (L3B)




4778903

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

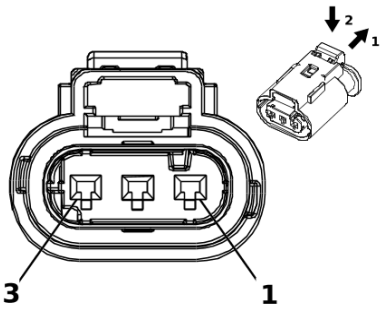
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### B26 Crankshaft Position Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | I | — |
| 2 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | I | — |
| 3 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | I | — |

# B26 Crankshaft Position Sensor (L84/L87)




2717069

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

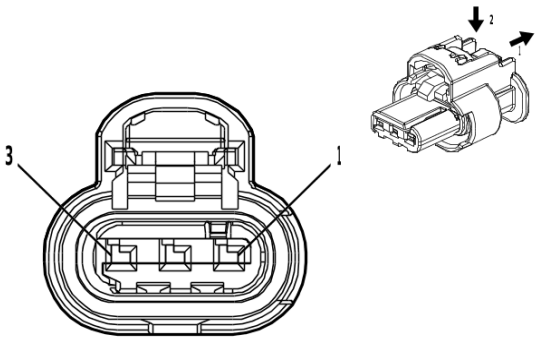
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B26 Crankshaft Position Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | I | — |
| 2 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | I | — |
| 3 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | I | — |

## B26 Crankshaft Position Sensor (LZ0)




4581126

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

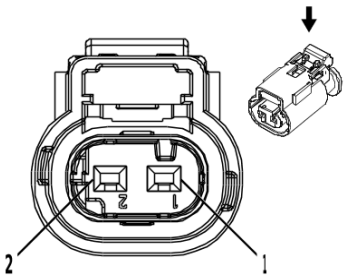
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### B26 Crankshaft Position Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | I | — |
| 2 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | I | — |
| 3 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | I | — |

# B34 Engine Coolant Temperature Sensor (L84/L87)




2717066

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Extension Harness
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

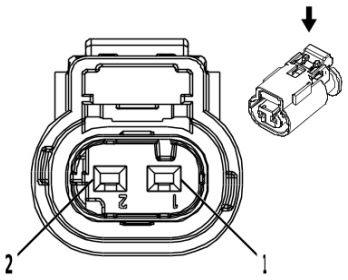
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34 Engine Coolant Temperature Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | I | — |
| 2 | 0.5 | BK / YE | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# B34A Engine Coolant Temperature Sensor 1 (L3B)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

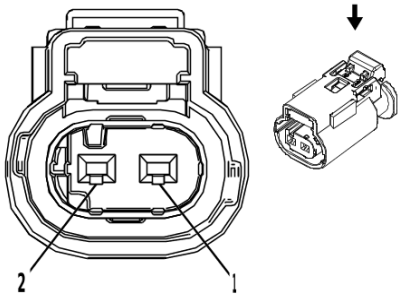
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34A Engine Coolant Temperature Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BU | 2408 | Engine Inlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B34A Engine Coolant Temperature Sensor 1 (LZ0)




2830969

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed( D-GY)

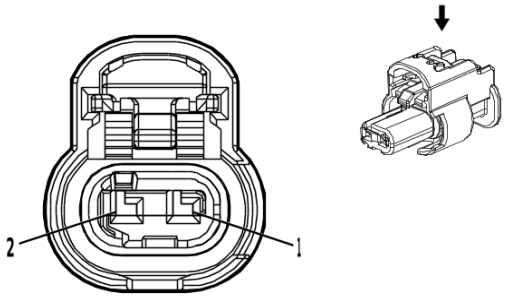
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34A Engine Coolant Temperature Sensor 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BU | 2408 | Engine Inlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B34B Engine Coolant Temperature Sensor 2 (L3B)




4690744

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

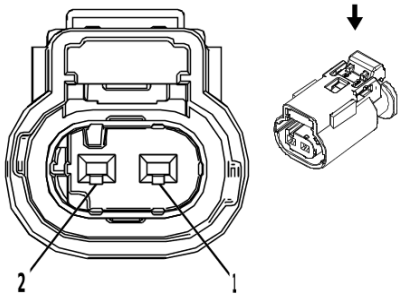
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B34B Engine Coolant Temperature Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# B34B Engine Coolant Temperature Sensor 2 (LZ0)




2830969

## Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Harness
OEM Connector: 13503568
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( D-GY)

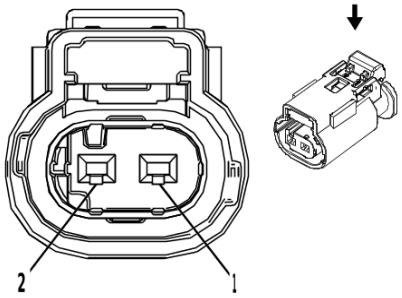
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B34B Engine Coolant Temperature Sensor 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# B34E Engine Coolant Temperature Sensor 5 (L3B)




2830969

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed( D-GY)

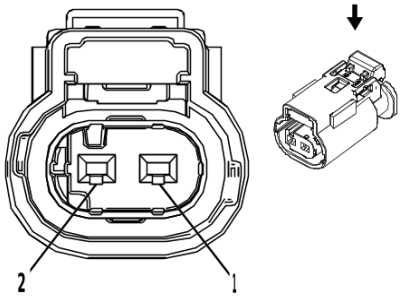
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34E Engine Coolant Temperature Sensor 5 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / YE | 8938 | Engine Integrated Exhaust Manifold Temperature Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B34F Engine Coolant Temperature Sensor 6 (L3B)




2830969

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed( D-GY)

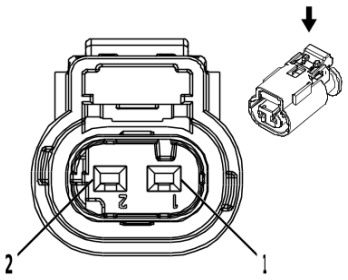
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34F Engine Coolant Temperature Sensor 6 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / VT | 2404 | Engine Block Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B34K Charge Air Cooler Coolant Temperature Sensor - Inlet (LZ0)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

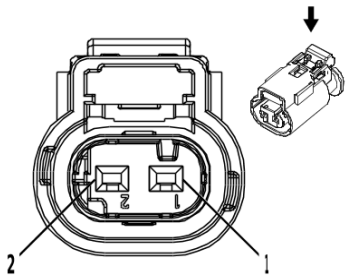
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B34K Charge Air Cooler Coolant Temperature Sensor - Inlet (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / BK | 1422 | Engine Water Charge Air Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# B35 Engine Oil Level Indicator Switch (L84/L87)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

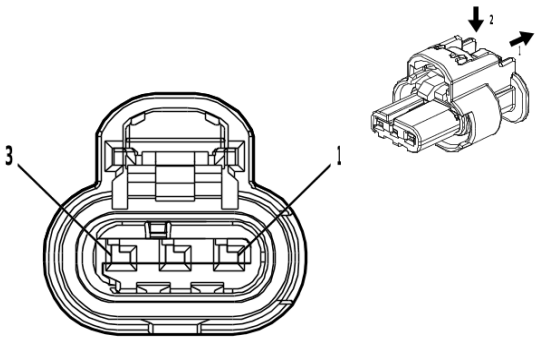
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B35 Engine Oil Level Indicator Switch (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / GN | 1174 | Oil Level Switch Signal | I | — |
| 2 | 0.75 | BK / WH | 251 | Signal Ground | I | — |

# B36 Engine Oil Temperature Sensor (L3B)




4994602

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

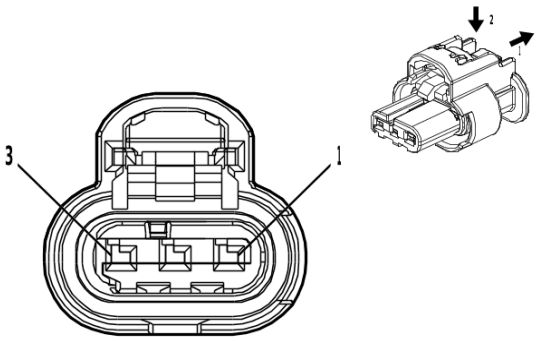
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B36 Engine Oil Temperature Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 2 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | I | — |
| 3 | 0.5 | VT | 7485 | Engine Oil Temperature Sensor 2 Signal | I | — |

# B36 Engine Oil Temperature Sensor (LZ0)




4994602

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

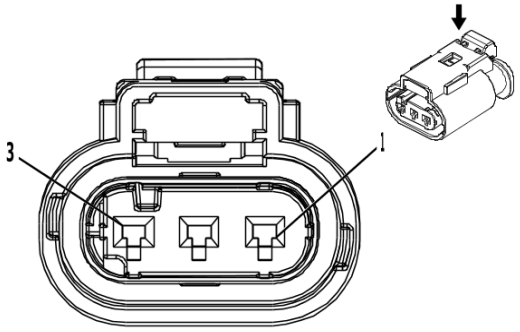
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B36 Engine Oil Temperature Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 2 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | I | — |
| 3 | 0.5 | VT | 7485 | Engine Oil Temperature Sensor 2 Signal | I | — |

# B37B Engine Oil Pressure Sensor (L3B)




3240107

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

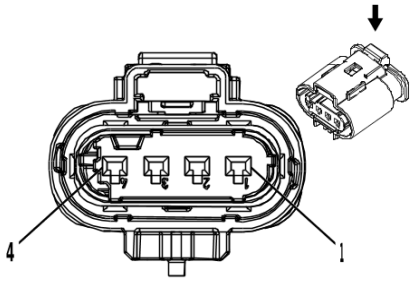
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B37B Engine Oil Pressure Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |

# B37B Engine Oil Pressure Sensor (L84/L87)




2717079

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

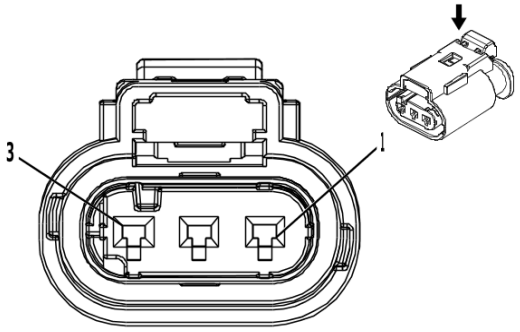
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B37B Engine Oil Pressure Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 2 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | I | — |

# B37B Engine Oil Pressure Sensor (LZ0)




3240107

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

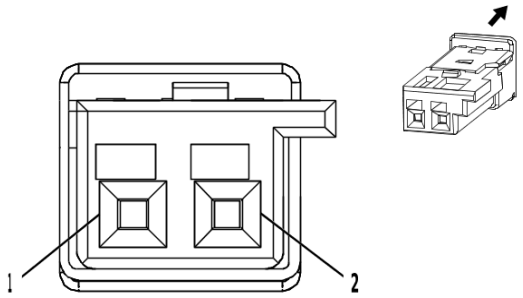
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B37B Engine Oil Pressure Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |

# B39 Air Conditioning Evaporator Air Temperature Sensor




2780265

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 13535799
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Micro-Quadlock Series( NA)

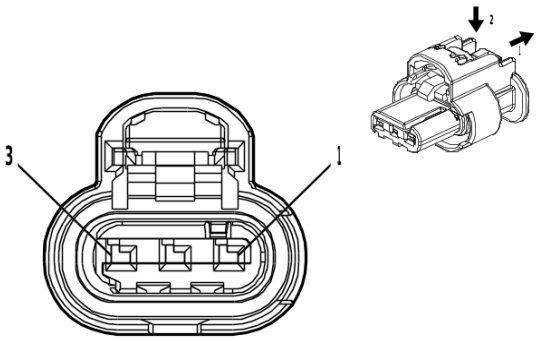
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B39 Air Conditioning Evaporator Air Temperature Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY | 6137 | A/C Evaporator Temperature Sensor Signal | I | — |
| 2 | 0.35 | BK / YE | 407 | Sensor Low Reference | I | — |

# B47 Fuel Pressure Sensor




4581126

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

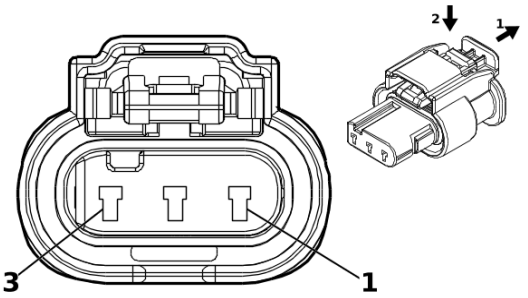
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B47 Fuel Pressure Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / RD | 7445 | Fuel Line Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK / YE | 7447 | Fuel Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | BU / WH | 7446 | Fuel Pressure Sensor Signal | I | — |

# B47B Fuel Rail Pressure Sensor (L3B)




5420917

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34900-3127
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-LL Series, Sealed( GY)

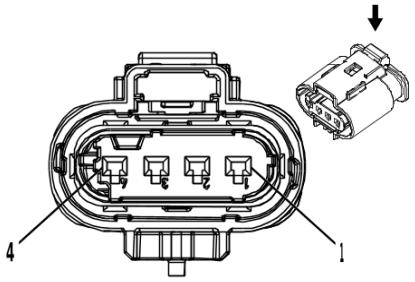
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B47B Fuel Rail Pressure Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 2 | 0.5 | BU / WH | 10786 | Fuel Rail Pressure Sensor SENT 1 Signal | I | — |
| 3 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# B47B Fuel Rail Pressure Sensor (LZ0)




2717079

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

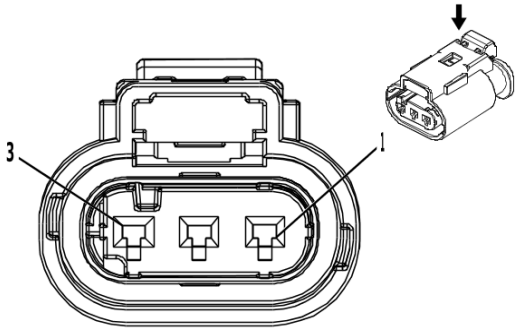
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B47B Fuel Rail Pressure Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / RD | 2917 | Fuel Rail Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BN / YE | 2161 | Fuel Rail Pressure Sensor 2 Signal | I | — |
| 3 | 0.5 | BK / GN | 2919 | Fuel Rail Pressure Sensor Low Reference | I | — |
| 4 | 0.5 | BU / WH | 2918 | Fuel Rail Pressure Sensor Signal | I | — |

# B47B Fuel Rail Pressure Sensor (L84 / L87)




3240107

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 172007659
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

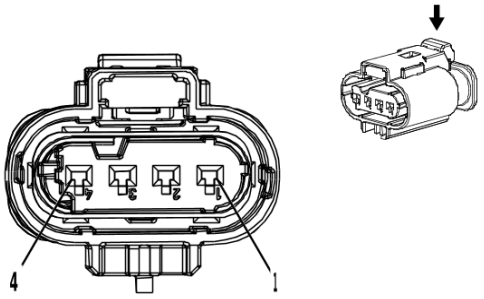
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B47B Fuel Rail Pressure Sensor (L84 / L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GN | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 2 | 0.5 | BU / WH | 10786 | Fuel Rail Pressure Sensor SENT 1 Signal | I | — |
| 3 | 0.5 | BN / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# B52B Heated Oxygen Sensor 2 (L3B)




4036496

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532689
Service Connector: 19330904
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

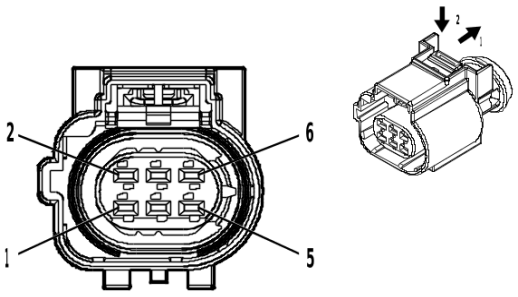
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B52B Heated Oxygen Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 3122 | HO2S Heater Low Control Bank 1 Sensor 2 | I | — |
| 2 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 3 | 0.5 | WH / YE | 3121 | HO2S Low Signal Bank 1 Sensor 2 | I | — |
| 4 | 0.5 | VT / BU | 3120 | HO2S High Signal Bank 1 Sensor 2 | I | — |

# B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L3B)




5086832

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35032609
Service Connector: 84613131
Description: 6-Way F 1.5 MCP Series, Sealed( GY)

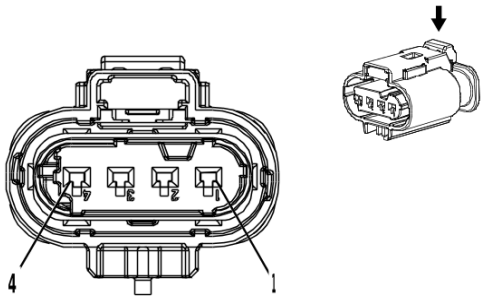
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 6933 | HO2S Pump Current Signal | I | — |
| 2 | 0.5 | BN | 6934 | HO2S Ground | I | — |
| 3 | 0.5 | GY / WH | 3113 | HO2S Heater Low Control Bank 1 Sensor 1 | I | — |
| 4 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 5 | 0.5 | GN | 6935 | HO2S Pump Current Trim Signal | I | — |
| 6 | 0.5 | YE / GY | 6936 | HO2S Signal | I | — |

# B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L84/L87)




4381050

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

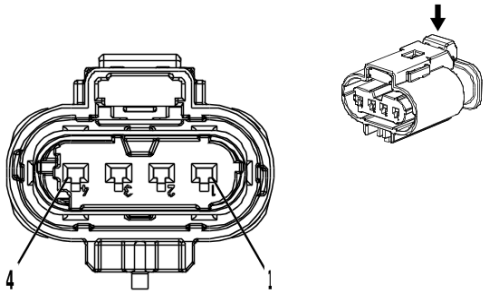
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 3113 | HO2S Heater Low Control Bank 1 Sensor 1 | I | — |
| 2 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 3 | 0.5 | WH / BK | 3111 | HO2S Low Signal Bank 1 Sensor 1 | I | — |
| 4 | 0.5 | VT / GY | 3110 | HO2S High Signal Bank 1 Sensor 1 | I | — |

# B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L84/L87)




4036370

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed( GY)

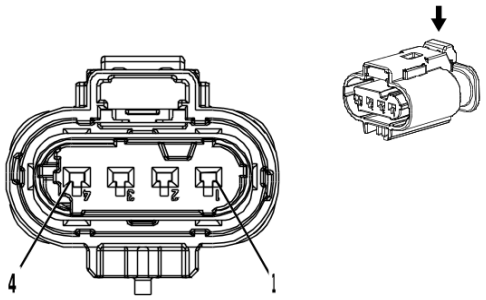
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BN | 3223 | HO2S Heater Low Control Bank 2 Sensor 2 | I | — |
| 2 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 3 | 0.5 | YE / BU | 3221 | HO2S Low Signal Bank 2 Sensor 2 | I | — |
| 4 | 0.5 | VT / GN | 3220 | HO2S High Signal Bank 2 Sensor 2 | I | — |

# B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L84/L87)




4381050

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

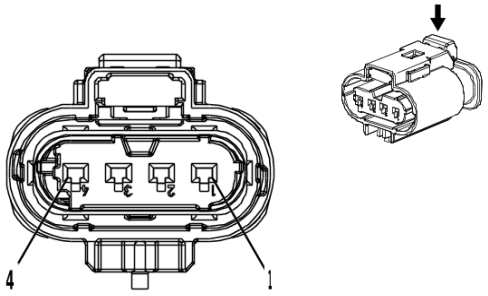
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 3212 | HO2S Heater Low Control Bank 2 Sensor 1 | I | — |
| 2 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 3 | 0.5 | YE / WH | 3211 | HO2S Low Signal Bank 2 Sensor 1 | I | — |
| 4 | 0.5 | VT / WH | 3210 | HO2S High Signal Bank 2 Sensor 1 | I | — |

# B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L84/L87)




4036370

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed( GY)

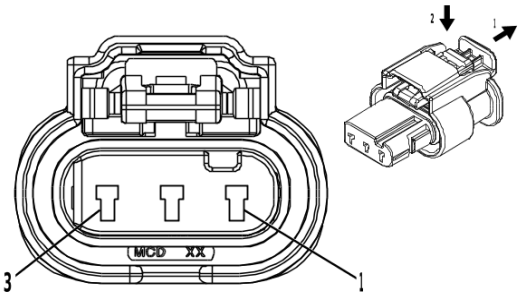
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 3122 | HO2S Heater Low Control Bank 1 Sensor 2 | I | — |
| 2 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 3 | 0.5 | WH / YE | 3121 | HO2S Low Signal Bank 1 Sensor 2 | I | — |
| 4 | 0.5 | VT / BU | 3120 | HO2S High Signal Bank 1 Sensor 2 | I | — |

# B55 Engine Compartment Cover Switch




4421568

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33320864
Service Connector: 19368220
Description: 3-Way F 1.2 MCON-LL Series, Sealed( BK)

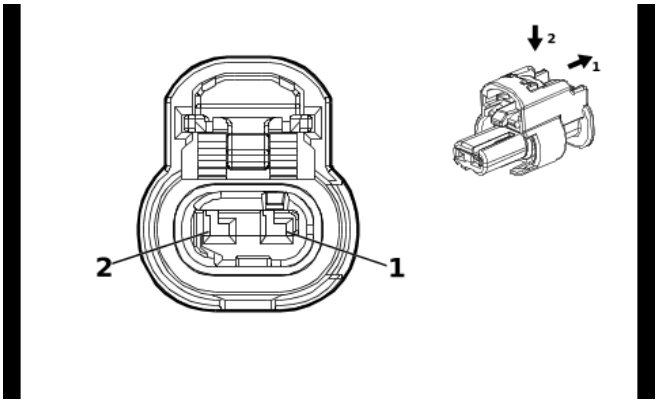
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B55 Engine Compartment Cover Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 4063 | Hood Status A Signal | I | — |
| 2 | 0.35 | BN / GN | 4064 | Hood Status B Signal | I | — |
| 3 | 0.5 | BK / WH | 151 | Signal Ground | I | — |

# B58L Airbag Front End Discriminating Sensor - Left




4649903

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

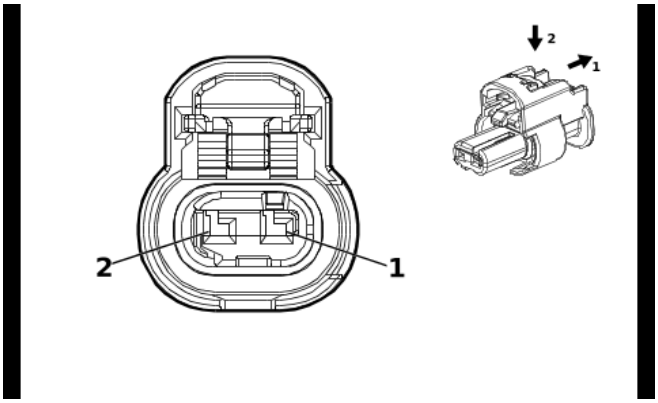
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B58L Airbag Front End Discriminating Sensor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / YE | 354 | Left Front Impact Discriminating Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 5045 | Left Front Impact Discriminating Sensor Low Reference | I | — |

# B58R Airbag Front End Discriminating Sensor - Right




4649903

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

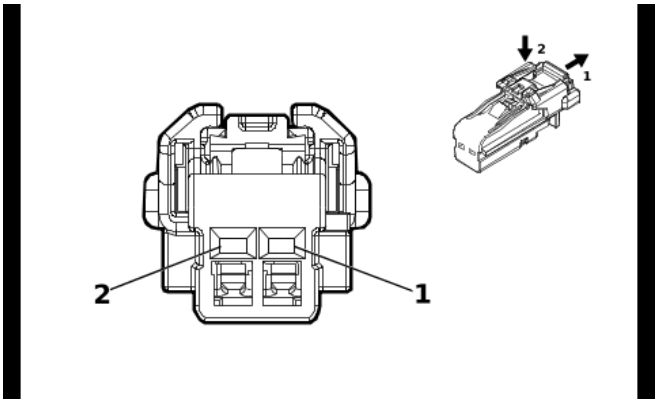
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B58R Airbag Front End Discriminating Sensor - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GN | 1409 | Right Front Impact Discriminating Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 5600 | Right Front Impact Discriminating Sensor Low Reference | I | — |

# B61P Seat Belt Tension Sensor - Passenger




4115691

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

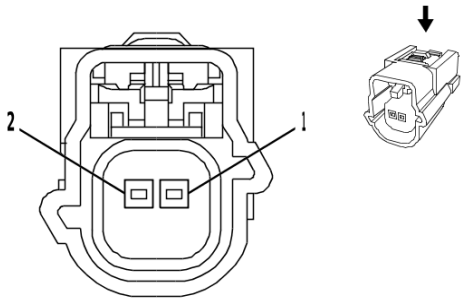
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B61P Seat Belt Tension Sensor - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY / OG | 3946 | Passenger Automatic Locking Retractor Switch Low Reference | I | — |
| 2 | 0.35 | OG / BN | 3947 | Passenger Automatic Locking Retractor Switch Signal | I | — |

# B63LF Airbag Side Impact Sensor - Left Front Door




2179777

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed( GY)

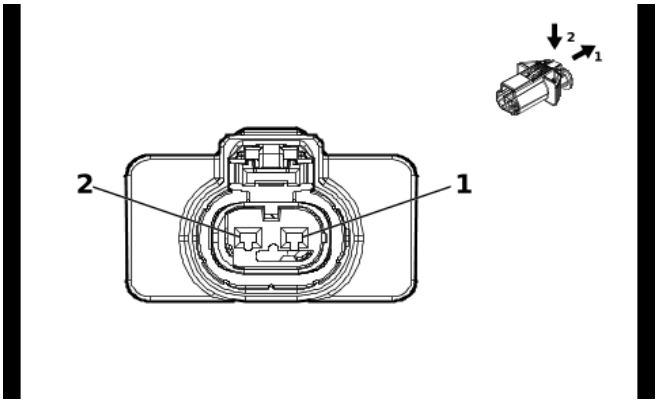
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B63LF Airbag Side Impact Sensor - Left Front Door

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GN | 2132 | Left Front Side Impact Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 6628 | Left Front Side Impact Sensor Low Reference | I | — |

# B63LR Airbag Side Impact Rear Sensor - Left Door - EXTENDED CAB/CREW CAB




5877154

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35242148
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MLK Series, Sealed( BK)

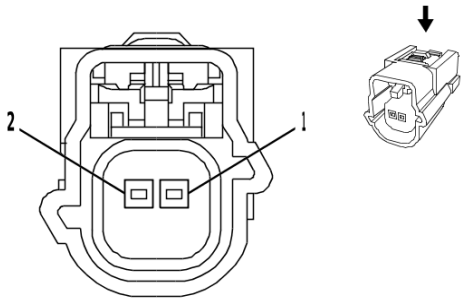
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B63LR Airbag Side Impact Rear Sensor - Left Door - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / BU | 6622 | Left Rear Side Impact Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 6623 | Left Rear Side Impact Sensor Low Reference | I | — |

# B63RF Airbag Side Impact Sensor - Right Front Door




2179777

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed( GY)

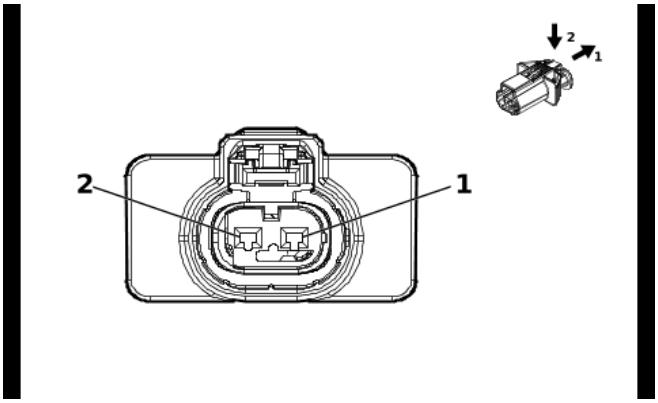
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B63RF Airbag Side Impact Sensor - Right Front Door

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / OG | 2134 | Right Front Side Impact Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 6629 | Right Front Side Impact Sensor Low Reference | I | — |

# B63RR Airbag Side Impact Rear Sensor - Right Door - EXTENDED CAB/CREW CAB




5877154

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35242148
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MLK Series, Sealed( BK)

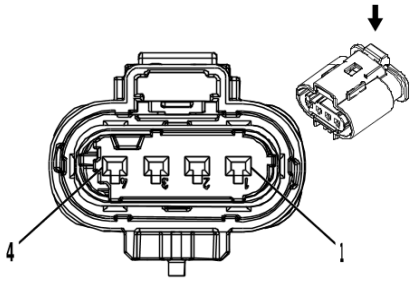
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B63RR Airbag Side Impact Rear Sensor - Right Door - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / WH | 6626 | Right Rear Side Impact Sensor Signal | I | — |
| 2 | 0.5 | BK / OG | 6627 | Right Rear Side Impact Sensor Low Reference | I | — |

# B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (L3B)




2717079

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

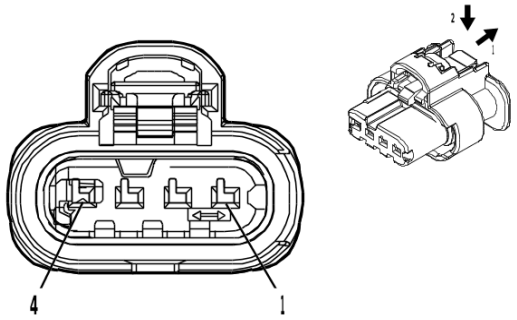
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 7329 | Pre-Throttle Air Temperature Signal | I | — |
| 2 | 0.5 | GY / RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | I | — |
| 3 | 0.5 | BK / GN | 469 | Manifold Absolute Pressure Sensor Low Reference | I | — |
| 4 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LZ0)




4934614

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

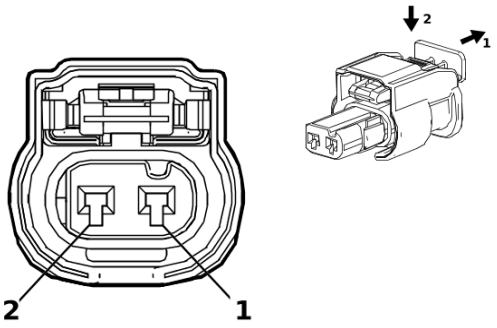
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 7329 | Pre-Throttle Air Temperature Signal | I | — |
| 2 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 3 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 4 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

## B68A Knock Sensor 1 (L3B)




3960139

### Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

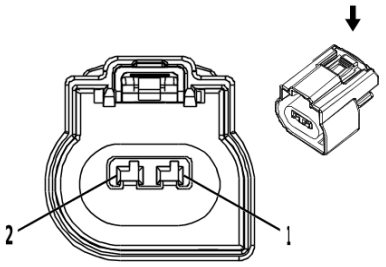
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

### B68A Knock Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GY | 496 | Knock Sensor 1 Signal | I | — |
| 2 | 0.5 | BK / YE | 1716 | Knock Sensor Low Reference 1 | I | — |

# B68A Knock Sensor 1 (L84/L87)




2717073

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed( BK)

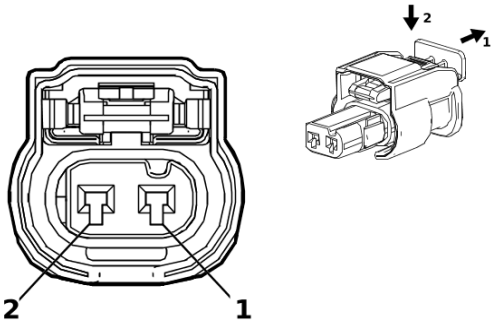
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## B68A Knock Sensor 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / GY | 496 | Knock Sensor 1 Signal | I | — |
| 2 | 0.75 | BK / YE | 1716 | Knock Sensor Low Reference 1 | I | — |

# B68B Knock Sensor 2 (L3B)




3960139

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

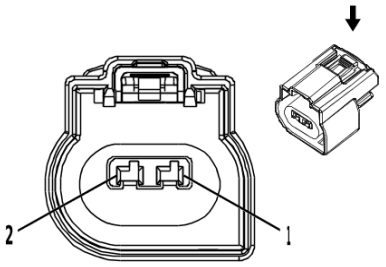
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B68B Knock Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GY | 1876 | Knock Sensor 2 Signal | I | — |
| 2 | 0.5 | BK / GY | 2303 | Knock Sensor Low Reference 2 | I | — |

# B68B Knock Sensor 2 (L84/L87)




2717073

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed( BK)

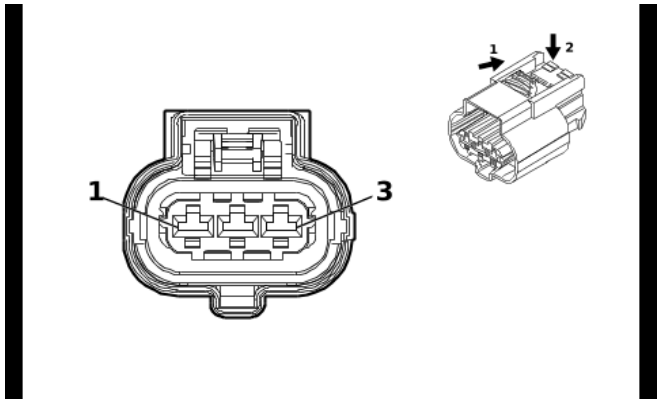
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## B68B Knock Sensor 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / GY | 1876 | Knock Sensor 2 Signal | I | — |
| 2 | 0.75 | BK / GY | 2303 | Knock Sensor Low Reference 2 | I | — |

## B74 Manifold Absolute Pressure Sensor (L84/L87)




4900977

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133579
Service Connector: 84815530
Description: 3-Way F 2.8 CTS Series, Sealed( BK)

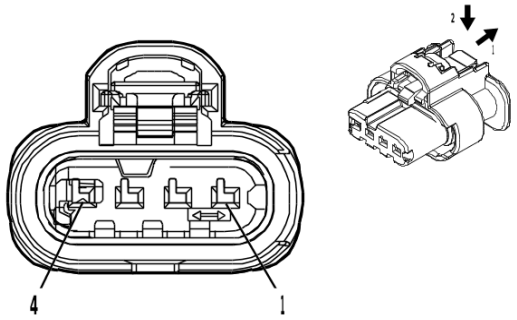
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

### B74 Manifold Absolute Pressure Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK / GN | 469 | Manifold Absolute Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B75 Mass Airflow Sensor (L3B)




4934614

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

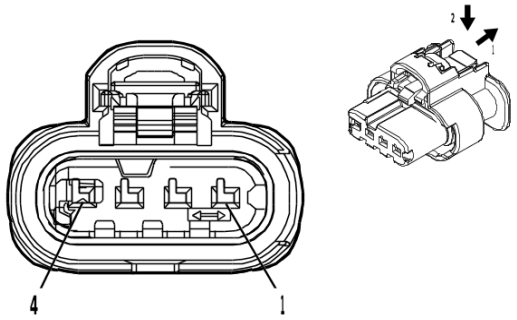
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B75 Mass Airflow Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 2 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 3 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | I | — |
| 4 | 0.5 | BK | 6550 | Ground | I | — |

# B75 Mass Airflow Sensor (L84/L87)




4934614

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

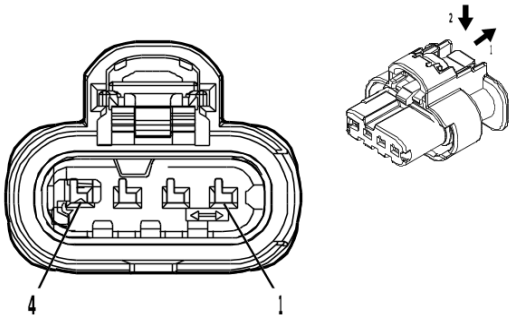
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B75 Mass Airflow Sensor (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 2 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 3 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | I | — |
| 4 | 0.75 | BK / WH | 251 | Signal Ground | I | — |

# B75 Mass Airflow Sensor (LZ0)




4934614

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

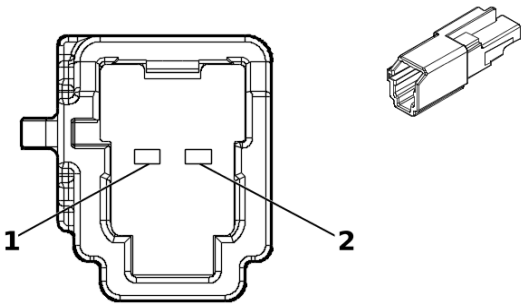
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B75 Mass Airflow Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 2 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 3 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | I | — |
| 4 | 0.75 | BK / WH | 251 | Signal Ground | I | — |

# B77 Radio Volume Compensator Interior Noise Microphone




5355341

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35258943
Service Connector: 84815531
Description: 2-Way M 1.2 MCON Series( BK)

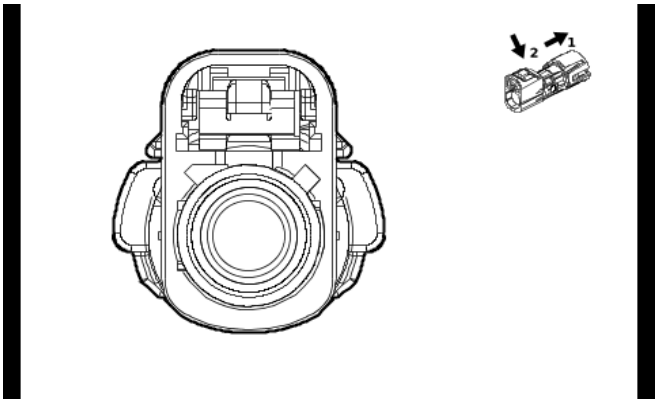
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## B77 Radio Volume Compensator Interior Noise Microphone

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / BK | 3008 | Active Noise Cancellation Microphone 1 Feedback Signal | I | — |
| 2 | 0.35 | GN / BN | 3005 | Active Noise Cancellation Microphone 1 Signal | I | — |

# B87 Rearview Driver Information Camera (UV2)




5758030

## Connector Part Information

Harness Type: Endgate Wiring Harness COAX
OEM Connector: 35187032
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

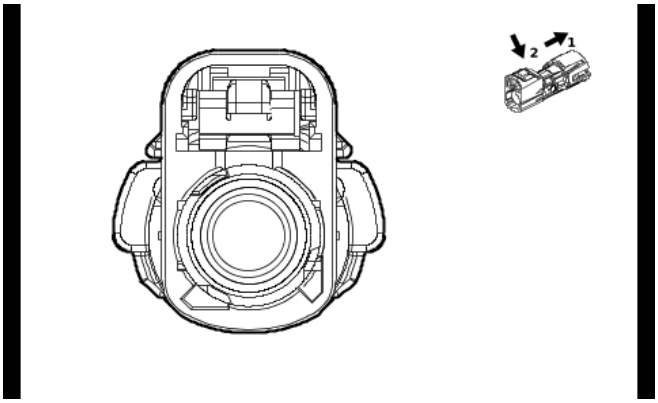
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B87 Rearview Driver Information Camera (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Rear Vision Camera Coaxial Video Signal | I | — |

# B87 Rearview Driver Information Camera (UVB)




5757455

## Connector Part Information

Harness Type: Endgate Wiring Harness COAX
OEM Connector: 35187043
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( OG)

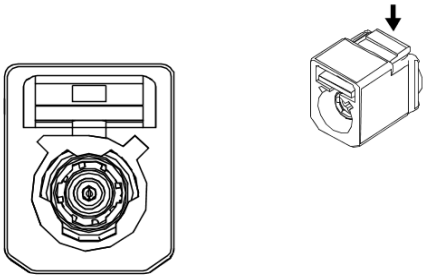
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B87 Rearview Driver Information Camera (UVB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Rear Vision Camera Coaxial Video Signal | I | — |

# B87CA Auxiliary Rearview Camera - Cargo Area (UVN)



3293633

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper COAX
OEM Connector: 13519801
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

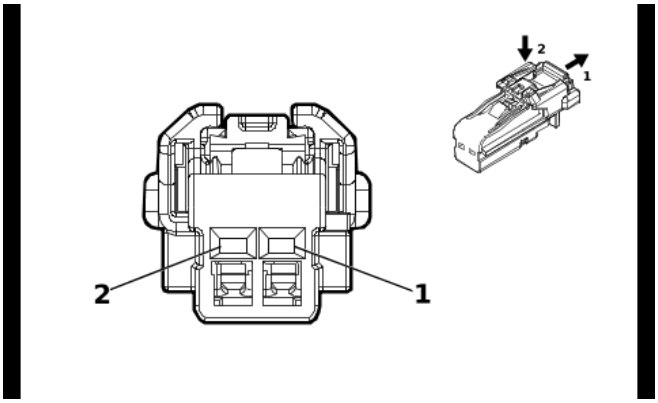
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B87CA Auxiliary Rearview Camera - Cargo Area (UVN)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Cargo Bed Rear Vision Camera Coaxial Video Signal | I | — |

## B88D Seat Belt Switch - Driver




4115691

### Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

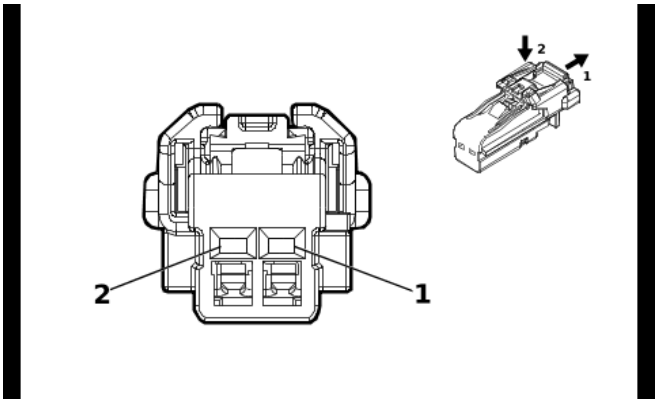
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### B88D Seat Belt Switch - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 2 | 0.5 | OG / GY | 2652 | Driver Seat Belt Sensor Signal | I | — |

# B88P Seat Belt Switch - Passenger




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

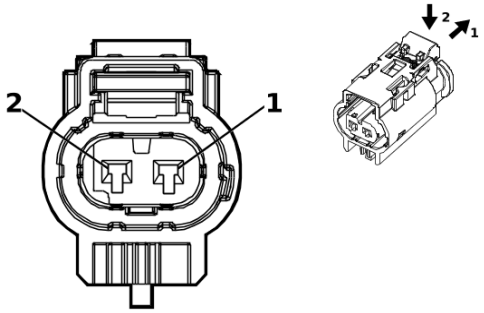
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B88P Seat Belt Switch - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 2 | 0.5 | OG / VT | 1362 | Passenger Seat Belt Switch Signal | I | — |

# B96 Cylinder Head Temperature Sensor (LZ0)




3747580

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33159713
Service Connector: 19332627
Description: 2-Way F 1.2 Multilock Series, Sealed( GY)

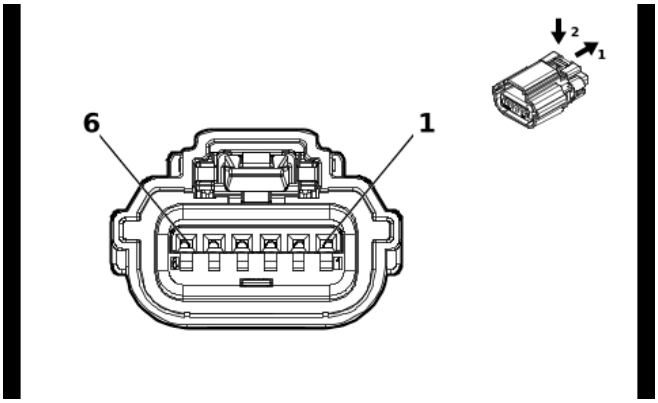
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B96 Cylinder Head Temperature Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 37 | Engine Block Temperature Sensor Signal | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |

# B107 Accelerator Pedal Position Sensor




5921819

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35390637
Service Connector: 86825466
Description: 6-Way F 0.64 OCS Series, Sealed( BK)

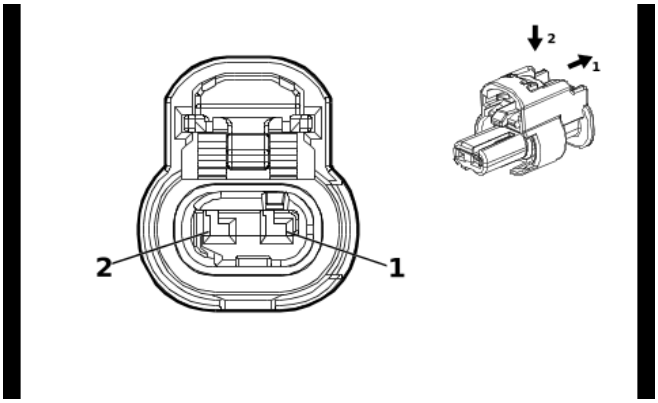
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B107 Accelerator Pedal Position Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH / RD | 1164 | Accelerator Pedal Position 5V Reference 1 | I | — |
| 2 | 0.35 | YE / WH | 1161 | Accelerator Pedal Position Signal 1 | I | — |
| 3 | 0.35 | BK / BU | 1271 | Accelerator Pedal Position Low Reference 1 | I | — |
| 4 | 0.35 | BK / VT | 1272 | Accelerator Pedal Position Low Reference 2 | I | — |
| 5 | 0.35 | GN / WH | 1162 | Accelerator Pedal Position Signal 2 | I | — |
| 6 | 0.35 | BN / RD | 1274 | Accelerator Pedal Position 5V Reference 2 | I | — |

# B110 Battery Monitor Module X1




4649903

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## B110 Battery Monitor Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / YE | 2855 | Body Control Module LIN Bus 9 | II | — |
| 2 | 0.75 | RD / YE | 2340 | Battery Positive Voltage | I | — |

# B110 Battery Monitor Module X2 (L3B/L84/L87)

—

## Connector Part Information

Harness Type: Battery Negative Cable
OEM Connector: 13516387
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B110 Battery Monitor Module X2 (L3B/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 50 | BK | 550 | Ground | I | — |

# B110 Battery Monitor Module X2 (LZ0)

—

## Connector Part Information

Harness Type: Battery Negative Cable
OEM Connector: 13516387
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

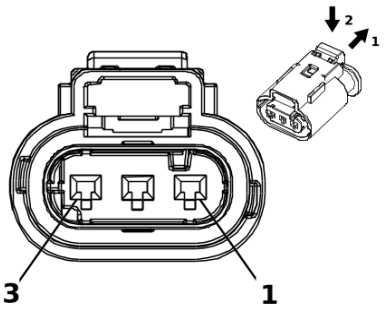
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B110 Battery Monitor Module X2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 50 | BK | 550 | Ground | I | — |

# B111 Turbocharger/Supercharger Boost Pressure Sensor (L3B)




2717069

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

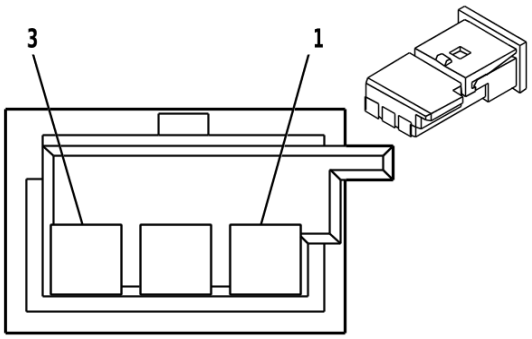
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B111 Turbocharger/Supercharger Boost Pressure Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 3 | 0.5 | YE / WH | 3200 | Throttle Inlet Absolute Pressure Sensor Signal | I | — |

# B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor (ASV&CE1)




647970

## Connector Part Information

Harness Type: Headlamp Automatic Control Ambient Light Sensor Wiring Harness to Dome Lamp Wiring Harness
OEM Connector: 13153088
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series( BK)

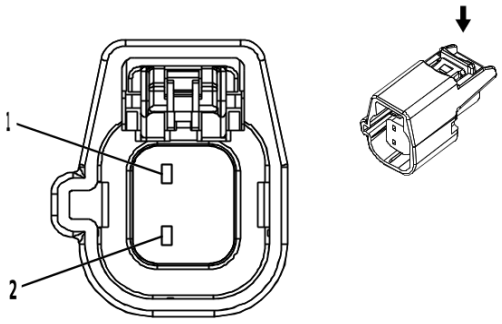
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor (ASV&CE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / VT | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.35 | GN / BN | 4115 | Body Control Module LIN Bus 5 | I | — |
| 3 | 0.35 | BK | 851 | Signal Ground | I | — |

# B118 Windshield Washer Solvent Container Level Sensor




3958652

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33113086
Service Connector: 13593220
Description: 2-Way F 1.5 Series, Sealed( L-GY)

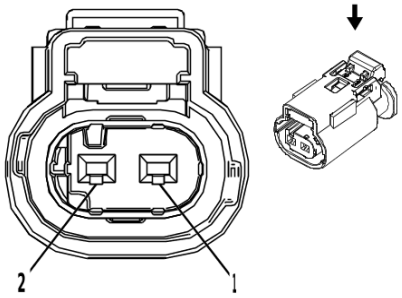
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B118 Windshield Washer Solvent Container Level Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 185 | Low Washer Fluid Indicator Control | I | — |
| 2 | 0.5 | BK / WH | 151 | Signal Ground | I | — |

# B130C Exhaust Gas Recirculation Temperature Sensor 3 (LZ0)




2830969

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed( D-GY)

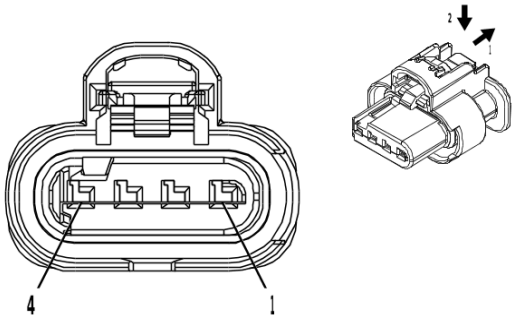
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B130C Exhaust Gas Recirculation Temperature Sensor 3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GN | 3235 | Exhaust Gas Recirculation Temperature Sensor 3 Low Reference | I | — |
| 2 | 0.5 | WH / GY | 3234 | Exhaust Gas Recirculation Temperature Sensor 3 Signal | I | — |

# B136 Exhaust Particulate Matter Sensor (LZ0)




4210809

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33390897
Service Connector: 85518225
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

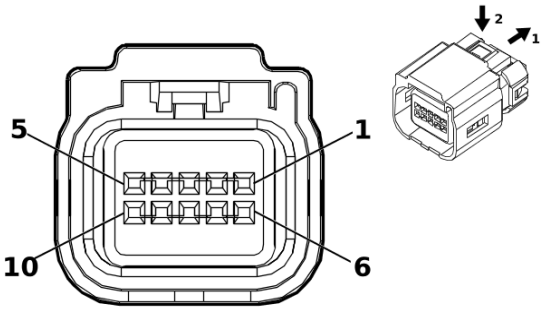
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B136 Exhaust Particulate Matter Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK / WH | 1151 | Signal Ground | I | — |
| 2 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 3 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 4 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |

# B137B Power Steering Shaft Torque/Position Sensor




3608469

## Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness - Shaft Sensor
OEM Connector: 13587225
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed( GY)

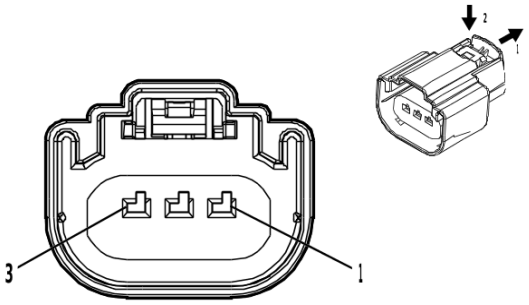
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B137B Power Steering Shaft Torque/Position Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 8367 | Handwheel Channel A Torque Pressure Sensor 1 SENT Signal | I | — |
| 2 | 0.5 | RD | 8366 | Handwheel Channel A High Reference | I | — |
| 3 | 0.5 | BK | 8370 | Handwheel Channel A Low Reference | I | — |
| 4 | 0.5 | WH / RD | 8371 | Handwheel Channel B High Reference | I | — |
| 5 | 0.5 | WH / BU | 8372 | Handwheel Channel B Torque Pressure Sensor 1 SENT Signal | I | — |
| 6 | 0.5 | VT | 8368 | Handwheel Channel A Torque Pressure Sensor 2 SENT Signal | I | — |
| 7 | 0.5 | OG | 8369 | Handwheel Channel A Angle Position Sensor SENT Signal | I | — |
| 8 | 0.5 | GY | 8375 | Handwheel Channel B Low Reference | I | — |
| 9 | 0.5 | YE | 8374 | Handwheel Channel B Angle Position Sensor SENT Signal | I | — |
| 10 | 0.5 | GN | 8373 | Handwheel Channel B Torque Pressure Sensor 2 SENT Signal | I | — |

# B139 Transfer Case Two/Four Wheel Drive Actuator Position Sensor (NP0/NQH)




4569745

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed( BK)

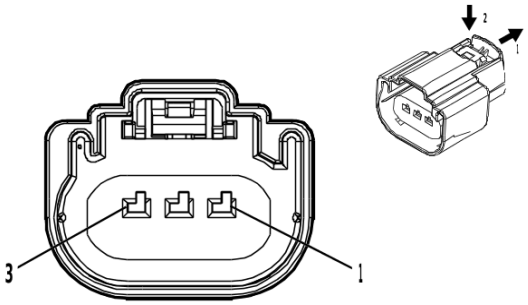
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## B139 Transfer Case Two/Four Wheel Drive Actuator Position Sensor (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 7477 | Gear Position Sensor 5V Reference | I | — |
| 2 | 0.5 | WH / GN | 7479 | Rotary Position Sensor Signal | I | — |
| 3 | 0.5 | YE / BK | 7478 | Gear Position Sensor Low Reference | I | — |

# B150 Fuel Tank Pressure Sensor




4589538

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343864
Service Connector: 84569854
Description: 3-Way F 1.5 MX Series, Sealed( GY)

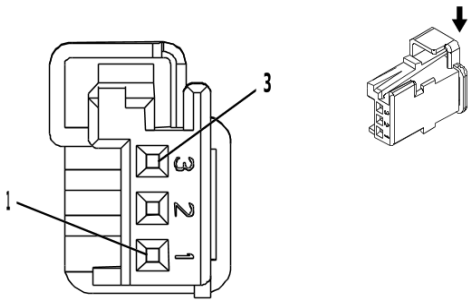
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B150 Fuel Tank Pressure Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / GN | 890 | Fuel Tank Pressure Sensor Signal | I | FHS |
| | 0.5 | BU / WH | 890 | Fuel Tank Pressure Sensor Signal | I | FJW |
| 2 | 0.5 | BK / BN | 6284 | Fuel Tank Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | YE / RD | 2709 | Fuel Tank Pressure Sensor 5V Reference | I | — |

# B160 Inside Air Moisture and Windshield Temperature Sensor (ASV-CE1)




4218883

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper
OEM Connector: 13593004
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B160 Inside Air Moisture and Windshield Temperature Sensor (ASV-CE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 3 | 0.35 | GN / WH | 4115 | Body Control Module LIN Bus 5 | I | — |

# B172LF Front Disc Brake Pad Wear Sensor - Left (JBP)

—

## Connector Part Information

Harness Type: Front Disc Brake Pad Wear Sensor
OEM Connector: 84480342
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

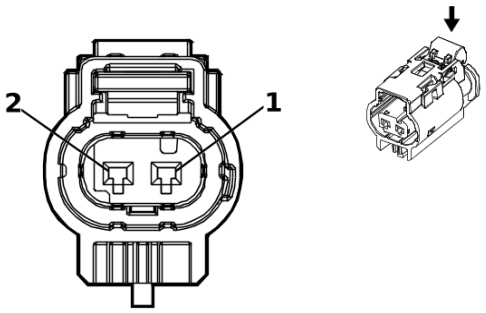
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B172LF Front Disc Brake Pad Wear Sensor - Left (JBP)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BU | 1602 | Front Brake Pad Wear Sensor Signal | I | — |
| 2 | 0.5 | BK / WH | 1151 | Signal Ground | I | — |

# B172LR Rear Disc Brake Pad Wear Sensor - Left




3747581

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 10094234
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

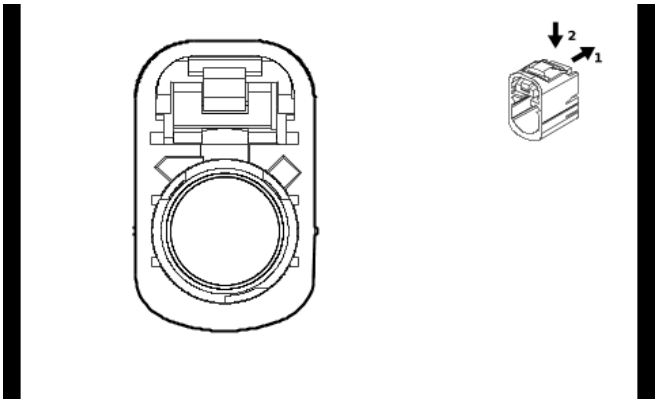
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B172LR Rear Disc Brake Pad Wear Sensor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / YE | 1616 | Rear Brake Pad Wear Sensor Signal | I | - Z45 |
| | 0.75 | GN / YE | 1616 | Rear Brake Pad Wear Sensor Signal | I | Z45+ G94 |
| 2 | 0.75 | BK / WH | 1751 | Signal Ground | I | - Z45 |
| | 0.75 | BK / WH | 1751 | Signal Ground | I | Z45+ G94 |

# B174G Front View Driver Information Camera - Grille




5920539

## Connector Part Information

Harness Type: Front View Camera Switch Wiring Harness COAX
OEM Connector: 35339728
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

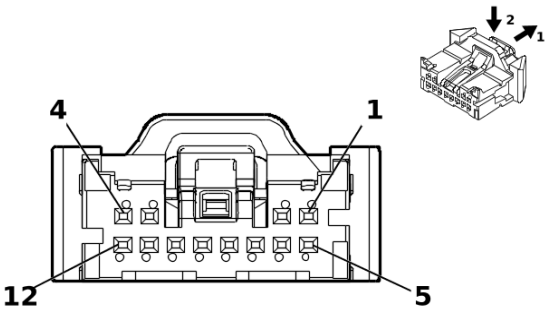
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B174G Front View Driver Information Camera - Grille

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Front Vision Camera 1 Coaxial Video Signal | I | — |

# B174W Front View Camera - Windshield (UHY/UGN)




5360826

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35068239
Service Connector: 13529935
Description: 12-Way F 050 CTS Series( BK)

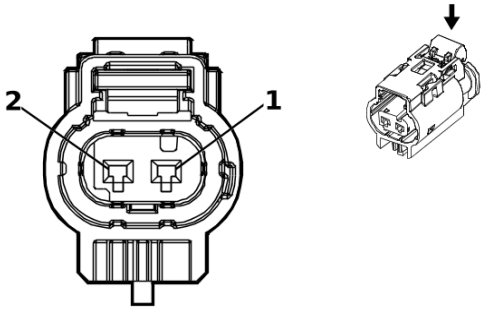
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84944580 | EL-35616-58 (BK) | EL-38125-58 |

## B174W Front View Camera - Windshield (UHY/UGN)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | RD / YE | 240 | Battery Positive Voltage | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35<br>0.35 | BU / YE<br>BU / GY | 4979<br>4105 | AUTOSAR CAN Bus [+] 2 Serial Data<br>AUTOSAR CAN Bus [+] 8 Serial Data | I<br>I | GFF+ UHY<br>UGN- GFF |
| 6 | 0.35<br>0.35 | WH<br>WH / GY | 4978<br>4104 | AUTOSAR CAN Bus [-] 2 Serial Data<br>AUTOSAR CAN Bus [-] 8 Serial Data | I<br>I | GFF+ UHY<br>UGN- GFF |
| 7 | 0.35<br>0.35 | BU / YE<br>BU / GY | 4979<br>4105 | AUTOSAR CAN Bus [+] 2 Serial Data<br>AUTOSAR CAN Bus [+] 8 Serial Data | I<br>I | GFF+ UHY<br>UGN- GFF |
| 8 | 0.35<br>0.35 | WH<br>WH / GY | 4978<br>4104 | AUTOSAR CAN Bus [-] 2 Serial Data<br>AUTOSAR CAN Bus [-] 8 Serial Data | I<br>I | GFF+ UHY<br>UGN- GFF |
| 9 - 12 | — | — | — | Not Occupied | — | — |

# B193A Charge Air Cooler Air Temperature Sensor - Inlet (LZ0)




3747581

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

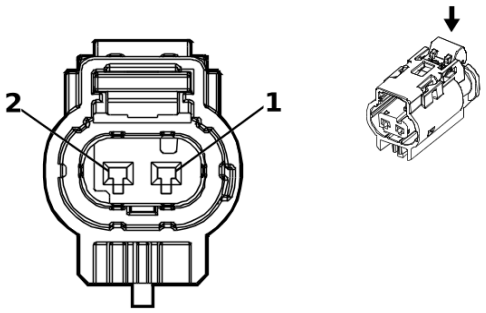
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B193A Charge Air Cooler Air Temperature Sensor - Inlet (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 3683 | Charge Air Cooler Inlet Temperature Sensor Signal | I | — |
| 2 | 0.5 | YE / BK | 3682 | Charge Air Cooler Inlet Temperature Sensor Low Reference | I | — |

# B193B Charge Air Cooler Air Temperature Sensor - Outlet (LZ0)




3747581

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

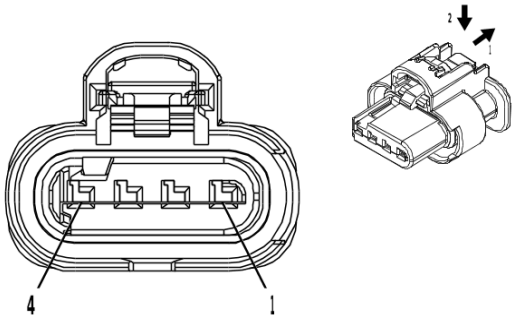
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B193B Charge Air Cooler Air Temperature Sensor - Outlet (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 3681 | Charge Air Cooler Outlet Temperature Sensor Signal | I | — |
| 2 | 0.5 | YE / BU | 3680 | Charge Air Cooler Outlet Temperature Sensor Low Reference | I | — |

# B195A Nitrogen Oxides Sensor 1 (LZ0)




4210809

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33390897
Service Connector: 85518225
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

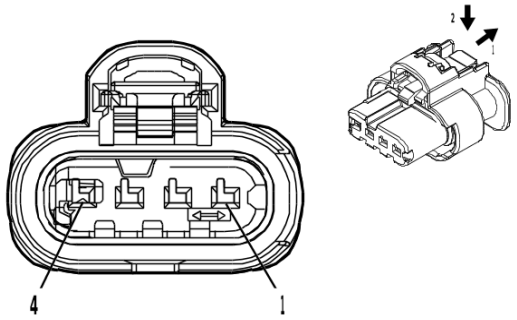
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B195A Nitrogen Oxides Sensor 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 2 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 4 | 1 | BK / WH | 1151 | Signal Ground | I | — |

# B195B Nitrogen Oxides Sensor 2 (LZ0)




4934614

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

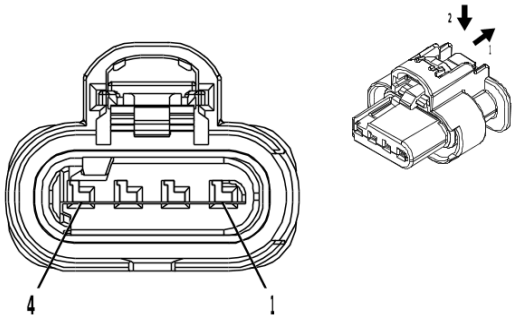
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B195B Nitrogen Oxides Sensor 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 2 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 4 | 1 | BK / WH | 1151 | Signal Ground | I | — |

# B195C Nitrogen Oxides Sensor 3 (LZ0)




4210809

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33390897
Service Connector: 85518225
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

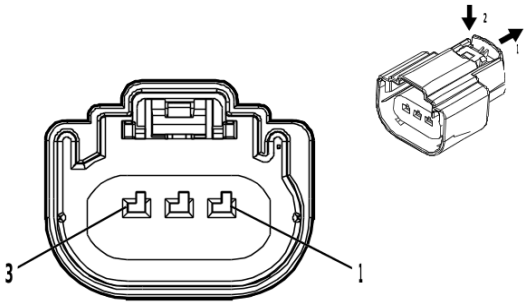
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B195C Nitrogen Oxides Sensor 3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 2 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 4 | 1 | BK / WH | 1151 | Signal Ground | I | — |

# B198 Fuel Composition Sensor (FHS)




4829227

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33362826
Service Connector: 19371197
Description: 3-Way F 1.5 MX Series, Sealed( GY)

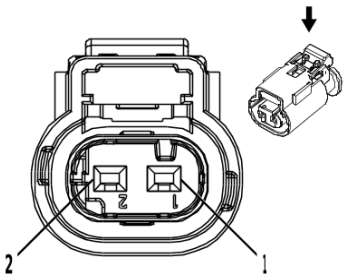
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## B198 Fuel Composition Sensor (FHS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 2 | 0.5 | BK / GY | 3802 | Fuel Composition Sensor Low Reference | I | — |
| 3 | 0.5 | VT / BN | 3803 | Fuel Composition Sensor Signal | I | — |

# B203 Radiator Coolant Temperature Sensor (L3B)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

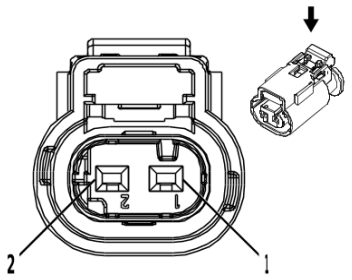
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B203 Radiator Coolant Temperature Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BK | 3000 | Coolant Temperature Sensor 2 Signal | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |

# B203 Radiator Coolant Temperature Sensor (LZ0)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

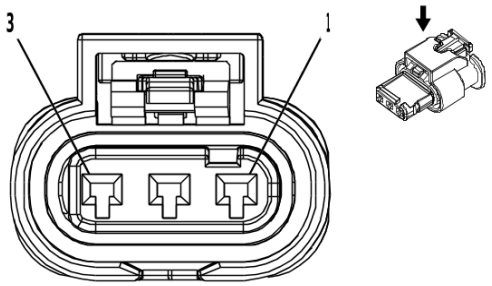
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B203 Radiator Coolant Temperature Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BK | 3000 | Coolant Temperature Sensor 2 Signal | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |

# B212 Reductant Tank Fluid Sensor (LZ0)




2750649

## Connector Part Information

Harness Type: Emission Reduction Fluid Tank Reservoir Wire Harness
OEM Connector: 13722729
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON Series, Sealed( BK)

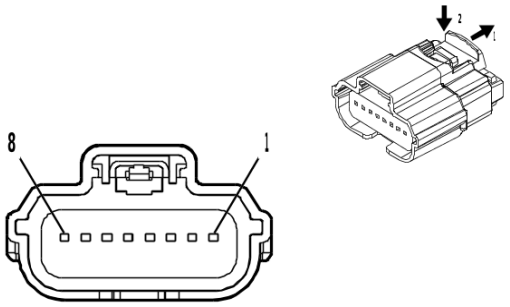
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B212 Reductant Tank Fluid Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 7290 | Diesel Exhaust Fluid Sensor Voltage Reference 1 | I | — |
| 2 | 0.5 | YE / GN | 7284 | Diesel Exhaust Fluid Liquid Quality Temperature Signal | I | — |
| 3 | 0.5 | BK / YE | 8434 | Diesel Exhaust Fluid Sensor Low Reference | I | — |

# B218L Side Obstacle Detection Control Module - Left (UKC/UKV)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

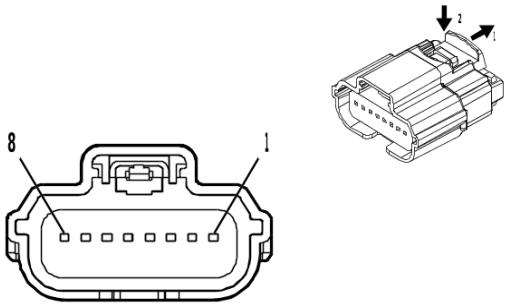
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B218L Side Obstacle Detection Control Module - Left (UKC/UKV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4087 | Private Serial Data Side Obstacle Detection CAN Bus [-] Serial Data | I | — |
| 2 | 0.5 | BU / VT | 4088 | Private Serial Data Side Obstacle Detection CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 4 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 5 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 6 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 7 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 8 | 0.5 | RD / GN | 6940 | Battery Positive Voltage | I | — |

# B218R Side Obstacle Detection Control Module - Right (UKC / UKV)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200888
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

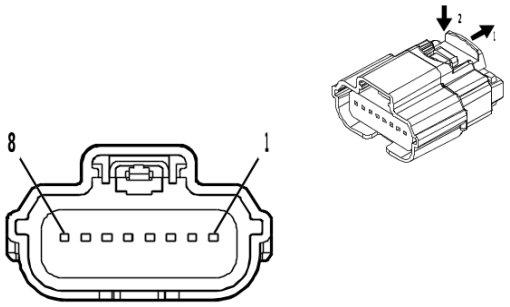
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B218R Side Obstacle Detection Control Module - Right (UKC / UKV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4087 | Private Serial Data Side Obstacle Detection CAN Bus [-] Serial Data | I | — |
| 2 | 0.5 | BU / VT | 4088 | Private Serial Data Side Obstacle Detection CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 6 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | RD / GN | 6940 | Battery Positive Voltage | I | — |

# B233B Forward Range Radar Sensor - Long Range (UKL/(UGN-UKL))




4708234

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 35211138
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

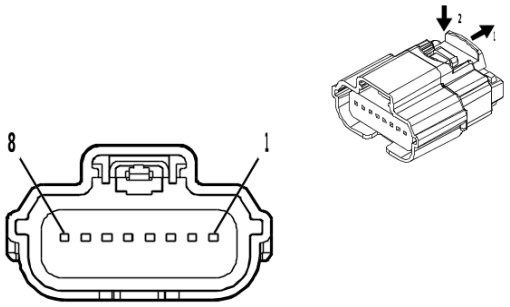
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233B Forward Range Radar Sensor - Long Range (UKL/(UGN-UKL))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 4 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 5 | 0.5 | RD / GN | 3140 | Battery Positive Voltage | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BK / WH | 651 | Signal Ground | I | — |

# B233LF Short Range Radar Sensor - Left Front (UKL)




4708234

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness - Left Jumper
OEM Connector: 35200886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

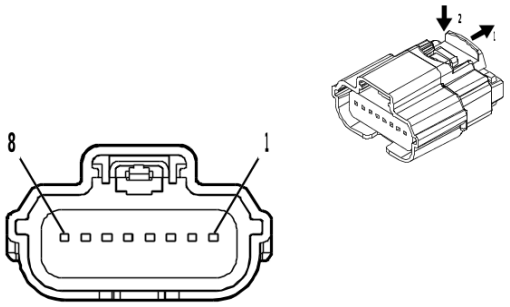
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233LF Short Range Radar Sensor - Left Front (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 651 | Signal Ground | I | — |
| 2 | 0.5 | BK / WH | 651 | Signal Ground | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | RD / GN | 3140 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B233LR Short Range Radar Rear Sensor - Left (UKL)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200889
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

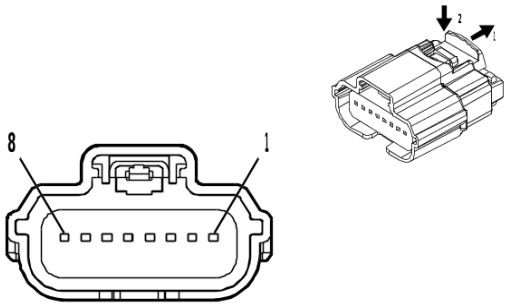
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233LR Short Range Radar Rear Sensor - Left (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | RD / BU | 5240 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B233RF Short Range Radar Sensor - Right Front (UKL)




4708234

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness - Right Jumper
OEM Connector: 35200887
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

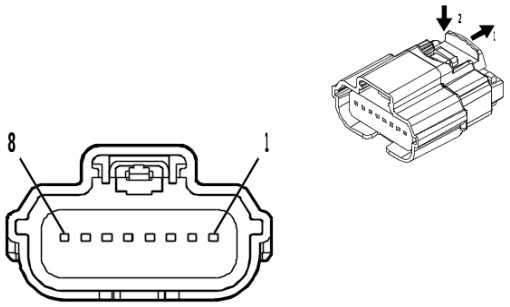
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233RF Short Range Radar Sensor - Right Front (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 651 | Signal Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK / WH | 651 | Signal Ground | I | — |
| 4 | 0.5 | RD / GN | 3140 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B233RR Short Range Radar Rear Sensor - Right (UKL)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

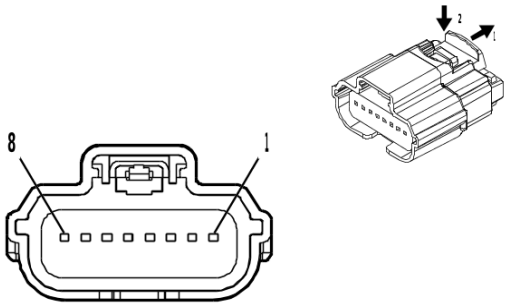
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233RR Short Range Radar Rear Sensor - Right (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 2 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 3 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 4 | 0.5 | RD / BU | 5240 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B233SL Short Range Radar Rear Side Sensor - Left (UKL)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200889
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

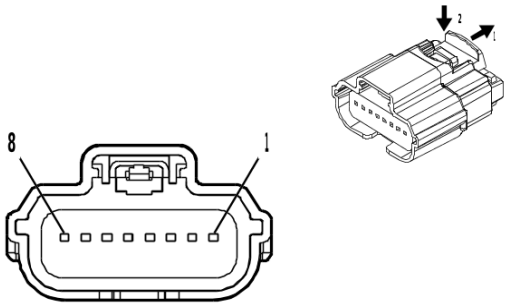
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233SL Short Range Radar Rear Side Sensor - Left (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | RD / BU | 5240 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B233SR Short Range Radar Rear Side Sensor - Right (UKL)




4708234

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

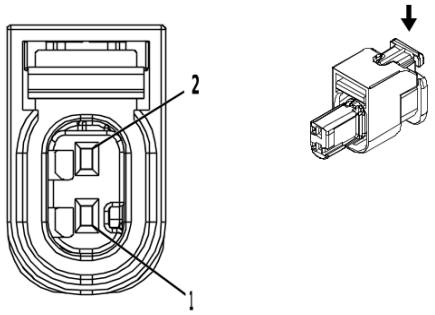
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B233SR Short Range Radar Rear Side Sensor - Right (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 2 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 3 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 4 | 0.5 | RD / BU | 5240 | Battery Positive Voltage | I | — |
| 5 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 7 | 0.5 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 8 | 0.5 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |

# B280 Transmission Fluid Pressure Accumulator Solenoid Valve (MQE)




4051102

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2138873-4
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BN)

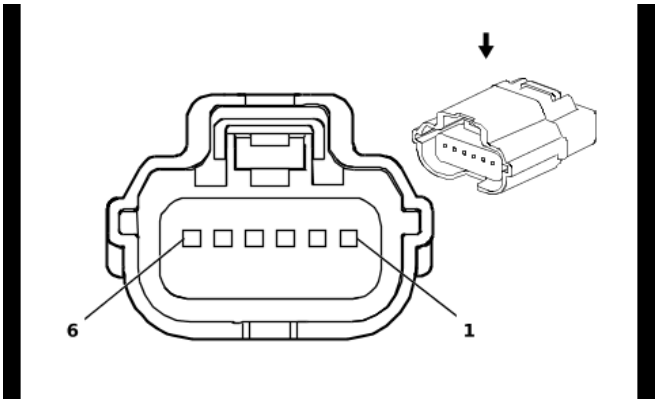
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B280 Transmission Fluid Pressure Accumulator Solenoid Valve (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | WH / GY | 4578 | Surge Accumulator Solenoid Valve Low Side Control | I | — |

# B284 Vehicle Dynamics Sensor (UKL)




1974974

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35473844
Service Connector: 84773558
Description: 6-Way F 0.64 Series, Sealed( BK)

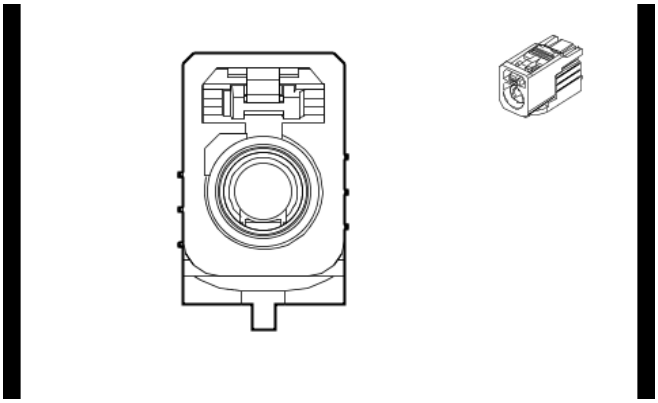
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## B284 Vehicle Dynamics Sensor (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT / GY | 8978 | Inertial Sensor Supply Voltage | I | — |
| 2 | 0.5 | BU / YE | 8977 | Private Serial Data Active Safety CAN Bus [+] Serial Data | I | — |
| 3 | 0.5 | WH / YE | 8976 | Private Serial Data Active Safety CAN Bus [-] Serial Data | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | BK / WH | 1551 | Signal Ground | I | — |

# B292 Driver Monitoring Camera (UKL)



5633912

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33351016
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( GN)

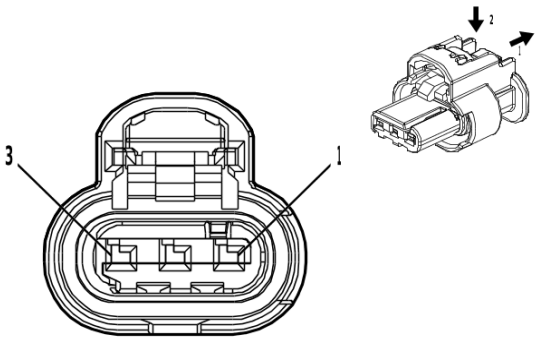
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B292 Driver Monitoring Camera (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Driver Monitoring System Camera Coaxial Signal | I | — |

# B306A Parking Assist Alarm Sensor - Front Left Outer (UD5)




4581126

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

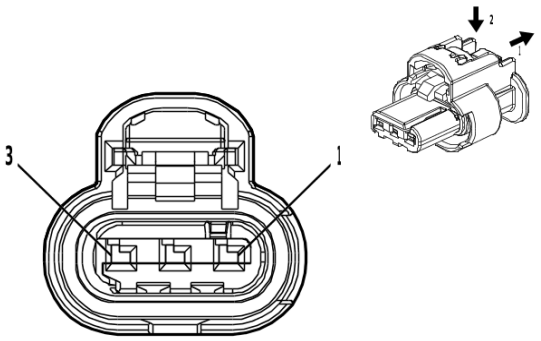
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306A Parking Assist Alarm Sensor - Front Left Outer (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6581 | Front Parking Assist Display Control | I | — |
| 2 | 0.5 | VT / WH | 5215 | Left Front Outer Parking Assist Sensor | I | — |
| 3 | 0.5 | BK / BU | 5214 | Front Parking Assist Sensor Low Reference | I | — |

# B306B Parking Assist Alarm Sensor - Front Left Middle (UD5)




4581126

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

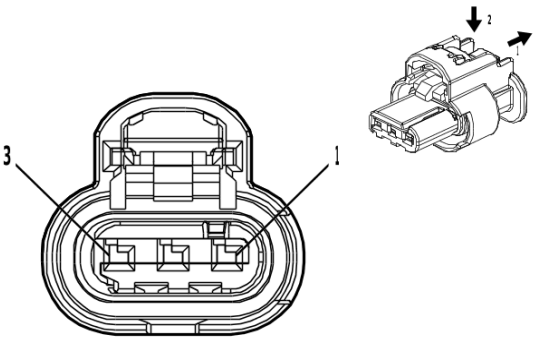
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306B Parking Assist Alarm Sensor - Front Left Middle (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6581 | Front Parking Assist Display Control | I | — |
| 2 | 0.5 | YE / GY | 5216 | Left Front Middle Parking Assist Sensor | I | — |
| 3 | 0.5 | BK / BU | 5214 | Front Parking Assist Sensor Low Reference | I | — |

# B306C Parking Assist Alarm Sensor - Front Right Middle (UD5)




4581126

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

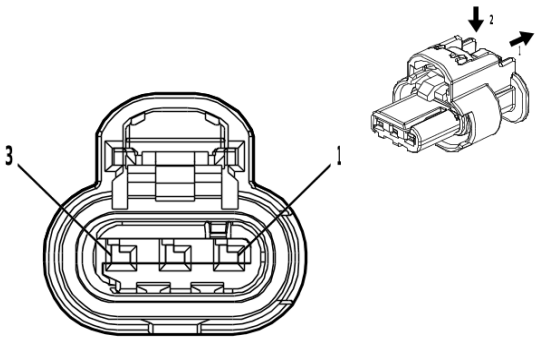
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306C Parking Assist Alarm Sensor - Front Right Middle (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6581 | Front Parking Assist Display Control | I | — |
| 2 | 0.5 | VT / GY | 5218 | Right Front Middle Parking Assist Sensor | I | — |
| 3 | 0.5 | BK / BU | 5214 | Front Parking Assist Sensor Low Reference | I | — |

# B306D Parking Assist Alarm Sensor - Front Right Outer (UD5)




4581126

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

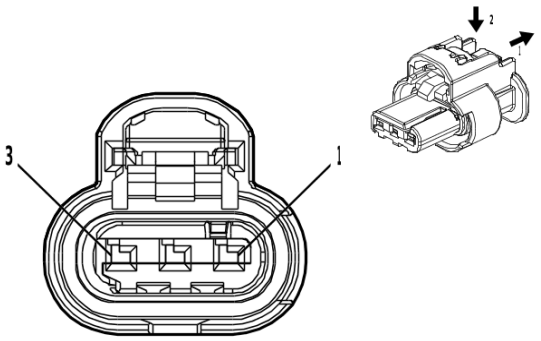
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306D Parking Assist Alarm Sensor - Front Right Outer (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6581 | Front Parking Assist Display Control | I | — |
| 2 | 0.5 | WH / GY | 5217 | Right Front Outer Parking Assist Sensor | I | — |
| 3 | 0.5 | BK / BU | 5214 | Front Parking Assist Sensor Low Reference | I | — |

# B306E Parking Assist Alarm Sensor - Rear Left Outer (UD5/UD7)




4581126

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

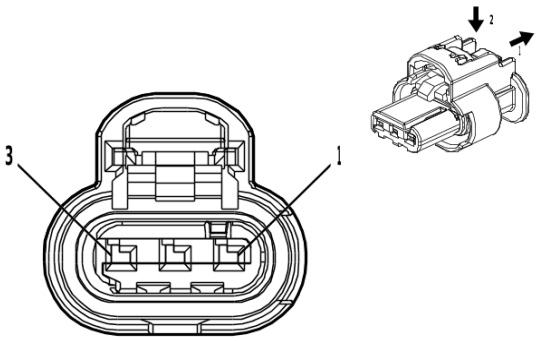
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306E Parking Assist Alarm Sensor - Rear Left Outer (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 2374 | Object Sensor Voltage Reference | I | — |
| 2 | 0.5 | YE | 2375 | Left Rear Outer Parking Assist Sensor Signal | I | — |
| 3 | 0.5 | BK / GY | 2379 | Object Sensor Low Reference | I | — |

# B306F Parking Assist Alarm Sensor - Rear Left Middle (UD5/UD7)




4581126

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

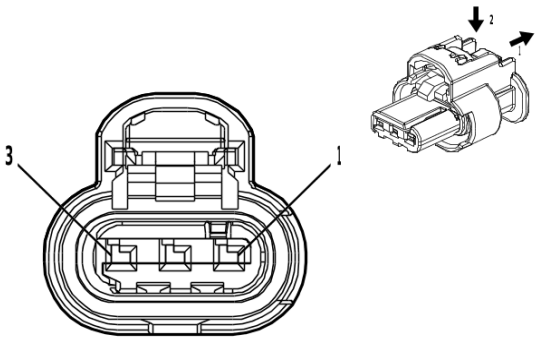
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306F Parking Assist Alarm Sensor - Rear Left Middle (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 2374 | Object Sensor Voltage Reference | I | — |
| 2 | 0.5 | YE / BU | 2376 | Left Rear Middle Parking Assist Sensor Signal | I | — |
| 3 | 0.5 | BK / GY | 2379 | Object Sensor Low Reference | I | — |

# B306G Parking Assist Alarm Sensor - Rear Right Middle (UD5/UD7)




4581126

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

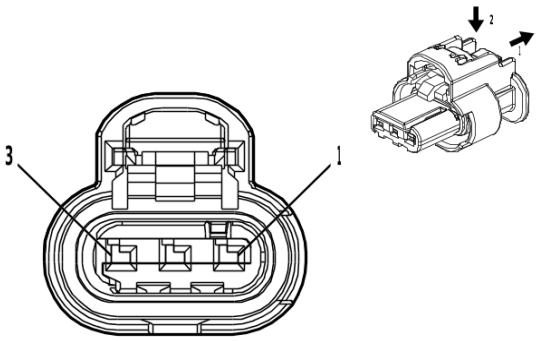
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306G Parking Assist Alarm Sensor - Rear Right Middle (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 2374 | Object Sensor Voltage Reference | I | — |
| 2 | 0.5 | YE / WH | 2377 | Right Rear Middle Parking Assist Sensor Signal | I | — |
| 3 | 0.5 | BK / GY | 2379 | Object Sensor Low Reference | I | — |

# B306H Parking Assist Alarm Sensor - Rear Right Outer (UD5/UD7)




4581126

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

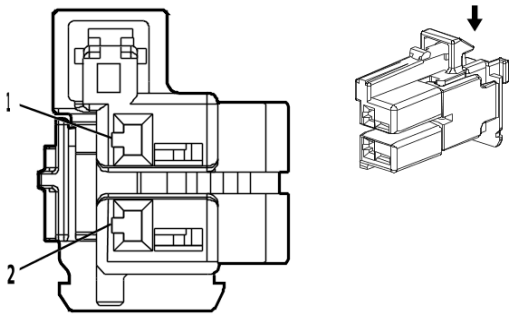
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B306H Parking Assist Alarm Sensor - Rear Right Outer (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 2374 | Object Sensor Voltage Reference | I | — |
| 2 | 0.5 | YE / VT | 2378 | Right Rear Outer Parking Assist Sensor Signal | I | — |
| 3 | 0.5 | BK / GY | 2379 | Object Sensor Low Reference | I | — |

# B315A Transmission Range Control Valve 1 Position Switch (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

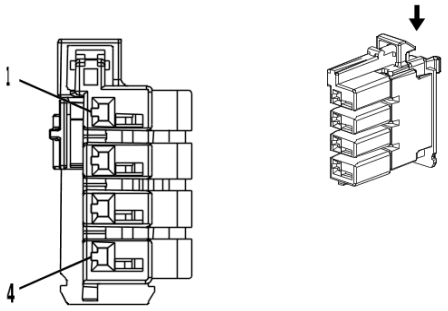
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B315A Transmission Range Control Valve 1 Position Switch (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 2 | 0.5 | BK / GY | 3706 | Electronic Transmission Range Select Switch Analog Signal 1 | I | — |

# B316 Transmission Park Valve Position Switch (MHS/MQC)




4364148

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series( BN)

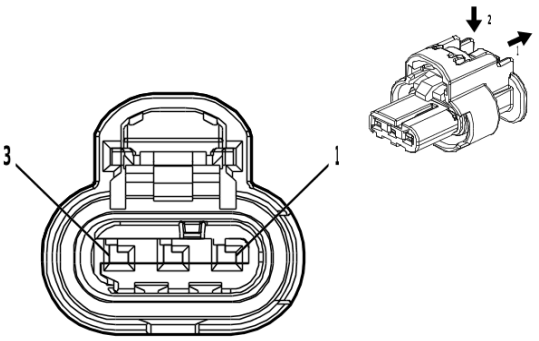
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B316 Transmission Park Valve Position Switch (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |
| 3 | 0.5 | YE | 6317 | Electronic Transmission Range Select Out of Park Switch Signal | I | — |
| 4 | 0.5 | YE / GY | 6319 | Electronic Transmission Range Select Out of Park Switch 2 Signal | I | — |

# B321 Crankcase Pressure Sensor (LZ0)




4778903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

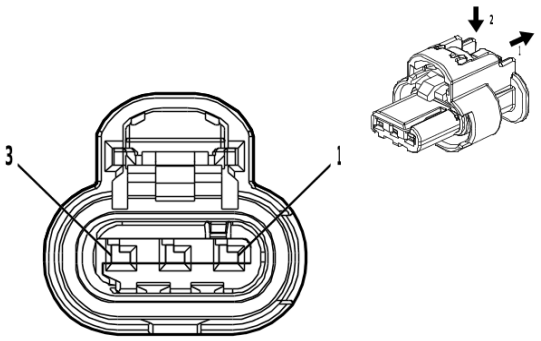
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B321 Crankcase Pressure Sensor (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | YE / GY | 3926 | Crankcase Differential Pressure Sensor Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

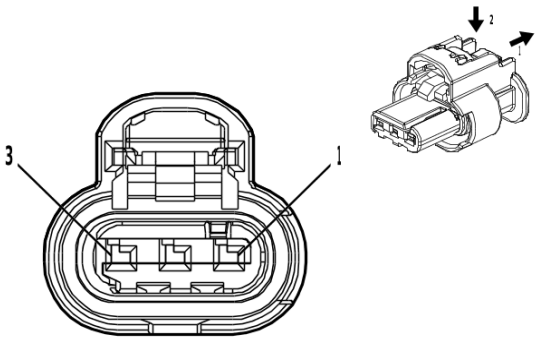
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B338A Intake Camshaft Profile Sleeve Position Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | VT / WH | 3744 | Camshaft Intake Lobe Axial Position Signal 1 | I | — |

# B338B Intake Camshaft Profile Sleeve Position Sensor 2 (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

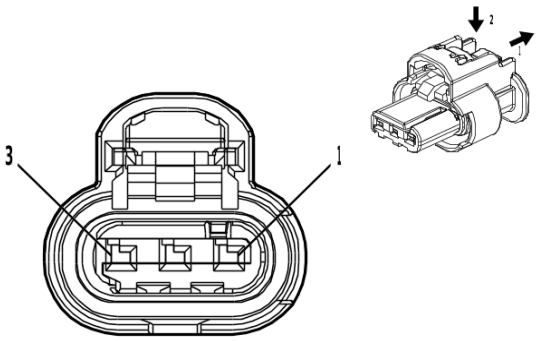
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B338B Intake Camshaft Profile Sleeve Position Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | VT / GN | 3745 | Camshaft Intake Lobe Axial Position Signal 2 | I | — |

# B339A Exhaust Camshaft Profile Sleeve Position Sensor 1 (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

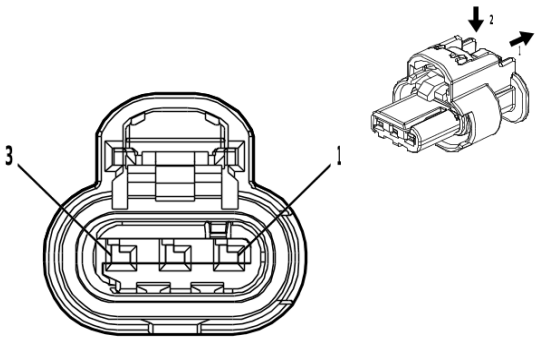
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B339A Exhaust Camshaft Profile Sleeve Position Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | YE / WH | 3746 | Camshaft Exhaust Lobe Axial Position Signal 1 | I | — |

# B339B Exhaust Camshaft Profile Sleeve Position Sensor 2 (L3B)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

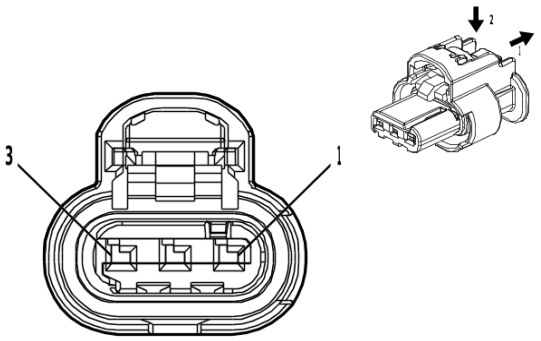
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B339B Exhaust Camshaft Profile Sleeve Position Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | YE / GN | 3747 | Camshaft Exhaust Lobe Axial Position Signal 2 | I | — |

# B345P Exhaust Pressure Differential Sensor - Particulate Filter (LZ0)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

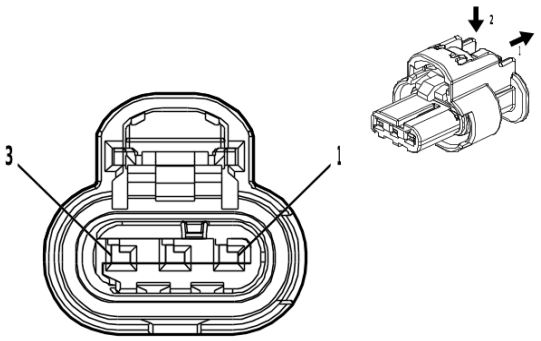
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B345P Exhaust Pressure Differential Sensor - Particulate Filter (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | WH / BN | 2363 | Exhaust Pressure Sensor SENT 1 Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LZ0)




4778903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

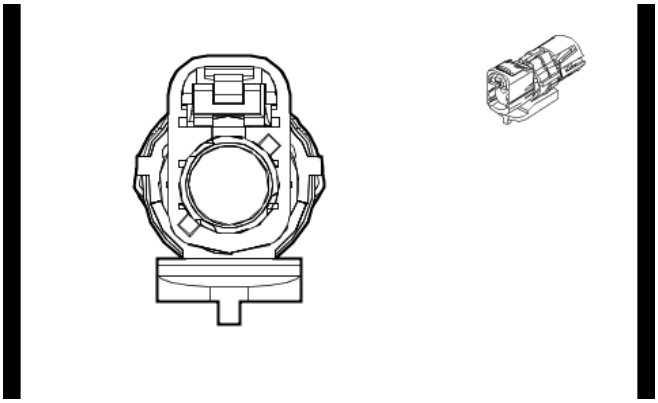
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | GN | 10478 | Low Pressure Exhaust Gas Recirculation Sensor SENT Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# B352 Video Display Inside Rearview Mirror Camera (DRZ)



5633894

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper COAX
OEM Connector: 35187049
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type, Sealed( BU)

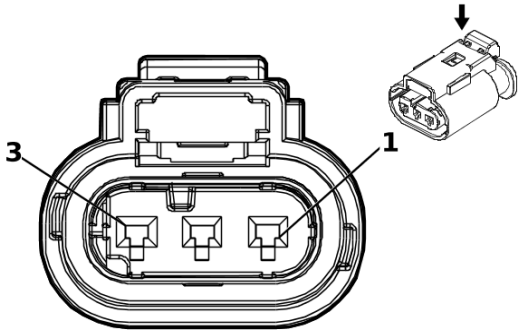
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## B352 Video Display Inside Rearview Mirror Camera (DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Full Display Mirror Rear Camera Coaxial Video Signal | I | — |

# B359 Exhaust Gas Temperature Sensor Module (LZ0)




5192187

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35129355
Service Connector: 84777453
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

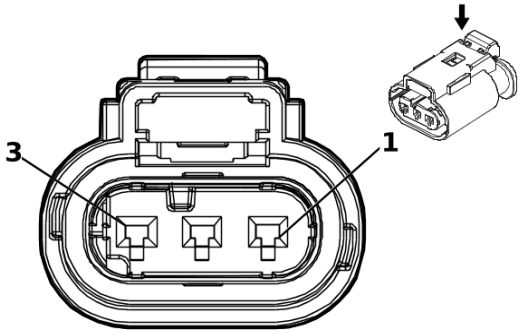
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B359 Exhaust Gas Temperature Sensor Module (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 10289 | Exhaust Gas Temperature Sensor SENT 1 Signal | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# B359B Exhaust Gas Temperature Sensor Module 2 (LZ0)




5192187

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35129355
Service Connector: 84777453
Description: 3-Way F 1.2 Multilock Series, Sealed( BK)

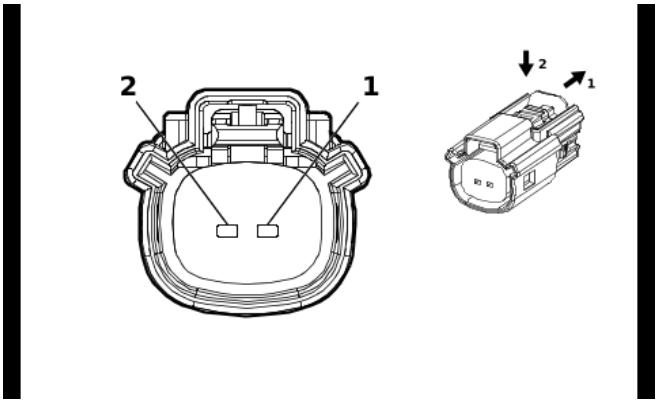
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## B359B Exhaust Gas Temperature Sensor Module 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 10290 | Exhaust Gas Temperature Sensor SENT 2 Signal | I | — |
| 2 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 3 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# E2LRB Side Marker Bulb - Left Rear (GFF/GFI/GFJ/GFS)




2474713

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

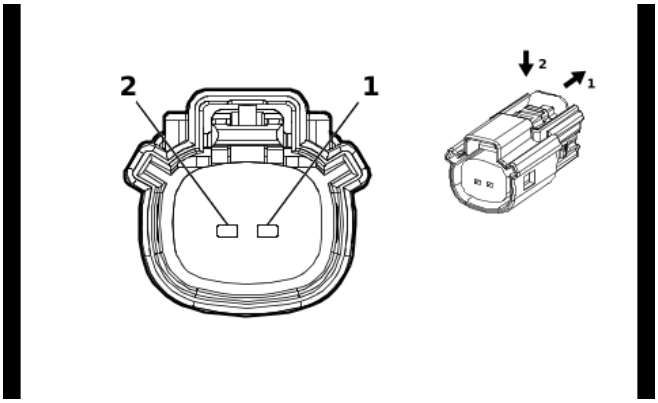
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## E2LRB Side Marker Bulb - Left Rear (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1951 | Signal Ground | I | — |
| 2 | 0.75 | BN | 6993 | Left Rear Park Lamp Control | I | — |

# E2RRB Side Marker Bulb - Right Rear (GFF/GFI/GFJ/GFS)




2474713

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E2RRB Side Marker Bulb - Right Rear (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1850 | Ground | I | — |
| 2 | 0.75 | BN | 6995 | Right Rear Park Lamp Control | I | — |

# E5A Backup Bulb - Left (GFF/GFI/GFJ/GFS)

—

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: EEM0323
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E5A Backup Bulb - Left (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 24 | Backup Lamp Control | I | — |
| 2 | 0.75<br>0.75 | BK<br>BK | 1951<br>1951 | Signal Ground<br>Signal Ground | I | —<br>— |

# E5AM Stop/Turn Signal Lamp - Left (GFF/GFI/GFJ/GFS)

—

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: EEM1214
Service Connector: Service by Harness - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E5AM Stop/Turn Signal Lamp - Left (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| GRND | 0.75 | BK | 1951 | Signal Ground | I | — |
| | 0.75 | BK | 1951 | Signal Ground | | — |
| MAJ | 0.75 | GN | 1334 | Left Rear Turn Signal Lamp Control 2 | I | — |

# E5AN Stop/Turn Signal Lamp - Right (GFF/GFI/GFJ/GFS)

—

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: EEM1214
Service Connector: Service by Harness - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E5AN Stop/Turn Signal Lamp - Right (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| GRND | 0.75 | BK | 1850 | Ground | I | — |
| | 0.75 | BK | 1850 | Ground | | — |
| MAJ | 0.75 | GN | 1335 | Right Rear Turn Signal Lamp Control 2 | I | — |

# E5B Backup Bulb - Right (GFF/GFI/GFJ/GFS)

—

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: EEM0323
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

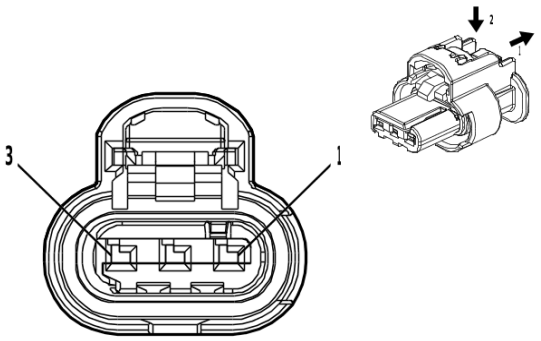
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E5B Backup Bulb - Right (GFF/GFI/GFJ/GFS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 24 | Backup Lamp Control | I | — |
| 2 | 0.75 | BK | 1850 | Ground | I | — |
| | 0.75 | BK | 1850 | Ground | | — |

# E6A High Mount Stop and Cargo Lamp - EXTENDED CAB/CREW CAB




4581126

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## E6A High Mount Stop and Cargo Lamp - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 2 | 0.5 | BN / YE | 820 | Center High Mounted Stop Lamp Supply Voltage | I | — |
| 3 | 0.5 | BK | 1050 | Ground | I | — |

# E6B High Mount Stop Lamp Bulb - REGULAR CAB

—

## Connector Part Information

Harness Type: High Mount Stop Lamp Wiring Harness
OEM Connector: 02075-01
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

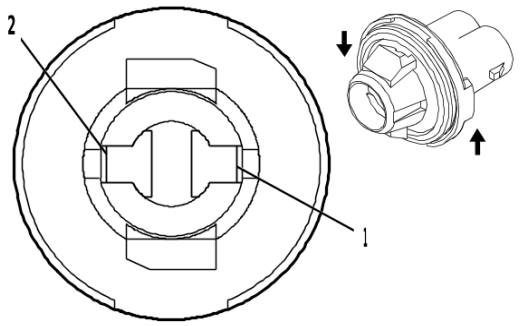
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E6B High Mount Stop Lamp Bulb - REGULAR CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.75 | RD | 1053 | Center High Mounted Stop Lamp Control 3 | I | — |
| B | 0.75 | BK | 1050 | Ground | I | — |
| | 0.75 | BK | 1050 | Ground | | — |

# E7L Rear License Plate Lamp - Left




5153536

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2( D-GY)

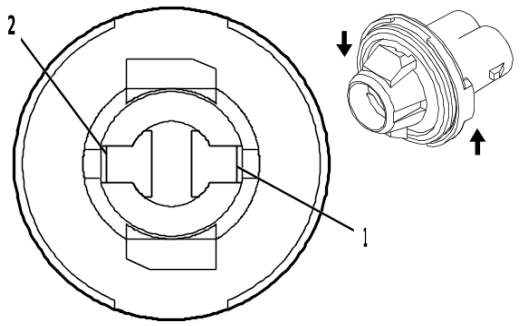
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E7L Rear License Plate Lamp - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 6846 | Rear License Plate Lamp Control | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# E7R Rear License Plate Lamp - Right




5153536

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2( D-GY)

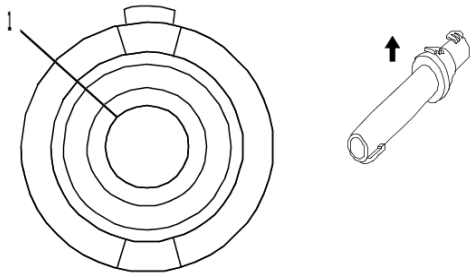
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E7R Rear License Plate Lamp - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 6846 | Rear License Plate Lamp Control | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# E12A Glow Plug 1 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

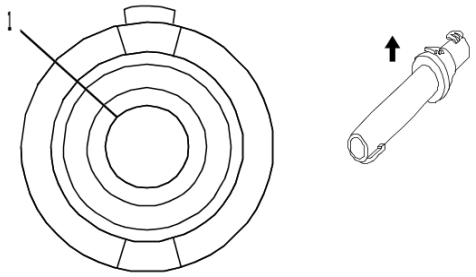
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12A Glow Plug 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / RD | 1581 | Glow Plug 1 Control | I | — |

# E12B Glow Plug 2 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

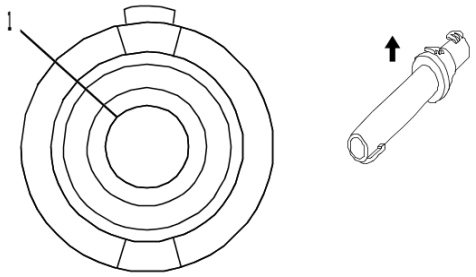
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12B Glow Plug 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / BK | 1582 | Glow Plug 2 Control | I | — |

# E12C Glow Plug 3 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

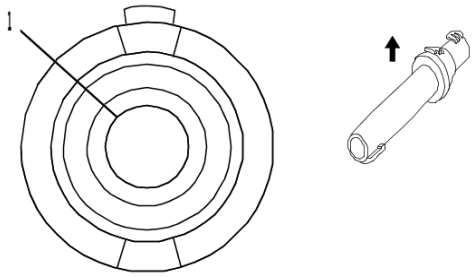
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12C Glow Plug 3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / GN | 1583 | Glow Plug 3 Control | I | — |

# E12D Glow Plug 4 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

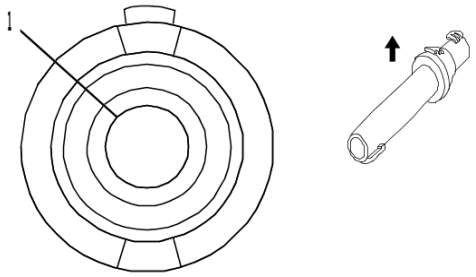
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12D Glow Plug 4 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / YE | 1584 | Glow Plug 4 Control | I | — |

# E12E Glow Plug 5 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

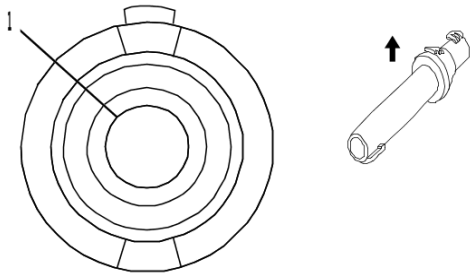
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12E Glow Plug 5 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / WH | 1585 | Glow Plug 5 Control | I | — |

# E12F Glow Plug 6 (LZ0)



2231591

## Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series( BK)

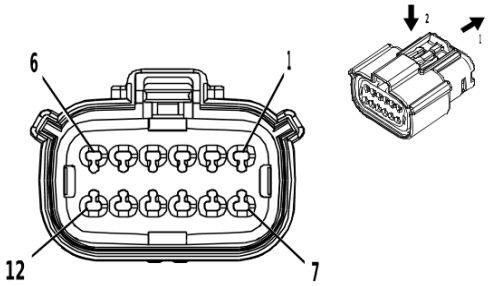
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-37 (L-BU) | No Tool Required |

## E12F Glow Plug 6 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GY | 1586 | Glow Plug 6 Control | I | — |

# E13LA Front Headlamp - Left




2871860

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33362189
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

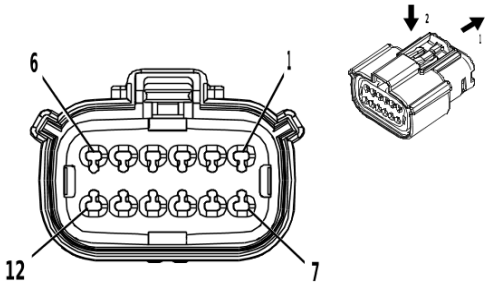
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |

### E13LA Front Headlamp - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 150 | Ground | I | — |
| 2 | 1.5 | RD / WH | 640 | Battery Positive Voltage | I | — |
| 3 | 0.75 | YE | 712 | Left Headlamp Low Beam Control | I | — |
| 4 | 0.75 | WH | 711 | Left Headlamp High Beam Control | I | — |
| 5 | 0.35 | GY / BU | 7538 | Left Front DRL Control | I | — |
| 6 | 0.5 | WH / YE | 1254 | Left Front Park Lamp Control | I | — |
| 7 | 0.5 | BU / WH | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 8 | 0.35 | VT / BK | 6568 | Front Turn Signal Lamp Feedback Signal | I | — |
| 9 | 0.5 | YE / GN | 2024 | Animation Lighting Control | I | — |
| 10 | 0.5 | GN / VT | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# E13RA Front Headlamp - Right




2871860

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33362189
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

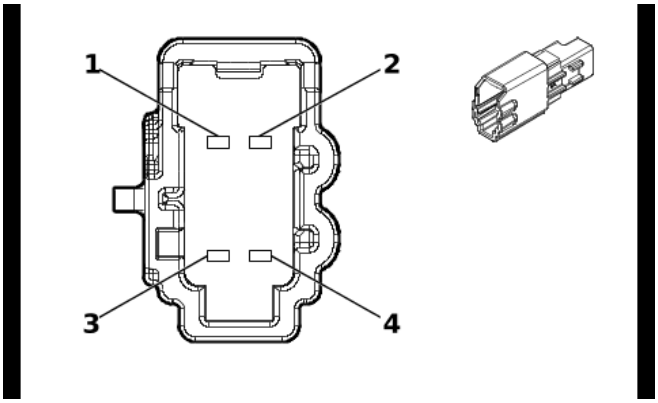
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |

### E13RA Front Headlamp - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1<br>0.75 | BK<br>BK | 650<br>650 | Ground<br>Ground | I<br>I | GFF<br>- GFF |
| 2 | 1.5 | RD / YE | 740 | Battery Positive Voltage | I | — |
| 3 | 1 | YE | 312 | Right Headlamp Low Beam Control | I | — |
| 4 | 0.75 | WH | 311 | Right Headlamp High Beam Control | I | — |
| 5 | 0.35 | BU / BN | 7539 | Right Front DRL Control | I | — |
| 6 | 0.5 | BU / GN | 1253 | Right Front Park Lamp Control | I | — |
| 7 | 0.5 | GN / VT | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 8 | 0.35 | WH / YE | 7545 | Right Front Turn Signal Lamp Feedback Signal | I | — |
| 9 | 0.5 | YE / GN | 2024 | Animation Lighting Control | I | — |
| 10 | 0.5 | BU / WH | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# E14A Front Seat Back Heater - Driver (KA1)




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

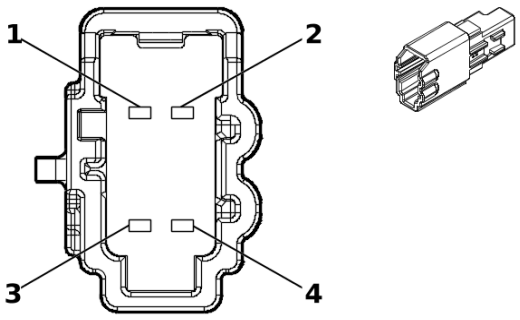
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## E14A Front Seat Back Heater - Driver (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 2432 | Driver Seat Back Heating Element Control | I | — |
| 2 | 0.5 | BU | 2425 | Driver Seat Back Heating Temperature Sensor Signal | II | — |
| 3 | 0.5 | BK / YE | 2080 | Driver Heated Seat Thermistor Low Reference | II | — |
| 4 | 0.75 | BN / BK | 2078 | Driver Seat Heating Element Low Reference | I | — |

# E14B Front Seat Cushion Heater - Driver (KA1)




5360963

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( BK)

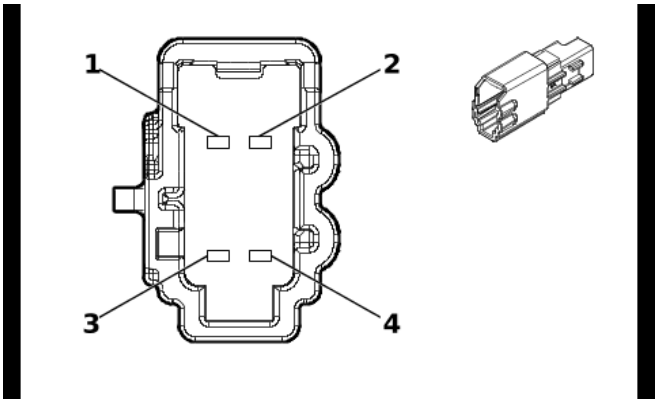
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## E14B Front Seat Cushion Heater - Driver (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / VT | 2077 | Driver Seat Heating Element Control | I | — |
| 2 | 0.5 | YE / GY | 2079 | Driver Seat Heating Temperature Sensor Signal | II | — |
| 3 | 0.5 | BK / YE | 2080 | Driver Heated Seat Thermistor Low Reference | II | — |
| 4 | 0.75 | BN / BK | 2078 | Driver Seat Heating Element Low Reference | I | — |

# E14C Front Seat Back Heater - Passenger (KA1)




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

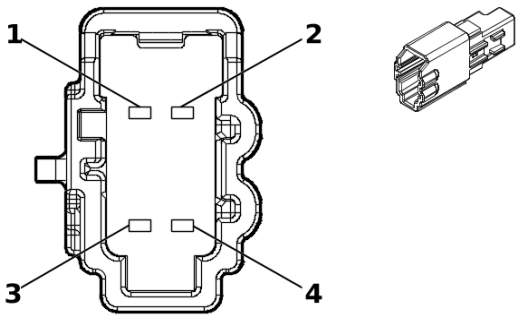
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## E14C Front Seat Back Heater - Passenger (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / BN | 2481 | Passenger Seat Back Heating Element Control | I | — |
| 2 | 0.5 | WH / BU | 2436 | Passenger Seat Back Heating Temperature Sensor Signal | II | — |
| 3 | 0.5 | BK / GN | 2482 | Passenger Heated Back Thermistor Low Reference | II | — |
| 4 | 0.75 | GY / BK | 2480 | Passenger Seat Heating Element Low Reference | I | — |

# E14D Front Seat Cushion Heater - Passenger (KA1)




5360963

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( BK)

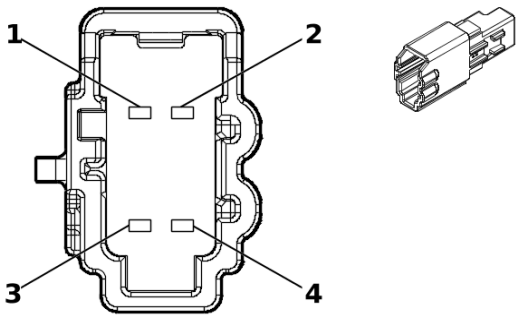
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## E14D Front Seat Cushion Heater - Passenger (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 2479 | Passenger Seat Heating Element Control | I | — |
| 2 | 0.5 | WH / GY | 2434 | Passenger Seat Heating Temperature Sensor Signal | II | — |
| 3 | 0.5 | BK / GY | 2435 | Passenger Heated Seat Thermistor Low Reference | II | — |
| 4 | 0.75 | GY / BK | 2480 | Passenger Seat Heating Element Low Reference | I | — |

# E14F Rear Seat Cushion Heater - Left Rear (KA6)




5360963

## Connector Part Information

Harness Type: Rear Seat Heater Control Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( BK)

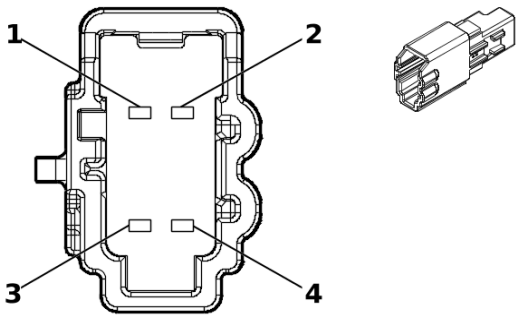
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## E14F Rear Seat Cushion Heater - Left Rear (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY | 2294 | Left Rear Seat Cushion Heating Element Control | I | — |
| 2 | 0.75 | WH / BU | 7047 | Left Rear Seat Cushion Temperature Sensor Signal | I | — |
| 3 | 0.75 | BU / WH | 7048 | Left Rear Cushion Thermistor Feedback Signal | I | — |
| 4 | 0.75 | BN / BK | 2295 | Left Rear Seat Cushion Heating Element Low Reference | I | — |

# E14H Rear Seat Cushion Heater - Right Rear (KA6)




5360963

## Connector Part Information

Harness Type: Rear Seat Heater Control Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( BK)

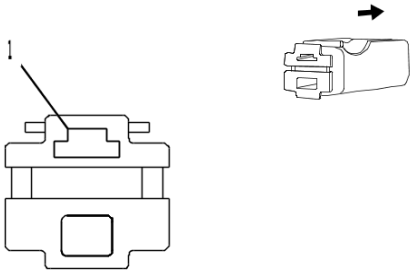
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## E14H Rear Seat Cushion Heater - Right Rear (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / BN | 2296 | Right Rear Seat Cushion Heating Element Control | I | — |
| 2 | 0.75 | YE / WH | 7053 | Right Rear Seat Cushion Temperature Sensor Signal | I | — |
| 3 | 0.75 | WH / BK | 7054 | Right Rear Cushion Thermistor Feedback Signal | I | — |
| 4 | 0.75 | GN / BK | 2297 | Right Rear Seat Cushion Heating Element Low Reference | I | — |

# E18 Rear Window Defogger Grid X1




1413086

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series( BK)

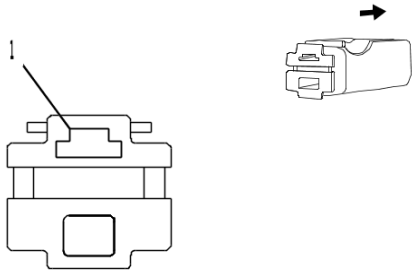
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |

## E18 Rear Window Defogger Grid X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BN / VT | 293 | Rear Defogger Grid Control | I | — |

# E18 Rear Window Defogger Grid X2




1413086

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series( BK)

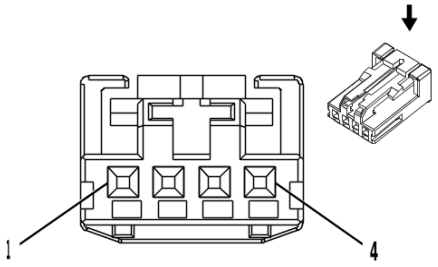
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |

## E18 Rear Window Defogger Grid X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1450 | Ground | I | — |

# E28 Front Floor Console Compartment Lamp




2717162

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

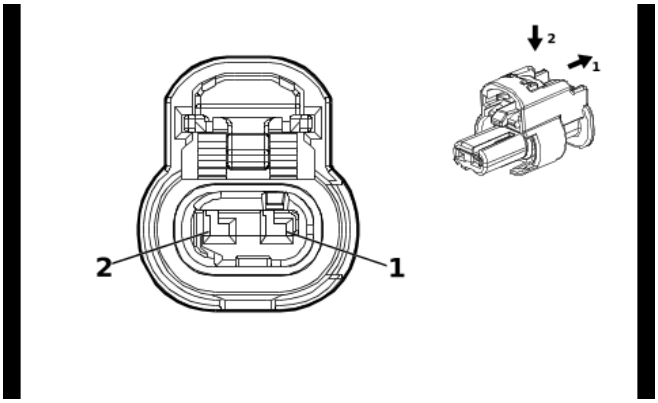
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## E28 Front Floor Console Compartment Lamp

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 1451 | Signal Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / VT | 4786 | Dome/Reading Lamp Enable Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# E29LF Front Fog Lamp - Left (T3U)




4649903

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

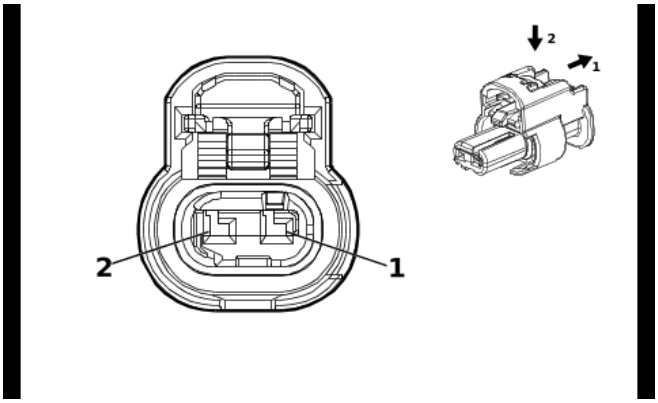
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## E29LF Front Fog Lamp - Left (T3U)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 650 | Ground | I | — |
| 2 | 0.5 | BN / GY | 5061 | Left Front Fog Lamp Control | I | — |

# E29RF Front Fog Lamp - Right (T3U)




4649903

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

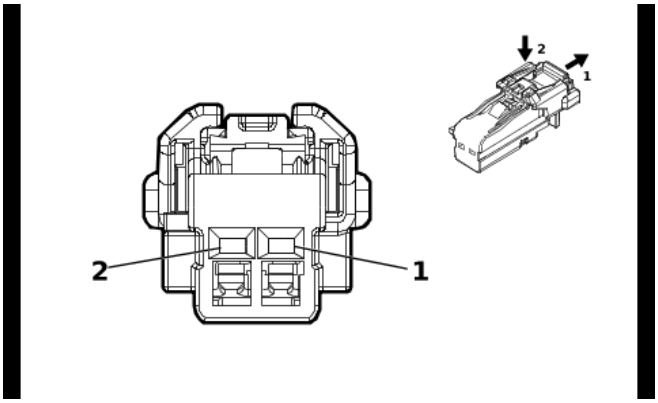
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## E29RF Front Fog Lamp - Right (T3U)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 650 | Ground | I | — |
| 2 | 0.5 | BN / GN | 5062 | Right Front Fog Lamp Control | I | — |

## E31L Sunshade Mirror Lamp - Left




5377746

### Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35327306
Service Connector: 84867147
Description: 2-Way F 1.2 MCON Series( BN)

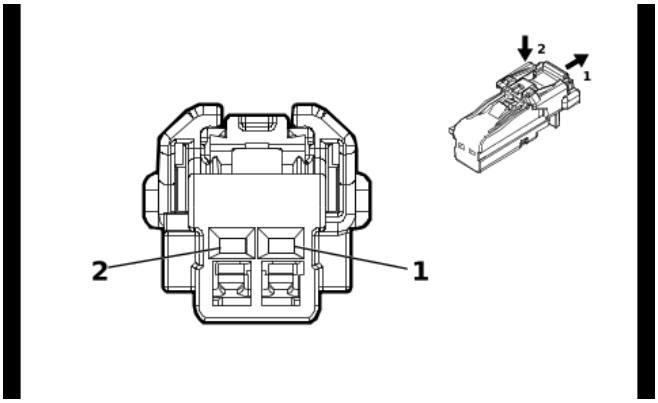
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

### E31L Sunshade Mirror Lamp - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / GN | 4785 | Interior Lamp Overhead Enable Signal | I | — |
| 2 | 0.5 | BK | 1050 | Ground | II | — |

# E31R Sunshade Mirror Lamp - Right




5377746

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35327306
Service Connector: 84867147
Description: 2-Way F 1.2 MCON Series( BN)

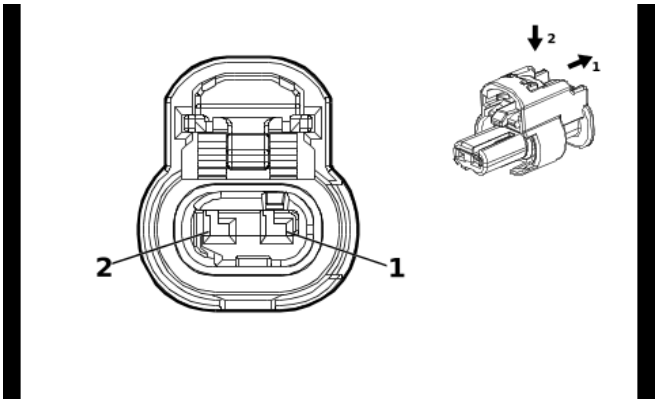
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## E31R Sunshade Mirror Lamp - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY / WH | 2369 | Interior Lamp Overhead 2 Enable Signal | I | — |
| 2 | 0.5 | BK | 1050 | Ground | I | — |

# E33L Cargo Lamp - Left (UF2)




4649903

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E33L Cargo Lamp - Left (UF2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BU<br>BU | 7762<br>7762 | Cargo Lamp Control<br>Cargo Lamp Control | I | —<br>GFF/ GFI/ GFJ/ GFS |
| 2 | 0.75 | BK | 1951 | Signal Ground | I | — |

# E33LB Cargo Box Lamp Bulb - Left - REGULAR CAB

—

## Connector Part Information

Harness Type: High Mount Stop Lamp Wiring Harness
OEM Connector: 02075-01
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

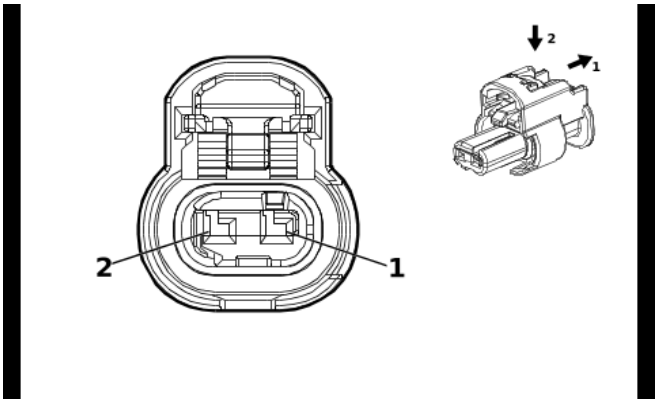
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E33LB Cargo Box Lamp Bulb - Left - REGULAR CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.75 | BN | 1430 | Exterior Courtesy Lamp Control | I | — |
| B | 0.75 | BK | 1050 | Ground | I | — |

# E33R Cargo Lamp - Right (UF2)




4649903

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E33R Cargo Lamp - Right (UF2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BU<br>BU | 7762<br>7762 | Cargo Lamp Control<br>Cargo Lamp Control | I | —<br>GFF/ GFI/ GFJ/ GFS |
| 2 | 0.75 | BK | 1850 | Ground | I | — |

# E33RB Cargo Box Lamp Bulb - Right - REGULAR CAB

—

## Connector Part Information

Harness Type: High Mount Stop Lamp Wiring Harness
OEM Connector: 02075-01
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

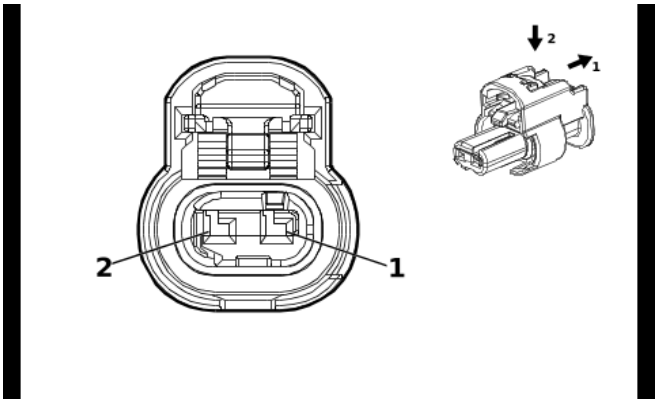
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## E33RB Cargo Box Lamp Bulb - Right - REGULAR CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.75 | BK | 1050 | Ground | I | — |
| | 0.75 | BK | 1050 | Ground | | — |
| B | 0.75 | BN | 1430 | Exterior Courtesy Lamp Control | I | — |
| | 0.75 | BN | 1430 | Exterior Courtesy Lamp Control | | — |

# E33TH Rear Closure Auxiliary Signal Lamp (QT5/QT6)




4649903

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

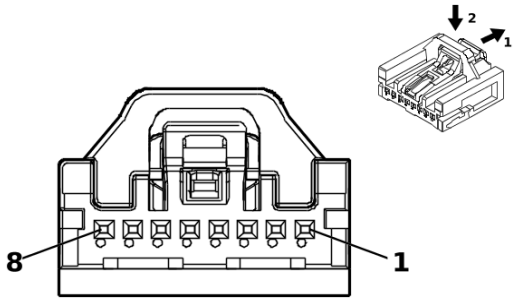
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## E33TH Rear Closure Auxiliary Signal Lamp (QT5/QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# E37SMC Rear Seat Position Center Reading and Courtesy Lamp




5200269

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

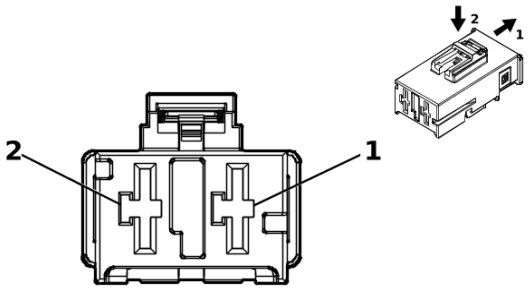
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## E37SMC Rear Seat Position Center Reading and Courtesy Lamp

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / YE | 2903 | Row 2 Dome Reading Lamp Interior Lamp Control | I | — |
| 2 | 0.35 | BN / BU | 2905 | Row 2 Dome Reading Lamp 2 Interior Lamp Control | I | — |
| 3 | 0.35 | BK | 1050 | Ground | I | — |
| 4 | 0.35 | WH / BN | 2904 | Row 2 Dome Reading Lamp Switch Signal | I | — |
| 5 | 0.35 | VT / GY | 2906 | Row 2 Dome Reading Lamp 2 Switch Signal | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |

# E40 Air Heater X1 (C32)




5187955

## Connector Part Information

Harness Type: Auxiliary Heater Wiring Harness
OEM Connector: 13525311
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 9.5 MCON-LL Series( BK)

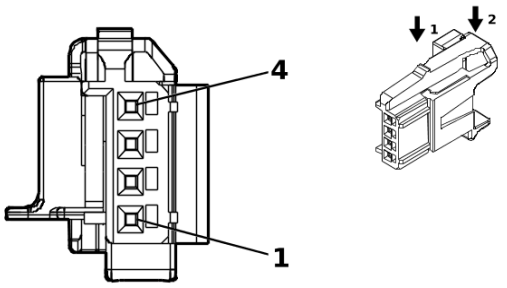
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-22 (RD) | No Tool Required |

## E40 Air Heater X1 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 10 | RD / GY | 642 | Battery Positive Voltage | I | — |

# E40 Air Heater X2 (C32)




5191926

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 2294399-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## E40 Air Heater X2 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 3 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 4 | 0.35 | BK | 1050 | Ground | I | — |

# E40 Air Heater X3 (C32)

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## Connector Part Information

Harness Type: Auxiliary Heater Wiring Harness
OEM Connector: 20000001
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

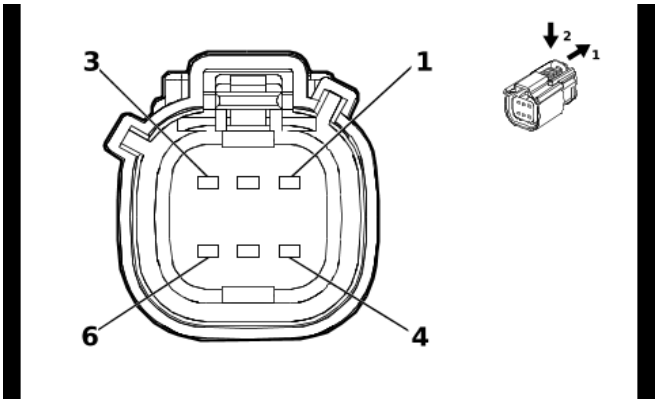
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E40 Air Heater X3 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 10 | BK | 750 | Ground | I | — |

# E42L Rear Body Structure Stop Lamp - Left (GA4/GFG/GFU/GFW/GFY)




5926694

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: 33472-0617
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 Series, Sealed( GY)

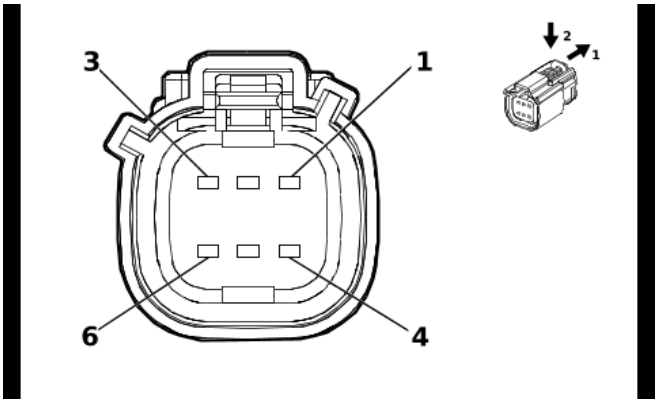
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## E42L Rear Body Structure Stop Lamp - Left (GA4/GFG/GFU/GFW/GFY)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BN | 6993 | Left Rear Park Lamp Control | I | — |
| 2 | 0.75 | RD / RD | 6567 | Rear Turn Signal Lamp Feedback Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / GN | 24 | Backup Lamp Control | I | — |
| 5 | 0.75 | GN / GN | 1334 | Left Rear Turn Signal Lamp Control 2 | I | — |
| 6 | 0.75 | BK | 1951 | Signal Ground | I | — |

# E42R Rear Body Structure Stop Lamp - Right (GA4/GFG/GFU/GFW/GFY)




5926694

## Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: 33472-0617
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 Series, Sealed( GY)

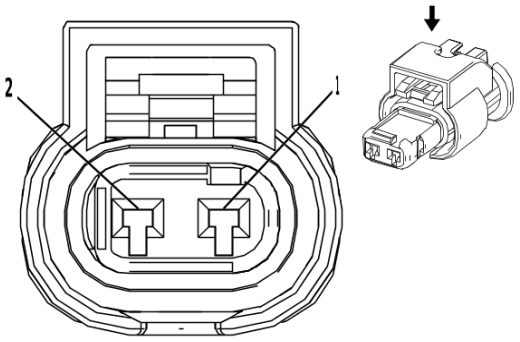
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## E42R Rear Body Structure Stop Lamp - Right (GA4/GFG/GFU/GFW/GFY)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 6995 | Right Rear Park Lamp Control | I | — |
| 2 | 0.75 | RD | 7544 | Right Rear Turn Signal Lamp Feedback Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN | 24 | Backup Lamp Control | I | — |
| 5 | 0.75 | GN | 1335 | Right Rear Turn Signal Lamp Control 2 | I | — |
| 6 | 0.75 | BK | 1850 | Ground | I | — |

# E52 Reductant Heater 2 - Injector Supply Pipe (LZ0)




2474752

## Connector Part Information

Harness Type: Emission Reduction Fluid Tank Reservoir Wire Harness
OEM Connector: 13927761
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK with BK Inner Connector)

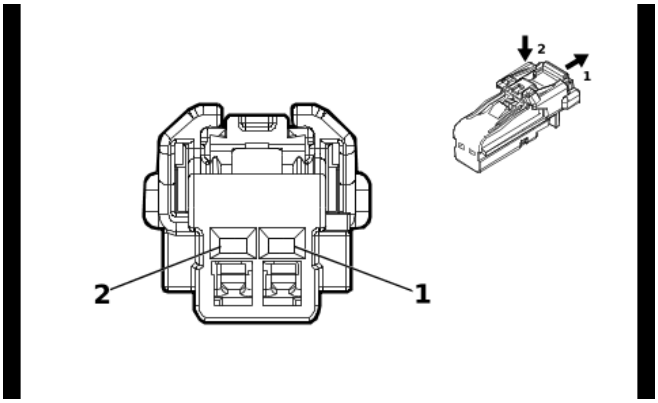
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## E52 Reductant Heater 2 - Injector Supply Pipe (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | WH | 3199 | Diesel Exhaust Fluid Pressure Line Heater Control | I | — |
| 2 | 1 | BN | 4319 | Diesel Exhaust Fluid Line Heater Low Control | I | — |

# E63D Front Side Door Inside Handle Illumination Lamp - Left




4115691

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

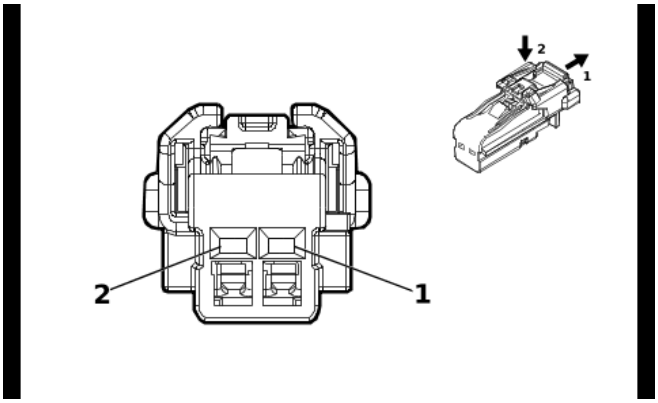
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## E63D Front Side Door Inside Handle Illumination Lamp - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / VT | 2767 | LED Ambient Lighting Control Left Front Door | I | — |
| 2 | 0.5 | BK | 1550 | Ground | I | — |

# E63P Front Side Door Inside Handle Illumination Lamp - Right




4115691

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

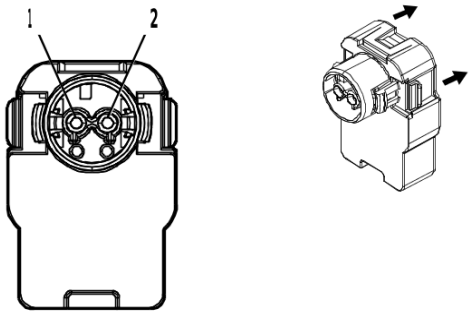
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## E63P Front Side Door Inside Handle Illumination Lamp - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BN | 2768 | LED Ambient Lighting Control Right Front Door | I | — |
| 2 | 0.5 | BK | 1350 | Ground | I | — |

# F101 Instrument Panel Airbag X1




4823732

## Connector Part Information

Harness Type: Instrument Panel Airbag Wiring Harness
OEM Connector: 13530531
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

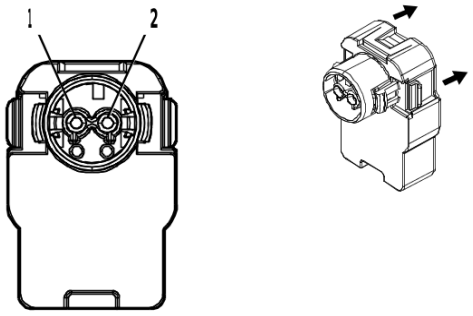
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## F101 Instrument Panel Airbag X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / OG | 3025 | Passenger Instrument Panel Air Bag Stage 1 High Control | I | — |
| 2 | 0.35 | OG / WH | 3024 | Passenger Instrument Panel Air Bag Stage 1 Low Control | I | — |

# F101 Instrument Panel Airbag X2




4772246

## Connector Part Information

Harness Type: Instrument Panel Airbag Wiring Harness
OEM Connector: 13530532
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

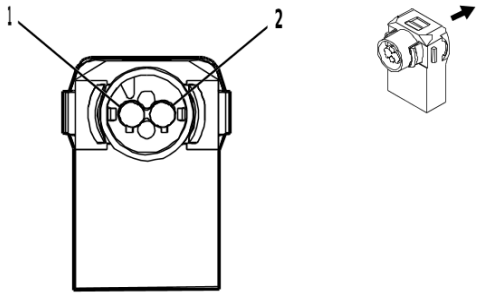
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## F101 Instrument Panel Airbag X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY / OG | 3027 | Passenger Instrument Panel Air Bag Stage 2 High Control | I | — |
| 2 | 0.35 | OG / VT | 3026 | Passenger Instrument Panel Air Bag Stage 2 Low Control | I | — |

# F105LF Front Row Roof Rail Airbag - Left




4679778

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series( GY with YE Cover)

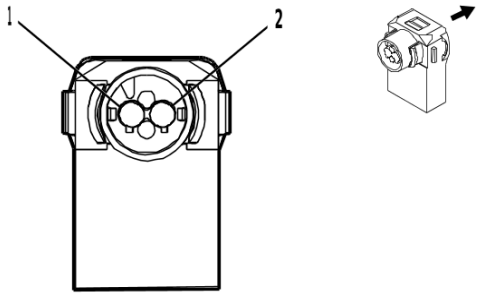
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F105LF Front Row Roof Rail Airbag - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GN | 5019 | Left Front Roof Rail Air Bag High Control | I | — |
| 2 | 0.5 | VT / OG | 5020 | Left Front Roof Rail Air Bag Low Control | I | — |

# F105RF Front Row Roof Rail Airbag - Right




4679778

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series( GY with YE Cover)

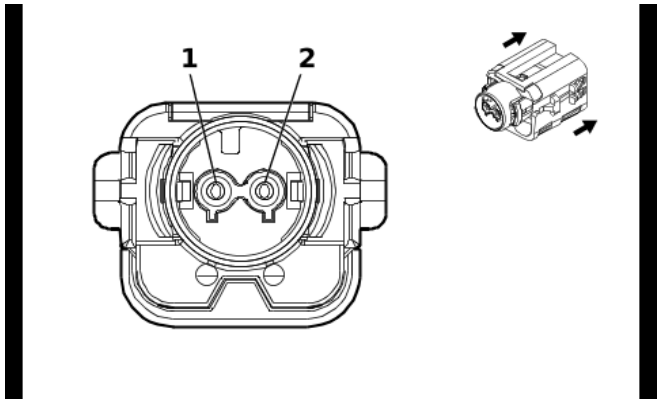
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F105RF Front Row Roof Rail Airbag - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GY | 5021 | Right Front Roof Rail Air Bag High Control | I | — |
| 2 | 0.5 | WH / OG | 5022 | Right Front Roof Rail Air Bag Low Control | I | — |

# F106D Front Seat Outboard Seat Back Airbag - Driver




5499727

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 35212936
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series( PK with YE Cover)

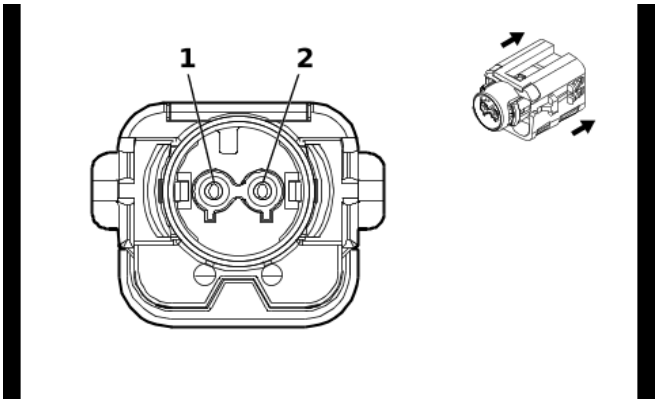
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-10 (GN) | No Tool Required |

## F106D Front Seat Outboard Seat Back Airbag - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / BU | 4962 | Driver Seat Back Air Bag High Control | I | — |
| 2 | 0.5 | BK / OG | 4963 | Driver Seat Back Air Bag Low Control | I | — |

# F106P Front Seat Outboard Seat Back Airbag - Passenger




5499727

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 35212936
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series( PK with YE Cover)

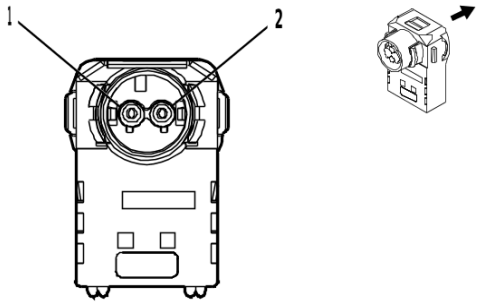
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-10 (GN) | No Tool Required |

## F106P Front Seat Outboard Seat Back Airbag - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GY | 4956 | Passenger Seat Back Air Bag High Control | I | — |
| 2 | 0.5 | BU / OG | 4957 | Passenger Seat Back Air Bag Low Control | I | — |

# F107 Steering Wheel Airbag X1 (NP5-D07)




4231869

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13516028
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series( PK with YE Cover)

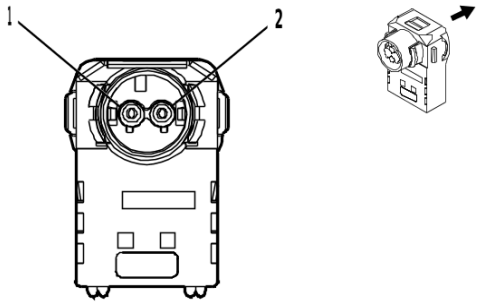
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-10 (GN) | No Tool Required |

## F107 Steering Wheel Airbag X1 (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / OG | 3021 | Steering Wheel Air Bag Stage 1 High Control | I | — |
| 2 | 0.5 | OG / WH | 3020 | Steering Wheel Air Bag Stage 1 Low Control | I | — |

# F107 Steering Wheel Airbag X1 (NK5/D07)




4231869

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13545486
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series

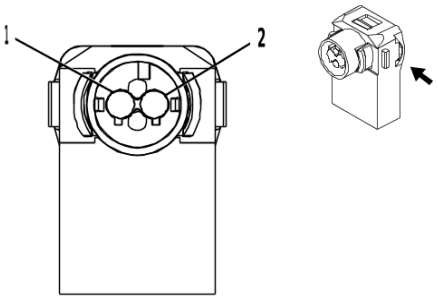
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## F107 Steering Wheel Airbag X1 (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | I | — |
| 2 | 0.5 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | I | — |

# F107 Steering Wheel Airbag X2 (NP5-D07)




4241364

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13516029
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series( PU with YE Cover)

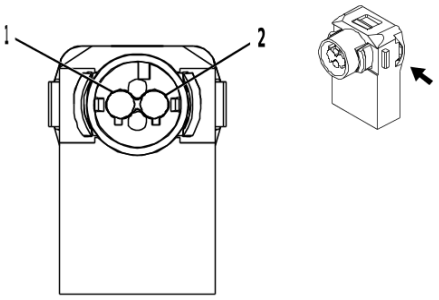
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-10 (GN) | No Tool Required |

## F107 Steering Wheel Airbag X2 (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / OG | 3023 | Steering Wheel Air Bag Stage 2 High Control | I | — |
| 2 | 0.5 | OG / VT | 3022 | Steering Wheel Air Bag Stage 2 Low Control | I | — |

# F107 Steering Wheel Airbag X2 (NK5/D07)




4241364

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13545487
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series

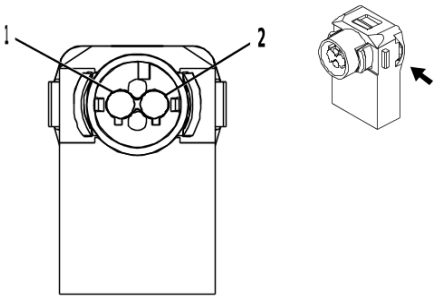
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## F107 Steering Wheel Airbag X2 (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | I | — |
| 2 | 0.5 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | I | — |

# F112D Front Seat Belt Retractor - Driver




4241364

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series( PU with YE Cover)

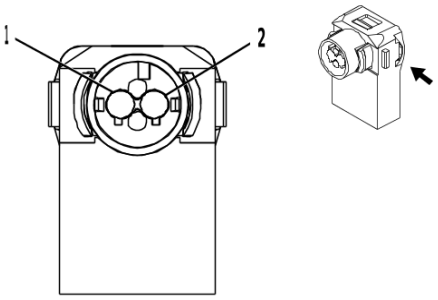
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F112D Front Seat Belt Retractor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / WH | 3477 | Driver Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.5 | VT / OG | 3478 | Driver Seat Belt Retractor Pretensioner Low Control | I | — |

# F112P Front Seat Belt Retractor - Passenger




4241364

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series( PU with YE Cover)

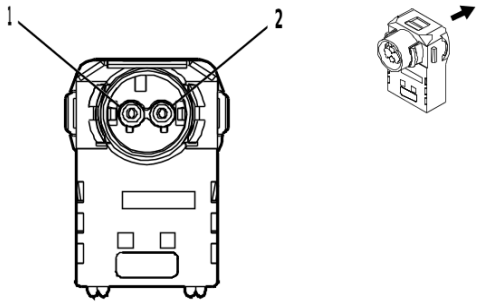
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F112P Front Seat Belt Retractor - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / GN | 3475 | Passenger Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.5 | WH / OG | 3476 | Passenger Seat Belt Retractor Pretensioner Low Control | I | — |

# F113D Front Seat Belt Anchor Plate Tensioner - Driver




4231869

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345777
Service Connector: 19355489
Description: 2-Way F ABX-5 Series( PK with YE Cover)

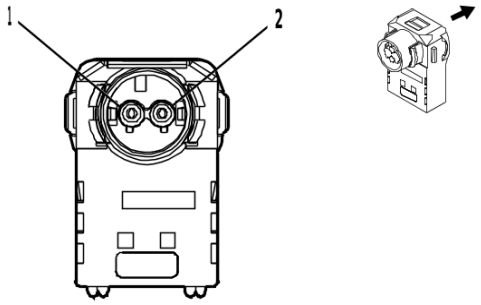
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F113D Front Seat Belt Anchor Plate Tensioner - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / YE | 3481 | Driver Seat Belt Anchor Pretensioner High Control | I | — |
| 2 | 0.5 | VT / OG | 3482 | Driver Seat Belt Anchor Pretensioner Low Control | I | — |

# F113P Front Seat Belt Anchor Plate Tensioner - Passenger




4231869

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345777
Service Connector: 19355489
Description: 2-Way F ABX-5 Series( PK with YE Cover)

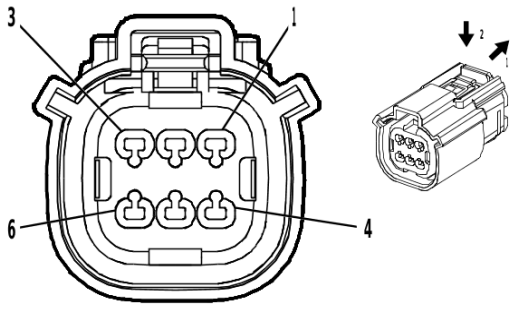
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## F113P Front Seat Belt Anchor Plate Tensioner - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG / BN | 3479 | Passenger Seat Belt Anchor Pretensioner High Control | I | — |
| 2 | 0.5 | GY / OG | 3480 | Passenger Seat Belt Anchor Pretensioner Low Control | I | — |

# G5 Transmission Fluid Pump - Electric/Auxiliary (MHS/MQC)




4574736

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( WH)

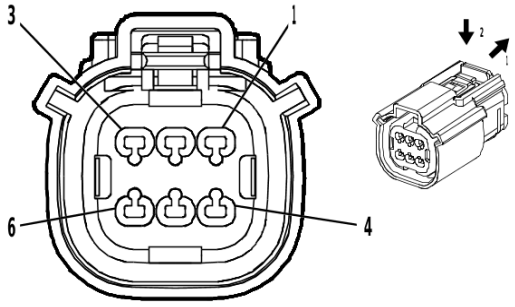
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## G5 Transmission Fluid Pump - Electric/Auxiliary (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / VT | 8540 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 4 | 0.5 | GY / OG | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 1.5 | BK / YE | 450 | Ground | I | — |

# G5 Transmission Fluid Pump - Electric/Auxiliary (MHT/MQB)




4574736

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( WH)

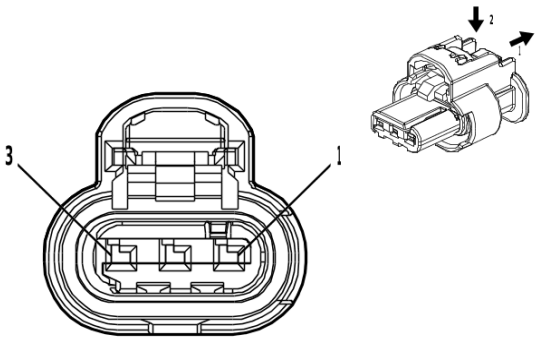
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## G5 Transmission Fluid Pump - Electric/Auxiliary (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / VT | 8540 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 4 | 0.5 | GY / OG | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 1.5 | BK / YE | 450 | Ground | I | — |

# G8 Engine Coolant Pump - Auxiliary (L84 / L87)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

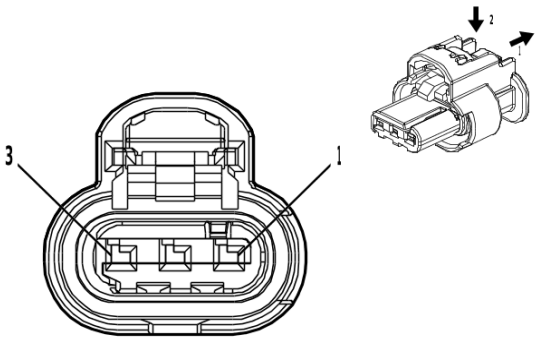
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G8 Engine Coolant Pump - Auxiliary (L84 / L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 450 | Ground | I | — |
| 2 | 0.5 | RD / BU | 6040 | Battery Positive Voltage | I | — |
| 3 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G8 Engine Coolant Pump - Auxiliary (LZ0)




4581126

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

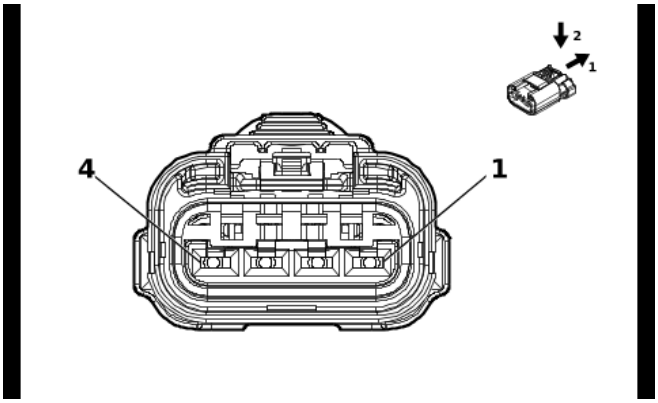
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G8 Engine Coolant Pump - Auxiliary (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.5 | RD / BU | 6040 | Battery Positive Voltage | I | — |
| 3 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10L Cooling Fan Motor - Left (L3B)




5838592

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed( BK)

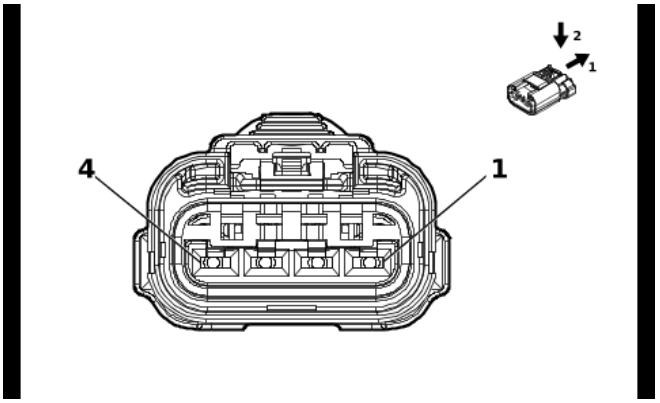
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## G10L Cooling Fan Motor - Left (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 6550 | Ground | II | — |
| 2 | 5 | RD / GN | 3840 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10L Cooling Fan Motor - Left (L84/L87)




5838592

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed( BK)

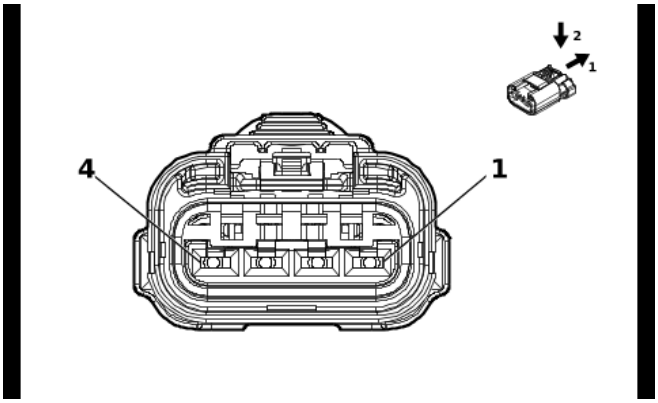
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## G10L Cooling Fan Motor - Left (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 450 | Ground | II | — |
| 2 | 5 | RD / GN | 3840 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10L Cooling Fan Motor - Left (LZ0)




5838592

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed( BK)

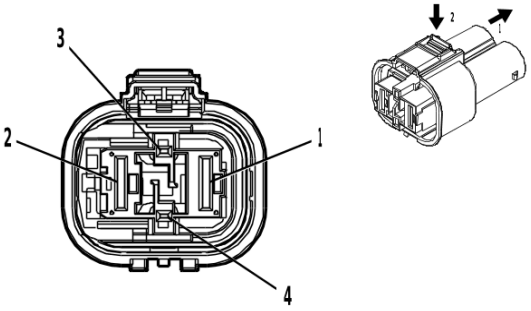
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## G10L Cooling Fan Motor - Left (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 4450 | Ground | II | — |
| 2 | 5 | RD / GN | 3840 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10LW Cooling Fan Motor - Lower (L3B)




4847569

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33376654
Service Connector: 84766431
Description: 4-Way F 1.2, 9.5 MCON Series, Sealed( BK)

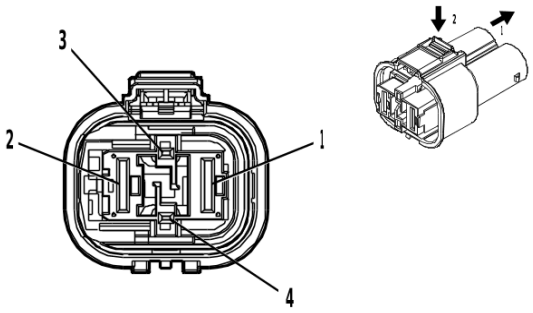
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-22 (RD) | No Tool Required |

## G10LW Cooling Fan Motor - Lower (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | RD / GY | 4140 | Battery Positive Voltage | II | — |
| 2 | 5 | BK | 6550 | Ground | II | — |
| 3 | 0.5 | GN / YE | 4623 | Engine Control Module LIN Bus 3 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# G10LW Cooling Fan Motor - Lower (LZ0)




4847569

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33376654
Service Connector: 84766431
Description: 4-Way F 1.2, 9.5 MCON Series, Sealed( BK)

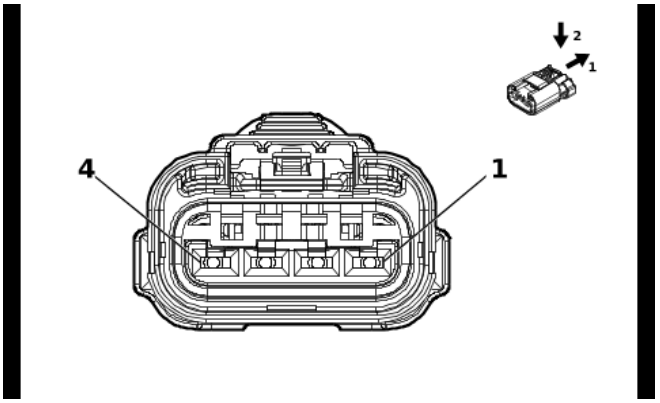
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-22 (RD) | No Tool Required |

## G10LW Cooling Fan Motor - Lower (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | RD / GY | 4140 | Battery Positive Voltage | II | — |
| 2 | 5 | BK | 4450 | Ground | II | — |
| 3 | 0.5 | GN / YE | 4623 | Engine Control Module LIN Bus 3 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# G10R Cooling Fan Motor - Right (L3B)




5838592

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed( BK)

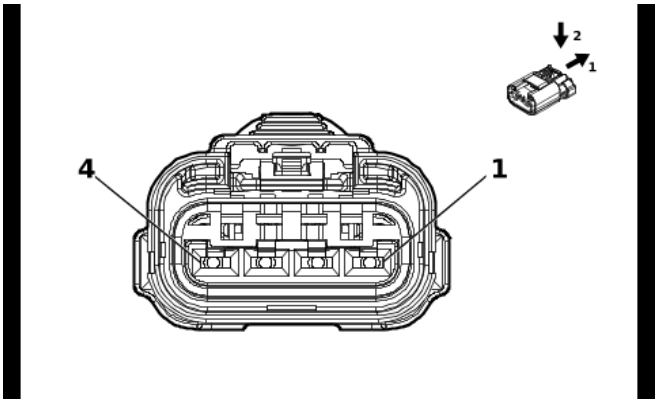
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## G10R Cooling Fan Motor - Right (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 6550 | Ground | II | — |
| 2 | 5 | RD / PU | 4040 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10R Cooling Fan Motor - Right (L84/L87)




5838592

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed( BK)

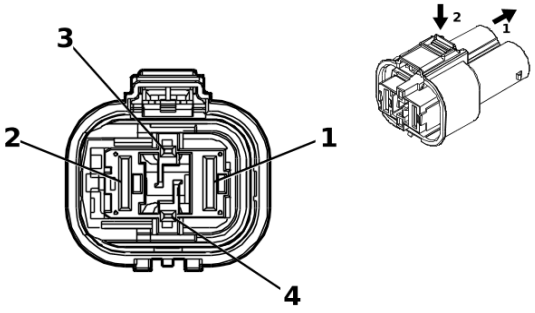
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## G10R Cooling Fan Motor - Right (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 450 | Ground | II | — |
| 2 | 5 | RD / PU | 4040 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |

# G10R Cooling Fan Motor - Right (LZ0)




5187743

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35194180
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series( GY)

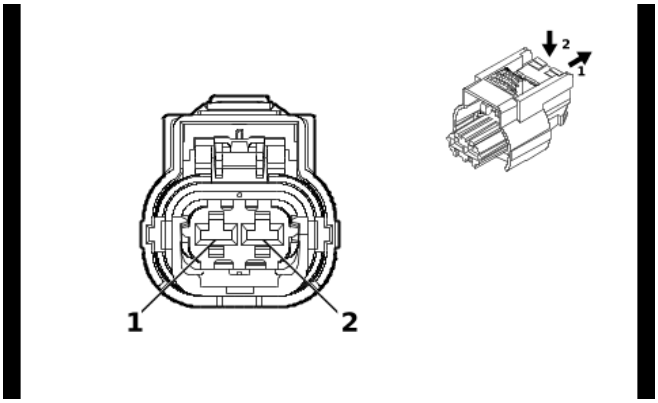
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-22 (RD) | No Tool Required |

## G10R Cooling Fan Motor - Right (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 8 | RD / BN | 1742 | Battery Positive Voltage | II | — |
| 2 | 8 | BK | 4450 | Ground | II | — |
| 3 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# G13 Generator X1 (L3B)




4992524

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

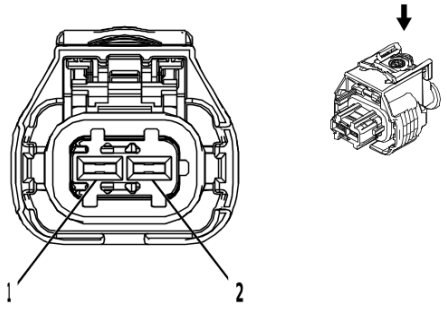
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## G13 Generator X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |

# G13 Generator X1 (L84/L87)




2577394

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed( BK)

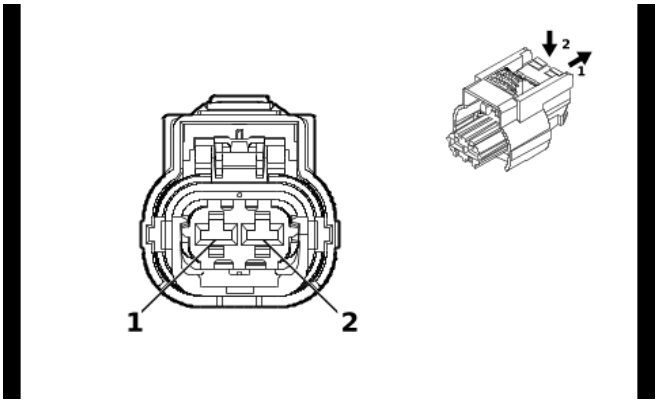
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## G13 Generator X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |

## G13 Generator X1 (LZ0)




4992524

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

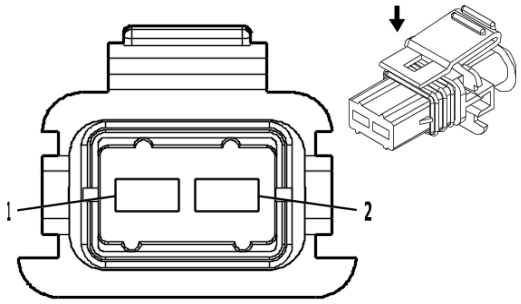
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

### G13 Generator X1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |

# G13 Generator X1 (VYU)




1522871

## Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 12186308
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Junior Power Timer Series, Sealed( BK)

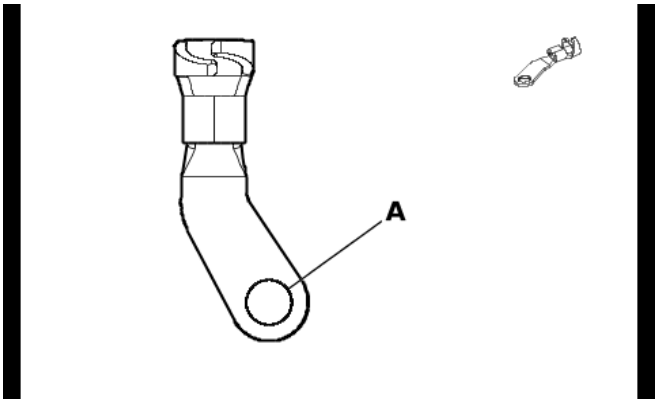
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## G13 Generator X1 (VYU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 9025 | Charge Indicator Control Switch Signal | I | — |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |

## G13 Generator X2 (L3B)




5911279

### Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84238913
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

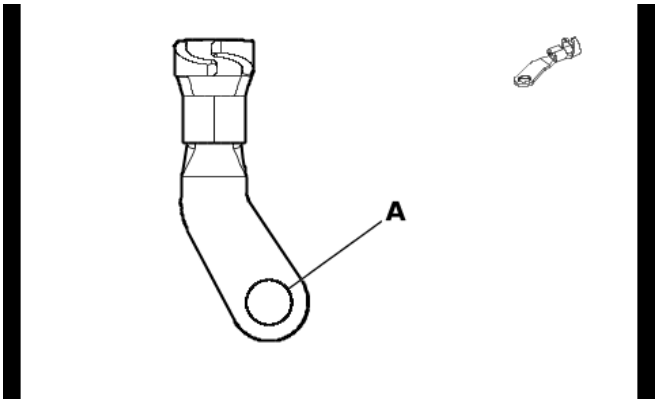
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### G13 Generator X2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

## G13 Generator X2 (( L84 / L87 ) & KW5)




5911279

### Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84238913
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

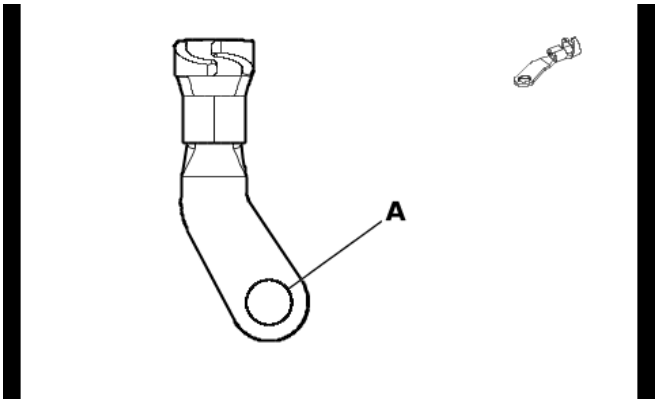
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### G13 Generator X2 (( L84 / L87 ) & KW5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

## G13 Generator X2 (LZ0)




5911279

### Connector Part Information

Harness Type: Generator Battery Jumper Cable
OEM Connector: 84238913
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### G13 Generator X2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / BU | 42 | Battery Positive Voltage | I | — |

# G13 Generator X2 ((L84/L87)&KW7)

—

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 84223343
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

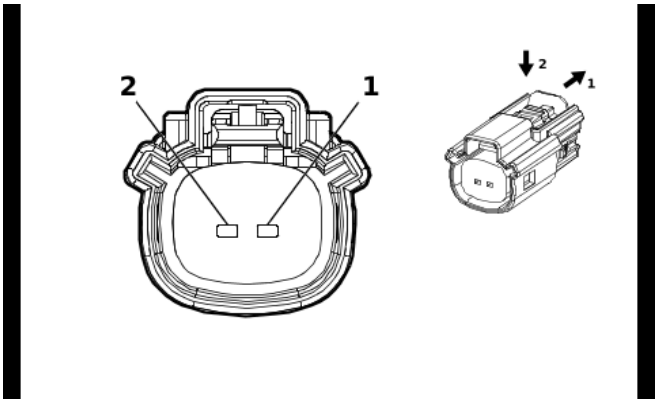
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## G13 Generator X2 ((L84/L87)&KW7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 25 | RD / BU | 42 | Battery Positive Voltage | I | — |

# G18 Fuel Pump - High Pressure (L3B)




2474713

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 1.5 MX Series, Sealed( BK)

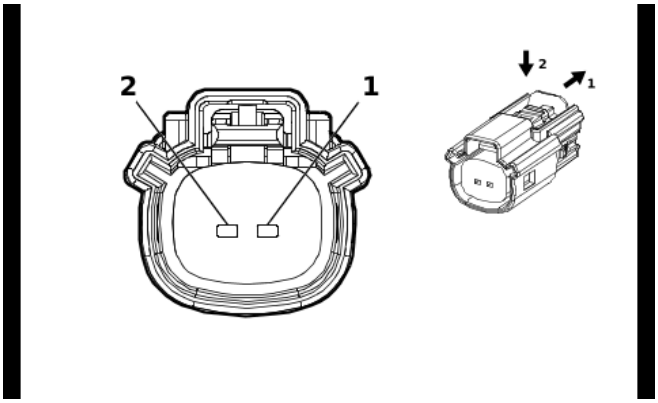
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## G18 Fuel Pump - High Pressure (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BK | 7300 | High Pressure Fuel Pump Low Control | I | — |
| 2 | 0.5 | YE | 7301 | High Pressure Fuel Pump High Control | I | — |

# G18 Fuel Pump - High Pressure (L84/L87)




2474713

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 33471-0206
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

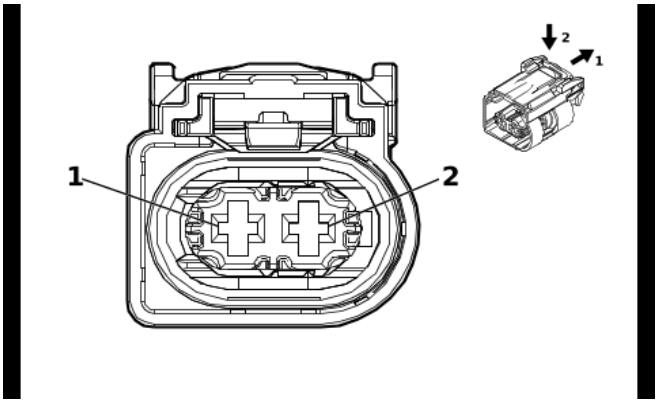
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## G18 Fuel Pump - High Pressure (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | VT / BK | 7300 | High Pressure Fuel Pump Low Control | I | — |
| 2 | 0.8 | YE | 7301 | High Pressure Fuel Pump High Control | I | — |

## G24 Windshield Washer Pump




5580410

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35459954
Service Connector: 85005016
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

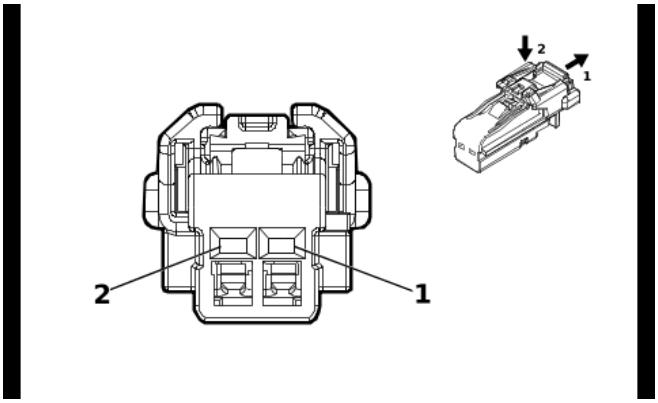
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

### G24 Windshield Washer Pump

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY / VT | 228 | Windshield Washer Pump Control | I | — |
| 2 | 0.75 | BK | 150 | Ground | I | — |

# G31D Front Seat Back Lumbar Pump - Driver (AF6)




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

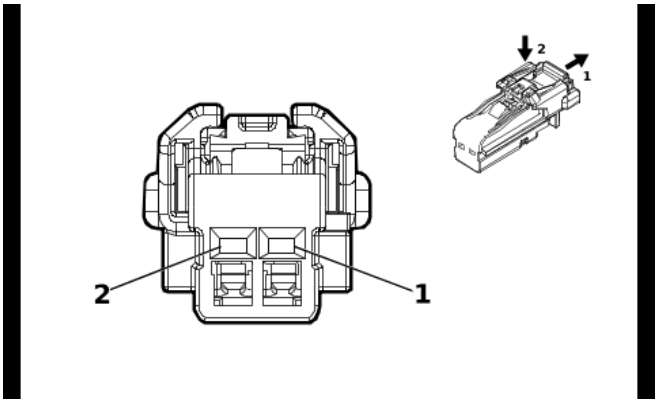
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G31D Front Seat Back Lumbar Pump - Driver (AF6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4891 | Driver Seat Lumbar/Bolster Pump Control | I | — |
| 2 | 0.5 | BN / BK | 2305 | Driver Seat Bolster Pump Low Reference | I | — |

# G31D Front Seat Back Lumbar Pump - Driver (AVK-AF6)




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

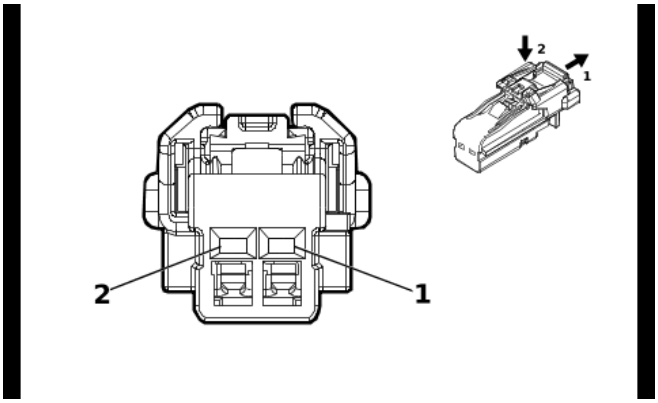
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G31D Front Seat Back Lumbar Pump - Driver (AVK-AF6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4891 | Driver Seat Lumbar/Bolster Pump Control | I | — |
| 2 | 0.5 | BN / BK | 2305 | Driver Seat Bolster Pump Low Reference | I | — |

# G31P Front Seat Back Lumbar Pump - Passenger (AKE)




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

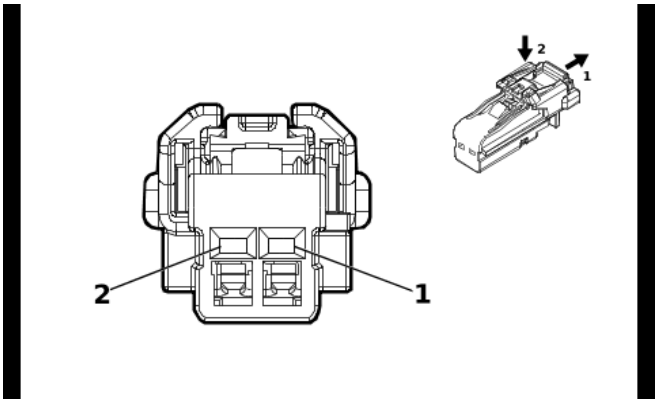
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G31P Front Seat Back Lumbar Pump - Passenger (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 4890 | Passenger Seat Lumbar/Bolster Pump Control | I | — |
| 2 | 0.5 | GY / BK | 2306 | Passenger Seat Bolster Pump Low Reference | I | — |

# G31P Front Seat Back Lumbar Pump - Passenger (AVU-AKE)




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

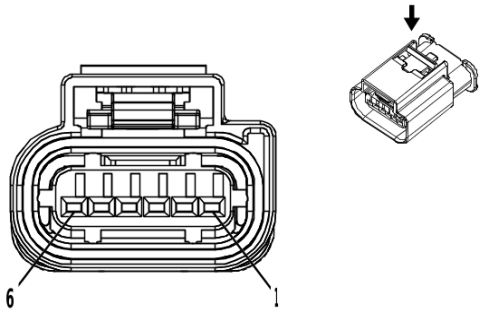
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G31P Front Seat Back Lumbar Pump - Passenger (AVU-AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / WH | 4890 | Passenger Seat Lumbar/Bolster Pump Control | I | — |
| 2 | 0.5 | BK | 1350 | Ground | I | — |

# G58 Evaporative Emission Canister Purge Pump (L3B)




3747579

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33225994
Service Connector: 19354437
Description: 6-Way F 1.2 MCON Series, Sealed( BK)

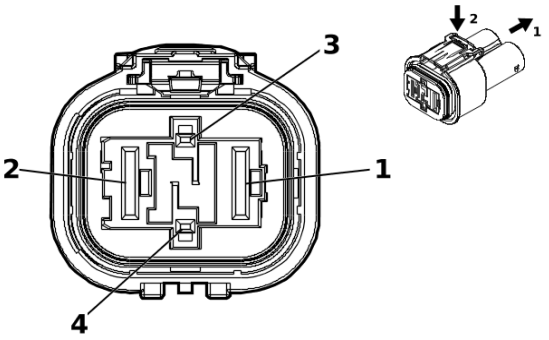
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## G58 Evaporative Emission Canister Purge Pump (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BU | 2447 | Evaporative Purge Pump Pressure Signal | I | — |
| 2 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.5 | GN / BN | 2732 | Engine Control Module LIN Bus 4 | I | — |
| 5 | 0.75 | BK | 6550 | Ground | I | — |
| 6 | 0.75 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |

## G59 Engine Coolant Pump (L3B)




5389785

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35485244
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series( BK)

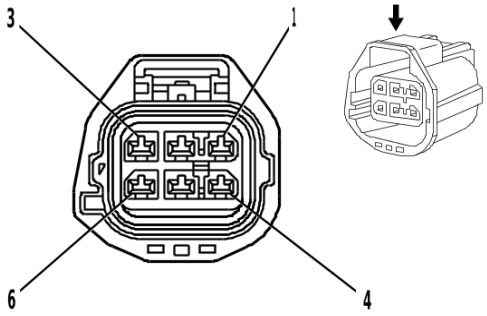
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-22 (RD) | No Tool Required |

### G59 Engine Coolant Pump (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 10 | RD / BN | 1742 | Battery Positive Voltage | II | — |
| 2 | 10 | BK | 6550 | Ground | II | — |
| 3 | 0.5 | GN / BN | 2732 | Engine Control Module LIN Bus 4 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# K4 Running Board Control Module X1 (BRS)




1420587

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33334914
Service Connector: 19368306
Description: 6-Way F 2.8 Series, Sealed( GY)

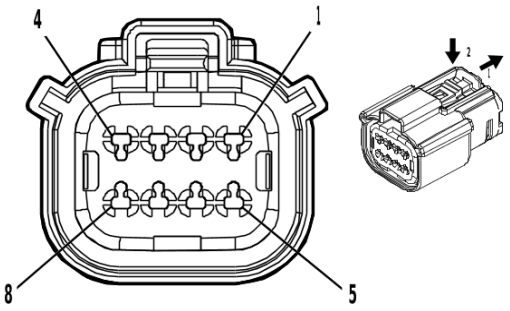
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## K4 Running Board Control Module X1 (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / WH | 1040 | Battery Positive Voltage | I | — |
| 2 | 2 | GY | 7472 | Left Running Board Step Motor Control Retract | I | — |
| 3 | 2 | BU | 7470 | Right Running Board Step Motor Control Extend | I | — |
| 4 | 2.5 | BK | 1650 | Ground | I | — |
| 5 | 2 | WH / BN | 7471 | Left Running Board Step Motor Control Extend | I | — |
| 6 | 2 | GN | 7469 | Right Left Running Board Step Motor Control Retract | I | — |

# K4 Running Board Control Module X2 (BRS)




4846407

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35105969
Service Connector: 84928314
Description: 8-Way F 1.5 MX Series, Sealed( BK)

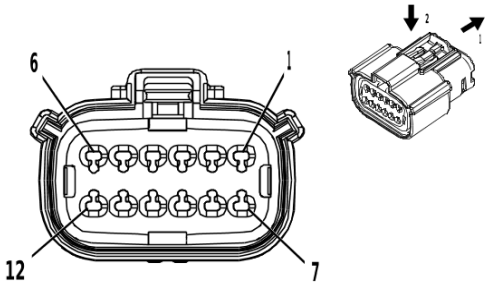
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## K4 Running Board Control Module X2 (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 2 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 3 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 6 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 7 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 8 | — | — | — | Not Occupied | — | — |

# K4 Running Board Control Module X3 (BRS)




2871860

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35554985
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

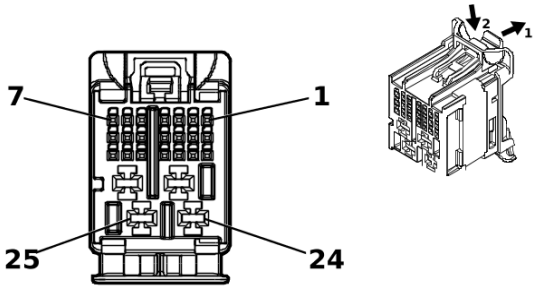
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |

## K4 Running Board Control Module X3 (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / RD | 7464 | Right Running Board Step Motor Hall Sensor 5V Reference | I | — |
| 2 | 0.5 | VT | 7465 | Right Running Board Step Motor Hall Sensor Signal | I | — |
| 3 | 0.5 | YE / BK | 7463 | Right Running Board Step Motor Hall Sensor Low Reference | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | VT / RD | 7468 | Left Running Board Step Motor Hall Sensor 5V Reference | I | — |
| 8 | 0.5 | YE | 7467 | Left Running Board Step Motor Hall Sensor Signal | I | — |
| 9 | 0.5 | YE / BN | 7466 | Left Running Board Step Motor Hall Sensor Low Reference | I | — |
| 10 | 0.5 | BU / GN | 4746 | Running Board Step Left Kick Switch Signal | I | — |
| 11 | 0.5 | WH | 4747 | Running Board Step Right Kick Switch Signal | I | — |
| 12 | — | — | — | Not Occupied | — | — |

# K9 Body Control Module X1




5203995

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392285
Service Connector: 13534967
Description: 25-Way F 0.5 MQS, 2.8 MCP Series( BK with GY Inner Connector)

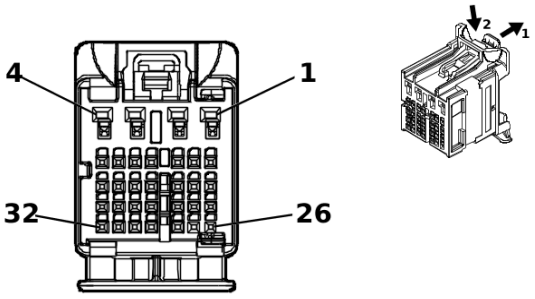
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

## K9 Body Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | BU / GN | 4248 | Cargo Lamp Indicator Control | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | BU / GY | 754 | Blower Motor Speed Control | I | — |
| 6 | 0.35 | WH / YE | 4634 | HVAC Remote Enable Signal | I | — |
| 7 | 0.35 | WH / GY | 7297 | Minor Endgate High Relay Control | I | — |
| 8 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GY / GN | 4636 | HVAC System Enable Signal | I | — |
| 12 | 0.35 | GY | 728 | Security Indicator Control | I | — |
| 13 | 0.35 | YE | 6812 | Out of Park Signal | I | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | GY | 590 | Driver Solar Sensor Signal | I | — |
| 16 | 0.35 | GY | 6137 | A/C Evaporator Temperature Sensor Signal | I | — |
| 17 | 0.35 | WH / BU | 278 | Ambient Light Sensor Signal | I | — |
| 18 | 0.35 | BU / WH | 734 | Inside Air Temperature Sensor Signal | I | — |
| 19 | 0.35 | GY | 158 | Cargo Lamp Switch Signal | I | — |
| 20 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 21 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 1 | RD / GY | 2140 | Battery Positive Voltage | II | — |
| 24 | — | — | — | Not Occupied | — | — |
| 25 | 1 | GN / YE | 6840 | Auxiliary Device 2 Switched Voltage | II | — |

# K9 Body Control Module X2




5204222

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392289
Service Connector: 13534980
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( PK with GY Inner Connector)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |

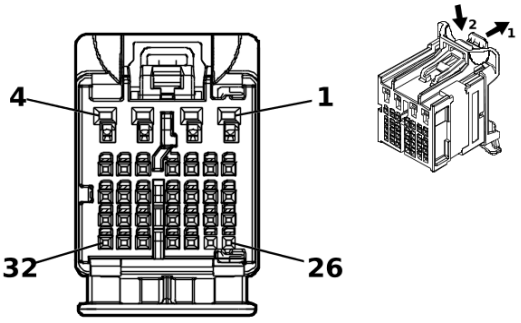
## K9 Body Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | BU / GN | 5723 | Ignition Mode Switch Mode Voltage | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35<br>0.35 | VT / YE<br>GN / BU | 5526<br>3738 | Tap Up/Tap Down Switch Signal<br>Tap Up/Tap Down Switch Signal 2 | I<br>I | ( MQC/ MHS) + N38<br>M5X/ MQB/ MQE/ MHT |
| 10 | 0.35 | WH / BN | 2203 | Enhanced Driver Mode 2 Switch Signal | I | — |
| 11 | 0.35 | GY | 1198 | Endgate Release Switch Analog Signal Interior | I | — |
| 12 | 0.35 | YE / BU | 1714 | Windshield Wiper Switch Low Signal | I | — |
| 13 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 14 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | BN / BK | 5720 | Ignition Mode Switch Accessory LED Signal | I | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | WH / VT | 103 | Headlamp Switch On Signal | I | — |
| 20 | 0.35 | GN / GY | 13 | Headlamp Switch Park Lamp Signal | I | — |
| 21 | 0.35 | GN / BN | 306 | Headlamp Switch Off Signal | I | — |
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | VT / BU | 2916 | Right Turn Signal Switch Signal | I | — |
| 24 | — | — | — | Not Occupied | — | — |

## K9 Body Control Module X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.35 | BK / GY | 6009 | Windshield Wiper Switch Low Reference | I | — |
| 26 | 0.35 | WH / BK | 94 | Windshield Washer Switch Signal | I | — |
| 27 | 0.35 | YE / BN | 307 | Headlamp Switch Flash Signal | I | — |
| 28 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 29 | 0.35 | WH / GN | 2915 | Left Turn Signal Switch Signal | I | — |
| 30 | 0.35 | BK / YE | 407 | Sensor Low Reference | I | — |
| 31 | 0.35 | GN / WH | 111 | Hazard Warning Switch Signal | I | — |
| 32 | 0.35 | WH | 524 | High Beam Select Switch High Beam Signal | I | — |

# K9 Body Control Module X3




5203925

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392288
Service Connector: 13534977
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( BU with GY Inner Connector)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

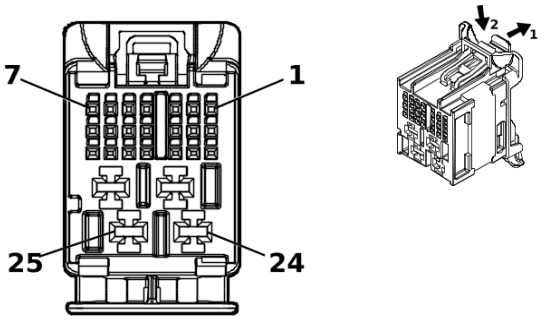
## K9 Body Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN / VT | 4786 | Dome/Reading Lamp Enable Signal | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | WH / BN | 7555 | Headlamp Switch Signal | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | GN / BK | 2858 | Body Control Module LIN Bus 12 | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | YE / WH | 816 | Brake Transmission Shift Interlock Solenoid Actuator Control | I | — |
| 13 | 0.35 | WH | 3152 | Lane Departure Warning Indicator Control | I | — |
| 14 | 0.35 | GN / BN | 5852 | Rear Parking Assist Disable LED Signal | I | — |
| 15 | 0.35 | GN | 1110 | Stop/Start Indicator Control | I | — |
| 16 | 0.35 | GN / BU | 761 | Blower Speed Feedback Signal | I | — |
| 17 | 0.35 | VT / BK | 7553 | Park Lock Solenoid Actuator Control | I | — |
| 18 | 0.35 | YE | 7556 | Headlamp Switch Reference | I | — |
| 19 | 0.35 | BU / BK | 5719 | Ignition Mode Switch Start LED Signal | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | BN | 7291 | Major Endgate Release Switch Signal Interior | I | — |
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | BU | 1111 | Stop/Start Switch Signal | I | — |
| 24 | 0.35 | WH / BU | 3691 | Trailer Brake Apply Signal | I | — |

## K9 Body Control Module X3 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.35 | BU / GY | 4990 | Driver Mode 1 Switch Signal | I | — |
| 26 | 0.35 | GY / BN | 3904 | Auto High Beam Assist Switch Signal | I | — |
| 27 | 0.35 | GY / WH | 3153 | Lane Departure Warning Disable Switch Signal | I | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.35 | BU / YE | 6844 | ABS/Traction Control Hill Descent Control Switch Signal | I | — |
| 31 | 0.35 | GY / GN | 2555 | Rear Parking Assist Disable Signal | I | — |
| 32 | — | — | — | Not Occupied | — | — |

# K9 Body Control Module X4




5203893

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392284
Service Connector: 13534970
Description: 25-Way F 0.5 MQS, 2.8 MCP Series( GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

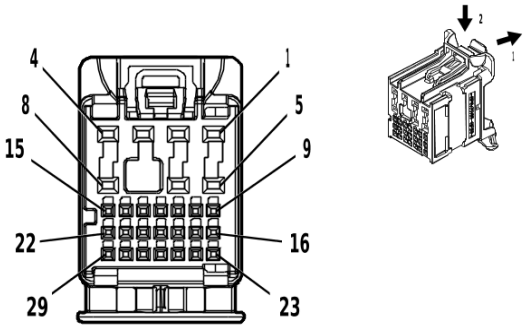
### K9 Body Control Module X4

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN / BK | 3552 | Interior Passive Entry Antenna 1 High Signal | I | — |
| 2 | 0.35 | WH | 3553 | Interior Passive Entry Antenna 1 Low Signal | I | — |
| 3 | 0.35 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 4 | 0.35 | WH / GN | 7728 | Major Endgate High Relay Control | I | — |
| 5 | 0.35 | GN / VT | 5199 | Run/Crank Relay Coil Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BN / BK | 4996 | Immobilizer Antenna Signal [+] | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | GY / GN | 4083 | Retained Accessory Power Relay 2 Coil Control | I | — |
| 11 | 0.35 | BU / YE | 7176 | All Windows Open Switch Signal | I | — |
| 12 | 0.35 | BU / VT | 7729 | Major Endgate Low Relay Control | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | WH / GY | 4997 | Immobilizer Antenna Low Signal | I | — |
| 15 | 0.35 | BU / VT | 1788 | Traction Control Switch Signal 1 | I | — |
| 16 | 0.35 | GN / WH | 4115 | Body Control Module LIN Bus 5 | I | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 20 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 21 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 22 | 0.5 | RD / WH | 2740 | Battery Positive Voltage | II | — |
| 23 | 2 | RD / BU | 2540 | Battery Positive Voltage | II | — |

## K9 Body Control Module X4 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 1 | BK | 1050 | Ground | II | — |
| 25 | 1 | BK | 1050 | Ground | II | — |

# K9 Body Control Module X5




4584346

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35364128
Service Connector: 13534972
Description: 29-Way F 0.5 NANO, 1.2 MCON Series( GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

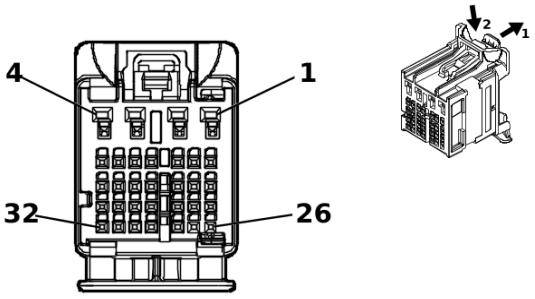
## K9 Body Control Module X5

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | BU / BN | 7573 | A/C Compressor Solenoid Valve Control | II | — |
| 3 | 0.5 | BU / YE | 7574 | A/C Compressor Solenoid Valve Control | II | — |
| 4 | 0.75 | WH | 2679 | Lock Actuators Unlock Control 1 | II | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | YE | 6817 | LED Backlight Dimming Control 1 | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | GY | 2681 | Left Front Door Lock Actuator Lock Control | II | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BN / WH | 28 | Horn Relay Control | I | — |
| 12 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 13 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 14 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | VT | 4301 | Passive Entry Left Front Antenna Signal High | I | — |
| 17 | 0.35 | GN / YE | 2855 | Body Control Module LIN Bus 9 | I | — |
| 18 | 0.35 | VT / GY | 126 | Left Front Door Open Switch Signal | I | — |
| 19 | 0.35 | GN / YE | 6134 | Body Control Module LIN Bus 3 | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | WH / BU | 6311 | Cruise/ETC/TCC Brake Signal | I | — |
| 22 | 0.35 | BN / VT | 193 | Rear Defogger Relay Control | I | — |
| 23 | 0.35 | VT / GY | 4302 | Passive Entry Left Front Antenna Signal Low | I | — |

## K9 Body Control Module X5 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.35 | WH | 5359 | Brake Apply Sensor Control | I | — |
| 25 | 0.35 | BU / YE | 5361 | Brake Apply Sensor Signal | I | — |
| 26 | 0.35 | BK / BN | 5360 | Brake Apply Sensor Low Reference | I | — |
| 27 | 0.35 | YE | 1144 | Endgate Release Switch Discrete Signal Exterior | I | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |

# K9 Body Control Module X6




5202291

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392287
Service Connector: 13534981
Description: 32-Way F 0.5 MQS, 1.2 OCS Series( BN with GY Inner Connector)

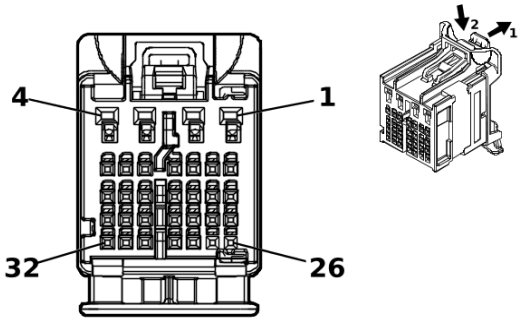
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

## K9 Body Control Module X6

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | VT / WH | 1094 | Right Rear Door Lock Actuator Lock Control | II | — |
| 3 | 0.75 | GY / BK | 2680 | Lock Actuators Unlock Control 2 | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BN / GN | 3568 | Rear Closure Passive Entry Antenna High Signal | I | — |
| 8 | 0.35 | GN / GY | 3569 | Rear Closure Passive Entry Antenna Low Signal | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GN / BU | 6133 | Body Control Module LIN Bus 2 | I | — |
| 12 | 0.35 | GY | 7292 | Major Endgate Release Switch Signal Exterior | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | VT | 801 | Retained Accessory Power Control | I | — |
| 15 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | YE | 7294 | Minor Endgate Release Switch Discrete Signal Exterior | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | YE / BU | 7295 | Left Minor Endgate Ajar Signal | I | — |
| 22 | 0.35 | BN / GN | 4064 | Hood Status B Signal | I | — |
| 23 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | BU | 2675 | Left Front Exterior Door Handle Switch Unlock Signal | I | — |
| 29 - 32 | — | — | — | Not Occupied | — | — |

# K9 Body Control Module X7




5202294

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35397992
Service Connector: 13534979
Description: 32-Way F 0.5 MQS, 1.2 OCS Series( PU with GY Inner Connector)

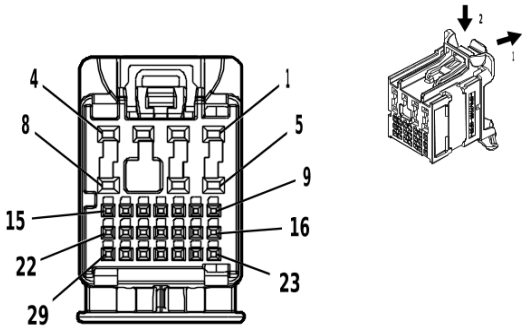
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |

## K9 Body Control Module X7

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | YE | 900 | Not Used | I | — |
| 10 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | GN / VT | 2857 | Body Control Module LIN Bus 11 | I | — |
| 20 | 0.35 | YE | 901 | Not Used | I | — |
| 21 | — | — | — | Not Occupied | — | — |
| 22 | 0.35 | YE | 902 | Not Used | I | — |
| 23 - 32 | — | — | — | Not Occupied | — | — |

# K9 Body Control Module X8




4578560

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35364137
Service Connector: 13534971
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( GY)

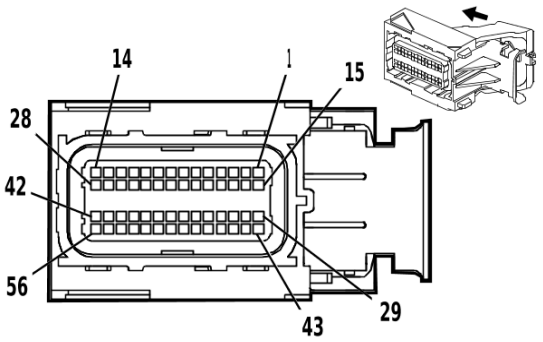
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

## K9 Body Control Module X8

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BU / YE | 1091 | Left Rear Door Lock Actuator Lock Control | II | — |
| 4 | 0.75 | YE / GN | 2682 | Right Front Door Lock Actuator Lock Control | II | — |
| 5 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | GN / BK | 4304 | Passive Entry Right Front Door Antenna Signal Low | I | — |
| 10 | 0.35 | GN / YE | 4303 | Passive Entry Right Front Door Antenna Signal High | I | — |
| 11 - 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | GN / YE | 2862 | Body Control Module LIN Bus 16 | I | — |
| 18 | 0.35 | GN / WH | 2854 | Body Control Module LIN Bus 8 | I | — |
| 19 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | GY / VT | 2676 | Right Front Door Exterior Switch Unlock Signal | I | — |
| 29 | 0.35 | GN / GY | 6135 | Body Control Module LIN Bus 4 | I | — |

## K19 Suspension Control Module (Z45)




1590948

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35554991
Service Connector: 88988373
Description: 56-Way F MX123 Series, Sealed( BK with BU Terminal Position Assurance)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

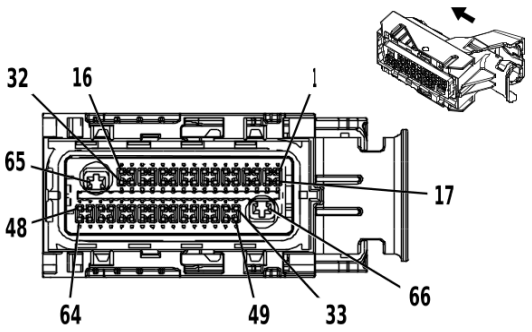
### K19 Suspension Control Module (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / GY | 1114 | Left Rear Shock Absorber Actuator Control | I | — |
| 2 | 0.5 | BN / WH | 1207 | Left Front Suspension Position Sensor Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK / BU | 1206 | Left Front Suspension Position Sensor Low Reference | I | — |
| 5 | 0.5 | GN / WH | 1210 | Left Rear Suspension Position Sensor Signal | I | — |
| 6 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | YE / WH | 1213 | Right Front Suspension Position Sensor Signal | I | — |
| 12 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.75 | BN / GN | 1118 | Right Rear Shock Absorber Actuator Control | I | — |
| 15 | 0.75 | GN / VT | 1115 | Left Rear Shock Absorber Actuator Control | I | — |
| 16 | 0.5 | BU / RD | 1205 | Left Front Suspension Position Sensor Voltage Reference | I | — |
| 17 | 0.75 | BK / WH | 1951 | Signal Ground | I | — |
| 18 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 21 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 24 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.75 | RD / GN | 2440 | Battery Positive Voltage | I | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.75 | GN / GY | 1119 | Right Rear Shock Absorber Actuator Control | I | — |
| 29 | 0.75 | BN / WH | 1107 | Left Front Shock Absorber Actuator Control | I | — |

## K19 Suspension Control Module (Z45) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 30 | 0.75 | GY / BU | 1113 | Left Front Shock Absorber Actuator Control | I | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.5 | BK / GN | 1209 | Left Rear Suspension Position Sensor Low Reference | I | — |
| 33 | 0.5 | YE / RD | 1208 | Left Rear Suspension Position Sensor Voltage Reference | I | — |
| 34 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 35 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 36 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 37 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 38 | 0.5 | BK / GY | 1212 | Right Front Suspension Position Sensor Low Reference | I | — |
| 39 | 0.5 | BN / RD | 1211 | Right Front Suspension Position Sensor Voltage Reference | I | — |
| 40 | — | — | — | Not Occupied | — | — |
| 41 | 0.75 | GY / WH | 1117 | Right Front Shock Absorber Actuator Control | I | — |
| 42 | 0.75 | BN / BU | 1116 | Right Front Shock Absorber Actuator Control | I | — |
| 43 - 56 | — | — | — | Not Occupied | — | — |

# K20 Engine Control Module X1 (L3B)




4504420

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33303655
Service Connector: 19371186
Description: 66-Way F 0.64, 2.8 Series, Sealed( BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

## K20 Engine Control Module X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 2 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | II | — |
| 3 | 0.5 | YE / VT | 4325 | Starter Pinion Solenoid Actuator Relay Control | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT / GY | 3615 | Step Cam A Control | II | — |
| 7 | 0.5 | GN / BK | 3616 | Step Cam B Control | II | — |
| 8 | 0.5 | GN | 3585 | Camshaft Position Motor Control B | II | — |
| 9 | 0.5 | BU | 3584 | Camshaft Position Motor Control A | II | — |
| 10 | 0.5 | YE / BU | 3587 | Camshaft Position Motor Control D | II | — |
| 11 | 0.5 | GY | 3586 | Camshaft Position Motor Control C | II | — |
| 12 | 0.5 | BU / WH | 3589 | Camshaft Position Motor Position Sensor 1 Signal | II | — |
| 13 | 0.5 | GN / WH | 3592 | Camshaft Position Motor Position Sensor 2 Signal | II | — |
| 14 | 0.5 | BK / GN | 3593 | Camshaft Position Sensor 2 Ground | II | — |
| 15 | 0.5 | WH / BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 16 | 0.75 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |
| 17 | 0.5 | GN / GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 18 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| 19 - 21 | — | — | — | Not Occupied | — | — |
| 22 | 0.5 | GN / YE | 1402 | Camshaft Intake Stepper Cylinder 4 Front Solenoid Control | II | — |

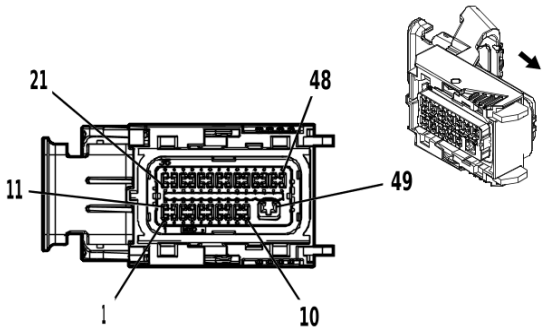
## K20 Engine Control Module X1 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 23 | 0.5 | GY / YE | 1502 | Camshaft Intake Stepper Cylinder 4 Rear Solenoid Control | II | — |
| 24 | 0.5 | YE / VT | 6265 | Camshaft Exhaust Stepper Cylinder 2 Rear Solenoid Control | II | — |
| 25 | 0.5 | VT / BK | 6264 | Camshaft Exhaust Stepper Cylinder 2 Front Solenoid Control | II | — |
| 26 | 0.5 | GY / BN | 6262 | Camshaft Exhaust Stepper Cylinder 3 Rear Solenoid Control | II | — |
| 27 | 0.5 | GN / BN | 6261 | Camshaft Exhaust Stepper Cylinder 3 Front Solenoid Control | II | — |
| 28 | 0.5 | YE / BN | 1702 | Camshaft Intake Stepper Cylinder 4 Position Sensor Signal | II | — |
| 29 | 0.5 | GN / BK | 6266 | Camshaft Exhaust Stepper Cylinder 2 Position Signal | II | — |
| 30 | 0.5 | YE | 6263 | Camshaft Exhaust Stepper Cylinder 3 Position Signal | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 33 | 0.5 | BK / BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 34 | 0.5 | YE / WH | 3746 | Camshaft Exhaust Lobe Axial Position Signal 1 | II | — |
| 35 | 0.5 | BK / VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 36 | 0.5 | YE / GN | 3747 | Camshaft Exhaust Lobe Axial Position Signal 2 | II | — |
| 37 | — | — | — | Not Occupied | — | — |
| 38 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 39 | 0.5 | YE / WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 - 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | GN / BN | 2732 | Engine Control Module LIN Bus 4 | II | — |
| 43 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | II | — |
| 46 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | II | — |
| 47 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 48 | 0.5 | RD / BN | 440 | Battery Positive Voltage | II | — |
| 49 | 0.5 | WH / RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 50 | 0.5 | VT / WH | 3744 | Camshaft Intake Lobe Axial Position Signal 1 | II | — |
| 51 | 0.5 | BN / RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 52 | 0.5 | VT / GN | 3745 | Camshaft Intake Lobe Axial Position Signal 2 | II | — |
| 53 | 0.5 | BU / GY | 636 | Ambient Air Temperature Sensor Signal | II | — |
| 54 | — | — | — | Not Occupied | — | — |
| 55 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 56 | 0.5 | WH / GN | 5380 | Brake Position Sensor Signal | II | — |
| 57 | 0.5 | GN / WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 60 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 61 - 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | WH | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | II | — |

## K20 Engine Control Module X1 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 64 | 0.5 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | II | — |
| 65 | 2 | BK / WH | 251 | Signal Ground | I | — |
| 66 | 2 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | I | — |

# K20 Engine Control Module X1 (L84/L87)




4596458

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33315785
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed( BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

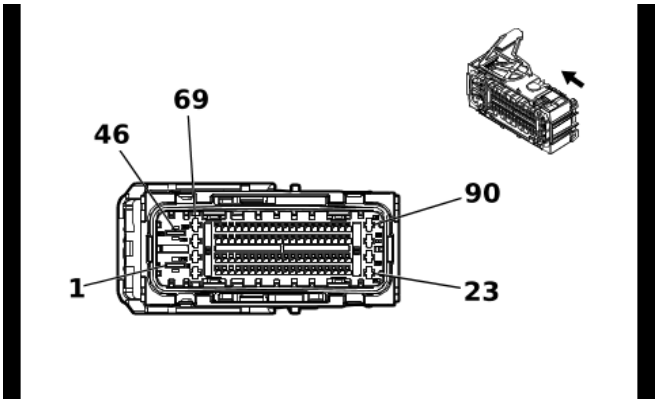
## K20 Engine Control Module X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | II | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | II | — |
| 6 | 0.5 | WH / BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 7 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 12 | 0.5 | BU / GY | 636 | Ambient Air Temperature Sensor Signal | II | — |
| 13 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | II | — |
| 14 | 0.5 | WH / GN | 5380 | Brake Position Sensor Signal | II | — |
| 15 | 0.5 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 18 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | GN / BU | 428 | EVAP Canister Purge Solenoid Control | II | — |

## K20 Engine Control Module X1 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | II | — |
| 24 | 0.5 | BK / BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 25 - 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | GN / YE | 3337 | Transmission Internal Mode Switch Mode Control Y | II | — |
| 28 | 0.5 | BN / GN | 1174 | Oil Level Switch Signal | II | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BK / VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |
| 33 | — | — | — | Not Occupied | — | — |
| 34 | 0.5 | RD / BN | 440 | Battery Positive Voltage | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | II | — |
| 37 | 0.5 | GN / GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 38 | 0.5 | WH / RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 39 | 0.5 | YE / WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | II | — |
| 41 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 42 - 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN / WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 45 | 0.5 | BN / RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 46 | — | — | — | Not Occupied | — | — |
| 47 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 48 | 0.75 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |
| 49 | 2 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | I | — |

# K20 Engine Control Module X1 (LZ0)




5492269

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35294570
Service Connector: 84941451
Description: 90-Way F 0.64 GEN-Y, 2.8, 6.3 MCP Series, Sealed( BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19367373 | J-35616-64B (L-BU) | J-38125-215A |
| II | 19371214 | J-35616-4A (PU) | J-38125-215A |
| III | 84616649 | J-35616-42 (RD) | J-38125-556 |

## K20 Engine Control Module X1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 6 | BN / BU | 104 | Glow Plug Control | III | — |
| 2 | 2.5 | GY / YE | 1584 | Glow Plug 4 Control | II | — |
| 3 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | WH / GY | 459 | A/C Compressor Clutch Relay Control | I | — |
| 7 | 0.75 | RD / BN | 440 | Battery Positive Voltage | I | — |
| 8 | 0.5 | GN / WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | WH / BU | 6311 | Cruise/ETC/TCC Brake Signal | I | — |
| 11 | 0.5 | GY | 2973 | Coolant Flow Control Valve Position Signal | I | — |
| 12 | 0.5 | GN / GY | 7316 | Intake Manifold Runner Valve Actuator Control | I | — |
| 13 | 0.5 | GN | 10289 | Exhaust Gas Temperature Sensor SENT 1 Signal | I | — |
| 14 | 0.5 | BU | 10290 | Exhaust Gas Temperature Sensor SENT 2 Signal | I | — |
| 15 | 0.5 | BN / GN | 4305 | Exhaust Flow Control Valve 1 | I | — |
| 16 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 17 | 0.5 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 18 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 19 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 20 | — | — | — | Not Occupied | — | — |

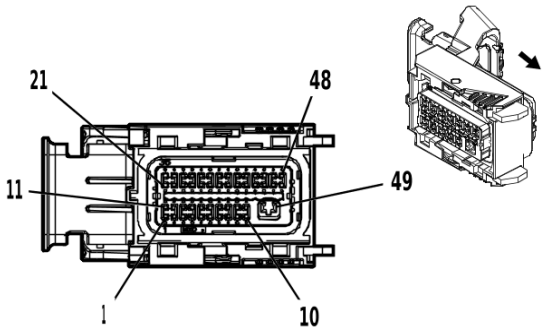
## K20 Engine Control Module X1 (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.75 | GY / BK | 1330 | Variable Geometry Turbocharger Position Sensor Motor Close Control | I | — |
| 22 | 0.75 | WH / BN | 1313 | Variable Geometry Turbocharger Position Sensor Motor Open Control | I | — |
| 23 | 2.5 | GY / GN | 1583 | Glow Plug 3 Control | II | — |
| 24 | 2.5 | GY / BN | 1582 | Glow Plug 2 Control | II | — |
| 25 | 0.75 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | I | — |
| 26 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | I | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | GN / BN | 507 | Wait To Start Indicator Control | I | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 31 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | WH / BN | 2363 | Exhaust Pressure Sensor SENT 1 Signal | I | — |
| 34 | 0.5 | VT / YE | 5947 | Turbocharger Vane Position Sensor Signal | I | — |
| 35 | 0.5 | BN / WH | 5763 | Exhaust Gas Recirculation Position Signal | I | — |
| 36 | 0.5 | BU / GY | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 37 | 0.5 | GN | 10478 | Low Pressure Exhaust Gas Recirculation Sensor SENT Signal | I | — |
| 38 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 39 | 0.5 | WH | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 40 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | I | — |
| 43 | 0.75 | VT / BK | 5746 | Exhaust Gas Recirculation Valve Low Control | I | — |
| 44 | 0.75 | WH / VT | 5764 | Exhaust Gas Recirculation Valve High Control | I | — |
| 45 | 2.5 | GY / WH | 1585 | Glow Plug 5 Control | II | — |
| 46 | 4 | BK / WH | 251 | Signal Ground | III | — |
| 47 | 2.5 | GY / VT | 1586 | Glow Plug 6 Control | II | — |
| 48 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 49 | 0.5 | GN / WH | 1162 | Accelerator Pedal Position Signal 2 | I | — |
| 50 | 0.5 | BK / VT | 1272 | Accelerator Pedal Position Low Reference 2 | I | — |
| 51 | 0.5 | BK / BU | 1271 | Accelerator Pedal Position Low Reference 1 | I | — |
| 52 | 0.5 | WH / GN | 5380 | Brake Position Sensor Signal | I | — |
| 53 - 54 | — | — | — | Not Occupied | — | — |
| 55 | 0.5 | YE | 4063 | Hood Status A Signal | I | — |
| 56 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | I | — |
| 60 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | I | — |
| 61 | 0.5 | YE / GY | 3926 | Crankcase Differential Pressure Sensor Signal | I | — |
| 62 - 63 | — | — | — | Not Occupied | — | — |
| 64 | 0.5 | GN / BU | 3889 | Powertrain Sensor Bus Relay Control | I | — |
| 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.75 | BN | 1421 | Exhaust Restrictor Motor Closed Control | I | — |

## K20 Engine Control Module X1 (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 67 | 0.75 | YE / BN | 1420 | Exhaust Restrictor Motor Open Control | I | — |
| 68 | 2.5 | GY / BU | 1581 | Glow Plug 1 Control | II | — |
| 69 | 2.5 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |
| 70 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 71 | 0.5 | BN / RD | 1274 | Accelerator Pedal Position 5V Reference 2 | I | — |
| 72 | 0.5 | WH / RD | 1164 | Accelerator Pedal Position 5V Reference 1 | I | — |
| 73 | 0.5 | YE / WH | 1161 | Accelerator Pedal Position Signal 1 | I | — |
| 74 | 0.5 | BU / GY | 636 | Ambient Air Temperature Sensor Signal | I | — |
| 75 | 0.5 | VT | 7485 | Engine Oil Temperature Sensor 2 Signal | I | — |
| 76 - 85 | — | — | — | Not Occupied | — | — |
| 86 | 0.5 | GN / GY | 465 | Fuel Pump Primary Relay Control | I | — |
| 87 | 0.75 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 88 | 0.75 | GY / BN | 2972 | Coolant Flow Control Actuator Control Close | I | — |
| 89 | 0.75 | GY / BU | 2971 | Coolant Flow Control Actuator Control Open | I | — |
| 90 | 2.5 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | II | — |

# K20 Engine Control Module X2 (L3B)




4596458

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33303656
Service Connector: 19355678
Description: 49-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

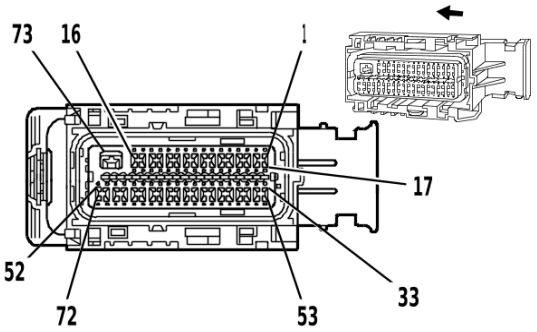
## K20 Engine Control Module X2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | II | — |
| 2 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BN / BU | 2447 | Evaporative Purge Pump Pressure Signal | II | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.75 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | II | — |
| 10 | 0.5 | BU / GY | 2978 | Coolant Diverter Valve Position Signal | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | II | — |
| 13 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | GN / YE | 3337 | Transmission Internal Mode Switch Mode Control Y | II | — |
| 16 | 0.5 | YE / BN | 331 | Oil Pressure Sensor Signal | II | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BU / WH | 10786 | Fuel Rail Pressure Sensor SENT 1 Signal | II | — |
| 20 | 0.5 | WH | 2590 | Turbocharger Wastegate Motor Feedback Signal | II | — |
| 21 | — | — | — | Not Occupied | — | — |
| 22 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | II | — |
| 23 | 0.5 | VT | 7485 | Engine Oil Temperature Sensor 2 Signal | II | — |
| 24 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | II | — |
| 25 | 0.5 | YE / WH | 3200 | Throttle Inlet Absolute Pressure Sensor Signal | II | — |

## K20 Engine Control Module X2 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 26 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 0.5 | YE / GY | 6936 | HO2S Signal | II | — |
| 32 | 0.5 | BN | 6934 | HO2S Ground | II | — |
| 33 | 0.5 | GN / YE | 4623 | Engine Control Module LIN Bus 3 | II | — |
| 34 | 0.5 | GY / WH | 3113 | HO2S Heater Low Control Bank 1 Sensor 1 | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | II | — |
| 37 | 0.5 | YE / BK | 3000 | Coolant Temperature Sensor 2 Signal | II | — |
| 38 - 39 | — | — | — | Not Occupied | — | — |
| 40 | 0.5 | GY / VT | 2404 | Engine Block Coolant Temperature Signal | II | — |
| 41 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.5 | GN | 6935 | HO2S Pump Current Trim Signal | II | — |
| 46 | 0.5 | BN / WH | 6933 | HO2S Pump Current Signal | II | — |
| 47 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | II | — |
| 48 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | II | — |
| 49 | 2 | BK / WH | 251 | Signal Ground | I | — |

# K20 Engine Control Module X2 (L84/L87)




1673472

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35208299
Service Connector: 19333090
Description: 73-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19354746 | J-35616-64B (L-BU) | J-38125-215A |

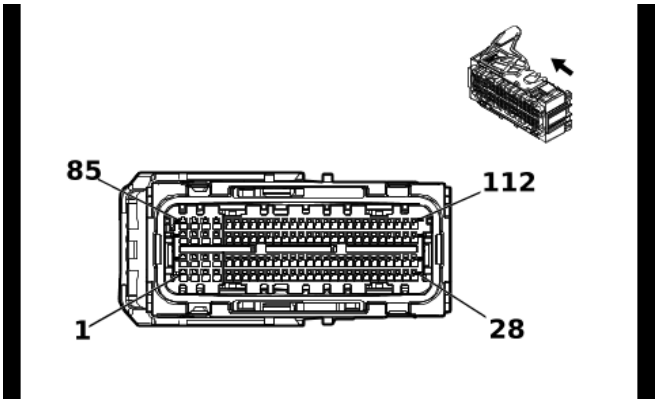
## K20 Engine Control Module X2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 3212 | HO2S Heater Low Control Bank 2 Sensor 1 | II | — |
| 2 | 0.5 | GY | 5493 | Cylinder Deactivation Solenoid Valve Control 3 | II | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | II | — |
| 8 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT / GY | 3110 | HO2S High Signal Bank 1 Sensor 1 | II | — |
| 11 | 0.5 | WH / BK | 3111 | HO2S Low Signal Bank 1 Sensor 1 | II | — |
| 12 | 0.5 | YE / BU | 2124 | Ignition Control 4 | II | — |
| 13 | 0.5 | BN / BU | 2126 | Ignition Control 6 | II | — |
| 14 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | II | — |
| 15 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | II | — |
| 16 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | II | — |
| 17 | 0.5 | GY / WH | 3113 | HO2S Heater Low Control Bank 1 Sensor 1 | II | — |
| 18 | 0.5 | YE / GY | 2493 | Cylinder Shutoff Solenoid Enable Signal 3 | II | — |
| 19 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.5 | VT / WH | 3210 | HO2S High Signal Bank 2 Sensor 1 | II | — |
| 27 | 0.5 | YE / WH | 3211 | HO2S Low Signal Bank 2 Sensor 1 | II | — |
| 28 | 0.5 | GN / BU | 2123 | Ignition Control 3 | II | — |
| 29 | 0.5 | BU / GY | 2125 | Ignition Control 5 | II | — |

## K20 Engine Control Module X2 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 30 | 0.5 | BK / GY | 2130 | Ignition Control Low Reference Bank 2 | II | — |
| 31 | 0.5 | BN | 5496 | Cylinder Deactivation Solenoid Valve Control 6 | II | — |
| 32 | 0.5 | YE / BN | 2496 | Cylinder Shutoff Solenoid Enable Signal 6 | II | — |
| 33 | 0.5 | WH / BN | 3223 | HO2S Heater Low Control Bank 2 Sensor 2 | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | BU | 179 | Engine Oil Pump Control | II | — |
| 36 | 0.5 | YE / GN | 2494 | Cylinder Shutoff Solenoid Enable Signal 4 | II | — |
| 37 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | II | — |
| 40 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.5 | YE / BU | 3221 | HO2S Low Signal Bank 2 Sensor 2 | II | — |
| 47 | 0.5 | VT / GN | 3220 | HO2S High Signal Bank 2 Sensor 2 | II | — |
| 48 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.75 | BK / GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 51 | 0.75 | BK / YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 52 | 0.5 | BN / WH | 582 | Throttle Actuator Close Control | II | — |
| 53 | 0.5 | GY / WH | 3122 | HO2S Heater Low Control Bank 1 Sensor 2 | II | — |
| 54 | 0.5 | VT | 5495 | Cylinder Deactivation Solenoid Valve Control 5 | II | — |
| 55 | 0.5 | WH / VT | 2495 | Cylinder Shutoff Solenoid Enable Signal 5 | II | — |
| 56 | 0.5 | YE / BU | 5494 | Cylinder Deactivation Solenoid Valve Control 4 | II | — |
| 57 | 0.5 | GN | 5492 | Cylinder Deactivation Solenoid Valve Control 2 | II | — |
| 58 | 0.5 | WH / GN | 2492 | Cylinder Shutoff Solenoid Enable Signal 2 | II | — |
| 59 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | II | — |
| 60 - 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.5 | WH / YE | 3121 | HO2S Low Signal Bank 1 Sensor 2 | II | — |
| 67 | 0.5 | VT / BU | 3120 | HO2S High Signal Bank 1 Sensor 2 | II | — |
| 68 - 69 | — | — | — | Not Occupied | — | — |
| 70 | 0.75 | WH / GY | 1876 | Knock Sensor 2 Signal | II | — |
| 71 | 0.75 | VT / GY | 496 | Knock Sensor 1 Signal | II | — |
| 72 | 0.5 | YE | 581 | Throttle Actuator Open Control | II | — |
| 73 | 2.5 | BK / WH | 251 | Signal Ground | I | — |

## K20 Engine Control Module X2 (LZ0)




5491584

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35294571
Service Connector: 84941452
Description: 112-Way F 0.64 GEN-Y, 1.2 MCON Series, Sealed( BK with BK Terminal Position Assurance)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19367373 | J-35616-64B (L-BU) | J-38125-215A |
| II | 84963773 | J-35616-12 (BU) | J-38125-215A |

### K20 Engine Control Module X2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | II | — |
| 2 | 1.5 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | II | — |
| 3 | 0.75 | YE / VT | 2420 | Fuel High Pressure Pump Low Enable Signal | II | — |
| 4 | 0.75 | YE / VT | 7245 | High Pressure Fuel Pump Low Enable Signal | II | — |
| 5 | 0.5 | GY / YE | 5297 | Exhaust Camshaft Position Sensor 1 Voltage Reference | I | — |
| 6 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | I | — |
| 7 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
| 10 | 0.75 | BU / YE | 11616 | Diesel Exhaust Fluid Dosing Valve Low Control 2 | I | — |
| 11 | 0.5 | BK / GN | 3235 | Exhaust Gas Recirculation Temperature Sensor 3 Low Reference | I | — |
| 12 | 0.5 | YE / BU | 3680 | Charge Air Cooler Outlet Temperature Sensor Low Reference | I | — |
| 13 | 0.5 | YE / BK | 3682 | Charge Air Cooler Inlet Temperature Sensor Low Reference | I | — |
| 14 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.75 | BN / WH | 3100 | Diesel Exhaust Fluid Dosing Valve Low Control | I | — |
| 24 | 0.5 | BK / YE | 2834 | Fuel Rail Pressure Solenoid Valve Low Reference | I | — |

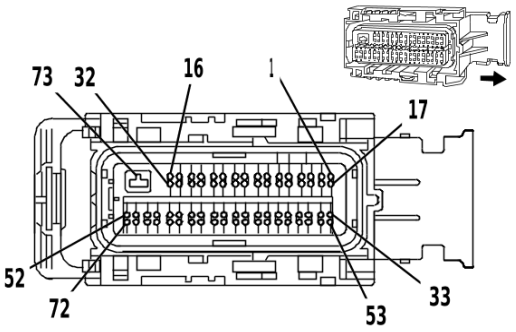
## K20 Engine Control Module X2 (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.5 | BU | 179 | Engine Oil Pump Control | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.75 | BN / WH | 582 | Throttle Actuator Close Control | I | — |
| 28 | 0.75 | YE | 581 | Throttle Actuator Open Control | I | — |
| 29 | 1.5 | GN / GY | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | II | — |
| 30 | 1.5 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | II | — |
| 31 | 0.75 | GY / BN | 2419 | Fuel High Pressure Pump High Side Supply Voltage | II | — |
| 32 | 0.75 | GY / BN | 7244 | High Pressure Fuel Pump High Side Control | II | — |
| 33 | 0.5 | BK / GY | 5296 | Exhaust Camshaft Position Sensor Low Reference 1 | I | — |
| 34 | 0.5 | VT / BK | 5273 | Exhaust Camshaft Position Sensor 1 | I | — |
| 35 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | I | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU | 3017 | Fuel Heater Relay 1 Control | I | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH / GY | 3234 | Exhaust Gas Recirculation Temperature Sensor 3 Signal | I | — |
| 40 | 0.5 | BN | 3681 | Charge Air Cooler Outlet Temperature Sensor Signal | I | — |
| 41 | 0.5 | GN | 3683 | Charge Air Cooler Inlet Temperature Sensor Signal | I | — |
| 42 - 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.75 | BU | 11615 | Diesel Exhaust Fluid Dosing Valve High Control 2 | I | — |
| 50 | — | — | — | Not Occupied | — | — |
| 51 | 0.75 | BN | 3099 | Diesel Exhaust Fluid Dosing Valve High Control | I | — |
| 52 | 0.5 | BU / WH | 2530 | Fuel Rail Pressure Solenoid Valve Control | I | — |
| 53 | 0.5 | YE / BN | 106 | Oil Pump Motor Control | I | — |
| 54 | — | — | — | Not Occupied | — | — |
| 55 | 0.75 | BK / BU | 1408 | Variable Swirl Valve Close Control | I | — |
| 56 | 0.75 | BK / GN | 1389 | Variable Swirl Valve Open Control | I | — |
| 57 | 1.5 | VT / GY | 4906 | Direct Fuel Injector High Voltage Supply Cylinder 6 | II | — |
| 58 | 1.5 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | II | — |
| 59 | 1.5 | GN / WH | 4905 | Direct Fuel Injector High Voltage Supply Cylinder 5 | II | — |
| 60 | 1.5 | BU / GY | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | II | — |
| 61 | — | — | — | Not Occupied | — | — |
| 62 | 0.5 | GN / YE | 3337 | Transmission Internal Mode Switch Mode Control Y | I | — |
| 63 - 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.5 | BN / RD | 2917 | Fuel Rail Pressure Sensor 5V Reference | I | — |
| 67 | 0.5 | BK / GN | 2919 | Fuel Rail Pressure Sensor Low Reference | I | — |
| 68 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X2 (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 69 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | I | — |
| 70 | 0.5 | YE / BK | 3000 | Coolant Temperature Sensor 2 Signal | I | — |
| 71 - 72 | — | — | — | Not Occupied | — | — |
| 73 | 0.5 | WH / BU | 7329 | Pre-Throttle Air Temperature Signal | I | — |
| 74 | — | — | — | Not Occupied | — | — |
| 75 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 76 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |
| 77 | 0.5 | GN / YE | 4622 | Engine Control Module LIN Bus 2 | I | — |
| 78 | 0.5 | GN / YE | 4623 | Engine Control Module LIN Bus 3 | I | — |
| 79 - 82 | — | — | — | Not Occupied | — | — |
| 83 | 0.75 | BU / BN | 2977 | Coolant Diverter Valve Actuator Control Close | I | — |
| 84 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Open | I | — |
| 85 | 1.5 | VT / GN | 4806 | Direct Fuel Injector High Voltage Control Cylinder 6 | II | — |
| 86 | 1.5 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | II | — |
| 87 | 1.5 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | II | — |
| 88 | 1.5 | WH / GN | 4805 | Direct Fuel Injector High Voltage Control Cylinder 5 | II | — |
| 89 | — | — | — | Not Occupied | — | — |
| 90 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | I | — |
| 91 | 0.5 | BU / GN | 4012 | Exhaust Gas Recirculation 2 Valve Position Sensor Signal | I | — |
| 92 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |
| 93 | — | — | — | Not Occupied | — | — |
| 94 | 0.5 | BU / WH | 2918 | Fuel Rail Pressure Sensor Signal | I | — |
| 95 | 0.5 | YE / BU | 2408 | Engine Inlet Coolant Temperature Signal | I | — |
| 96 | 0.5 | BN / YE | 2161 | Fuel Rail Pressure Sensor 2 Signal | I | — |
| 97 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | I | — |
| 98 - 100 | — | — | — | Not Occupied | — | — |
| 101 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |
| 102 | 0.5 | GN / YE | 37 | Engine Block Temperature Sensor Signal | I | — |
| 103 | 0.5 | BU / BK | 1422 | Engine Water Charge Air Coolant Temperature Signal | I | — |
| 104 - 110 | — | — | — | Not Occupied | — | — |
| 111 | 0.75 | BU / BN | 4013 | Exhaust Gas Recirculation 2 Valve Close Control | I | — |
| 112 | 0.75 | BU / WH | 4014 | Exhaust Gas Recirculation 2 Valve Open Control | I | — |

# K20 Engine Control Module X3 (L3B)




1590596

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35406518
Service Connector: 19333091
Description: 73-Way F 0.64, 2.8 Series, Sealed( BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19354746 | J-35616-64B (L-BU) | J-38125-215A |

## K20 Engine Control Module X3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | GN | 3060 | Turbocharger Bypass Solenoid Valve Control Bank 1 | II | — |
| 3 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | II | — |
| 7 | 0.5 | BN / RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 10 | 0.5 | VT / BU | 3120 | HO2S High Signal Bank 1 Sensor 2 | II | — |
| 11 | 0.5 | WH / YE | 3121 | HO2S Low Signal Bank 1 Sensor 2 | II | — |
| 12 | 0.5 | VT / BN | 5284 | Intake Camshaft Position Actuator Solenoid Valve 1 | II | — |
| 13 | 0.5 | GY / BU | 5282 | Exhaust Camshaft Position Actuator Solenoid Valve 1 | II | — |
| 14 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Open | II | — |
| 15 | 0.75 | WH / BN | 2591 | Turbocharger Wastegate Motor Open Control | II | — |
| 16 | 0.75 | WH / BU | 2592 | Turbocharger Wastegate Motor Close Control | II | — |
| 17 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | II | — |
| 22 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | II | — |
| 23 | 0.5 | BK / BN | 2752 | Throttle Position Sensor Low Reference | II | — |

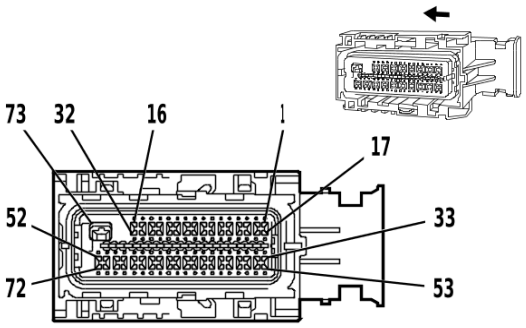
## K20 Engine Control Module X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | YE / BU | 2408 | Engine Inlet Coolant Temperature Signal | II | — |
| 25 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | II | — |
| 26 | 0.5 | WH / BU | 7329 | Pre-Throttle Air Temperature Signal | II | — |
| 27 | 0.5 | BU / YE | 8938 | Engine Integrated Exhaust Manifold Temperature Signal | II | — |
| 28 | 0.5 | BK / BN | 6753 | Camshaft Position Actuator Solenoid Valve W Low Reference | II | — |
| 29 | 0.5 | BK / VT | 6754 | Camshaft Position Actuator Solenoid Valve X Low Reference | II | — |
| 30 | 0.5 | YE | 581 | Throttle Actuator Open Control | II | — |
| 31 | 0.5 | BN / WH | 582 | Throttle Actuator Close Control | II | — |
| 32 | 0.75 | BU / BN | 2977 | Coolant Diverter Valve Actuator Control Close | II | — |
| 33 | 0.5 | VT / GY | 496 | Knock Sensor 1 Signal | II | — |
| 34 | 0.5 | WH / GY | 1876 | Knock Sensor 2 Signal | II | — |
| 35 | 0.5 | BK / GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 36 | 0.5 | GN / BU | 428 | EVAP Canister Purge Solenoid Control | II | — |
| 37 - 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | BK / GN | 5301 | Intake Camshaft Position Sensor Low Reference 1 | II | — |
| 40 | 0.5 | BK / GY | 5296 | Exhaust Camshaft Position Sensor Low Reference 1 | II | — |
| 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | VT / BK | 5273 | Exhaust Camshaft Position Sensor 1 | II | — |
| 43 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | II | — |
| 44 | 0.75 | YE / BU | 2124 | Ignition Control 4 | II | — |
| 45 | 0.75 | BU / WH | 2122 | Ignition Control 2 | II | — |
| 46 | 0.75 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 47 | 0.5 | GY / WH | 3122 | HO2S Heater Low Control Bank 1 Sensor 2 | II | — |
| 48 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | II | — |
| 49 | 0.75 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | II | — |
| 50 | 0.75 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | II | — |
| 51 | 0.75 | BU / GY | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | II | — |
| 52 | 0.75 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | II | — |
| 53 | 0.5 | BK / YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 54 | 0.5 | BK / GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 55 | 0.5 | GY / RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 56 | 0.5 | YE / BN | 106 | Oil Pump Motor Control | II | — |
| 57 | 0.5 | BU | 179 | Engine Oil Pump Control | II | — |
| 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | GY / BU | 5300 | Intake Camshaft Position Sensor 1 Voltage Reference | II | — |
| 60 | 0.5 | GY / YE | 5297 | Exhaust Camshaft Position Sensor 1 Voltage Reference | II | — |

## K20 Engine Control Module X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 61 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | YE / VT | 5275 | Intake Camshaft Position Sensor 1 | II | — |
| 64 | 0.75 | BU / VT | 2121 | Ignition Control 1 | II | — |
| 65 | 0.75 | GN / BU | 2123 | Ignition Control 3 | II | — |
| 66 | — | — | — | Not Occupied | — | — |
| 67 | 0.5 | VT / BK | 7300 | High Pressure Fuel Pump Low Control | II | — |
| 68 | 0.5 | YE | 7301 | High Pressure Fuel Pump High Control | II | — |
| 69 | 0.75 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | II | — |
| 70 | 0.75 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | II | — |
| 71 | 0.75 | GN / GY | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | II | — |
| 72 | 0.75 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | II | — |
| 73 | 2 | VT / BU | 5290 | Powertrain Main Relay Fused Supply Voltage 1 | I | — |

# K20 Engine Control Module X3 (L84/L87)




1650395

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35208354
Service Connector: 19333091
Description: 73-Way F 0.64, 2.8 Series, Sealed( BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19354746 | J-35616-64B (L-BU) | J-38125-215A |

## K20 Engine Control Module X3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 5497 | Cylinder Deactivation Solenoid Valve Control 7 | II | — |
| 2 | 0.5 | GN / GY | 2497 | Cylinder Shutoff Solenoid Enable Signal 7 | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | VT / BN | 5284 | Intake Camshaft Position Actuator Solenoid Valve 1 | II | — |
| 6 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | YE / VT | 5275 | Intake Camshaft Position Sensor 1 | II | — |
| 9 | 0.5 | GY / BU | 5300 | Intake Camshaft Position Sensor 1 Voltage Reference | II | — |
| 10 | 0.5 | GN | 6271 | Crankshaft Position Sensor Signal | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BU / WH | 2122 | Ignition Control 2 | II | — |
| 13 | 0.5 | VT / WH | 2128 | Ignition Control 8 | II | — |
| 14 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.75 | YE | 7301 | High Pressure Fuel Pump High Control | II | — |
| 17 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BK / BN | 6753 | Camshaft Position Actuator Solenoid Valve W Low Reference | II | — |
| 22 - 23 | — | — | — | Not Occupied | — | — |

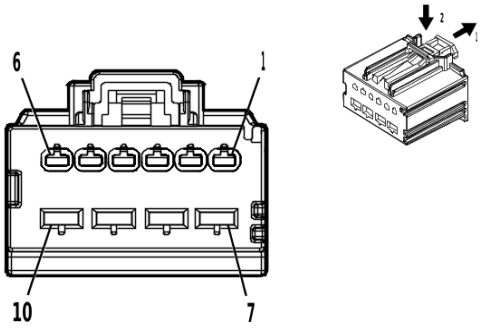
## K20 Engine Control Module X3 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | BK / GN | 5301 | Intake Camshaft Position Sensor Low Reference 1 | II | — |
| 25 | 0.5 | VT / BU | 6270 | Crankshaft Position Sensor Voltage | II | — |
| 26 | 0.5 | BK / VT | 6272 | Crankshaft Position Sensor Low Reference | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | GN / GY | 2127 | Ignition Control 7 | II | — |
| 29 | 0.5 | BU / VT | 2121 | Ignition Control 1 | II | — |
| 30 | 0.5 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT / BK | 7300 | High Pressure Fuel Pump Low Control | II | — |
| 33 | 0.5 | YE / VT | 4325 | Starter Pinion Solenoid Actuator Relay Control | II | — |
| 34 | 0.5 | WH / BU | 2491 | Cylinder Shutoff Solenoid Enable Signal 1 | II | — |
| 35 | 0.5 | WH / YE | 2498 | Cylinder Shutoff Solenoid Enable Signal 8 | II | — |
| 36 | 0.5 | BK / BN | 2752 | Throttle Position Sensor Low Reference | II | — |
| 37 | 0.5 | BK / GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 38 - 39 | — | — | — | Not Occupied | — | — |
| 40 | 0.5 | BN / BU | 357 | Oil Temperature Sensor Signal | II | — |
| 41 - 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | II | — |
| 44 | 0.75 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | II | — |
| 45 | 0.75 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | II | — |
| 46 | 0.75 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | II | — |
| 47 | 0.75 | WH / GN | 4805 | Direct Fuel Injector High Voltage Control Cylinder 5 | II | — |
| 48 | 0.75 | VT / GN | 4806 | Direct Fuel Injector High Voltage Control Cylinder 6 | II | — |
| 49 | 0.75 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | II | — |
| 50 | 0.75 | YE / GY | 4807 | Direct Fuel Injector High Voltage Control Cylinder 7 | II | — |
| 51 | 0.75 | GY | 4808 | Direct Fuel Injector High Voltage Control Cylinder 8 | II | — |
| 52 | 0.75 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | II | — |
| 53 | 0.5 | BU / VT | 5491 | Cylinder Deactivation Solenoid Valve Control 1 | II | — |
| 54 | 0.5 | YE | 5498 | Cylinder Deactivation Solenoid Valve Control 8 | II | — |
| 55 | 0.5 | BN / RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 56 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | II | — |
| 57 | 0.5 | GY / RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 58 | 0.5 | GN / WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 59 - 60 | — | — | — | Not Occupied | — | — |
| 61 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | BU / WH | 10786 | Fuel Rail Pressure Sensor SENT 1 Signal | II | — |

## K20 Engine Control Module X3 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 64 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 65 | 0.75 | GN / BK | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | II | — |
| 66 | 0.75 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | II | — |
| 67 | 0.75 | GN / WH | 4905 | Direct Fuel Injector High Voltage Supply Cylinder 5 | II | — |
| 68 | 0.75 | VT / GY | 4906 | Direct Fuel Injector High Voltage Supply Cylinder 6 | II | — |
| 69 | 0.75 | BU / BK | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | II | — |
| 70 | 0.75 | WH / YE | 4907 | Direct Fuel Injector High Voltage Supply Cylinder 7 | II | — |
| 71 | 0.75 | GY / WH | 4908 | Direct Fuel Injector High Voltage Supply Cylinder 8 | II | — |
| 72 | 0.75 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | II | — |
| 73 | 2.5 | BK / WH | 251 | Signal Ground | I | — |

# K29FV Front Seat Heater Vent Control Module X1 (KA1&KQV)




5035058

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 31372-1600
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series( BK)

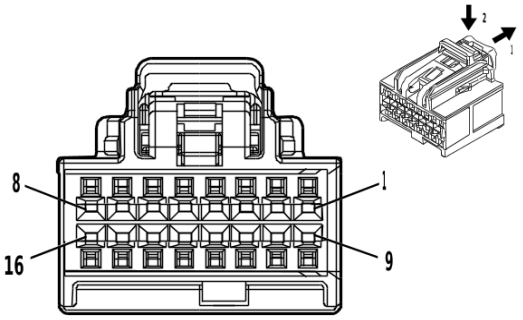
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## K29FV Front Seat Heater Vent Control Module X1 (KA1&KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / BN | 2481 | Passenger Seat Back Heating Element Control | I | — |
| 2 | 0.75 | BN / BU | 2479 | Passenger Seat Heating Element Control | I | — |
| 3 | 0.75 | GY / BK | 2480 | Passenger Seat Heating Element Low Reference | I | — |
| 4 | 0.75 | BN / BK | 2078 | Driver Seat Heating Element Low Reference | I | — |
| 5 | 0.75 | BN | 2432 | Driver Seat Back Heating Element Control | I | — |
| 6 | 0.75 | BN / VT | 2077 | Driver Seat Heating Element Control | I | — |
| 7 | 0.75 | RD / GN | 6140 | Battery Positive Voltage | II | — |
| 8 | 0.75 | BK | 1350 | Ground | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | RD / BN | 6640 | Battery Positive Voltage | II | — |

# K29FV Front Seat Heater Vent Control Module X2 (KA1&KQV)




4873243

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series( BK)

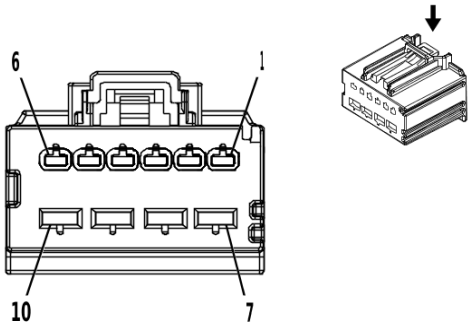
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K29FV Front Seat Heater Vent Control Module X2 (KA1&KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 2080 | Driver Heated Seat Thermistor Low Reference | I | — |
| 2 | 0.5 | BK / GY | 2435 | Passenger Heated Seat Thermistor Low Reference | I | — |
| 3 | 0.5 | BU | 2425 | Driver Seat Back Heating Temperature Sensor Signal | I | — |
| 4 | 0.5 | WH / BU | 2436 | Passenger Seat Back Heating Temperature Sensor Signal | I | — |
| 5 | 0.5 | WH / GY | 2434 | Passenger Seat Heating Temperature Sensor Signal | I | — |
| 6 | 0.5 | YE / GY | 2079 | Driver Seat Heating Temperature Sensor Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | GN / VT | 2857 | Body Control Module LIN Bus 11 | I | — |
| 9 | 0.5 | GN / VT | 5906 | Driver Seat Blower Motor Control 1 | I | — |
| 10 | 0.5 | VT / WH | 5908 | Passenger Seat Blower Motor Control 1 | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BK / GN | 2482 | Passenger Heated Back Thermistor Low Reference | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

# K29R Rear Seat Heater Control Module X1 (KA6)




3791446

## Connector Part Information

Harness Type: Rear Seat Heater Control Wiring Harness
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series( BK)

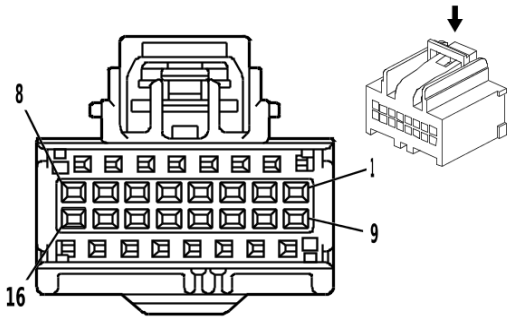
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## K29R Rear Seat Heater Control Module X1 (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | GN / BN | 2296 | Right Rear Seat Cushion Heating Element Control | I | — |
| 3 | 0.75 | GN / BK | 2297 | Right Rear Seat Cushion Heating Element Low Reference | I | — |
| 4 | 0.75 | BN / BK | 2295 | Left Rear Seat Cushion Heating Element Low Reference | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.75 | GY | 2294 | Left Rear Seat Cushion Heating Element Control | I | — |
| 7 | 0.75 | RD / YE | 240 | Battery Positive Voltage | II | — |
| 8 | 1 | BK | 1150 | Ground | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | RD / VT | 340 | Battery Positive Voltage | II | — |

# K29R Rear Seat Heater Control Module X2 (KA6)




1653409

## Connector Part Information

Harness Type: Rear Seat Heater Control Wiring Harness
OEM Connector: 7283-9076-30
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series( BK)

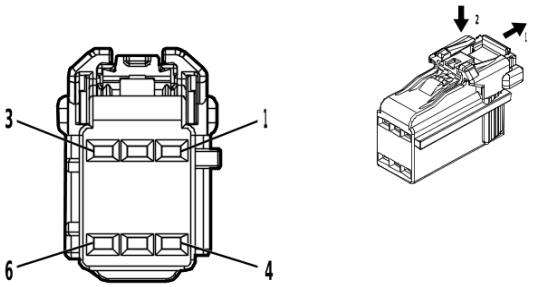
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K29R Rear Seat Heater Control Module X2 (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / WH | 7048 | Left Rear Cushion Thermistor Feedback Signal | I | — |
| 2 | 0.75 | WH / BK | 7054 | Right Rear Cushion Thermistor Feedback Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | YE / WH | 7053 | Right Rear Seat Cushion Temperature Sensor Signal | I | — |
| 6 | 0.75 | WH / BU | 7047 | Left Rear Seat Cushion Temperature Sensor Signal | I | — |
| 7 | 0.5 | BK | 1150 | Ground | I | — |
| 8 | 0.5 | GN / BU | 6133 | Body Control Module LIN Bus 2 | I | — |
| 9 - 16 | — | — | — | Not Occupied | — | — |

# K32 Heated Steering Wheel Module X1 (KI3&NP5-D07)




4862126

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13532426
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series( BK)

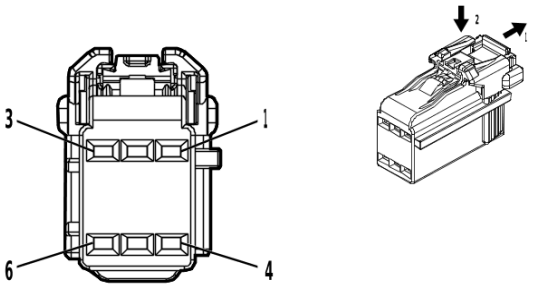
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## K32 Heated Steering Wheel Module X1 (KI3&NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN | 5883 | Steering Wheel Heating Switch Signal | I | — |
| 2 | 0.35 | GY / OG | 5884 | Steering Wheel Heating Switch LED Control | I | — |
| 3 | 0.5 | OG | 10040 | Secondary Fused Battery Positive Voltage | I | — |
| 4 | 0.5 | BK | 6050 | Steering Wheel Ground | I | — |
| 5 | 0.35 | BK | 6051 | Steering Wheel Ground | I | — |
| 6 | 0.35 | WH | 2858 | Body Control Module LIN Bus 12 | I | — |

# K32 Heated Steering Wheel Module X1 (KI3&(NK5/D07))




4862126

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13532426
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series( BK)

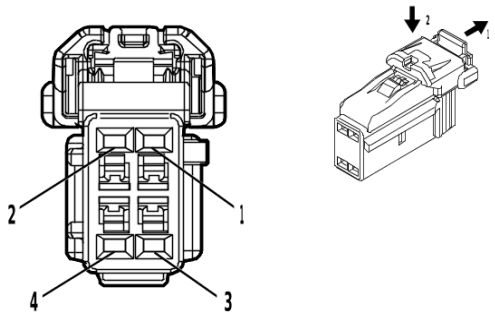
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K32 Heated Steering Wheel Module X1 (KI3&(NK5/D07))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / GY | 5883 | Steering Wheel Heating Switch Signal | I | — |
| 2 | 0.35 | BN / WH | 5884 | Steering Wheel Heating Switch LED Control | I | — |
| 3 | 0.5 | RD / GN | 10040 | Secondary Fused Battery Positive Voltage | I | — |
| 4 | 0.5 | BK | 6050 | Steering Wheel Ground | I | — |
| 5 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 6 | 0.35 | GN / BK | 2858 | Body Control Module LIN Bus 12 | I | — |

# K32 Heated Steering Wheel Module X2 (KI3-UKL)




4872683

## Connector Part Information

Harness Type: Steering Wheel Heater
OEM Connector: 13533335
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series( BK)

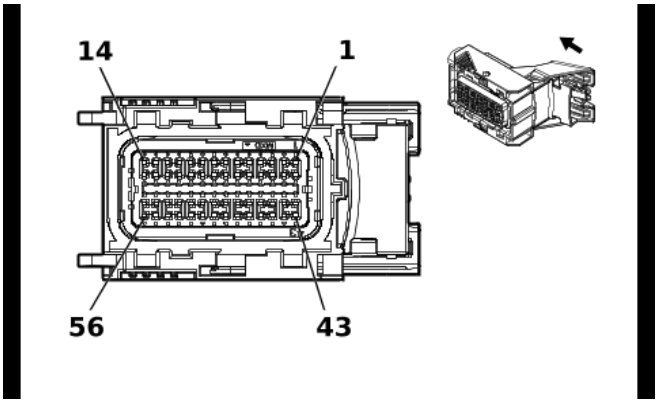
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## K32 Heated Steering Wheel Module X2 (KI3-UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / YE | 5888 | Steering Wheel Heating High Control | I | — |
| 2 | 0.75 | GY / YE | 5887 | Steering Wheel Heating Low Control | I | — |
| 3 | 0.35 | VT / BU | 5886 | Steering Wheel Heating Temperature Sensor Signal | I | — |
| 4 | 0.35 | YE / RD | 5885 | Steering Wheel Heating Voltage Reference | I | — |

## K36 Restraints Control Module X1




5377109

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35554344
Service Connector: 26314571
Description: 56-Way F 0.64 Series, Sealed( BU)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19354746 | J-35616-64B (L-BU) | J-38125-215A |

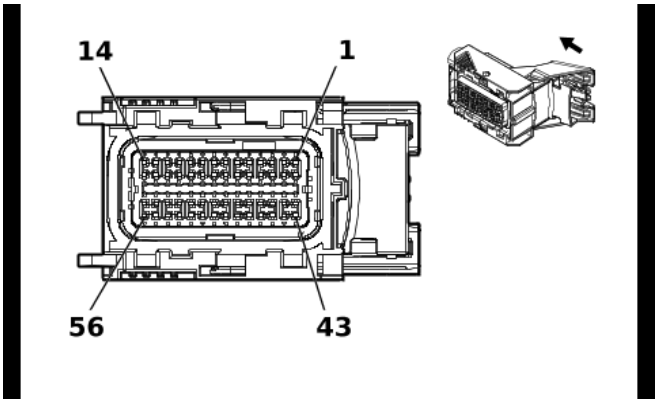
### K36 Restraints Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK / OG | 5045 | Left Front Impact Discriminating Sensor Low Reference | I | — |
| 8 | 0.5 | OG / YE | 354 | Left Front Impact Discriminating Sensor Signal | I | — |
| 9 | 0.5 | OG / GN | 1409 | Right Front Impact Discriminating Sensor Signal | I | — |
| 10 | 0.5 | BK / OG | 5600 | Right Front Impact Discriminating Sensor Low Reference | I | — |
| 11 | 0.5 | WH / OG | 3476 | Passenger Seat Belt Retractor Pretensioner Low Control | I | — |
| 12 | 0.5 | OG / GN | 3475 | Passenger Seat Belt Retractor Pretensioner High Control | I | — |
| 13 | 0.35 | YE / OG | 3025 | Passenger Instrument Panel Air Bag Stage 1 High Control | I | — |
| 14 | 0.35 | OG / WH | 3024 | Passenger Instrument Panel Air Bag Stage 1 Low Control | I | — |
| 15 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.5 | VT / OG | 3478 | Driver Seat Belt Retractor Pretensioner Low Control | I | — |
| 26 | 0.5 | OG / WH | 3477 | Driver Seat Belt Retractor Pretensioner High Control | I | — |
| 27 | 0.35 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | I | — |
| 28 | 0.35 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | I | — |
| 29 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 30 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 31 | — | — | — | Not Occupied | — | — |

## K36 Restraints Control Module X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 32 | 0.5 | OG / BN | 3479 | Passenger Seat Belt Anchor Pretensioner High Control | I | — |
| 33 | 0.5 | GY / OG | 3480 | Passenger Seat Belt Anchor Pretensioner Low Control | I | — |
| 34 - 37 | — | — | — | Not Occupied | — | — |
| 38 | 0.35 | OG / VT | 3026 | Passenger Instrument Panel Air Bag Stage 2 Low Control | I | — |
| 39 | 0.35 | GY / OG | 3027 | Passenger Instrument Panel Air Bag Stage 2 High Control | I | — |
| 40 - 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | BK / WH | 1251 | Signal Ground | I | — |
| 43 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 44 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.5 | VT / OG | 3482 | Driver Seat Belt Anchor Pretensioner Low Control | I | — |
| 47 | 0.5 | OG / YE | 3481 | Driver Seat Belt Anchor Pretensioner High Control | I | — |
| 48 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.35 | BN / WH | 3895 | Roof Rail Air Bag Disable Switch Low Reference | I | — |
| 51 | 0.35 | BU / WH | 3119 | Roof Rail Air Bag Disable Switch Signal | I | — |
| 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.35 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | I | — |
| 54 | 0.35 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | I | — |
| 55 | 0.35 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | I | — |
| 56 | 0.5 | RD / GN | 4440 | Battery Positive Voltage | I | — |

## K36 Restraints Control Module X2




5377124

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35622711
Service Connector: 85004498
Description: 56-Way F 0.64 Series, Sealed( BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19354746 | J-35616-64B (L-BU) | J-38125-215A |

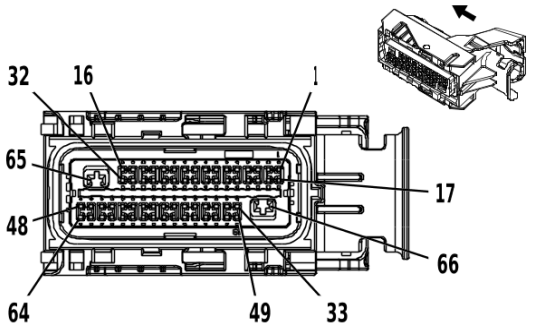
### K36 Restraints Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | OG / GY | 2652 | Driver Seat Belt Sensor Signal | I | — |
| 13 | 0.5 | BK / OG | 6627 | Right Rear Side Impact Sensor Low Reference | I | — |
| 14 | 0.5 | OG / WH | 6626 | Right Rear Side Impact Sensor Signal | I | — |
| 15 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BK / OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.35 | OG / VT | 1362 | Passenger Seat Belt Switch Signal | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | BK / OG | 6628 | Left Front Side Impact Sensor Low Reference | I | — |
| 28 | 0.5 | OG / GN | 2132 | Left Front Side Impact Sensor Signal | I | — |
| 29 - 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | OG / GY | 5021 | Right Front Roof Rail Air Bag High Control | I | — |
| 38 | 0.5 | WH / OG | 5022 | Right Front Roof Rail Air Bag Low Control | I | — |
| 39 | 0.5 | BU / OG | 4957 | Passenger Seat Back Air Bag Low Control | I | — |
| 40 | 0.5 | OG / GY | 4956 | Passenger Seat Back Air Bag High Control | I | — |
| 41 | 0.5 | BK / OG | 6629 | Right Front Side Impact Sensor Low Reference | I | — |
| 42 | 0.5 | BN / OG | 2134 | Right Front Side Impact Sensor Signal | I | — |
| 43 - 50 | — | — | — | Not Occupied | — | — |
| 51 | 0.5 | OG / GN | 5019 | Left Front Roof Rail Air Bag High Control | I | — |
| 52 | 0.5 | VT / OG | 5020 | Left Front Roof Rail Air Bag Low Control | I | — |
| 53 | 0.5 | BK / OG | 4963 | Driver Seat Back Air Bag Low Control | I | — |

## K36 Restraints Control Module X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 54 | 0.5 | OG / BU | 4962 | Driver Seat Back Air Bag High Control | I | — |
| 55 | 0.5 | BK / OG | 6623 | Left Rear Side Impact Sensor Low Reference | I | — |
| 56 | 0.5 | OG / BU | 6622 | Left Rear Side Impact Sensor Signal | I | — |

# K38 Chassis Control Module (G93/G94)




3621452

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13965710
Service Connector: 19329822
Description: 66-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

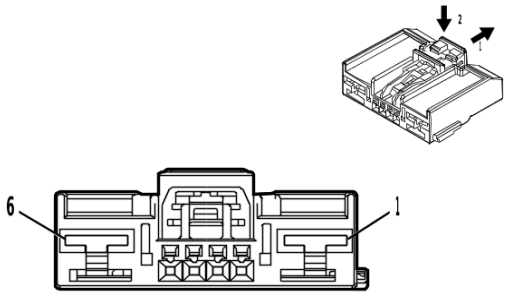
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

## K38 Chassis Control Module (G93/G94)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT / WH | 639 | Run/Crank Ignition 1 Voltage | II | — |
| 7 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.5 | YE / GN | 7122 | Axle Differential Lock Switch Signal | II | — |
| 14 - 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.5 | VT / GY | 7117 | Front Axle Differential Lock Indicator Control | II | — |
| 33 | 0.75 | VT / WH | 7256 | Front Differential Lock Actuator Control | II | — |
| 34 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 35 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 36 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 37 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 38 | 0.5 | YE | 7115 | Rear Axle Differential Lock Indicator Control | II | — |
| 39 - 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.75 | GY / BK | 7253 | Rear Differential Lock Actuator Low Control | II | — |
| 45 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.75 | VT / BN | 7258 | Rear Differential Lock Actuator Control | II | — |
| 51 - 59 | — | — | — | Not Occupied | — | — |
| 60 | 0.75 | WH / BK | 7254 | Front Differential Lock Actuator Low Control | II | — |
| 61 - 64 | — | — | — | Not Occupied | — | — |
| 65 | 1.5 | BK | 1850 | Ground | I | — |
| 66 | 1.5 | RD / WH | 5940 | Battery Positive Voltage | I | — |

# K40D Driver Seat Adjuster Memory Module X1 (A45)




4650258

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 7289-7139-30
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64, 6.3 Series( BK)

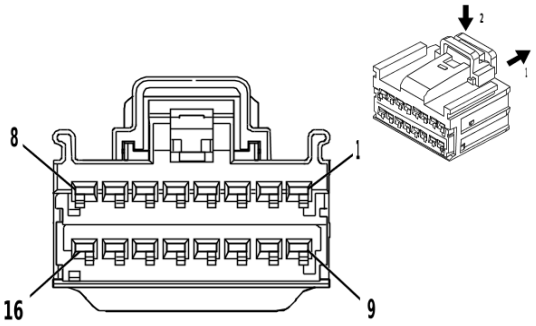
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |

## K40D Driver Seat Adjuster Memory Module X1 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1550 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 2.5 | RD / YE | 5040 | Battery Positive Voltage | I | — |

# K40D Driver Seat Adjuster Memory Module X2 (A45)




4332214

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 15512506
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.5 OCS Series( BK)

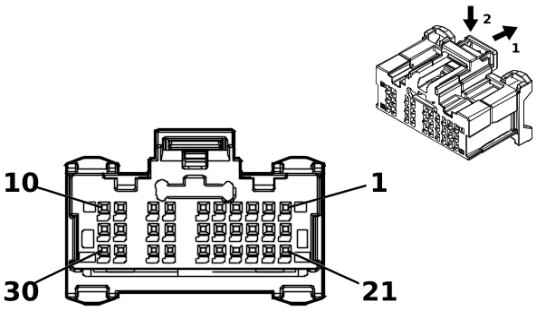
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## K40D Driver Seat Adjuster Memory Module X2 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | YE / BU | 285 | Driver Seat Horizontal Motor Forward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN / YE | 276 | Driver Seat Recline Motor Forward Control | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 1.5 | BU / VT | 287 | Driver Seat Front Vertical Motor Down Control | I | — |
| 7 | 1.5 | YE | 282 | Driver Seat Rear Vertical Motor Up Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 1.5 | BU / YE | 277 | Driver Seat Recline Motor Rearward Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 1.5 | GY / GN | 284 | Driver Seat Horizontal Motor Rearward Control | I | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 1.5 | GY / BU | 283 | Driver Seat Rear Vertical Motor Down Control | I | — |
| 14 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 1.5 | GN / BN | 286 | Driver Seat Front Vertical Motor Up Control | I | — |

# K40D Driver Seat Adjuster Memory Module X3 (A45)




5202284

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2309644-1
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 0.5 MQS Series( BK)

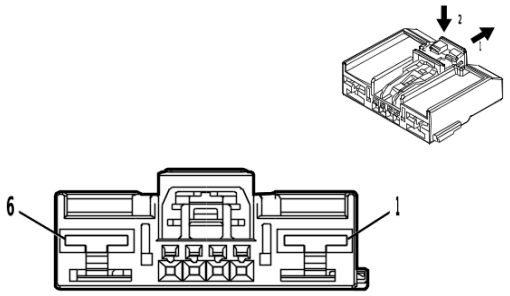
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K40D Driver Seat Adjuster Memory Module X3 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | BU / GN | 614 | Seat Memory Switch Set Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | BN | 3038 | Driver Seat Right Rear Haptic Movement Motor Control | I | — |
| 6 | 0.35 | YE / BN | 3037 | Driver Seat Left Rear Haptic Movement Motor Control | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | GN / WH | 7530 | Driver Seat Adjuster Memory Module LIN Bus 1 | I | — |
| 9 | 0.35 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 10 | 0.35 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 11 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | WH | 615 | Seat Memory Switch Signal 1 | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | GN / GY | 3758 | Driver Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 19 | 0.35 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 20 | 0.35 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 21 - 30 | — | — | — | Not Occupied | — | — |

# K40P Passenger Seat Adjuster Memory Module X1 (AKE)




4650258

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 7289-7139-30
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64, 6.3 Series( BK)

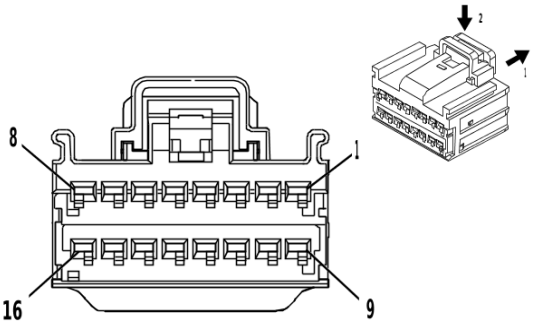
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |

## K40P Passenger Seat Adjuster Memory Module X1 (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1350 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 2.5 | RD / YE | 7440 | Battery Positive Voltage | I | — |

# K40P Passenger Seat Adjuster Memory Module X2 (AKE)




4332214

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 15512506
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.5 OCS Series( BK)

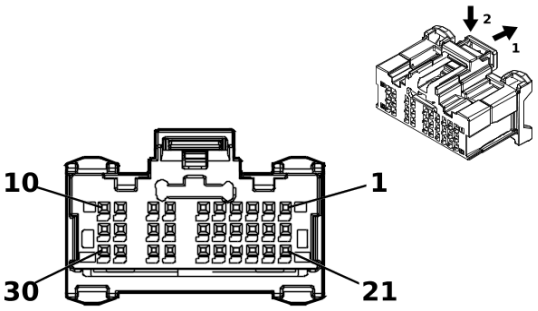
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## K40P Passenger Seat Adjuster Memory Module X2 (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | YE / WH | 296 | Passenger Seat Horizontal Motor Forward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN | 76 | Passenger Seat Recline Motor Forward Control | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 1.5 | GN / BU | 298 | Passenger Seat Front Vertical Motor Down Control | I | — |
| 7 | 1.5 | GN / WH | 288 | Passenger Seat Rear Vertical Motor Up Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 1.5 | BU / BN | 77 | Passenger Seat Recline Motor Rearward Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 1.5 | YE / BU | 290 | Passenger Seat Horizontal Motor Rearward Control | I | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 1.5 | BU / WH | 289 | Passenger Seat Rear Vertical Motor Down Control | I | — |
| 14 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 1.5 | GN / VT | 297 | Passenger Seat Front Vertical Motor Up Control | I | — |

# K40P Passenger Seat Adjuster Memory Module X3 (AKE)




5202284

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2309644-1
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 0.5 MQS Series( BK)

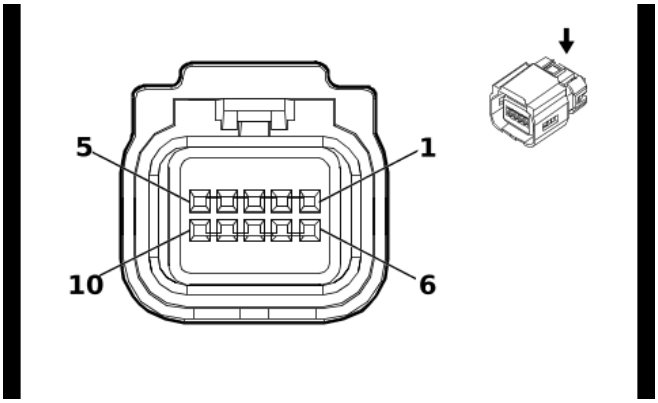
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K40P Passenger Seat Adjuster Memory Module X3 (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 10 | 0.35 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 11 - 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | GN / YE | 4116 | Passenger Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 19 | 0.35 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 20 | 0.35 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 21 | — | — | — | Not Occupied | — | — |
| 22 | 0.35 | BN / VT | 2452 | Seat Memory Module Configuration 2 | I | — |
| 23 | 0.35 | BN / VT | 2452 | Seat Memory Module Configuration 2 | I | — |
| 24 - 30 | — | — | — | Not Occupied | — | — |

# K43 Power Steering Control Module X1




5924496

## Connector Part Information

Harness Type: Power Steering Wiring Harness Extension Harness
OEM Connector: 13529266
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed( GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K43 Power Steering Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | WH / BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 8 | 0.5 | BU / WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# K43 Power Steering Control Module X2

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## Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 13598847
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

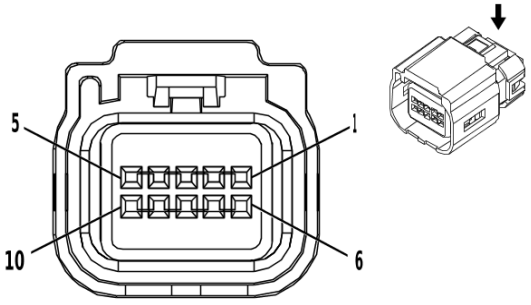
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K43 Power Steering Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 20 | RD | 3542 | Battery Positive Voltage | I | — |
| 2 | 20 | BK | 350 | Ground | I | — |

# K43 Power Steering Control Module X3




3608468

## Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness - Shaft Sensor
OEM Connector: 13587226
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed( BN)

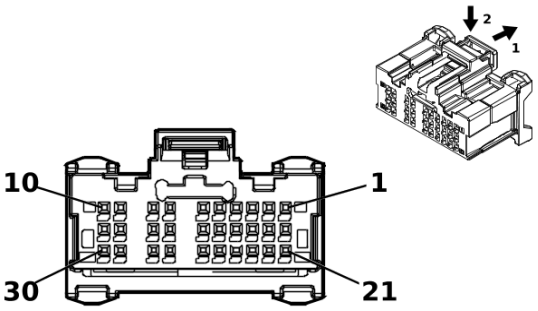
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K43 Power Steering Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 8367 | Handwheel Channel A Torque Pressure Sensor 1 SENT Signal | I | — |
| 2 | 0.5 | RD | 8366 | Handwheel Channel A High Reference | I | — |
| 3 | 0.5 | BK | 8370 | Handwheel Channel A Low Reference | I | — |
| 4 | 0.5 | WH / RD | 8371 | Handwheel Channel B High Reference | I | — |
| 5 | 0.5 | WH / BU | 8372 | Handwheel Channel B Torque Pressure Sensor 1 SENT Signal | I | — |
| 6 | 0.5 | VT | 8368 | Handwheel Channel A Torque Pressure Sensor 2 SENT Signal | I | — |
| 7 | 0.5 | OG | 8369 | Handwheel Channel A Angle Position Sensor SENT Signal | I | — |
| 8 | 0.5 | GY | 8375 | Handwheel Channel B Low Reference | I | — |
| 9 | 0.5 | YE | 8374 | Handwheel Channel B Angle Position Sensor SENT Signal | I | — |
| 10 | 0.5 | GN | 8373 | Handwheel Channel B Torque Pressure Sensor 2 SENT Signal | I | — |

# K56 Serial Data Gateway Module X1




5202284

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35085331
Service Connector: 84766507
Description: 30-Way F 0.5 MQS Series( BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |

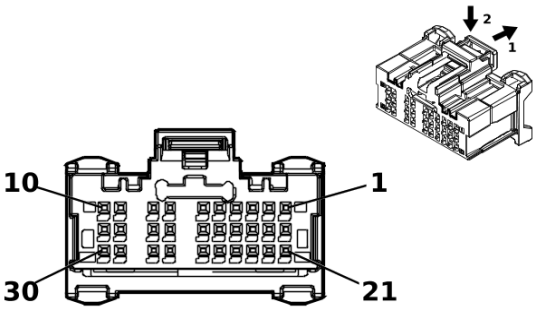
### K56 Serial Data Gateway Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / BN | 4940 | Battery Positive Voltage | I | — |
| 2 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 3 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 4 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 5 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 6 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 7 | 0.35 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 8 | 0.35 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 9 | 0.35 | WH | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 10 | 0.35 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 14 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 15 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 16 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 17 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 18 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 19 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 20 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 21 | 0.35 | GN | 7209 | Ethernet Bus 3 [+] | I | — |
| 22 | 0.35 | BU | 7208 | Ethernet Bus 3 [-] | I | — |
| 23 - 24 | — | — | — | Not Occupied | — | — |

## K56 Serial Data Gateway Module X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 26 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 27 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 28 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 29 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 30 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |

# K56 Serial Data Gateway Module X2




5203942

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35094158
Service Connector: 84766509
Description: 30-Way F 0.5 MQS Series( BK with L-GY Front Housing)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |

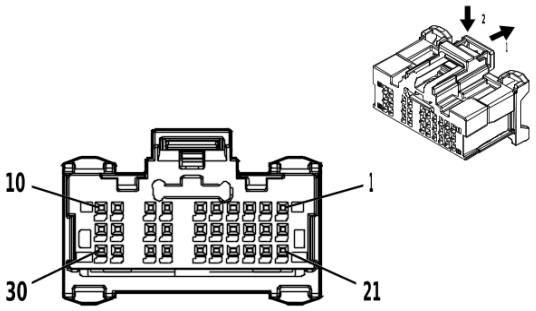
### K56 Serial Data Gateway Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | BK / GY | 3559 | Passive Start Switch 2 Low Reference | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | GN / VT | 5199 | Run/Crank Relay Coil Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | BU | 4973 | Ethernet Bus 1R [+] | I | — |
| 10 | 0.35 | YE | 4972 | Ethernet Bus 1R [-] | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | BU / BN | 4983 | AUTOSAR CAN Bus [+] 7 Serial Data | I | — |
| 14 | 0.35 | WH | 4982 | AUTOSAR CAN Bus [-] 7 Serial Data | I | — |
| 15 | 0.35 | GN / BK | 3558 | Passive Start Switch Signal 2 | I | — |
| 16 | 0.35 | WH | 4980 | AUTOSAR CAN Bus [-] 6 Serial Data | I | — |
| 17 | 0.35 | GN | 2578 | Private Serial Data Presentation CAN Bus [+] 1 Serial Data | I | — |
| 18 | 0.35 | BN | 2577 | Private Serial Data Presentation CAN Bus [-] 1 Serial Data | I | — |
| 19 | 0.35 | WH | 7207 | Ethernet Bus 1 Enable Signal | I | — |
| 20 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 24 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.35 | YE | 4981 | AUTOSAR CAN Bus [+] 6 Serial Data | I | — |

## K56 Serial Data Gateway Module X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 27 | 0.35 | VT | 2580 | Private Serial Data Presentation CAN Bus [+] 2 Serial Data | I | — |
| 28 | 0.35 | GY | 2579 | Private Serial Data Presentation CAN Bus [-] 2 Serial Data | I | — |
| 29 | 0.35 | WH | 4975 | Ethernet Bus 1T [+] | I | — |
| 30 | 0.35 | GN | 4974 | Ethernet Bus 1T [-] | I | — |

# K56 Serial Data Gateway Module X3




4900333

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35077574
Service Connector: 13519319
Description: 30-Way F 0.5 MQS Series( BK with D-GY Front Housing)

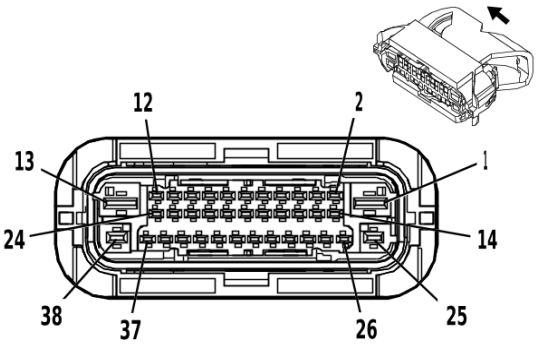
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |

## K56 Serial Data Gateway Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35<br>0.35 | YE<br>BN | 4758<br>7211 | Ethernet Bus 2 [+]<br>Ethernet Bus 4 [+] | I<br>I | IOK<br>IOR |
| 8 | 0.35<br>0.35 | BU<br>GY | 4757<br>7210 | Ethernet Bus 2 [-]<br>Ethernet Bus 4 [-] | I<br>I | IOK<br>IOR |
| 9 | 0.35 | YE | 4758 | Ethernet Bus 2 [+] | I | — |
| 10 | 0.35 | BU | 4757 | Ethernet Bus 2 [-] | I | — |
| 11 - 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.35 | GN | 7217 | Ethernet Bus 7 [+] | I | — |
| 28 | 0.35 | WH | 7216 | Ethernet Bus 7 [-] | I | — |
| 29 - 30 | — | — | — | Not Occupied | — | — |

# K58 Power Sliding Door Control Module (UET)




5141918

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35497871
Service Connector: 86825459
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed( BK with BN Inner Connector)

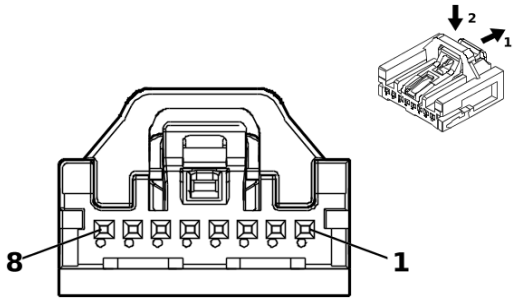
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368624 | J-35616-35 (VT) | J-38125-212 |
| II | 19369235 | J-35616-14 (GN) | EL-38125-560A |
| III | 85158596 | J-35616-40 (BU) | EL-38125-560A |

## K58 Power Sliding Door Control Module (UET)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / VT | 5640 | Battery Positive Voltage | III | — |
| 2 | 1 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | II | — |
| 3 | 1 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 1 | GY | 5189 | Trailer Backup Lamp Control | II | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | VT / WH | 639 | Run/Crank Ignition 1 Voltage | II | — |
| 11 | 0.5 | BN / YE | 820 | Center High Mounted Stop Lamp Supply Voltage | II | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 2.5 | BK | 1750 | Ground | III | — |
| 14 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 1 | BN | 2109 | Trailer Park Lamp Control | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | II | — |
| 28 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | II | — |
| 29 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | II | — |
| 30 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | II | — |
| 31 - 37 | — | — | — | Not Occupied | — | — |
| 38 | 2.5 | RD / YE | 5840 | Battery Positive Voltage | I | — |

# K60 Column Lock Module (N06)




5200269

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K60 Column Lock Module (N06)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / BN | 4940 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 4 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 5 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 6 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 7 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 8 | 0.35 | BU / VT | 807 | Ignition Off/Accessory Ignition Voltage | I | — |

# K61 Sunroof Control Module (CF5)

—

## Connector Part Information

Harness Type: Sunroof Wiring Harness
OEM Connector: 15512475
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F

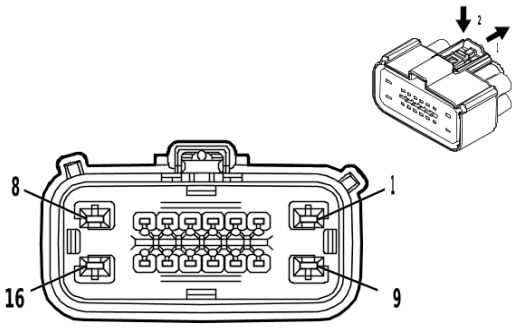
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## K61 Sunroof Control Module (CF5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 6 | 0.35 | GN / BN | 2854 | Body Control Module LIN Bus 8 | I | — |
| 8 | 1.5 | RD / GY | 4540 | Battery Positive Voltage | I | — |
| 10 | 1.5 | BK | 1050 | Ground | I | — |

# K67 Trailer Brake Control Module (JL1)




4624589

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33297568
Service Connector: 13599889
Description: 16-Way F 1.5, 2.8 MX Series, Sealed( GY)

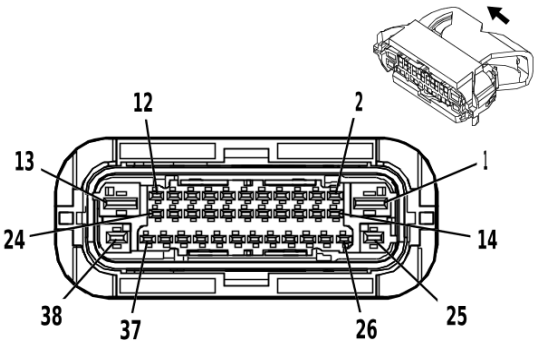
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A |
| II | 85528055 | J-35616-2A (GY) | J-38125-217 |

## K67 Trailer Brake Control Module (JL1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / BN | 3640 | Battery Positive Voltage | I | — |
| 2 | 0.5 | WH / BK | 2223 | Trailer Brake Apply Signal | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | YE / BK | 2224 | Trailer Brake Enable Signal | II | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 2.5 | BU | 47 | Trailer Auxiliary Control | I | — |
| 9 | 2.5 | BK | 1850 | Ground | I | — |
| 10 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN / BU | 2733 | Brake System Control Module LIN Bus 2 | II | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

# K68 Trailer Lamp Control Module (UET)




5141918

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35497871
Service Connector: 86825459
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed( BK with BN Inner Connector)

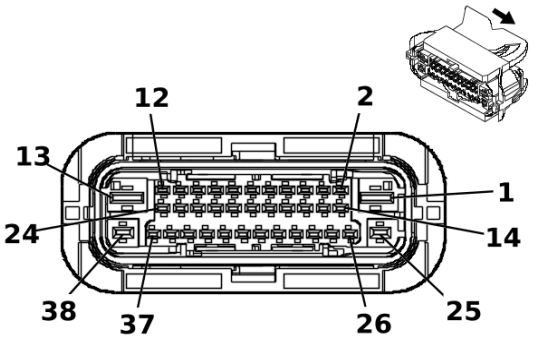
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368624 | J-35616-35 (VT) | J-38125-212 |
| II | 19369235 | J-35616-14 (GN) | EL-38125-560A |
| III | 85158596 | J-35616-40 (BU) | EL-38125-560A |

## K68 Trailer Lamp Control Module (UET)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / VT | 5640 | Battery Positive Voltage | III | — |
| 2 | 1 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | II | — |
| 3 | 1 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 1 | GY | 5189 | Trailer Backup Lamp Control | II | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | VT / WH | 639 | Run/Crank Ignition 1 Voltage | II | — |
| 11 | 0.5 | BN / YE | 820 | Center High Mounted Stop Lamp Supply Voltage | II | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 2.5 | BK | 1750 | Ground | III | — |
| 14 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 1 | BN | 2109 | Trailer Park Lamp Control | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | II | — |
| 28 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | II | — |
| 29 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | II | — |
| 30 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | II | — |
| 31 - 37 | — | — | — | Not Occupied | — | — |
| 38 | 2.5 | RD / YE | 5840 | Battery Positive Voltage | I | — |

# K69 Transfer Case Control Module (NP0/NQH)




5199340

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35497867
Service Connector: 86825458
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed( BK with BN Inner Connector)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368624 | J-35616-35 (VT) | J-38125-212 |
| II | 19369235 | J-35616-14 (GN) | EL-38125-560A |
| III | 85158596 | J-35616-40 (BU) | EL-38125-560A |

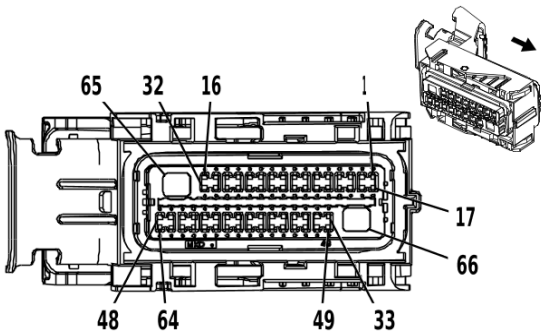
## K69 Transfer Case Control Module (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 3 | GN / RD | 6042 | Cruise Control Switch 5V Reference | III | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 4 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 5 | 0.5 | WH / GN | 7479 | Rotary Position Sensor Signal | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE | 7474 | Incremental Encoder Direction Signal | II | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | YE / WH | 1695 | 4WD Locked Range Indicator Control | II | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | VT / GY | 8017 | Secondary Axle Motor Relay Control | II | — |
| 12 | 0.5 | GY / BK | 1570 | Front Axle Actuator Control | II | — |
| 13 | 4 | YE / VT | 1553 | Transfer Case Motor Counter Clockwise Control | III | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 16 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 19 | 0.5 | BU / GY | 7473 | Incremental Encoder Impulse Signal | II | — |
| 20 | 0.5 | WH / RD | 7477 | Gear Position Sensor 5V Reference | II | — |

## K69 Transfer Case Control Module (NP0/NQH) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | GN | 8015 | Transfer Case Motor Low Reference | II | — |
| 25 | 2.5 | BK | 450 | Ground | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | GN | 8014 | Transfer Case Lock Solenoid Low Reference | II | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | YE / BK | 7478 | Gear Position Sensor Low Reference | II | — |
| 31 | 0.5 | WH / GN | 7475 | Incremental Encoder Sensor Voltage Reference | II | — |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.75 | BU | 8013 | Transfer Case Lock Solenoid Control 2 | II | — |
| 34 | 0.75 | YE / BN | 1569 | Transfer Case Lock Solenoid Valve Control | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | VT | 7476 | Incremental Encoder Sensor Low Reference | II | — |
| 37 | — | — | — | Not Occupied | — | — |
| 38 | 2.5 | YE / GY | 1552 | Transfer Case Motor Clockwise Control | I | — |

# K71 Transmission Control Module (L3B)




4024881

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35309373
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

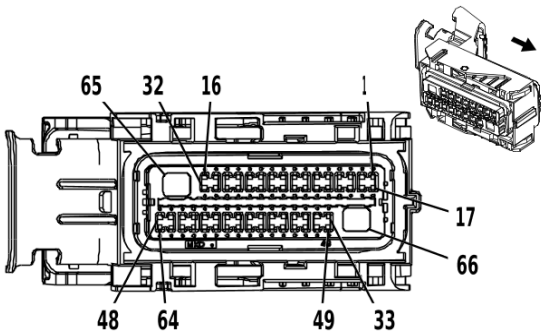
## K71 Transmission Control Module (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | II | — |
| 2 | 0.5 | BU | 6401 | Clutch Solenoid Valve B Control | II | — |
| 3 | 0.5 | GN / WH | 1530 | Transmission Line Pressure Control Solenoid Valve Control | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE / GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | II | — |
| 8 | 0.5 | YE / BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | II | — |
| 9 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.5 | GN / VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 14 | 0.5 | GY / BU | 6358 | Output Speed Signal | II | — |
| 15 | 0.5 | BK / BU | 6253 | Transmission Input Speed Sensor Ground | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 18 | 0.5 | BN | 6400 | Clutch Solenoid Valve A Control | II | — |
| 19 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | II | — |
| 20 | 0.5 | VT / WH | 422 | Torque Converter Clutch Solenoid Valve Control | II | — |
| 21 | 0.5 | GN / WH | 6380 | Torque Converter Clutch Enable Solenoid Valve A Control | II | — |
| 22 | 0.5 | YE / BN | 6210 | Torque Converter Clutch Enable Solenoid Valve B Control | II | — |
| 23 | — | — | — | Not Occupied | — | — |

## K71 Transmission Control Module (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | WH / GY | 4578 | Surge Accumulator Solenoid Valve Low Side Control | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BK / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | II | — |
| 29 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 38 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 39 - 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | II | — |
| 50 - 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 54 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 55 - 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | BN / WH | 585 | Transmission Fluid Temperature Sensor Signal | II | — |
| 64 | 0.5 | BU / WH | 3338 | Transmission Internal Mode Switch Mode Control X | II | — |
| 65 | 1.5 | BK / WH | 251 | Signal Ground | I | — |
| 66 | 1.5 | RD / GN | 1840 | Battery Positive Voltage | I | — |

# K71 Transmission Control Module (L84/L87)




4024881

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33344977
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

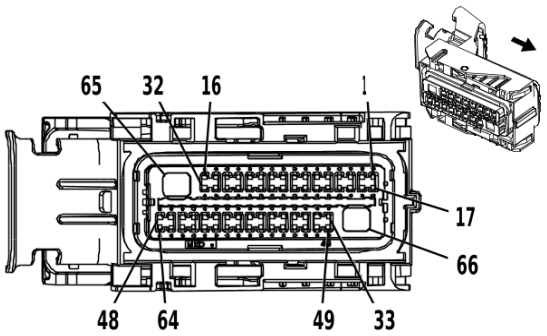
## K71 Transmission Control Module (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / WH | 422 | Torque Converter Clutch Solenoid Valve Control | II | — |
| 2 | 0.5 | GY / GN | 6403 | Clutch Solenoid Valve D Control | II | — |
| 3 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | II | — |
| 4 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE / GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | II | — |
| 8 | 0.5 | YE / BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | II | — |
| 9 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN / YE | 6353 | Input Speed Signal | II | — |
| 13 | 0.5 | GN / VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 14 | 0.5 | GY / BU | 6358 | Output Speed Signal | II | — |
| 15 | 0.5 | BN / WH | 6254 | Transmission Input Speed Sensor Signal | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | GN / WH | 1530 | Transmission Line Pressure Control Solenoid Valve Control | II | — |
| 18 | 0.5 | YE / BN | 6404 | Clutch Solenoid Valve E Control | II | — |
| 19 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | II | — |
| 20 | 0.5 | VT | 4509 | Transmission Clutch F Control | II | — |
| 21 | 0.5 | WH / YE | 2159 | Park Inhibit Solenoid Assembly Control | II | — |
| 22 | 0.5 | GN / BK | 7819 | Default Disable Solenoid Control | II | — |

## K71 Transmission Control Module (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | GN / WH | 2968 | Transmission Auxiliary Fluid Pump Control | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BK / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | II | — |
| 29 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | II | — |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 38 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 39 - 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | II | — |
| 50 - 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 54 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 55 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | VT / WH | 6319 | Electronic Transmission Range Select Out of Park Switch 2 Signal | II | — |
| 60 | — | — | — | Not Occupied | — | — |
| 61 | 0.5 | WH / YE | 6317 | Electronic Transmission Range Select Out of Park Switch Signal | II | — |
| 62 | 0.5 | BN | 3706 | Electronic Transmission Range Select Switch Analog Signal 1 | II | — |
| 63 | 0.5 | BN / WH | 585 | Transmission Fluid Temperature Sensor Signal | II | — |
| 64 | 0.5 | BU / WH | 3338 | Transmission Internal Mode Switch Mode Control X | II | — |
| 65 | 1.5 | BK / WH | 251 | Signal Ground | I | — |
| 66 | 1.5 | RD / GN | 1840 | Battery Positive Voltage | I | — |

# K71 Transmission Control Module (LZ0)




4024881

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33344977
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed( BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13587518 | J-35616-35 (VT) | J-38125-11A |
| II | 19351723 | J-35616-64B (L-BU) | J-38125-213 |

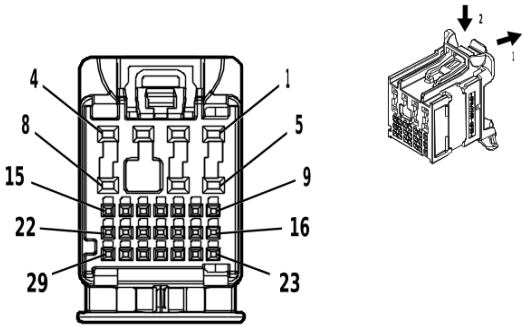
## K71 Transmission Control Module (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / WH | 422 | Torque Converter Clutch Solenoid Valve Control | II | — |
| 2 | 0.5 | GY / GN | 6403 | Clutch Solenoid Valve D Control | II | — |
| 3 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | II | — |
| 4 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE / GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | II | — |
| 8 | 0.5 | YE / BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | II | — |
| 9 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN / YE | 6353 | Input Speed Signal | II | — |
| 13 | 0.5 | GN / VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 14 | 0.5 | GY / BU | 6358 | Output Speed Signal | II | — |
| 15 | 0.5 | BN / WH | 6254 | Transmission Input Speed Sensor Signal | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | GN / WH | 1530 | Transmission Line Pressure Control Solenoid Valve Control | II | — |
| 18 | 0.5 | YE / BN | 6404 | Clutch Solenoid Valve E Control | II | — |
| 19 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | II | — |
| 20 | 0.5 | VT | 4509 | Transmission Clutch F Control | II | — |
| 21 | 0.5 | WH / YE | 2159 | Park Inhibit Solenoid Assembly Control | II | — |
| 22 | 0.5 | GN / BK | 7819 | Default Disable Solenoid Control | II | — |

## K71 Transmission Control Module (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | GN / WH | 2968 | Transmission Auxiliary Fluid Pump Control | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BK / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | II | — |
| 29 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | II | — |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | VT / GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 38 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 39 - 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | II | — |
| 50 - 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 54 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 55 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | VT / WH | 6319 | Electronic Transmission Range Select Out of Park Switch 2 Signal | II | — |
| 60 | — | — | — | Not Occupied | — | — |
| 61 | 0.5 | WH / YE | 6317 | Electronic Transmission Range Select Out of Park Switch Signal | II | — |
| 62 | 0.5 | BN | 3706 | Electronic Transmission Range Select Switch Analog Signal 1 | II | — |
| 63 | 0.5 | BN / WH | 585 | Transmission Fluid Temperature Sensor Signal | II | — |
| 64 | 0.5 | BU / WH | 3338 | Transmission Internal Mode Switch Mode Control X | II | — |
| 65 | 1.5 | BK / WH | 251 | Signal Ground | I | — |
| 66 | 1.5 | RD / GN | 1840 | Battery Positive Voltage | I | — |

# K73 Telematic Control Module X1




4496253

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364134
Service Connector: 13534974
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

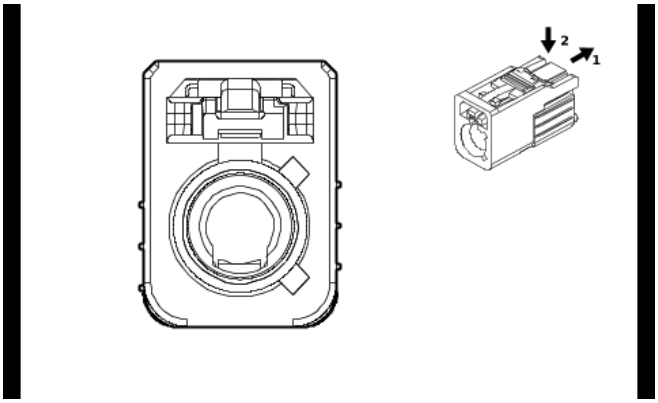
## K73 Telematic Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 3040 | Battery Positive Voltage | II | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | BK / WH | 1051 | Signal Ground | II | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | GN / BK | 2515 | Telematics Switch Supply Voltage | II | — |
| 7 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 10 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 11 | 0.35 | GN / WH | 2514 | Telematics Switch Signal | I | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | Bare | 1792 | Low Reference | I | — |
| 14 | 0.35 | BK / GY | 5152 | Voice Recognition Audio [-] Control | I | — |
| 15 | 0.35 | GY / YE | 5149 | Voice Recognition Audio Signal | I | — |
| 16 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 17 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | YE / VT | 2516 | Telematics Switch Green LED Indicator Control | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | BK / BN | 654 | Cellular Telephone Microphone Low Reference | I | — |
| 22 | 0.35 | BU | 655 | Cellular Telephone Microphone Signal | I | — |
| 23 - 25 | — | — | — | Not Occupied | — | — |

## K73 Telematic Control Module X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 26 | 0.35 | BN / WH | 2517 | Telematics Switch Red LED Indicator Control | I | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | BN | 7211 | Ethernet Bus 4 [+] | I | — |
| 29 | 0.35 | GY | 7210 | Ethernet Bus 4 [-] | I | — |

## K73 Telematic Control Module X2




5630760

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340312
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( VT)

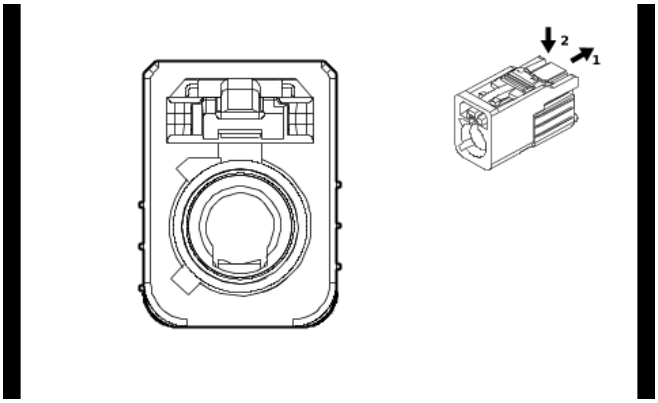
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### K73 Telematic Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (Cell only) Coaxial Antenna Cell Phone Signal | I | — |

# K73 Telematic Control Module X3




5630785

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340314
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BN)

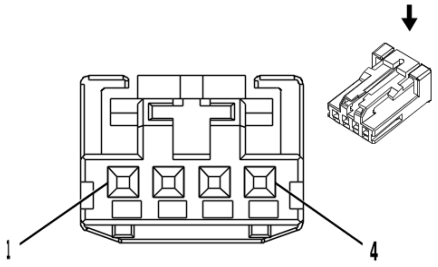
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K73 Telematic Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (GPS/Cell) Coaxial Antenna Cell/GPS combined Signal | I | — |

# K77 Remote Function Actuator Module




2717162

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

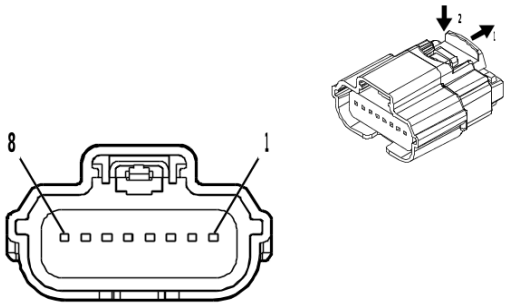
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K77 Remote Function Actuator Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / VT | 2640 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN / YE | 2862 | Body Control Module LIN Bus 16 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | BK / WH | 1451 | Signal Ground | I | — |

# K85P Restraints Occupant Classification System Module - Passenger (AL0)




4708234

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 31404-9110
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed( BK)

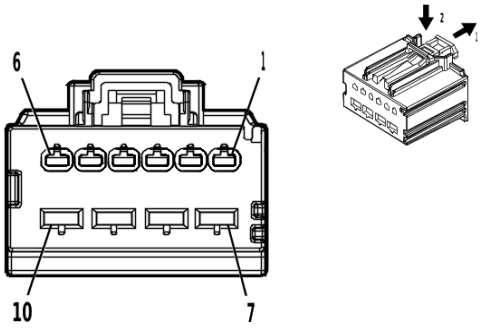
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K85P Restraints Occupant Classification System Module - Passenger (AL0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 4440 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 3 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 4 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 5 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 6 | 0.5 | BK / WH | 1251 | Signal Ground | I | — |
| 7 | 0.5 | OG / BN | 3947 | Passenger Automatic Locking Retractor Switch Signal | I | — |
| 8 | 0.5 | GY / OG | 3946 | Passenger Automatic Locking Retractor Switch Low Reference | I | — |

# K99 Steering Column Control Module X1 (N38)




5035058

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35152553
Service Connector: 13525907
Description: 10-Way F 1.5, 2.8 MX Series( BK)

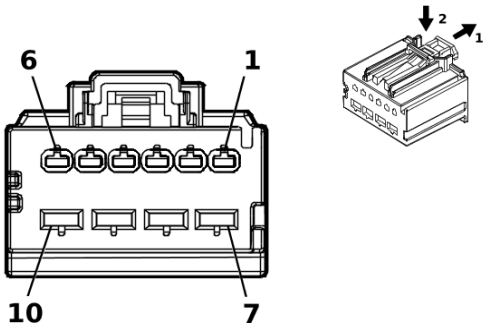
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300432 | J-35616-2A (GY) | J-38125-557 |
| II | 85544080 | J-35616-4A (PU) | J-38125-11A |

## K99 Steering Column Control Module X1 (N38)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BK | 2020 | Steering Column Tilt and Telescope Switch Feedback Signal | I | — |
| 2 | 0.5 | GN / WH | 7530 | Driver Seat Adjuster Memory Module LIN Bus 1 | I | — |
| 3 | 0.5 | GN / BN | 2095 | Steering Column Tilt and Telescope Switch Rearward Signal | I | — |
| 4 | 0.5 | BN / GY | 2096 | Steering Column Tilt and Telescope Switch Up Signal | I | — |
| 5 | 0.5 | YE / BN | 2097 | Steering Column Tilt and Telescope Switch Down Signal | I | — |
| 6 | 0.5 | BU / YE | 2094 | Steering Column Tilt and Telescope Switch Forward Signal | I | — |
| 7 | 0.75 | RD / VT | 4640 | Battery Positive Voltage | II | — |
| 8 | 1.5 | BK | 1050 | Ground | II | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# K99 Steering Column Tilt Wheel and Telescope Control Module X2 (N38)




5190551

## Connector Part Information

Harness Type: Steering Column Tilt and Telescope Wheel Actuator Motor Harness
OEM Connector: 31372-1700
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series( GY)

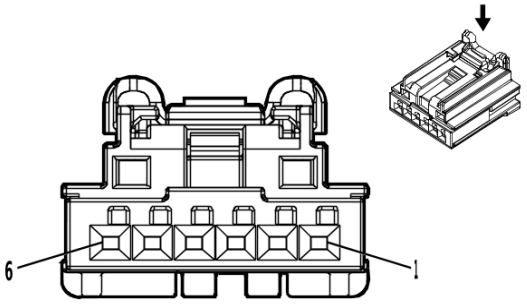
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K99 Steering Column Tilt Wheel and Telescope Control Module X2 (N38)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT / GY | 2153 | Steering Column Telescope Motor Signal | I | — |
| 2 | 0.35 | YE / BK | 2152 | Steering Column Telescope Motor Low Reference | I | — |
| 3 | 0.35 | YE | 2154 | Steering Column Tilt Motor Signal | I | — |
| 4 | 0.35 | WH / BK | 2157 | Steering Column Tilt Motor Low Reference | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 1 | GN / BK | 2098 | Steering Column Telescope Motor Forward Control | I | — |
| 8 | 1 | YE / BN | 2110 | Steering Column Telescope Motor Rearward Control | I | — |
| 9 | 1 | BN / GY | 2112 | Steering Column Tilt Motor Down Control | I | — |
| 10 | 1 | GY / VT | 2111 | Steering Column Tilt Motor Up Control | I | — |

# K104D Front Seat Bladder Control Module - Driver (AVK - AF6)




5020940

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2035363-6
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

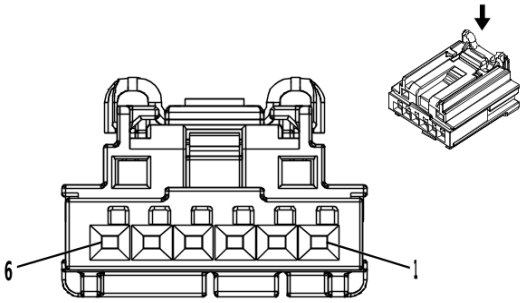
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104D Front Seat Bladder Control Module - Driver (AVK - AF6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / GY | 3758 | Driver Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 3 | 0.5 | WH / BU | 4891 | Driver Seat Lumbar/Bolster Pump Control | I | — |
| 4 | 0.5 | BK | 1550 | Ground | I | — |
| 5 | 0.5 | BN / BK | 2305 | Driver Seat Bolster Pump Low Reference | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# K104DP Front Seat Bladder Control Module - Driver Primary (AF6)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

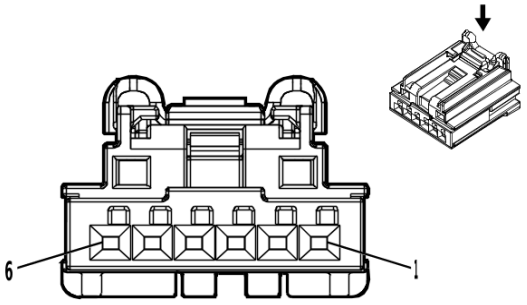
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104DP Front Seat Bladder Control Module - Driver Primary (AF6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / GY | 3758 | Driver Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 3 | 0.5 | WH / BU | 4891 | Driver Seat Lumbar/Bolster Pump Control | I | — |
| 4 | 0.5 | BK | 1550 | Ground | I | — |
| 5 | 0.5 | BN / BK | 2305 | Driver Seat Bolster Pump Low Reference | I | — |
| 6 | 0.5 | GN / BK | 2637 | Front Seat Bolster Memory Module - Driver LIN Bus 1 | I | — |

# K104DS Front Seat Bladder Control Module - Driver Secondary (AF6)




5020940

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2035363-6
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

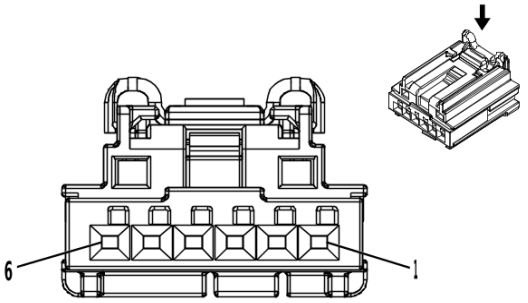
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104DS Front Seat Bladder Control Module - Driver Secondary (AF6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / BK | 2637 | Front Seat Bolster Memory Module - Driver LIN Bus 1 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK | 1550 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# K104P Front Seat Bladder Control Module - Passenger (AVU-AKE)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

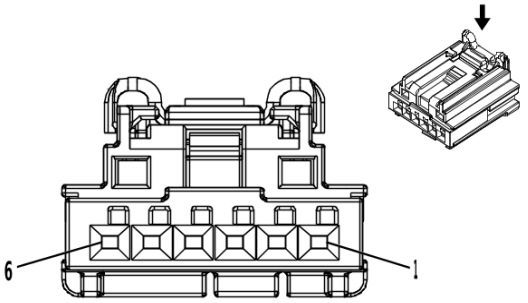
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104P Front Seat Bladder Control Module - Passenger (AVU-AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GY / WH | 4890 | Passenger Seat Lumbar/Bolster Pump Control | I | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 | 0.5 | BK / BU | 2194 | Passenger Seat Position Switch Low Reference | I | — |
| 6 | 0.5 | YE / GN | 1068 | Passenger Seat Lumbar Support Switch Analog Signal | I | — |

# K104PP Front Seat Bladder Control Module - Passenger Primary (AKE)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

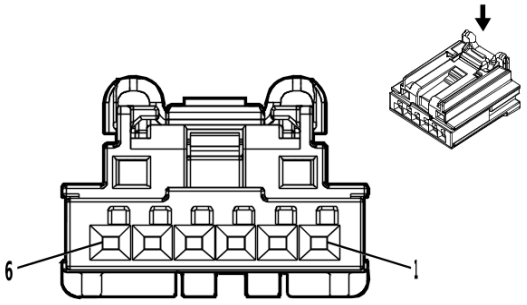
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104PP Front Seat Bladder Control Module - Passenger Primary (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / YE | 4116 | Passenger Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 3 | 0.5 | GY / WH | 4890 | Passenger Seat Lumbar/Bolster Pump Control | I | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 | 0.5 | GY / BK | 2306 | Passenger Seat Bolster Pump Low Reference | I | — |
| 6 | 0.5 | GN / BU | 2638 | Front Seat Bolster Memory Module - Passenger LIN Bus 1 | I | — |

# K104PS Front Seat Bladder Control Module - Passenger Secondary (AKE)




5020940

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2035363-6
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

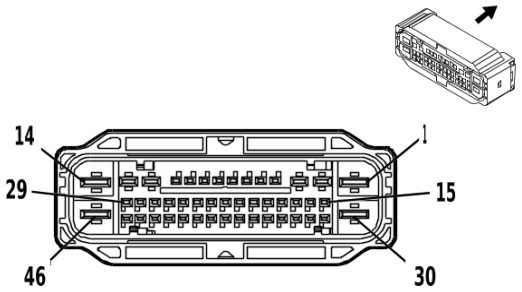
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K104PS Front Seat Bladder Control Module - Passenger Secondary (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / BU | 2638 | Front Seat Bolster Memory Module - Passenger LIN Bus 1 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# K111 Fuel Pump Power Control Module (FHS)




4162046

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575368 | J-35616-35 (VT) | J-38125-36 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 84634921 | J-35616-42 (RD) | J-38125-212 |

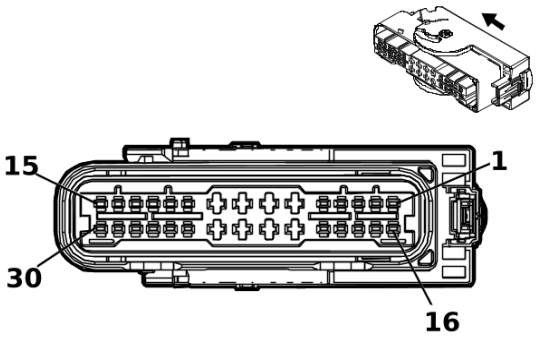
## K111 Fuel Pump Power Control Module (FHS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | WH / BN | 4138 | Fuel Pump Supply Voltage Phase 3 | III | — |
| 2 | 2.5 | GY | 120 | Fuel Pump Control | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BK / GY | 3802 | Fuel Composition Sensor Low Reference | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | II | — |
| 8 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | II | — |
| 11 | 0.5 | GN / GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 12 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 2.5 | BK | 1650 | Ground | III | — |
| 15 | 0.5 | WH | 7444 | Fuel Pump Assembly Shield Ground | II | — |
| 16 | 0.5 | VT / BN | 3803 | Fuel Composition Sensor Signal | II | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BN / RD | 7445 | Fuel Line Pressure Sensor 5V Reference | II | — |
| 20 | 0.5 | BU / WH | 7446 | Fuel Pressure Sensor Signal | II | — |
| 21 | 0.5 | BK / GN | 6281 | Fuel Level Sensor Low Reference | II | — |
| 22 | — | — | — | Not Occupied | — | — |

## K111 Fuel Pump Power Control Module (FHS) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 23 | 0.5 | BK / BN | 6284 | Fuel Tank Pressure Sensor Low Reference | II | — |
| 24 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 2.5 | YE / GY | 4137 | Fuel Pump Supply Voltage Phase 2 | III | — |
| 31 - 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | BK / YE | 7447 | Fuel Pressure Sensor Low Reference | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU / GN | 1936 | Primary Fuel Level Sensor Signal | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | YE / RD | 2709 | Fuel Tank Pressure Sensor 5V Reference | II | — |
| 40 | 0.5 | BU / GN | 890 | Fuel Tank Pressure Sensor Signal | II | — |
| 41 - 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.5 | WH | 1310 | EVAP Vent Solenoid Valve Control | II | — |
| 44 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 2.5 | RD / VT | 1940 | Battery Positive Voltage | III | — |

# K111 Fuel Pump Power Control Module (FJW)




3240109

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13551117
Service Connector: 85140064
Description: 30-Way F 1.5, 2.8 MCP Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19329958 | J-35616-2A (GY) | J-38125-11A |
| II | 19371214 | J-35616-4A (PU) | J-38125-215A |

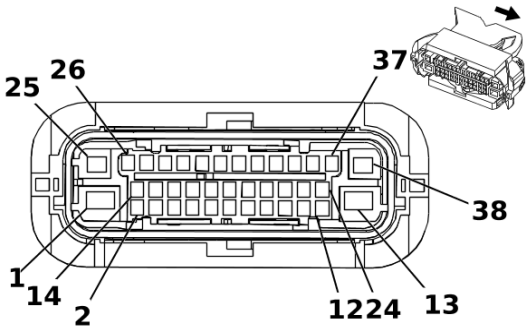
## K111 Fuel Pump Power Control Module (FJW)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | BU / YE | 6861 | Water In Fuel Sensor Signal | I | — |
| 3 | 0.5 | BK / BU | 6863 | Water In Fuel Sensor Low Reference | I | — |
| 4 | 0.5 | BN / GY | 7072 | Fuel Temperature Sensor 1 Signal | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | RD / VT | 1940 | Battery Positive Voltage | II | — |
| 8 | 2.5 | GY | 120 | Fuel Pump Control | II | — |
| 9 | 2.5 | YE / GY | 4137 | Fuel Pump Supply Voltage Phase 2 | II | — |
| 10 | 0.5 | YE / RD | 2709 | Fuel Tank Pressure Sensor 5V Reference | I | — |
| 11 | 0.5 | BU / WH | 890 | Fuel Tank Pressure Sensor Signal | I | — |
| 12 | 0.5 | BN / RD | 7445 | Fuel Line Pressure Sensor 5V Reference | I | — |
| 13 | 0.5 | BU / GN | 1936 | Primary Fuel Level Sensor Signal | I | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 16 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | GN / GY | 465 | Fuel Pump Primary Relay Control | I | — |
| 19 | 0.5 | BN / WH | 7073 | Fuel Temperature Sensor 1 Low Reference | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | WH | 1310 | EVAP Vent Solenoid Valve Control | II | — |

## K111 Fuel Pump Power Control Module (FJW) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 | 2.5 | BK | 1650 | Ground | II | — |
| 23 | 0.5 | WH | 7444 | Fuel Pump Assembly Shield Ground | II | — |
| 24 | 2.5 | WH / BN | 4138 | Fuel Pump Supply Voltage Phase 3 | II | — |
| 25 | 0.5 | BK / BN | 6284 | Fuel Tank Pressure Sensor Low Reference | I | — |
| 26 | 0.5 | BU / WH | 7446 | Fuel Pressure Sensor Signal | I | — |
| 27 | 0.5 | BK / YE | 7447 | Fuel Pressure Sensor Low Reference | I | — |
| 28 | 0.5 | BK / GN | 6281 | Fuel Level Sensor Low Reference | I | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |

# K115 Reductant Control Module (LZ0)




3240110

## Connector Part Information

Harness Type: Emission Reduction Fluid Tank Reservoir Wire Harness
OEM Connector: 13582126
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed( BK with BK Inner Connector)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-40 (BU) | No Tool Required |
| III | Not required | J-35616-4A (PU) | No Tool Required |

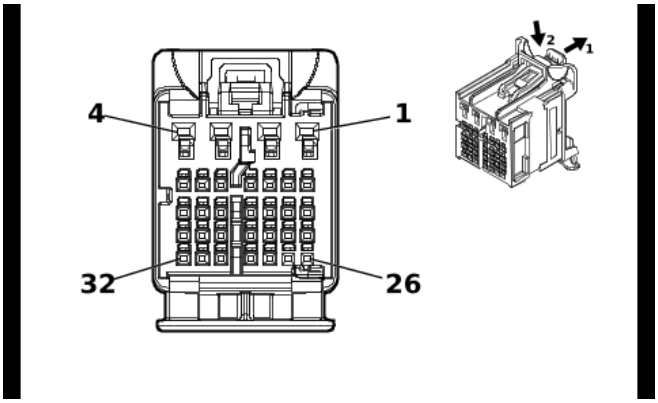
## K115 Reductant Control Module (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 3 | BK | 2040 | Battery Positive Voltage | II | — |
| 2 | 1 | BN | 3676 | Diesel Exhaust Fluid Heating Tank 2 Heater Control | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 1 | YE | 3677 | Diesel Exhaust Fluid Reservoir Heater Control | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | BK | 3244 | Diesel Exhaust Fluid Tank Temperature Sensor Signal | I | — |
| 7 | 0.5 | BK | 7290 | Diesel Exhaust Fluid Sensor Voltage Reference 1 | I | — |
| 8 | 0.5 | BN | 7284 | Diesel Exhaust Fluid Liquid Quality Temperature Signal | I | — |
| 9 | 0.5 | BK | 8434 | Diesel Exhaust Fluid Sensor Low Reference | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 1 | YE | 3876 | Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3 | I | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 3 | WH | 1650 | Ground | II | — |
| 14 | 1 | BN | 2936 | Diesel Exhaust Fluid Heating Tank 2 Heater Control Low | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 1 | BU | 4318 | Diesel Exhaust Fluid Tank Heater Low Control | I | — |

## K115 Reductant Control Module (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | BN | 3245 | Diesel Exhaust Fluid Tank Temperature Sensor Low Reference | I | — |
| 19 | 0.5 | BN | 3106 | Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference | I | — |
| 20 | 0.5 | BU | 3108 | Diesel Exhaust Fluid Pressure Sensor Signal | I | — |
| 21 | 0.5 | BU | 3107 | Diesel Exhaust Fluid Pressure Sensor Low Reference | I | — |
| 22 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 1 | BN | 3875 | Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2 | I | — |
| 25 | 2 | BK | 1650 | Ground | III | — |
| 26 | 1 | WH | 3199 | Diesel Exhaust Fluid Pressure Line Heater Control | I | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 1 | BN | 4319 | Diesel Exhaust Fluid Line Heater Low Control | I | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BN | 639 | Run/Crank Ignition 1 Voltage | I | — |
| 31 | 0.5 | BU | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 32 | 0.5 | BU | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 33 | 0.5 | BN | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 34 | 0.5 | BN | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 1 | BU | 2937 | Diesel Exhaust Fluid Pump Motor Stator Low Reference | I | — |
| 37 | 1 | WH | 3103 | Diesel Exhaust Fluid Smart Pump Control | I | — |
| 38 | 2 | RD | 3440 | Battery Positive Voltage | III | — |

# K124 Image Processing Module X1 (UGN&UKL)




5493608

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35392290
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( BK with GY Inner Connector)

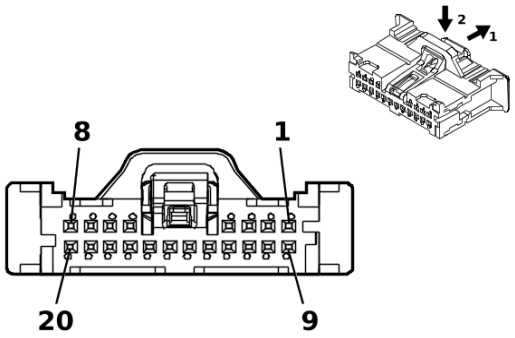
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K124 Image Processing Module X1 (UGN&UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | RD / WH | 4740 | Battery Positive Voltage | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 10 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 11 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 17 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | BK / WH | 1451 | Signal Ground | I | — |
| 20 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | GN / GY | 4627 | Image Processing Module LIN Bus 1 | I | — |
| 24 - 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.35 | VT / GY | 8978 | Inertial Sensor Supply Voltage | I | — |
| 28 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 0.35 | WH | 7225 | Ethernet Bus 11 [+] | I | — |
| 32 | 0.35 | BU | 7224 | Ethernet Bus 11 [-] | I | — |

# K124 Image Processing Module X1 (UGN-UKL)




5200955

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35068196
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F Mini 50 Series( BK)

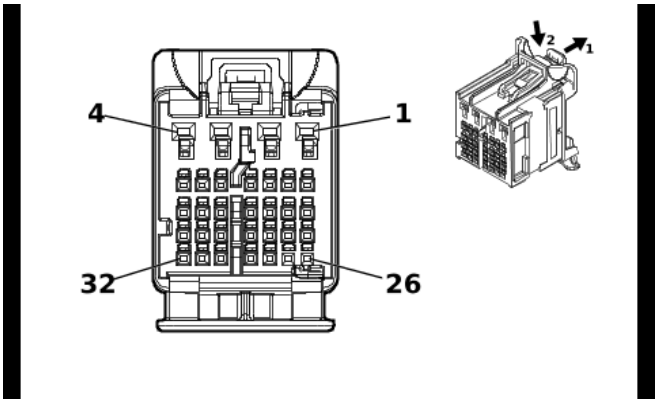
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K124 Image Processing Module X1 (UGN-UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 1451 | Signal Ground | I | — |
| 2 | 0.35 | RD / WH | 4740 | Battery Positive Voltage | I | — |
| 3 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 7 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 8 - 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 19 | 0.35 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 20 | — | — | — | Not Occupied | — | — |

# K124 Image Processing Module X2 (UGN&UKL)




5493614

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35392291
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( GY with GY Inner Connector)

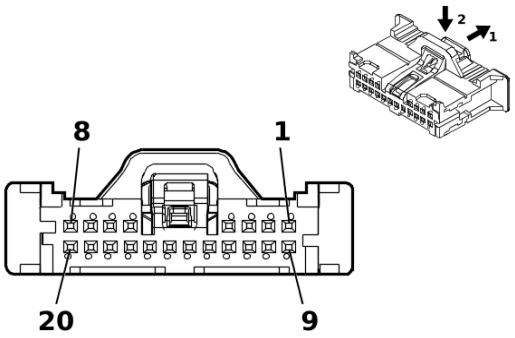
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K124 Image Processing Module X2 (UGN&UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | YE | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 6 | 0.35 | YE | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 7 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 8 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 9 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 10 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | YE | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 14 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 15 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 16 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 17 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 18 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | BU / YE | 8977 | Private Serial Data Active Safety CAN Bus [+] Serial Data | I | — |
| 22 | 0.35 | WH / YE | 8976 | Private Serial Data Active Safety CAN Bus [-] Serial Data | I | — |
| 23 - 32 | — | — | — | Not Occupied | — | — |

# K124 Image Processing Module X2 (UGN-UKL)




5360760

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35068197
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 050 CTS Series( GY)

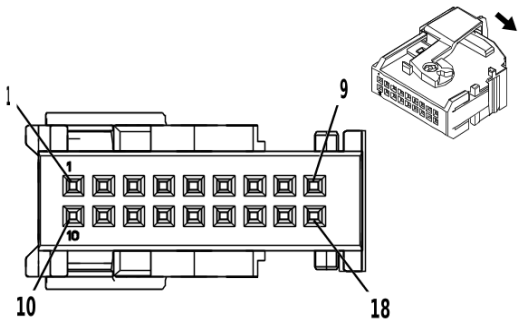
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K124 Image Processing Module X2 (UGN-UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 2 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 3 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 4 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 5 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 11 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 12 - 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 18 - 20 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Module X1 (UV2)




4329088

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35332167
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series( BK)

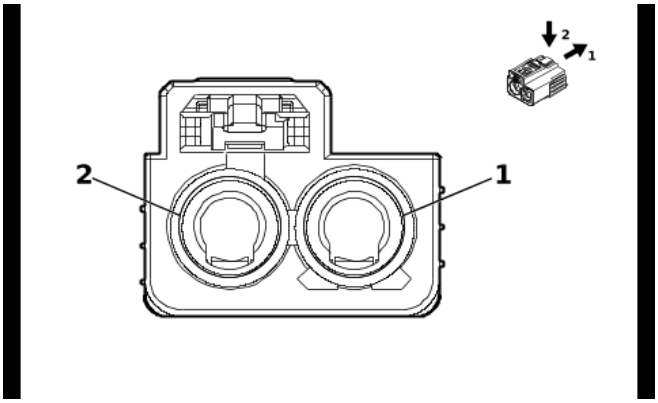
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300632 | J-35616-64B (L-BU) | J-38125-215A |

## K157 Video Processing Module X1 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK / WH | 1451 | Signal Ground | I | — |
| 4 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | RD / VT | 1640 | Battery Positive Voltage | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 14 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 15 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 16 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Module X3 (UV2)




5810808

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33340388
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way F Coax Type( RD)

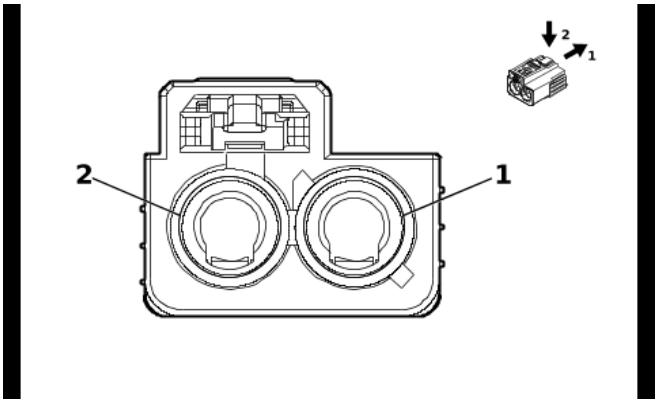
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K157 Video Processing Module X3 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.16 | BK | 4723 | Video Processing Module LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Module X4 (UV2)




5810836

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33340386
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way F Coax Type( BG)

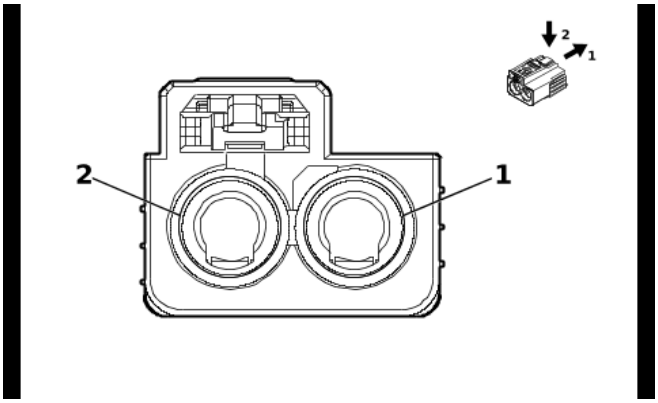
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K157 Video Processing Module X4 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.16 | BK | 4721 | Rearview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Module X5 (UV2)




5810827

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33340382
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way F Coax Type( GN)

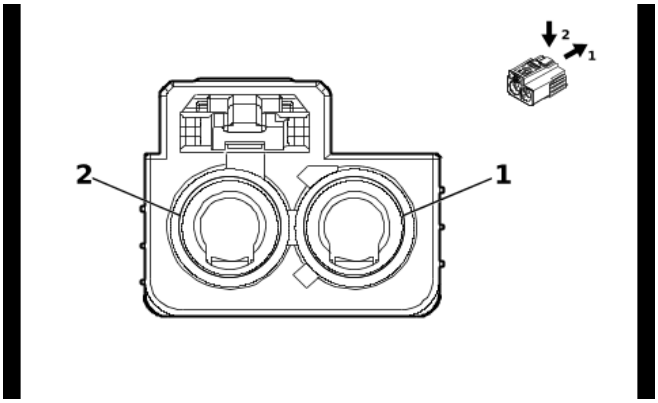
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K157 Video Processing Module X5 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.16 | BK | 7886 | Trailer 2 Rear Vision Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |
| 2 | 0.8 | BK | 2548 | Cargo Bed Rear Vision Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |

# K157 Video Processing Module X6 (UV2)




5810832

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33340383
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way F Coax Type( BN)

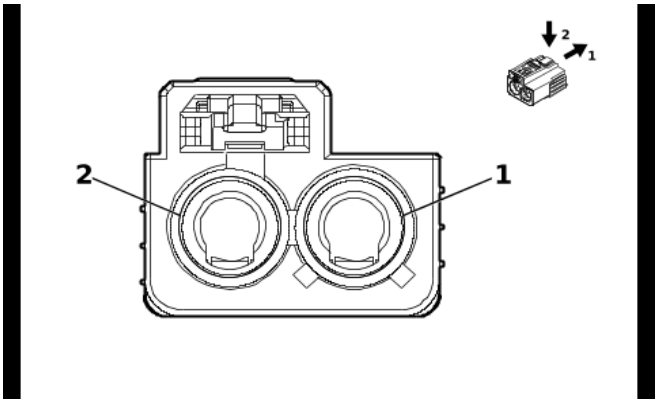
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K157 Video Processing Module X6 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.16 | BK | 2421 | Trailer Rear Vision Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |
| 2 | 0.8 | BK | 4725 | Left Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |

# K157 Video Processing Module X7 (UV2)




5810835

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33340387
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way F Coax Type( CU)

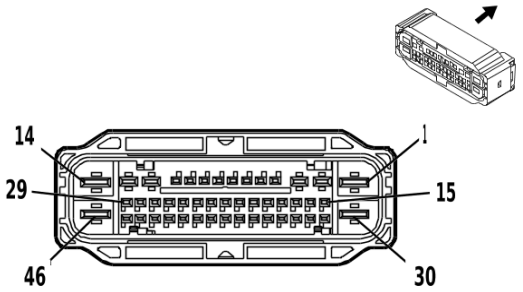
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K157 Video Processing Module X7 (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.16 | BK | 4722 | Frontview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |
| 2 | — | BK | 4724 | Right Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | I | — |

# K160 Brake System Control Module




4162046

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35495608
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575368 | J-35616-35 (VT) | J-38125-36 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 84634921 | J-35616-42 (RD) | J-38125-212 |

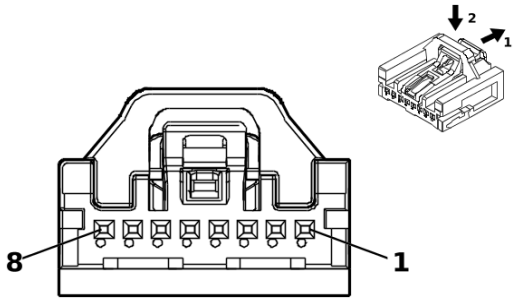
## K160 Brake System Control Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 6 | BK | 150 | Ground | III | — |
| 2 | 2.5 | WH | 2001 | Left Park Brake Motor Apply Control | I | — |
| 3 | 2.5 | GY / BK | 4369 | Left Park Brake Motor Low Reference | I | — |
| 4 | 0.5 | GY / WH | 7064 | Left Front Wheel Speed Sensor Control | II | — |
| 5 | 0.5 | GY | 830 | Left Front Wheel Speed Sensor Signal | II | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | II | — |
| 10 | 0.5 | GY / BN | 7065 | Right Front Wheel Speed Sensor Control | II | — |
| 11 | 0.5 | YE | 872 | Right Front Wheel Speed Sensor Signal | II | — |
| 12 | 2.5 | GN / VT | 1988 | Right Park Brake Motor Apply Control | I | — |
| 13 | 2.5 | GY | 4368 | Right Park Brake Motor Low Reference | I | — |
| 14 | 6 | RD / WH | 1642 | Battery Positive Voltage | III | — |
| 15 | 0.5 | GY / BK | 7127 | Left Rear Wheel Speed Sensor Control | II | — |
| 16 | 0.5 | BU | 884 | Left Rear Wheel Speed Sensor Signal | II | — |
| 17 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 18 | 0.5 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | II | — |
| 19 | 0.35 | GN / GY | 817 | Vehicle Speed Signal | II | — |
| 20 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | GN / YE | 2731 | Brake System Control Module LIN Bus 1 | II | — |
| 24 | — | — | — | Not Occupied | — | — |

## K160 Brake System Control Module (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | II | — |
| 26 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | GY / YE | 7128 | Right Rear Wheel Speed Sensor Control | II | — |
| 29 | 0.5 | VT | 882 | Right Rear Wheel Speed Sensor Signal | II | — |
| 30 | 6 | BK | 250 | Ground | III | — |
| 31 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 34 | 0.5 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | II | — |
| 35 | 0.5 | GN / BU | 2733 | Brake System Control Module LIN Bus 2 | II | — |
| 36 | 0.5 | WH / BK | 2223 | Trailer Brake Apply Signal | II | — |
| 37 | 0.5 | YE / BK | 2224 | Trailer Brake Enable Signal | II | — |
| 38 | 0.5 | GN / GY | 333 | Brake Fluid Level Signal | II | — |
| 39 | 0.5 | BN / BU | 1602 | Front Brake Pad Wear Sensor Signal | II | — |
| 40 | — | — | — | Not Occupied | — | — |
| 41 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | II | — |
| 42 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | II | — |
| 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN / YE | 1616 | Rear Brake Pad Wear Sensor Signal | II | — |
| 45 | — | — | — | Not Occupied | — | — |
| 46 | 6 | RD / WH | 1040 | Battery Positive Voltage | III | — |

# K179 Automated Driving Mapping Module X1 (UKL)




5200269

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

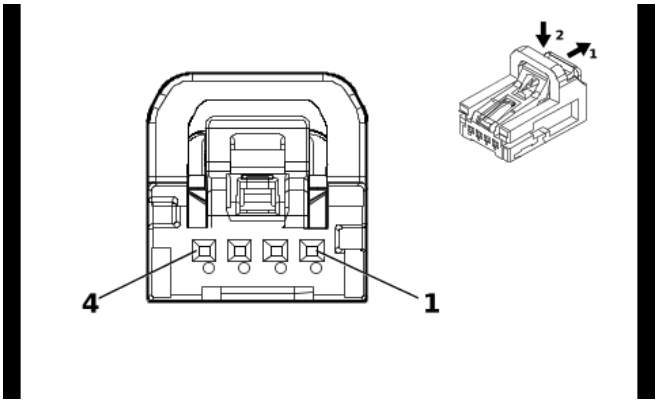
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

### K179 Automated Driving Mapping Module X1 (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 3 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 4 | 0.35 | BU / GY | 4105 | AUTOSAR CAN Bus [+] 8 Serial Data | I | — |
| 5 | 0.35 | WH / GY | 4104 | AUTOSAR CAN Bus [-] 8 Serial Data | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK / WH | 851 | Signal Ground | I | — |

# K179 Automated Driving Mapping Module X2 (UKL)




5921812

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068221
Service Connector: 86825465
Description: 4-Way F Mini 50 Series( GN)

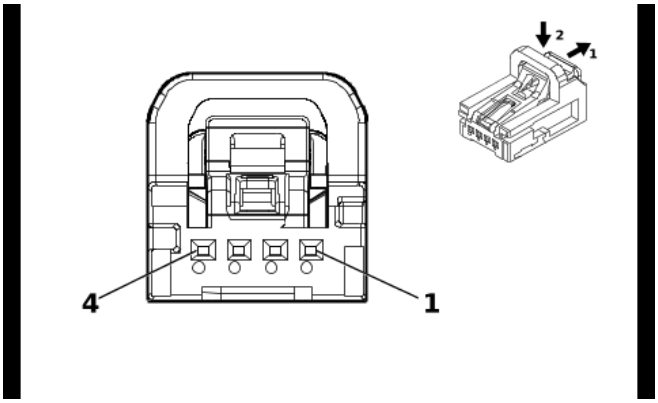
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K179 Automated Driving Mapping Module X2 (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | BU | 7208 | Ethernet Bus 3 [-] | I | — |
| 3 | 0.35 | GN | 7209 | Ethernet Bus 3 [+] | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# K179 Automated Driving Mapping Module X3 (UKL)




5921811

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068220
Service Connector: 86825464
Description: 4-Way F Mini 50 Series( BN)

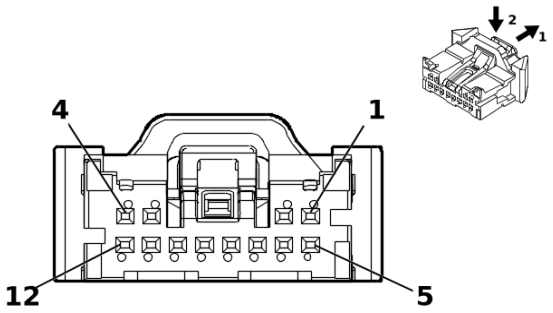
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K179 Automated Driving Mapping Module X3 (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | BU | 7224 | Ethernet Bus 11 [-] | I | — |
| 3 | 0.35 | WH | 7225 | Ethernet Bus 11 [+] | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# K180 Driver Monitoring System Module X1 (UKL)




5360826

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068239
Service Connector: 13529935
Description: 12-Way F 050 CTS Series( BK)

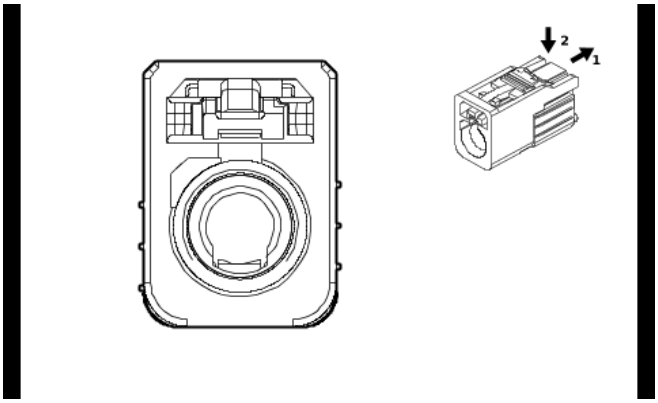
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84944580 | EL-35616-58 (BK) | EL-38125-58 |

## K180 Driver Monitoring System Module X1 (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / YE | 3040 | Battery Positive Voltage | I | — |
| 2 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 3 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 4 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BU / BN | 7744 | Driver Illumination Lamp Ground | I | — |
| 8 | 0.35 | YE / BU | 2245 | Driver Illumination Lamp 2 Control | I | — |
| 9 | 0.35 | WH / VT | 2246 | Driver Illumination Lamp 1 Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 12 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |

# K180 Driver Monitoring System Module X2 (UKL)




5519144

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340313
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( GN)

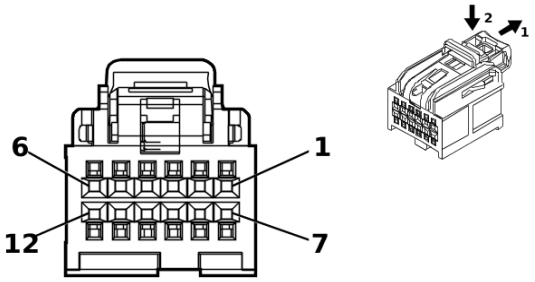
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## K180 Driver Monitoring System Module X2 (UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Driver Monitoring System Camera Coaxial Signal | I | — |

# K182 Parking Assist Control Module X1 (UD5/UD7)




4975223

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series( BK)

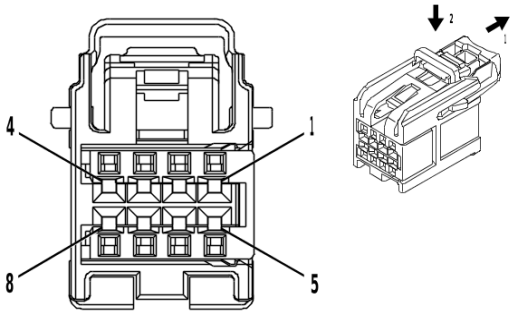
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300660 | J-35616-64B (L-BU) | J-38125-215A |

## K182 Parking Assist Control Module X1 (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / WH | 4740 | Battery Positive Voltage | I | — |
| 2 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 3 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5<br>0.75 | BK / WH<br>BK / WH | 1551<br>1551 | Signal Ground<br>Signal Ground | I<br>I | EXTENDED CAB/ CREW CAB<br>REGULAR CAB |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | WH | 4986 | AUTOSAR CAN Bus [-] 1 Serial Data | I | — |
| 9 | 0.5 | BU | 4987 | AUTOSAR CAN Bus [+] 1 Serial Data | I | — |
| 10 - 12 | — | — | — | Not Occupied | — | — |

# K182 Parking Assist Control Module X2 (UD5/UD7)




4232228

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series( GY)

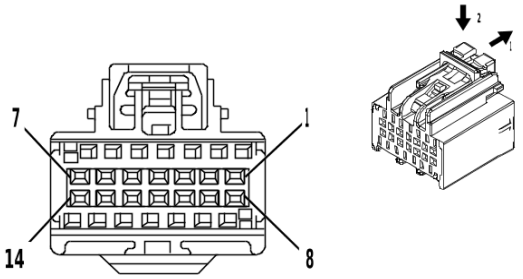
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K182 Parking Assist Control Module X2 (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | YE / WH | 2377 | Right Rear Middle Parking Assist Sensor Signal | I | — |
| 3 | 0.5 | YE | 2375 | Left Rear Outer Parking Assist Sensor Signal | I | — |
| 4 | 0.5 | BN / WH | 2374 | Object Sensor Voltage Reference | I | — |
| 5 | 0.5 | YE / VT | 2378 | Right Rear Outer Parking Assist Sensor Signal | I | — |
| 6 | 0.5 | YE / BU | 2376 | Left Rear Middle Parking Assist Sensor Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BK / GY | 2379 | Object Sensor Low Reference | I | — |

# K182 Parking Assist Control Module X3 (UD5/UD7)




4547098

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35014564
Service Connector: 19354933
Description: 14-Way F 0.64 Kaizen Series( BU)

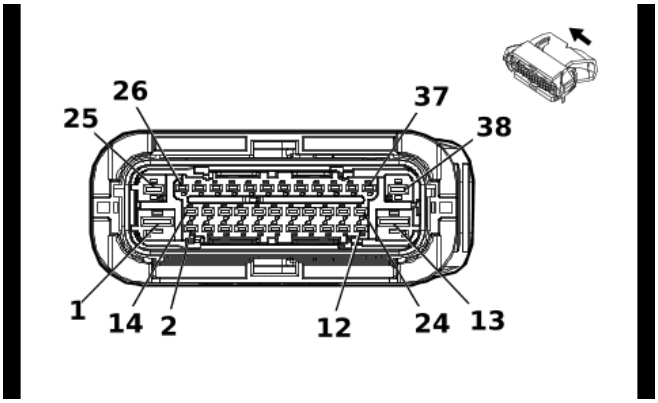
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19303553 | J-35616-64B (L-BU) | J-38125-215A |

## K182 Parking Assist Control Module X3 (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | YE / GY | 5216 | Left Front Middle Parking Assist Sensor | I | — |
| 6 | 0.5 | WH / GY | 5217 | Right Front Outer Parking Assist Sensor | I | — |
| 7 | 0.5 | BN | 6581 | Front Parking Assist Display Control | I | — |
| 8 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | VT / WH | 5215 | Left Front Outer Parking Assist Sensor | I | — |
| 12 | 0.5 | VT / GY | 5218 | Right Front Middle Parking Assist Sensor | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | BK / BU | 5214 | Front Parking Assist Sensor Low Reference | I | — |

## K194 Rear Gate Module (QK1&QT6)




3240112

### Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35503407
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed( BK with BU Inner Connector)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-35 (VT) | No Tool Required |
| III | Not required | J-35616-40 (BU) | No Tool Required |

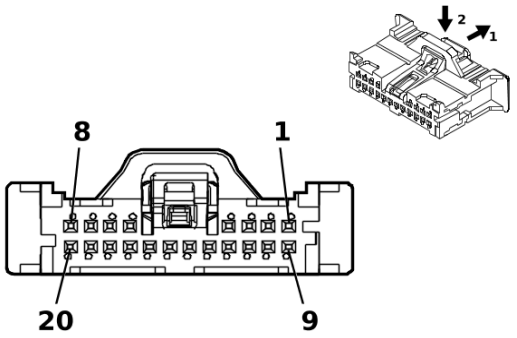
### K194 Rear Gate Module (QK1&QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1850 | Ground | III | — |
| 2 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 3 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | YE / BK | 8085 | Rear Closure Latch Primary Status | I | — |
| 6 | 0.5 | BN / GY | 10281 | Rear Closure Latch Secondary Status Signal | I | — |
| 7 | 0.5 | WH / GN | 8084 | Rear Closure Latch Neutral Status | I | — |
| 8 | 0.5 | GY / VT | 4678 | Rear Closure Latch Unlatch Status | I | — |
| 9 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 2.5 | RD / VT | 4442 | Primary Fused Battery Positive Voltage | III | — |
| 14 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 15 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |
| 16 | 0.5 | BN | 7736 | Rear Closure Latch 2 Unlatch Status Signal | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | BN / RD | 4683 | Rear Closure Position Sensor Voltage Reference | I | — |
| 19 | 0.5 | BK / GN | 4687 | Rear Closure Position Sensor Low Reference | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BN / YE | 4686 | Rear Closure Position Sensor Signal 2 | I | — |
| 22 | 0.5 | BU / WH | 4685 | Rear Closure Position Sensor Signal 1 | I | — |

## K194 Rear Gate Module (QK1&QT6) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 23 | 0.5 | GN / BU | 10283 | Rear Closure Latch 2 Primary Status Signal | I | — |
| 24 | 0.5 | VT / WH | 10284 | Rear Closure Latch 2 Secondary Status Signal | I | — |
| 25 | 1 | BN / WH | 4690 | Rear Closure Open/Close Motor Close Control | II | — |
| 26 | 0.5 | BU / BN | 10282 | Rear Closure Latch 2 Neutral Status Signal | I | — |
| 27 | 0.5 | GY / BK | 1575 | Rear Closure Sensor Low Reference 2 | I | — |
| 28 | 0.5 | BK / VT | 4656 | Rear Closure Object Sensor Low Reference | I | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 1 | BU | 1509 | Rear Closure Cinch Latch Motor 2 Release Control | I | — |
| 31 | 1 | GN | 1499 | Rear Closure Cinch Latch Motor 2 Cinch Control | I | — |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 1 | BU / GY | 4682 | Rear Closure Cinch Latch Motor Release Control | I | — |
| 34 | 1 | BN | 4681 | Rear Closure Cinch Latch Motor Cinch Control | I | — |
| 35 | 0.5 | GN | 1577 | Rear Closure Clutch Control | I | — |
| 36 | 0.5 | BU / BK | 1590 | Rear Closure Clutch Low Return | I | — |
| 37 | — | — | — | Not Occupied | — | — |
| 38 | 1 | WH | 4689 | Rear Closure Open/Close Motor Open Control | II | — |

# K212 Gear Shift Control Module (D07)




5200955

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35068196
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F Mini 50 Series( BK)

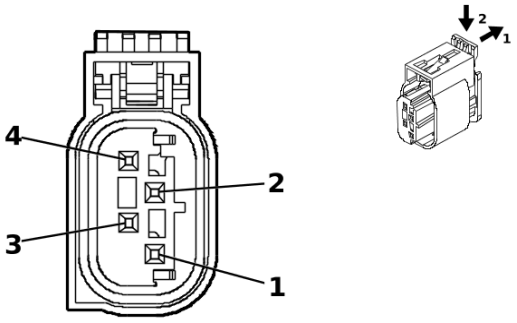
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## K212 Gear Shift Control Module (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 2 | 0.35 | BU / BK | 4977 | AUTOSAR CAN Bus [+] 3 Serial Data | I | — |
| 3 | 0.35 | YE | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 4 | 0.35 | YE | 4976 | AUTOSAR CAN Bus [-] 3 Serial Data | I | — |
| 5 | 0.35 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 6 | 0.35 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 7 | 0.35 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 8 | 0.35 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 9 | 0.35 | RD / WH | 5440 | Battery Positive Voltage | I | — |
| 10 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 17 | 0.35 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | I | — |
| 18 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.35 | BK | 1350 | Ground | I | — |

# K214 Trailer Tire Pressure Indicator Module (UET)




5215490

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13655424
Service Connector: 86825461
Description: 4-Way F 0.64 MTS Series, Sealed( BK)

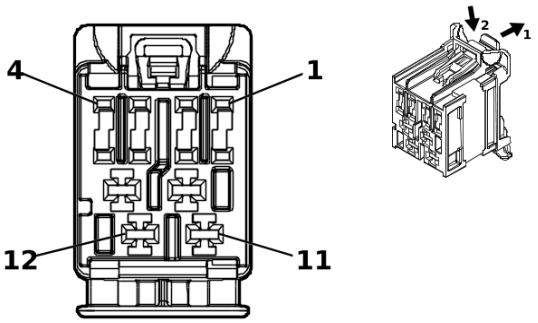
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## K214 Trailer Tire Pressure Indicator Module (UET)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 6940 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BK / WH | 1951 | Signal Ground | I | — |
| 3 | 0.5 | GN / YE | 2862 | Body Control Module LIN Bus 16 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# K219 Lighting Control Module X1




5203784

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33382115
Service Connector: 13509990
Description: 12-Way F 1.2, 2.8 stAK50h Series( L-PU)

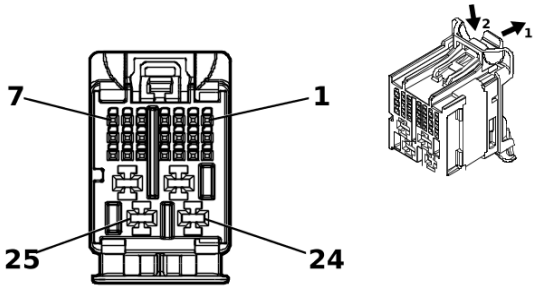
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84729890 | J-35616-12 (BU) | J-38125-215A |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

## K219 Lighting Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / YE | 1254 | Left Front Park Lamp Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / WH | 24 | Backup Lamp Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BU / WH | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 6 | 0.5 | BN / GY | 5061 | Left Front Fog Lamp Control | I | — |
| 7 | 0.5 | GN / YE | 6846 | Rear License Plate Lamp Control | I | — |
| 8 | 0.35 | GY / BU | 7538 | Left Front DRL Control | I | — |
| 9 | 0.5 | RD / VT | 7140 | Battery Positive Voltage | II | — |
| 10 | 0.75 | YE | 712 | Left Headlamp Low Beam Control | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.75 | WH | 711 | Left Headlamp High Beam Control | II | — |

# K219 Lighting Control Module X2




5203807

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392286
Service Connector: 13534966
Description: 25-Way F 0.5 MQS, 2.8 MCP Series( GY with GY Inner Connector)

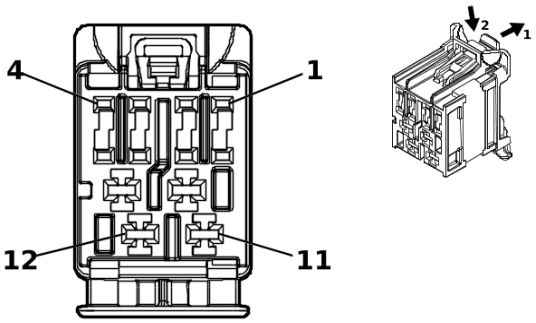
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

## K219 Lighting Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BN / GY | 2268 | Windshield Washer Relay Control | I | — |
| 4 | 0.35 | BU / BN | 38 | Backup Lamp Relay Control | I | — |
| 5 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | BN / GN | 196 | Windshield Wiper Motor Park Switch Signal | I | — |
| 11 | 0.35 | VT / BK | 6568 | Front Turn Signal Lamp Feedback Signal | I | — |
| 12 | 0.35 | GY | 91 | Windshield Wiper Motor Relay Coil Control | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | VT | 185 | Low Washer Fluid Indicator Control | I | — |
| 15 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | WH / BN | 7055 | Auxiliary Park Lamp Relay Control | I | — |
| 20 | 0.35 | WH / YE | 7545 | Right Front Turn Signal Lamp Feedback Signal | I | — |
| 21 | 0.35 | WH / VT | 860 | Windshield Wiper Switch High Signal | I | — |
| 22 | 0.5 | RD / GN | 7740 | Battery Positive Voltage | II | — |
| 23 | 0.5 | RD / BU | 840 | Battery Positive Voltage | II | — |
| 24 - 25 | — | — | — | Not Occupied | — | — |

# K219 Lighting Control Module X3




5203797

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33382116
Service Connector: 13509989
Description: 12-Way F 1.2, 2.8 stAK50h Series( GN)

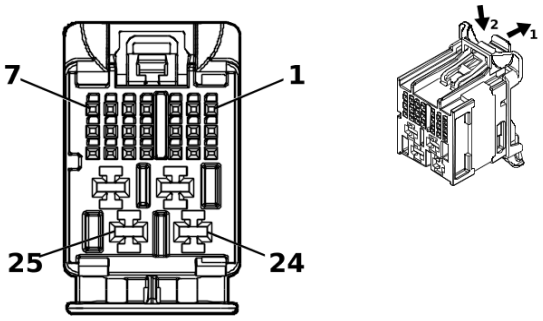
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84729890 | J-35616-12 (BU) | J-38125-215A |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

## K219 Lighting Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / BN | 7539 | Right Front DRL Control | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BU / GN | 1253 | Right Front Park Lamp Control | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.75 | BU / VT | 1335 | Right Rear Turn Signal Lamp Control 2 | I | — |
| 7 | 0.35 | BU / YE | 7761 | Backup Illumination Lamp Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 1.5 | RD / BU | 540 | Battery Positive Voltage | II | — |
| 10 | 1.5 | RD / BN | 1440 | Battery Positive Voltage | II | — |
| 11 | 0.75 | WH | 311 | Right Headlamp High Beam Control | II | — |
| 12 | 1 | YE | 312 | Right Headlamp Low Beam Control | II | — |

# K219 Lighting Control Module X4




5203416

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392283
Service Connector: 13534969
Description: 25-Way F 0.5 MQS, 2.8 MCP Series( PU with GY Inner Connector)

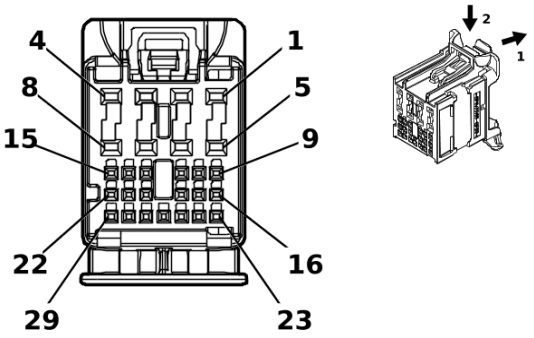
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 87814662 | J-35616-4A (PU) | J-38125-557 |

## K219 Lighting Control Module X4

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 4 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 5 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 6 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 7 | 0.35 | WH / BU | 6311 | Cruise/ETC/TCC Brake Signal | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | WH | 4978 | AUTOSAR CAN Bus [-] 2 Serial Data | I | — |
| 11 | 0.35 | BU / YE | 4979 | AUTOSAR CAN Bus [+] 2 Serial Data | I | — |
| 12 - 21 | — | — | — | Not Occupied | — | — |
| 22 | 1 | RD / BN | 1140 | Battery Positive Voltage | II | — |
| 23 | 1 | BK / WH | 1551 | Signal Ground | II | — |
| 24 | 0.5 | RD / GN | 1540 | Battery Positive Voltage | II | — |
| 25 | 1 | BK / WH | 1451 | Signal Ground | II | — |

# K219 Lighting Control Module X5




5203373

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392292
Service Connector: 13534975
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series( BU with GY Inner Connector)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | EL-38125-58 |
| II | 84729890 | J-35616-12 (BU) | J-38125-215A |

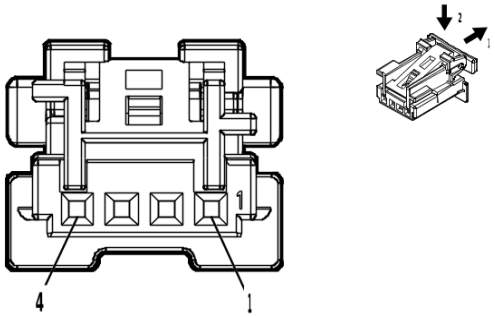
## K219 Lighting Control Module X5

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GN | 5966 | Approach Lamp Control | II | — |
| 2 | 0.75 | BN / GY | 6995 | Right Rear Park Lamp Control | II | — |
| 3 | 0.5 | GY / BU | 7762 | Cargo Lamp Control | II | — |
| 4 | 0.5 | WH / VT | 1430 | Exterior Courtesy Lamp Control | II | — |
| 5 | 0.5 | YE / GN | 2024 | Animation Lighting Control | II | — |
| 6 | 0.75 | BN / BU | 6993 | Left Rear Park Lamp Control | II | — |
| 7 | 0.5 | GN / VT | 1315 | Right Front Turn Signal Lamp Control | II | — |
| 8 | 0.75 | BU / WH | 1334 | Left Rear Turn Signal Lamp Control 2 | II | — |
| 9 | 0.35 | GN / GY | 2115 | Right Turn Signal Lamp Control 2 | I | — |
| 10 | 0.35 | WH / GY | 2114 | Left Turn Signal Lamp Control 2 | I | — |
| 11 | 0.35 | GY | 1715 | Windshield Wiper Switch High Signal | I | — |
| 13 | 0.35 | GN / BN | 319 | Right Rear Trailer Stop/Turn Lamp Control | I | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | WH / GY | 2935 | Task Lamp Switch Signal | I | — |
| 16 | 0.35 | YE / WH | 2934 | Task Lamp Control Right | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | I | — |
| 20 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | WH / VT | 6567 | Rear Turn Signal Lamp Feedback Signal | I | — |
| 24 | 0.35 | WH / BK | 7544 | Right Rear Turn Signal Lamp Feedback Signal | I | — |
| 25 | 0.35 | BN / YE | 820 | Center High Mounted Stop Lamp Supply Voltage | I | — |

## K219 Lighting Control Module X5 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 26 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | YE / GY | 2933 | Task Lamp Control Left | I | — |
| 29 | 0.35 | YE / BU | 318 | Left Rear Trailer Stop/Turn Lamp Control | I | — |

# M4 Air Inlet Valve Actuator




4997407

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 2294218-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

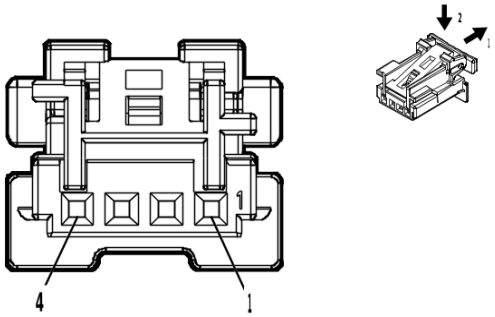
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## M4 Air Inlet Valve Actuator

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 1050 | Ground | I | — |
| 2 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 3 | 0.35 | BK | 1050 | Ground | I | — |
| 4 | 0.35 | WH / YE | 4634 | HVAC Remote Enable Signal | I | — |

# M6PL Programmable Temperature Valve Actuator - Left




4997407

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 2294218-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

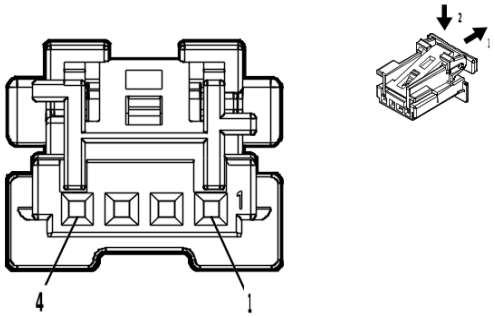
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## M6PL Programmable Temperature Valve Actuator - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 1050 | Ground | I | — |
| 2 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 3 | 0.35 | BK | 1050 | Ground | I | — |
| 4 | 0.35 | WH / YE | 4634 | HVAC Remote Enable Signal | I | — |

# M6PR Programmable Temperature Valve Actuator - Right




4997407

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 2294218-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

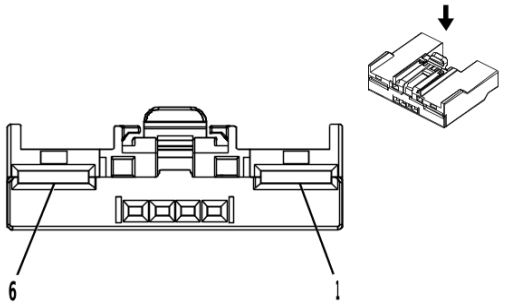
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## M6PR Programmable Temperature Valve Actuator - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 1050 | Ground | I | — |
| 2 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | WH / YE | 4634 | HVAC Remote Enable Signal | I | — |

# M8 Blower Motor




2904463

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13965831
Service Connector: 19356432
Description: 6-Way F 0.64 GET, 6.3 Series( BK)

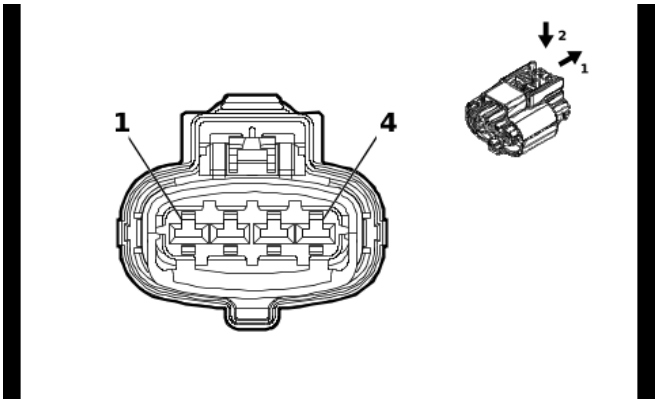
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |

## M8 Blower Motor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 4 | RD / GY | 1740 | Battery Positive Voltage | I | — |
| 2 | 0.35 | BU / GY | 754 | Blower Motor Speed Control | II | — |
| 3 | 0.35 | GN / BU | 761 | Blower Speed Feedback Signal | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 4 | BK | 1050 | Ground | I | — |

# M10 Charge Air Cooler Coolant Pump (LZ0)




5869064

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133588
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed( BK)

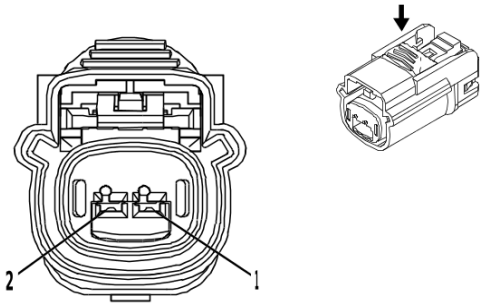
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## M10 Charge Air Cooler Coolant Pump (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |
| 2 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 1 | BK | 6150 | Engine Odd Bank Ground | I | — |

# M14A Pickup Box Endgate Lock Actuator (QT6)




4332222

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 15514573
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

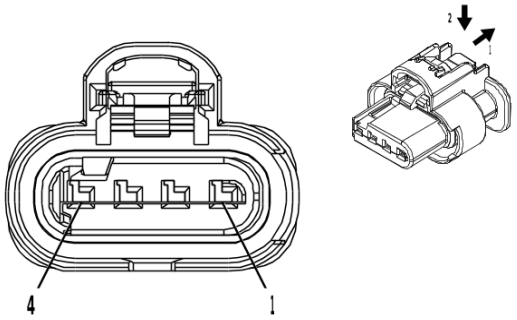
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## M14A Pickup Box Endgate Lock Actuator (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | GN | 1299 | Major Endgate Motor Control | I | — |
| 2 | 1 | YE / BK | 7730 | Major Endgate Motor Low Reference | I | — |

# M26 Front Drive Axle Actuator (NP0/NQH)




4210809

## Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness
OEM Connector: 33390897
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

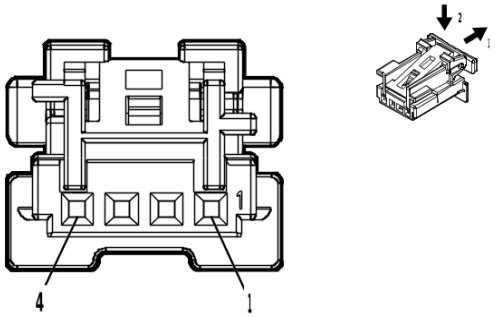
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## M26 Front Drive Axle Actuator (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 8016 | Secondary Axle Motor Control | I | — |
| 2 | 0.5 | GY / BK | 1570 | Front Axle Actuator Control | I | — |
| 3 | 0.5 | YE / WH | 1695 | 4WD Locked Range Indicator Control | I | — |
| 4 | 0.5 | BK | 450 | Ground | I | — |

# M37 Mode Valve Actuator




4997407

## Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 2294218-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

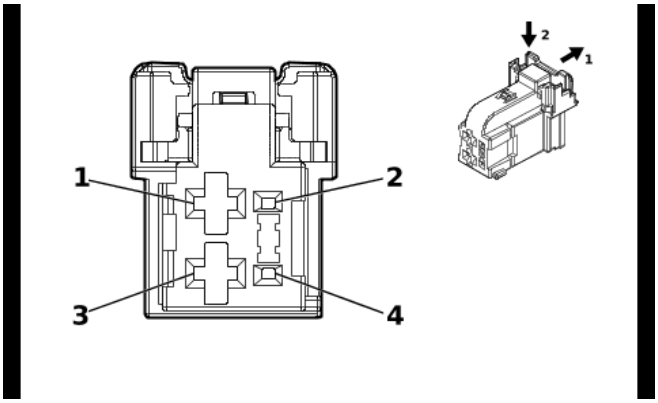
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## M37 Mode Valve Actuator

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 1050 | Ground | I | — |
| 2 | 0.35 | GN / VT | 2852 | Body Control Module LIN Bus 6 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | WH / YE | 4634 | HVAC Remote Enable Signal | I | — |

# M50D Front Seat Tilt Adjuster Actuator - Driver (A2X&A45)




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

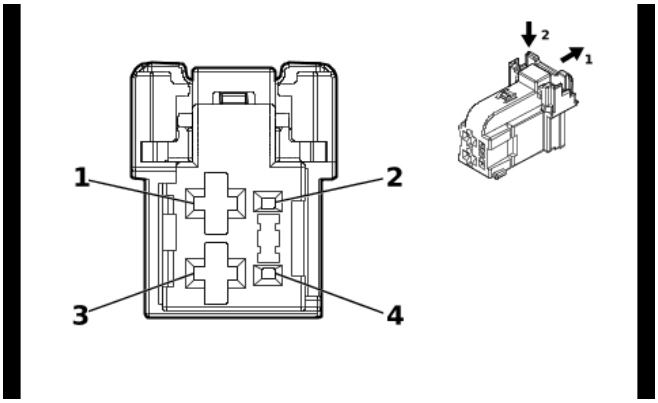
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M50D Front Seat Tilt Adjuster Actuator - Driver (A2X&A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU / VT | 287 | Driver Seat Front Vertical Motor Down Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN / BN | 286 | Driver Seat Front Vertical Motor Up Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M50D Front Seat Tilt Adjuster Actuator - Driver (A2X-A45)




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

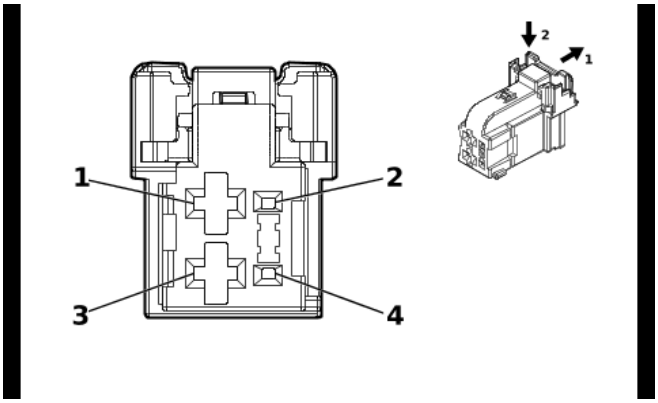
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M50D Front Seat Tilt Adjuster Actuator - Driver (A2X-A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU / VT | 287 | Driver Seat Front Vertical Motor Down Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN / BN | 286 | Driver Seat Front Vertical Motor Up Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M50P Front Seat Tilt Adjuster Actuator - Passenger




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

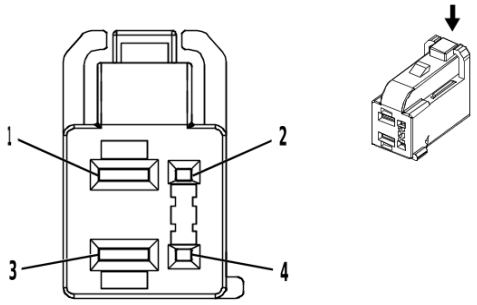
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M50P Front Seat Tilt Adjuster Actuator - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / VT | 297 | Passenger Seat Front Vertical Motor Up Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN / BU | 298 | Passenger Seat Front Vertical Motor Down Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M51D Front Seat Adjuster Actuator - Driver




3683652

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 13583828
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

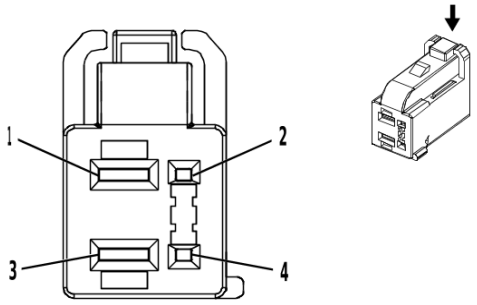
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## M51D Front Seat Adjuster Actuator - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GY / GN | 284 | Driver Seat Horizontal Motor Rearward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | YE / BU | 285 | Driver Seat Horizontal Motor Forward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M51P Front Seat Adjuster Actuator - Passenger




3683652

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 13583828
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

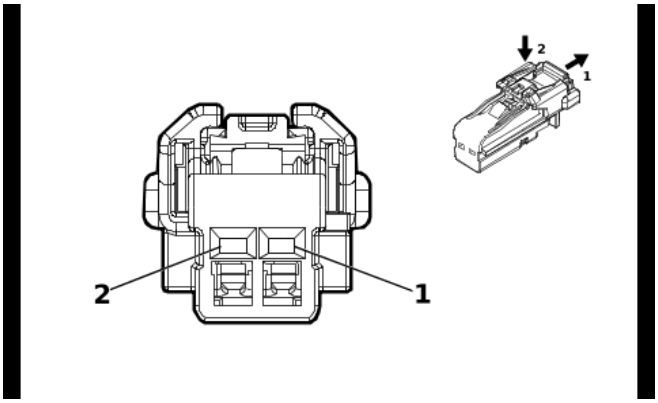
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## M51P Front Seat Adjuster Actuator - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | YE / BU | 290 | Passenger Seat Horizontal Motor Rearward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | YE / WH | 296 | Passenger Seat Horizontal Motor Forward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M53D Front Seat Back Lumbar Motor - Driver




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

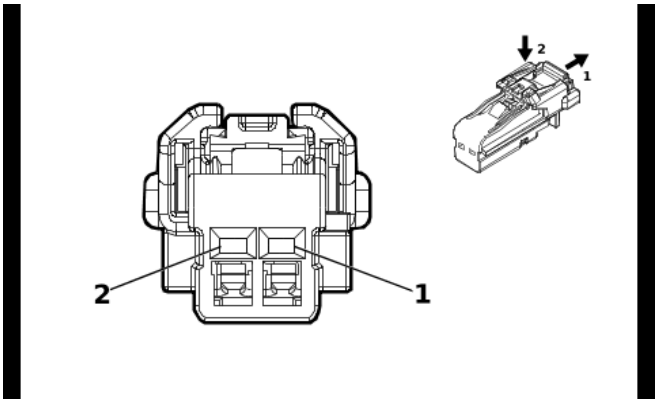
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M53D Front Seat Back Lumbar Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 611 | Driver Seat Lumbar Support Motor Forward Control | I | — |
| 2 | 0.75 | VT | 610 | Driver Seat Lumbar Support Motor Backward Control | I | — |

# M53P Front Seat Back Lumbar Motor - Passenger




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

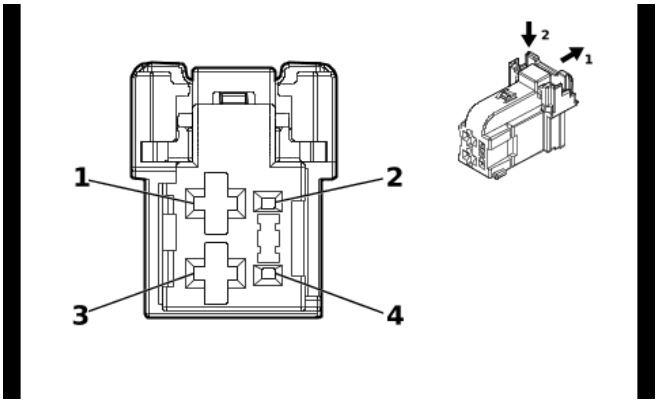
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M53P Front Seat Back Lumbar Motor - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 211 | Passenger Seat Lumbar Support Motor Forward Control | I | — |
| 2 | 0.75 | VT | 210 | Passenger Seat Lumbar Support Motor Backward Control | I | — |

# M55D Front Seat Vertical Adjuster Actuator - Driver




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

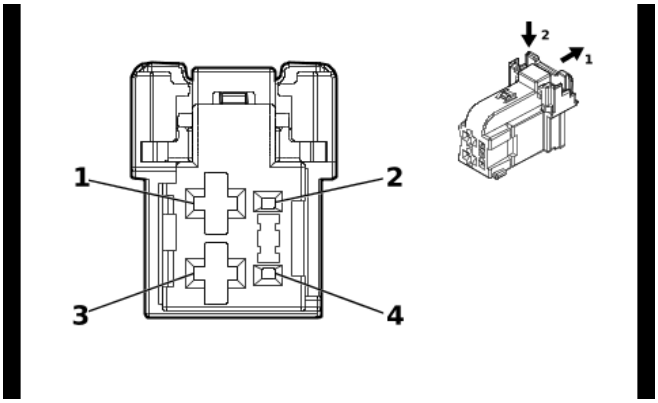
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M55D Front Seat Vertical Adjuster Actuator - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GY / BU | 283 | Driver Seat Rear Vertical Motor Down Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | YE | 282 | Driver Seat Rear Vertical Motor Up Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M55P Front Seat Vertical Adjuster Actuator - Passenger




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

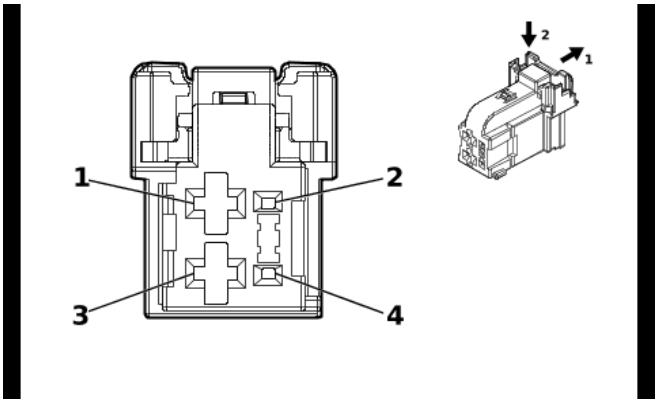
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M55P Front Seat Vertical Adjuster Actuator - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU / WH | 289 | Passenger Seat Rear Vertical Motor Down Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN / WH | 288 | Passenger Seat Rear Vertical Motor Up Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M56D Front Seat Recliner Actuator - Driver (A45)




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

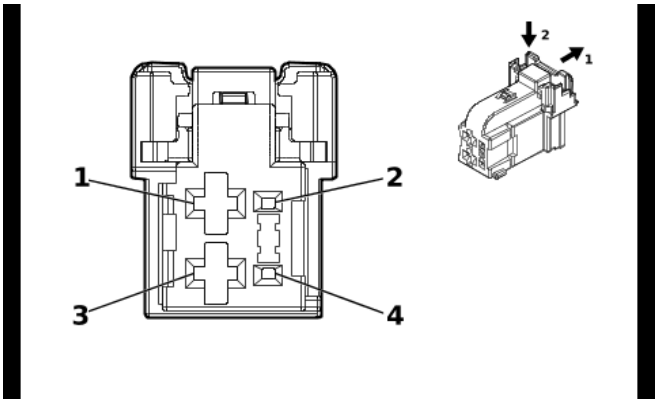
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M56D Front Seat Recliner Actuator - Driver (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / YE | 276 | Driver Seat Recline Motor Forward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | BU / YE | 277 | Driver Seat Recline Motor Rearward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M56P Front Seat Recliner Actuator - Passenger (AKE)




5410027

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

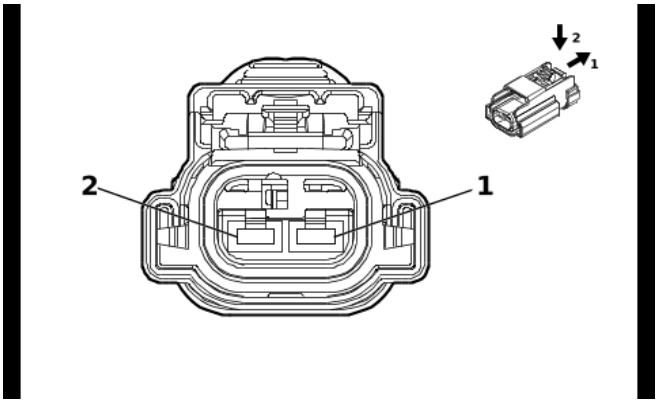
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M56P Front Seat Recliner Actuator - Passenger (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN | 76 | Passenger Seat Recline Motor Forward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | BU / BN | 77 | Passenger Seat Recline Motor Rearward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M63 Rear Sliding Window Motor (A48)




5795169

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35286783
Service Connector: 19301518
Description: 2-Way F 2.8 APEX Series, Sealed( BK)

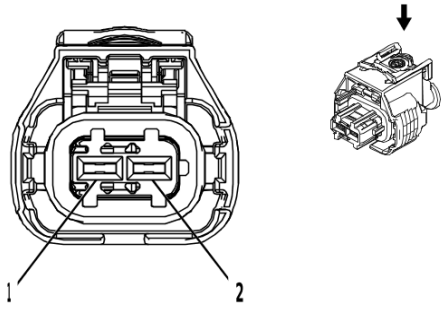
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M63 Rear Sliding Window Motor (A48)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | YE | 7454 | Window Motor Rear Auxiliary Close Control | I | — |
| 2 | 2 | VT / YE | 7453 | Window Motor Rear Auxiliary Open Control | I | — |

# M64 Starter X1 (L3B)




2577394

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed( BK)

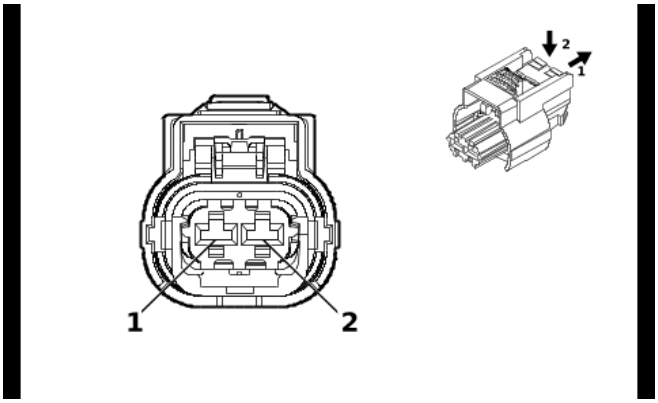
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M64 Starter X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |
| 2 | 2.5 | YE / GN | 4358 | Starter Pinion Solenoid Voltage | I | — |

# M64 Starter X1 (L84/L87)




4992524

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

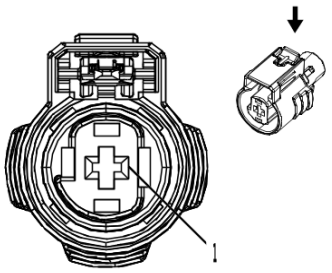
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## M64 Starter X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |
| 2 | 2.5 | YE / GN | 4358 | Starter Pinion Solenoid Voltage | I | — |

# M64 Starter X1 (LZ0)




2717134

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15526411
Service Connector: 19300471
Description: 1-Way F 2.8 MCP Series, Sealed( BK)

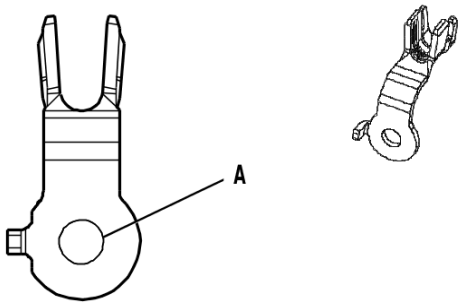
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M64 Starter X1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |

# M64 Starter X2 (L3B)




5020399

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 13516388
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## M64 Starter X2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# M64 Starter X2 (L84/L87)

—

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 86816601
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## M64 Starter X2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# M64 Starter X2 (LZ0)

—

## Connector Part Information

Harness Type: Starter Solenoid Cable
OEM Connector: 8681660
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

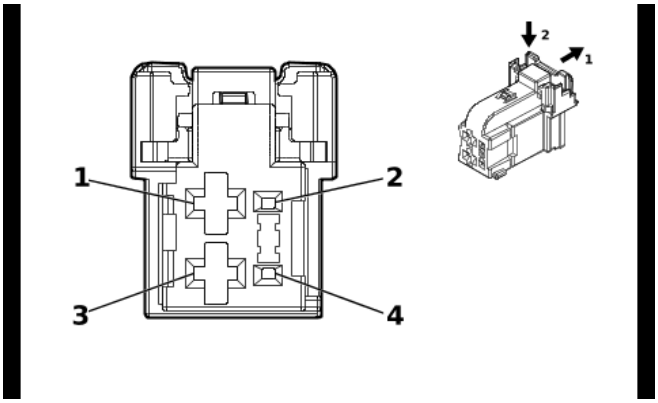
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## M64 Starter X2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD / YE | 2 | Battery Positive Voltage | I | — |

# M65 Steering Column Telescope Actuator (N38)




5410027

## Connector Part Information

Harness Type: Steering Column Tilt and Telescope Wheel Actuator Motor Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

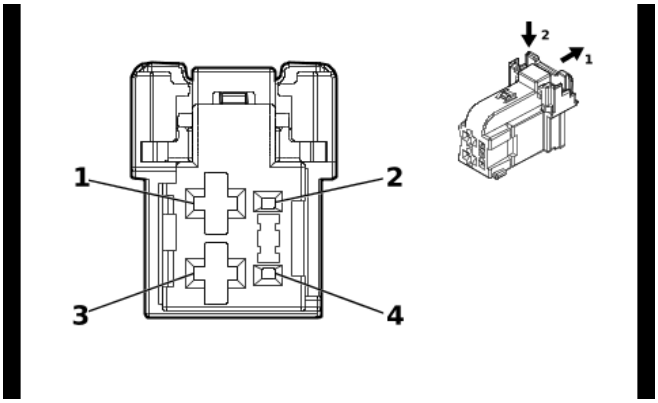
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## M65 Steering Column Telescope Actuator (N38)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | GN / BK | 2098 | Steering Column Telescope Motor Forward Control | I | — |
| 2 | 0.35 | YE / BN | 2153 | Steering Column Telescope Motor Signal | I | — |
| 3 | 1 | VT / GY | 2110 | Steering Column Telescope Motor Rearward Control | I | — |
| 4 | 0.35 | YE / BK | 2152 | Steering Column Telescope Motor Low Reference | I | — |

# M68 Steering Column Tilt Wheel Actuator (N38)




5410027

## Connector Part Information

Harness Type: Steering Column Tilt and Telescope Wheel Actuator Motor Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series( BK)

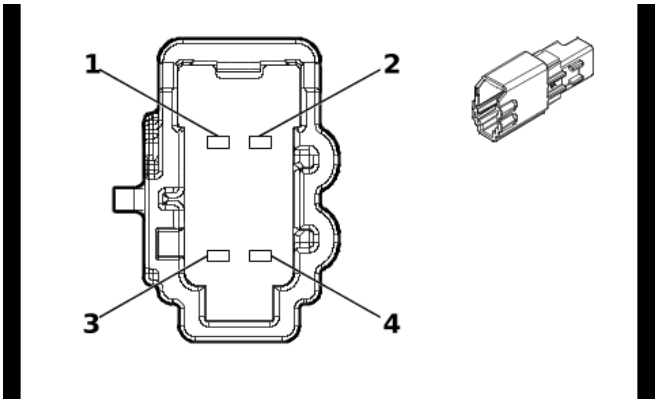
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## M68 Steering Column Tilt Wheel Actuator (N38)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | GY / VT | 2112 | Steering Column Tilt Motor Down Control | I | — |
| 2 | 0.35 | BN / GY | 2154 | Steering Column Tilt Motor Signal | I | — |
| 3 | 1 | YE | 2111 | Steering Column Tilt Motor Up Control | I | — |
| 4 | 0.35 | WH / BK | 2157 | Steering Column Tilt Motor Low Reference | I | — |

# M73A Front Seat Back Ventilation Blower - Driver




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

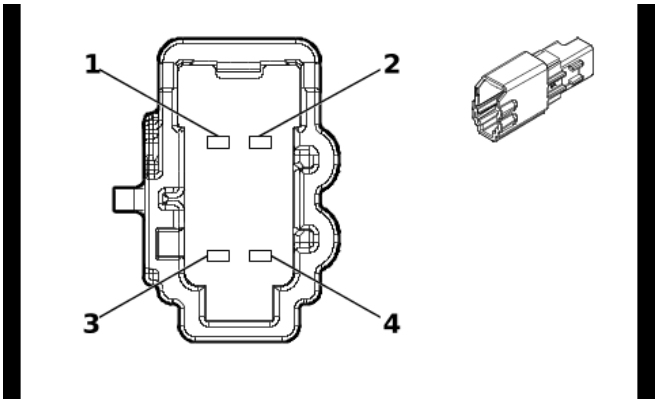
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## M73A Front Seat Back Ventilation Blower - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | GN / VT | 5906 | Driver Seat Blower Motor Control 1 | II | — |
| 3 | 0.75 | BK | 1550 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73B Front Seat Back Ventilation Blower - Passenger (KA1&KQV)




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

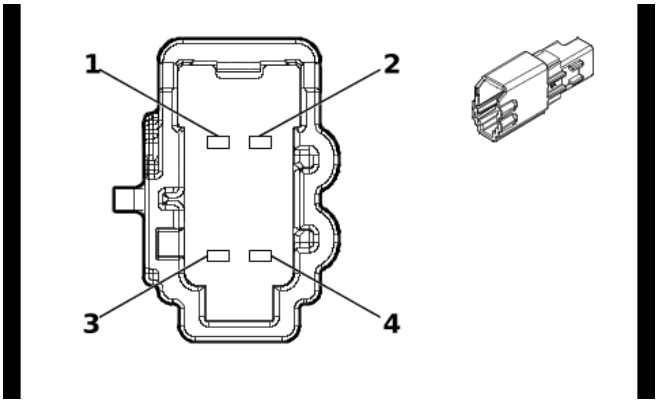
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## M73B Front Seat Back Ventilation Blower - Passenger (KA1&KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | VT / WH | 5908 | Passenger Seat Blower Motor Control 1 | II | — |
| 3 | 0.75 | BK | 1350 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73D Front Seat Cushion Ventilation Blower - Driver (KA1&KQV)




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

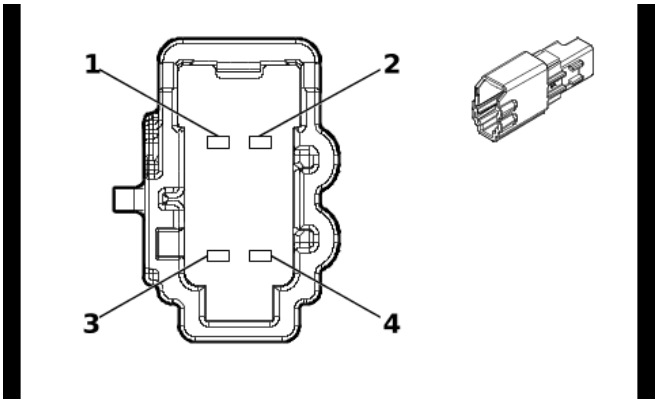
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## M73D Front Seat Cushion Ventilation Blower - Driver (KA1&KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | GN / VT | 5906 | Driver Seat Blower Motor Control 1 | II | — |
| 3 | 0.75 | BK | 1550 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73P Front Seat Cushion Ventilation Blower - Passenger (KA1&KQV)




5423974

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series( GY)

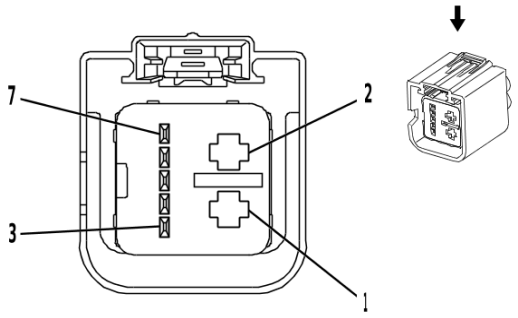
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

## M73P Front Seat Cushion Ventilation Blower - Passenger (KA1&KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | VT / WH | 5908 | Passenger Seat Blower Motor Control 1 | II | — |
| 3 | 0.75 | BK | 1350 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M74D Front Side Door Window Regulator Motor - Driver




2282932

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed( GY)

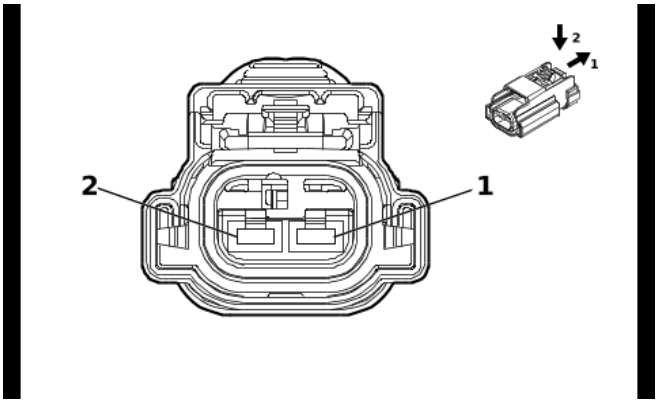
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |

## M74D Front Side Door Window Regulator Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1550 | Ground | I | — |
| 2 | 2.5 | RD / GY | 3540 | Battery Positive Voltage | I | — |
| 3 | 0.5 | GY / GN | 2763 | Window Switch Left Front Up Signal | II | — |
| 4 | 0.5 | GN / YE | 6134 | Body Control Module LIN Bus 3 | II | — |
| 5 | 0.5 | GN | 2766 | Power Window Switch Left Front Express Signal | II | — |
| 6 | 0.5 | GY | 745 | Left Front Door Ajar Switch Signal | II | — |
| 7 | 0.5 | WH / BN | 2764 | Window Switch Left Front Down Signal | II | — |

# M74LR Rear Side Door Window Regulator Motor - Left - EXTENDED CAB/ CREW CAB




5795169

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35286783
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed( BK)

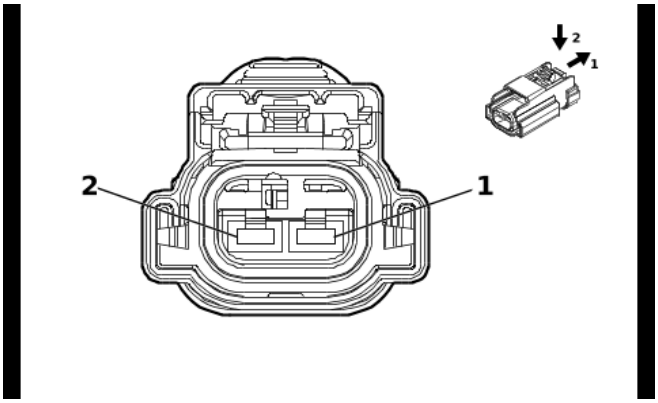
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M74LR Rear Side Door Window Regulator Motor - Left - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | BU / VT | 668 | Left Rear Window Motor Up Control | I | — |
| 2 | 2 | YE / BU | 669 | Left Rear Window Motor Down Control | I | — |

# M74P Front Side Door Window Regulator Motor - Passenger (AED)




5795169

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35286783
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed( BK)

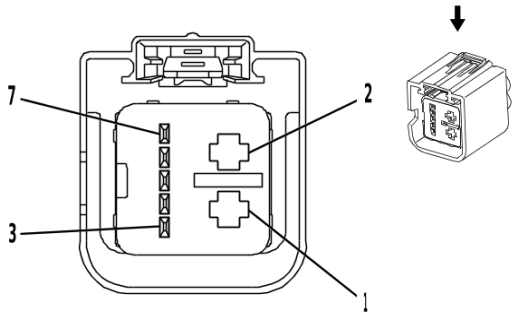
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M74P Front Side Door Window Regulator Motor - Passenger (AED)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | GN / GY | 666 | Right Front Window Motor Up Control | I | — |
| 2 | 2 | YE / BU | 667 | Right Front Window Motor Down Control | I | — |

# M74P Front Side Door Window Regulator Motor - Passenger (AEF)




2282932

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed( GY)

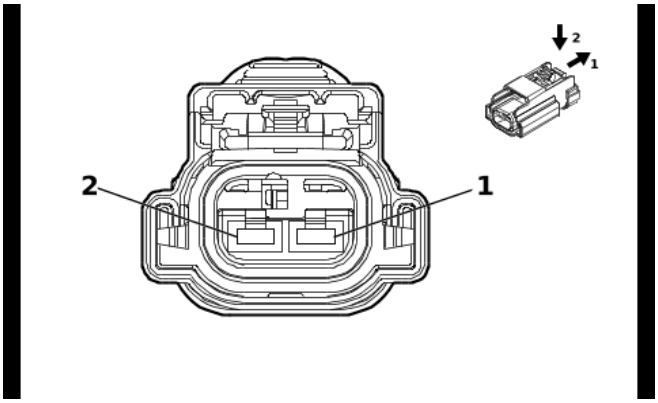
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |

## M74P Front Side Door Window Regulator Motor - Passenger (AEF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1350 | Ground | I | — |
| 2 | 2.5 | RD / BN | 4240 | Battery Positive Voltage | I | — |
| 3 | 0.5 | GN | 1184 | Window Switch Right Front Up Signal | II | — |
| 4 | 0.5 | GN / YE | 6134 | Body Control Module LIN Bus 3 | II | — |
| 5 | 0.5 | VT / GY | 2765 | Window Switch Right Front Express Signal | II | — |
| 6 | 0.5 | GY | 746 | Right Front Door Ajar Switch Signal | II | — |
| 7 | 0.5 | BN | 5295 | Window Switch Right Front Down Signal | II | — |

# M74RR Rear Side Door Window Regulator Motor - Right - EXTENDED CAB/ CREW CAB




5795169

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35286783
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed( BK)

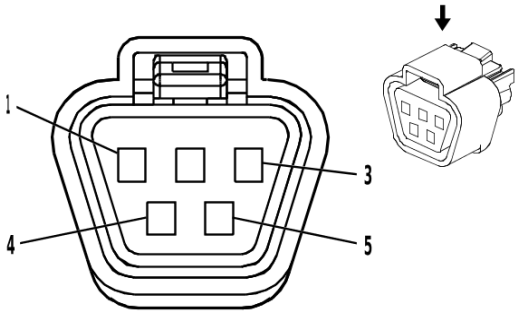
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M74RR Rear Side Door Window Regulator Motor - Right - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | BU / GY | 670 | Right Rear Window Motor Up Control | I | — |
| 2 | 2 | GN / BK | 671 | Right Rear Window Motor Down Control | I | — |

# M75 Windshield Wiper Motor




1715213

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15316488
Service Connector: 13587179
Description: 5-Way F 090 Series, Sealed( BK)

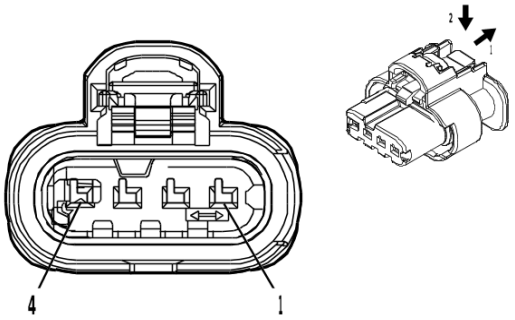
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-18 (BK) | No Tool Required |

## M75 Windshield Wiper Motor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | YE / BN | 95 | Windshield Wiper Motor Low Speed Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BN / GN | 196 | Windshield Wiper Motor Park Switch Signal | I | — |
| 4 | 2 | WH | 92 | Windshield Wiper Motor High Speed Control | II | — |
| 5 | 2 | BK | 150 | Ground | II | — |

# M96A Active Grille Air Shutter Actuator 1 (VTI/WMI)




4934614

## Connector Part Information

Harness Type: Active Grille Air Shutter
OEM Connector: 13514087
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

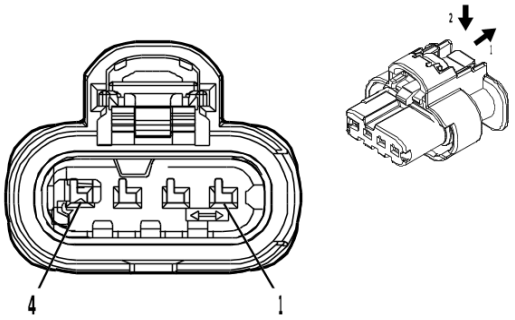
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## M96A Active Grille Air Shutter Actuator 1 (VTI/WMI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5705 | Powertrain Main Relay Control | I | — |
| 2 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5<br>0.5 | BK<br>BK | 450<br>6550 | Ground<br>Ground | I<br>I | L84/ L87<br>LM2 |

# M96B Active Grille Air Shutter Actuator 2 (WMI)




4934614

## Connector Part Information

Harness Type: Active Grille Air Shutter Jumper
OEM Connector: 13514087
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed( BK)

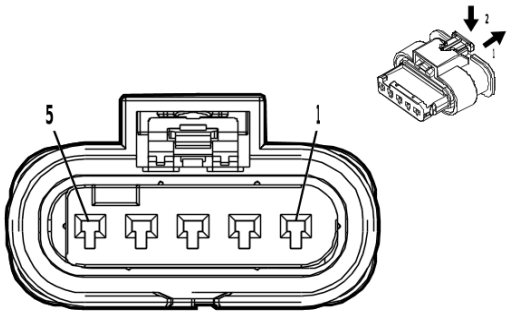
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## M96B Active Grille Air Shutter Actuator 2 (WMI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5705 | Powertrain Main Relay Control | I | — |
| 2 | 0.5 | GN / VT | 4621 | Engine Control Module LIN Bus 1 | I | — |
| 3 | 0.5 | BK | 450 | Ground | I | L84/ L87 |
| | 0.5 | BK | 6550 | Ground | I | LM2 |
| 4 | 0.5 | BK | 450 | Ground | I | L84/ L87 |
| | 0.5 | BK | 6550 | Ground | I | LM2 |

# M103 Turbocharger Vane Position Actuator (LZ0)




3338689

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed( BK)

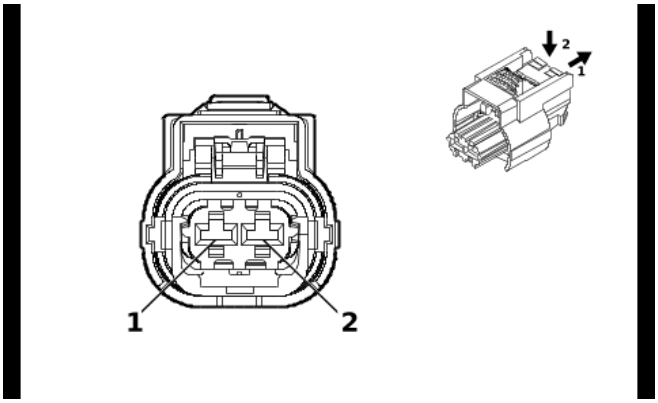
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M103 Turbocharger Vane Position Actuator (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / BN | 1313 | Variable Geometry Turbocharger Position Sensor Motor Open Control | I | — |
| 2 | 0.5 | VT / YE | 5947 | Turbocharger Vane Position Sensor Signal | I | — |
| 3 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |
| 4 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.75 | GY / BK | 1330 | Variable Geometry Turbocharger Position Sensor Motor Close Control | I | — |

# M104L Parking Brake Actuator - Left




4992524

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 35182447
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

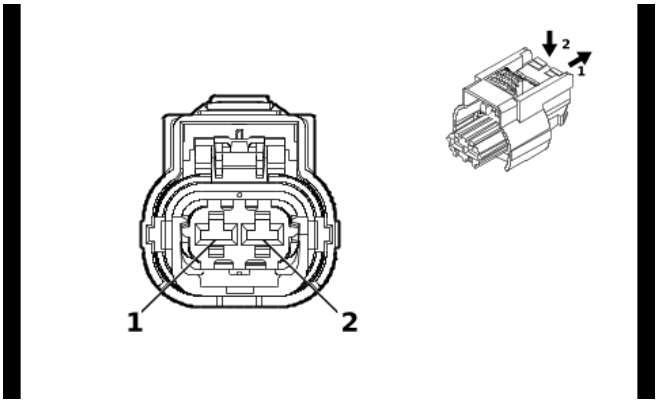
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M104L Parking Brake Actuator - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | WH | 2001 | Left Park Brake Motor Apply Control | I | Z45+ G94 |
| 2 | 2.5 | GY / BK | 4369 | Left Park Brake Motor Low Reference | I | Z45+ G94 |

# M104R Parking Brake Actuator - Right




4992524

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 35182447
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

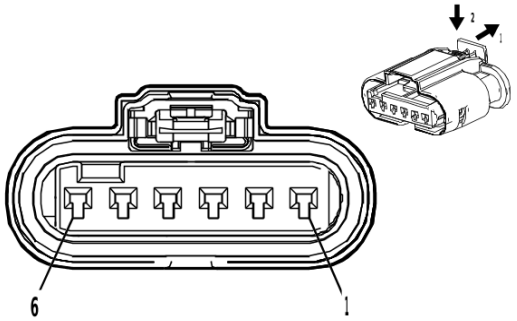
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## M104R Parking Brake Actuator - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GN / VT | 1988 | Right Park Brake Motor Apply Control | I | Z45+ G94 |
| 2 | 2.5 | GY | 4368 | Right Park Brake Motor Low Reference | I | Z45+ G94 |

# M122 Exhaust Pressure Regulator Valve (LZ0)




3960142

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33230495
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

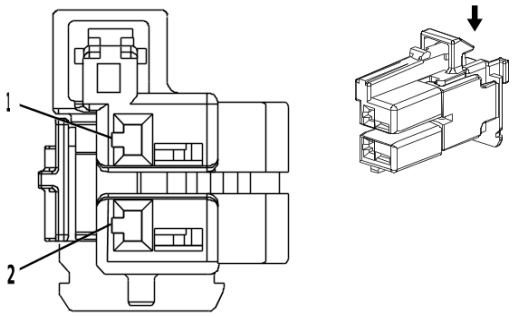
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## M122 Exhaust Pressure Regulator Valve (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / BN | 1420 | Exhaust Restrictor Motor Open Control | I | — |
| 2 | 0.75 | BN | 1421 | Exhaust Restrictor Motor Closed Control | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BN / GN | 4305 | Exhaust Flow Control Valve 1 | I | — |
| 5 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# M123 Transmission Park Valve Lock Solenoid Actuator (MHS/MQC)




4364736

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BU)

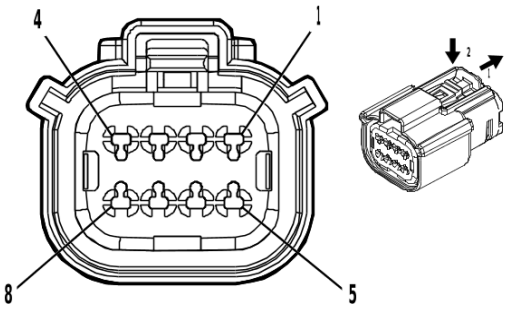
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## M123 Transmission Park Valve Lock Solenoid Actuator (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | OG | 2159 | Park Inhibit Solenoid Assembly Control | I | — |

# M125 Pickup Box Endgate Power Assist Actuator (QT6)




4846407

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed( BK)

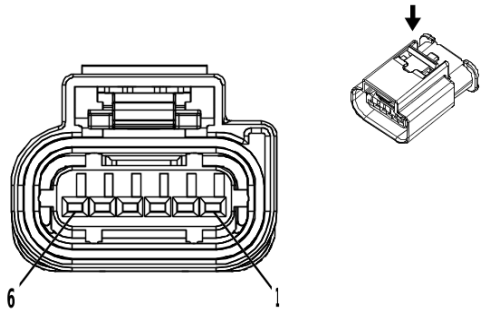
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## M125 Pickup Box Endgate Power Assist Actuator (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BN / WH | 4690 | Rear Closure Open/Close Motor Close Control | I | — |
| 2 | 0.5 | GN | 1577 | Rear Closure Clutch Control | I | — |
| 3 | 0.5 | BU / BK | 1590 | Rear Closure Clutch Low Return | I | — |
| 4 | 0.5 | BN / RD | 4683 | Rear Closure Position Sensor Voltage Reference | I | — |
| 5 | 1 | WH | 4689 | Rear Closure Open/Close Motor Open Control | I | — |
| 6 | 0.5 | BN / YE | 4686 | Rear Closure Position Sensor Signal 2 | I | — |
| 7 | 0.5 | BK / GN | 4687 | Rear Closure Position Sensor Low Reference | I | — |
| 8 | 0.5 | BU / WH | 4685 | Rear Closure Position Sensor Signal 1 | I | — |

# M128 Turbocharger Wastegate Actuator (L3B)




3747579

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed( BK)

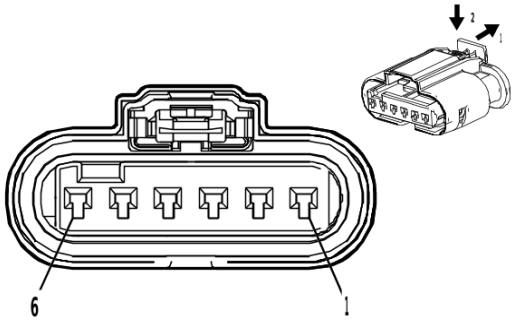
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M128 Turbocharger Wastegate Actuator (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 2 | 0.5 | WH | 2590 | Turbocharger Wastegate Motor Feedback Signal | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.75 | WH / BU | 2592 | Turbocharger Wastegate Motor Close Control | I | — |
| 5 | 0.75 | WH / BN | 2591 | Turbocharger Wastegate Motor Open Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# M129A Intake Camshaft Profile Actuator 1 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

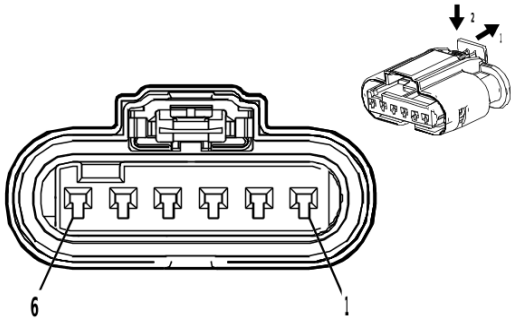
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M129A Intake Camshaft Profile Actuator 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GY | 3615 | Step Cam A Control | I | — |
| 2 | 0.5 | BU / WH | 3589 | Camshaft Position Motor Position Sensor 1 Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | GN / BK | 3616 | Step Cam B Control | I | — |

# M129B Intake Camshaft Profile Actuator 2 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

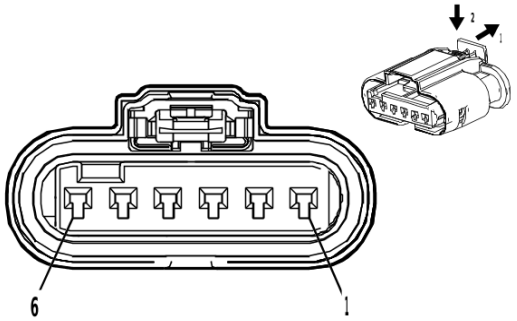
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M129B Intake Camshaft Profile Actuator 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 3585 | Camshaft Position Motor Control B | I | — |
| 2 | 0.5 | GN / WH | 3592 | Camshaft Position Motor Position Sensor 2 Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | BU | 3584 | Camshaft Position Motor Control A | I | — |

# M129C Intake Camshaft Profile Actuator 3 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

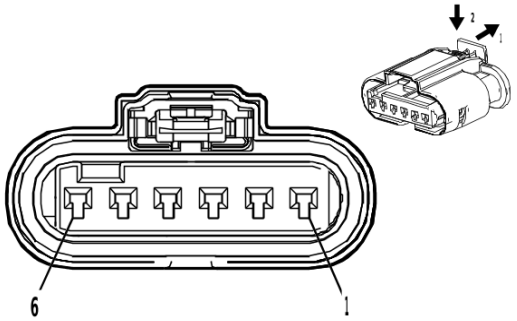
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M129C Intake Camshaft Profile Actuator 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BU | 3587 | Camshaft Position Motor Control D | I | — |
| 2 | 0.5 | BK / GN | 3593 | Camshaft Position Sensor 2 Ground | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | GY | 3586 | Camshaft Position Motor Control C | I | — |

# M129D Intake Camshaft Profile Actuator 4 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

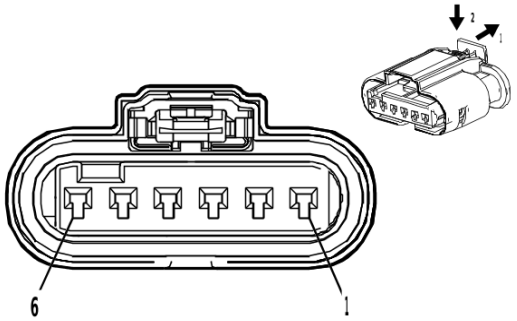
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M129D Intake Camshaft Profile Actuator 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 1402 | Camshaft Intake Stepper Cylinder 4 Front Solenoid Control | I | — |
| 2 | 0.5 | YE / BN | 1702 | Camshaft Intake Stepper Cylinder 4 Position Sensor Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | GY / YE | 1502 | Camshaft Intake Stepper Cylinder 4 Rear Solenoid Control | I | — |

# M130B Exhaust Camshaft Profile Actuator 2 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

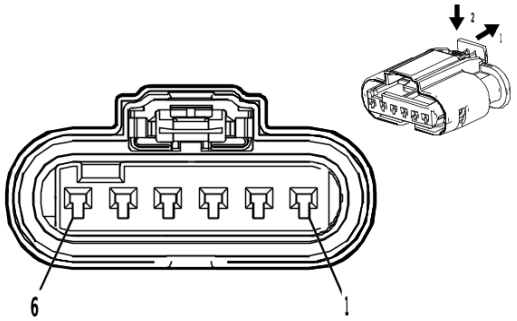
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M130B Exhaust Camshaft Profile Actuator 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / VT | 6265 | Camshaft Exhaust Stepper Cylinder 2 Rear Solenoid Control | I | — |
| 2 | 0.5 | GN / BK | 6266 | Camshaft Exhaust Stepper Cylinder 2 Position Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | VT / BK | 6264 | Camshaft Exhaust Stepper Cylinder 2 Front Solenoid Control | I | — |

# M130C Exhaust Camshaft Profile Actuator 3 (L3B)




3960142

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed( BK)

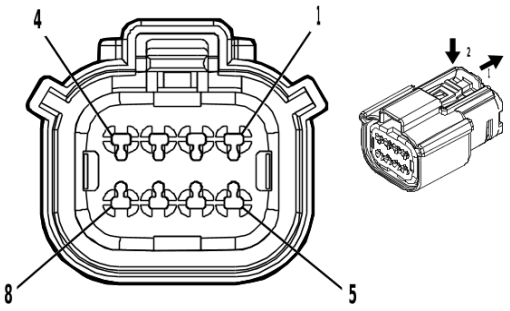
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## M130C Exhaust Camshaft Profile Actuator 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BN | 6262 | Camshaft Exhaust Stepper Cylinder 3 Rear Solenoid Control | I | — |
| 2 | 0.5 | YE | 6263 | Camshaft Exhaust Stepper Cylinder 3 Position Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 5 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 6 | 0.5 | GN / BN | 6261 | Camshaft Exhaust Stepper Cylinder 3 Front Solenoid Control | I | — |

# M151L Pickup Box Endgate Cinch Latch Actuator - Left (QT6)




4846407

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed( BK)

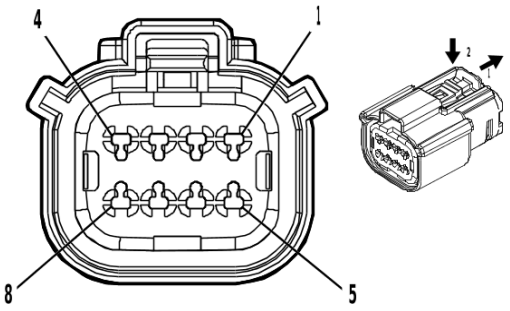
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## M151L Pickup Box Endgate Cinch Latch Actuator - Left (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | BN / GY | 10281 | Rear Closure Latch Secondary Status Signal | I | — |
| 3 | 0.5 | GY / VT | 4678 | Rear Closure Latch Unlatch Status | I | — |
| 4 | 0.5 | BK / VT | 4656 | Rear Closure Object Sensor Low Reference | I | — |
| 5 | 1 | BN | 4681 | Rear Closure Cinch Latch Motor Cinch Control | I | — |
| 6 | 1 | BU / GY | 4682 | Rear Closure Cinch Latch Motor Release Control | I | — |
| 7 | 0.5 | WH / GN | 8084 | Rear Closure Latch Neutral Status | I | — |
| 8 | 0.5 | YE / BK | 8085 | Rear Closure Latch Primary Status | I | — |

# M151R Pickup Box Endgate Cinch Latch Actuator - Right (QT6)




4846407

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed( BK)

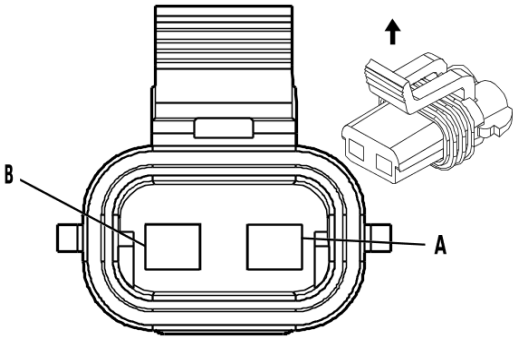
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## M151R Pickup Box Endgate Cinch Latch Actuator - Right (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BK | 1575 | Rear Closure Sensor Low Reference 2 | I | — |
| 2 | 0.5 | BN | 7736 | Rear Closure Latch 2 Unlatch Status Signal | I | — |
| 3 | 0.5 | VT / WH | 10284 | Rear Closure Latch 2 Secondary Status Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GN / BU | 10283 | Rear Closure Latch 2 Primary Status Signal | I | — |
| 6 | 0.5 | BU / BN | 10282 | Rear Closure Latch 2 Neutral Status Signal | I | — |
| 7 | 1 | GN | 1499 | Rear Closure Cinch Latch Motor 2 Cinch Control | I | — |
| 8 | 1 | BU | 1509 | Rear Closure Cinch Latch Motor 2 Release Control | I | — |

# P3 Backup Alarm (8S3)




68721

## Connector Part Information

Harness Type: Backup Alarm Wiring Harness
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed( BK)

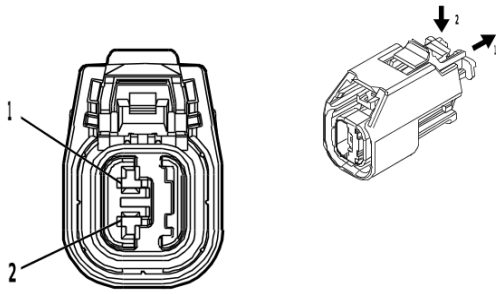
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## P3 Backup Alarm (8S3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1 | GN | 1624 | Trailer Backup Lamp Control | I | — |
| B | 1 | WH | 22 | Trailer Ground | I | — |

# P13 Horn




4889830

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33164011
Service Connector: 86802964
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

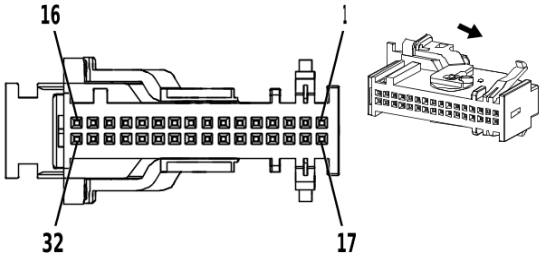
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## P13 Horn

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 650 | Ground | I | — |
| 2 | 0.75 | BN / GY | 29 | Horn Control | I | — |

# P16 Instrument Panel Cluster Control Module X1




627214

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33323630
Service Connector: 13511333
Description: 32-Way F 0.64 Micro-Quadlock Series( GY)

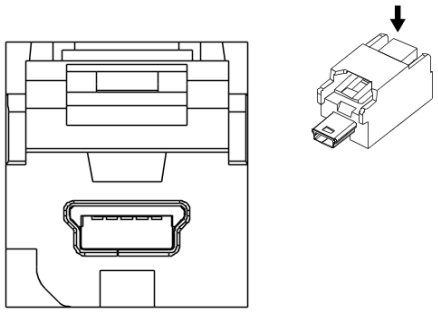
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300632 | J-35616-64B (L-BU) | J-38125-215A |

### P16 Instrument Panel Cluster Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH | 7216 | Ethernet Bus 7 [-] | I | — |
| 2 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 8 | 0.35 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GY / BK | 4787 | Day Night LED Control | I | — |
| 12 | 0.35 | GY / YE | 3885 | Forward Collision Alert LED Control | I | — |
| 13 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 14 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 15 - 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | GN | 7217 | Ethernet Bus 7 [+] | I | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BK | 851 | Signal Ground | I | — |
| 20 | 0.5 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 21 - 28 | — | — | — | Not Occupied | — | — |
| 29 | 0.35 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 30 | 0.35 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.35 | GN / BN | 507 | Wait To Start Indicator Control | I | — |

# P16 Instrument Panel Cluster Control Module X2



3214018

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: 13893437
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( GY)

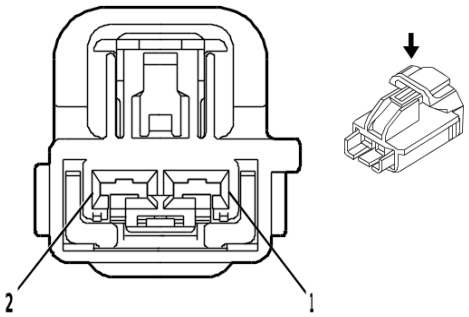
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## P16 Instrument Panel Cluster Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# P19AFC Front Floor Speaker - Console (UQA/UQS)




1803142

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 10846819
Service Connector: 19367562
Description: 2-Way F Kaizen Series( L-GY)

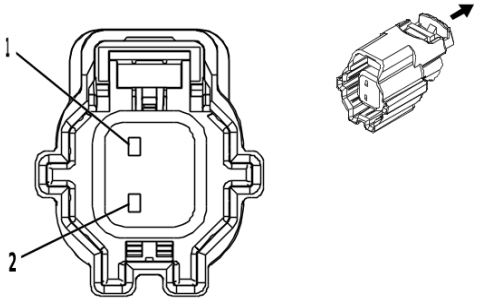
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## P19AFC Front Floor Speaker - Console (UQA/UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GN / BK | 1794 | Left/Rear Subwoofer [-] Control | I | — |
| 2 | 2.5 | BU / GY | 346 | Left/Rear Subwoofer [+] Control | I | — |

# P19AG Radio Front Side Door Speaker - Left




4223204

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

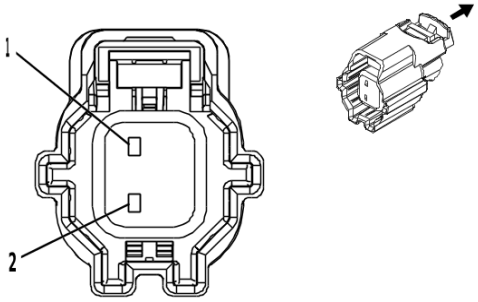
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## P19AG Radio Front Side Door Speaker - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | I | — |

# P19AH Radio Front Side Door Speaker - Right




4223204

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

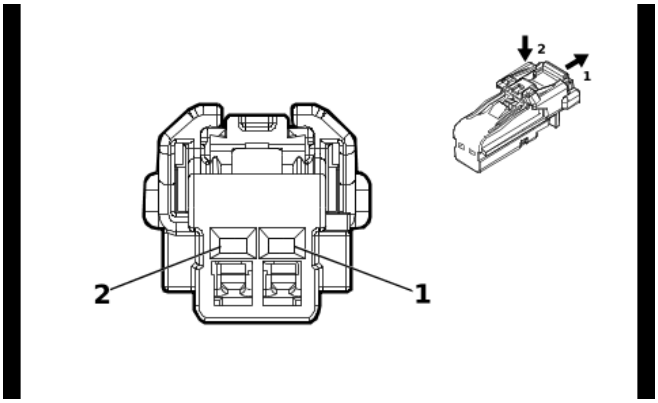
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## P19AH Radio Front Side Door Speaker - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / BK | 117 | Right Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker 1 [+] Control | I | — |

# P19AJ Radio Rear Speaker - Left




4115691

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

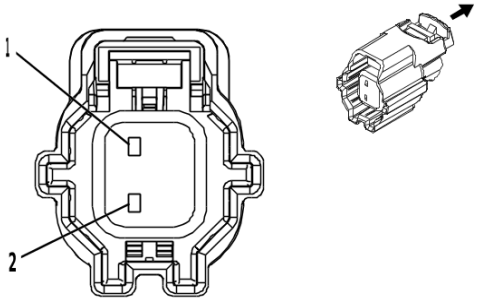
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19AJ Radio Rear Speaker - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | I | — |

# P19AL Radio Rear Side Door Speaker - Left




4223204

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

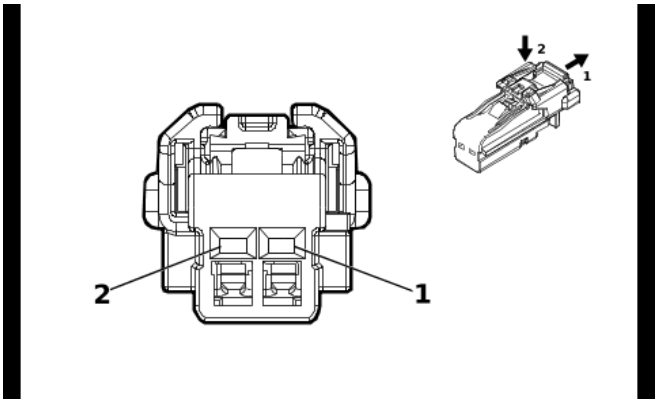
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## P19AL Radio Rear Side Door Speaker - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / BK | 116 | Left Rear Speaker [-] Control | I | — |
| 2 | 0.75 | GN | 199 | Left Rear Speaker [+] Control | I | — |

# P19ALU Radio Rear Side Door Upper Speaker - Left (UQS)




4115691

## Connector Part Information

Harness Type: Rear Side Door Wiring Harness - Tweeter Jumper
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

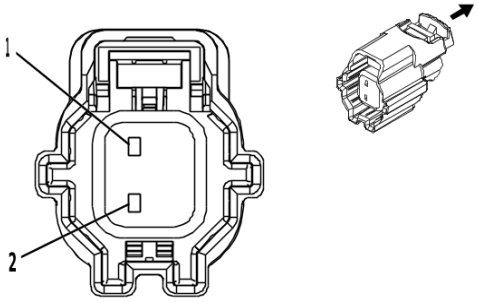
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19ALU Radio Rear Side Door Upper Speaker - Left (UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / BK | 116 | Left Rear Speaker [-] Control | I | — |
| 2 | 0.75 | GN | 199 | Left Rear Speaker [+] Control | I | — |

# P19AM Radio Rear Side Door Speaker - Right




4223204

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed( BK)

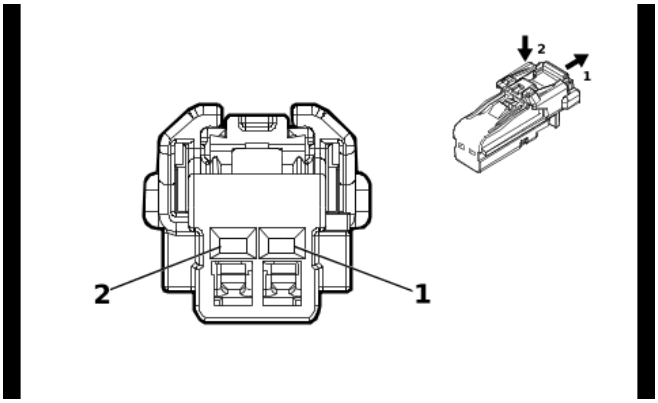
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## P19AM Radio Rear Side Door Speaker - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / BK | 115 | Right Rear Speaker [-] Control | I | — |
| 2 | 0.75 | WH | 46 | Right Rear Speaker [+] Control | I | — |

# P19AMU Radio Rear Side Door Upper Speaker - Right (UQS)




4115691

## Connector Part Information

Harness Type: Rear Side Door Wiring Harness - Tweeter Jumper
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

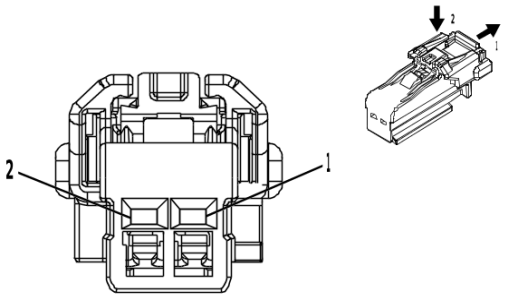
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19AMU Radio Rear Side Door Upper Speaker - Right (UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / BK | 115 | Right Rear Speaker [-] Control | I | — |
| 2 | 0.75 | GN | 46 | Right Rear Speaker [+] Control | I | — |

# P19B Radio Front Center Speaker (UQS)




4373379

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311601
Service Connector: 19369632
Description: 2-Way F 1.2 MCON Series( GY)

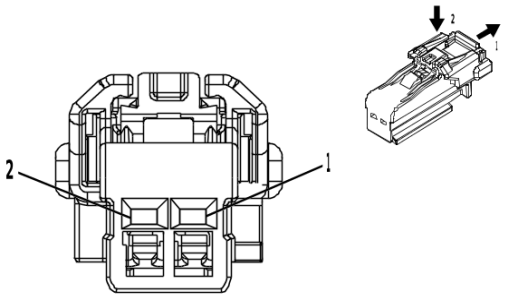
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19B Radio Front Center Speaker (UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / YE | 1960 | Front Center Speaker [-] Control | I | — |
| 2 | 0.75 | YE / WH | 1860 | Front Center Speaker [+] Control | I | — |

# P19H Radio Windshield Side Garnish Molding Speaker - Left Front (UQA/UQS)




4373379

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311601
Service Connector: 19369632
Description: 2-Way F 1.2 MCON Series( GY)

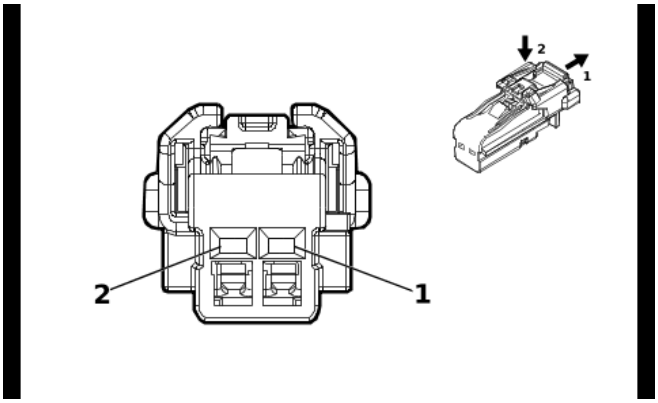
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19H Radio Windshield Side Garnish Molding Speaker - Left Front (UQA/UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / BN | 1957 | Left Front Midrange Speaker [-] Control | I | — |
| 2 | 0.75 | BU / VT | 1857 | Left Front Midrange Speaker [+] Control | I | — |

# P19J Radio Front Speaker - Instrument Panel Left (UQA)




4115691

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

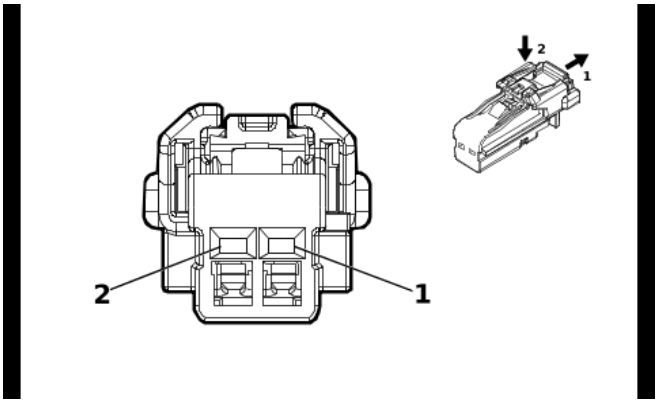
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19J Radio Front Speaker - Instrument Panel Left (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | I | — |

# P19J Radio Front Speaker - Instrument Panel Left (UQS)




4115691

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

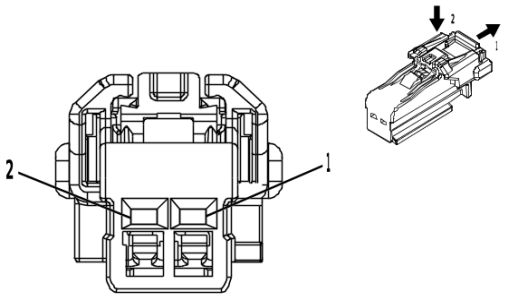
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19J Radio Front Speaker - Instrument Panel Left (UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | I | — |

# P19V Radio Windshield Side Garnish Molding Speaker - Right Front




4373379

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311601
Service Connector: 19369632
Description: 2-Way F 1.2 MCON Series( GY)

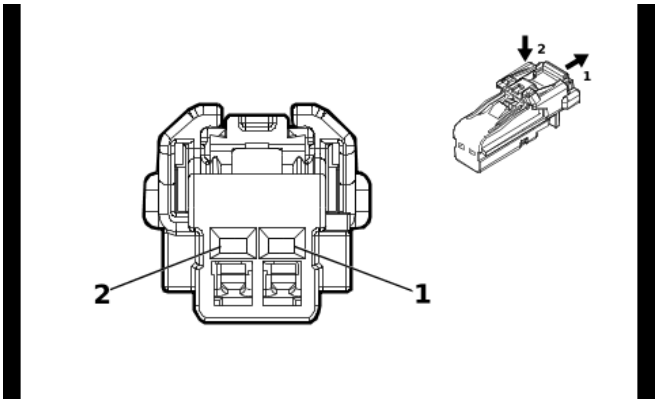
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19V Radio Windshield Side Garnish Molding Speaker - Right Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BK | 1953 | Right Front Midrange Speaker [-] Control | I | — |
| 2 | 0.75 | WH / YE | 1853 | Right Front Midrange Speaker [+] Control | I | — |

# P19W Radio Front Speaker - Instrument Panel Right (UQF)




4115691

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

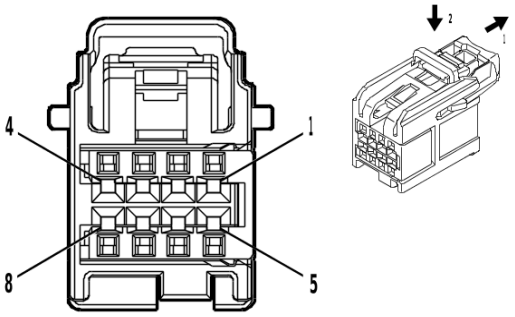
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## P19W Radio Front Speaker - Instrument Panel Right (UQF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / BK | 117 | Right Front Speaker [-] Control 1 | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker 1 [+] Control | I | — |

# P29 Head-Up Display X1 (UV6)




4935776

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series( BK)

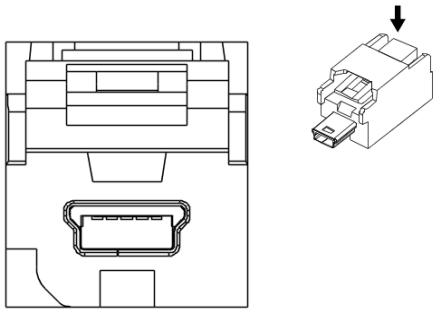
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## P29 Head-Up Display X1 (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | YE / WH | 622 | Head-Up Display Switch Signal | I | — |
| 4 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK / GN | 5699 | Head-Up Display Switch Low Reference | I | — |

# P29 Head-Up Display X2 (UV6)



3214018

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: 13871470
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( GY)

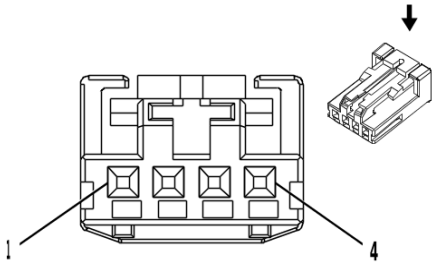
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## P29 Head-Up Display X2 (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# P43 Forward Collision Alert Display (( UEU / UHX ) - UV6)




2717162

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

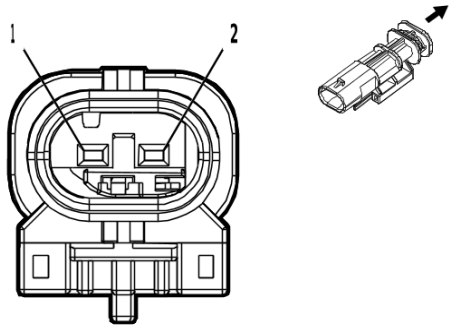
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## P43 Forward Collision Alert Display (( UEU / UHX ) - UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT / BK | 339 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.35 | GY / YE | 3885 | Forward Collision Alert LED Control | I | — |
| 3 | 0.35 | GY / BK | 4787 | Day Night LED Control | I | — |
| 4 | 0.35 | BK / WH | 851 | Signal Ground | I | — |

# P45L Front Seat Lane Departure Warning Actuator - Left (HS1)




4569729

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 34899-2080
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( BK)

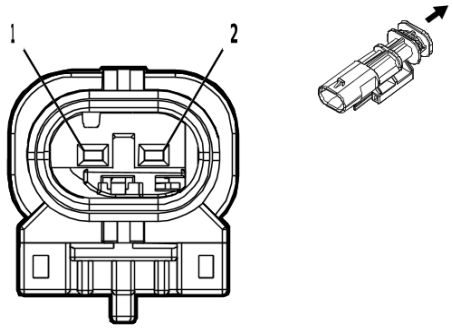
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## P45L Front Seat Lane Departure Warning Actuator - Left (HS1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1550 | Ground | I | — |
| 2 | 0.35 | YE / BN | 3037 | Driver Seat Left Rear Haptic Movement Motor Control | I | — |

# P45R Front Seat Lane Departure Warning Actuator - Right (HS1)




4569729

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 34899-2080
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( BK)

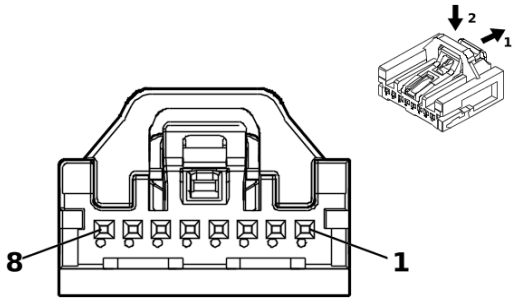
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-13 (BU) | No Tool Required |

## P45R Front Seat Lane Departure Warning Actuator - Right (HS1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1550 | Ground | I | — |
| 2 | 0.35 | BN | 3038 | Driver Seat Right Rear Haptic Movement Motor Control | I | — |

# P53 Driver Information Display X1 (IOK)




5200269

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

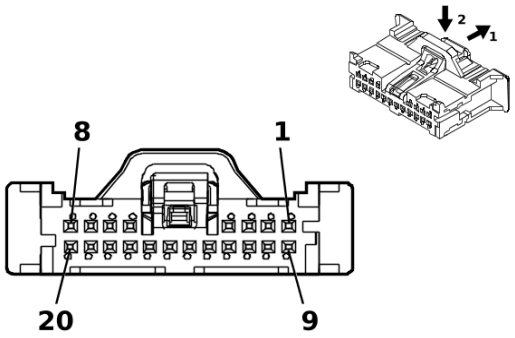
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## P53 Driver Information Display X1 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / WH | 1340 | Battery Positive Voltage | I | — |
| 2 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK / WH | 1051 | Signal Ground | I | — |

# P53 Driver Information Display X1 (IOR)




5200955

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068196
Service Connector: 84769280
Description: 20-Way F Mini 50 Series( BK)

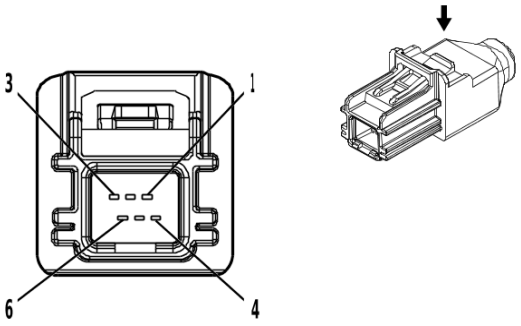
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84944580 | EL-35616-58 (BK) | EL-38125-58 |

### P53 Driver Information Display X1 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / RD | 11246 | Infotainment Display 5 Volt Reference | I | — |
| 2 | 0.35 | GY / BU | 11247 | Infotainment Display LCD Enable Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BU | 11235 | Radio Switch Volume Up Signal | I | — |
| 5 | 0.35 | GY / BN | 11234 | Radio Switch Volume Down Signal | I | — |
| 6 | 0.35 | BN / WH | 11233 | Radio Switch Power ON/OFF Switch Signal | I | — |
| 7 | 0.35 | VT / WH | 11245 | Radio Switch Buttons Signal | I | — |
| 8 | 0.35 | BU / GY | 11244 | Radio Switch Dimming Control | I | — |
| 9 | 0.35 | BU / GN | 11248 | Infotainment Display Backlight Dimming Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BK / WH | 11252 | Infotainment Display Low Reference | I | — |
| 12 | 0.35 | YE / RD | 11236 | Radio Switch 5 Volt Reference | I | — |
| 13 | 0.35 | BK / BU | 11237 | Radio Switch Low Reference 1 | I | — |
| 14 | 0.35 | BU | 11235 | Radio Switch Volume Up Signal | I | — |
| 15 | 0.35 | GY / BN | 11234 | Radio Switch Volume Down Signal | I | — |
| 16 | 0.35 | BN / WH | 11233 | Radio Switch Power ON/OFF Switch Signal | I | — |
| 17 | 0.35 | VT / WH | 11245 | Radio Switch Buttons Signal | I | — |
| 18 | 0.35 | BU / GY | 11244 | Radio Switch Dimming Control | I | — |
| 19 | 0.35 | GY / VT | 11249 | Infotainment Display Backlight Enable Control | I | — |
| 20 | 0.35 | BK / GN | 11238 | Radio Switch Low Reference 2 | I | — |

# P53 Driver Information Display X2 (IOK)




4806625

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: VP000160
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series( BK)

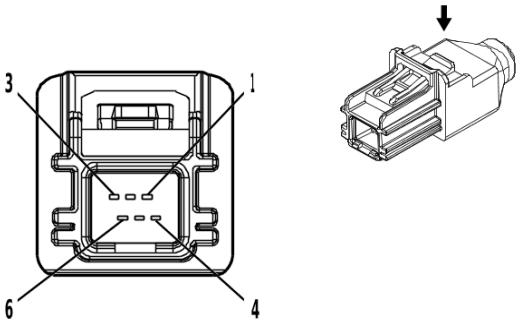
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## P53 Driver Information Display X2 (IOK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | 7853 | Center Stack LVDS (Low Voltage Differential Signaling) Low Reference | I | — |
| 2 | — | — | 7854 | Center Stack LVDS (Low Voltage Differential Signaling) Signal [+] | I | — |
| 3 | — | — | 7855 | Center Stack LVDS (Low Voltage Differential Signaling) Signal [-] | I | — |
| 4 | — | — | 7848 | Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [+] | I | — |
| 5 | — | — | 7849 | Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [-] | I | — |
| 6 | — | — | 7847 | Center Stack LVDS (Low Voltage Differential Signaling) 2 Low Reference | I | — |

# P53 Driver Information Display X2 (IOR)




4806625

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: VP000160
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series( BK)

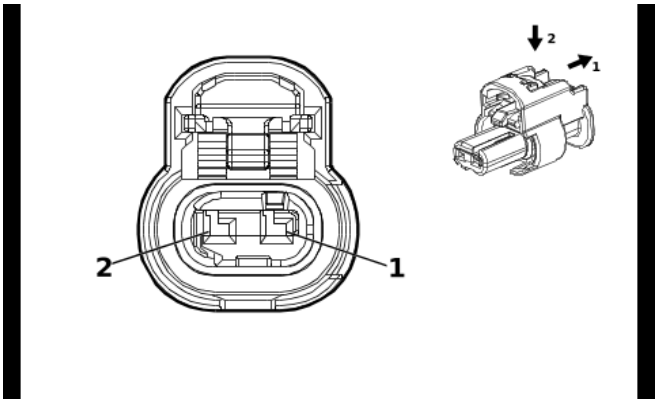
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## P53 Driver Information Display X2 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | 4844 | Radio LVDS (Low Voltage Differential Signaling) Low Reference | I | — |
| 2 | — | — | 4845 | Radio LVDS (Low Voltage Differential Signaling) Signal [+] | I | — |
| 3 | — | — | 4846 | Radio LVDS (Low Voltage Differential Signaling) Signal [-] | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# Q2 Air Conditioning Clutch (L3B)




4649903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

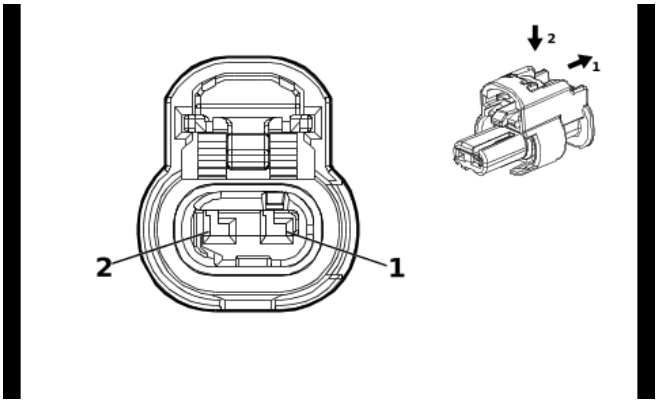
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q2 Air Conditioning Clutch (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 450 | Ground | I | — |
| 2 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | I | — |

# Q2 Air Conditioning Clutch (L84/L87)




4649903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

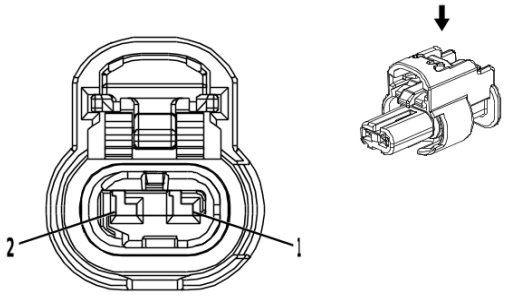
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q2 Air Conditioning Clutch (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 450 | Ground | I | — |
| 2 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | I | — |

# Q2 Air Conditioning Clutch (LZ0)




4335931

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

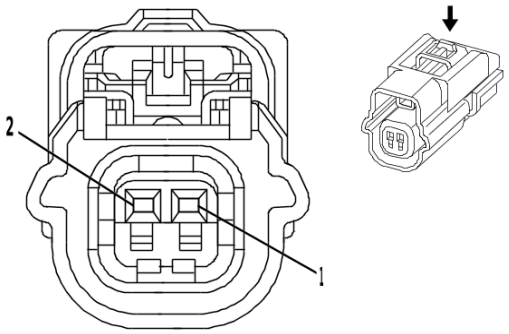
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q2 Air Conditioning Clutch (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / YE | 7574 | A/C Compressor Solenoid Valve Control | I | — |
| 2 | 0.75 | BU / BN | 7573 | A/C Compressor Solenoid Valve Control | I | — |

# Q6 Camshaft Position Actuator Solenoid Valve (L84/L87)




1664592

## Connector Part Information

Harness Type: Camshaft Position Sensor Wire
OEM Connector: 89047381
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed( BK)

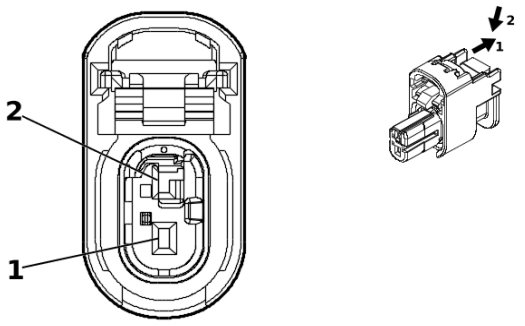
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q6 Camshaft Position Actuator Solenoid Valve (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / BN | 6753 | Camshaft Position Actuator Solenoid Valve W Low Reference | I | — |
| 2 | 0.5 | VT / BN | 5284 | Intake Camshaft Position Actuator Solenoid Valve 1 | I | — |

# Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)




5340268

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35270627
Service Connector: 19371204
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

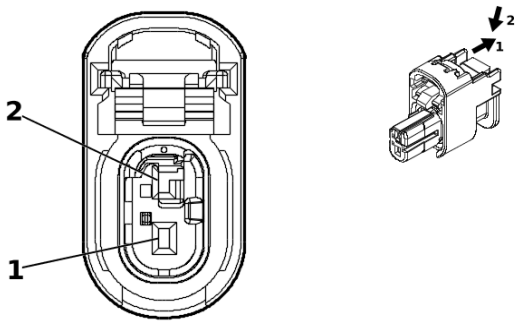
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BU | 5282 | Exhaust Camshaft Position Actuator Solenoid Valve 1 | I | — |
| 2 | 0.5 | BK / VT | 6754 | Camshaft Position Actuator Solenoid Valve X Low Reference | I | — |

# Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)




5340268

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35270627
Service Connector: 19371204
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

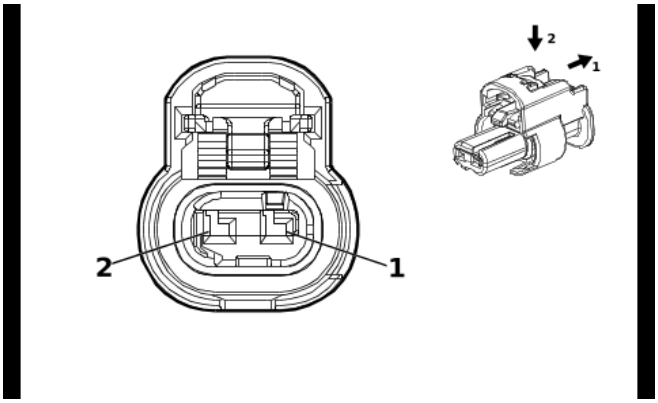
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BN | 5284 | Intake Camshaft Position Actuator Solenoid Valve 1 | I | — |
| 2 | 0.5 | BK / BN | 6753 | Camshaft Position Actuator Solenoid Valve W Low Reference | I | — |

# Q9F Differential Locking Actuator - Front (G93)




4649903

## Connector Part Information

Harness Type: Front Differential Locking Actuator Jumper Wiring Harness
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

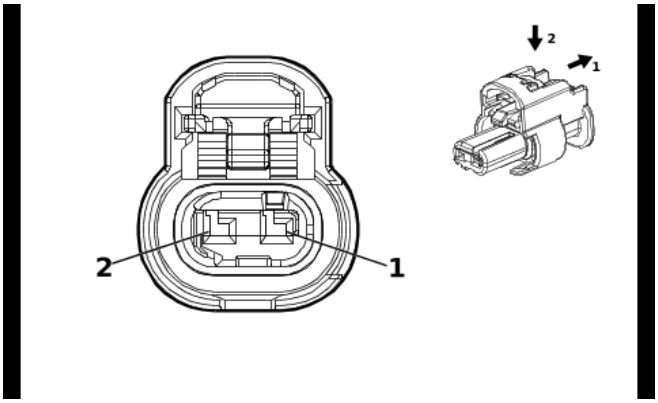
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q9F Differential Locking Actuator - Front (G93)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 7256 | Front Differential Lock Actuator Control | I | — |
| 2 | 0.75 | WH / BK | 7254 | Front Differential Lock Actuator Low Control | I | — |

# Q9R Differential Locking Actuator - Rear (G94)




4649903

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 1-2296694-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

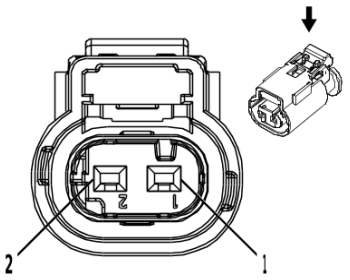
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q9R Differential Locking Actuator - Rear (G94)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / BN | 7258 | Rear Differential Lock Actuator Control | I | G94 |
| 2 | 0.75 | GY / BK | 7253 | Rear Differential Lock Actuator Low Control | I | G94 |

# Q12 Evaporative Emission Canister Purge Solenoid Valve (L3B)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

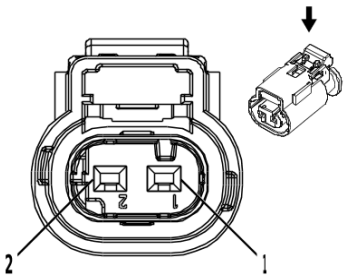
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q12 Evaporative Emission Canister Purge Solenoid Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 2 | 0.5 | GN / BU | 428 | EVAP Canister Purge Solenoid Control | I | — |

# Q12 Evaporative Emission Canister Purge Solenoid Valve (L84/L87)




2717066

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

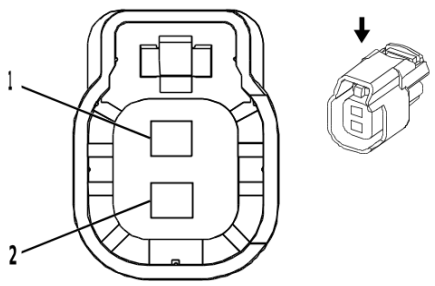
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q12 Evaporative Emission Canister Purge Solenoid Valve (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 2 | 0.5 | GN / BU | 428 | EVAP Canister Purge Solenoid Control | I | — |

# Q13 Evaporative Emission Canister Vent Solenoid Valve (FHS)




2422378

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13771883
Service Connector: 13579002
Description: 2-Way F 1.5 Series, Sealed( BK)

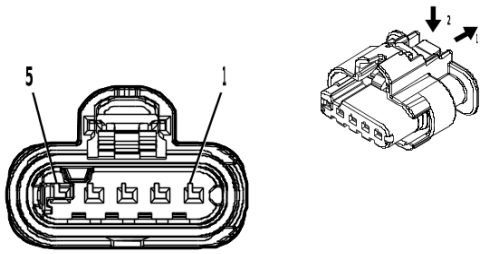
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## Q13 Evaporative Emission Canister Vent Solenoid Valve (FHS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 1310 | EVAP Vent Solenoid Valve Control | I | — |
| 2 | 0.5 | RD / WH | 3440 | Battery Positive Voltage | I | — |

# Q14A Exhaust Gas Recirculation Valve 1 (LZ0)




4997783

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed( BK)

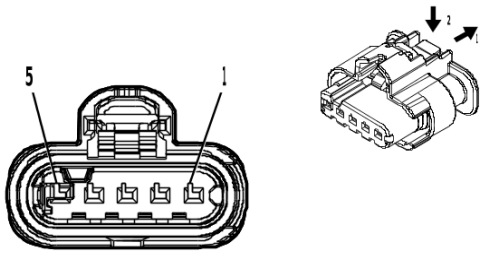
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q14A Exhaust Gas Recirculation Valve 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 2 | 0.5 | BN / WH | 5763 | Exhaust Gas Recirculation Position Signal | I | — |
| 3 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 4 | 0.75 | WH / VT | 5764 | Exhaust Gas Recirculation Valve High Control | I | — |
| 5 | 0.75 | VT / BK | 5746 | Exhaust Gas Recirculation Valve Low Control | I | — |

# Q14B Exhaust Gas Recirculation Valve 2 (LZ0)




4997783

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed( BK)

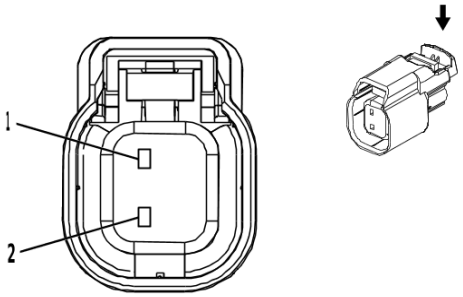
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q14B Exhaust Gas Recirculation Valve 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 2 | 0.5 | BU / GN | 4012 | Exhaust Gas Recirculation 2 Valve Position Sensor Signal | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.75 | BU / WH | 4014 | Exhaust Gas Recirculation 2 Valve Open Control | I | — |
| 5 | 0.75 | BU / BN | 4013 | Exhaust Gas Recirculation 2 Valve Close Control | I | — |

# Q17A Fuel Injector 1 (L3B)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

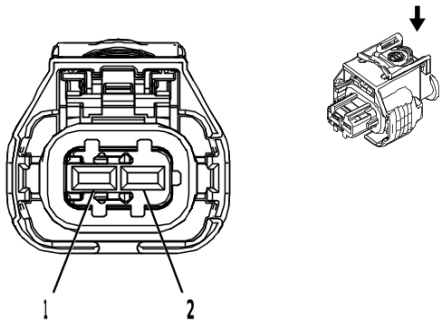
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## Q17A Fuel Injector 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | I | — |
| 2 | 0.8 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | I | — |

# Q17A Fuel Injector 1 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

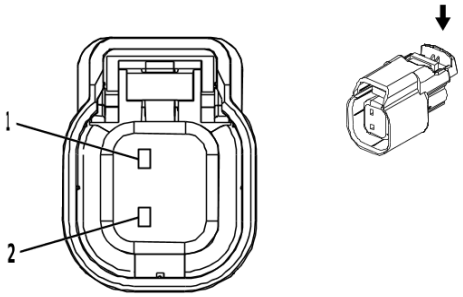
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17A Fuel Injector 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | I | — |
| 2 | 1.5 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | I | — |

# Q17A Fuel Injector 1 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

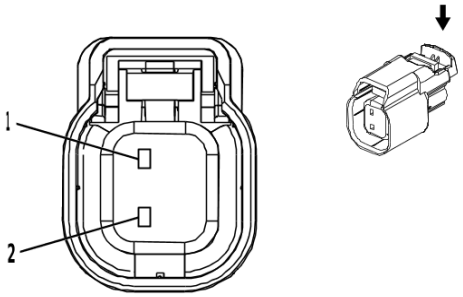
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17A Fuel Injector 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BN / WH | 4901 | Direct Fuel Injector High Voltage Supply Cylinder 1 | I | — |
| 2 | 0.8 | BN | 4801 | Direct Fuel Injector High Voltage Control Cylinder 1 | I | — |

# Q17B Fuel Injector 2 (L3B)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

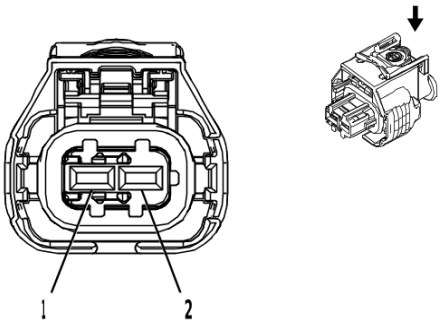
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## Q17B Fuel Injector 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | I | — |
| 2 | 0.8 | BU / GY | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | I | — |

# Q17B Fuel Injector 2 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

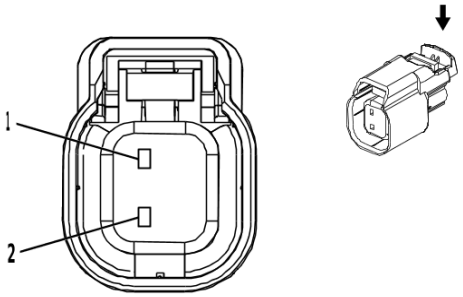
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17B Fuel Injector 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU / GY | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | I | — |
| 2 | 1.5 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | I | — |

# Q17B Fuel Injector 2 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

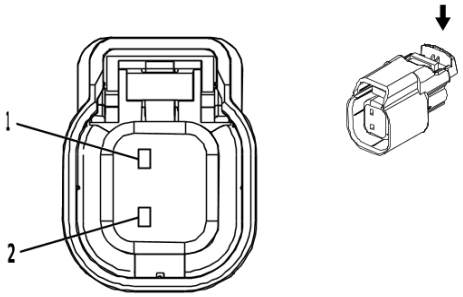
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17B Fuel Injector 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BU / GY | 4902 | Direct Fuel Injector High Voltage Supply Cylinder 2 | I | — |
| 2 | 0.8 | BU | 4802 | Direct Fuel Injector High Voltage Control Cylinder 2 | I | — |

# Q17C Fuel Injector 3 (L3B)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

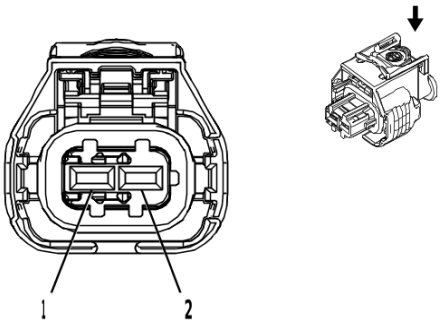
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## Q17C Fuel Injector 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | I | — |
| 2 | 0.8 | GN / GY | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | I | — |

# Q17C Fuel Injector 3 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

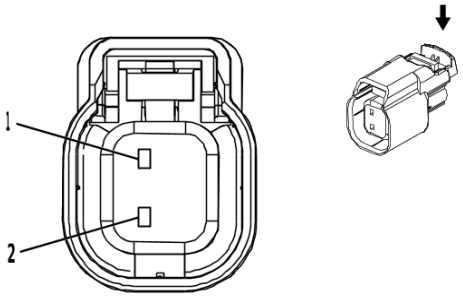
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17C Fuel Injector 3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / GY | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | I | — |
| 2 | 1.5 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | I | — |

# Q17C Fuel Injector 3 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

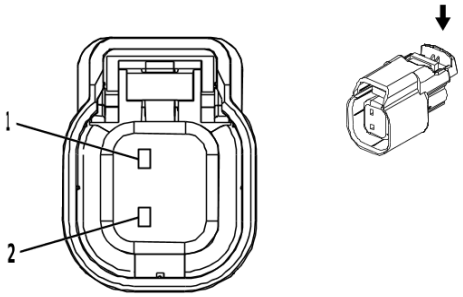
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17C Fuel Injector 3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GN / GY | 4903 | Direct Fuel Injector High Voltage Supply Cylinder 3 | I | — |
| 2 | 0.8 | GN | 4803 | Direct Fuel Injector High Voltage Control Cylinder 3 | I | — |

# Q17D Fuel Injector 4 (L3B)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

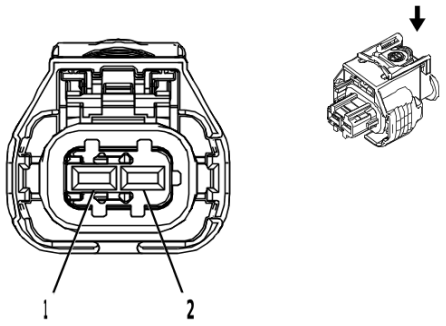
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## Q17D Fuel Injector 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | I | — |
| 2 | 0.8 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | I | — |

# Q17D Fuel Injector 4 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

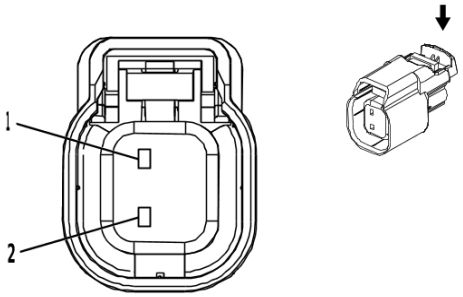
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17D Fuel Injector 4 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | I | — |
| 2 | 1.5 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | I | — |

# Q17D Fuel Injector 4 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

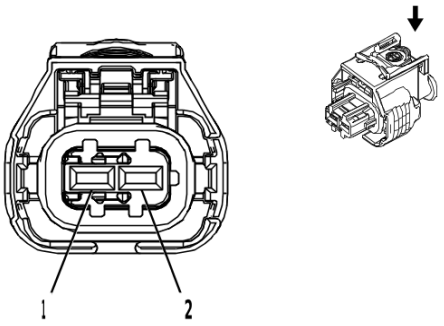
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17D Fuel Injector 4 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BU / WH | 4904 | Direct Fuel Injector High Voltage Supply Cylinder 4 | I | — |
| 2 | 0.8 | GY / BU | 4804 | Direct Fuel Injector High Voltage Control Cylinder 4 | I | — |

# Q17E Fuel Injector 5 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

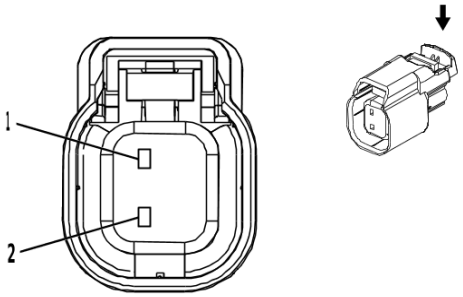
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17E Fuel Injector 5 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN / WH | 4905 | Direct Fuel Injector High Voltage Supply Cylinder 5 | I | — |
| 2 | 1.5 | WH / GN | 4805 | Direct Fuel Injector High Voltage Control Cylinder 5 | I | — |

# Q17E Fuel Injector 5 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

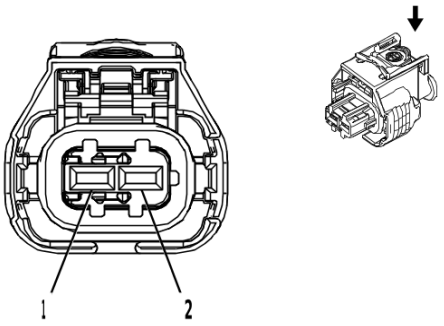
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17E Fuel Injector 5 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GN / WH | 4905 | Direct Fuel Injector High Voltage Supply Cylinder 5 | I | — |
| 2 | 0.8 | WH / GN | 4805 | Direct Fuel Injector High Voltage Control Cylinder 5 | I | — |

# Q17F Fuel Injector 6 (LZ0)




2845578

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed( BK)

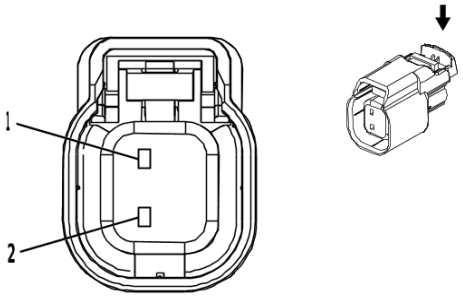
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q17F Fuel Injector 6 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | VT / GY | 4906 | Direct Fuel Injector High Voltage Supply Cylinder 6 | I | — |
| 2 | 1.5 | VT / GN | 4806 | Direct Fuel Injector High Voltage Control Cylinder 6 | I | — |

# Q17F Fuel Injector 6 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

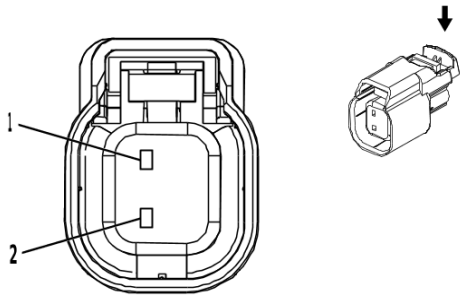
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17F Fuel Injector 6 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | VT / GY | 4906 | Direct Fuel Injector High Voltage Supply Cylinder 6 | I | — |
| 2 | 0.8 | VT / GN | 4806 | Direct Fuel Injector High Voltage Control Cylinder 6 | I | — |

# Q17G Fuel Injector 7 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

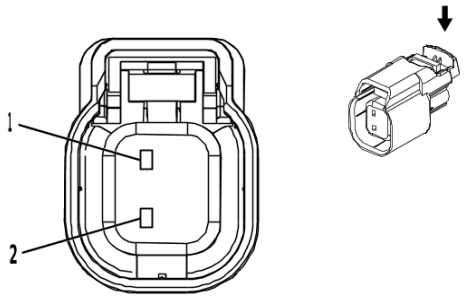
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17G Fuel Injector 7 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | WH / YE | 4907 | Direct Fuel Injector High Voltage Supply Cylinder 7 | I | — |
| 2 | 0.8 | YE / GY | 4807 | Direct Fuel Injector High Voltage Control Cylinder 7 | I | — |

# Q17H Fuel Injector 8 (L84/L87)




2792100

## Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed( BK)

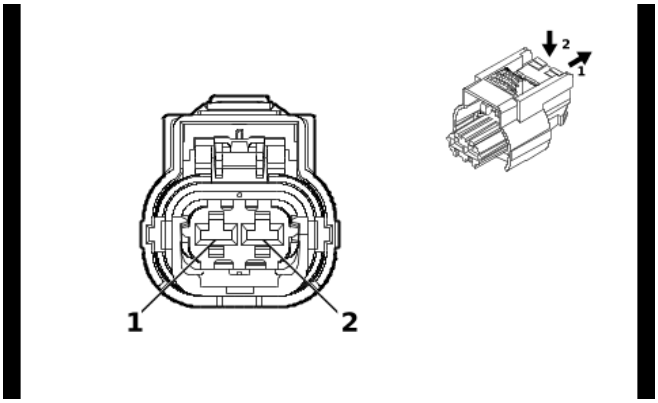
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## Q17H Fuel Injector 8 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GY / WH | 4908 | Direct Fuel Injector High Voltage Supply Cylinder 8 | I | — |
| 2 | 0.8 | GY | 4808 | Direct Fuel Injector High Voltage Control Cylinder 8 | I | — |

# Q18A Fuel Pressure Regulator 1 (LZ0)




4992524

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

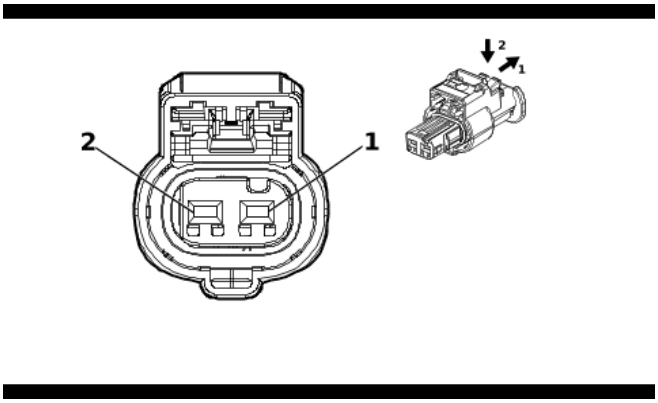
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## Q18A Fuel Pressure Regulator 1 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / VT | 7245 | High Pressure Fuel Pump Low Enable Signal | I | — |
| 2 | 0.75 | GY / BN | 7244 | High Pressure Fuel Pump High Side Control | I | — |

# Q18B Fuel Pressure Regulator 2 (LZ0)




6055996

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13534795
Service Connector: 85625525
Description: 2-Way F 1.2 HPF Series, Sealed( BK)

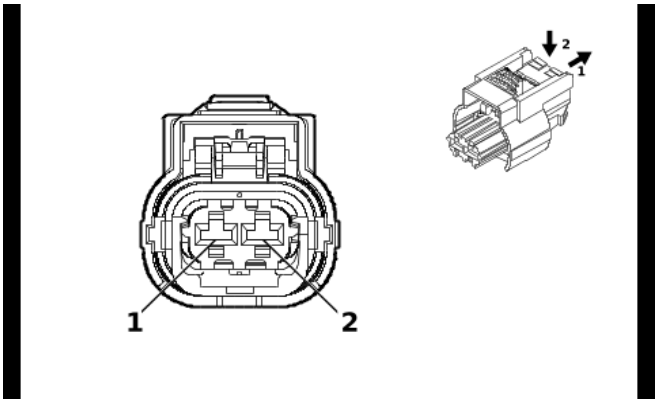
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q18B Fuel Pressure Regulator 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 2834 | Fuel Rail Pressure Solenoid Valve Low Reference | I | — |
| 2 | 0.5 | BU / WH | 2530 | Fuel Rail Pressure Solenoid Valve Control | I | — |

# Q18C Fuel Pressure Regulator 3 (LZ0)




4992524

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

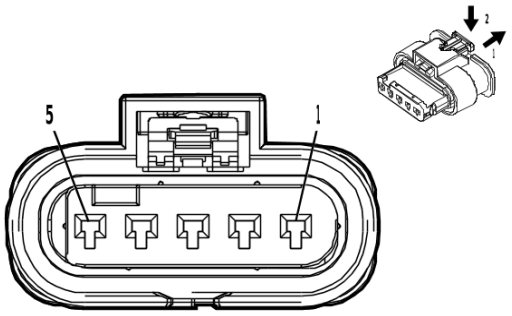
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## Q18C Fuel Pressure Regulator 3 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE / VT | 2420 | Fuel High Pressure Pump Low Enable Signal | I | — |
| 2 | 0.75 | GY / BN | 2419 | Fuel High Pressure Pump High Side Supply Voltage | I | — |

# Q22 Intake Manifold Tuning Solenoid Valve (LZ0)




3338689

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed( BK)

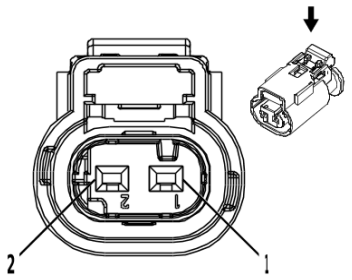
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q22 Intake Manifold Tuning Solenoid Valve (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 2 | 0.5 | GN / GY | 7316 | Intake Manifold Runner Valve Actuator Control | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.75 | BK / BU | 1408 | Variable Swirl Valve Close Control | I | — |
| 5 | 0.75 | BK / GN | 1389 | Variable Swirl Valve Open Control | I | — |

# Q37LFB Front Shock Absorber Actuator - Left (Z45)




2717066

## Connector Part Information

Harness Type: Electronic Suspension Strut Wiring Harness Extension Harness - Front
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

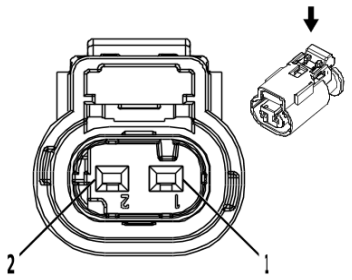
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q37LFB Front Shock Absorber Actuator - Left (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / WH | 1107 | Left Front Shock Absorber Actuator Control | I | — |
| 2 | 0.75 | GY | 1113 | Left Front Shock Absorber Actuator Control | I | — |

# Q37LRB Rear Shock Absorber Actuator - Left (Z45)




2717066

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

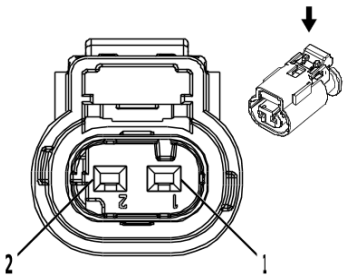
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q37LRB Rear Shock Absorber Actuator - Left (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / GY | 1114 | Left Rear Shock Absorber Actuator Control | I | Z45 |
| 2 | 0.75 | GN / VT | 1115 | Left Rear Shock Absorber Actuator Control | I | Z45 |

# Q37RFB Front Shock Absorber Actuator - Right (Z45)




2717066

## Connector Part Information

Harness Type: Electronic Suspension Strut Wiring Harness Extension Harness - Front
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

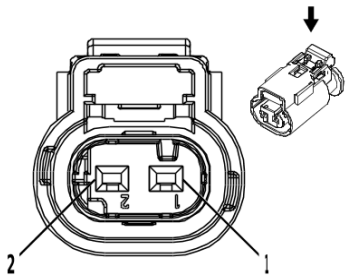
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q37RFB Front Shock Absorber Actuator - Right (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / WH | 1116 | Right Front Shock Absorber Actuator Control | I | — |
| 2 | 0.75 | GY | 1117 | Right Front Shock Absorber Actuator Control | I | — |

# Q37RRB Rear Shock Absorber Actuator - Right (Z45)




2717066

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

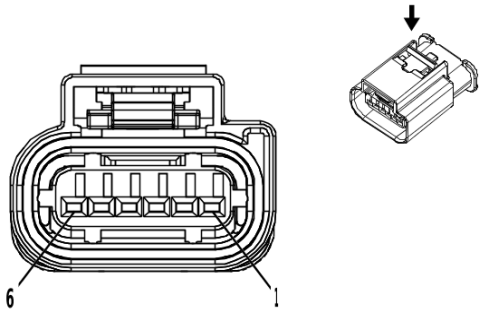
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q37RRB Rear Shock Absorber Actuator - Right (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / GN | 1118 | Right Rear Shock Absorber Actuator Control | I | Z45 |
| 2 | 0.75 | GN / GY | 1119 | Right Rear Shock Absorber Actuator Control | I | Z45 |

# Q38 Throttle Body (L3B)




3747579

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed( BK)

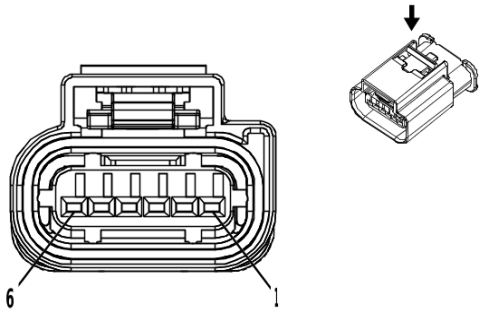
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q38 Throttle Body (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 581 | Throttle Actuator Open Control | I | — |
| 2 | 0.5 | BN / WH | 582 | Throttle Actuator Close Control | I | — |
| 3 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | I | — |
| 4 | 0.5 | BK / BN | 2752 | Throttle Position Sensor Low Reference | I | — |
| 5 | 0.5 | BN / RD | 2701 | Throttle Position Sensor 5V Reference | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# Q38 Throttle Body (L84/L87)




3747579

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed( BK)

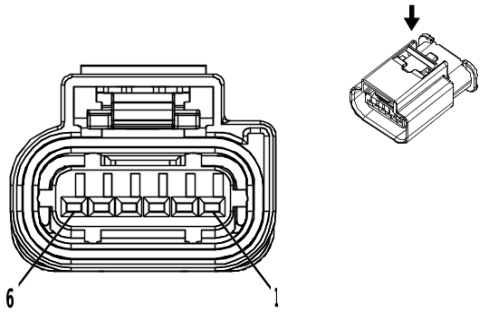
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q38 Throttle Body (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 581 | Throttle Actuator Open Control | I | — |
| 2 | 0.5 | BN / WH | 582 | Throttle Actuator Close Control | I | — |
| 3 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | I | — |
| 4 | 0.5 | BK / BN | 2752 | Throttle Position Sensor Low Reference | I | — |
| 5 | 0.5 | BN / RD | 2701 | Throttle Position Sensor 5V Reference | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# Q38 Throttle Body (LZ0)




3747579

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed( BK)

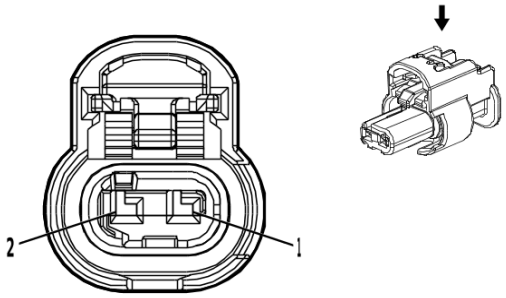
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q38 Throttle Body (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE | 581 | Throttle Actuator Open Control | I | — |
| 2 | 0.75 | BN / WH | 582 | Throttle Actuator Close Control | I | — |
| 3 | 0.5 | BU / WH | 3630 | Throttle Position Sensor SENT 1 Signal | I | — |
| 4 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |
| 5 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# Q40 Turbocharger Bypass Valve Solenoid (L3B)




4690744

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

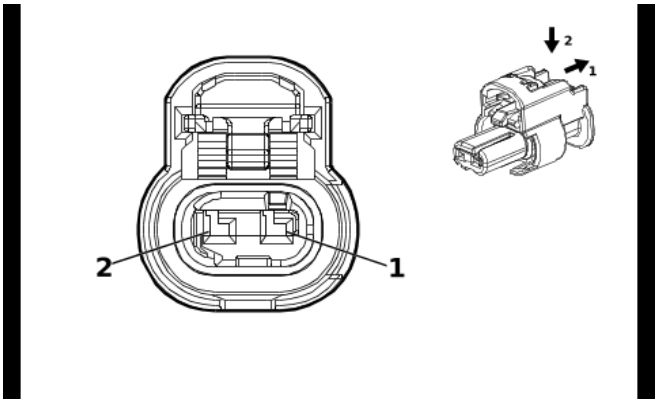
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q40 Turbocharger Bypass Valve Solenoid (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 2 | 0.5 | GN | 3060 | Turbocharger Bypass Solenoid Valve Control Bank 1 | I | — |

# Q44 Engine Oil Pressure Control Solenoid Valve (L87)




4036662

## Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Wire
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

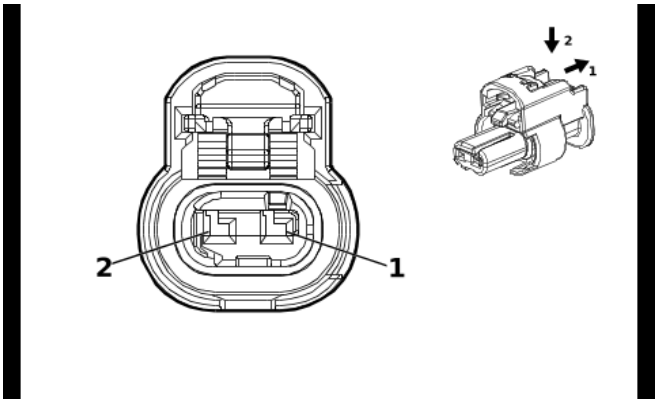
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q44 Engine Oil Pressure Control Solenoid Valve (L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5293 | Powertrain Main Relay Fused Supply Voltage 4 | I | — |
| 2 | 0.5 | BU | 179 | Engine Oil Pump Control | I | — |

# Q44 Engine Oil Pressure Control Solenoid Valve (LZ0)




4036662

## Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Harness
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

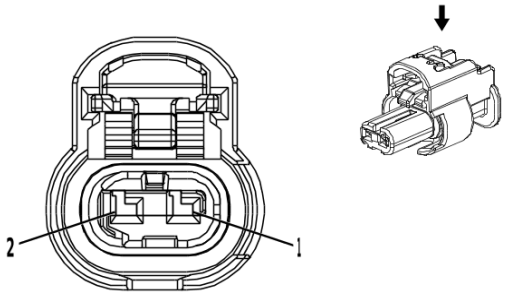
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |

## Q44 Engine Oil Pressure Control Solenoid Valve (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 106 | Oil Pump Motor Control | I | — |
| 2 | 0.5 | BU | 179 | Engine Oil Pump Control | I | — |

# Q46 Air Conditioning Compressor Solenoid Valve (L3B)




4335931

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

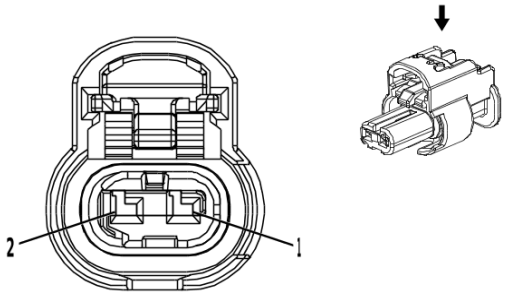
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q46 Air Conditioning Compressor Solenoid Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / YE | 7574 | A/C Compressor Solenoid Valve Control | I | — |
| 2 | 0.75 | BU / BN | 7573 | A/C Compressor Solenoid Valve Control | I | — |

# Q46 Air Conditioning Compressor Solenoid Valve (L84/L87)




4335931

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

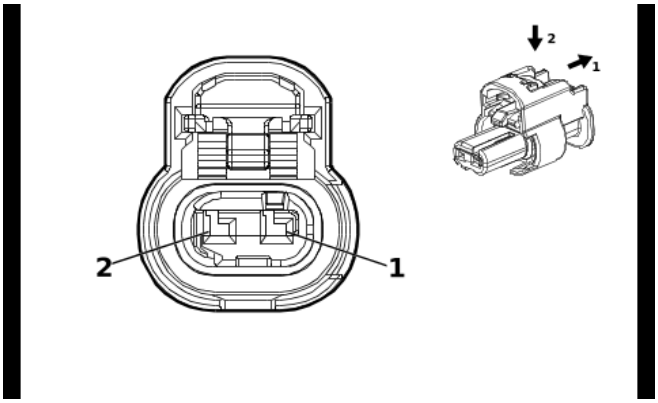
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q46 Air Conditioning Compressor Solenoid Valve (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / YE | 7574 | A/C Compressor Solenoid Valve Control | I | — |
| 2 | 0.75 | BU / BN | 7573 | A/C Compressor Solenoid Valve Control | I | — |

# Q46 Air Conditioning Compressor Solenoid Valve (LZ0)




4649903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

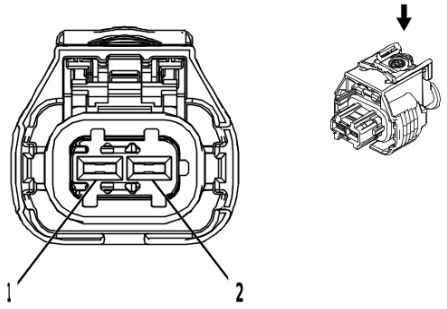
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q46 Air Conditioning Compressor Solenoid Valve (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.75 | BN / GN | 59 | A/C Compressor Clutch Control | I | — |

# Q61 Reductant Fluid Injector (LZ0)




2577394

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed( BK)

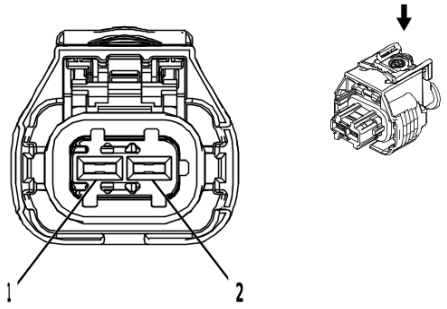
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q61 Reductant Fluid Injector (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / WH | 3100 | Diesel Exhaust Fluid Dosing Valve Low Control | I | — |
| 2 | 0.75 | BN | 3099 | Diesel Exhaust Fluid Dosing Valve High Control | I | — |

# Q61B Reductant Fluid Injector 2 (LZ0)




2577394

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed( BK)

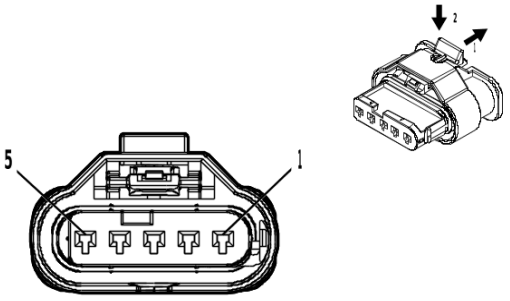
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## Q61B Reductant Fluid Injector 2 (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 11615 | Diesel Exhaust Fluid Dosing Valve High Control 2 | I | — |
| 2 | 0.75 | BU / YE | 11616 | Diesel Exhaust Fluid Dosing Valve Low Control 2 | I | — |

# Q74 Engine Coolant Bypass Valve (L3B)




4994456

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed( NA)

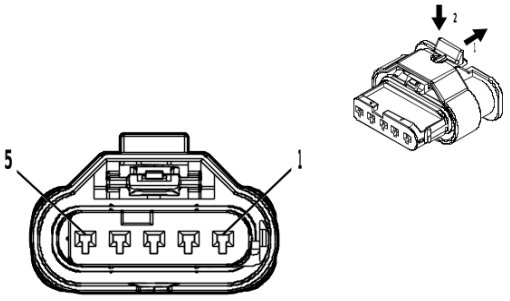
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q74 Engine Coolant Bypass Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Open | I | — |
| 2 | 0.75 | BU / BN | 2977 | Coolant Diverter Valve Actuator Control Close | I | — |
| 3 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.5 | BU / GY | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 5 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |

# Q74 Engine Coolant Bypass Valve (LZ0)




4994456

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed( NA)

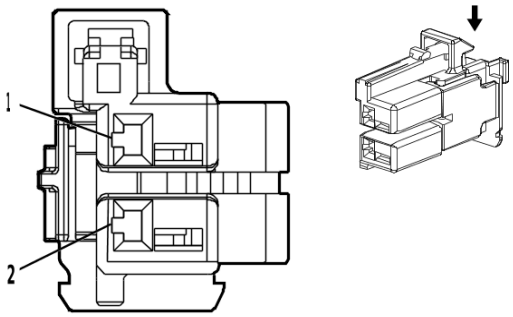
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q74 Engine Coolant Bypass Valve (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Open | I | — |
| 2 | 0.75 | BU / BN | 2977 | Coolant Diverter Valve Actuator Control Close | I | — |
| 3 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.5 | BU / GY | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 5 | 0.5 | BK / GN | 580 | Engine Control Sensors Low Reference 2 | I | — |

# Q77A Transmission Control Solenoid Valve 1 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

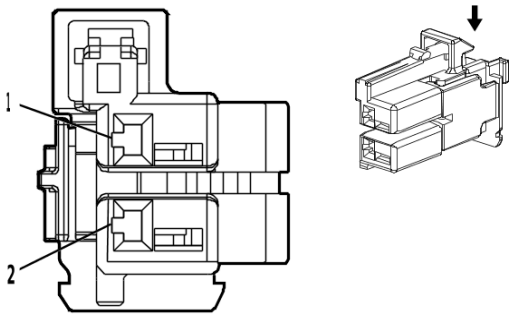
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77A Transmission Control Solenoid Valve 1 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BU / GN | 6404 | Clutch Solenoid Valve E Control | I | — |

# Q77A Transmission Control Solenoid Valve 1 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

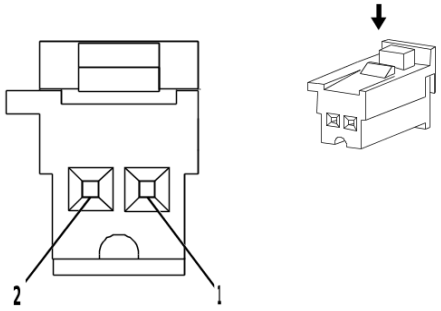
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77A Transmission Control Solenoid Valve 1 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BN / WH | 6404 | Clutch Solenoid Valve E Control | I | — |

# Q77A Transmission Control Solenoid Valve 1 (MQE)




4051391

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( VT)

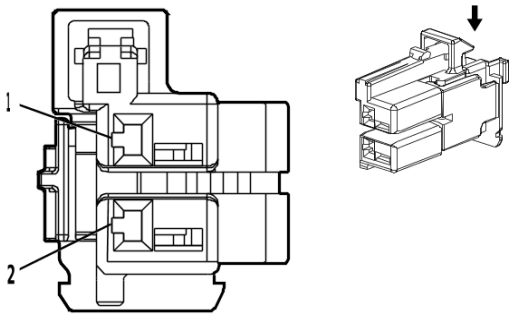
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77A Transmission Control Solenoid Valve 1 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6400 | Clutch Solenoid Valve A Control | I | — |
| 2 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |

# Q77B Transmission Control Solenoid Valve 2 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

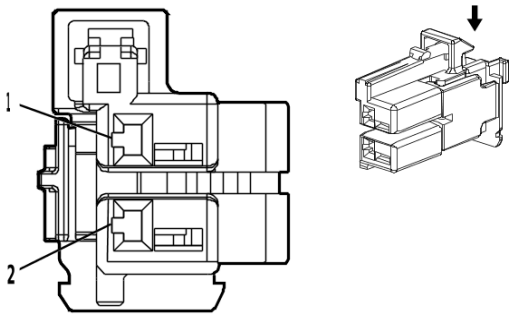
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77B Transmission Control Solenoid Valve 2 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | GN / BN | 6403 | Clutch Solenoid Valve D Control | I | — |

# Q77B Transmission Control Solenoid Valve 2 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

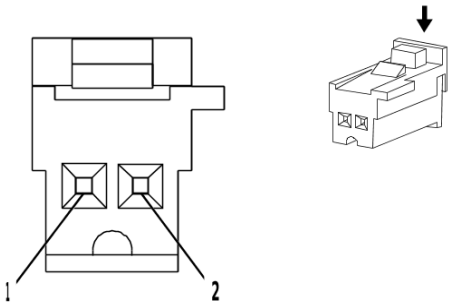
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77B Transmission Control Solenoid Valve 2 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | GN / BN | 6403 | Clutch Solenoid Valve D Control | I | — |

# Q77B Transmission Control Solenoid Valve 2 (MQE)




4008644

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( GY)

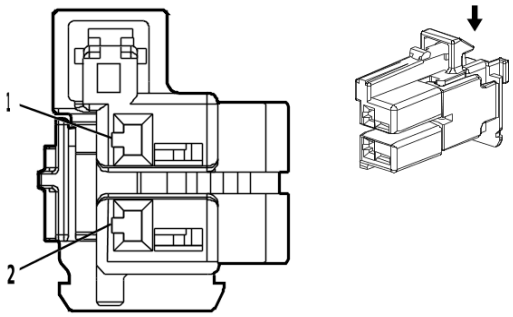
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77B Transmission Control Solenoid Valve 2 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 6401 | Clutch Solenoid Valve B Control | I | — |
| 2 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |

# Q77C Transmission Control Solenoid Valve 3 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

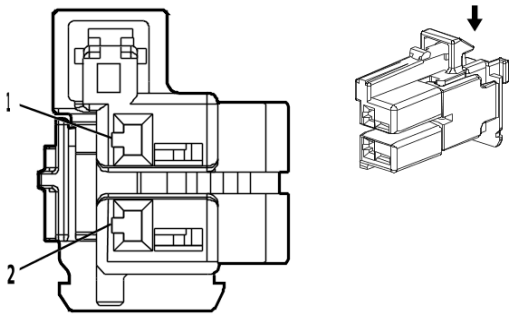
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77C Transmission Control Solenoid Valve 3 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |

# Q77C Transmission Control Solenoid Valve 3 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

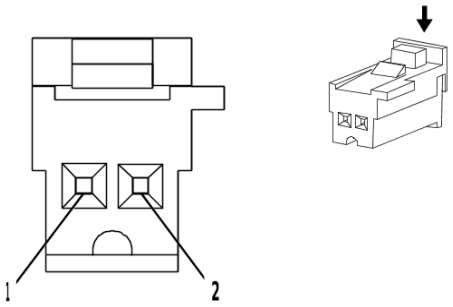
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77C Transmission Control Solenoid Valve 3 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |

# Q77C Transmission Control Solenoid Valve 3 (MQE)




4008644

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( GY)

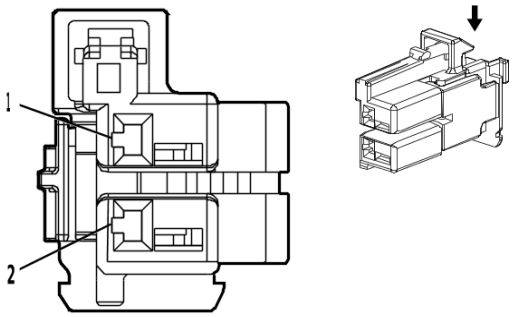
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77C Transmission Control Solenoid Valve 3 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 2 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |

# Q77D Transmission Control Solenoid Valve 4 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

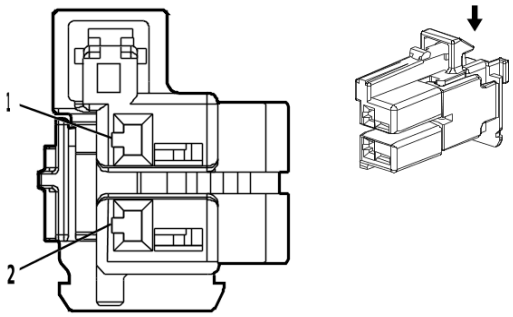
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77D Transmission Control Solenoid Valve 4 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BN / WH | 4509 | Transmission Clutch F Control | I | — |

# Q77D Transmission Control Solenoid Valve 4 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

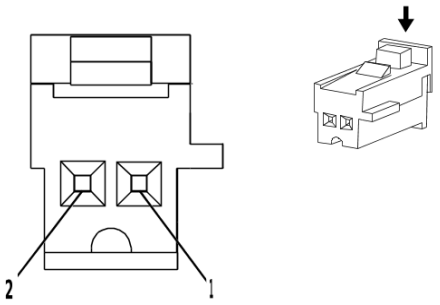
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77D Transmission Control Solenoid Valve 4 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BN / WH | 4509 | Transmission Clutch F Control | I | — |

# Q77D Transmission Control Solenoid Valve 4 (MQE)




4008636

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( NA)

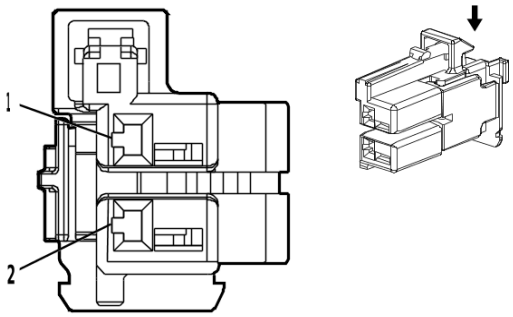
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77D Transmission Control Solenoid Valve 4 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4508 | Transmission Clutch G Control | I | — |
| 2 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | I | — |

# Q77E Transmission Control Solenoid Valve 5 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

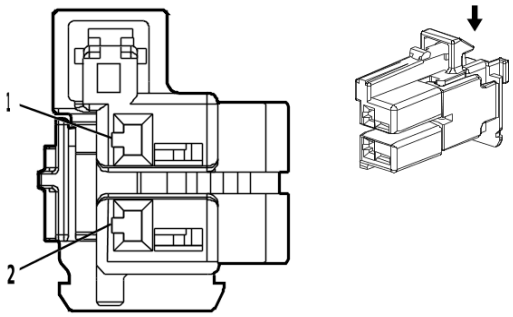
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77E Transmission Control Solenoid Valve 5 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | YE / VT | 4507 | Transmission Clutch H Control | I | — |

# Q77E Transmission Control Solenoid Valve 5 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

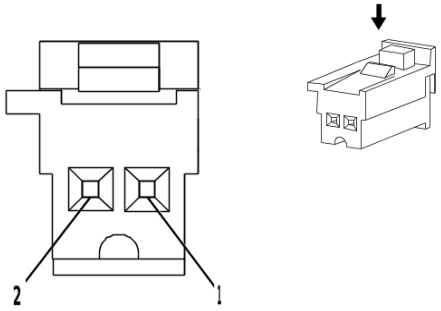
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77E Transmission Control Solenoid Valve 5 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | YE / VT | 4507 | Transmission Clutch H Control | I | — |

# Q77E Transmission Control Solenoid Valve 5 (MQE)




4051391

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( VT)

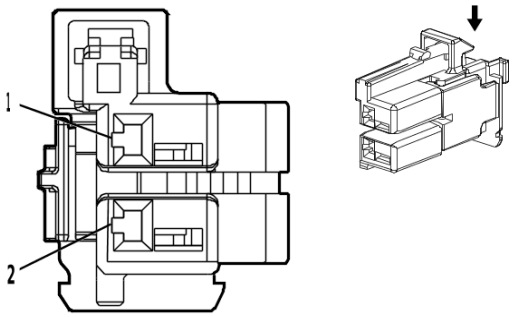
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77E Transmission Control Solenoid Valve 5 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | I | — |
| 2 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | I | — |

# Q77F Transmission Control Solenoid Valve 6 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

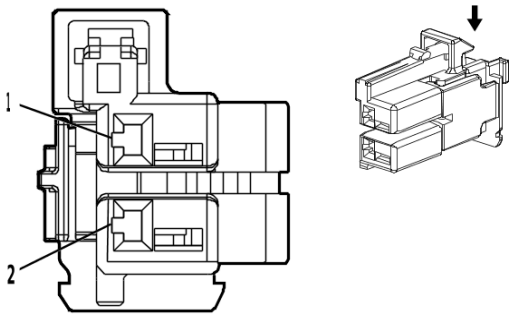
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77F Transmission Control Solenoid Valve 6 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BU / GY | 4508 | Transmission Clutch G Control | I | — |

# Q77F Transmission Control Solenoid Valve 6 (MHT / MQB / MI2)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

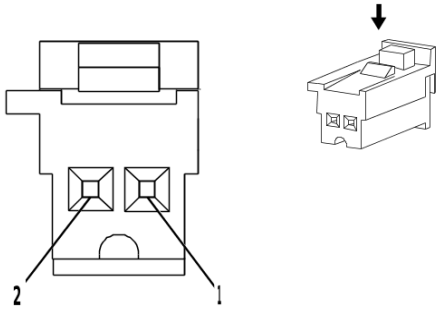
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77F Transmission Control Solenoid Valve 6 (MHT / MQB / MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | BU / GY | 4508 | Transmission Clutch G Control | I | — |

# Q77F Transmission Control Solenoid Valve 6 (MQE)




4051391

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( VT)

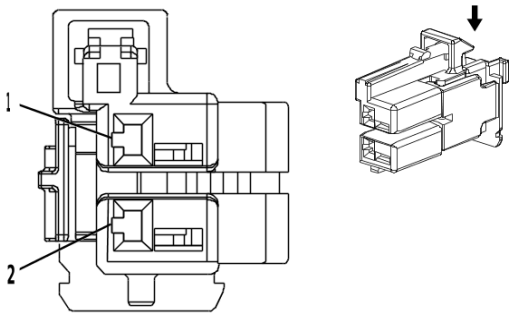
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77F Transmission Control Solenoid Valve 6 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / GN | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 2 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |

# Q77G Transmission Control Solenoid Valve 7 (MHS/MQC)




4364736

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BU)

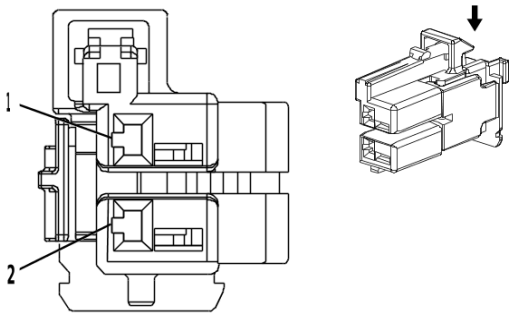
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77G Transmission Control Solenoid Valve 7 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | GN / OG | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |

# Q77G Transmission Control Solenoid Valve 7 (MHT / MI2 / MQB)




4364736

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BU)

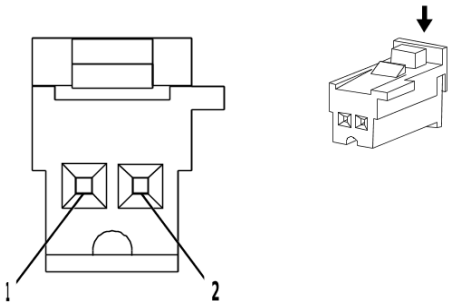
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77G Transmission Control Solenoid Valve 7 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | GN / OG | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |

# Q77G Transmission Control Solenoid Valve 7 (MQE)




4008644

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series( GY)

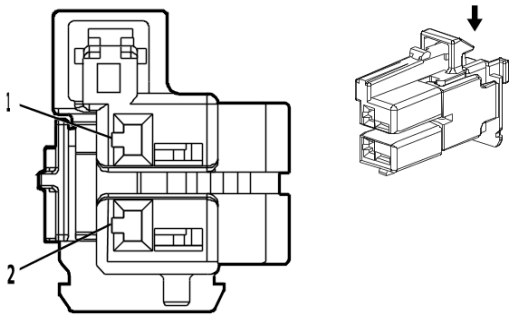
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## Q77G Transmission Control Solenoid Valve 7 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 2 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |

# Q77H Transmission Control Solenoid Valve 8 (MHS/MQC)




4672683

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( GN)

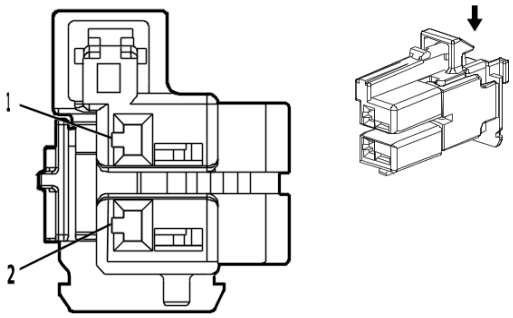
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77H Transmission Control Solenoid Valve 8 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | GY / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |

# Q77H Transmission Control Solenoid Valve 8 (MHT / MI2 / MQB)




4672683

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( GN)

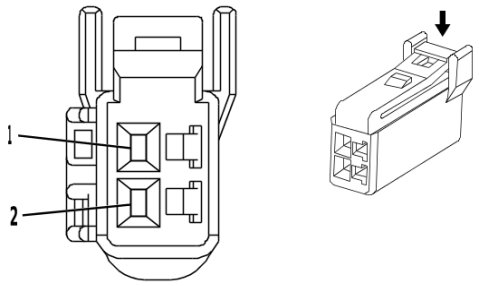
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77H Transmission Control Solenoid Valve 8 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | GY / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |

# Q77H Transmission Control Solenoid Valve 8 (MQE)




4051682

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series( NA)

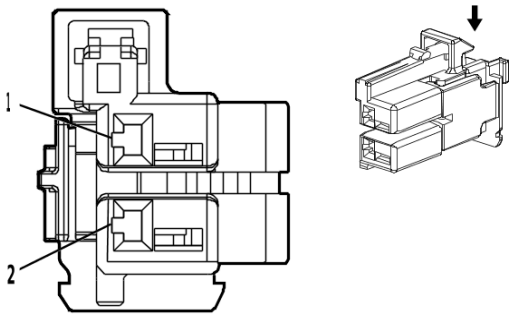
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q77H Transmission Control Solenoid Valve 8 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | I | — |
| 2 | 0.5 | GN / WH | 6380 | Torque Converter Clutch Enable Solenoid Valve A Control | I | — |

# Q77J Transmission Control Solenoid Valve 9 (MHS/MQC)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

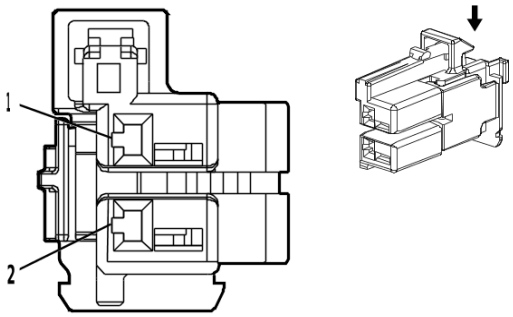
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77J Transmission Control Solenoid Valve 9 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |

# Q77J Transmission Control Solenoid Valve 9 (MHT / MI2 / MQB)




4672650

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BN)

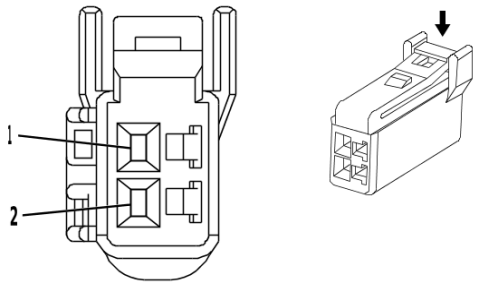
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## Q77J Transmission Control Solenoid Valve 9 (MHT / MI2 / MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |

# Q77J Transmission Control Solenoid Valve 9 (MQE)




4051682

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series( NA)

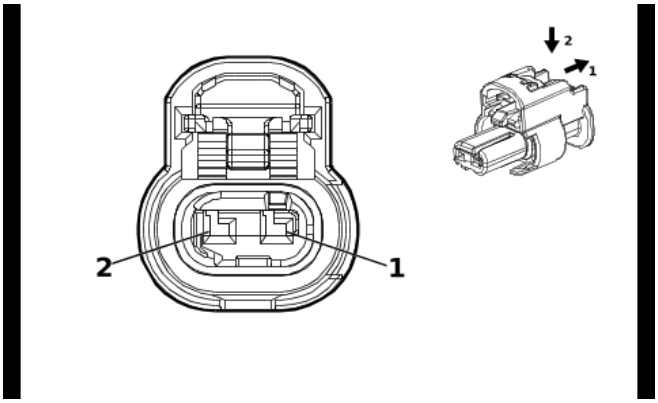
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q77J Transmission Control Solenoid Valve 9 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |
| 2 | 0.5 | YE / BN | 6210 | Torque Converter Clutch Enable Solenoid Valve B Control | I | — |

# Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

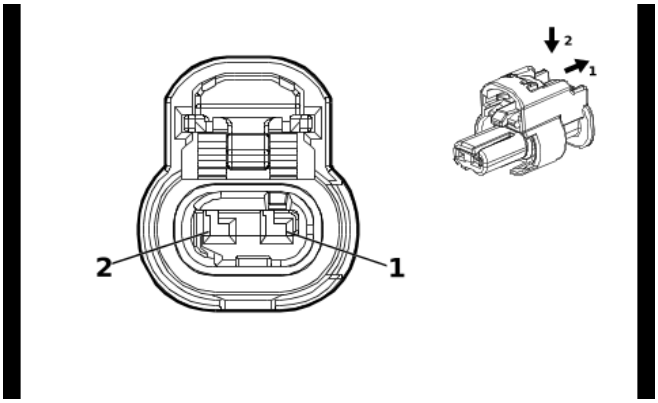
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 2491 | Cylinder Shutoff Solenoid Enable Signal 1 | I | — |
| 2 | 0.5 | BU | 5491 | Cylinder Deactivation Solenoid Valve Control 1 | I | — |

# Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

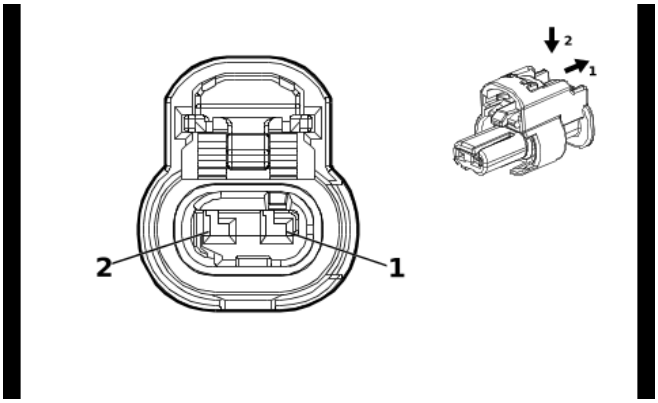
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GN | 2492 | Cylinder Shutoff Solenoid Enable Signal 2 | I | — |
| 2 | 0.5 | GN | 5492 | Cylinder Deactivation Solenoid Valve Control 2 | I | — |

# Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

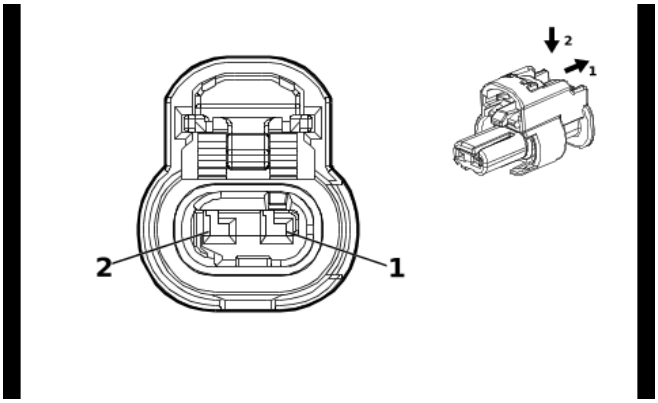
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GY | 2493 | Cylinder Shutoff Solenoid Enable Signal 3 | I | — |
| 2 | 0.5 | GY | 5493 | Cylinder Deactivation Solenoid Valve Control 3 | I | — |

# Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

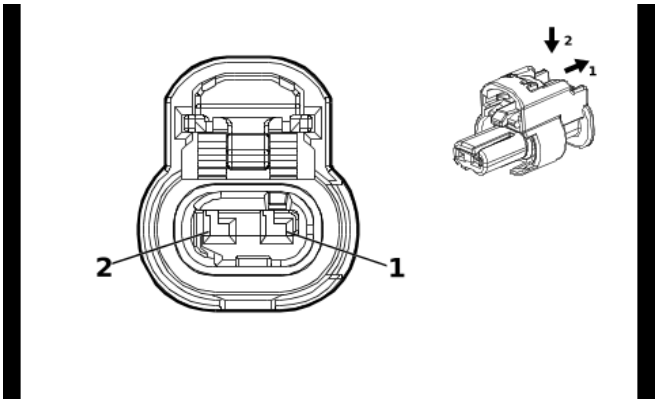
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GN | 2494 | Cylinder Shutoff Solenoid Enable Signal 4 | I | — |
| 2 | 0.5 | YE / BU | 5494 | Cylinder Deactivation Solenoid Valve Control 4 | I | — |

# Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

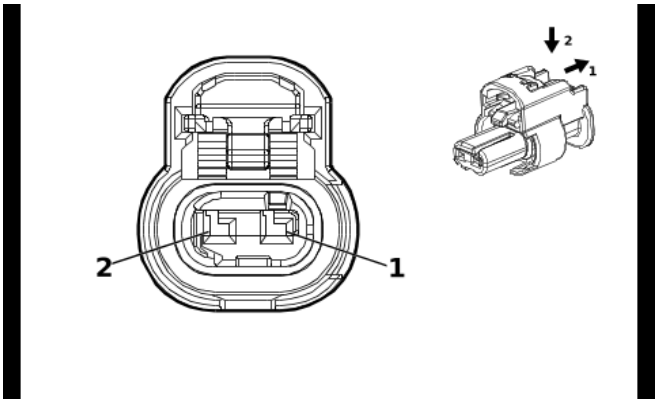
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 2495 | Cylinder Shutoff Solenoid Enable Signal 5 | I | — |
| 2 | 0.5 | VT | 5495 | Cylinder Deactivation Solenoid Valve Control 5 | I | — |

# Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

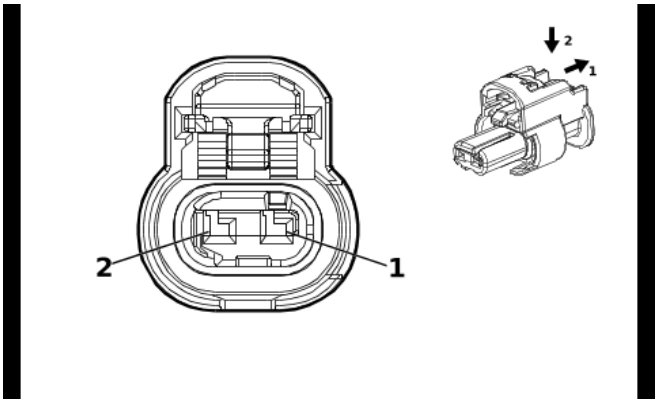
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 2496 | Cylinder Shutoff Solenoid Enable Signal 6 | I | — |
| 2 | 0.5 | BN | 5496 | Cylinder Deactivation Solenoid Valve Control 6 | I | — |

# Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

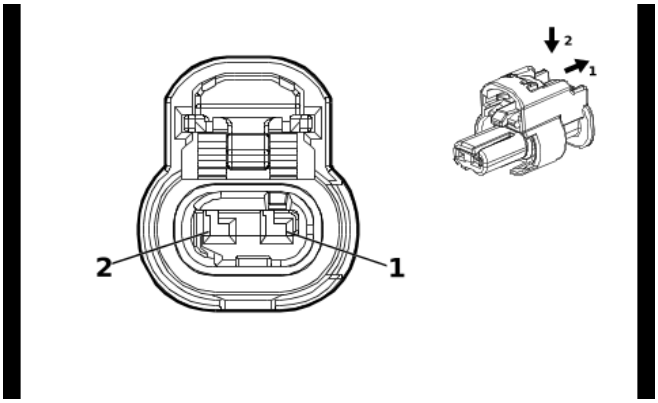
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / GY | 2497 | Cylinder Shutoff Solenoid Enable Signal 7 | I | — |
| 2 | 0.5 | WH | 5497 | Cylinder Deactivation Solenoid Valve Control 7 | I | — |

# Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)




4036662

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed( BK)

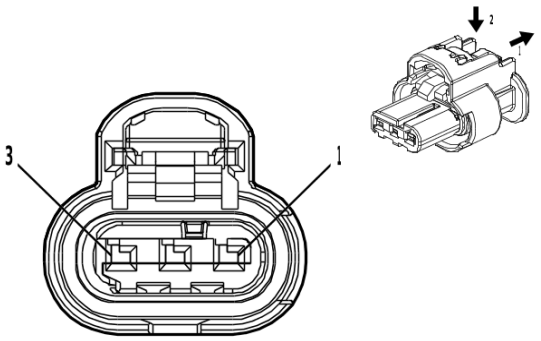
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / YE | 2498 | Cylinder Shutoff Solenoid Enable Signal 8 | I | — |
| 2 | 0.5 | YE | 5498 | Cylinder Deactivation Solenoid Valve Control 8 | I | — |

# Q97B Engine Coolant Flow Control Valve - Block (L3B)




4778903

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed( BK)

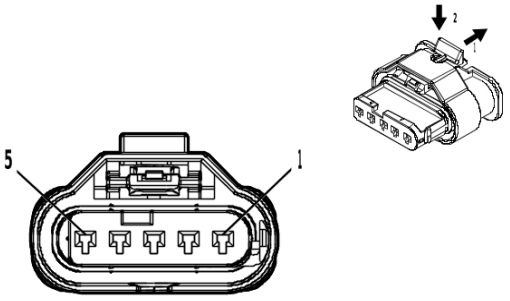
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q97B Engine Coolant Flow Control Valve - Block (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / BN | 2732 | Engine Control Module LIN Bus 4 | I | — |
| 2 | 0.5 | BK | 6550 | Ground | I | — |
| 3 | 0.5 | VT / BU | 5294 | Powertrain Main Relay Fused Supply Voltage 5 | I | — |

# Q97M Engine Coolant Flow Control Valve - Main (LZ0)




4994456

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed( NA)

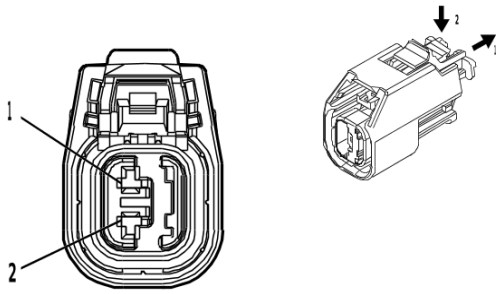
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## Q97M Engine Coolant Flow Control Valve - Main (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY / BN | 2972 | Coolant Flow Control Actuator Control Close | I | — |
| 2 | 0.75 | GY / BU | 2971 | Coolant Flow Control Actuator Control Open | I | — |
| 3 | 0.5 | BU / RD | 460 | Engine Control Sensors 5 Volt Reference 1 | I | — |
| 4 | 0.5 | GY | 2973 | Coolant Flow Control Valve Position Signal | I | — |
| 5 | 0.5 | BK / YE | 548 | Engine Control Sensors Low Reference 1 | I | — |

# R6A Terminating Resistor - High Speed Bus




4889830

## Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33164011
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

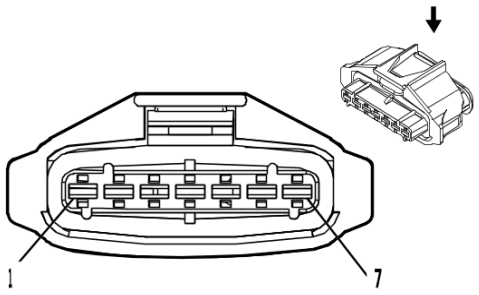
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |

## R6A Terminating Resistor - High Speed Bus

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4100 | AUTOSAR CAN Bus [-] 4 Serial Data | I | — |
| 2 | 0.5 | BU / VT | 4101 | AUTOSAR CAN Bus [+] 4 Serial Data | I | — |

# R29 Fuel Filter (LZ0)




2537256

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 10774827
Service Connector: 19354080
Description: 7-Way F 2.8 Junior Power Timer Series, Sealed( BK)

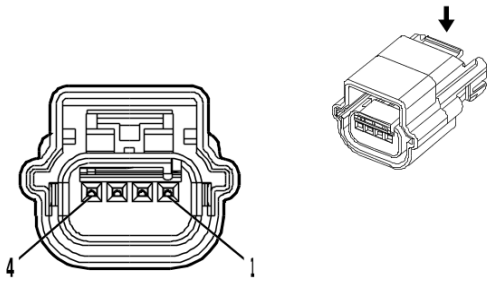
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## R29 Fuel Filter (LZ0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1650 | Ground | I | — |
| 2 | 2.5 | BN / YE | 2996 | Fuel Heater Control 1 | I | — |
| 3 | 1 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | — |
| 4 | 0.5 | BK / BU | 6863 | Water In Fuel Sensor Low Reference | I | — |
| 5 | 0.5 | BU / YE | 6861 | Water In Fuel Sensor Signal | I | — |
| 6 | 0.5 | BN / GY | 7072 | Fuel Temperature Sensor 1 Signal | I | — |
| 7 | 0.5 | BN / WH | 7073 | Fuel Temperature Sensor 1 Low Reference | I | — |

# S2 Automatic Transmission Manual Shift Shaft Position Switch (MHT/MQB)




4789353

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 6006314801
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Series, Sealed( BK)

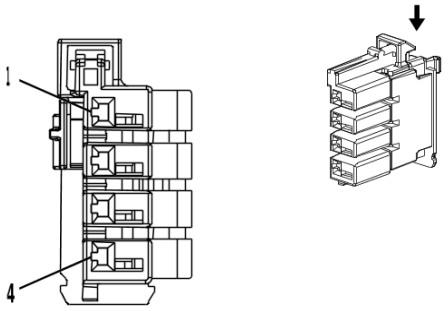
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S2 Automatic Transmission Manual Shift Shaft Position Switch (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 2 | 0.5 | YE | 3338 | Transmission Internal Mode Switch Mode Control X | I | — |
| 3 | 0.5 | YE / GY | 3337 | Transmission Internal Mode Switch Mode Control Y | I | — |
| 4 | 0.5 | OG | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# S2 Automatic Transmission Manual Shift Shaft Position Switch (MQE)




4364148

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series( BN)

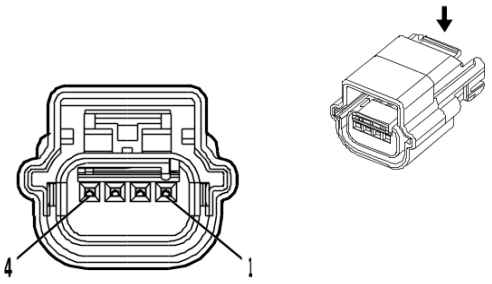
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## S2 Automatic Transmission Manual Shift Shaft Position Switch (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 3337 | Transmission Internal Mode Switch Mode Control Y | I | — |
| 2 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 3 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 4 | 0.5 | BU / WH | 3338 | Transmission Internal Mode Switch Mode Control X | I | — |

# S2 Automatic Transmission Manual Shift Shaft Position Switch (MI2)




4789353

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 6006314801
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Series, Sealed( BK)

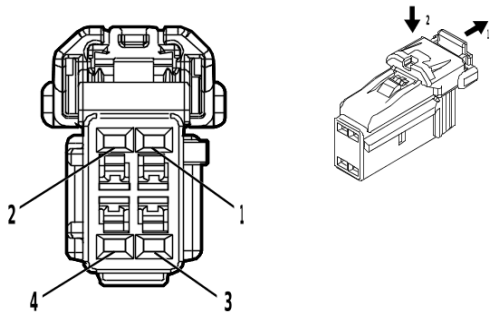
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S2 Automatic Transmission Manual Shift Shaft Position Switch (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 2 | 0.5 | YE | 3338 | Transmission Internal Mode Switch Mode Control X | I | — |
| 3 | 0.5 | YE / GY | 3337 | Transmission Internal Mode Switch Mode Control Y | I | — |
| 4 | 0.5 | OG | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |

# S3 Automatic Transmission Control




4872683

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35029308
Service Connector: 19369633
Description: 4-Way F 1.2 Series( BK)

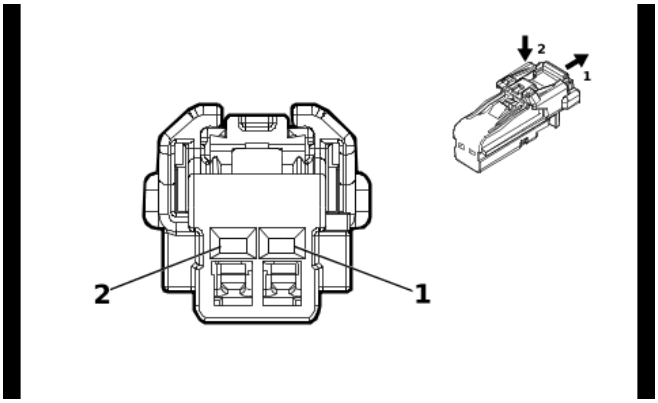
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## S3 Automatic Transmission Control

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / WH | 816 | Brake Transmission Shift Interlock Solenoid Actuator Control | I | — |
| 2 | 0.5 | BK | 1050 | Ground | II | — |
| 3 | 0.35 | VT / BK | 7553 | Park Lock Solenoid Actuator Control | I | — |
| 4 | 0.5 | BK | 1050 | Ground | II | — |

# S3C Automatic Transmission Control Lever (MHT/MQB/MQE)




4115691

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series( BK)

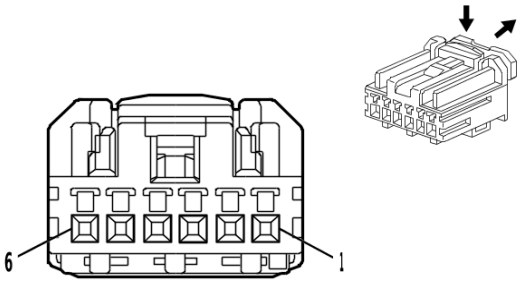
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## S3C Automatic Transmission Control Lever (MHT/MQB/MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / BU | 3738 | Tap Up/Tap Down Switch Signal 2 | I | — |
| 2 | 0.5 | BK / WH | 851 | Signal Ground | II | — |

# S13D Door Lock Switch - Driver (AEQ)




4650256

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series( BK)

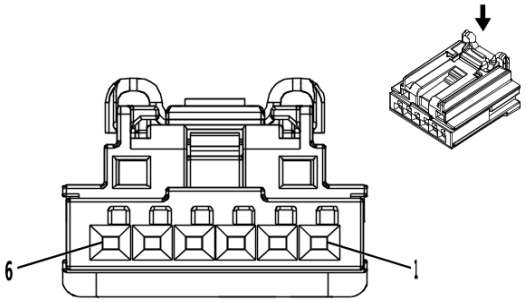
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S13D Door Lock Switch - Driver (AEQ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | BN / GY<br>YE | 4784<br>6817 | Left Front Door LED Backlight Dimming Control<br>LED Backlight Dimming Control 1 | I<br>I | DEZ<br>- DEZ |
| 2 | 0.5 | BN / YE | 2771 | Left Front Door Lock Switch Lock Signal | I | — |
| 3 | 0.5 | BN / WH | 2772 | Left Front Door Lock Switch Unlock Signal | I | — |
| 4 | 0.5 | BK | 1550 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S13D Door Lock Switch - Driver (-AEQ)




4145138

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33251915
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

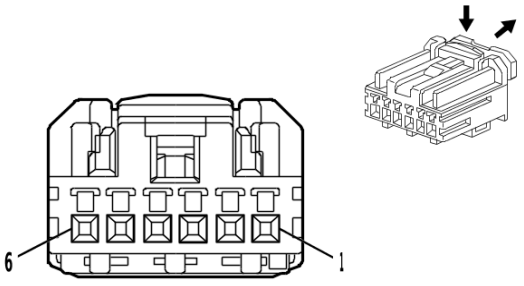
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S13D Door Lock Switch - Driver (-AEQ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / GY | 4784 | Left Front Door LED Backlight Dimming Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BN / YE | 2771 | Left Front Door Lock Switch Lock Signal | I | — |
| 4 | 0.5 | BN / WH | 2772 | Left Front Door Lock Switch Unlock Signal | I | — |
| 5 | 0.5 | BK | 1550 | Ground | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# S13P Door Lock Switch - Passenger - EXTENDED CAB/CREW CAB (GFF)




4650256

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series( BK)

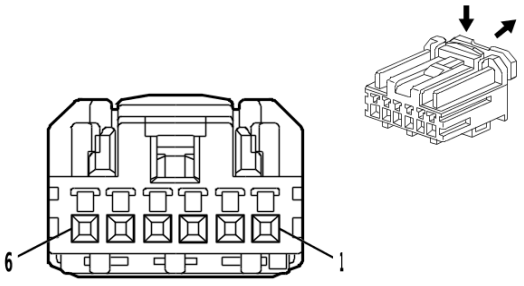
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S13P Door Lock Switch - Passenger - EXTENDED CAB/CREW CAB (GFF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | YE<br>GY / VT | 6817<br>4638 | LED Backlight Dimming Control 1<br>LED Backlight Dimming Control Right Front Door | I<br>I | DEZ<br>- DEZ |
| 2 | 0.5 | YE / VT | 2773 | Right Front Door Lock Switch Lock Control | I | — |
| 3 | 0.5 | BN / VT | 2774 | Right Front Door Lock Switch Unlock Control | I | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S13P Door Lock Switch - Passenger - EXTENDED CAB/CREW CAB (GFI / GFJ)




4650256

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series( BK)

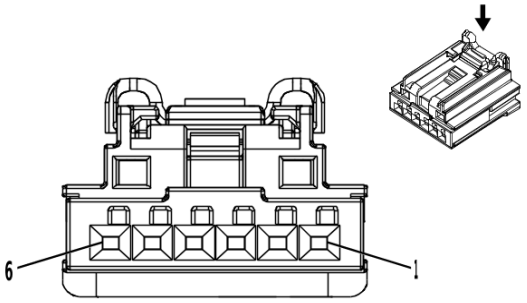
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S13P Door Lock Switch - Passenger - EXTENDED CAB/CREW CAB (GFI / GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / VT | 4638 | LED Backlight Dimming Control Right Front Door | I | — |
| 2 | 0.5 | YE / VT | 2773 | Right Front Door Lock Switch Lock Control | I | — |
| 3 | 0.5 | BN / VT | 2774 | Right Front Door Lock Switch Unlock Control | I | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S13P Door Lock Switch - Passenger - REGULAR CAB (GFG / GFI / GFJ)




4145138

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 33251915
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

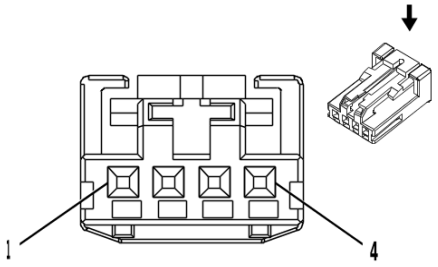
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S13P Door Lock Switch - Passenger - REGULAR CAB (GFG / GFI / GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / VT | 4638 | LED Backlight Dimming Control Right Front Door | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | YE / VT | 2773 | Right Front Door Lock Switch Lock Control | I | — |
| 4 | 0.5 | BN / VT | 2774 | Right Front Door Lock Switch Unlock Control | I | — |
| 5 | 0.5 | BK | 1350 | Ground | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# S27 Head-Up Display Switch (UV6)




2717162

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

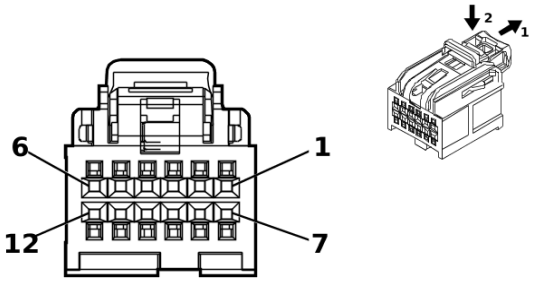
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S27 Head-Up Display Switch (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 2 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 3 | 0.35 | BK / GN | 5699 | Head-Up Display Switch Low Reference | I | — |
| 4 | 0.35 | YE / WH | 622 | Head-Up Display Switch Signal | I | — |

# S30 Headlamp Switch




4975223

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series( BK)

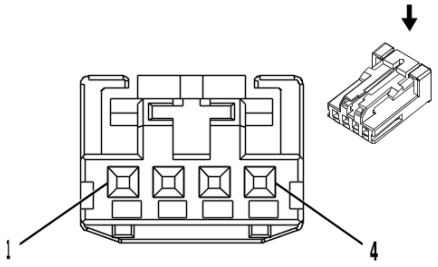
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300660 | J-35616-64B (L-BU) | J-38125-215A |

### S30 Headlamp Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH / VT | 103 | Headlamp Switch On Signal | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | GN / BN | 306 | Headlamp Switch Off Signal | I | — |
| 4 | 0.35 | GY | 158 | Cargo Lamp Switch Signal | I | — |
| 5 | 0.35 | GN / GY | 13 | Headlamp Switch Park Lamp Signal | I | — |
| 6 | 0.35 | BU / GN | 4248 | Cargo Lamp Indicator Control | I | — |
| 7 | 0.35 | WH / GY | 2935 | Task Lamp Switch Signal | I | — |
| 8 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | WH / BN | 7555 | Headlamp Switch Signal | I | — |
| 12 | 0.35 | YE | 7556 | Headlamp Switch Reference | I | — |

# S32R Rear Seat Heater Switch (KA6)




2717162

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

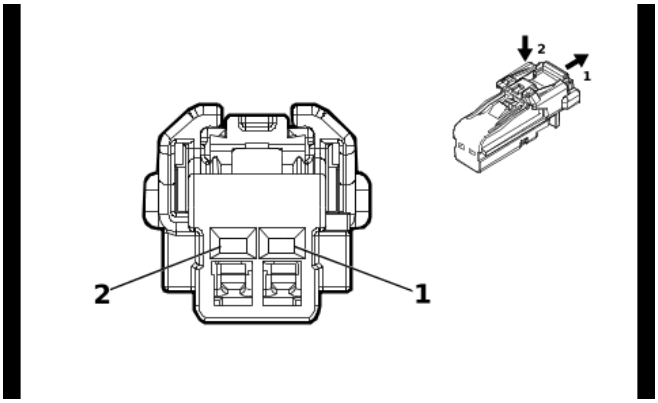
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S32R Rear Seat Heater Switch (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BU | 1240 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / VT | 2857 | Body Control Module LIN Bus 11 | I | — |
| 4 | 0.5 | BK / WH | 1451 | Signal Ground | I | — |

## S33 Steering Wheel Horn Contact (NK5/D07)




4115691

### Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13532422
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

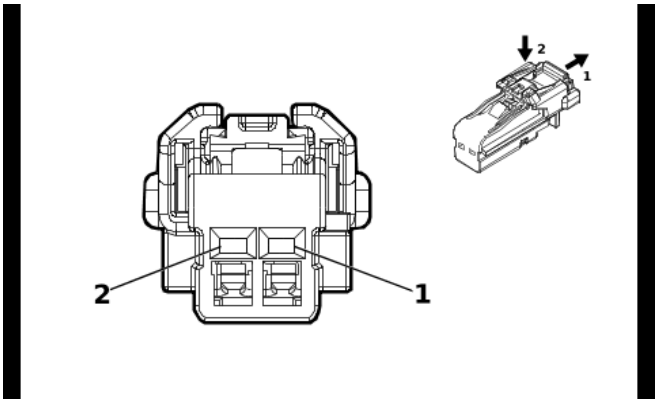
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### S33 Steering Wheel Horn Contact (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |

## S33 Steering Wheel Horn Contact (NP5-D07)




4115691

### Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13532422
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

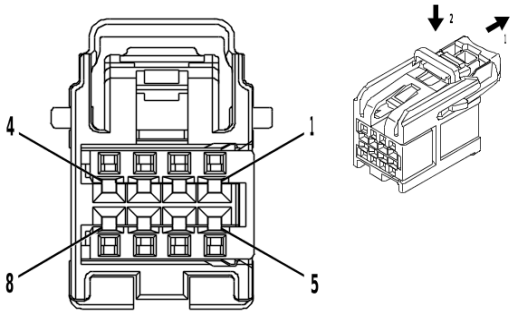
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

### S33 Steering Wheel Horn Contact (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | RD | 3287 | Horn Switch Signal | I | — |

# S38 On/Off Vehicle Switch




4232228

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series( GY)

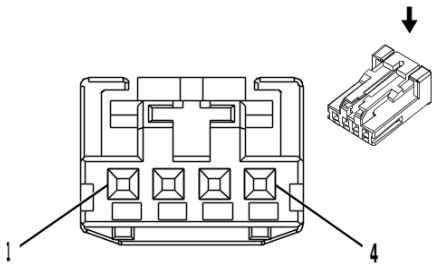
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S38 On/Off Vehicle Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / BK | 5719 | Ignition Mode Switch Start LED Signal | I | — |
| 2 | 0.35 | BN / BK | 5720 | Ignition Mode Switch Accessory LED Signal | I | — |
| 3 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 4 | 0.35 | BU / GN | 5723 | Ignition Mode Switch Mode Voltage | I | — |
| 5 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BK / GY | 3559 | Passive Start Switch 2 Low Reference | I | — |
| 8 | 0.35 | GN / BK | 3558 | Passive Start Switch Signal 2 | I | — |

# S47D Front Seat Adjuster Memory Switch - Driver - EXTENDED CAB/CREW CAB (A45)




2717162

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

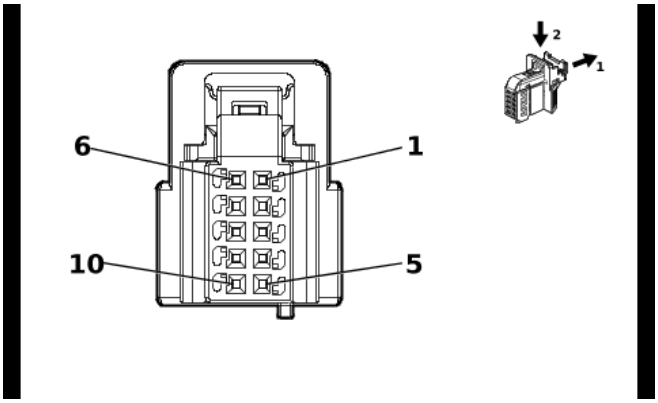
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S47D Front Seat Adjuster Memory Switch - Driver - EXTENDED CAB/CREW CAB (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / GY | 4784 | Left Front Door LED Backlight Dimming Control | I | — |
| 2 | 0.5 | BK / WH | 1551 | Signal Ground | I | — |
| 3 | 0.5 | WH | 615 | Seat Memory Switch Signal 1 | I | — |
| 4 | 0.5 | BU / GN | 614 | Seat Memory Switch Set Signal | I | — |

# S47D Front Seat Adjuster Memory Switch - Driver - REGULAR CAB (A45)




5838155

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 35380960
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 MQS Series( BK)

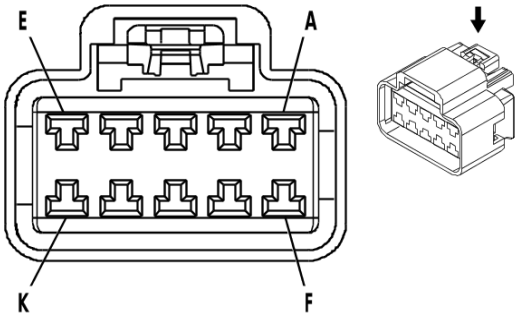
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S47D Front Seat Adjuster Memory Switch - Driver - REGULAR CAB (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / GY | 4784 | Left Front Door LED Backlight Dimming Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BN / YE | 2771 | Left Front Door Lock Switch Lock Signal | I | — |
| 4 | 0.5 | BN / WH | 2772 | Left Front Door Lock Switch Unlock Signal | I | — |
| 5 | 0.5 | BK / WH | 1551 | Signal Ground | I | — |
| 6 | 0.5 | BU / GN | 614 | Seat Memory Switch Set Signal | I | — |
| 7 | 0.5 | WH | 615 | Seat Memory Switch Signal 1 | I | — |
| 8 - 10 | — | — | — | Not Occupied | — | — |

# S64D Front Seat Adjuster Switch - Driver (A2X-A45)




623046

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 35058909
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series( BK)

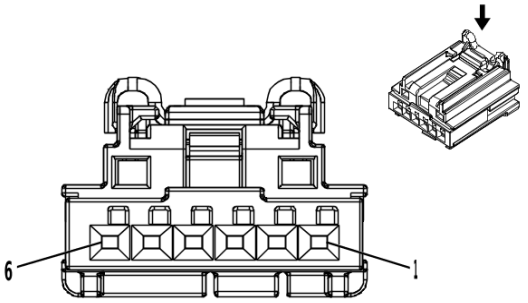
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## S64D Front Seat Adjuster Switch - Driver (A2X-A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 2.5 | RD / YE | 5040 | Battery Positive Voltage | I | — |
| B | 1.5 | BU / YE | 277 | Driver Seat Recline Motor Rearward Control | I | — |
| C | 1.5 | YE / BU | 285 | Driver Seat Horizontal Motor Forward Control | I | — |
| D | 1.5 | GY / GN | 284 | Driver Seat Horizontal Motor Rearward Control | I | — |
| E | 1.5 | GY / BU | 283 | Driver Seat Rear Vertical Motor Down Control | I | — |
| F | 1.5 | GN / BN | 286 | Driver Seat Front Vertical Motor Up Control | I | — |
| G | 1.5 | YE | 282 | Driver Seat Rear Vertical Motor Up Control | I | — |
| H | 1.5 | GN / YE | 276 | Driver Seat Recline Motor Forward Control | I | — |
| J | 2.5 | BK | 1550 | Ground | I | — |
| K | 1.5 | BU / VT | 287 | Driver Seat Front Vertical Motor Down Control | I | — |

# S64D Front Seat Adjuster Switch - Driver (A45)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

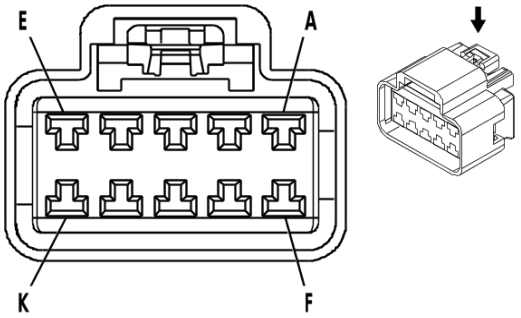
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S64D Front Seat Adjuster Switch - Driver (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / GY | 3758 | Driver Seat Adjuster Memory Module LIN Bus 2 | I | A45 |
| | 0.35 | GN / GY | 3758 | Driver Seat Adjuster Memory Module LIN Bus 2 | I | - A45 |
| 4 | 0.5 | BK | 1550 | Ground | I | — |
| 5 | 0.5 | BU / YE | 2818 | Driver Seat Auxiliary Adjustment Switch Signal | I | — |
| 6 | 0.5 | BK / VT | 2817 | Auxiliary Driver Seat Adjustment Switch Low Reference | I | — |

# S64P Front Seat Adjuster Switch - Passenger (A7K-AKE)




623046

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 35058909
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series( BK)

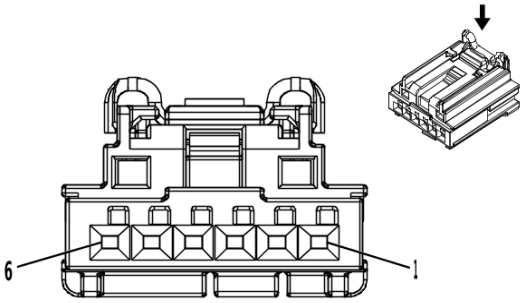
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## S64P Front Seat Adjuster Switch - Passenger (A7K-AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | BU / WH | 289 | Passenger Seat Rear Vertical Motor Down Control | I | — |
| B | 1.5 | YE / BU | 290 | Passenger Seat Horizontal Motor Rearward Control | I | — |
| C | 1.5 | YE / WH | 296 | Passenger Seat Horizontal Motor Forward Control | I | — |
| D | 1.5 | BU / BN | 77 | Passenger Seat Recline Motor Rearward Control | I | — |
| E | 2.5 | BK | 1350 | Ground | I | — |
| F | 1.5 | GN / BU | 298 | Passenger Seat Front Vertical Motor Down Control | I | — |
| G | 2.5 | RD / GY | 7440 | Battery Positive Voltage | I | — |
| H | 1.5 | GN | 76 | Passenger Seat Recline Motor Forward Control | I | — |
| J | 1.5 | GN / WH | 288 | Passenger Seat Rear Vertical Motor Up Control | I | — |
| K | 1.5 | GN / VT | 297 | Passenger Seat Front Vertical Motor Up Control | I | — |

# S64P Front Seat Adjuster Switch - Passenger (AKE)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

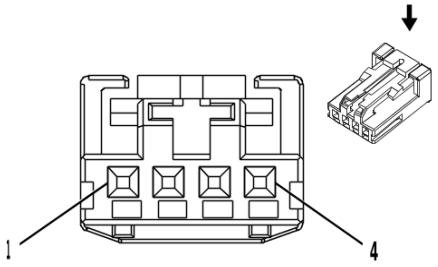
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S64P Front Seat Adjuster Switch - Passenger (AKE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / YE | 4116 | Passenger Seat Adjuster Memory Module LIN Bus 2 | I | — |
| 4 | 0.5 | BK | 1350 | Ground | I | — |
| 5 | 0.5 | GN / WH | 2816 | Passenger Seat Auxiliary Adjustment Switch Signal | I | — |
| 6 | 0.5 | BK / BN | 2815 | Auxiliary Passenger Seat Adjustment Switch Low Reference | I | — |

# S65D Front Seat Lumbar Switch - Driver (A2X-AVK)




2717162

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

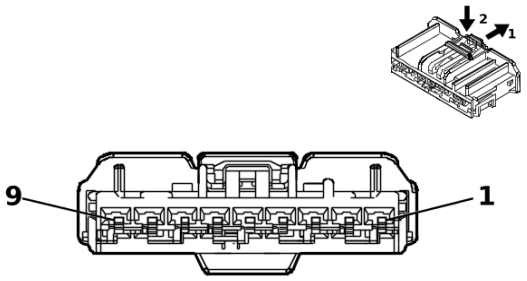
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S65D Front Seat Lumbar Switch - Driver (A2X-AVK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BU / YE | 2818 | Driver Seat Auxiliary Adjustment Switch Signal | I | — |
| 4 | 0.5 | BK / VT | 2817 | Auxiliary Driver Seat Adjustment Switch Low Reference | I | — |

# S65D Front Seat Lumbar Switch - Driver (AVK)




5204289

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 7289-6875-40
Service Connector: Service by Harness - See Part Catalog
Description: 9-Way F 2.8 YESC Series( GY)

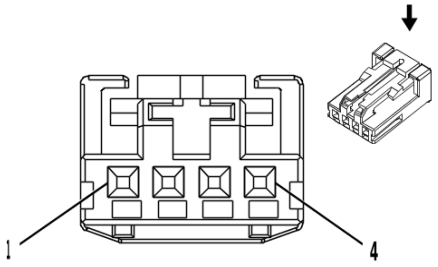
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## S65D Front Seat Lumbar Switch - Driver (AVK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1550 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | BU | 611 | Driver Seat Lumbar Support Motor Forward Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | VT | 610 | Driver Seat Lumbar Support Motor Backward Control | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |

# S65P Front Seat Lumbar Switch - Passenger (-(AKE/AVU))




2717162

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

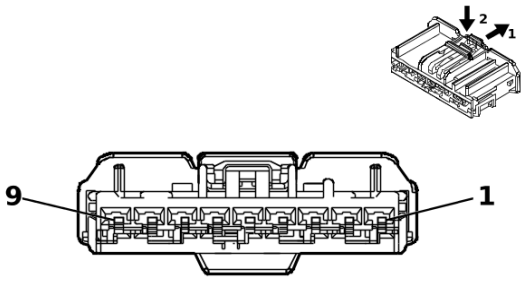
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S65P Front Seat Lumbar Switch - Passenger (-(AKE/AVU))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | YE / GN | 1068 | Passenger Seat Lumbar Support Switch Analog Signal | I | — |
| 4 | 0.5 | BK / BU | 2194 | Passenger Seat Position Switch Low Reference | I | — |

# S65P Front Seat Lumbar Switch - Passenger (A7K-AVU)




5204289

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 7289-6875-40
Service Connector: Service by Harness - See Part Catalog
Description: 9-Way F 2.8 YESC Series( GY)

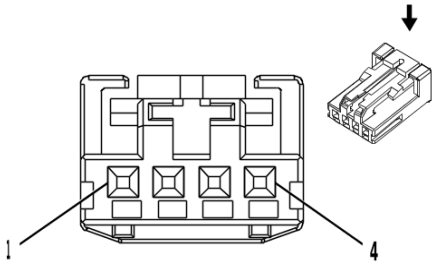
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## S65P Front Seat Lumbar Switch - Passenger (A7K-AVU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1350 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | RD / BN | 2240 | Battery Positive Voltage | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | BU | 211 | Passenger Seat Lumbar Support Motor Forward Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | VT | 210 | Passenger Seat Lumbar Support Motor Backward Control | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |

# S65P Front Seat Lumbar Switch - Passenger (AKE&AVU)




2717162

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

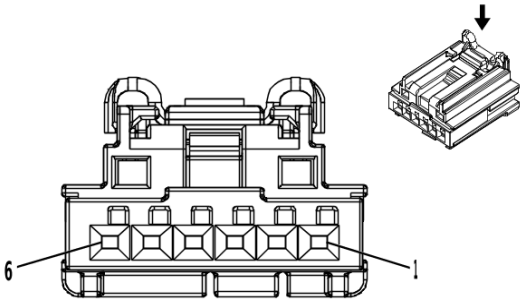
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S65P Front Seat Lumbar Switch - Passenger (AKE&AVU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN / WH | 2816 | Passenger Seat Auxiliary Adjustment Switch Signal | I | — |
| 4 | 0.5 | BK / BN | 2815 | Auxiliary Passenger Seat Adjustment Switch Low Reference | I | — |

# S70E Radio Favorites Switch - Steering Wheel (NK5/D07)




3960313

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13583825
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

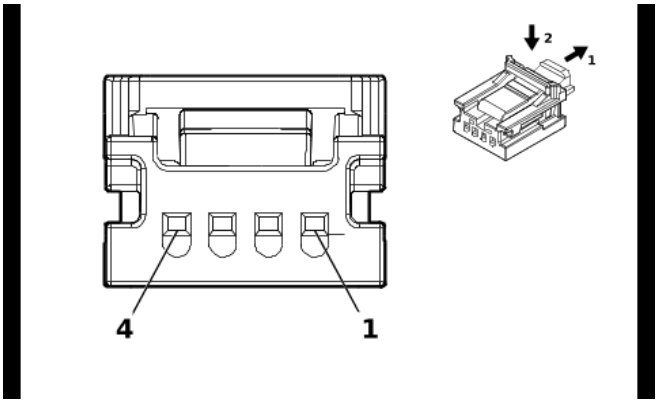
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S70E Radio Favorites Switch - Steering Wheel (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / BK | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | WH / YE | 4313 | Radio Favorite Forward Switch Signal | I | — |
| 3 | 0.35 | YE / YE | 4312 | Radio Favorite Back Switch Signal | I | — |
| 4 | 0.35 | YE / BU | 6855 | Transmission Tap Down Switch Signal | I | MHS/ MQC |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S70E Radio Favorites Switch - Steering Wheel (NP5-D07)




5493278

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13507113
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Mini 50 Series( BK)

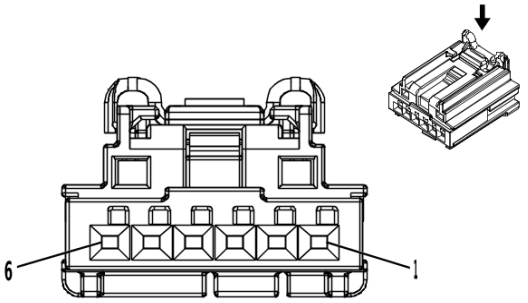
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## S70E Radio Favorites Switch - Steering Wheel (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | BU / RD | 4313 | Radio Favorite Forward Switch Signal | I | — |
| 3 | 0.35 | BU / RD | 4312 | Radio Favorite Back Switch Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# S70F Radio Volume Switch - Steering Wheel (NK5/D07)




3960313

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13583825
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

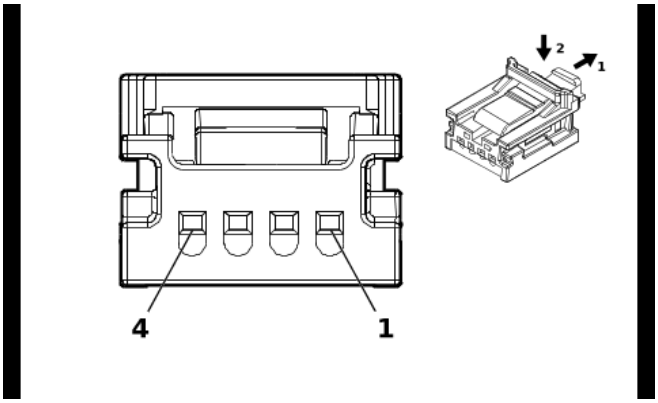
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S70F Radio Volume Switch - Steering Wheel (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | GY / BN | 4314 | Radio Volume Down Switch Signal | I | — |
| 3 | 0.35 | BU | 4315 | Radio Volume Up Switch Signal | I | — |
| 4 | 0.35 | YE / BU | 6855 | Transmission Tap Down Switch Signal | I | MHS/ MQC |
| 5 | 0.35 | VT / YE | 5526 | Tap Up/Tap Down Switch Signal | I | MHS/ MQC |
| 6 | — | — | — | Not Occupied | — | — |

# S70F Radio Volume Switch - Steering Wheel (NP5 - D07)




5493584

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13507115
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Mini 50 Series( GY)

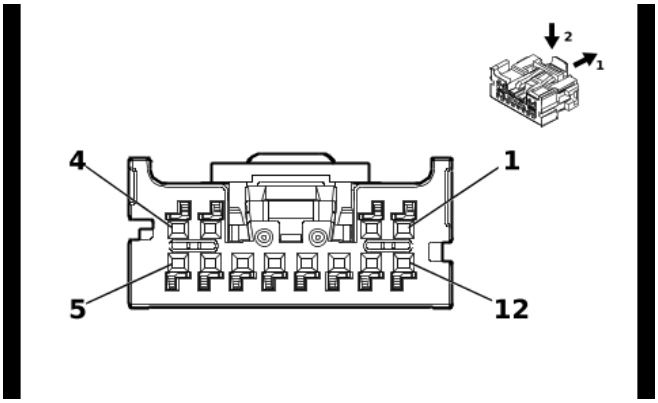
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S70F Radio Volume Switch - Steering Wheel (NP5 - D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | GN / RD | 4314 | Radio Volume Down Switch Signal | I | — |
| 3 | 0.35 | OG / RD | 4315 | Radio Volume Up Switch Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |

## S70L Cruise Control Switch (NK5/D07)




5823893

### Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13541203
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series( GY)

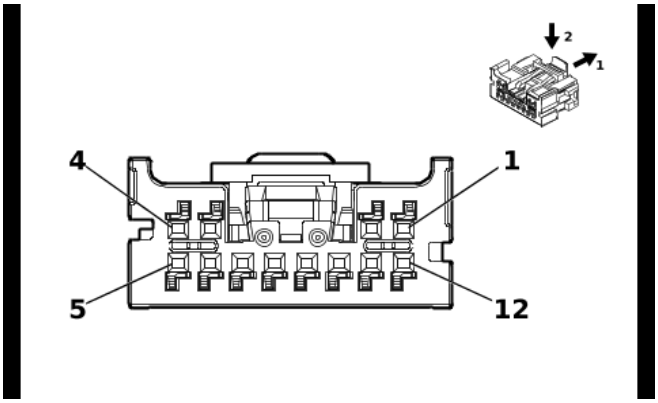
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

### S70L Cruise Control Switch (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE / BK | 3893 | Steering Wheel LED Backlight Dimming Control | I | NK5 |
| | 0.35 | YE / BK | 3893 | Steering Wheel LED Backlight Dimming Control | I | NP5 |
| 3 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 4 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 7 | 0.35 | GY / WH | 5884 | Steering Wheel Heating Switch LED Control | I | KI3 |
| 8 | 0.35 | YE / GY | 5883 | Steering Wheel Heating Switch Signal | I | KI3 |
| 9 | 0.35 | VT | 3892 | Indicator Dimming Control 2 | I | — |
| 10 | 0.35 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | KI3 |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# S70L Cruise Control Switch (NP5-D07)




5823893

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13541203
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series( GY)

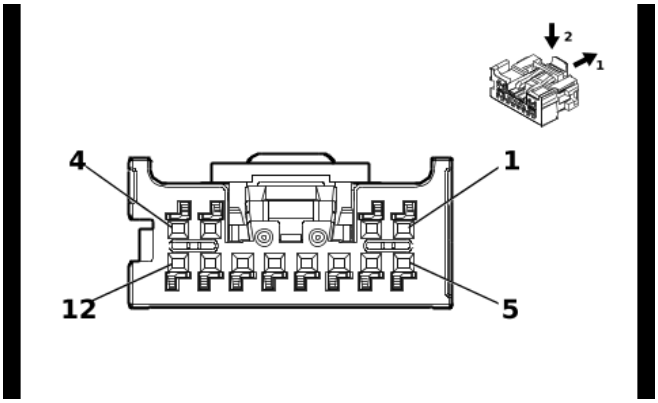
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## S70L Cruise Control Switch (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE / BK | 3893 | Steering Wheel LED Backlight Dimming Control | I | — |
| 3 | 0.35 | GN / OG | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 4 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK | 6051 | Steering Wheel Ground | I | — |
| 7 | 0.35 | GY / OG | 5884 | Steering Wheel Heating Switch LED Control | I | KI3 |
| 8 | 0.35 | YE / GY | 5883 | Steering Wheel Heating Switch Signal | I | KI3 |
| 9 | 0.35 | BK / RD | 3892 | Indicator Dimming Control 2 | I | — |
| 10 | 0.35 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | KI3 |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# S70R Radio Control Switch - Steering Wheel (NK5/D07)




5911307

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13541204
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series( GY)

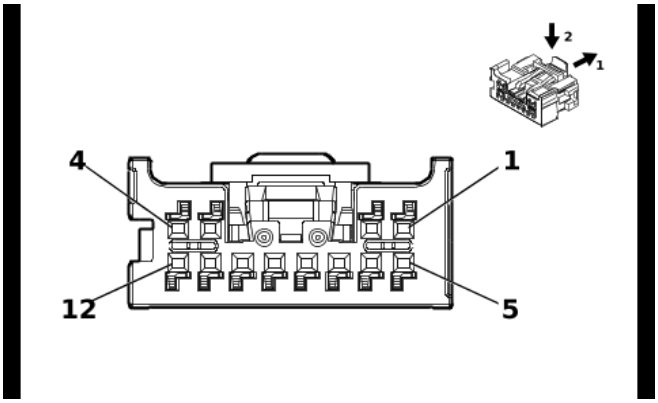
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## S70R Radio Control Switch - Steering Wheel (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN / GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE / BK | 3893 | Steering Wheel LED Backlight Dimming Control | I | — |
| 3 | 0.35 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 7 | 0.35 | WH / YE | 4313 | Radio Favorite Forward Switch Signal | I | — |
| 8 | 0.35 | YE / BU | 4312 | Radio Favorite Back Switch Signal | I | — |
| 9 | 0.35 | VT | 3892 | Indicator Dimming Control 2 | I | — |
| 10 | 0.35 | BU | 4315 | Radio Volume Up Switch Signal | I | — |
| 11 | 0.35 | GN / BN | 4314 | Radio Volume Down Switch Signal | I | — |
| 12 | — | — | — | Not Occupied | — | — |

# S70R Radio Control Switch - Steering Wheel (NP5 - D07)




5911307

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13541204
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series( GY)

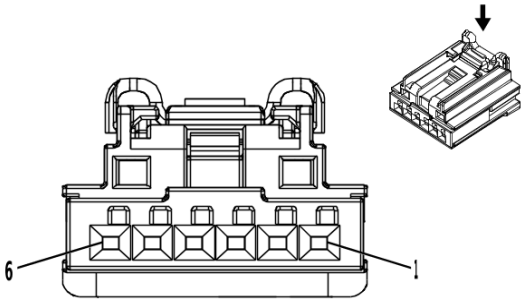
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## S70R Radio Control Switch - Steering Wheel (NP5 - D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | PK | 3893 | Steering Wheel LED Backlight Dimming Control | I | — |
| 3 | 0.35 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 7 | 0.35 | WH / YE | 4313 | Radio Favorite Forward Switch Signal | I | — |
| 8 | 0.35 | YE / RD | 4312 | Radio Favorite Back Switch Signal | I | — |
| 9 | 0.35 | BK / RD | 3892 | Indicator Dimming Control 2 | I | — |
| 10 | 0.35 | OG / RD | 4315 | Radio Volume Up Switch Signal | I | — |
| 11 | 0.35 | GN / BN | 4314 | Radio Volume Down Switch Signal | I | — |
| 12 | — | — | — | Not Occupied | — | — |

# S71 Steering Column Tilt Wheel and Telescope Switch (N38)




4145138

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33251915
Service Connector: 19356359
Description: 6-Way F 0.64 Generation Y Series( BK)

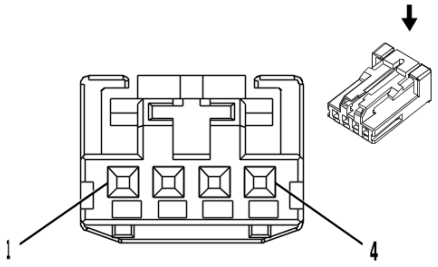
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S71 Steering Column Tilt Wheel and Telescope Switch (N38)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / YE | 2094 | Steering Column Tilt and Telescope Switch Forward Signal | I | — |
| 2 | 0.5 | YE / BN | 2097 | Steering Column Tilt and Telescope Switch Down Signal | I | — |
| 3 | 0.5 | BN / GY | 2096 | Steering Column Tilt and Telescope Switch Up Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GN / BN | 2095 | Steering Column Tilt and Telescope Switch Rearward Signal | I | — |
| 6 | 0.5 | VT / BK | 2020 | Steering Column Tilt and Telescope Switch Feedback Signal | I | — |

# S76 Trailer Brake Control Switch (D07)




2717162

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

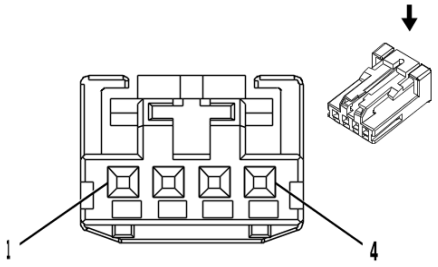
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S76 Trailer Brake Control Switch (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 2340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN / BU | 2733 | Brake System Control Module LIN Bus 2 | I | — |
| 3 | 0.5 | BK | 1350 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# S76 Trailer Brake Control Switch (-D07)




2717162

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

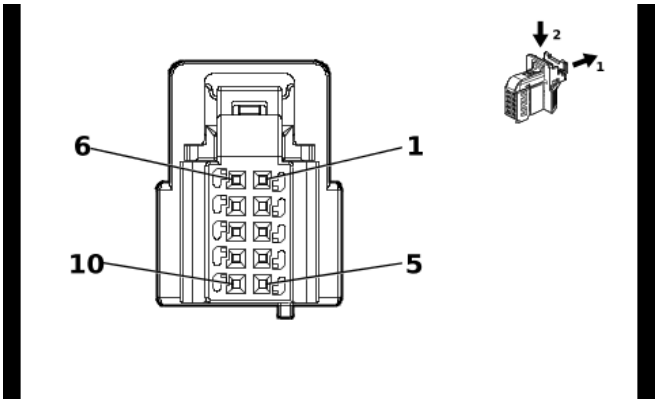
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S76 Trailer Brake Control Switch (-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 2340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN / BU | 2733 | Brake System Control Module LIN Bus 2 | I | — |
| 3 | 0.5 | BK | 1050 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# S78 Turn Signal Switch




5838155

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35380960
Service Connector: 13518417
Description: 10-Way F 0.64 MQS Series( BK)

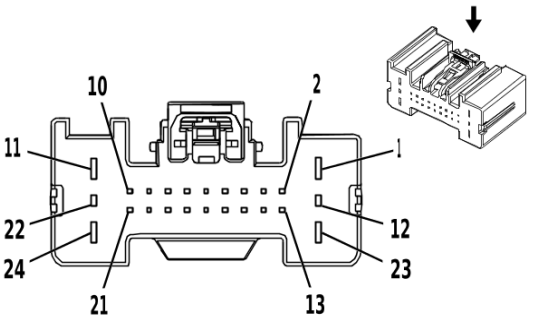
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300632 | J-35616-64B (L-BU) | J-38125-215A |

## S78 Turn Signal Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH / GN | 2915 | Left Turn Signal Switch Signal | I | — |
| 2 | 0.35 | VT / BU | 2916 | Right Turn Signal Switch Signal | I | — |
| 3 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 4 | 0.35 | GY / BN | 3904 | Auto High Beam Assist Switch Signal | I | — |
| 5 | 0.35 | WH / BK | 94 | Windshield Washer Switch Signal | I | — |
| 6 | 0.35 | YE / BN | 307 | Headlamp Switch Flash Signal | I | — |
| 7 | 0.35 | WH | 524 | High Beam Select Switch High Beam Signal | I | — |
| 8 | 0.35 | BK / GY | 6009 | Windshield Wiper Switch Low Reference | I | — |
| 9 | 0.5 | GY | 1715 | Windshield Wiper Switch High Signal | I | — |
| 10 | 0.35 | YE / BU | 1714 | Windshield Wiper Switch Low Signal | I | — |

# S79D Front Side Door Window Control Switch - Driver X1




2871905

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64 GEN-Y, 1.5, 2.8 YESC Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | Not required | J-35616-64B (L-BU) | No Tool Required |

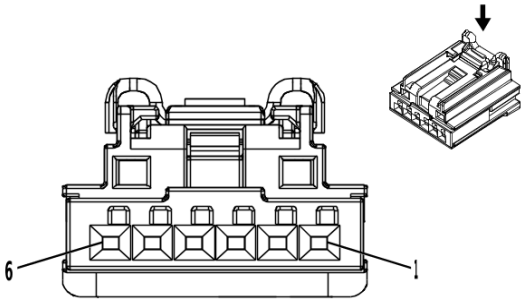
## S79D Front Side Door Window Control Switch - Driver X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BN | 2764 | Window Switch Left Front Down Signal | II | — |
| 2 | 0.5 | GN | 2766 | Power Window Switch Left Front Express Signal | III | — |
| 3 | 0.5 | BN / YE | 2771 | Left Front Door Lock Switch Lock Signal | III | — |
| 4 | 0.5 | BN / WH | 2772 | Left Front Door Lock Switch Unlock Signal | III | — |
| 5 | 0.5 | GY / VT | 2767 | LED Ambient Lighting Control Left Front Door | III | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BN / GY | 4784 | Left Front Door LED Backlight Dimming Control | III | — |
| 8 | 0.35 | GY / YE | 1760 | Left Side Object Detection LED Control | III | — |
| 9 | 0.5 | WH / GN | 2786 | Left Front Mirror Motor Fold In Control | III | — |
| 10 | 0.5 | YE / BN | 2789 | Left Front Mirror Motor Common Control | III | — |
| 11 | 0.5 | BK | 1550 | Ground | II | — |
| 12 | 0.5 | GY / WH | 2785 | Left Front Mirror Motor Fold Out Control | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | WH / VT | 4258 | Left Front Door Lock Status Signal | III | — |
| 18 | 0.5 | VT / BU | 2788 | Left Front Mirror Motor Up [+] Down [-] Control | III | — |
| 19 | 0.5 | BN / BK | 2790 | Left Front Mirror Motor Right [+] Left [-] Control | III | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | GN / YE | 6134 | Body Control Module LIN Bus 3 | III | — |
| 22 | 0.5 | WH | 606 | Left Outside Rearview Mirror Heater Control | I | — |
| 23 | 0.5 | GY / GN | 2763 | Window Switch Left Front Up Signal | II | — |

## S79D Front Side Door Window Control Switch - Driver X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | RD / BU | 1240 | Battery Positive Voltage | II | — |

# S79D Front Side Door Window Control Switch - Driver X2 (A45)




4145138

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33251915
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

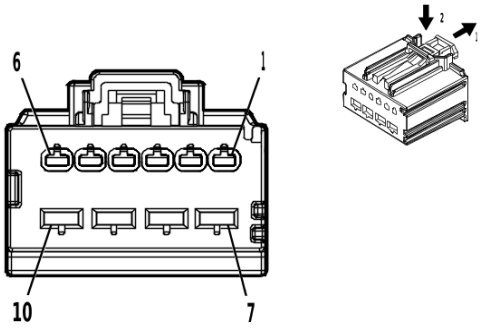
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S79D Front Side Door Window Control Switch - Driver X2 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / YE | 2792 | Left Front Mirror Position Sensor Left [-] Right [+] Signal | I | — |
| 2 | 0.5 | GY / BN | 2787 | Left Front Mirror Position Sensor Up [+] Down [-] Signal | I | — |
| 3 | 0.5 | VT / RD | 2791 | Left Front Mirror Position Sensor High Reference | I | — |
| 4 | 0.5 | BK / BN | 673 | Left Outside Rearview Mirror Position Sensor Low Reference | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S79LR Rear Side Door Window Switch - Left - EXTENDED CAB/CREW CAB




5035058

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series( BK)

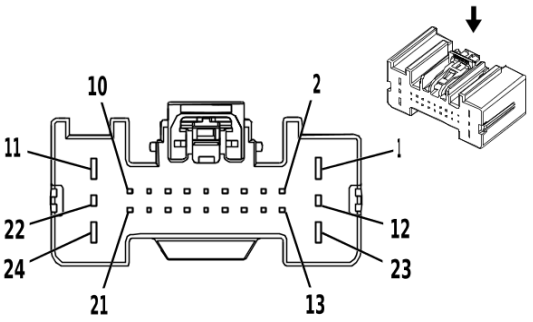
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## S79LR Rear Side Door Window Switch - Left - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / GY | 6135 | Body Control Module LIN Bus 4 | I | — |
| 2 | 0.5 | GY | 747 | Left Rear Door Ajar Switch Signal | I | — |
| 3 | 0.5 | BK | 1550 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1550 | Ground | II | — |
| 8 | 2.5 | RD / BU | 3240 | Battery Positive Voltage | II | — |
| 9 | 2 | BU / VT | 668 | Left Rear Window Motor Up Control | II | — |
| 10 | 2 | YE / BU | 669 | Left Rear Window Motor Down Control | II | — |

# S79P Front Side Door Window Switch - Passenger




2871905

## Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64 GEN-Y, 1.5, 2.8 YESC Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | Not required | J-35616-64B (L-BU) | No Tool Required |

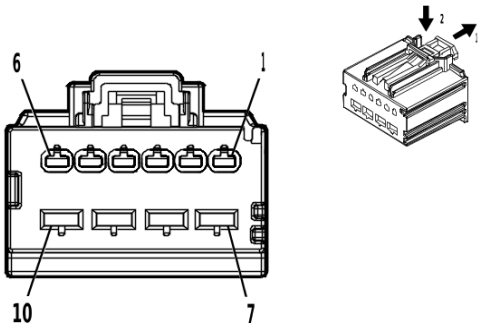
## S79P Front Side Door Window Switch - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1350 | Ground | II | — |
| 2 | 0.5 | YE / RD | 2799 | Right Front Mirror Position Sensor High Reference | III | — |
| 3 | 0.5 | GN / BK | 2798 | Right Front Mirror Motor Right [+] Left [-] Control | III | — |
| 4 | 0.5 | YE / VT | 2796 | Right Front Mirror Motor Up [+] Down [-] Control | III | — |
| 5 | 0.5 | WH / BN | 2768 | LED Ambient Lighting Control Right Front Door | III | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | GY / VT | 4638 | LED Backlight Dimming Control Right Front Door | III | — |
| 8 | 0.35 | GY | 1761 | Right Side Object Detection LED Control | III | — |
| 9 | 0.5 | BU / GY | 2794 | Right Front Mirror Motor Fold In Control | III | — |
| 10 | 0.5 | YE / WH | 2793 | Right Front Mirror Motor Fold Out Control | III | — |
| 11 | 2.5<br>0.5 | GN / GY<br>GN | 666<br>1184 | Right Front Window Motor Up Control<br>Window Switch Right Front Up Signal | II<br>II | AED+ AXG<br>AEF+ AXG |
| 12 | 0.5 | BN / VT | 607 | Right Outside Rearview Mirror Heater Control | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | GN / YE | 6134 | Body Control Module LIN Bus 3 | III | — |
| 15 | 0.5 | VT / WH | 2800 | Right Front Mirror Position Sensor Left [-] Right [+] Signal | III | — |
| 16 | 0.5 | BU / YE | 2795 | Right Front Mirror Position Sensor Up [+] Down [-] Signal | III | — |

## S79P Front Side Door Window Switch - Passenger (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 17 | 0.5 | YE / VT | 2773 | Right Front Door Lock Switch Lock Control | III | — |
| 18 | 0.5 | BN / VT | 2774 | Right Front Door Lock Switch Unlock Control | III | — |
| 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | GY | 746 | Right Front Door Ajar Switch Signal | III | AEF+ AXG |
| | 0.5 | VT / GY | 2765 | Window Switch Right Front Express Signal | III | AXG+ AEF |
| 21 | 0.5 | WH | 2797 | Right Front Mirror Motor Common Control | III | — |
| 22 | 0.5 | BK / GN | 675 | Right Outside Rearview Mirror Position Sensor Low Reference | I | — |
| 23 | 2.5 | RD / BN | 4240 | Battery Positive Voltage | II | — |
| 24 | 0.5 | BN | 5295 | Window Switch Right Front Down Signal | II | AEF+ AXG |
| | 2.5 | YE / BU | 667 | Right Front Window Motor Down Control | II | AXG+ AEF |

# S79RR Rear Side Door Window Switch - Right - EXTENDED CAB/CREW CAB




5035058

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series( BK)

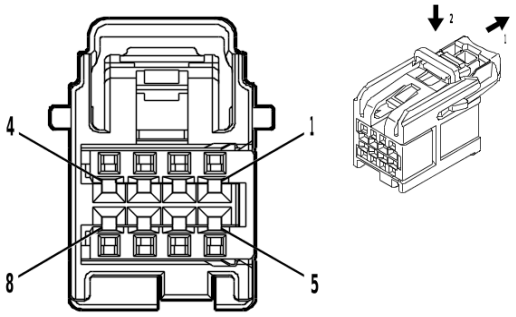
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## S79RR Rear Side Door Window Switch - Right - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / GY | 6135 | Body Control Module LIN Bus 4 | I | — |
| 2 | 0.5 | GY | 748 | Right Rear Door Ajar Switch Signal | I | — |
| 3 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1350 | Ground | II | — |
| 8 | 2.5 | YE / BK | 4840 | Battery Positive Voltage | II | — |
| 9 | 2 | BU / GY | 670 | Right Rear Window Motor Up Control | II | — |
| 10 | 2 | GN / BK | 671 | Right Rear Window Motor Down Control | II | — |

# S86 Vehicle Stability Control System Switch




4935776

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series( BK)

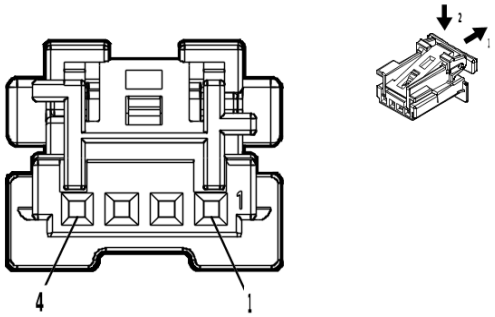
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S86 Vehicle Stability Control System Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / VT | 1788 | Traction Control Switch Signal 1 | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | BN | 7291 | Major Endgate Release Switch Signal Interior | I | — |
| 4 | 0.35 | BU / YE | 6844 | ABS/Traction Control Hill Descent Control Switch Signal | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 7 | 0.35 | GN / WH | 111 | Hazard Warning Switch Signal | I | — |
| 8 | 0.35 | GY | 1198 | Endgate Release Switch Analog Signal Interior | I | — |

# S91 Parking Brake Control Switch




4997407

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35082250
Service Connector: 19371192
Description: 4-Way F 0.64 Micro-Quadlock Series( BK)

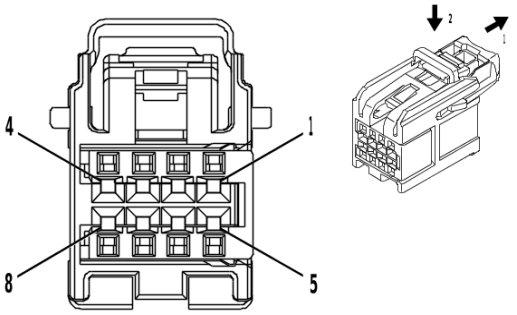
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S91 Parking Brake Control Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / YE | 4340 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN / YE | 2731 | Brake System Control Module LIN Bus 1 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BK / WH | 851 | Signal Ground | I | — |

# S126 Ride Control Switch




4232228

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series( GY)

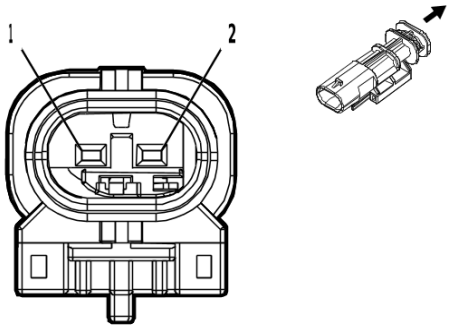
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S126 Ride Control Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH / BN | 2203 | Enhanced Driver Mode 2 Switch Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 4 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 5 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |

# S158 Liftgate Exterior Release Switch - Auxiliary Endgate (QT5)




4994410

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35235497
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( GY)

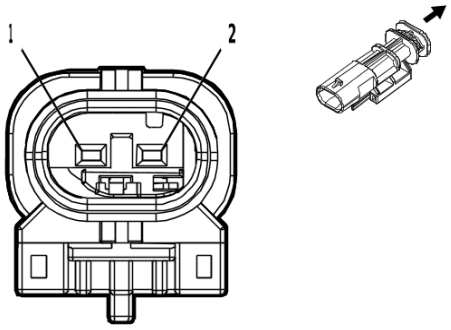
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-17 (L-GN) | No Tool Required |

## S158 Liftgate Exterior Release Switch - Auxiliary Endgate (QT5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 7294 | Minor Endgate Release Switch Discrete Signal Exterior | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# S159E Liftgate Exterior Release Switch - Endgate (QT5)




4994411

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( GY)

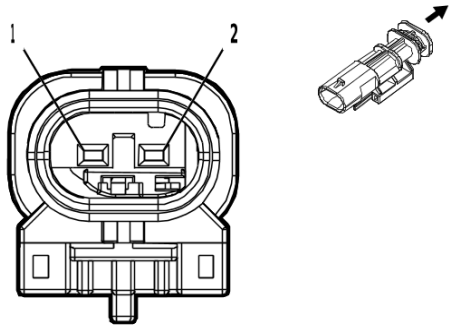
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-17 (L-GN) | No Tool Required |

## S159E Liftgate Exterior Release Switch - Endgate (QT5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 7292 | Major Endgate Release Switch Signal Exterior | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# S159E Liftgate Exterior Release Switch - Endgate (QT6)




4994411

## Connector Part Information

Harness Type: Endgate Wiring Harness
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( GY)

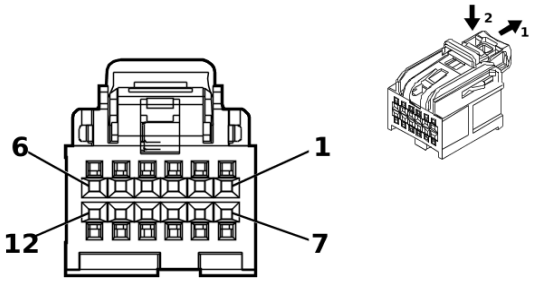
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-17 (L-GN) | No Tool Required |

## S159E Liftgate Exterior Release Switch - Endgate (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 1144 | Endgate Release Switch Discrete Signal Exterior | I | — |
| 2 | 0.5 | BK | 1850 | Ground | I | — |

# S171L Instrument Panel Center Accessory Function Switch - Left




4975223

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series( BK)

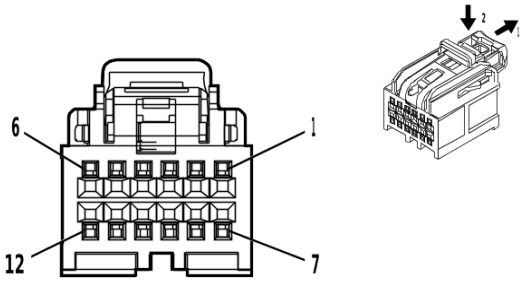
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300660 | J-35616-64B (L-BU) | J-38125-215A |

## S171L Instrument Panel Center Accessory Function Switch - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY / GN | 2555 | Rear Parking Assist Disable Signal | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | BU / WH | 3119 | Roof Rail Air Bag Disable Switch Signal | I | — |
| 4 | 0.35 | GY / WH | 3153 | Lane Departure Warning Disable Switch Signal | I | — |
| 5 | 0.35 | WH | 3152 | Lane Departure Warning Indicator Control | I | — |
| 6 | 0.35 | BU / YE | 6844 | ABS/Traction Control Hill Descent Control Switch Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | GN / BN | 5852 | Rear Parking Assist Disable LED Signal | I | — |
| 9 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 10 | 0.35 | BN / WH | 3895 | Roof Rail Air Bag Disable Switch Low Reference | I | — |
| 11 | 0.35 | GN | 1110 | Stop/Start Indicator Control | I | — |
| 12 | 0.35 | BU | 1111 | Stop/Start Switch Signal | I | — |

# S171R Instrument Panel Center Accessory Function Switch - Right




4997362

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35016613
Service Connector: 13519752
Description: 12-Way F 0.64 OCS Series( BN)

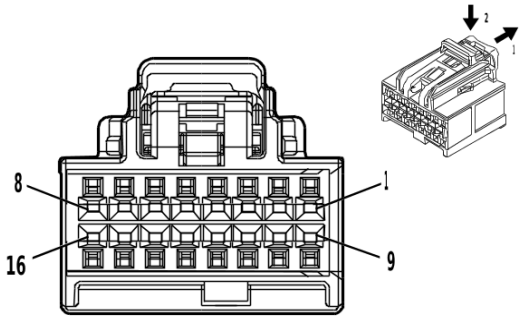
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300660 | J-35616-64B (L-BU) | J-38125-215A |

## S171R Instrument Panel Center Accessory Function Switch - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | BU / YE | 6844 | ABS/Traction Control Hill Descent Control Switch Signal | I | — |
| 4 | 0.35 | YE / GN | 7122 | Axle Differential Lock Switch Signal | I | — |
| 5 | 0.35 | YE | 7115 | Rear Axle Differential Lock Indicator Control | I | — |
| 6 | 0.35 | GN | 1110 | Stop/Start Indicator Control | I | — |
| 7 | 0.35 | VT / GY | 7117 | Front Axle Differential Lock Indicator Control | I | — |
| 8 | 0.35 | BU / YE | 7176 | All Windows Open Switch Signal | I | — |
| 9 | 0.35 | BK / WH | 851 | Signal Ground | I | — |
| 10 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35<br>0.35 | BU / GY<br>BU | 4990<br>1111 | Driver Mode 1 Switch Signal<br>Stop/Start Switch Signal | I<br>I | URC<br>- URC |

# S172 Auxiliary Multifunction Switch (9L7)




4873243

## Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series( BK)

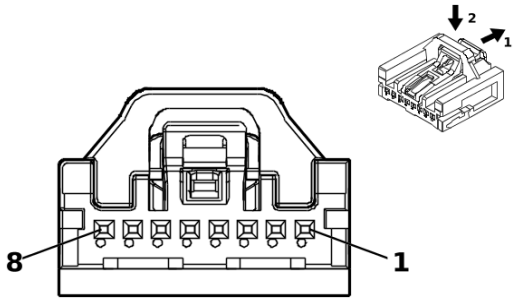
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## S172 Auxiliary Multifunction Switch (9L7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BU / WH | 10716 | Upfitter Accessory Relay 1 Coil Control | I | — |
| 7 | 0.35 | VT / GY | 10717 | Upfitter Accessory Relay 2 Coil Control | I | — |
| 8 | 0.35 | GN / BN | 10718 | Upfitter Accessory Relay 3 Coil Control | I | — |
| 9 | 0.35 | WH / YE | 10719 | Upfitter Accessory Relay 4 Coil Control | I | — |
| 10 | 0.35 | GY / VT | 10720 | Upfitter Accessory Relay 5 Coil Control | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.75 | BK / WH | 851 | Signal Ground | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

# S192 Radio Function Switch (IOR)




5200269

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series( BK)

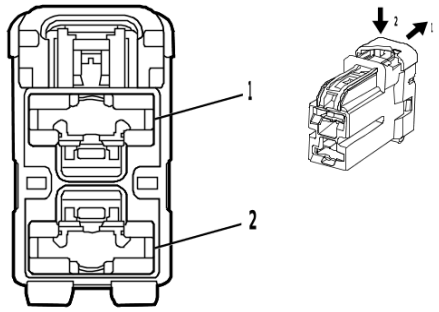
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | EL-35616-58 (BK) | No Tool Required |

## S192 Radio Function Switch (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / RD | 11236 | Radio Switch 5 Volt Reference | I | — |
| 2 | 0.35 | BK / BU | 11237 | Radio Switch Low Reference 1 | I | — |
| 3 | 0.35 | BN / WH | 11233 | Radio Switch Power ON/OFF Switch Signal | I | — |
| 4 | 0.35 | BK / GN | 11238 | Radio Switch Low Reference 2 | I | — |
| 5 | 0.35 | BU / GY | 11244 | Radio Switch Dimming Control | I | — |
| 6 | 0.35 | VT / WH | 11245 | Radio Switch Buttons Signal | I | — |
| 7 | 0.35 | BU | 11235 | Radio Switch Volume Up Signal | I | — |
| 8 | 0.35 | GY / BN | 11234 | Radio Switch Volume Down Signal | I | — |

# T1 DC/AC Converter Control Module X1 (KI4/KI5)




2453116

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13581928
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 9.5 Series( BK)

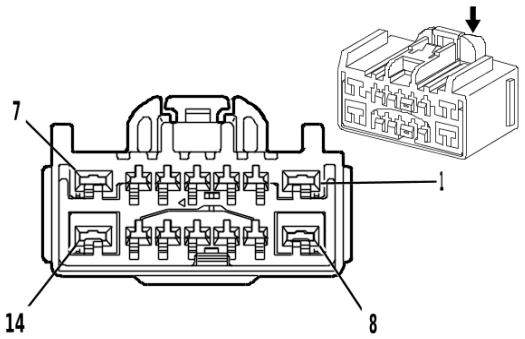
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-22 (RD) | No Tool Required |

## T1 DC/AC Converter Control Module X1 (KI4/KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BN / BK | 4629 | DC/AC Inverter Control | I | — |
| 2 | 5 | BK | 1550 | Ground | I | — |

# T1 DC/AC Converter Control Module X2




1540775

## Connector Part Information

Harness Type: Body Rear Wiring Harness Extension Harness
OEM Connector: 33356826
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 YESC Series( BU)

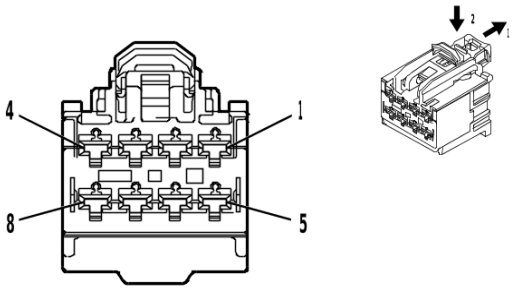
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## T1 DC/AC Converter Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 3 | 0.35 | VT / WH | 239 | Run/Crank Ignition 1 Voltage | I | — |
| 4 | 0.5 | WH / GN | 4628 | DC/AC Inverter Relay Control | I | — |
| 5 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BK / WH | 10120 | AC Outlet 2 Phase A Control | II | — |
| 8 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 9 | 0.35 | Bare | 10116 | AC Outlet Low Reference | I | — |
| 10 | 0.5 | GN / BU | 6133 | Body Control Module LIN Bus 2 | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN / BN | 2266 | DC/AC Inverter Control 2 | I | — |
| 13 | 0.35 | Bare | 10119 | AC Outlet 2 Low Reference | I | — |
| 14 | 0.75 | RD / WH | 10121 | AC Outlet 2 Phase B Control | II | — |

# T3 Audio Amplifier X1 (UQA/UQS)




4875738

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33223792
Service Connector: 19369366
Description: 8-Way F 2.8 OCS Series( BK)

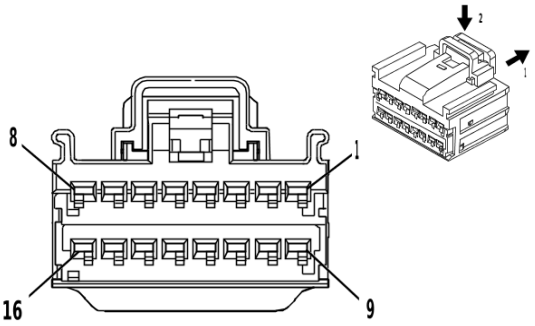
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |

## T3 Audio Amplifier X1 (UQA/UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BU / GY | 346 | Left/Rear Subwoofer [+] Control | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker 1 [+] Control | I | — |
| 3 | 0.75 | BU | 201 | Left Front Speaker 1 [+] Control | I | — |
| 4 | 2.5 | RD / YE | 3740 | Battery Positive Voltage | I | — |
| 5 | 2.5 | GN / BK | 1794 | Left/Rear Subwoofer [-] Control | I | — |
| 6 | 0.75 | YE / BK | 117 | Right Front Speaker [-] Control 1 | I | — |
| 7 | 0.75 | BN / BU | 118 | Left Front Speaker [-] Control 1 | I | — |
| 8 | 2.5 | BK / WH | 1051 | Signal Ground | I | — |

# T3 Audio Amplifier X2 (UQA/UQS)




4332214

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15512506
Service Connector: 13591061
Description: 16-Way F 1.5 OCS Series( BK)

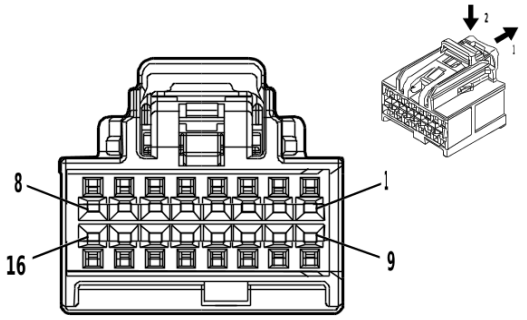
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84757974 | J-35616-2A (GY) | J-38125-215A |

## T3 Audio Amplifier X2 (UQA/UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | BN / BK | 1953 | Right Front Midrange Speaker [-] Control | I | — |
| 3 | 0.75 | BU / VT | 1857 | Left Front Midrange Speaker [+] Control | I | — |
| 4 | 1.5 | WH | 46 | Right Rear Speaker [+] Control | I | — |
| 5 | 1.5 | GN | 199 | Left Rear Speaker [+] Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | YE / WH | 1860 | Front Center Speaker [+] Control | I | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | WH / YE | 1853 | Right Front Midrange Speaker [+] Control | I | — |
| 11 | 0.75 | BU / BN | 1957 | Left Front Midrange Speaker [-] Control | I | — |
| 12 | 1.5 | BU / BK | 115 | Right Rear Speaker [-] Control | I | — |
| 13 | 1.5 | GN / BK | 116 | Left Rear Speaker [-] Control | I | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.75 | BU / YE | 1960 | Front Center Speaker [-] Control | I | — |
| 16 | — | — | — | Not Occupied | — | — |

# T3 Audio Amplifier X3 (UQA/UQS)




4873243

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series( BK)

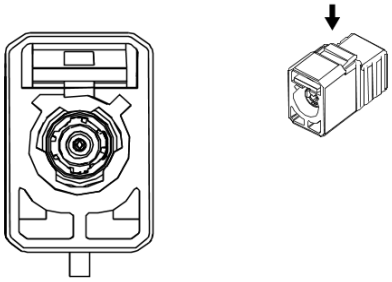
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19354230 | J-35616-64B (L-BU) | J-38125-215A |

## T3 Audio Amplifier X3 (UQA/UQS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 7215 | Ethernet Bus 6 [+] | I | — |
| 2 | 0.35 | GN | 7214 | Ethernet Bus 6 [-] | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | GN / BN | 3005 | Active Noise Cancellation Microphone 1 Signal | I | — |
| 6 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 12 | 0.5 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 13 | 0.35 | GN / BK | 3008 | Active Noise Cancellation Microphone 1 Feed-back Signal | I | — |
| 14 - 16 | — | — | — | Not Occupied | — | — |

# T4M Radio Antenna



2893647

## Connector Part Information

Harness Type: Radio Antenna Cable Extension Cable COAX
OEM Connector: 13581683
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

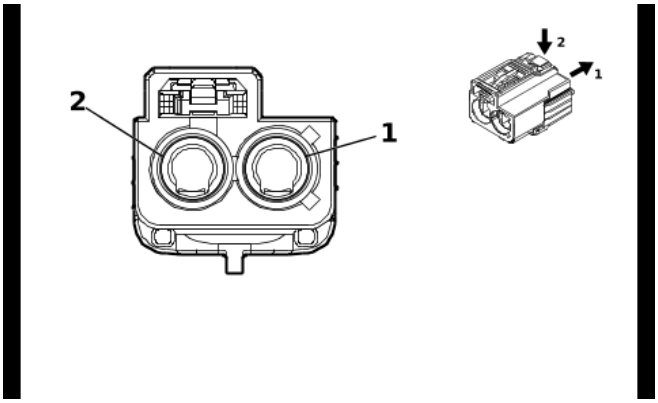
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## T4M Radio Antenna

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (AM/FM) Antenna RF Signal | I | — |

# T4P High Frequency Antenna X1 (UDA/UE1)




5661671

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33351060
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 2-Way F Coax Type( VT)

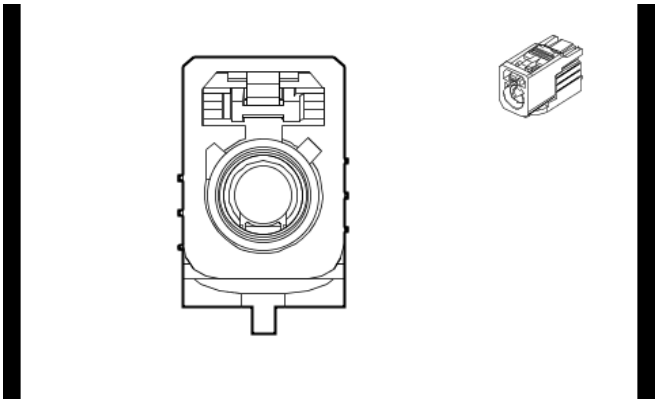
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## T4P High Frequency Antenna X1 (UDA/UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | 3134 | Coaxial Antenna Cell/GPS Combined Signal | I | — |
| 2 | — | — | 6449 | Coaxial Antenna Cell Phone Signal | I | — |

# T4P High Frequency Antenna X1 (-UDA-UE1)



5633890

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33351013
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BU)

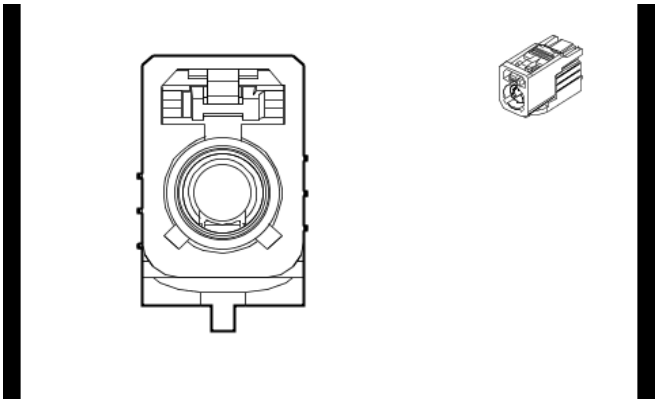
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## T4P High Frequency Antenna X1 (-UDA-UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (GPS only) Coaxial Antenna GPS Signal | I | — |

# T4P High Frequency Antenna X2 (U2K)



5661657

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33351022
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( YE)

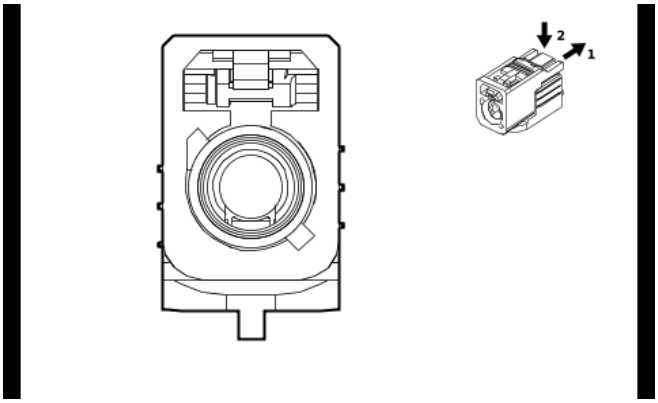
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## T4P High Frequency Antenna X2 (U2K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

# T4TA Auxiliary Wireless Communication Interface Antenna




5518436

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33351021
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BG)

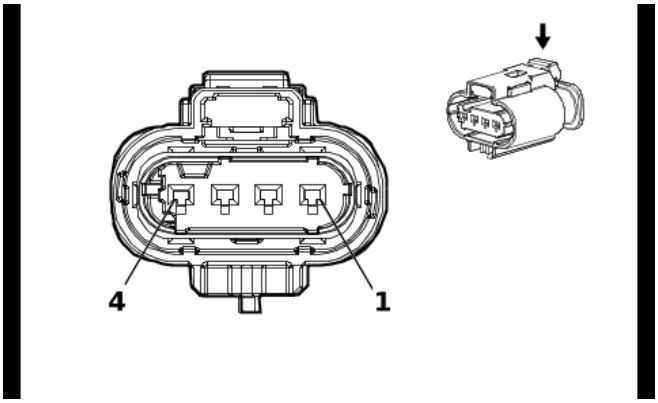
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## T4TA Auxiliary Wireless Communication Interface Antenna

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | WiFi Antenna Coaxial Signal | I | — |

# T8A Ignition Coil 1 (L3B)




5402120

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33217609
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

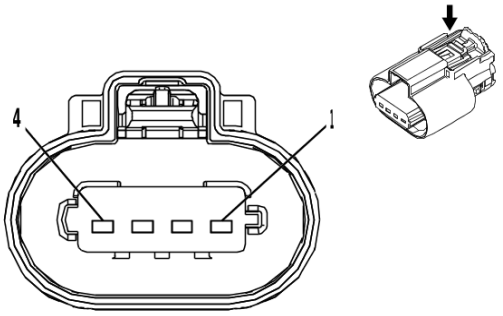
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T8A Ignition Coil 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | I | — |
| 2 | 0.75 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.75 | BU / VT | 2121 | Ignition Control 1 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | I | — |

# T8A Ignition Coil 1 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

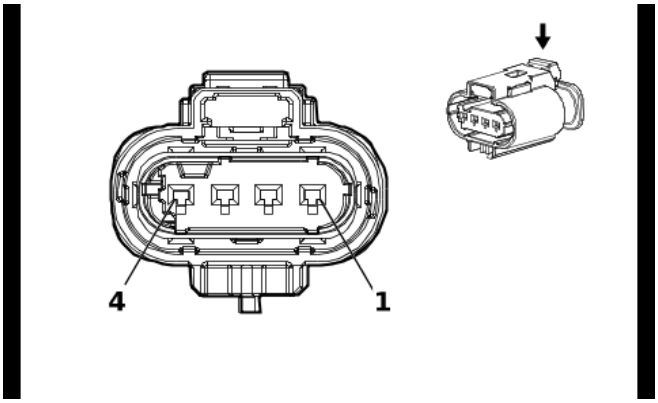
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8A Ignition Coil 1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6150 | Engine Odd Bank Ground | II | — |
| 2 | 0.5 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU / VT | 2121 | Ignition Control 1 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |

# T8B Ignition Coil 2 (L3B)




5402120

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33217609
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

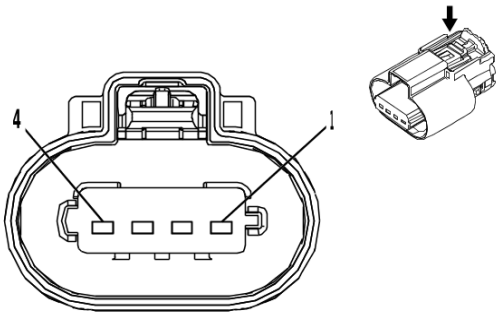
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T8B Ignition Coil 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | I | — |
| 2 | 0.75 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.75 | BU / WH | 2122 | Ignition Control 2 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | I | — |

# T8B Ignition Coil 2 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

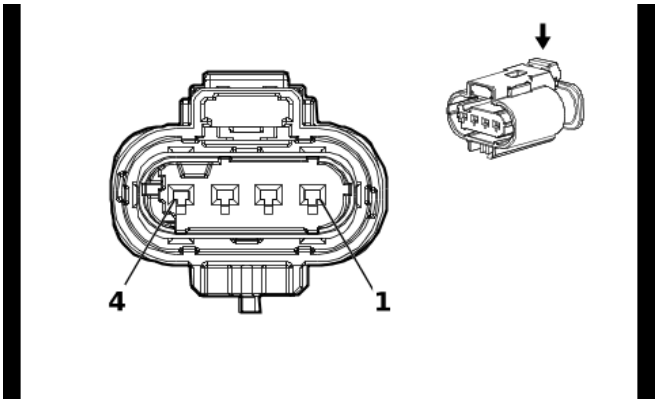
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8B Ignition Coil 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | II | — |
| 2 | 0.5 | BK / GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | BU / WH | 2122 | Ignition Control 2 | I | — |
| 4 | 1 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | II | — |

# T8C Ignition Coil 3 (L3B)




5402120

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33217609
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

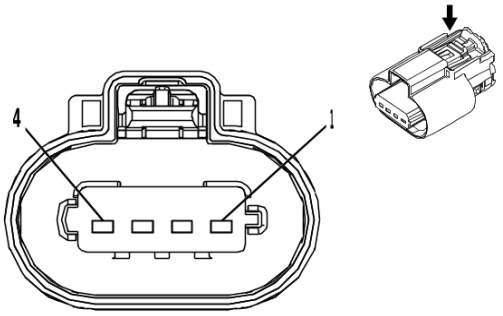
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T8C Ignition Coil 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | I | — |
| 2 | 0.75 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.75 | GN / BU | 2123 | Ignition Control 3 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | I | — |

# T8C Ignition Coil 3 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

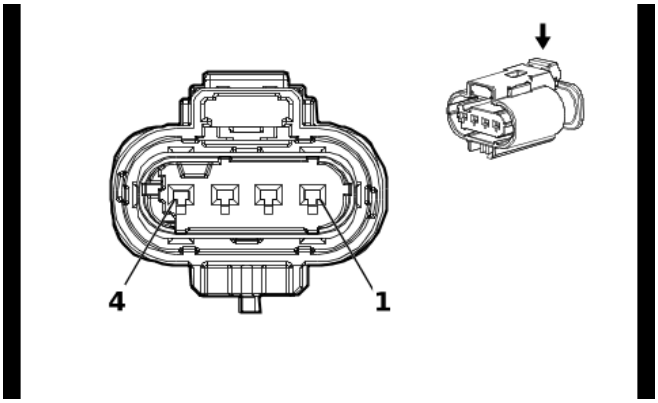
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8C Ignition Coil 3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6150 | Engine Odd Bank Ground | II | — |
| 2 | 0.5 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | GN / BU | 2123 | Ignition Control 3 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |

# T8D Ignition Coil 4 (L3B)




5402120

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33217609
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

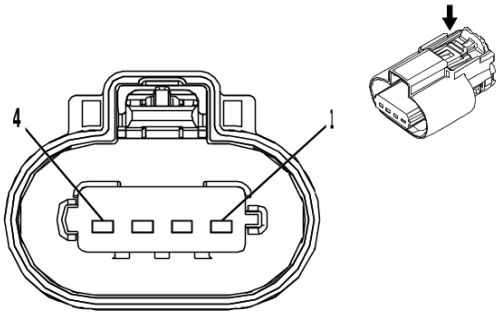
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T8D Ignition Coil 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | I | — |
| 2 | 0.75 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.75 | YE / BU | 2124 | Ignition Control 4 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | I | — |

# T8D Ignition Coil 4 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

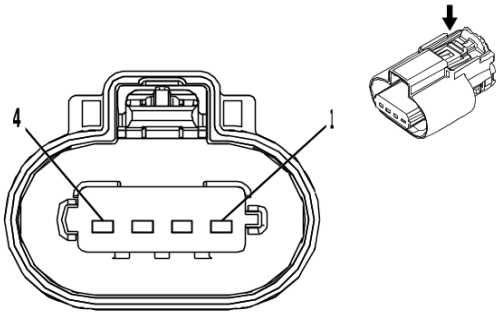
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8D Ignition Coil 4 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | II | — |
| 2 | 0.5 | BK / GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | YE / BU | 2124 | Ignition Control 4 | I | — |
| 4 | 1 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | II | — |

# T8E Ignition Coil 5 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

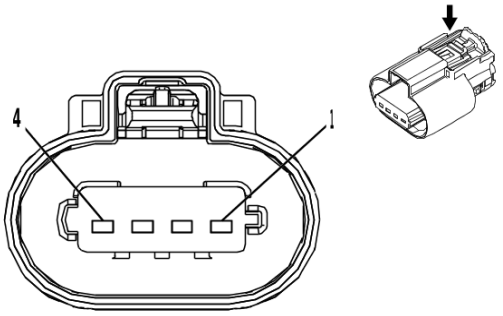
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8E Ignition Coil 5 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6150 | Engine Odd Bank Ground | II | — |
| 2 | 0.5 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU / GY | 2125 | Ignition Control 5 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |

# T8F Ignition Coil 6 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

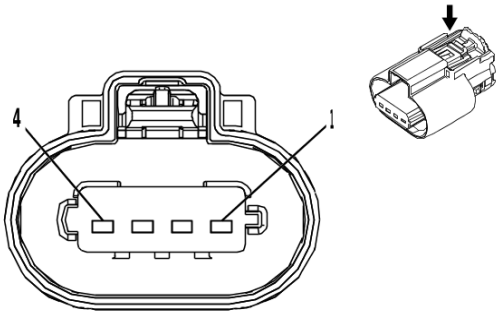
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8F Ignition Coil 6 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | II | — |
| 2 | 0.5 | BK / GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | BN / BU | 2126 | Ignition Control 6 | I | — |
| 4 | 1 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | II | — |

# T8G Ignition Coil 7 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

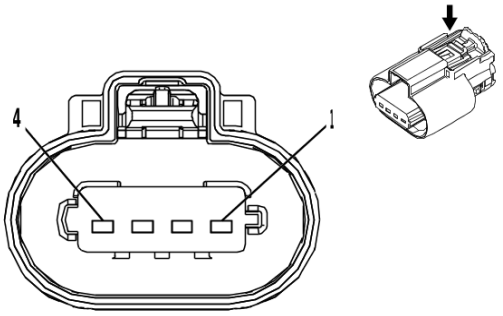
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8G Ignition Coil 7 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6150 | Engine Odd Bank Ground | II | — |
| 2 | 0.5 | BK / BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | GN / GY | 2127 | Ignition Control 7 | I | — |
| 4 | 1 | VT / BU | 5291 | Powertrain Main Relay Fused Supply Voltage 2 | II | — |

# T8H Ignition Coil 8 (L84/L87)




3240115

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.5 MX Series, Sealed( BK)

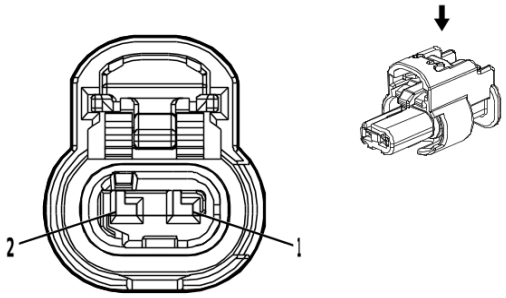
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-2A (GY) | No Tool Required |

## T8H Ignition Coil 8 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 6450 | Engine Even Bank Ground | II | — |
| 2 | 0.5 | BK / GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | VT / WH | 2128 | Ignition Control 8 | I | — |
| 4 | 1 | VT / BU | 5292 | Powertrain Main Relay Fused Supply Voltage 3 | II | — |

# T10G Low Frequency Rear Bumper Antenna (AVJ)




4690744

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

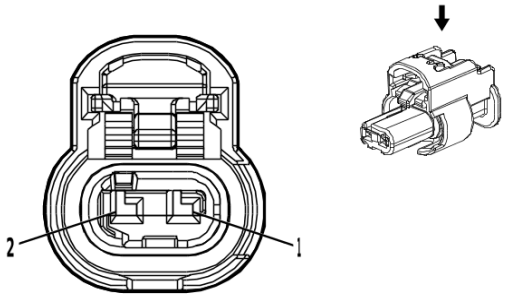
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T10G Low Frequency Rear Bumper Antenna (AVJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / GN | 3568 | Rear Closure Passive Entry Antenna High Signal | I | — |
| 2 | 0.5 | GN / GY | 3569 | Rear Closure Passive Entry Antenna Low Signal | I | — |

# T10J Low Frequency Instrument Panel Antenna (D07)




4690744

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33375932
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

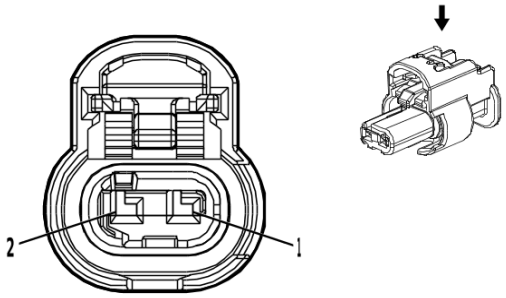
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## T10J Low Frequency Instrument Panel Antenna (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN / BK | 3552 | Interior Passive Entry Antenna 1 High Signal | I | — |
| 2 | 0.35 | WH | 3553 | Interior Passive Entry Antenna 1 Low Signal | I | — |

# T10J Low Frequency Instrument Panel Antenna (-D07)




4690744

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

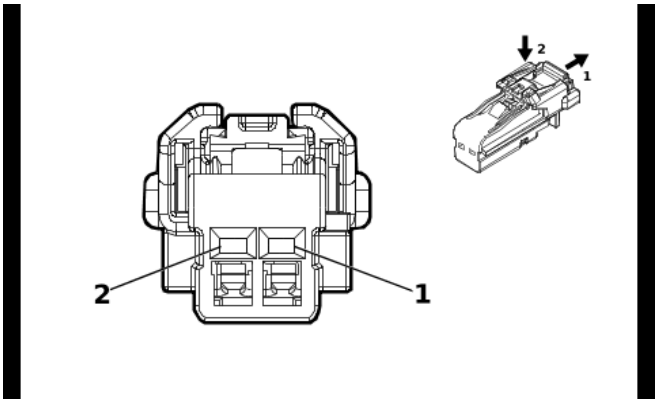
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## T10J Low Frequency Instrument Panel Antenna (-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN / BK | 3552 | Interior Passive Entry Antenna 1 High Signal | I | — |
| 2 | 0.35 | WH | 3553 | Interior Passive Entry Antenna 1 Low Signal | I | — |

# T10UA Low Frequency Console Antenna (AZ3)




4115691

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Center
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

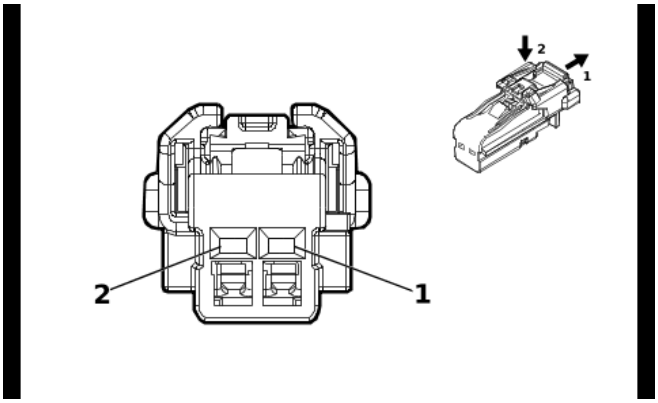
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## T10UA Low Frequency Console Antenna (AZ3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BK | 4996 | Immobilizer Antenna Signal [+] | I | — |
| 2 | 0.5 | WH / GY | 4997 | Immobilizer Antenna Low Signal | I | — |

# T10UA Low Frequency Console Antenna (D07)




4115691

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( BK)

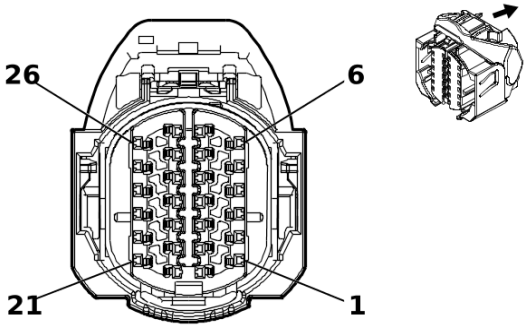
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T10UA Low Frequency Console Antenna (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN / BK | 4996 | Immobilizer Antenna Signal [+] | I | — |
| 2 | 0.35 | WH / GY | 4997 | Immobilizer Antenna Low Signal | I | — |

# T12 Automatic Transmission X1 (MHS/MQC)




5275597

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35345999
Service Connector: 13528029
Description: 26-Way F 1.2 MCON Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19331733 | J-35616-12 (BU) | J-38125-215A |
| II | 84963773 | J-35616-12 (BU) | J-38125-215A |

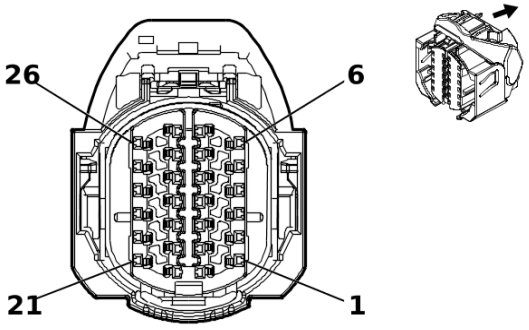
## T12 Automatic Transmission X1 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | GN / VT | 4510 | Transmission Intermediate Speed Signal | I | — |
| 3 | 0.5 | BN / WH | 6254 | Transmission Input Speed Sensor Signal | I | — |
| 4 | 0.5 | GY / BU | 6358 | Output Speed Signal | I | — |
| 5 | 0.5 | WH / YE | 6317 | Electronic Transmission Range Select Out of Park Switch Signal | I | — |
| 6 | 0.5 | VT / WH | 6319 | Electronic Transmission Range Select Out of Park Switch 2 Signal | I | — |
| 7 | 0.5 | YE / GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |
| 8 | 0.5 | YE / BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 9 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |
| 10 | 1.5 | RD / GY | 8540 | Battery Positive Voltage | II | — |
| 11 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | I | — |
| 12 | 0.5 | WH / YE | 2159 | Park Inhibit Solenoid Assembly Control | I | — |
| 13 | 0.5 | BN / WH | 585 | Transmission Fluid Temperature Sensor Signal | I | — |
| 14 | 0.5 | YE / BN | 6404 | Clutch Solenoid Valve E Control | I | — |
| 15 | 0.5 | GY / GN | 6403 | Clutch Solenoid Valve D Control | I | — |
| 16 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 17 | 1.5 | BK | 450 | Ground | II | — |
| 18 | 0.5 | GN / WH | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |

## T12 Automatic Transmission X1 (MHS/MQC) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 | 0.5 | GN / BK | 7819 | Default Disable Solenoid Control | I | — |
| 20 | 0.5 | BN | 3706 | Electronic Transmission Range Select Switch Analog Signal 1 | I | — |
| 21 | 0.5 | VT | 4509 | Transmission Clutch F Control | I | — |
| 22 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | I | — |
| 23 | 0.5 | WH | 4508 | Transmission Clutch G Control | I | — |
| 24 | 0.5 | GN / WH | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 25 | 0.5 | VT / WH | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 26 | 0.5 | BK / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |

# T12 Automatic Transmission X1 (MQB/MHT)




5275597

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35345999
Service Connector: 13528029
Description: 26-Way F 1.2 MCON Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19331733 | J-35616-12 (BU) | J-38125-215A |
| II | 84963773 | J-35616-12 (BU) | J-38125-215A |

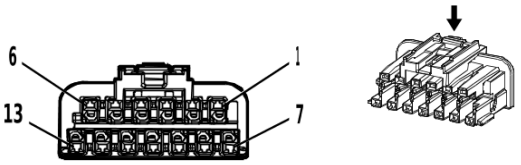
## T12 Automatic Transmission X1 (MQB/MHT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / YE | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | GN / VT | 4510 | Transmission Intermediate Speed Signal | I | — |
| 3 | 0.5 | BN / WH | 6254 | Transmission Input Speed Sensor Signal | I | — |
| 4 | 0.5 | GY / BU | 6358 | Output Speed Signal | I | — |
| 5 | 0.5 | BU / WH | 3338 | Transmission Internal Mode Switch Mode Control X | I | — |
| 6 | 0.5 | GN / YE | 3337 | Transmission Internal Mode Switch Mode Control Y | I | — |
| 7 | 0.5 | YE / GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |
| 8 | 0.5 | YE / BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 9 | 0.5 | GY / BN | 6388 | Transmission High Side Driver 2 Control | I | — |
| 10 | 1.5 | RD / GY | 8540 | Battery Positive Voltage | II | — |
| 11 | 0.5 | GN / GY | 6387 | Transmission High Side Driver 1 Control | I | — |
| 12 | 0.5 | WH / RD | 480 | Engine Control Vehicle Sensors 5 Volt Reference 1 | I | — |
| 13 | 0.5 | BN / WH | 585 | Transmission Fluid Temperature Sensor Signal | I | — |
| 14 | 0.5 | YE / BN | 6404 | Clutch Solenoid Valve E Control | I | — |
| 15 | 0.5 | GY / GN | 6403 | Clutch Solenoid Valve D Control | I | — |
| 16 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 17 | 1.5 | BK | 450 | Ground | II | — |
| 18 | 0.5 | GN / WH | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |

## T12 Automatic Transmission X1 (MQB/MHT) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 | 0.5 | GN / BK | 7819 | Default Disable Solenoid Control | I | — |
| 20 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |
| 21 | 0.5 | VT | 4509 | Transmission Clutch F Control | I | — |
| 22 | 0.5 | WH / BU | 4507 | Transmission Clutch H Control | I | — |
| 23 | 0.5 | WH | 4508 | Transmission Clutch G Control | I | — |
| 24 | 0.5 | GN / WH | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 25 | 0.5 | VT / WH | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 26 | 0.5 | BK / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |

# T12 Automatic Transmission Assembly X2 (MHS/MQC)




4757907

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

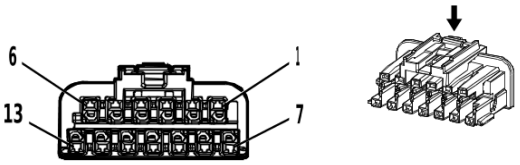
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## T12 Automatic Transmission Assembly X2 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GY | 6319 | Electronic Transmission Range Select Out of Park Switch 2 Signal | II | — |
| 2 | 0.5 | YE | 6317 | Electronic Transmission Range Select Out of Park Switch Signal | II | — |
| 3 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 4 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 5 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 6 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 7 | 0.5 | BN / YE | 585 | Transmission Fluid Temperature Sensor Signal | I | — |
| 8 | 0.5 | OG | 7553 | Park Lock Solenoid Actuator Control | I | — |
| 9 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 10 | 1.5 | GN / VT | 8540 | Battery Positive Voltage | I | — |
| 11 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 12 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 13 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# T12 Automatic Transmission Assembly X2 (MHT/MQB)




4757907

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

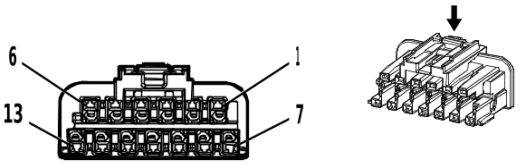
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## T12 Automatic Transmission Assembly X2 (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GY | 3337 | Transmission Internal Mode Switch Mode Control Y | II | — |
| 2 | 0.5 | YE | 5724 | Ignition Mode Switch Mode Control | II | — |
| 3 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 4 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 5 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 6 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 7 | 0.5 | BN / YE | 585 | Transmission Fluid Temperature Sensor Signal | I | — |
| 8 | 0.5 | OG | 2159 | Park Inhibit Solenoid Assembly Control | I | — |
| 9 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 10 | 1.5 | GN / VT | 8540 | Battery Positive Voltage | I | — |
| 11 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 12 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 13 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# T12 Automatic Transmission Assembly X2 (MI2)




4757907

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

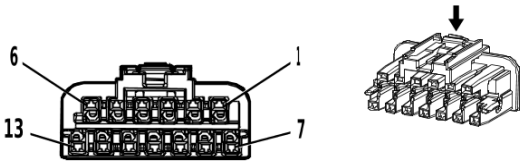
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## T12 Automatic Transmission Assembly X2 (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / GY | 3337 | Transmission Internal Mode Switch Mode Control Y | II | — |
| 2 | 0.5 | YE | 5724 | Ignition Mode Switch Mode Control | II | — |
| 3 | 0.5 | YE / OG | 6358 | Output Speed Signal | I | — |
| 4 | 0.5 | WH / BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 5 | 0.5 | VT / GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 6 | 0.5 | WH / VT | 6353 | Input Speed Signal | I | — |
| 7 | 0.5 | BN / YE | 585 | Transmission Fluid Temperature Sensor Signal | I | — |
| 8 | 0.5 | OG | 2159 | Park Inhibit Solenoid Assembly Control | I | — |
| 9 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Control | I | — |
| 12 | 0.5 | BU | 4171 | Transmission Input Shaft Speed Sensor Circuit 9V Reference | I | — |
| 13 | 0.5 | GN | 4170 | Transmission Output Shaft Speed Sensor Circuit 9V Reference | I | — |

# T12 Automatic Transmission Assembly X3 (MHS/MQC)




4757999

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

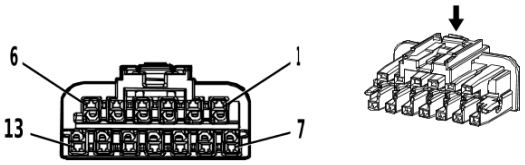
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T12 Automatic Transmission Assembly X3 (MHS/MQC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 4509 | Transmission Clutch F Control | I | — |
| 2 | 0.5 | YE / VT | 4507 | Transmission Clutch H Control | I | — |
| 3 | 0.5 | BU / GY | 4508 | Transmission Clutch G Control | I | — |
| 4 | 0.5 | GN / OG | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 5 | 0.5 | GY / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 6 | 0.5 | BU / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 7 | 0.5 | BU / GN | 6404 | Clutch Solenoid Valve E Control | I | — |
| 8 | 0.5 | GN / BN | 6403 | Clutch Solenoid Valve D Control | I | — |
| 9 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 10 | 1.5 | BK / YE | 450 | Ground | I | — |
| 11 | 0.5 | GY / OG | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |
| 12 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |
| 13 | 0.5 | BK / GY | 3706 | Electronic Transmission Range Select Switch Analog Signal 1 | I | — |

# T12 Automatic Transmission Assembly X3 (MHT/MQB)




4757999

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

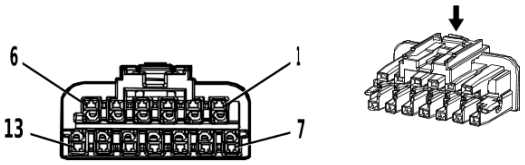
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T12 Automatic Transmission Assembly X3 (MHT/MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 4509 | Transmission Clutch F Control | I | — |
| 2 | 0.5 | YE / VT | 4507 | Transmission Clutch H Control | I | — |
| 3 | 0.5 | BU / GY | 4508 | Transmission Clutch G Control | I | — |
| 4 | 0.5 | GN / OG | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 5 | 0.5 | GY / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 6 | 0.5 | BU / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 7 | 0.5 | BU / GN | 6404 | Clutch Solenoid Valve E Control | I | — |
| 8 | 0.5 | GN / BN | 6403 | Clutch Solenoid Valve D Control | I | — |
| 9 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 10 | 1.5 | BK / YE | 150 | Ground | I | — |
| 11 | 0.5 | GY / OG | 2968 | Transmission Auxiliary Fluid Pump Control | I | — |
| 12 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |
| 13 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# T12 Automatic Transmission Assembly X3 (MI2)




4757999

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series( BN)

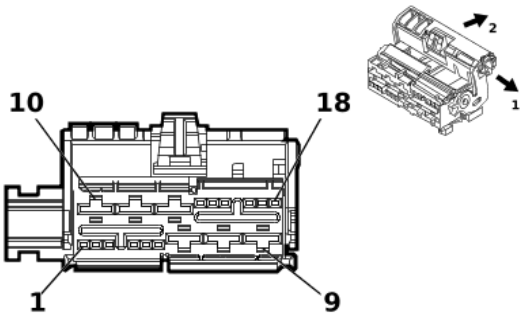
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |

## T12 Automatic Transmission Assembly X3 (MI2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / WH | 4509 | Transmission Clutch F Control | I | — |
| 2 | 0.5 | YE / VT | 4507 | Transmission Clutch H Control | I | — |
| 3 | 0.5 | BU / GY | 4508 | Transmission Clutch G Control | I | — |
| 4 | 0.5 | GN / OG | 1530 | Transmission Line Pressure Control Solenoid Valve Control | I | — |
| 5 | 0.5 | GY / BN | 422 | Torque Converter Clutch Solenoid Valve Control | I | — |
| 6 | 0.5 | BU / BN | 586 | Transmission Fluid Temperature Sensor Low Reference | I | — |
| 7 | 0.5 | BU / GN | 6404 | Clutch Solenoid Valve E Control | I | — |
| 8 | 0.5 | GN / BN | 6403 | Clutch Solenoid Valve D Control | I | — |
| 9 | 0.5 | GY | 6402 | Clutch Solenoid Valve C Control | I | — |
| 10 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |
| 13 | 0.5 | BK / GY | 626 | Engine Control Vehicle Sensors Low Reference 1 | I | — |

# T19 Multifunction Power Supply Converter




3825662

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13549243
Service Connector: 84789277
Description: 18-Way F 0.64 MTS, 6.3 MCP Series( BK)

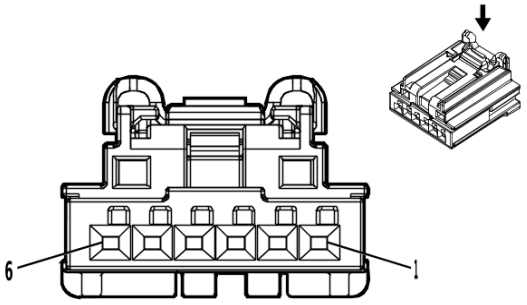
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19300632 | J-35616-64B (L-BU) | J-38125-215A |
| II | 19367600 | J-35616-42 (RD) | J-38125-556 |

## T19 Multifunction Power Supply Converter

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | VT / GN | 4320 | Powertrain Sensor Bus Enable | I | ( D07+ FHX) + ( MQC/ MHS) |
| 5 | 0.5 | YE / BK | 625 | Starter Enable Relay Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1350 | Ground | II | — |
| 8 | 2.5 | RD / YE | 8140 | Battery Positive Voltage | II | — |
| 9 | 2.5 | RD / GN | 2173 | 12V Regulated Supply Voltage 2 | II | — |
| 10 | 2.5 | RD / YE | 2172 | 12V Regulated Supply Voltage 1 | II | — |
| 11 | 2.5 | RD / WH | 8040 | Battery Positive Voltage | II | — |
| 12 | 2.5 | BK | 1350 | Ground | II | — |
| 13 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 14 | 0.5 | BU / GY | 4054 | Private Serial Data Powertrain CAN Bus [-] Serial Data | I | — |
| 15 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 16 | 0.5 | WH | 4055 | Private Serial Data Powertrain CAN Bus [+] Serial Data | I | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |

# T22 Wireless Accessory Charging Module (K4C)




5020940

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920634
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

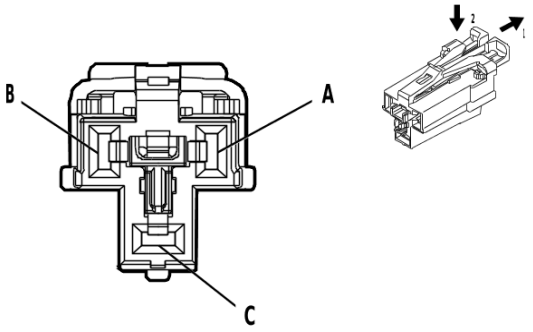
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## T22 Wireless Accessory Charging Module (K4C)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / VT | 2640 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BK | 1350 | Ground | I | — |
| 3 | 0.5 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 4 | 0.5 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |
| 5 | 0.5 | BU / YE | 4984 | AUTOSAR CAN Bus [-] 5 Serial Data | I | — |
| 6 | 0.5 | BU / WH | 4985 | AUTOSAR CAN Bus [+] 5 Serial Data | I | — |

# X80G Accessory Power Receptacle - Instrument Panel (KC5)




4872413

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33386302
Service Connector: 19369281
Description: 3-Way F 2.8 APEX Series( GY)

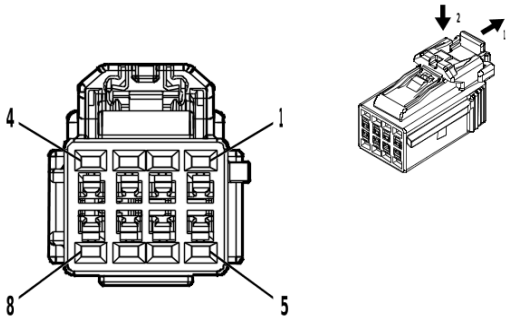
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |

## X80G Accessory Power Receptacle - Instrument Panel (KC5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | VT | 1001 | Retained Accessory Power Ignition Voltage | I | — |
| B | — | — | — | Not Occupied | — | — |
| C | 1.5 | BK | 1050 | Ground | I | — |

# X81ACA Front Floor Console Accessory Power Rear Receptacle - 110V AC (KI4)




5086387

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029311
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

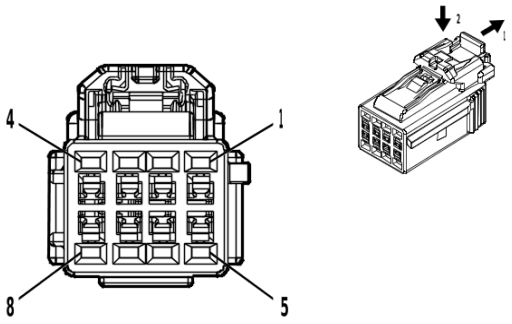
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81ACA Front Floor Console Accessory Power Rear Receptacle - 110V AC (KI4)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | II | — |
| 4 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | II | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK | 1350 | Ground | II | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81ACA Front Floor Console Accessory Power Rear Receptacle - 110V AC (KI4&D07)




5086387

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029311
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

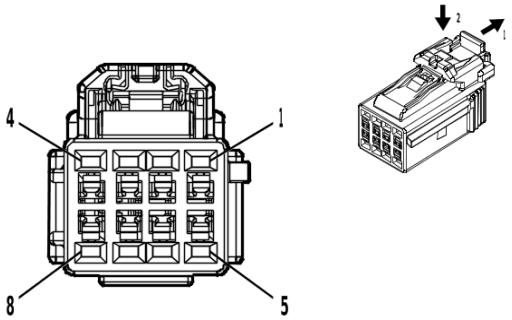
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81ACA Front Floor Console Accessory Power Rear Receptacle - 110V AC (KI4&D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | II | — |
| 4 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | II | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK | 1350 | Ground | II | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81AI Accessory Power Receptacle - Instrument Panel 110V AC (KI4 - AZ3 - D07)




5086387

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35029311
Service Connector: 84613126
Description: 8-Way F 1.2 Series( BK)

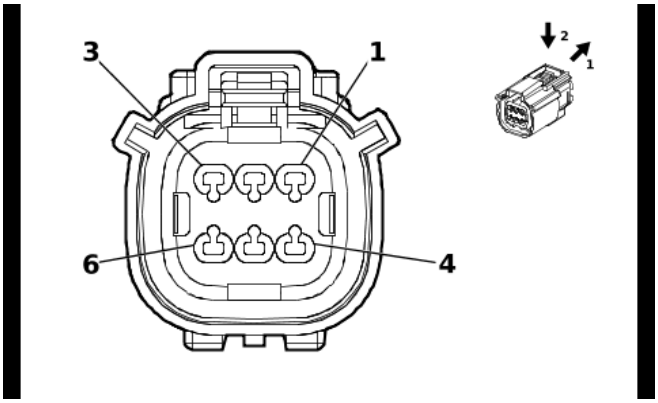
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81AI Accessory Power Receptacle - Instrument Panel 110V AC (KI4 - AZ3 - D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | II | — |
| 4 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | II | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK / WH | 851 | Signal Ground | II | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81AP Pickup Box Accessory Power Receptacle - 110V AC (KC9)




5666225

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness
OEM Connector: 35081273
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( BK)

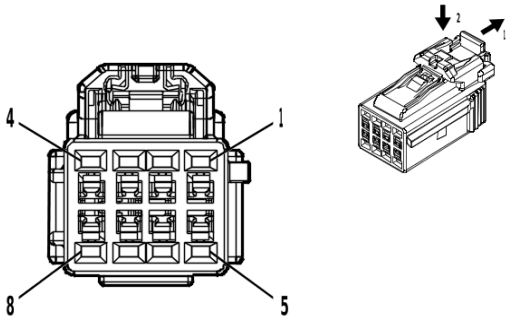
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## X81AP Pickup Box Accessory Power Receptacle - 110V AC (KC9)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 2 | 0.5 | GN / BN | 2266 | DC/AC Inverter Control 2 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | BK / WH | 10120 | AC Outlet 2 Phase A Control | I | — |
| 5 | 0.5 | BK | 1750 | Ground | I | — |
| 6 | 0.75 | RD / WH | 10121 | AC Outlet 2 Phase B Control | I | — |

# X81BCA Front Floor Console Accessory Power Rear Receptacle - 220V AC (KI5)




5086387

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029311
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

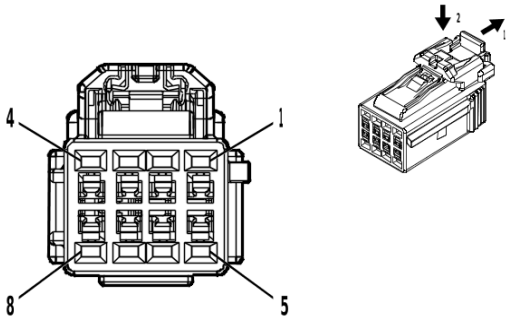
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81BCA Front Floor Console Accessory Power Rear Receptacle - 220V AC (KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | II | — |
| 4 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | II | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK | 1350 | Ground | II | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81BI Accessory Power Receptacle - Instrument Panel 220V AC (KI5-AZ3-D07)




5086387

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35029311
Service Connector: 84613126
Description: 8-Way F 1.2 Series( BK)

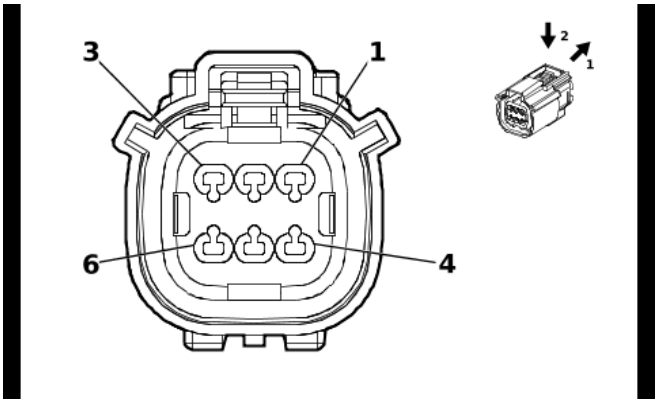
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81BI Accessory Power Receptacle - Instrument Panel 220V AC (KI5-AZ3-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | II | — |
| 4 | 0.5 | BU / BN | 6807 | DC/AC Inverter Control | II | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | II | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | BK / WH | 851 | Signal Ground | II | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81BP Pickup Box Accessory Power Receptacle - 220V AC (KCA)




5666225

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness
OEM Connector: 35081273
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( BK)

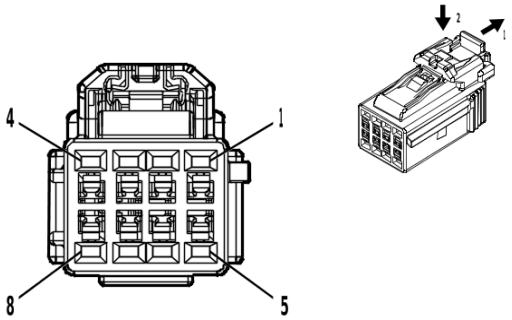
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |

## X81BP Pickup Box Accessory Power Receptacle - 220V AC (KCA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 2 | 0.5 | GN / BN | 2266 | DC/AC Inverter Control 2 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | BK / WH | 10120 | AC Outlet 2 Phase A Control | I | — |
| 5 | 0.5 | BK | 1750 | Ground | I | — |
| 6 | 0.75 | RD / WH | 10121 | AC Outlet 2 Phase B Control | I | — |

# X81FSA Accessory Power Receptacle - Front Center Seat Rear Cover 110V AC (KI4)




5086387

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Center
OEM Connector: 6098-8443
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

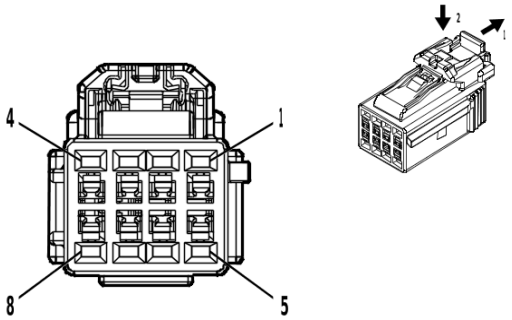
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81FSA Accessory Power Receptacle - Front Center Seat Rear Cover 110V AC (KI4)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 4 | 0.75 | BU / BN | 6807 | DC/AC Inverter Control | I | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BK | 1050 | Ground | I | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81FSB Accessory Power Receptacle - Front Center Seat Rear Cover 220V AC (KI5)




5086387

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Center
OEM Connector: 6098-8443
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

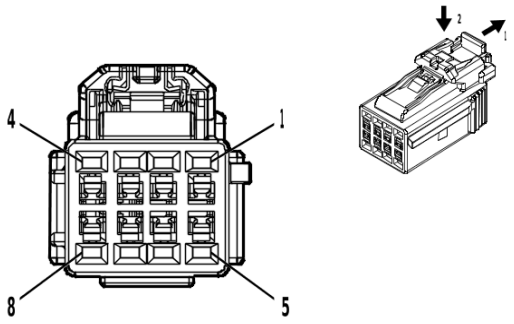
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81FSB Accessory Power Receptacle - Front Center Seat Rear Cover 220V AC (KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 4 | 0.75 | BU / BN | 6807 | DC/AC Inverter Control | I | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BK | 1050 | Ground | I | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X81FSB Accessory Power Receptacle - Front Center Seat Rear Cover 220V AC (KI5&AZ3)




5086387

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Center
OEM Connector: 6098-8443
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series( BK)

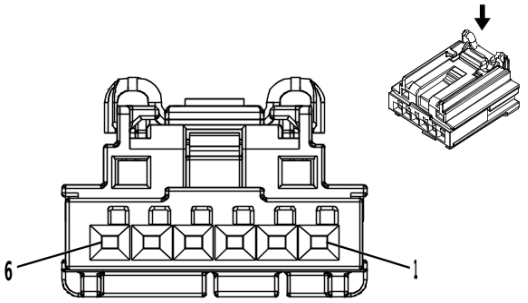
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |

## X81FSB Accessory Power Receptacle - Front Center Seat Rear Cover 220V AC (KI5&AZ3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | AC Outlet Phase A Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | VT / RD | 4049 | AC Power Outlet Sensor High Reference | I | — |
| 4 | 0.75 | BU / BN | 6807 | DC/AC Inverter Control | I | — |
| 5 | 0.75 | RD | 10118 | AC Outlet Phase B Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BK | 1050 | Ground | I | — |
| 8 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |

# X83B Audio/Video Receptacle X1 (D07)




3960313

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

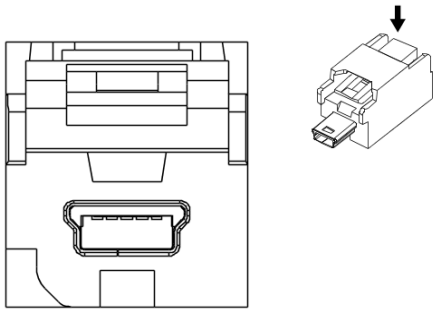
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X83B Audio/Video Receptacle X1 (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / VT | 2640 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.5 | BK / WH | 1051 | Signal Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X83B Audio/Video Receptacle X2 (D07)



3214018

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness USB
OEM Connector: 13890926
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( GY)

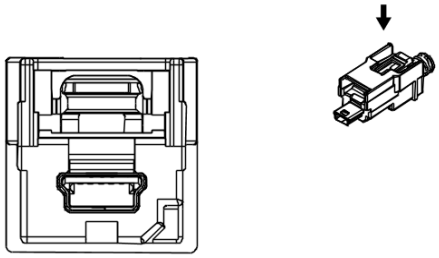
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X83B Audio/Video Receptacle X2 (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X83B Audio/Video Receptacle X3 (UBD&D07)



2807425

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness USB
OEM Connector: 13890925
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( BK)

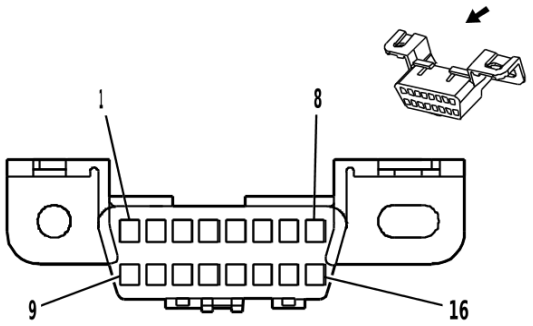
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X83B Audio/Video Receptacle X3 (UBD&D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X84 Data Link Connector




68793

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series( BK)

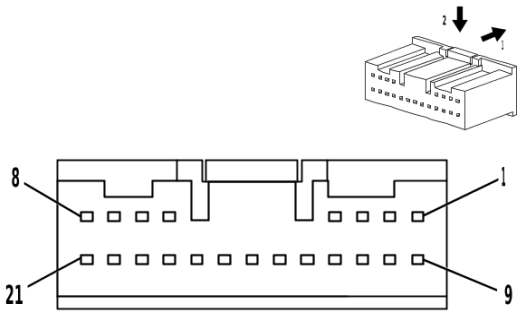
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13580059 | J-35616-14 (GN) | J-38125-12A |

### X84 Data Link Connector

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU / BN | 4983 | AUTOSAR CAN Bus [+] 7 Serial Data | I | — |
| 2 | 0.35 | GN | 2578 | Private Serial Data Presentation CAN Bus [+] 1 Serial Data | I | — |
| 3 | 0.35 | BU | 4973 | Ethernet Bus 1R [+] | I | — |
| 4 | 0.5 | BK | 1050 | Ground | I | — |
| 5 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 6 | 0.35 | YE | 4981 | AUTOSAR CAN Bus [+] 6 Serial Data | I | — |
| 7 | 0.35 | VT | 2580 | Private Serial Data Presentation CAN Bus [+] 2 Serial Data | I | — |
| 8 | 0.35 | WH | 7207 | Ethernet Bus 1 Enable Signal | I | — |
| 9 | 0.35 | WH | 4982 | AUTOSAR CAN Bus [-] 7 Serial Data | I | — |
| 10 | 0.35 | BN | 2577 | Private Serial Data Presentation CAN Bus [-] 1 Serial Data | I | — |
| 11 | 0.35 | YE | 4972 | Ethernet Bus 1R [-] | I | — |
| 12 | 0.35 | WH | 4975 | Ethernet Bus 1T [+] | I | — |
| 13 | 0.35 | GN | 4974 | Ethernet Bus 1T [-] | I | — |
| 14 | 0.35 | WH | 4980 | AUTOSAR CAN Bus [-] 6 Serial Data | I | — |
| 15 | 0.35 | GY | 2579 | Private Serial Data Presentation CAN Bus [-] 2 Serial Data | I | — |
| 16 | 0.5 | RD / YE | 6540 | Battery Positive Voltage | I | — |

# X85 Steering Wheel Airbag Coil X1 (IOK&UKL)




3960237

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series( YE)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575742 | J-35616-64B (L-BU) | J-38125-215A |
| II | 13575865 | J-35616-64B (L-BU) | J-38125-215A |

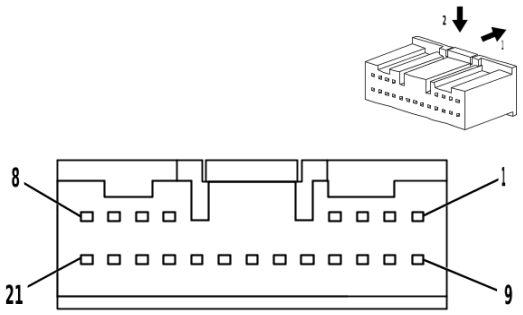
## X85 Steering Wheel Airbag Coil X1 (IOK&UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | II | — |
| 6 | 0.5 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | II | — |
| 7 | 0.5 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | II | — |
| 8 | 0.5 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | II | — |
| 9 | 0.5 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 10 | 0.5<br>0.35 | GN / GY<br>GN / BK | 4627<br>2858 | Image Processing Module LIN Bus 1<br>Body Control Module LIN Bus 12 | I<br>I | UKL<br>- UKL |
| 11 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 12 | 0.5 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 13 | 0.35 | WH / VT | 2246 | Driver Illumination Lamp 1 Control | I | — |
| 14 | 0.5 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 15 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | 0.35 | VT / YE | 5526 | Tap Up/Tap Down Switch Signal | I | — |
| 17 | 0.35 | YE / BU | 2245 | Driver Illumination Lamp 2 Control | I | — |
| 18 | 0.35 | BU / BN | 7744 | Driver Illumination Lamp Ground | I | — |
| 19 | — | — | — | Not Occupied | — | — |

## X85 Steering Wheel Airbag Coil X1 (IOK&UKL) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 20 | 0.5 | BK | 1050 | Ground | I | — |
| 21 | 0.5 | RD / BN | 10040 | Secondary Fused Battery Positive Voltage | I | — |

# X85 Steering Wheel Airbag Coil X1 (IOK-UKL)




3960237

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series( YE)

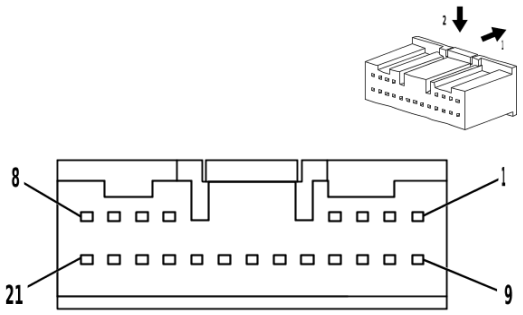
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575742 | J-35616-64B (L-BU) | J-38125-215A |
| II | 13575865 | J-35616-64B (L-BU) | J-38125-215A |

## X85 Steering Wheel Airbag Coil X1 (IOK-UKL)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | II | — |
| 6 | 0.5 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | II | — |
| 7 | 0.5 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | II | — |
| 8 | 0.5 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | II | — |
| 9 | 0.5 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |
| 10 | 0.35 | GN / BK | 2858 | Body Control Module LIN Bus 12 | I | — |
| 11 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 12 | 0.5 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 15 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | 0.35 | VT / YE | 5526 | Tap Up/Tap Down Switch Signal | I | — |
| 17 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | BK | 1050 | Ground | I | — |
| 21 | 0.5 | RD / BN | 10040 | Secondary Fused Battery Positive Voltage | I | — |

# X85 Steering Wheel Airbag Coil X1 (IOR)




3960237

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series( YE)

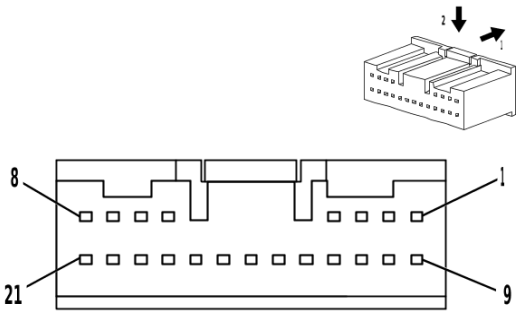
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575742 | J-35616-64B (L-BU) | J-38125-215A |
| II | 13575865 | J-35616-64B (L-BU) | J-38125-215A |

## X85 Steering Wheel Airbag Coil X1 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK / WH | 851 | Signal Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | II | — |
| 6 | 0.5 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | II | — |
| 7 | 0.5 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | II | — |
| 8 | 0.5 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | II | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 12 | 0.35<br>0.5 | BK / VT<br>BK / VT | 1449<br>1449 | Steering Wheel Resistor Ladder Low Reference<br>Steering Wheel Resistor Ladder Low Reference | I<br>I | ( K34/ KSG/ UEU) - N38- URC<br>URC- N38+ ( K34/ KSG/ UEU) |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 15 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 18 - 21 | — | — | — | Not Occupied | — | — |

# X85 Steering Wheel Airbag Coil X2 (NK5/D07)




3960237

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13510218
Service Connector: Service by Harness - See Part Catalog
Description: 21-Way F 0.64 Series( YE)

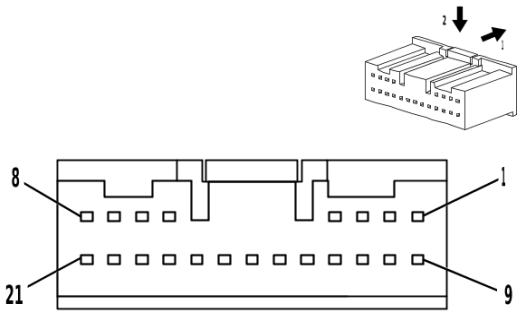
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X85 Steering Wheel Airbag Coil X2 (NK5/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK / WH | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | OG / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | I | — |
| 6 | 0.5 | WH / OG | 3022 | Steering Wheel Air Bag Stage 2 Low Control | I | — |
| 7 | 0.5 | BN / OG | 3020 | Steering Wheel Air Bag Stage 1 Low Control | I | — |
| 8 | 0.5 | OG / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | I | — |
| 9 | 0.5 | RD / BN | 10040 | Secondary Fused Battery Positive Voltage | I | KI3 |
| 10 | 0.5 | BK | 6050 | Steering Wheel Ground | I | KI3 |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | PK | 6817 | LED Backlight Dimming Control 1 | I | — |
| 14 | 0.35 | VT / YE | 5526 | Tap Up/Tap Down Switch Signal | I | — |
| 15 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | 0.35 | RD / GN | 5140 | Battery Positive Voltage | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | BK / VT | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 19 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 20 | 0.35 | GN / BK | 2858 | Body Control Module LIN Bus 12 | I | KI3 |
| 21 | 0.35 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |

# X85 Steering Wheel Airbag Coil X2 (NP5-D07)




3960237

## Connector Part Information

Harness Type: Steering Wheel Horn Switch Wiring Harness
OEM Connector: 13510218
Service Connector: Service by Harness - See Part Catalog
Description: 21-Way F 0.64 Series( YE)

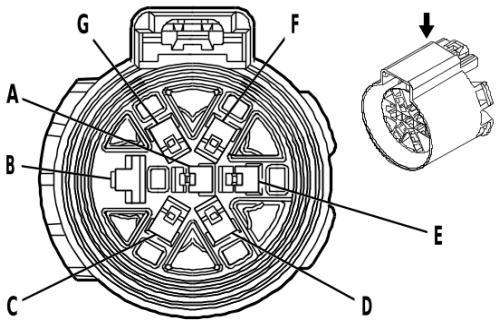
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X85 Steering Wheel Airbag Coil X2 (NP5-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK | 6051 | Steering Wheel Ground | I | — |
| 2 | 0.35 | GN / WH | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GY / GN | 3023 | Steering Wheel Air Bag Stage 2 High Control | I | — |
| 6 | 0.5 | WH / VT | 3022 | Steering Wheel Air Bag Stage 2 Low Control | I | — |
| 7 | 0.5 | BN / WH | 3020 | Steering Wheel Air Bag Stage 1 Low Control | I | — |
| 8 | 0.5 | YE / VT | 3021 | Steering Wheel Air Bag Stage 1 High Control | I | — |
| 9 | 0.5 | OG / BN | 10040 | Secondary Fused Battery Positive Voltage | I | KI3 |
| 10 | 0.5 | BK | 6050 | Steering Wheel Ground | I | KI3 |
| 11 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | GY / GN | 5737 | Distance Sensing Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | 0.35 | GN / GN | 5140 | Battery Positive Voltage | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | BU | 1449 | Steering Wheel Resistor Ladder Low Reference | I | — |
| 19 | 0.35 | BN / GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 20 | 0.35 | GN / BK | 2858 | Body Control Module LIN Bus 12 | I | KI3 |
| 21 | 0.35 | GN / BK | 3894 | Instrument Panel Cluster Control Module LIN Bus 1 | I | — |

# X88B Tow Vehicle Electrical Receptacle X1 (8S3)




2056936

## Connector Part Information

Harness Type: Backup Alarm Wiring Harness
OEM Connector: 13857223
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed( BK)

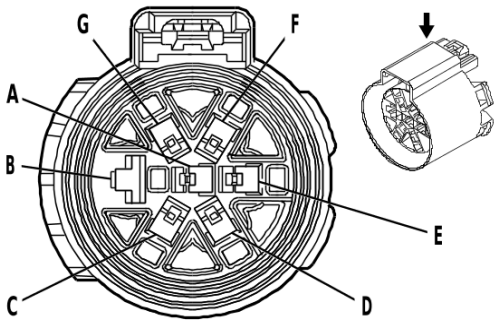
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## X88B Tow Vehicle Electrical Receptacle X1 (8S3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1 | GN | 1624 | Trailer Backup Lamp Control | II | — |
| B | 5 | WH | 22 | Trailer Ground | I | — |
| C | 3 | BU | 47 | Trailer Auxiliary Control | II | — |
| D | 0.8 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| E | 3 | RD / BK | 742 | Battery Positive Voltage | II | — |
| F | 1 | BN | 2109 | Trailer Park Lamp Control | II | — |
| G | 0.8 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | II | — |

# X88B Tow Vehicle Electrical Receptacle X1 (UET)




2056936

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13857223
Service Connector: 86816072
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed( BK)

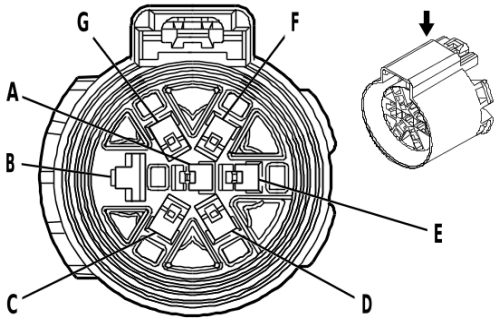
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## X88B Tow Vehicle Electrical Receptacle X1 (UET)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1<br>1 | GY<br>GY | 5189<br>1624 | Trailer Backup Lamp Control<br>Trailer Backup Lamp Control | II<br>II | U1D<br>Z82- U1D-<br>UY2- 8S3- UY2 |
| B | 5 | WH | 22 | Trailer Ground | I | — |
| C | 2.5 | BU | 47 | Trailer Auxiliary Control | II | — |
| D | 1 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| E | 4 | OG | 3940 | Battery Positive Voltage | II | — |
| F | 1<br>1.5 | BN<br>BN | 2109<br>2109 | Trailer Park Lamp Control<br>Trailer Park Lamp Control | II<br>II | U1D<br>Z82- U1D-<br>UY2- 8S3- UY2 |
| G | 1 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | II | — |

# X88B Tow Vehicle Electrical Receptacle X1 (Z82-UET)




2056936

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13857223
Service Connector: 86816072
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed( BK)

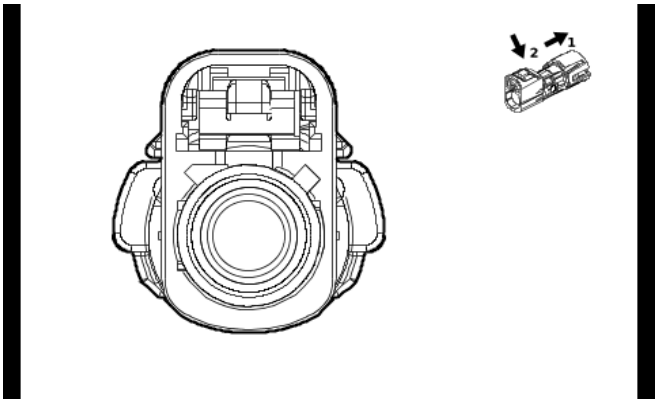
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |

## X88B Tow Vehicle Electrical Receptacle X1 (Z82-UET)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1<br>1 | GY<br>GY | 5189<br>1624 | Trailer Backup Lamp Control<br>Trailer Backup Lamp Control | II<br>II | U1D<br>Z82- U1D-<br>UY2- 8S3- UY2 |
| B | 5 | WH | 22 | Trailer Ground | I | — |
| C | 2.5 | BU | 47 | Trailer Auxiliary Control | II | — |
| D | 1 | GN | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| E | 4 | OG | 3940 | Battery Positive Voltage | II | — |
| F | 1<br>1.5 | BN<br>BN | 2109<br>2109 | Trailer Park Lamp Control<br>Trailer Park Lamp Control | II<br>II | U1D<br>Z82- U1D-<br>UY2- 8S3- UY2 |
| G | 1 | YE | 1618 | Left Rear Trailer Stop/Turn Lamp Control | II | — |

## X88B Tow Vehicle Electrical Receptacle X2 (TRG)




5758030

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX
OEM Connector: 35187032
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( BK)

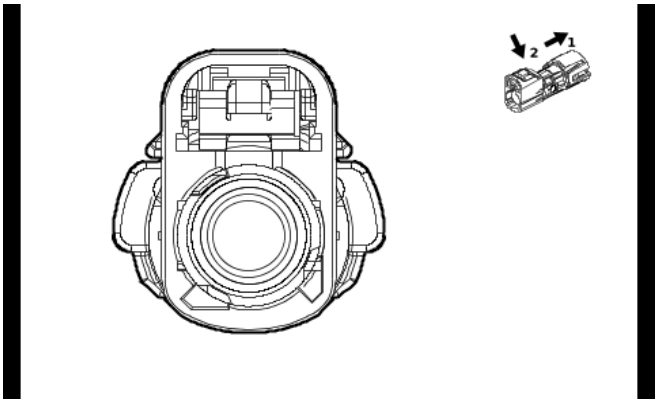
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### X88B Tow Vehicle Electrical Receptacle X2 (TRG)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Trailer Rear Vision Camera Coaxial Video Signal | I | — |

## X88B Tow Vehicle Electrical Receptacle X3 (TRG)




5757455

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX
OEM Connector: 35187043
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type( OG)

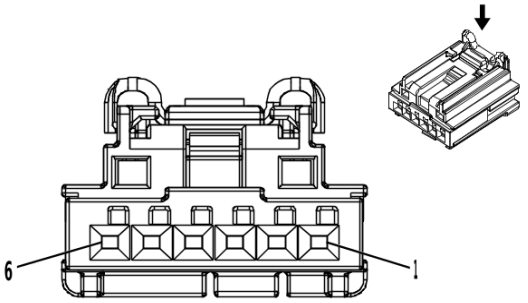
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

### X88B Tow Vehicle Electrical Receptacle X3 (TRG)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | Trailer 2 Rear Vision Camera Coaxial Video Signal | I | — |

# X92CD Dual Charge Only Receptacle - Floor Console Rear (UBI)




3960313

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

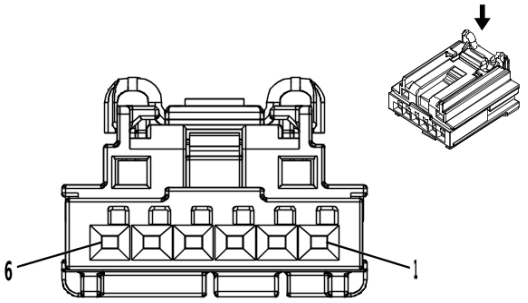
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X92CD Dual Charge Only Receptacle - Floor Console Rear (UBI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 4701 | Retained Accessory Power Control | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | BK | 1350 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X92CF USB 2 Port Receptacle - Floor Console Front X1 (D07)




3960313

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

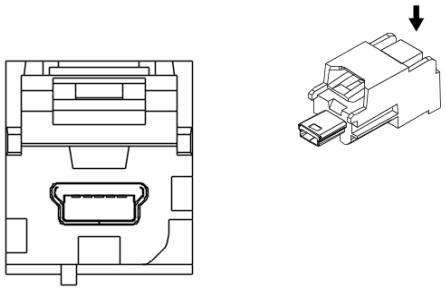
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X92CF USB 2 Port Receptacle - Floor Console Front X1 (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / VT | 2640 | Battery Positive Voltage | I | — |
| 2 | 0.5 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.5 | BK / WH | 1051 | Signal Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X92CF USB 2 Port Receptacle - Floor Console Front X2 (D07)



3028807

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness USB
OEM Connector: 13921002
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( GY)

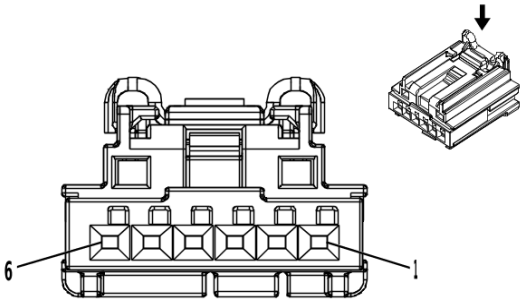
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X92CF USB 2 Port Receptacle - Floor Console Front X2 (D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X92FSR Dual Charge Only Receptacle - Front Center Seat Rear Cover (AZ3&UBI)




3960313

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Center
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series( BK)

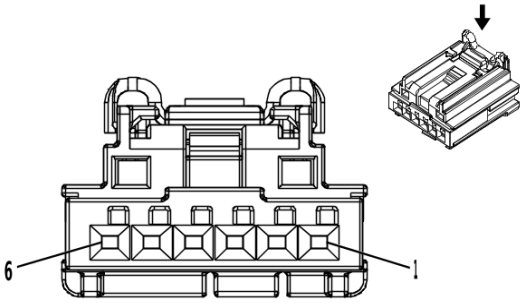
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X92FSR Dual Charge Only Receptacle - Front Center Seat Rear Cover (AZ3&UBI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 4701 | Retained Accessory Power Control | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.35 | BK | 1350 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X92IP USB 2 Port Receptacle - Instrument Panel X1 (-D07)




3960313

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series( BK)

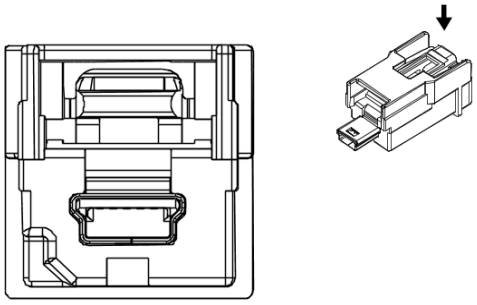
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-64B (L-BU) | No Tool Required |

## X92IP USB 2 Port Receptacle - Instrument Panel X1 (-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / VT | 2640 | Battery Positive Voltage | I | — |
| 2 | 0.5 | YE | 6817 | LED Backlight Dimming Control 1 | I | — |
| 3 | 0.75 | BK / WH | 1051 | Signal Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X92IP USB 2 Port Receptacle - Instrument Panel X2 (-D07)



2807491

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: 13946577
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( GY)

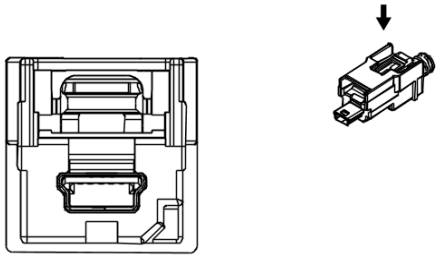
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X92IP USB 2 Port Receptacle - Instrument Panel X2 (-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X92IP USB 2 Port Receptacle - Instrument Panel X3 (-D07)



2807425

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: VP000109
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type( BK)

## Terminal Part Information

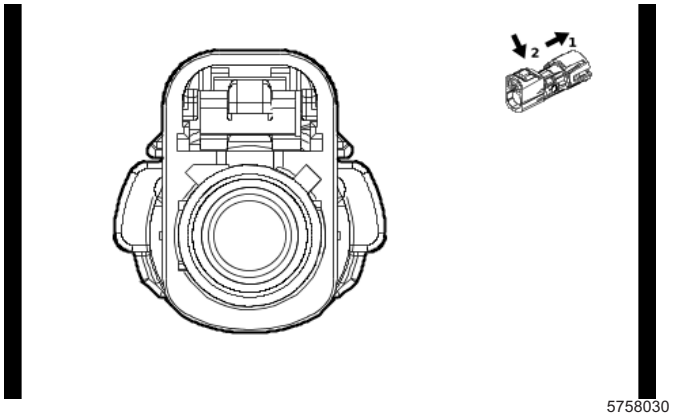
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X92IP USB 2 Port Receptacle - Instrument Panel X3 (-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# Inline Harness Connector End Views

## X122 Front View Camera Switch Wiring Harness to Body Wiring Harness (UV2)




5758030

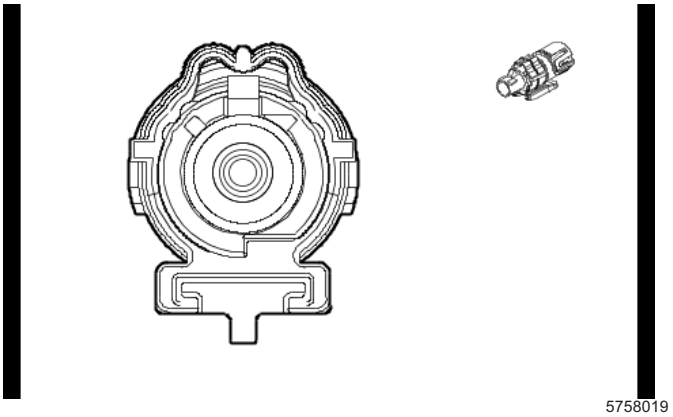
### Connector Part Information

Harness Type: Front View Camera Switch Wiring Harness COAX

OEM Connector: 35187032

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BK)



5758019

### Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 33338239

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( BK)

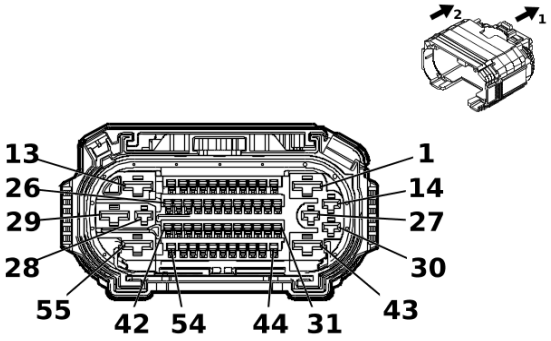
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

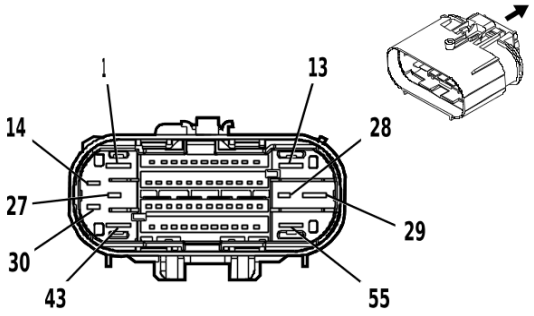
### X122 Front View Camera Switch Wiring Harness to Body Wiring Harness (UV2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Front Vision Camera 1 Coaxial Video Signal | — | — | Coax Cable | — | I | — |

# X125 Engine Wiring Harness to Body Wiring Harness (L3B)




5246872




4994369

## Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35580811

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588062

Service Connector: 84727363

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332901 | J-35616-35 (VT) | J-38125-212 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 19371217 | J-35616-12 (BU) | J-38125-215A |
| IV | 84634921 | J-35616-42 (RD) | J-38125-212 |
| V | 84847992 | J-35616-32 (OG) | J-38125-36 |
| VI | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VII | 84867141 | J-35616-13 (BU) | J-38125-215A |
| VIII | 84992391 | J-35616-5 (PU) | J-38125-215A |

## X125 Engine Wiring Harness to Body Wiring Harness (L3B)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | BK / WH | 251 | IV | — | Signal Ground | 1 | 3 | BK / WH | 251 | V | — |
| 2 | 1.5 | RD / GN | 1840 | III | — | Battery Positive Voltage | 2 | 1.5 | RD / GN | 1840 | VII | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.5 | BU / GY | 4054 | II | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 4 | 0.5 | BU / GY | 4054 | VI | — |
| 5 | 0.5 | WH | 4055 | II | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 5 | 0.5 | WH | 4055 | VI | — |
| 6 | 0.5 | WH | 4976 | II | — | AUTOSAR CAN Bus [-] 3 Serial Data | 6 | 0.5 | WH | 4976 | VI | — |

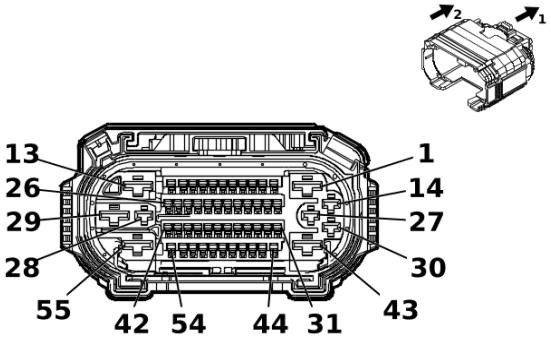
## X125 Engine Wiring Harness to Body Wiring Harness (L3B) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | BU / BK | 4977 | II | — | AUTOSAR CAN Bus [+] 3 Serial Data | 7 | 0.5 | BU / BK | 4977 | VI | — |
| 8 | 0.5 | WH / RD | 1164 | II | — | Accelerator Pedal Position 5V Reference 1 | 8 | 0.35 | WH / RD | 1164 | VI | — |
| 9 | 0.5 | BK / BU | 1271 | II | — | Accelerator Pedal Position Low Reference 1 | 9 | 0.35 | BK / BU | 1271 | VI | — |
| 10 | 0.5 | YE / WH | 1161 | II | — | Accelerator Pedal Position Signal 1 | 10 | 0.35 | YE / WH | 1161 | VI | — |
| 11 | 0.5 | GN / WH | 1162 | II | — | Accelerator Pedal Position Signal 2 | 11 | 0.35 | GN / WH | 1162 | VI | — |
| 12 - 14 | — | — | — | — | — | Not Occupied | 12 - 14 | — | — | — | — | — |
| 15 | 0.5 | BN / RD | 1274 | II | — | Accelerator Pedal Position 5V Reference 2 | 15 | 0.35 | BN / RD | 1274 | VI | — |
| 16 | 0.5 | YE | 4063 | II | — | Hood Status A Signal | 16 | 0.5 | YE | 4063 | VI | — |
| 17 | 0.5 | VT / GN | 4320 | II | — | Powertrain Sensor Bus Enable | 17 | 0.5 | VT / GN | 4320 | VI | — |
| 18 | 0.5 | WH / RD | 480 | II | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 18 | 0.35 | WH / RD | 480 | VI | — |
| 19 | — | — | — | — | — | Wait To Start Indicator Control | 19 | 0.35 | GN / BN | 507 | VI | — |
| 20 | 0.5 | WH / GN | 5380 | II | — | Brake Position Sensor Signal | 20 | 0.35 | WH / GN | 5380 | VI | — |
| 21 | — | — | — | — | — | Not Occupied | 21 | — | — | — | — | — |
| 22 | 0.5 | BK / VT | 1272 | II | — | Accelerator Pedal Position Low Reference 2 | 22 | 0.35 | BK / VT | 1272 | VI | — |
| 23 | 0.5 | BK / GY | 626 | II | — | Engine Control Vehicle Sensors Low Reference 1 | 23 | 0.5 | BK / GY | 626 | VI | — |
| 24 | 0.5 | WH / BU | 6311 | II | — | Cruise/ETC/ TCC Brake Signal | 24 | 0.5 | WH / BU | 6311 | VI | — |
| 25 | 0.5 | BU / GY | 636 | II | — | Ambient Air Temperature Sensor Signal | 25 | 0.5 | BU / GY | 636 | VI | — |

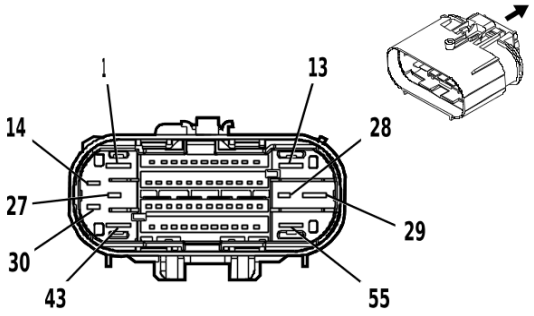
## X125 Engine Wiring Harness to Body Wiring Harness (L3B) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.75 | BU / BN | 7573 | II | — | A/C Compressor Solenoid Valve Control | 26 | 0.5 | BU / BN | 7573 | VI | — |
| 27 | 0.75 | BU / YE | 7574 | I | — | A/C Compressor Solenoid Valve Control | 27 | 0.5 | BU / YE | 7574 | VIII | — |
| 28 | — | — | — | — | — | Powertrain Sensor Bus Enable | 28 | 0.5 | VT / GN | 4320 | VIII | — |
| 29 - 30 | — | — | — | — | — | Not Occupied | 29 - 30 | — | — | — | — | — |
| 31 | 0.5 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 31 | 0.5 | WH | 4978 | VI | — |
| 32 | 0.5 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 32 | 0.5 | BU / YE | 4979 | VI | — |
| 33 | 0.5 | YE / BK | 625 | II | — | Starter Enable Relay Control | 33 | 0.5 | YE / BK | 625 | VI | — |
| 34 - 36 | — | — | — | — | — | Not Occupied | 34 - 36 | — | — | — | — | — |
| 37 | 0.5 | GN / GY | 465 | II | — | Fuel Pump Primary Relay Control | 37 | 0.5 | GN / GY | 465 | VI | — |
| 38 - 55 | — | — | — | — | — | Not Occupied | 38 - 55 | — | — | — | — | — |

# X125 Engine Wiring Harness to Body Wiring Harness (L84/L87)




5246872




4994369

### Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35580811

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

### Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588062

Service Connector: 84727363

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332901 | J-35616-35 (VT) | J-38125-212 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 19371217 | J-35616-12 (BU) | J-38125-215A |
| IV | 84634921 | J-35616-42 (RD) | J-38125-212 |
| V | 84847992 | J-35616-32 (OG) | J-38125-36 |
| VI | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VII | 84867141 | J-35616-13 (BU) | J-38125-215A |
| VIII | 84992391 | J-35616-5 (PU) | J-38125-215A |

## X125 Engine Wiring Harness to Body Wiring Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | BK / WH | 251 | IV | — | Signal Ground | 1 | 3 | BK / WH | 251 | V | — |
| 2 | 1.5 | RD / GN | 1840 | III | — | Battery Positive Voltage | 2 | 1.5 | RD / GN | 1840 | VII | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.5 | BU / GY | 4054 | II | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 4 | 0.5 | BU / GY | 4054 | VI | — |
| 5 | 0.5 | WH | 4055 | II | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 5 | 0.5 | WH | 4055 | VI | — |
| 6 | 0.5 | WH | 4976 | II | — | AUTOSAR CAN Bus [-] 3 Serial Data | 6 | 0.5 | WH | 4976 | VI | — |

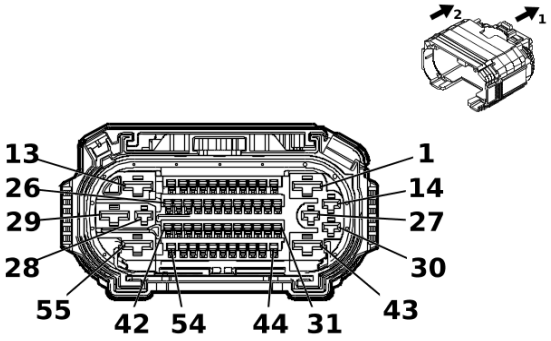
## X125 Engine Wiring Harness to Body Wiring Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | BU / BK | 4977 | II | — | AUTOSAR CAN Bus [+] 3 Serial Data | 7 | 0.5 | BU / BK | 4977 | VI | — |
| 8 | 0.5 | WH / RD | 1164 | II | — | Accelerator Pedal Position 5V Reference 1 | 8 | 0.35 | WH / RD | 1164 | VI | — |
| 9 | 0.5 | BK / BU | 1271 | II | — | Accelerator Pedal Position Low Reference 1 | 9 | 0.35 | BK / BU | 1271 | VI | — |
| 10 | 0.5 | YE / WH | 1161 | II | — | Accelerator Pedal Position Signal 1 | 10 | 0.35 | YE / WH | 1161 | VI | — |
| 11 | 0.5 | GN / WH | 1162 | II | — | Accelerator Pedal Position Signal 2 | 11 | 0.35 | GN / WH | 1162 | VI | — |
| 12 - 14 | — | — | — | — | — | Not Occupied | 12 - 14 | — | — | — | — | — |
| 15 | 0.5 | BN / RD | 1274 | II | — | Accelerator Pedal Position 5V Reference 2 | 15 | 0.35 | BN / RD | 1274 | VI | — |
| 16 | 0.5 | YE | 4063 | II | — | Hood Status A Signal | 16 | 0.5 | YE | 4063 | VI | — |
| 17 | 0.5 | VT / GN | 4320 | II | — | Powertrain Sensor Bus Enable | 17 | 0.5 | VT / GN | 4320 | VI | — |
| 18 | 0.5 | WH / RD | 480 | II | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 18 | 0.35 | WH / RD | 480 | VI | — |
| 19 | — | — | — | — | — | Wait To Start Indicator Control | 19 | 0.35 | GN / BN | 507 | VI | — |
| 20 | 0.5 | WH / GN | 5380 | II | — | Brake Position Sensor Signal | 20 | 0.35 | WH / GN | 5380 | VI | — |
| 21 | — | — | — | — | — | Not Occupied | 21 | — | — | — | — | — |
| 22 | 0.5 | BK / VT | 1272 | II | — | Accelerator Pedal Position Low Reference 2 | 22 | 0.35 | BK / VT | 1272 | VI | — |
| 23 | 0.5 | BK / GY | 626 | II | — | Engine Control Vehicle Sensors Low Reference 1 | 23 | 0.5 | BK / GY | 626 | VI | — |
| 24 | 0.5 | WH / BU | 6311 | II | — | Cruise/ETC/ TCC Brake Signal | 24 | 0.5 | WH / BU | 6311 | VI | — |
| 25 | 0.5 | BU / GY | 636 | II | — | Ambient Air Temperature Sensor Signal | 25 | 0.5 | BU / GY | 636 | VI | — |

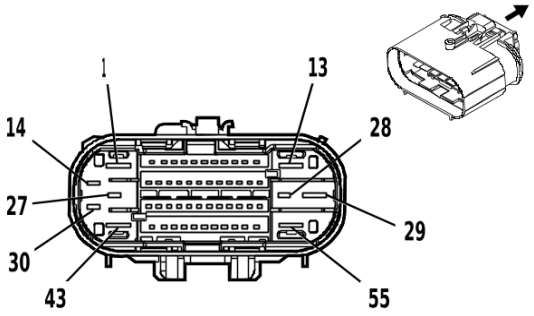
## X125 Engine Wiring Harness to Body Wiring Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.75 | BU / BN | 7573 | II | — | A/C Compressor Solenoid Valve Control | 26 | 0.5 | BU / BN | 7573 | VI | — |
| 27 | 0.75 | BU / YE | 7574 | I | — | A/C Compressor Solenoid Valve Control | 27 | 0.5 | BU / YE | 7574 | VIII | — |
| 28 | — | — | — | — | — | Powertrain Sensor Bus Enable | 28 | 0.5 | VT / GN | 4320 | VIII | — |
| 29 - 30 | — | — | — | — | — | Not Occupied | 29 - 30 | — | — | — | — | — |
| 31 | 0.5 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 31 | 0.5 | WH | 4978 | VI | — |
| 32 | 0.5 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 32 | 0.5 | BU / YE | 4979 | VI | — |
| 33 | 0.5 | YE / BK | 625 | II | — | Starter Enable Relay Control | 33 | 0.5 | YE / BK | 625 | VI | — |
| 34 - 36 | — | — | — | — | — | Not Occupied | 34 - 36 | — | — | — | — | — |
| 37 | 0.5 | GN / GY | 465 | II | — | Fuel Pump Primary Relay Control | 37 | 0.5 | GN / GY | 465 | VI | — |
| 38 - 55 | — | — | — | — | — | Not Occupied | 38 - 55 | — | — | — | — | — |

# X125 Engine Wiring Harness to Body Wiring Harness (LZ0)




5246872




4994369

### Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35580811

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

### Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588062

Service Connector: 84727363

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332901 | J-35616-35 (VT) | J-38125-212 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 19371217 | J-35616-12 (BU) | J-38125-215A |
| IV | 84634921 | J-35616-42 (RD) | J-38125-212 |
| V | 84847992 | J-35616-32 (OG) | J-38125-36 |
| VI | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VII | 84867141 | J-35616-13 (BU) | J-38125-215A |
| VIII | 84992391 | J-35616-5 (PU) | J-38125-215A |

## X125 Engine Wiring Harness to Body Wiring Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | BK / WH | 251 | IV | — | Signal Ground | 1 | 3 | BK / WH | 251 | V | — |
| 2 | 1.5 | RD / GN | 1840 | III | — | Battery Positive Voltage | 2 | 1.5 | RD / GN | 1840 | VII | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.5 | BU / GY | 4054 | II | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 4 | 0.5 | BU / GY | 4054 | VI | — |
| 5 | 0.5 | WH | 4055 | II | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 5 | 0.5 | WH | 4055 | VI | — |
| 6 | 0.5 | WH | 4976 | II | — | AUTOSAR CAN Bus [-] 3 Serial Data | 6 | 0.5 | WH | 4976 | VI | — |

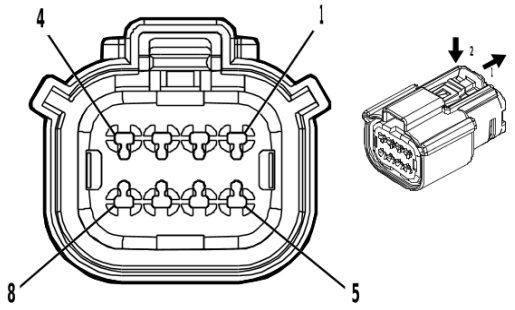
## X125 Engine Wiring Harness to Body Wiring Harness (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | BU / BK | 4977 | II | — | AUTOSAR CAN Bus [+] 3 Serial Data | 7 | 0.5 | BU / BK | 4977 | VI | — |
| 8 | 0.5 | WH / RD | 1164 | II | — | Accelerator Pedal Position 5V Reference 1 | 8 | 0.35 | WH / RD | 1164 | VI | — |
| 9 | 0.5 | BK / BU | 1271 | II | — | Accelerator Pedal Position Low Reference 1 | 9 | 0.35 | BK / BU | 1271 | VI | — |
| 10 | 0.5 | YE / WH | 1161 | II | — | Accelerator Pedal Position Signal 1 | 10 | 0.35 | YE / WH | 1161 | VI | — |
| 11 | 0.5 | GN / WH | 1162 | II | — | Accelerator Pedal Position Signal 2 | 11 | 0.35 | GN / WH | 1162 | VI | — |
| 12 - 14 | — | — | — | — | — | Not Occupied | 12 - 14 | — | — | — | — | — |
| 15 | 0.5 | BN / RD | 1274 | II | — | Accelerator Pedal Position 5V Reference 2 | 15 | 0.35 | BN / RD | 1274 | VI | — |
| 16 | 0.5 | YE | 4063 | II | — | Hood Status A Signal | 16 | 0.5 | YE | 4063 | VI | — |
| 17 | — | — | — | — | — | Powertrain Sensor Bus Enable | 17 | 0.5 | VT / GN | 4320 | VI | — |
| 18 | 0.5 | WH / RD | 480 | II | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 18 | 0.35 | WH / RD | 480 | VI | — |
| 19 | 0.5 | GN / BN | 507 | II | — | Wait To Start Indicator Control | 19 | 0.35 | GN / BN | 507 | VI | — |
| 20 | 0.5 | WH / GN | 5380 | II | — | Brake Position Sensor Signal | 20 | 0.35 | WH / GN | 5380 | VI | — |
| 21 | — | — | — | — | — | Not Occupied | 21 | — | — | — | — | — |
| 22 | 0.5 | BK / VT | 1272 | II | — | Accelerator Pedal Position Low Reference 2 | 22 | 0.35 | BK / VT | 1272 | VI | — |
| 23 | 0.5 | BK / GY | 626 | II | — | Engine Control Vehicle Sensors Low Reference 1 | 23 | 0.5 | BK / GY | 626 | VI | — |
| 24 | 0.5 | WH / BU | 6311 | II | — | Cruise/ETC/ TCC Brake Signal | 24 | 0.5 | WH / BU | 6311 | VI | — |
| 25 | 0.5 | BU / GY | 636 | II | — | Ambient Air Temperature Sensor Signal | 25 | 0.5 | BU / GY | 636 | VI | — |

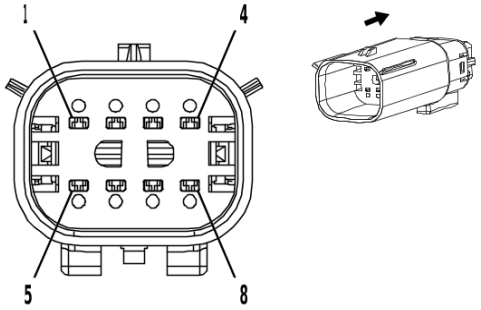
## X125 Engine Wiring Harness to Body Wiring Harness (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.75 | BU / BN | 7573 | II | — | A/C Compressor Solenoid Valve Control | 26 | 0.5 | BU / BN | 7573 | VI | — |
| 27 | 0.75 | BU / YE | 7574 | I | — | A/C Compressor Solenoid Valve Control | 27 | 0.5 | BU / YE | 7574 | VIII | — |
| 28 | 0.5 | VT / GN | 4320 | I | — | Powertrain Sensor Bus Enable | 28 | 0.5 | VT / GN | 4320 | VIII | — |
| 29 - 30 | — | — | — | — | — | Not Occupied | 29 - 30 | — | — | — | — | — |
| 31 | 0.5 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 31 | 0.5 | WH | 4978 | VI | — |
| 32 | 0.5 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 32 | 0.5 | BU / YE | 4979 | VI | — |
| 33 | 0.5 | YE / BK | 625 | II | — | Starter Enable Relay Control | 33 | 0.5 | YE / BK | 625 | VI | — |
| 34 - 36 | — | — | — | — | — | Not Occupied | 34 - 36 | — | — | — | — | — |
| 37 | — | — | — | — | — | Fuel Pump Primary Relay Control | 37 | 0.5 | GN / GY | 465 | VI | — |
| 38 - 55 | — | — | — | — | — | Not Occupied | 38 - 55 | — | — | — | — | — |

# X128 Engine Wiring Harness to Camshaft Position Sensor Wire (L84/L87)




4846407




2667653

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35063116
Service Connector: 84928314
Description: 8-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Camshaft Position Sensor Wire
OEM Connector: 13520589
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | J-35616-43 (RD) | No Tool Required |

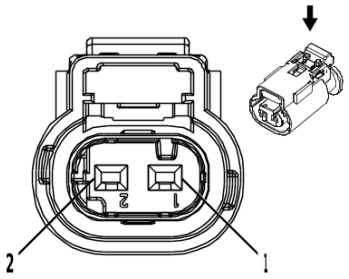
## X128 Engine Wiring Harness to Camshaft Position Sensor Wire (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BU | 5300 | I | — | Intake Camshaft Position Sensor 1 Voltage Reference | 1 | 0.5 | GY / BU | 5300 | II | — |
| 2 | 0.5 | BK / GN | 5301 | I | — | Intake Camshaft Position Sensor Low Reference 1 | 2 | 0.5 | BK / GN | 5301 | II | — |
| 3 | 0.5 | YE / VT | 5275 | I | — | Intake Camshaft Position Sensor 1 | 3 | 0.5 | YE / VT | 5275 | II | — |
| 4 | 0.5 | BU | 179 | I | — | Engine Oil Pump Control | 4 | 0.5 | BU | 179 | II | — |
| 5 | 0.5 | VT / BN | 5284 | I | — | Intake Camshaft Position Actuator Solenoid Valve 1 | 5 | 0.5 | VT / BN | 5284 | II | — |
| 6 | 0.5 | BK / BN | 6753 | I | — | Camshaft Position Actuator Solenoid Valve W Low Reference | 6 | 0.5 | BK / BN | 6753 | II | — |

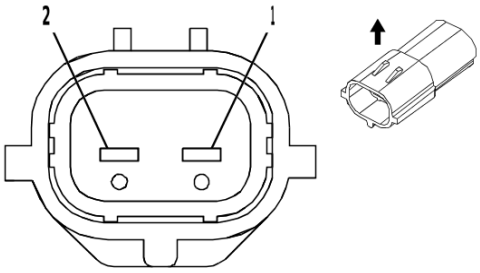
## X128 Engine Wiring Harness to Camshaft Position Sensor Wire (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | VT / BU | 5293 | I | — | Powertrain Main Relay Fused Supply Voltage 4 | 7 | 0.75 | VT / BU | 5293 | II | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |

# X129 Camshaft Position Sensor Wire to Oil Pump Flow Control Solenoid Valve Wire (L87)




2717066




2684367

### Connector Part Information

Harness Type: Camshaft Position Sensor Wire
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

### Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Wire
OEM Connector: 12681015
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed( BK)

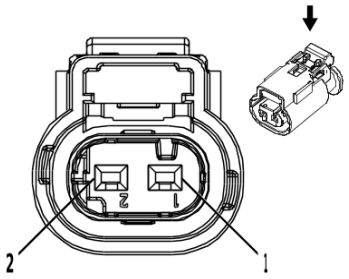
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |
| II | Not required | Not Available | No Tool Required |

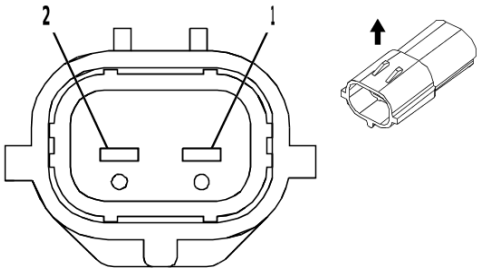
## X129 Camshaft Position Sensor Wire to Oil Pump Flow Control Solenoid Valve Wire (L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5293 | I | — | Powertrain Main Relay Fused Supply Voltage 4 | 1 | 0.5 | VT / BU | 5293 | II | — |
| 2 | 0.5 | BU | 179 | I | — | Engine Oil Pump Control | 2 | 0.5 | BU | 179 | II | — |

# X129 Engine Wiring Harness to Oil Pump Flow Control Solenoid Valve Harness (L3B)




2717066




2684367

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

### Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M ( BK)

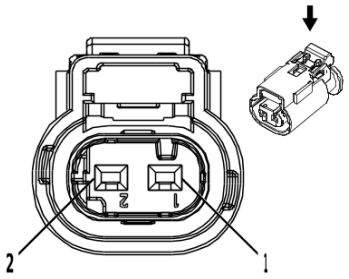
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

## X129 Engine Wiring Harness to Oil Pump Flow Control Solenoid Valve Harness (L3B)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 106 | I | — | Oil Pump Motor Control | 1 | 0.5 | YE / BN | 106 | II | — |
| 2 | 0.5 | BU | 179 | I | — | Engine Oil Pump Control | 2 | 0.5 | BU | 179 | II | — |

# X129 Engine Wiring Harness to Oil Pump Flow Control Solenoid Valve Harness (LZ0)




—

2717066

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

### Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Harness
OEM Connector: 12698857
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M ( BK)

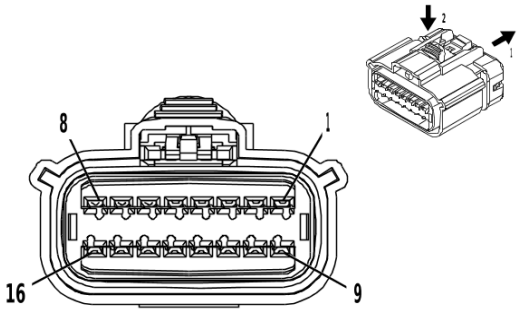
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

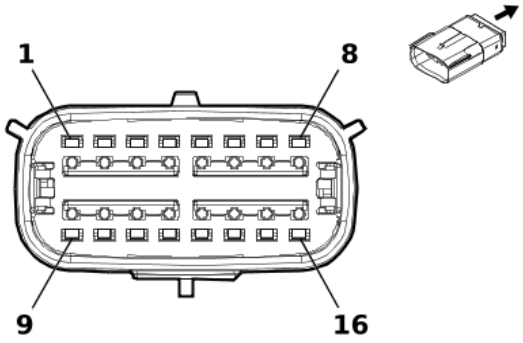
## X129 Engine Wiring Harness to Oil Pump Flow Control Solenoid Valve Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | YE / BN | 106 | I | — | Oil Pump Motor Control | 1 | 0.5 | YE / BN | 106 | II | — |
| 2 | 0.5 | BU | 179 | I | — | Engine Oil Pump Control | 2 | 0.5 | BU | 179 | II | — |

# X150 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness




4253394




2748079

### Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 35502379
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.5 OCS Series, Sealed( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35589680
Service Connector: 26314575
Description: 16-Way M 1.5 OCS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | 19352418 | J-35616-3 (GY) | J-38125-215A |

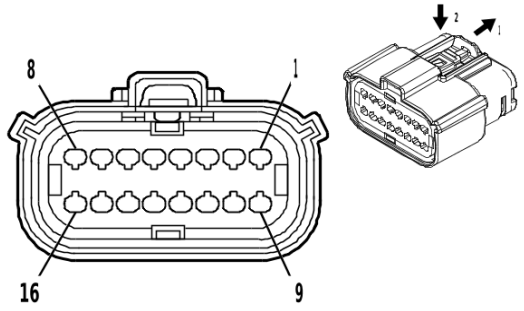
## X150 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 3140 | I | — | Battery Positive Voltage | 1 | 0.5 | RD / GN | 3140 | II | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.5 | BK / BU | 5214 | I | — | Front Parking Assist Sensor Low Reference | 3 | 0.5 | BK / BU | 5214 | II | — |
| 4 | 0.5 | VT / WH | 5215 | I | — | Left Front Outer Parking Assist Sensor | 4 | 0.5 | VT / WH | 5215 | II | — |
| 5 | 0.5 | YE / GY | 5216 | I | — | Left Front Middle Parking Assist Sensor | 5 | 0.5 | YE / GY | 5216 | II | — |
| 6 | 0.5 | WH / GY | 5217 | I | — | Right Front Outer Parking Assist Sensor | 6 | 0.5 | WH / GY | 5217 | II | — |
| 7 | 0.5 | VT / GY | 5218 | I | — | Right Front Middle Parking Assist Sensor | 7 | 0.5 | VT / GY | 5218 | II | — |
| 8 | 0.5 | BK | 650 | I | — | Ground | 8 | 0.5 | BK | 650 | II | — |
| 9 | 0.5 | BK / WH | 651 | I | — | Signal Ground | 9 | 0.5 | BK / WH | 651 | II | — |

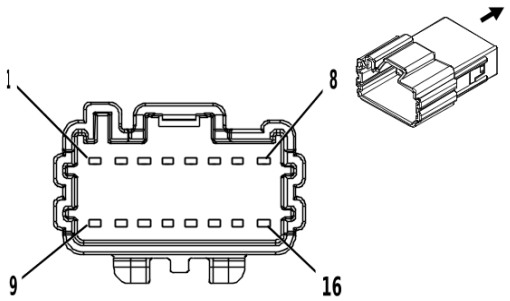
## X150 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | BN / GY | 5061 | I | — | Left Front Fog Lamp Control | 10 | 0.5 | BN / GY | 5061 | II | — |
| 11 | 0.5 | BN | 6581 | I | — | Front Parking Assist Display Control | 11 | 0.5 | BN | 6581 | II | — |
| 12 - 14 | — | — | — | — | — | Not Occupied | 12 - 14 | — | — | — | — | — |
| 15 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 15 | 0.5 | WH / GY | 4104 | II | — |
| 16 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 16 | 0.5 | BU / GY | 4105 | II | — |

# X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L3B)




4574233




4223086

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33386201
Service Connector: 13584788
Description: 16-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13520643
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M ( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | Not required | No Tool Required | No Tool Required |

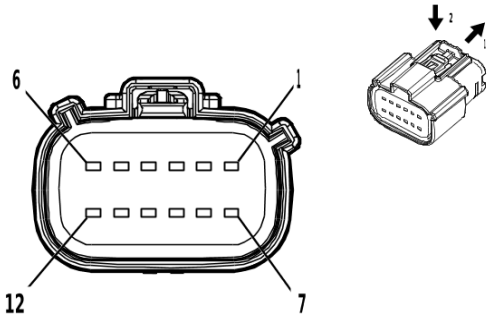
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L3B)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / GY | 496 | I | — | Knock Sensor 1 Signal | 1 | 0.5 | VT / GY | 496 | II | — |
| 2 | 0.75 | BN | 4801 | I | — | Direct Fuel Injector High Voltage Control Cylinder 1 | 2 | 0.75 | BN | 4801 | II | — |
| 3 | 0.5 | WH / RD | 480 | I | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 3 | 0.5 | WH / RD | 480 | II | — |
| 4 | 0.75 | GY / BU | 4804 | I | — | Direct Fuel Injector High Voltage Control Cylinder 4 | 4 | 0.75 | GY / BU | 4804 | II | — |
| 5 | — | — | — | — | — | Not Occupied | 5 | — | — | — | — | — |
| 6 | 0.75 | GN | 4803 | I | — | Direct Fuel Injector High Voltage Control Cylinder 3 | 6 | 0.75 | GN | 4803 | II | — |
| 7 | 0.75 | BU | 4802 | I | — | Direct Fuel Injector High Voltage Control Cylinder 2 | 7 | 0.75 | BU | 4802 | II | — |

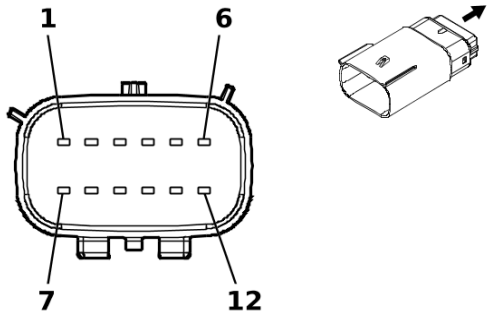
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L3B) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.5 | WH / GY | 1876 | I | — | Knock Sensor 2 Signal | 8 | 0.5 | WH / GY | 1876 | II | — |
| 9 | 0.5 | BK / YE | 1716 | I | — | Knock Sensor Low Reference 1 | 9 | 0.5 | BK / YE | 1716 | II | — |
| 10 | 0.75 | BN / WH | 4901 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 1 | 10 | 0.75 | BN / WH | 4901 | II | — |
| 11 | 0.5 | BU / WH | 10786 | I | — | Fuel Rail Pressure Sensor SENT 1 Signal | 11 | 0.5 | BU / WH | 10786 | II | — |
| 12 | 0.5 | BK / GN | 580 | I | — | Engine Control Sensors Low Reference 2 | 12 | 0.5 | BK / GN | 580 | II | — |
| 13 | 0.75 | BU / WH | 4904 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 4 | 13 | 0.75 | BU / WH | 4904 | II | — |
| 14 | 0.75 | GN / GY | 4903 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 3 | 14 | 0.75 | GN / GY | 4903 | II | — |
| 15 | 0.75 | BU / GY | 4902 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 2 | 15 | 0.75 | BU / GY | 4902 | II | — |
| 16 | 0.5 | BK / GY | 2303 | I | — | Knock Sensor Low Reference 2 | 16 | 0.5 | BK / GY | 2303 | II | — |

# X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LZ0)




4584248




5187933

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33221171
Service Connector: 19333239
Description: 12-Way F 1.5 MX Series, Sealed( D-GY)

### Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 33482-6261
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 85528055 | J-35616-2A (GY) | J-38125-217 |
| II | Not required | J-35616-3 (GY) | No Tool Required |

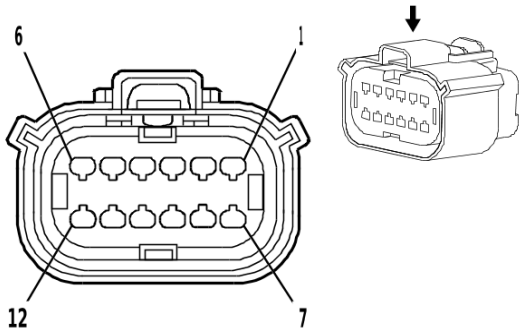
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.5 | BN / WH | 4901 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 1 | 1 | 1.5 | BN / WH | 4901 | II | — |
| 2 | 1.5 | BN | 4801 | I | — | Direct Fuel Injector High Voltage Control Cylinder 1 | 2 | 1.5 | BN | 4801 | II | — |
| 3 | 1.5 | BU / GY | 4902 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 2 | 3 | 1.5 | BU / GY | 4902 | II | — |
| 4 | 1.5 | BU | 4802 | I | — | Direct Fuel Injector High Voltage Control Cylinder 2 | 4 | 1.5 | BU | 4802 | II | — |
| 5 | 1.5 | GN / GY | 4903 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 3 | 5 | 1.5 | GN / GY | 4903 | II | — |
| 6 | 1.5 | GN | 4803 | I | — | Direct Fuel Injector High Voltage Control Cylinder 3 | 6 | 1.5 | GN | 4803 | II | — |

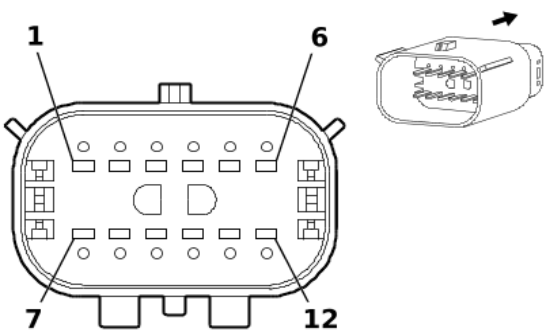
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 1.5 | BU / WH | 4904 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 4 | 7 | 1.5 | BU / WH | 4904 | II | — |
| 8 | 1.5 | GY / BU | 4804 | I | — | Direct Fuel Injector High Voltage Control Cylinder 4 | 8 | 1.5 | GY / BU | 4804 | II | — |
| 9 | 1.5 | GN / WH | 4905 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 5 | 9 | 1.5 | GN / WH | 4905 | II | — |
| 10 | 1.5 | WH / GN | 4805 | I | — | Direct Fuel Injector High Voltage Control Cylinder 5 | 10 | 1.5 | WH / GN | 4805 | II | — |
| 11 | 1.5 | VT / GY | 4906 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 6 | 11 | 1.5 | VT / GY | 4906 | II | — |
| 12 | 1.5 | VT / GN | 4806 | I | — | Direct Fuel Injector High Voltage Control Cylinder 6 | 12 | 1.5 | VT / GN | 4806 | II | — |

# X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 1 (L84/L87)




1825165




1825167

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13595088
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 1
OEM Connector: 334826211
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | Not required | J-35616-3 (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

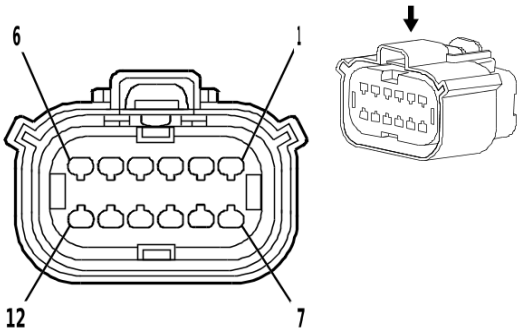
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 1 (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / WH | 4901 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 1 | 1 | 0.8 | BN / WH | 4901 | II | — |
| 2 | 0.75 | GN / BK | 4903 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 3 | 2 | 0.8 | GN / GY | 4903 | II | — |
| 3 | 0.75 | GN / WH | 4905 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 5 | 3 | 0.8 | GN / WH | 4905 | II | — |
| 4 | 0.75 | WH / YE | 4907 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 7 | 4 | 0.8 | WH / YE | 4907 | II | — |
| 5 | 0.75 | BN | 4801 | I | — | Direct Fuel Injector High Voltage Control Cylinder 1 | 5 | 0.8 | BN | 4801 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

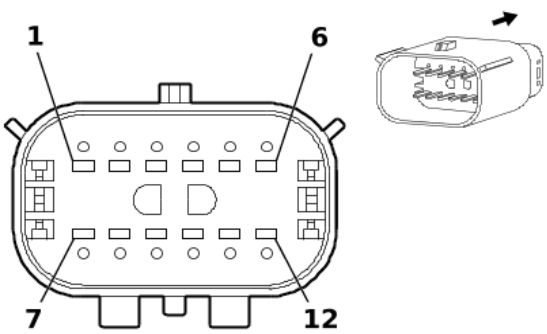
## X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 1 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.75 | GN | 4803 | I | — | Direct Fuel Injector High Voltage Control Cylinder 3 | 7 | — | GN | 4803 | II | — |
| 8 | 0.75 | WH / GN | 4805 | I | — | Direct Fuel Injector High Voltage Control Cylinder 5 | 8 | 0.8 | WH / GN | 4805 | II | — |
| 9 | 0.75 | YE / GY | 4807 | I | — | Direct Fuel Injector High Voltage Control Cylinder 7 | 9 | 0.8 | YE / GN | 4807 | II | — |
| 10 | 0.5 | WH / RD | 480 | I | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 10 | 0.8 | BN / RD | 480 | II | — |
| 11 | 0.5 | BU / WH | 10786 | I | — | Fuel Rail Pressure Sensor SENT 1 Signal | 11 | 0.8 | BU / WH | 10786 | II | — |
| 12 | 0.5 | BK / YE | 548 | I | — | Engine Control Sensors Low Reference 1 | 12 | 0.8 | BK / GN | 548 | II | — |

# X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 2 (L84/L87)




1825165




1825167

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13922706
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Bank 2
OEM Connector: 334826206
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | Not required | J-35616-3 (GY) | No Tool Required |

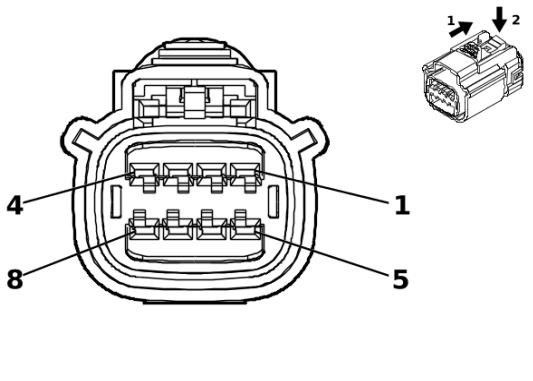
## X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 2 (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / BK | 4902 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 2 | 1 | 0.8 | BU / GY | 4902 | II | — |
| 2 | 0.75 | BU / WH | 4904 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 4 | 2 | 0.8 | GN / WH | 4904 | II | — |
| 3 | 0.75 | VT / GY | 4906 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 6 | 3 | 0.8 | GN / GY | 4906 | II | — |
| 4 | 0.75 | GY / WH | 4908 | I | — | Direct Fuel Injector High Voltage Supply Cylinder 8 | 4 | 0.8 | GY / WH | 4908 | II | — |
| 5 | 0.75 | BU | 4802 | I | — | Direct Fuel Injector High Voltage Control Cylinder 2 | 5 | 0.8 | BU | 4802 | II | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |

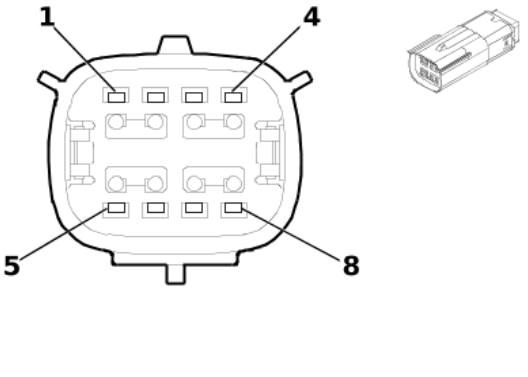
## X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Bank 2 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | GY / BU | 4804 | I | — | Direct Fuel Injector High Voltage Control Cylinder 4 | 8 | 0.8 | GY / GN | 4804 | II | — |
| 9 | 0.75 | VT / GN | 4806 | I | — | Direct Fuel Injector High Voltage Control Cylinder 6 | 9 | 0.8 | VT / GN | 4806 | II | — |
| 10 | 0.75 | GY | 4808 | I | — | Direct Fuel Injector High Voltage Control Cylinder 8 | 10 | 0.5 | GY / RD | 4808 | II | — |
| 11 | 0.75 | VT / BK | 7300 | I | — | High Pressure Fuel Pump Low Control | 11 | 0.5 | VT / BK | 7300 | II | — |
| 12 | 0.75 | YE | 7301 | I | — | High Pressure Fuel Pump High Control | 12 | 0.5 | YE / GN | 7301 | II | — |

# X162 Front Object Alarm Sensor Wiring Harness to Front Object Alarm Sensor Wiring Harness - Left Jumper (UKL)




5253496




5402096

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 35507578
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 OCS Series, Sealed( BK)

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness - Left Jumper
OEM Connector: 15514651
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 1.5 OCS Series, Sealed( BK)

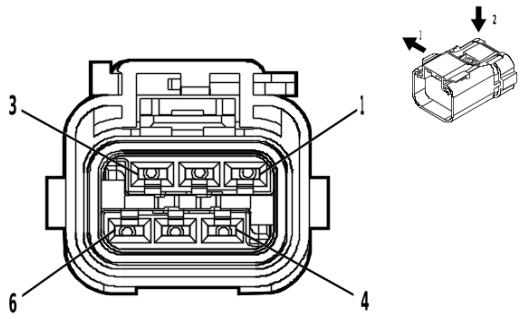
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

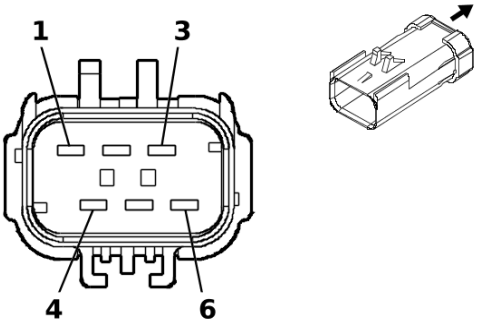
## X162 Front Object Alarm Sensor Wiring Harness to Front Object Alarm Sensor Wiring Harness - Left Jumper (UKL)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 3140 | I | — | Battery Positive Voltage | 1 | 0.5 | RD / GN | 3140 | II | — |
| 2 | 0.5 | BK / WH | 651 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 651 | II | — |
| 3 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 3 | 0.5 | BU / GY | 4105 | II | — |
| 4 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 4 | 0.5 | BU / GY | 4105 | II | — |
| 5 | 0.5 | BK / WH | 651 | I | — | Signal Ground | 5 | 0.5 | BK / WH | 651 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 7 | 0.5 | WH / GY | 4104 | II | — |
| 8 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 8 | 0.5 | WH / GY | 4104 | II | — |

# X163 Engine Wiring Harness to Diesel Glow Plug Wiring Harness (LZ0)




4997615




5187846

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15419838
Service Connector: 86825462
Description: 6-Way F 2.8 APEX Series, Sealed( BK)

### Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 54200612
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 2.8 APEX Series, Sealed( BK)

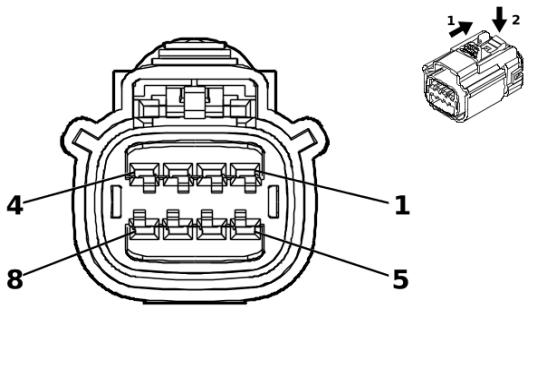
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

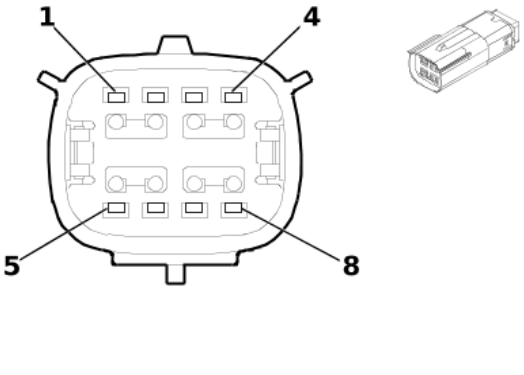
## X163 Engine Wiring Harness to Diesel Glow Plug Wiring Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | GY / BU | 1581 | I | — | Glow Plug 1 Control | 1 | 2.5 | GY / RD | 1581 | II | — |
| 2 | 2.5 | GY / BN | 1582 | I | — | Glow Plug 2 Control | 2 | 2.5 | GY / BK | 1582 | II | — |
| 3 | 2.5 | GY / GN | 1583 | I | — | Glow Plug 3 Control | 3 | 2.5 | GY / GN | 1583 | II | — |
| 4 | 2.5 | GY / YE | 1584 | I | — | Glow Plug 4 Control | 4 | 2.5 | GY / YE | 1584 | II | — |
| 5 | 2.5 | GY / WH | 1585 | I | — | Glow Plug 5 Control | 5 | 2.5 | GY / WH | 1585 | II | — |
| 6 | 2.5 | GY / VT | 1586 | I | — | Glow Plug 6 Control | 6 | 2.5 | GY | 1586 | II | — |

# X165 Front Object Alarm Sensor Wiring Harness to Front Object Alarm Sensor Wiring Harness - Right Jumper (UKL)




5253496




5402096

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 35507578
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 OCS Series, Sealed( BK)

## Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness - Right Jumper
OEM Connector: 15514651
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 1.5 OCS Series, Sealed( BK)

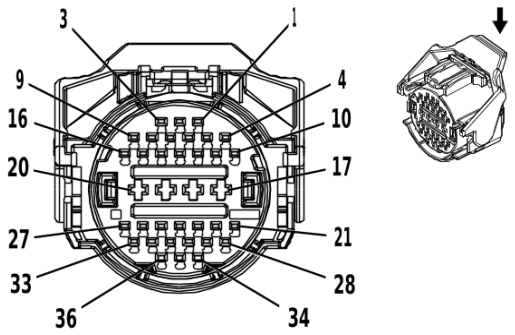
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

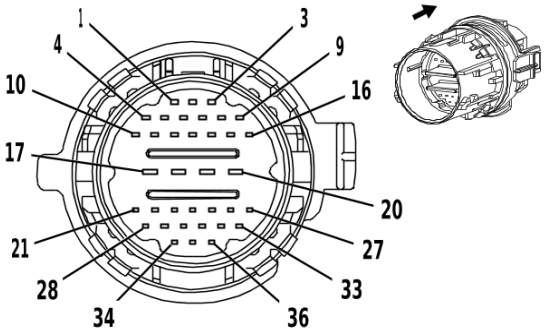
## X165 Front Object Alarm Sensor Wiring Harness to Front Object Alarm Sensor Wiring Harness - Right Jumper (UKL)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 3140 | I | — | Battery Positive Voltage | 1 | 0.5 | RD / GN | 3140 | II | — |
| 2 | 0.5 | BK / WH | 651 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 651 | II | — |
| 3 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 3 | 0.5 | BU / GY | 4105 | II | — |
| 4 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 4 | 0.5 | BU / GY | 4105 | II | — |
| 5 | 0.5 | BK / WH | 651 | I | — | Signal Ground | 5 | 0.5 | BK / WH | 651 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 7 | 0.5 | WH / GY | 4104 | II | — |
| 8 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 8 | 0.5 | WH / GY | 4104 | II | — |

# X175 Engine Wiring Harness to Automatic Transmission Wiring Harness - Case (MQE)




3621473




3977661

## Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 15532799

Service Connector: 19329922

Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed( BK)

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 2321030-7

Service Connector: 19329922

Description: 36-Way M ( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575368 | J-35616-35 (VT) | J-38125-36 |
| II | 19300445 | J-35616-12 (BU) | J-38125-11A |
| III | Not required | J-35616-17 (L-GN) | No Tool Required |

## X175 Engine Wiring Harness to Automatic Transmission Wiring Harness - Case (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / WH | 6380 | II | — | Torque Converter Clutch Enable Solenoid Valve A Control | 1 | 0.5 | GN / WH | 6380 | III | — |
| 2 | 0.5 | GN / GY | 6387 | II | — | Transmission High Side Driver 1 Control | 2 | 0.5 | YE / GN | 6387 | III | — |
| 3 | 0.5 | VT / WH | 422 | II | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | YE / BN | 422 | III | — |
| 4 | 0.5 | GN / WH | 1530 | II | — | Transmission Line Pressure Control Solenoid Valve Control | 4 | 0.5 | GY / GN | 1530 | III | — |
| 5 | 0.5 | BN | 6400 | II | — | Clutch Solenoid Valve A Control | 5 | 0.5 | BN | 6400 | III | — |
| 6 | 0.5 | BU | 6401 | II | — | Clutch Solenoid Valve B Control | 6 | 0.5 | BU | 6401 | III | — |

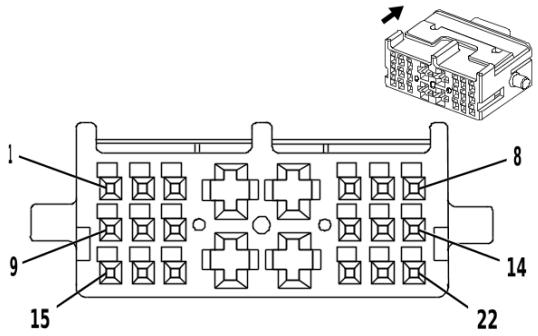
## X175 Engine Wiring Harness to Automatic Transmission Wiring Harness - Case (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | YE / BN | 6210 | II | — | Torque Converter Clutch Enable Solenoid Valve B Control | 7 | 0.5 | YE / BN | 6210 | III | — |
| 8 | 0.5 | WH / GY | 4578 | II | — | Surge Accumulator Solenoid Valve Low Side Control | 8 | 0.5 | WH / GY | 4578 | III | — |
| 9 | — | — | — | — | — | Not Occupied | 9 | — | — | — | — | — |
| 10 | 0.5 | GY | 6402 | II | — | Clutch Solenoid Valve C Control | 10 | 0.5 | GY | 6402 | III | — |
| 11 | 0.5 | BK / BN | 586 | II | — | Transmission Fluid Temperature Sensor Low Reference | 11 | 0.5 | BK / BN | 586 | III | — |
| 12 | 0.5 | BN / WH | 585 | II | — | Transmission Fluid Temperature Sensor Signal | 12 | 0.5 | BN / WH | 585 | III | — |
| 13 | 0.5 | WH | 4508 | II | — | Transmission Clutch G Control | 13 | 0.5 | WH | 4508 | III | — |
| 14 | 0.5 | WH / BU | 4507 | II | — | Transmission Clutch H Control | 14 | 0.5 | WH / BU | 4507 | III | — |
| 15 - 17 | — | — | — | — | — | Not Occupied | 15 - 17 | — | — | — | — | — |
| 18 | 0.5 | GN / GY | 6387 | I | — | Transmission High Side Driver 1 Control | 18 | 2.5 | GN / GY | 6387 | III | — |
| 19 | 0.5 | GY / BN | 6388 | I | — | Transmission High Side Driver 2 Control | 19 | 2.5 | GY / BN | 6388 | III | — |
| 20 | — | — | — | — | — | Not Occupied | 20 | — | — | — | — | — |
| 21 | 0.5 | GN / YE | 3337 | II | — | Transmission Internal Mode Switch Mode Control Y | 21 | 0.5 | GN / YE | 3337 | III | — |
| 22 | 0.5 | BU / WH | 3338 | II | — | Transmission Internal Mode Switch Mode Control X | 22 | 0.5 | BU / WH | 3338 | III | — |
| 23 | — | — | — | — | — | Not Occupied | 23 | — | — | — | — | — |
| 24 | 0.5 | GY / BU | 6358 | II | — | Output Speed Signal | 24 | 0.5 | GY / BU | 6358 | III | — |

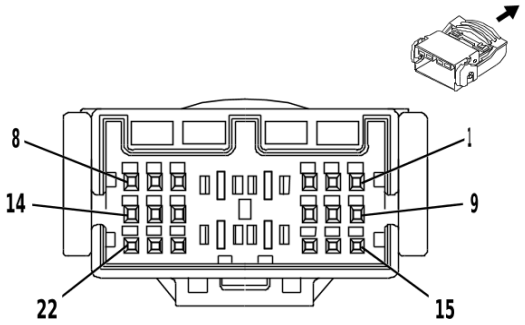
## X175 Engine Wiring Harness to Automatic Transmission Wiring Harness - Case (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 0.5 | YE / GN | 4170 | II | — | Transmission Output Shaft Speed Sensor Circuit 9V Reference | 25 | 0.5 | YE / GN | 4170 | III | — |
| 26 | 0.5 | BK / BU | 6253 | II | — | Transmission Input Speed Sensor Ground | 26 | 0.5 | GN / YE | 6253 | III | — |
| 27 | 0.5 | YE / BU | 4171 | II | — | Transmission Input Shaft Speed Sensor Circuit 9V Reference | 27 | 0.5 | WH / RD | 4171 | III | — |
| 28 | — | — | — | — | — | Not Occupied | 28 | — | — | — | — | — |
| 29 | 0.5 | WH / RD | 480 | II | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 29 | 0.5 | WH / RD | 480 | III | — |
| 30 | 0.5 | BK / GY | 626 | II | — | Engine Control Vehicle Sensors Low Reference 1 | 30 | 0.5 | BK / GY | 626 | III | — |
| 31 | — | — | — | — | — | Not Occupied | 31 | — | — | — | — | — |
| 32 | 0.5 | GN / VT | 4510 | II | — | Transmission Intermediate Speed Signal | 32 | 0.5 | GN / VT | 4510 | III | — |
| 33 - 36 | — | — | — | — | — | Not Occupied | 33 - 36 | — | — | — | — | — |

# X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHS/MQC)




3977748




3977770

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |
| III | Not required | J-35616-5 (PU) | No Tool Required |
| IV | Not required | J-35616-65B (L-BU) | No Tool Required |

## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHS/MQC)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 7819 | II | — | Default Disable Solenoid Control | 1 | 0.5 | VT | 7819 | IV | — |
| 2 | 0.5 | GN / OG | 1530 | II | — | Transmission Line Pressure Control Solenoid Valve Control | 2 | 0.5 | GN / OG | 1530 | IV | — |
| 3 | 0.5 | GY / BN | 422 | II | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | GY / BN | 422 | IV | — |
| 4 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Control | 4 | 0.5 | BN | 6387 | III | — |
| 5 | — | — | — | — | — | Not Occupied | 5 | — | — | — | — | — |

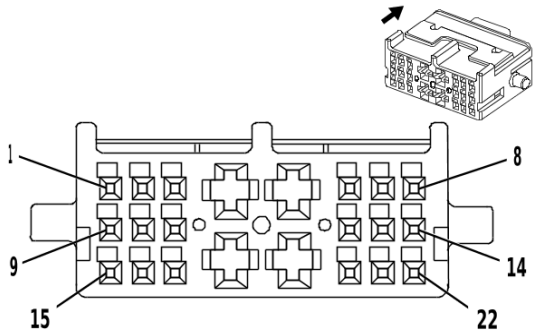
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHS/MQC) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | YE | 6317 | II | — | Electronic Transmission Range Select Out of Park Switch Signal | 6 | 0.5 | YE | 6317 | IV | — |
| 7 | 0.5 | YE / GY | 6319 | II | — | Electronic Transmission Range Select Out of Park Switch 2 Signal | 7 | 0.5 | YE / GY | 6319 | IV | — |
| 8 | 0.5 | GN | 4170 | II | — | Transmission Output Shaft Speed Sensor Circuit 9V Reference | 8 | 0.5 | GN | 4170 | IV | — |
| 9 | 0.5 | OG | 2159 | II | — | Park Inhibit Solenoid Assembly Control | 9 | 0.5 | OG | 2159 | IV | — |
| 10 | 0.5 | BK / GY | 3706 | II | — | Electronic Transmission Range Select Switch Analog Signal 1 | 10 | 0.5 | BK / GY | 3706 | IV | — |
| 11 | 0.5 | BU | 4171 | II | — | Transmission Input Shaft Speed Sensor Circuit 9V Reference | 11 | 0.5 | BU | 4171 | IV | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | BU / BN | 586 | II | — | Transmission Fluid Temperature Sensor Low Reference | 13 | 0.5 | BN / BN | 586 | IV | — |
| 14 | 0.5 | BN / YE | 585 | II | — | Transmission Fluid Temperature Sensor Signal | 14 | 0.5 | BN / YE | 585 | IV | — |
| 15 | 0.5 | BU / GN | 6404 | II | — | Clutch Solenoid Valve E Control | 15 | 0.5 | BU / GN | 6404 | IV | — |
| 16 | 0.5 | GN / BN | 6403 | II | — | Clutch Solenoid Valve D Control | 16 | 0.5 | GN / BN | 6403 | IV | — |
| 17 | 0.5 | GY | 6402 | II | — | Clutch Solenoid Valve C Control | 17 | 0.5 | GY | 6402 | IV | — |
| 18 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Control | 18 | 0.5 | WH | 6388 | III | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | BN / WH | 4509 | II | — | Transmission Clutch F Control | 20 | 0.5 | BN / WH | 4509 | IV | — |

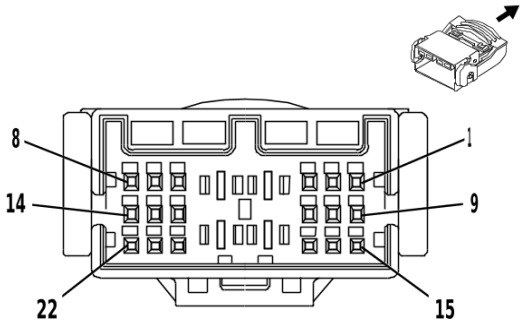
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHS/MQC) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 0.5 | YE / VT | 4507 | II | — | Transmission Clutch H Control | 21 | 0.5 | YE / VT | 4507 | IV | — |
| 22 | 0.5 | BU / GY | 4508 | II | — | Transmission Clutch G Control | 22 | 0.5 | BU / GY | 4508 | IV | — |

# X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHT/MQB)




3977748




3977770

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |
| III | Not required | J-35616-5 (PU) | No Tool Required |
| IV | Not required | J-35616-65B (L-BU) | No Tool Required |

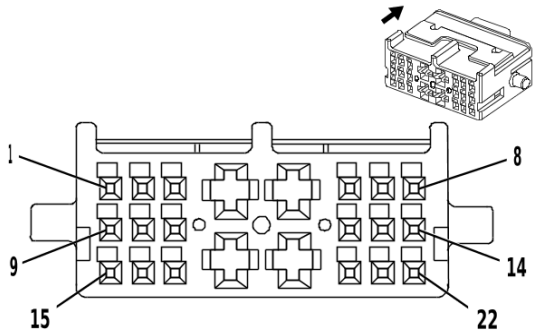
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHT/MQB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 7819 | II | — | Default Disable Solenoid Control | 1 | 0.5 | VT | 7819 | IV | — |
| 2 | 0.5 | GN / OG | 1530 | II | — | Transmission Line Pressure Control Solenoid Valve Control | 2 | 0.5 | GN / OG | 1530 | IV | — |
| 3 | 0.5 | GY / BN | 422 | II | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | GY / BN | 422 | IV | — |
| 4 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Control | 4 | 0.5 | BN | 6387 | III | — |
| 5 - 12 | — | — | — | — | — | Not Occupied | 5 - 12 | — | — | — | — | — |
| 13 | 0.5 | BU / BN | 1147 | II | — | Transmission Shift Inhibit Signal | 13 | 0.5 | BU / BN | 1147 | IV | — |

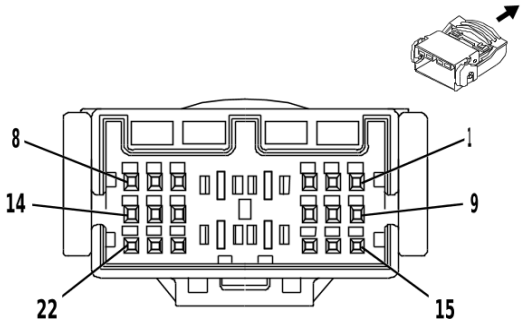
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MHT/MQB) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 0.5 | BN / YE | 585 | II | — | Transmission Fluid Temperature Sensor Signal | 14 | 0.5 | BN / YE | 585 | IV | — |
| 15 | 0.5 | BU / GN | 6404 | II | — | Clutch Solenoid Valve E Control | 15 | 0.5 | BU / GN | 6404 | IV | — |
| 16 | 0.5 | GN / BN | 6403 | II | — | Clutch Solenoid Valve D Control | 16 | 0.5 | GN / BN | 6403 | IV | — |
| 17 | 0.5 | GY | 6402 | II | — | Clutch Solenoid Valve C Control | 17 | 0.5 | GY | 6402 | IV | — |
| 18 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Control | 18 | 0.5 | WH | 6388 | III | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | BN / WH | 4509 | II | — | Transmission Clutch F Control | 20 | 0.5 | BN / WH | 4509 | IV | — |
| 21 | 0.5 | YE / VT | 4507 | II | — | Transmission Clutch H Control | 21 | 0.5 | YE / VT | 4507 | IV | — |
| 22 | 0.5 | BU / GY | 4508 | II | — | Transmission Clutch G Control | 22 | 0.5 | BU / GY | 4508 | IV | — |

# X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MQE)




3977748




3977770

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |
| III | Not required | J-35616-5 (PU) | No Tool Required |
| IV | Not required | J-35616-65B (L-BU) | No Tool Required |

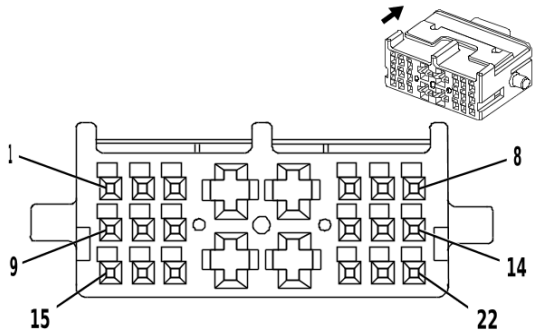
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GN / WH | 6380 | II | — | Torque Converter Clutch Enable Solenoid Valve A Control | 1 | 0.5 | GN / WH | 6380 | IV | — |
| 2 | 0.5 | BU / WH | 3338 | II | — | Transmission Internal Mode Switch Mode Control X | 2 | 0.5 | VT / WH | 3338 | IV | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 2.5 | GN / GY | 6387 | I | — | Transmission High Side Driver 1 Control | 4 | 2.5 | GN / GY | 6387 | III | — |
| 5 | 0.5 | WH / RD | 480 | I | — | Engine Control Vehicle Sensors 5 Volt Reference 1 | 5 | 0.5 | YE / RD | 480 | III | — |

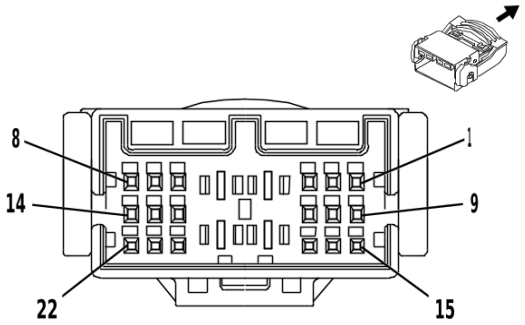
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5 | WH / BU | 4507 | II | — | Transmission Clutch H Control | 7 | 0.5 | WH / BU | 4507 | IV | — |
| 8 | 0.5 | GY / GN | 1530 | II | — | Transmission Line Pressure Control Solenoid Valve Control | 8 | 0.5 | GY / GN | 1530 | IV | — |
| 9 | 0.5 | WH | 4508 | II | — | Transmission Clutch G Control | 9 | 0.5 | WH | 4508 | IV | — |
| 10 | 0.5 | YE / BN | 6210 | II | — | Torque Converter Clutch Enable Solenoid Valve B Control | 10 | 0.5 | YE / BN | 6210 | IV | — |
| 11 | 0.5 | GN / YE | 3337 | II | — | Transmission Internal Mode Switch Mode Control Y | 11 | 0.5 | WH / BK | 3337 | IV | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | GY | 6402 | II | — | Clutch Solenoid Valve C Control | 13 | 0.5 | GY | 6402 | IV | — |
| 14 | 0.5 | YE / BN | 422 | II | — | Torque Converter Clutch Solenoid Valve Control | 14 | 0.5 | YE / BN | 422 | IV | — |
| 15 | 0.5 | BN / WH | 585 | II | — | Transmission Fluid Temperature Sensor Signal | 15 | 0.5 | BK / BN | 585 | IV | — |
| 16 | 0.5 | BK / BN | 586 | II | — | Transmission Fluid Temperature Sensor Low Reference | 16 | 0.5 | BK / BN | 586 | IV | — |
| 17 | — | — | — | — | — | Not Occupied | 17 | — | — | — | — | — |
| 18 | 2.5 | GY / BN | 6388 | I | — | Transmission High Side Driver 2 Control | 18 | 2.5 | GY / BN | 6388 | III | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | BK / GY | 626 | II | — | Engine Control Vehicle Sensors Low Reference 1 | 20 | 0.5 | BK / GY | 626 | IV | — |
| 21 | 0.5 | BN | 6400 | II | — | Clutch Solenoid Valve A Control | 21 | 0.5 | BN | 6400 | IV | — |
| 22 | 0.5 | BU | 6401 | II | — | Clutch Solenoid Valve B Control | 22 | 0.5 | BU | 6401 | IV | — |

# X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MI2)




3977748




3977770

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series( NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-64B (L-BU) | No Tool Required |
| III | Not required | J-35616-5 (PU) | No Tool Required |
| IV | Not required | J-35616-65B (L-BU) | No Tool Required |

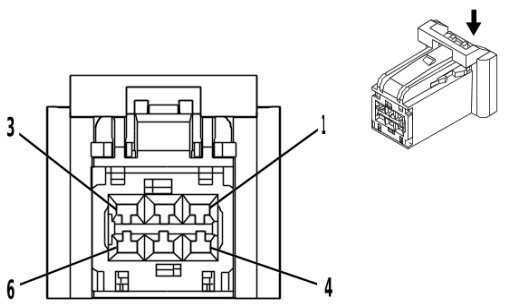
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MI2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 7819 | II | — | Default Disable Solenoid Control | 1 | 0.5 | VT | 7819 | IV | — |
| 2 | 0.5 | GN / OG | 1530 | II | — | Transmission Line Pressure Control Solenoid Valve Control | 2 | 0.5 | GN / OG | 1530 | IV | — |
| 3 | 0.5 | GY / BN | 422 | II | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | GY / BN | 422 | IV | — |
| 4 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Control | 4 | 0.5 | BN | 6387 | III | — |
| 5 - 12 | — | — | — | — | — | Not Occupied | 5 - 12 | — | — | — | — | — |
| 13 | 0.5 | BU / BN | 1147 | II | — | Transmission Shift Inhibit Signal | 13 | 0.5 | BU / BN | 1147 | IV | — |

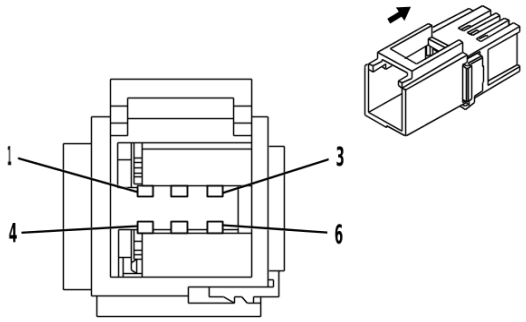
## X176 Automatic Transmission Wiring Harness - Case to Automatic Transmission Wiring Harness - Control (MI2) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 0.5 | BN / YE | 585 | II | — | Transmission Fluid Temperature Sensor Signal | 14 | 0.5 | BN / YE | 585 | IV | — |
| 15 | 0.5 | BU / GN | 6404 | II | — | Clutch Solenoid Valve E Control | 15 | 0.5 | BU / GN | 6404 | IV | — |
| 16 | 0.5 | GN / BN | 6403 | II | — | Clutch Solenoid Valve D Control | 16 | 0.5 | GN / BN | 6403 | IV | — |
| 17 | 0.5 | GY | 6402 | II | — | Clutch Solenoid Valve C Control | 17 | 0.5 | GY | 6402 | IV | — |
| 18 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Control | 18 | 0.5 | WH | 6388 | III | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | BN / WH | 4509 | II | — | Transmission Clutch F Control | 20 | 0.5 | BN / WH | 4509 | IV | — |
| 21 | 0.5 | YE / VT | 4507 | II | — | Transmission Clutch H Control | 21 | 0.5 | YE / VT | 4507 | IV | — |
| 22 | 0.5 | BU / GY | 4508 | II | — | Transmission Clutch G Control | 22 | 0.5 | BU / GY | 4508 | IV | — |

# X177 Automatic Transmission Wiring Harness - Case to Automatic Transmission Output Speed Sensor Wiring Harness (MQE)




3977938




3977959

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Case

OEM Connector: 13582377

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way F 1.2 OCS Series( NA)

### Connector Part Information

Harness Type: Automatic Transmission Output Speed Sensor Wiring Harness

OEM Connector: 13955963

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way M 0.64 II Series( GY)

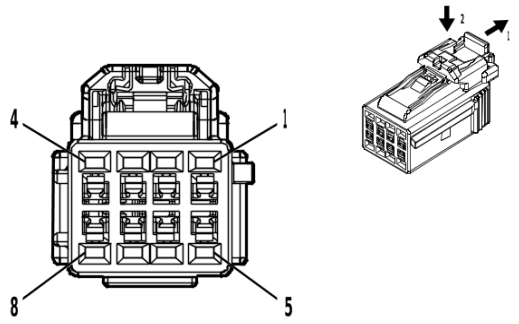
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-65B (L-BU) | No Tool Required |

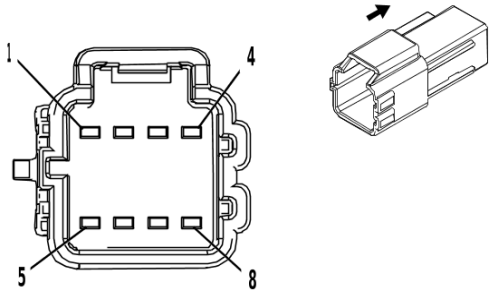
## X177 Automatic Transmission Wiring Harness - Case to Automatic Transmission Output Speed Sensor Wiring Harness (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BU | 6358 | I | — | Output Speed Signal | 1 | 0.5 | YE | 6358 | II | — |
| 2 | 0.5 | YE / GN | 4170 | I | — | Transmission Output Shaft Speed Sensor Circuit 9V Reference | 2 | 0.5 | RD | 4170 | II | — |
| 3 | 0.5 | YE / GN | 4170 | I | — | Transmission Output Shaft Speed Sensor Circuit 9V Reference | 3 | 0.5 | WH | 4170 | II | — |
| 4 | 0.5 | WH / RD | 4171 | I | — | Transmission Input Shaft Speed Sensor Circuit 9V Reference | 4 | 0.5 | WH | 4171 | II | — |
| 5 | 0.5 | GN / YE | 6253 | I | — | Transmission Input Speed Sensor Ground | 5 | 0.5 | GN | 6253 | II | — |
| 6 | 0.5 | GN / VT | 4510 | I | — | Transmission Intermediate Speed Signal | 6 | 0.5 | BK | 4510 | II | — |

# X177 Automatic Transmission Wiring Harness - Control Extension to Automatic Transmission Wiring Harness - Control (MHS/MQC)




5086387




4331672

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension

OEM Connector: 6098-8632

Service Connector: Service by Harness - See Part Catalog

Description: 8-Way F 1.2 Series

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 6098-8630

Service Connector: Service by Harness - See Part Catalog

Description: 8-Way M 1.2 Series

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

## X177 Automatic Transmission Wiring Harness - Control Extension to Automatic Transmission Wiring Harness - Control (MHS/MQC)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Control | 1 | 0.5 | BN | 6387 | II | — |
| 2 | 0.5 | GN / OG | 1530 | I | — | Transmission Line Pressure Control Solenoid Valve Control | 2 | 0.5 | GN / OG | 1530 | II | — |
| 3 | 0.5 | GY / BN | 422 | I | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | GY / BN | 422 | II | — |
| 4 | 0.5 | VT | 7819 | I | — | Default Disable Solenoid Control | 4 | 0.5 | VT | 7819 | II | — |
| 5 | 0.5 | BK / GY | 3706 | I | — | Electronic Transmission Range Select Switch Analog Signal 1 | 5 | 0.5 | BK / GY | 3706 | II | — |
| 6 | 0.5 | BU | 4171 | I | — | Transmission Input Shaft Speed Sensor Circuit 9V Reference | 6 | 0.5 | BU | 4171 | II | — |

## X177 Automatic Transmission Wiring Harness - Control Extension to Automatic Transmission Wiring Harness - Control (MHS/MQC) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Control | 7 | 0.5 | WH | 6388 | II | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |

# X177 Automatic Transmission Wiring Harness - Control Extension to Automatic Transmission Wiring Harness Control (MHT/MI2/MQB)

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### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control Extension
OEM Connector: 6098-8427
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F SUMITOMO

—

### Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control
OEM Connector: 6098-8429
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M SUMITOMO SLV WIR CONN FEM

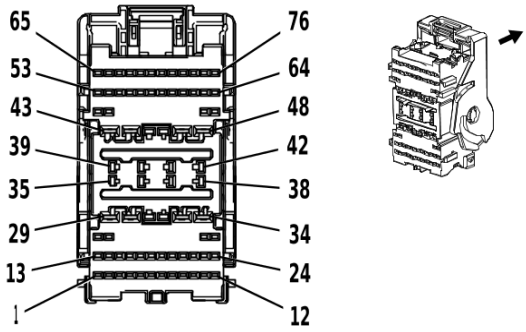
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

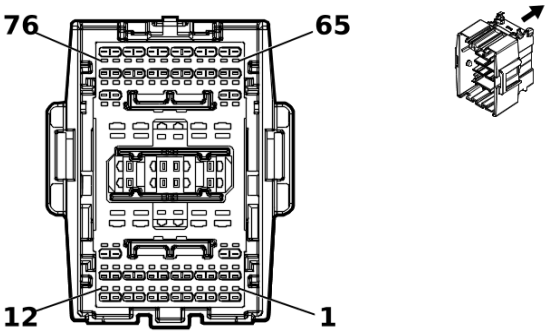
## X177 Automatic Transmission Wiring Harness - Control Extension to Automatic Transmission Wiring Harness Control (MHT/MI2/MQB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Control | 1 | 0.5 | BN | 6387 | II | — |
| 2 | 0.5 | GN / OG | 1530 | I | — | Transmission Line Pressure Control Solenoid Valve Control | 2 | 0.5 | GN / OG | 1530 | II | — |
| 3 | 0.5 | GY / BN | 422 | I | — | Torque Converter Clutch Solenoid Valve Control | 3 | 0.5 | GY / BN | 422 | II | — |
| 4 | 0.5 | VT | 7819 | I | — | Default Disable Solenoid Control | 4 | 0.5 | VT | 7819 | II | — |
| 5 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Control | 5 | 0.5 | WH | 6388 | II | — |

# X210 Instrument Panel Wiring Harness to Body Wiring Harness




3960183




5277492

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35273135
Service Connector: 13526160
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575708 | J-35616-2A (GY) | J-38125-11A |
| II | 13587516 | J-35616-4A (PU) | J-38125-11A |
| III | 84962854 | J-35616-12 (BU) | J-38125-215A |
| IV | 84616651 | J-35616-13 (BU) | J-38125-215A |
| V | 84888592 | J-35616-5 (PU) | J-38125-11A |
| VI | 85119177 | J-35616-3 (GY) | J-38125-553 |

## X210 Instrument Panel Wiring Harness to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 1540 | III | — | Battery Positive Voltage | 1 | 0.5 | RD / GN | 1540 | IV | — |
| 2 | 0.5 | RD / YE | 6540 | III | — | Battery Positive Voltage | 2 | 0.5 | RD / YE | 6540 | IV | — |
| 3 | 0.5 | BN / OG | 3020 | III | — | Steering Wheel Air Bag Stage 1 Low Control | 3 | 0.35 | BN / OG | 3020 | IV | — |
| 4 | 0.5 | OG / VT | 3021 | III | — | Steering Wheel Air Bag Stage 1 High Control | 4 | 0.35 | OG / VT | 3021 | IV | — |
| 5 | 0.5 | WH / OG | 3022 | III | — | Steering Wheel Air Bag Stage 2 Low Control | 5 | 0.35 | WH / OG | 3022 | IV | — |
| 6 | 0.5 | OG / GN | 3023 | III | — | Steering Wheel Air Bag Stage 2 High Control | 6 | 0.35 | OG / GN | 3023 | IV | — |
| 7 | 0.35 | BN / WH | 28 | III | — | Horn Relay Control | 7 | 0.35 | BN / WH | 28 | IV | — |

## X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 - 12 | — | — | — | — | — | Not Occupied | 8 - 12 | — | — | — | — | — |
| 13 | 0.35 | BN / BK | 3552 | III | — | Interior Passive Entry Antenna 1 High Signal | 13 | 0.35 | BN / BK | 3552 | IV | — |
| 14 | 0.35 | WH | 3553 | III | — | Interior Passive Entry Antenna 1 Low Signal | 14 | 0.35 | WH | 3553 | IV | — |
| 15 | 0.35 | WH | 4100 | III | — | AUTOSAR CAN Bus [-] 4 Serial Data | 15 | 0.5 | WH | 4100 | IV | — |
| 16 | 0.35 | BU / VT | 4101 | III | — | AUTOSAR CAN Bus [+] 4 Serial Data | 16 | 0.5 | BU / VT | 4101 | IV | — |
| 17 | 0.35 | WH | 4976 | III | — | AUTOSAR CAN Bus [-] 3 Serial Data | 17 | 0.5 | WH | 4976 | IV | — |
| 18 | 0.35 | BU / BK | 4977 | III | — | AUTOSAR CAN Bus [+] 3 Serial Data | 18 | 0.5 | BU / BK | 4977 | IV | — |
| 19 - 20 | — | — | — | — | — | Not Occupied | 19 - 20 | — | — | — | — | — |
| 21 | 0.35 | BU / YE | 4984 | III | — | AUTOSAR CAN Bus [-] 5 Serial Data | 21 | 0.5 | BU / YE | 4984 | IV | — |
| 22 | 0.35 | BU / WH | 4985 | III | — | AUTOSAR CAN Bus [+] 5 Serial Data | 22 | 0.5 | BU / WH | 4985 | IV | — |
| 23 | 0.35 | WH | 4986 | III | — | AUTOSAR CAN Bus [-] 1 Serial Data | 23 | 0.5 | WH | 4986 | IV | — |
| 24 | 0.35 | BU | 4987 | III | — | AUTOSAR CAN Bus [+] 1 Serial Data | 24 | 0.5 | BU | 4987 | IV | — |
| 25 | 0.35 | WH | 4986 | III | — | AUTOSAR CAN Bus [-] 1 Serial Data | 25 | 0.5 | WH | 4986 | IV | — |
| 26 | 0.35 | BU | 4987 | III | — | AUTOSAR CAN Bus [+] 1 Serial Data | 26 | 0.5 | BU | 4987 | IV | — |
| 27 | 0.35 | BN / BK | 4996 | III | — | Immobilizer Antenna Signal [+] | 27 | 0.35 | BN / BK | 4996 | IV | — |
| 28 | 0.35 | WH / GY | 4997 | III | — | Immobilizer Antenna Low Signal | 28 | 0.35 | WH / GY | 4997 | IV | — |
| 29 | 2.5 | RD / BN | 4142 | II | — | Primary Fused Battery Positive Voltage | 29 | 2.5 | RD / BN | 4142 | V | — |
| 30 | 0.5 | GY | 1715 | II | — | Windshield Wiper Switch High Signal | 30 | 0.35 | GY | 1715 | V | — |
| 31 | 0.5 | GN / YE | 2731 | I | — | Brake System Control Module LIN Bus 1 | 31 | 0.5 | GN / YE | 2731 | VI | — |

## X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 - 34 | — | — | — | — | — | Not Occupied | 32 - 34 | — | — | — | — | — |
| 35 | 0.75 | GN / BK | 116 | I | — | Left Rear Speaker [-] Control | 35 | 0.75 | GN / BK | 116 | VI | — |
| 36 | 0.75 | GN | 199 | I | — | Left Rear Speaker [+] Control | 36 | 0.75 | GN | 199 | VI | — |
| 37 | 0.75 | BN / BU | 118 | I | — | Left Front Speaker [-] Control 1 | 37 | 0.75 | BN / BU | 118 | VI | — |
| 38 | 0.75 | BU | 201 | I | — | Left Front Speaker 1 [+] Control | 38 | 0.75 | BU | 201 | VI | — |
| 39 | — | — | — | — | — | Not Occupied | 39 | — | — | — | — | — |
| 40 | 0.35 | BU / WH | 3119 | I | — | Roof Rail Air Bag Disable Switch Signal | 40 | 0.35 | BU / WH | 3119 | VI | — |
| 41 | 0.35 | BN / WH | 3895 | I | — | Roof Rail Air Bag Disable Switch Low Reference | 41 | 0.35 | BN / WH | 3895 | VI | — |
| 42 | — | — | — | — | — | Not Occupied | 42 | — | — | — | — | — |
| 43 | 0.5 | GN / GY | 4627 | II | — | Image Processing Module LIN Bus 1 | 43 | 0.5 | GN / GY | 4627 | V | — |
| 44 | — | — | — | — | — | Not Occupied | 44 | — | — | — | — | — |
| 45 | 0.35 | GN / VT | 4786 | I | — | Dome/Reading Lamp Enable Signal | 45 | 0.5 | GN / VT | 4786 | VI | — |
| 46 | 0.35 | GN / BN | 507 | I | — | Wait To Start Indicator Control | 46 | 0.35 | GN / BN | 507 | VI | — |
| 47 | — | — | — | — | — | Not Occupied | 47 | — | — | — | — | — |
| 48 | 0.5 | YE / VT | 6191 | II | — | Power Rear Window Switch Open Signal | 48 | 0.5 | YE / VT | 6191 | V | — |
| 49 | 0.5 | WH | 6192 | III | — | Sliding Rear Window Switch Close Signal | 49 | 0.5 | WH | 6192 | IV | — |
| 50 | 0.5 | YE | 6817 | III | — | LED Backlight Dimming Control 1 | 50 | 0.5 | YE | 6817 | IV | — |
| 51 | 0.35 | WH / GY | 7297 | III | — | Minor Endgate High Relay Control | 51 | 0.75 | WH / GY | 7297 | IV | — |
| 52 | 0.5 | GN / WH | 7530 | III | — | Driver Seat Adjuster Memory Module LIN Bus 1 | 52 | 0.5 | GN / WH | 7530 | IV | — |

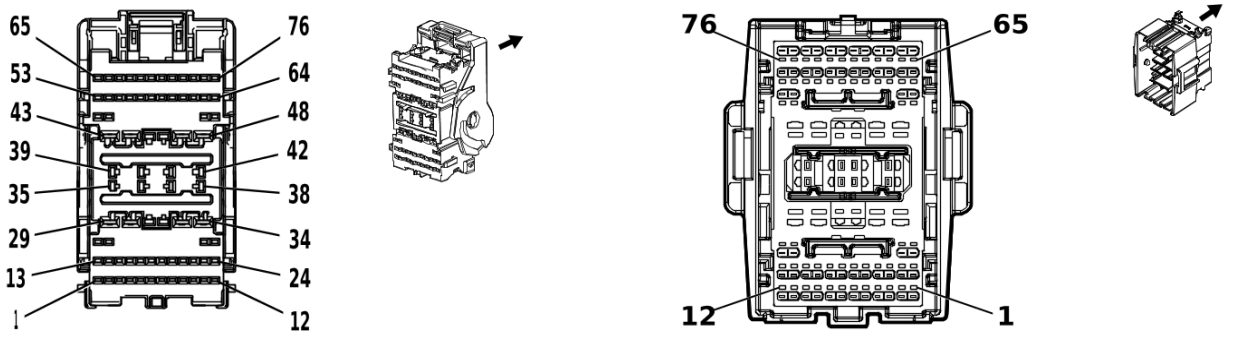
## X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53 | 0.5 | RD / VT | 7140 | III | — | Battery Positive Voltage | 53 | 0.5 | RD / VT | 7140 | IV | — |
| 54 | 0.35 | WH / GN | 7728 | III | — | Major Endgate High Relay Control | 54 | 0.75 | WH / GN | 7728 | IV | — |
| 55 | 0.35 | BU / VT | 7729 | III | — | Major Endgate Low Relay Control | 55 | 0.75 | BU / VT | 7729 | IV | — |
| 56 | 0.5 | VT | 801 | III | — | Retained Accessory Power Control | 56 | 0.35 | VT | 801 | IV | — |
| 57 | 0.5<br>0.5 | BN / YE<br>BN / YE | 820<br>820 | III<br>III | UET<br>- UET | Center High Mounted Stop Lamp Supply Voltage<br>Center High Mounted Stop Lamp Supply Voltage | 57 | 0.5<br>0.35 | BN / YE<br>BN / YE | 820<br>820 | IV<br>IV | UET<br>- UET |
| 58 | 0.35 | GN / BU | 2733 | III | — | Brake System Control Module LIN Bus 2 | 58 | 0.5 | GN / BU | 2733 | IV | — |
| 59 | 0.5 | RD / VT | 2640 | III | — | Battery Positive Voltage | 59 | 0.5 | RD / VT | 2640 | IV | — |
| 60 | 0.35 | BU / YE | 4984 | III | — | AUTOSAR CAN Bus [-] 5 Serial Data | 60 | 0.5 | BU / YE | 4984 | IV | — |
| 61 | 0.35 | BU / WH | 4985 | III | — | AUTOSAR CAN Bus [+] 5 Serial Data | 61 | 0.5 | BU / WH | 4985 | IV | — |
| 62 | — | — | — | — | — | Not Occupied | 62 | — | — | — | — | — |
| 63 | 0.5 | RD / GN | 7740 | III | — | Battery Positive Voltage | 63 | 0.5 | RD / GN | 7740 | IV | — |
| 64 | — | — | — | — | — | Not Occupied | 64 | — | — | — | — | — |
| 65 | 0.35 | GN / GY | 817 | III | — | Vehicle Speed Signal | 65 | 0.35 | GN / GY | 817 | IV | — |
| 66 | 0.35 | WH / GY | 2935 | III | — | Task Lamp Switch Signal | 66 | 0.35 | WH / GY | 2935 | IV | — |
| 67 | 0.5 | RD / YE | 2340 | III | — | Battery Positive Voltage | 67 | 0.5 | RD / YE | 2340 | IV | — |
| 68 | 0.5 | WH / VT | 1430 | III | — | Exterior Courtesy Lamp Control | 68 | 0.5 | WH / VT | 1430 | IV | — |
| 69 | 0.5 | GN / WH | 2854 | III | — | Body Control Module LIN Bus 8 | 69 | 0.35 | GN / WH | 2854 | IV | — |
| 70 | 0.5 | BU / BN | 6807 | III | — | DC/AC Inverter Control | 70 | 0.5 | BU / BN | 6807 | IV | — |
| 71 | 0.5 | VT / RD | 4049 | III | — | AC Power Outlet Sensor High Reference | 71 | 0.5 | VT / RD | 4049 | IV | — |

## X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 - 73 | — | — | — | — | — | Not Occupied | 72 - 73 | — | — | — | — | — |
| 74 | 0.35 | Bare | 10116 | III | — | AC Outlet Low Reference | 74 | 0.35 | Bare | 10116 | IV | — |
| 75 | 0.75 | BK | 10117 | III | — | AC Outlet Phase A Control | 75 | 0.75 | BK | 10117 | IV | — |
| 76 | 0.75 | RD | 10118 | III | — | AC Outlet Phase B Control | 76 | 0.75 | RD | 10118 | IV | — |

# X211 Instrument Panel Wiring Harness to Body Wiring Harness




3960183 5277492

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series( BK)

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35273135
Service Connector: 13526160
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575708 | J-35616-2A (GY) | J-38125-11A |
| II | 13587516 | J-35616-4A (PU) | J-38125-11A |
| III | 84962854 | J-35616-12 (BU) | J-38125-215A |
| IV | 84616651 | J-35616-13 (BU) | J-38125-215A |
| V | 84888592 | J-35616-5 (PU) | J-38125-11A |
| VI | 85119177 | J-35616-3 (GY) | J-38125-553 |

## X211 Instrument Panel Wiring Harness to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BK | 339 | III | — | Run/Crank Ignition 1 Voltage | 1 | 0.5 | VT / BK | 339 | IV | — |
| 2 | 0.35 | BU / VT | 807 | III | — | Ignition Off/ Accessory Ignition Voltage | 2 | 0.35 | BU / VT | 807 | IV | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.5 | GN / WH | 24 | III | — | Backup Lamp Control | 4 | 0.5 | GN / WH | 24 | IV | — |
| 5 | 0.35 | OG / WH | 3024 | III | — | Passenger Instrument Panel Air Bag Stage 1 Low Control | 5 | 0.35 | OG / WH | 3024 | IV | — |
| 6 | 0.35 | YE / OG | 3025 | III | — | Passenger Instrument Panel Air Bag Stage 1 High Control | 6 | 0.35 | YE / OG | 3025 | IV | — |

## X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.35 | OG / VT | 3026 | III | — | Passenger Instrument Panel Air Bag Stage 2 Low Control | 7 | 0.35 | OG / VT | 3026 | IV | — |
| 8 | 0.35 | GY / OG | 3027 | III | — | Passenger Instrument Panel Air Bag Stage 2 High Control | 8 | 0.35 | GY / OG | 3027 | IV | — |
| 9 - 15 | — | — | — | — | — | Not Occupied | 9 - 15 | — | — | — | — | — |
| 16 | 0.35 | GN / BN | 3005 | III | — | Active Noise Cancellation Microphone 1 Signal | 16 | 0.35 | GN / BN | 3005 | IV | — |
| 17 | 0.35 | GN / BK | 3008 | III | — | Active Noise Cancellation Microphone 1 Feedback Signal | 17 | 0.35 | GN / BK | 3008 | IV | — |
| 18 - 19 | — | — | — | — | — | Not Occupied | 18 - 19 | — | — | — | — | — |
| 20 | 0.35 | WH / GY | 4104 | III | — | AUTOSAR CAN Bus [-] 8 Serial Data | 20 | 0.5 | WH / GY | 4104 | IV | — |
| 21 | 0.35 | BU / GY | 4105 | III | — | AUTOSAR CAN Bus [+] 8 Serial Data | 21 | 0.5 | BU / GY | 4105 | IV | — |
| 22 | 0.5 | WH / GY | 4104 | III | — | AUTOSAR CAN Bus [-] 8 Serial Data | 22 | 0.5 | WH / GY | 4104 | IV | — |
| 23 | 0.5 | BU / GY | 4105 | III | — | AUTOSAR CAN Bus [+] 8 Serial Data | 23 | 0.5 | BU / GY | 4105 | IV | — |
| 24 | — | — | — | — | — | Not Occupied | 24 | — | — | — | — | — |
| 25 | 0.35 | BU | 4987 | III | — | AUTOSAR CAN Bus [+] 1 Serial Data | 25 | 0.5 | BU | 4987 | IV | — |
| 26 | 0.35 | WH | 4986 | III | — | AUTOSAR CAN Bus [-] 1 Serial Data | 26 | 0.5 | WH | 4986 | IV | — |
| 27 - 28 | — | — | — | — | — | Not Occupied | 27 - 28 | — | — | — | — | — |
| 29 | 1 | GN / YE | 6840 | II | — | Auxiliary Device 2 Switched Voltage | 29 | 1 | GN / YE | 6840 | V | — |
| 30 - 31 | — | — | — | — | — | Not Occupied | 30 - 31 | — | — | — | — | — |
| 32 | 0.5 | BU / BK | 1053 | I | — | Center High Mounted Stop Lamp Control 3 | 32 | 0.5 | BU / BK | 1053 | VI | — |

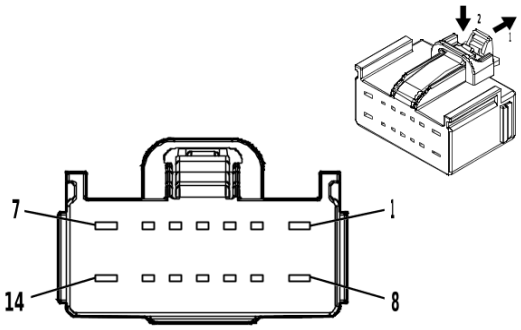
## X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | 0.75 | WH | 46 | II | — | Right Rear Speaker [+] Control | 33 | 0.75 | WH | 46 | V | — |
| 34 | 0.75 | BU / BK | 115 | II | — | Right Rear Speaker [-] Control | 34 | 0.75 | BU / BK | 115 | V | — |
| 35 | 0.75 | YE / BK | 117 | I | — | Right Front Speaker [-] Control 1 | 35 | 0.75 | YE / BK | 117 | VI | — |
| 36 | 0.75 | YE | 200 | I | — | Right Front Speaker 1 [+] Control | 36 | 0.75 | YE | 200 | VI | — |
| 37 | 0.75 | YE / BK | 117 | I | — | Right Front Speaker [-] Control 1 | 37 | 0.75 | YE / BK | 117 | VI | — |
| 38 | 0.75 | YE | 200 | I | — | Right Front Speaker 1 [+] Control | 38 | 0.75 | YE | 200 | VI | — |
| 39 | 0.75 | YE / BK | 117 | I | — | Right Front Speaker [-] Control 1 | 39 | 0.75 | YE / BK | 117 | VI | — |
| 40 | 0.75 | YE | 200 | I | — | Right Front Speaker 1 [+] Control | 40 | 0.75 | YE | 200 | VI | — |
| 41 | 0.75 | WH / YE | 1853 | I | — | Right Front Midrange Speaker [+] Control | 41 | 0.75 | WH / YE | 1853 | VI | — |
| 42 | 0.75 | BN / BK | 1953 | I | — | Right Front Midrange Speaker [-] Control | 42 | 0.75 | BN / BK | 1953 | VI | — |
| 43 | 0.75 | YE / WH | 1860 | II | — | Front Center Speaker [+] Control | 43 | 0.75 | YE / WH | 1860 | V | — |
| 44 | 0.75 | BU / YE | 1960 | II | — | Front Center Speaker [-] Control | 44 | 0.75 | BU / YE | 1960 | V | — |
| 45 | 0.75 | BU / VT | 1857 | I | — | Left Front Midrange Speaker [+] Control | 45 | 0.75 | BU / VT | 1857 | VI | — |
| 46 | 0.75 | BU / BN | 1957 | I | — | Left Front Midrange Speaker [-] Control | 46 | 0.75 | BU / BN | 1957 | VI | — |
| 47 | 2 | BU | 47 | II | — | Trailer Auxiliary Control | 47 | 2 | BU | 47 | V | — |
| 48 | 2.5 | BK / WH | 1051 | II | — | Signal Ground<br>Signal Ground | 48 | 0.5<br>2.5 | BK / WH<br>BK / WH | 1051<br>1051 | V<br>V | D07- IOK- ( UQA/ UQS)<br>D07+ IOK+ ( UQA/ UQS) |
| 49 | 0.35 | BU / YE | 4979 | III | — | AUTOSAR CAN Bus [+] 2 Serial Data | 49 | 0.5 | BU / YE | 4979 | IV | — |
| 50 | 0.35 | WH | 4978 | III | — | AUTOSAR CAN Bus [-] 2 Serial Data | 50 | 0.5 | WH | 4978 | IV | — |

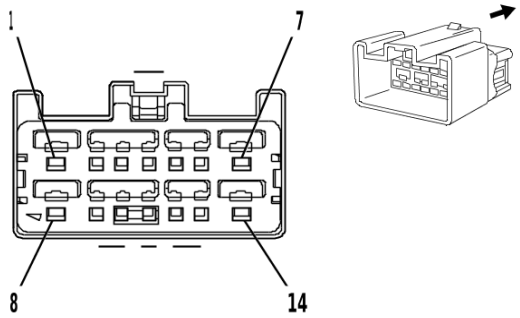
## X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | 0.35 | VT / GY | 7117 | III | — | Front Axle Differential Lock Indicator Control | 51 | 0.35 | VT / GY | 7117 | IV | — |
| 52 | 0.35 | YE | 7115 | III | — | Rear Axle Differential Lock Indicator Control | 52 | 0.35 | YE | 7115 | IV | — |
| 53 | 0.35 | YE / GN | 7122 | III | — | Axle Differential Lock Switch Signal | 53 | 0.35 | YE / GN | 7122 | IV | — |
| 54 | 0.5 | GN / VT | 5199 | III | — | Run/Crank Relay Coil Control | 54 | 0.5 | GN / VT | 5199 | IV | — |
| 55 - 59 | — | — | — | — | — | Not Occupied | 55 - 59 | — | — | — | — | — |
| 60 | 0.35 | YE / WH | 1690 | III | — | Mirror Dimming Signal | 60 | 0.35 | YE / WH | 1690 | IV | — |
| 61 | 0.35 | BK / YE | 1691 | III | — | Automatic Day/Night Mirror Low Reference | 61 | 0.35 | BK / YE | 1691 | IV | — |
| 62 - 76 | — | — | — | — | — | Not Occupied | 62 - 76 | — | — | — | — | — |

# X213A Auxiliary Fuse Block Wiring Harness to Instrument Panel Wiring Harness (9L7)




4934172




1283905

### Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 33366376
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 YESC Series( GY)

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10846900
Service Connector: 88956523
Description: 14-Way M 1.5, 2.8 YESC Series( L-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | 13578907 | J-35616-3 (GY) | J-38125-215A |
| IV | 13578908 | J-35616-5 (PU) | J-38125-11A |

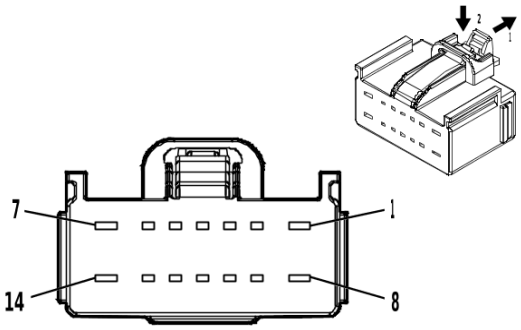
## X213A Auxiliary Fuse Block Wiring Harness to Instrument Panel Wiring Harness (9L7)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK / WH | 851 | II | — | Signal Ground | 1 | 2.5 | WH | 22 | IV | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.35 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 3 | 0.35 | YE | 6817 | III | — |
| 4 | — | — | — | — | — | Not Occupied | 4 | — | — | — | — | — |
| 5 | 0.5 | WH / BU | 3691 | I | — | Trailer Brake Apply Signal | 5 | 0.35 | WH / BU | 3691 | III | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 2.5 | RD / BN | 4142 | II | — | Primary Fused Battery Positive Voltage | 7 | 2.5 | RD / BN | 4142 | IV | — |
| 8 | 2.5 | VT / BU | 10735 | II | — | Upfitter Accessory 5 Supply Voltage | 8 | 2.5 | VT / BU | 10735 | IV | — |

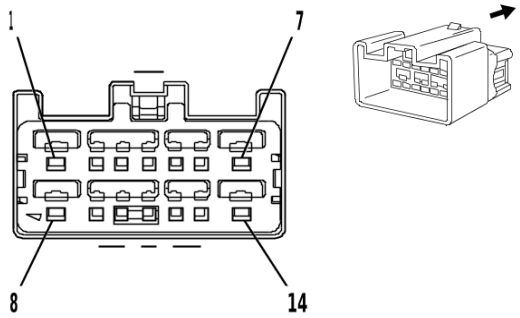
## X213A Auxiliary Fuse Block Wiring Harness to Instrument Panel Wiring Harness (9L7) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | — | — | — | — | — | Out of Park Signal | 9 | 0.35 | YE | 6812 | III | — |
| 10 | — | — | — | — | — | Vehicle Speed Signal | 10 | 0.35 | GN / GY | 817 | III | — |
| 11 | 0.35 | WH | 6816 | I | — | Indicator Dimming Control | 11 | 0.35 | WH | 6816 | III | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | VT / BK | 339 | I | — | Run/Crank Ignition 1 Voltage | 13 | 0.5 | VT / BK | 339 | III | — |
| 14 | 2 | BU | 47 | II | — | Trailer Auxiliary Control | 14 | 2 | BU | 47 | IV | — |

# X213B Trailer Wiring Harness Extension Harness to Instrument Panel Wiring Harness (Z82-JL1)




4934172




1283905

### Connector Part Information

Harness Type: Trailer Wiring Harness Extension Harness
OEM Connector: 33366376
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 YESC Series( GY)

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10846900
Service Connector: 88956523
Description: 14-Way M 1.5, 2.8 YESC Series( L-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | 13578907 | J-35616-3 (GY) | J-38125-215A |
| IV | 13578908 | J-35616-5 (PU) | J-38125-11A |

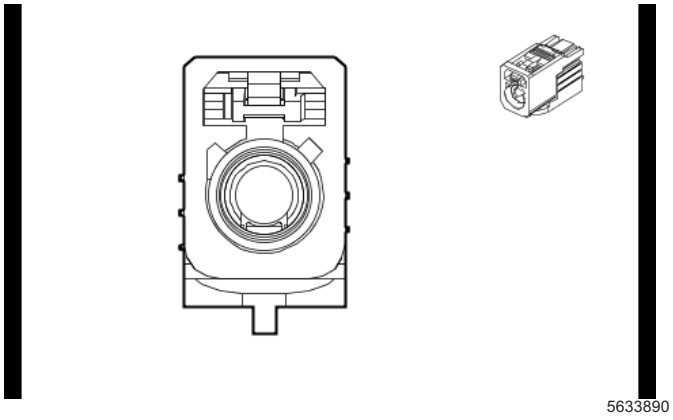
## X213B Trailer Wiring Harness Extension Harness to Instrument Panel Wiring Harness (Z82-JL1)

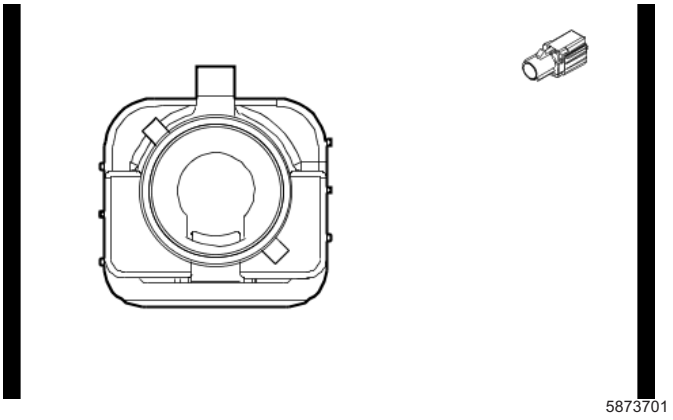
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | WH | 22 | II | — | Trailer Ground | 1 | 2.5 | WH | 22 | IV | — |
| 2 | — | — | — | — | — | Horn Relay Control | 2 | 0.35 | BN / WH | 28 | III | — |
| 3 | — | — | — | — | — | LED Back-light Dim-ming Control 1 | 3 | 0.35 | YE | 6817 | III | — |
| 4 | — | — | — | — | — | Not Occu-pied | 4 | — | — | — | — | — |
| 5 | 0.5 | WH / BU | 3691 | I | — | Trailer Brake Apply Signal | 5 | 0.35 | WH / BU | 3691 | III | — |
| 6 | — | — | — | — | — | Not Occu-pied | 6 | — | — | — | — | — |
| 7 | 2.5 | RD / BN | 4142 | II | — | Primary Fused Bat-tery Positive Voltage | 7 | 2.5 | RD / BN | 4142 | IV | — |
| 8 | — | — | — | — | — | Upfitter Ac-cessory 5 Supply Volt-age | 8 | 2.5 | VT / BU | 10735 | IV | — |

## X213B Trailer Wiring Harness Extension Harness to Instrument Panel Wiring Harness (Z82-JL1) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | — | — | — | — | — | Out of Park Signal | 9 | 0.35 | YE | 6812 | III | — |
| 10 | — | — | — | — | — | Vehicle Speed Signal | 10 | 0.35 | GN / GY | 817 | III | — |
| 11 | — | — | — | — | — | Indicator Dimming Control | 11 | 0.35 | WH | 6816 | III | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | — | — | — | — | — | Run/Crank Ignition 1 Voltage | 13 | 0.5 | VT / BK | 339 | III | — |
| 14 | 2 | BU | 47 | II | — | Trailer Auxiliary Control | 14 | 2 | BU | 47 | IV | — |

# X217 Body Wiring Harness to Instrument Panel Wiring Harness (UVB)


5633890


5873701

### Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: 33351013

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BU)

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS

OEM Connector: 33351038

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type( BU)

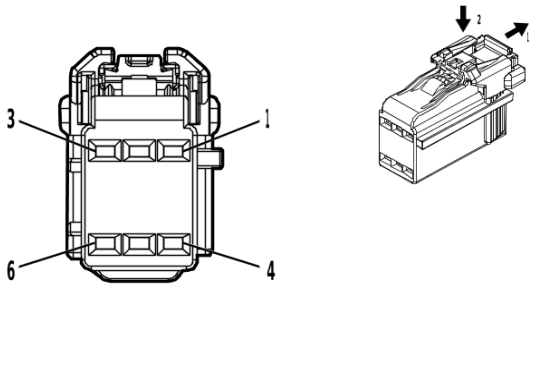
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

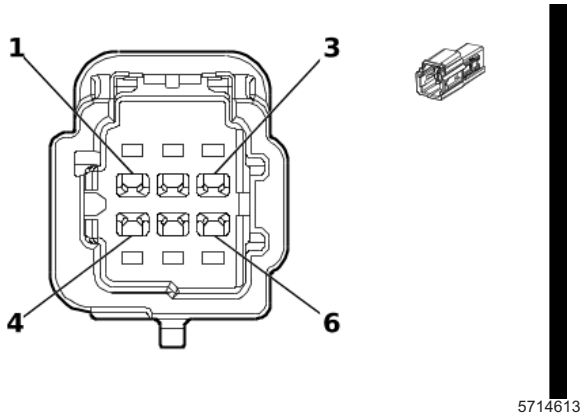
## X217 Body Wiring Harness to Instrument Panel Wiring Harness (UVB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | LVDS | — | I | — | Performance Data Recorder Low Voltage Differential Signaling LVDS Signal | — | — | LVDS | — | I | — |

# X218 Instrument Panel Wiring Harness to Body Wiring Harness




4862126




5714613

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327305
Service Connector: 84613129
Description: 6-Way F 1.2 Series( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35446705
Service Connector: 86825467
Description: 6-Way M 1.2 MBS Series( BK)

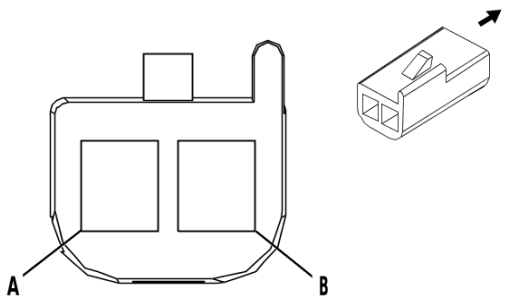
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

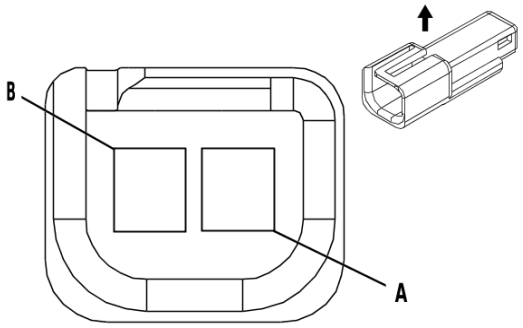
## X218 Instrument Panel Wiring Harness to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | GN | 7214 | I | — | Ethernet Bus 6 [-] | 1 | 0.35 | GN | 7214 | II | — |
| 2 | 0.35 | YE | 7215 | I | — | Ethernet Bus 6 [+] | 2 | 0.35 | YE | 7215 | II | — |
| 3 - 4 | — | — | — | — | — | Not Occupied | 3 - 4 | — | — | — | — | — |
| 5 | 0.35 | BU | 7224 | I | — | Ethernet Bus 11 [-] | 5 | 0.35 | BU | 7224 | II | — |
| 6 | 0.35 | WH | 7225 | I | — | Ethernet Bus 11 [+] | 6 | 0.35 | WH | 7225 | II | — |

# X219 Police Accessory Harness to Instrument Panel Wiring Harness (5W4/9C1)




82383




35441

### Connector Part Information

Harness Type: Police Accessory Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series( BK)

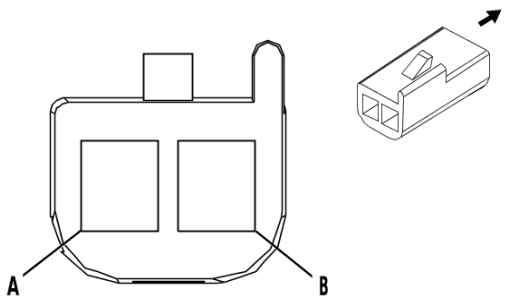
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

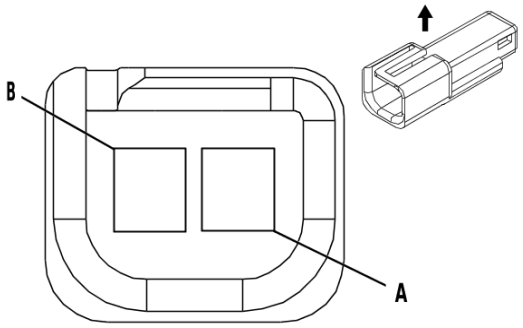
## X219 Police Accessory Harness to Instrument Panel Wiring Harness (5W4/9C1)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 0.75 | RD / GY | 10340 | I | — | Secondary Fused Battery Positive Voltage 103 Police | B | 0.75 | RD / GY | 10340 | II | — |
| A | 0.75 | BK | 1050 | I | — | Ground | A | 0.75 | BK | 1050 | II | — |

# X220 Police Accessory Harness to Instrument Panel Wiring Harness (5W4/9C1)




82383




35441

### Connector Part Information

Harness Type: Police Accessory Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series( BK)

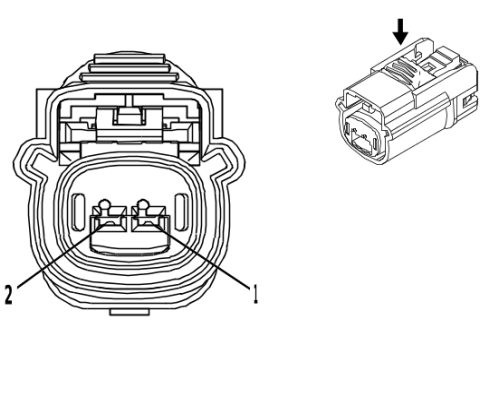
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

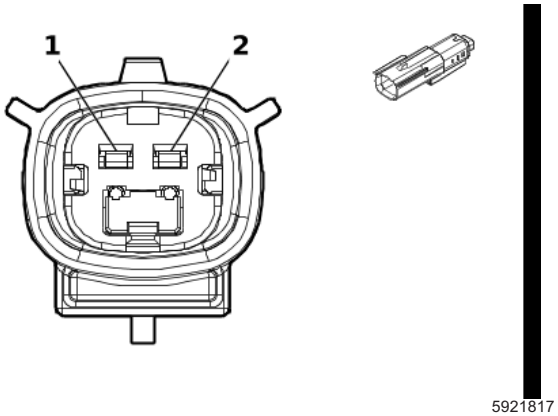
## X220 Police Accessory Harness to Instrument Panel Wiring Harness (5W4/9C1)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | 0.75 | RD / GN | 10240 | I | — | Secondary Fused Battery Positive Voltage 102 Police | B | 0.75 | RD / GN | 10240 | II | — |
| A | 0.75 | BK | 1050 | I | — | Ground | A | 0.75 | BK | 1050 | II | — |

# X225 Front Floor Console Wiring Harness to Body Wiring Harness (D07)




4332222




5921817

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 15514573
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 OCS Series, Sealed( BK)

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15514550
Service Connector: 86825463
Description: 2-Way M 1.5 OCS Series, Sealed( BK)

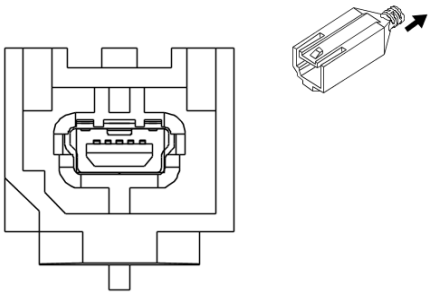
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

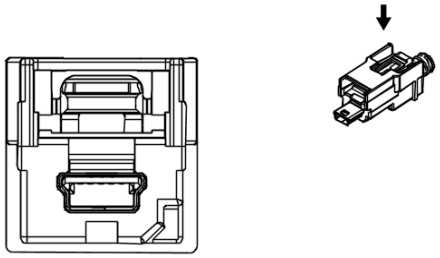
## X225 Front Floor Console Wiring Harness to Body Wiring Harness (D07)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | BU | 7224 | I | — | Ethernet Bus 11 [-] | 1 | 0.35 | BU | 7224 | II | — |
| 2 | 0.35 | WH | 7225 | I | — | Ethernet Bus 11 [+] | 2 | 0.35 | WH | 7225 | II | — |

# X226 Front Floor Console Wiring Harness to Instrument Panel Wiring Harness (D07)



3273655



2807425

### Connector Part Information

Harness Type: Front Floor Console Wiring Harness USB

OEM Connector: 13699757

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 5-Way F 2.0 Mini-B USB Type( BK)

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB

OEM Connector: VP000109

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 5-Way M 2.0 Mini-B USB Type( BK)

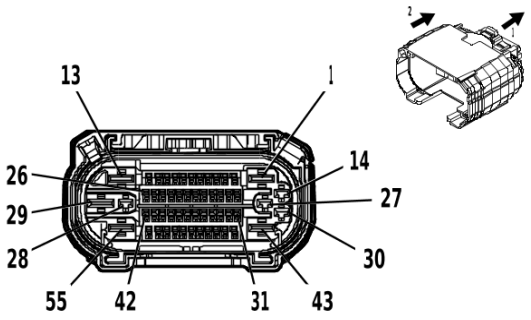
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

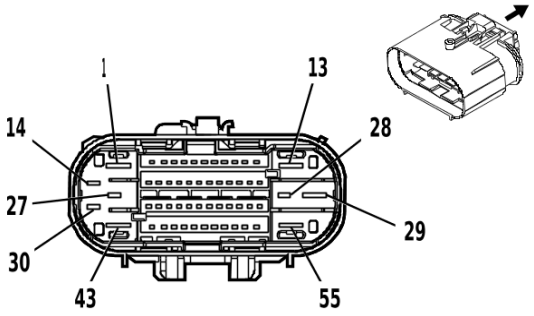
## X226 Front Floor Console Wiring Harness to Instrument Panel Wiring Harness (D07)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | USB | — | I | — | USB Serial Data | — | — | USB | — | I | — |

# X227 Front Floor Console Wiring Harness to Body Wiring Harness (D07)




4992168




4993301

## Connector Part Information

Harness Type: Front Floor Console Wiring Harness

OEM Connector: 35598969

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35589922

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-16 (L-GN) | No Tool Required |
| III | Not required | J-35616-35 (VT) | No Tool Required |
| IV | Not required | J-35616-43 (RD) | No Tool Required |
| V | 84847992 | J-35616-32 (OG) | J-38125-36 |
| VI | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VII | 84992391 | J-35616-5 (PU) | J-38125-215A |

## X227 Front Floor Console Wiring Harness to Body Wiring Harness (D07)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.35 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 3 | 0.35 | WH | 4986 | VI | — |
| 4 | 0.35 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 4 | 0.35 | BU | 4987 | VI | — |
| 5 | 0.35 | VT / WH | 239 | I | — | Run/Crank Ignition 1 Voltage | 5 | 0.5 | VT / WH | 239 | VI | — |
| 6 | 0.35 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 6 | 0.5 | WH | 4986 | VI | — |
| 7 | 0.35 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 7 | 0.5 | BU | 4987 | VI | — |
| 8 | 0.35 | RD / WH | 5440 | I | — | Battery Positive Voltage | 8 | 0.5 | RD / WH | 5440 | VI | — |

## X227 Front Floor Console Wiring Harness to Body Wiring Harness (D07) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | RD / BU | 1240 | II | — | Battery Positive Voltage | 9 | 0.5 | RD / BU | 1240 | VI | — |
| 10 | 0.35 | BN / BK | 3552 | I | — | Interior Passive Entry Antenna 1 High Signal | 10 | 0.35 | BN / BK | 3552 | VI | — |
| 11 | 0.35 | WH | 3553 | I | — | Interior Passive Entry Antenna 1 Low Signal | 11 | 0.35 | WH | 3553 | VI | — |
| 12 - 13 | — | — | — | — | — | Not Occupied | 12 - 13 | — | — | — | — | — |
| 14 | 0.75 | BK | 10117 | III | — | AC Outlet Phase A Control | 14 | 0.75 | BK | 10117 | VII | — |
| 15 | 0.35 | RD / WH | 4740 | I | — | Battery Positive Voltage | 15 | 0.5 | RD / WH | 4740 | VI | — |
| 16 | 0.35 | YE | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 16 | 0.5 | WH | 4976 | VI | — |
| 17 | 0.35 | BU / BK | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 17 | 0.5 | BU / BK | 4977 | VI | — |
| 18 | 0.35 | YE | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 18 | 0.5 | WH | 4976 | VI | — |
| 19 | 0.35 | BU / BK | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 19 | 0.5 | BU / BK | 4977 | VI | — |
| 20 | 0.35 | WH | 4978 | I | — | AUTOSAR CAN Bus [-] 2 Serial Data | 20 | 0.35 | WH | 4978 | VI | — |
| 21 | 0.35 | BU / YE | 4979 | I | — | AUTOSAR CAN Bus [+] 2 Serial Data | 21 | 0.35 | BU / YE | 4979 | VI | — |
| 22 | 0.5 | BU / YE | 4984 | II | — | AUTOSAR CAN Bus [-] 5 Serial Data | 22 | 0.5 | BU / YE | 4984 | VI | — |
| 23 | 0.5 | BU / WH | 4985 | II | — | AUTOSAR CAN Bus [+] 5 Serial Data | 23 | 0.5 | BU / WH | 4985 | VI | — |
| 24 | 0.5 | BU / YE | 4984 | II | — | AUTOSAR CAN Bus [-] 5 Serial Data | 24 | 0.5 | BU / YE | 4984 | VI | — |
| 25 | 0.5 | BU / WH | 4985 | II | — | AUTOSAR CAN Bus [+] 5 Serial Data | 25 | 0.5 | BU / WH | 4985 | VI | — |
| 26 | 0.5 | BK | 1350 | II | — | Ground | 26 | 0.75 | BK | 1350 | VI | — |
| 27 | 0.5 | WH | 10116 | III | — | AC Outlet Low Reference | 27 | 0.5 | WH | 10116 | VII | — |
| 28 | 0.35 | GN / BU | 2733 | III | — | Brake System Control Module LIN Bus 2 | 28 | 0.5 | GN / BU | 2733 | VII | — |
| 29 | 0.5 | RD / VT | 2640 | IV | — | Battery Positive Voltage | 29 | 0.5 | RD / VT | 2640 | V | — |

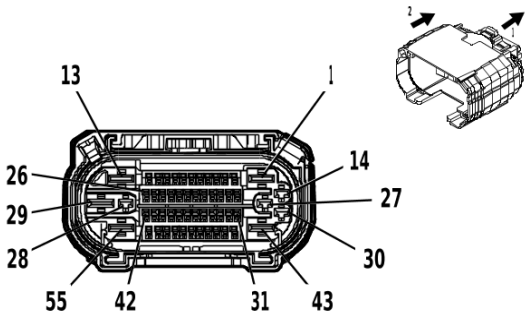
## X227 Front Floor Console Wiring Harness to Body Wiring Harness (D07) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 0.75 | RD | 10118 | III | — | AC Outlet Phase B Control | 30 | 0.75 | RD | 10118 | VII | — |
| 31 | 0.35 | VT / GY | 8978 | I | — | Inertial Sensor Supply Voltage | 31 | 0.35 | VT / GY | 8978 | VI | — |
| 32 | 0.35 | BN / BK | 4996 | I | — | Immobilizer Antenna Signal [+] | 32 | 0.35 | BN / BK | 4996 | VI | — |
| 33 | 0.35 | WH / GY | 4997 | I | — | Immobilizer Antenna Low Signal | 33 | 0.35 | WH / GY | 4997 | VI | — |
| 34 | 0.35 | WH / YE | 8976 | I | — | Private Serial Data Active Safety CAN Bus [-] Serial Data | 34 | 0.5 | WH / YE | 8976 | VI | — |
| 35 | 0.35 | BU / YE | 8977 | I | — | Private Serial Data Active Safety CAN Bus [+] Serial Data | 35 | 0.5 | BU / YE | 8977 | VI | — |
| 36 | 0.5 | RD / YE | 2340 | II | — | Battery Positive Voltage | 36 | 0.5 | RD / YE | 2340 | VI | — |
| 37 | 0.5 | GN / VT | 2857 | II | — | Body Control Module LIN Bus 11 | 37 | 0.35 | GN / VT | 2857 | VI | — |
| 38 | 0.5 | VT / RD | 4049 | II | — | AC Power Outlet Sensor High Reference | 38 | 0.5 | VT / RD | 4049 | VI | — |
| 39 | 0.35 | VT / GN | 4320 | I | — | Powertrain Sensor Bus Enable | 39 | 0.5 | VT / GN | 4320 | VI | — |
| 40 | 0.35 | WH | 4055 | I | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 40 | 0.5 | WH | 4055 | VI | — |
| 41 | 0.35 | GN / GY | 4627 | I | — | Image Processing Module LIN Bus 1 | 41 | 0.5 | GN / GY | 4627 | VI | — |
| 42 | 0.5 | BU / BN | 6807 | II | — | DC/AC Inverter Control | 42 | 0.5 | BU / BN | 6807 | VI | — |
| 43 | 0.5 | GN / VT | 4786 | IV | — | Dome/Reading Lamp Enable Signal | 43 | 0.5 | GN / VT | 4786 | V | — |
| 44 | 0.75 | YE | 6817 | II | — | LED Backlight Dimming Control 1 | 44 | 0.75 | YE | 6817 | VI | — |
| 45 | 0.35 | BU / GY | 4054 | I | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 45 | 0.5 | BU / GY | 4054 | VI | — |
| 46 | 0.35 | WH | 4055 | I | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 46 | 0.5 | WH | 4055 | VI | — |

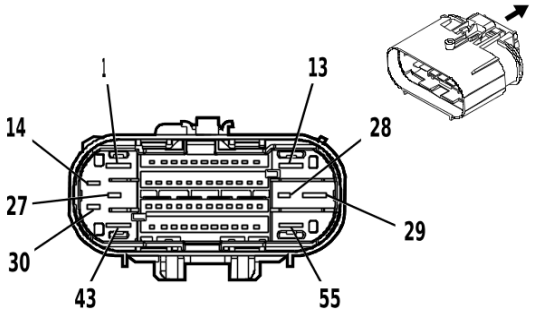
## X227 Front Floor Console Wiring Harness to Body Wiring Harness (D07) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | 0.5 | BK | 1451 | II | — | Signal Ground | 47 | 0.75 | BK / WH | 1451 | VI | — |
| 48 | 0.35 | VT | 4701 | I | — | Retained Accessory Power Control | 48 | 0.35 | VT | 4701 | VI | — |
| 49 | 0.35 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 49 | 0.5 | WH / GY | 4104 | VI | — |
| 50 | 0.35 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 50 | 0.5 | BU / GY | 4105 | VI | — |
| 51 | 0.5 | BK / WH | 1451 | II | — | Signal Ground | 51 | 0.75 | BK / WH | 1451 | VI | — |
| 52 | 0.5 | BK / WH | 1051 | II | — | Signal Ground | 52 | 0.5 | BK / WH | 1051 | VI | — |
| 53 | 0.35 | BU / GY | 4054 | I | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 53 | 0.5 | BU / GY | 4054 | VI | — |
| 54 - 55 | — | — | — | — | — | Not Occupied | 54 - 55 | — | — | — | — | — |

# X227 Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3)




4992168




4993301

### Connector Part Information

Harness Type: Front Seat Wiring Harness - Center

OEM Connector: 35016652

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

### Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35589924

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-35 (VT) | No Tool Required |
| III | 84867140 | J-35616-13 (BU) | J-38125-215A |
| IV | 84992391 | J-35616-5 (PU) | J-38125-215A |

## X227 Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 13 | — | — | — | — | — | Not Occupied | 1 - 13 | — | — | — | — | — |
| 14 | 0.75 | BK | 10117 | II | — | AC Outlet Phase A Control | 14 | 0.75 | BK | 10117 | IV | — |
| 15 | — | — | — | — | — | Not Occupied | 15 | — | — | — | — | — |
| 16 | 0.35 | WH | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 16 | 0.5 | WH | 4976 | III | — |
| 17 | 0.35 | BU / BK | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 17 | 0.5 | BU / BK | 4977 | III | — |
| 18 | 0.35 | WH | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 18 | 0.5 | WH | 4976 | III | — |
| 19 | 0.35 | BU / BK | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 19 | 0.5 | BU / BK | 4977 | III | — |
| 20 - 21 | — | — | — | — | — | Not Occupied | 20 - 21 | — | — | — | — | — |

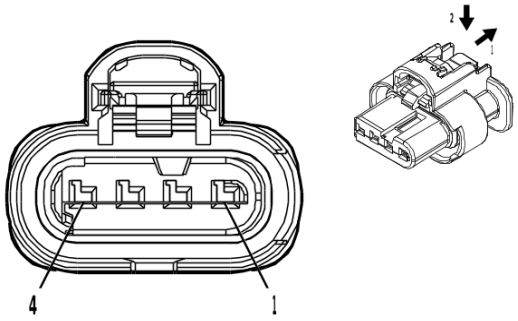
## X227 Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | 0.5 | BU / YE | 4984 | I | — | AUTOSAR CAN Bus [-] 5 Serial Data | 22 | 0.5 | BU / YE | 4984 | III | — |
| 23 | 0.5 | BU / WH | 4985 | I | — | AUTOSAR CAN Bus [+] 5 Serial Data | 23 | 0.5 | BU / WH | 4985 | III | — |
| 24 | 0.5 | BU / YE | 4984 | I | — | AUTOSAR CAN Bus [-] 5 Serial Data | 24 | 0.5 | BU / YE | 4984 | III | — |
| 25 | 0.5 | BU / WH | 4985 | I | — | AUTOSAR CAN Bus [+] 5 Serial Data | 25 | 0.5 | BU / WH | 4985 | III | — |
| 26 | 0.75 | BK | 1050 | I | — | Ground | 26 | 0.75 | BK | 1350 | III | — |
| 27 | 0.35 | BK | 10116 | II | — | AC Outlet Low Reference | 27 | 0.5 | WH | 10116 | IV | — |
| 28 - 29 | — | — | — | — | — | Not Occupied | 28 - 29 | — | — | — | — | — |
| 30 | 0.75 | RD | 10118 | II | — | AC Outlet Phase B Control | 30 | 0.75 | RD | 10118 | IV | — |
| 31 | — | — | — | — | — | Not Occupied | 31 | — | — | — | — | — |
| 32 | 0.5 | BN / BK | 4996 | I | — | Immobilizer Antenna Signal [+] | 32 | 0.35 | BN / BK | 4996 | III | — |
| 33 | 0.5 | WH / GY | 4997 | I | — | Immobilizer Antenna Low Signal | 33 | 0.35 | WH / GY | 4997 | III | — |
| 34 - 37 | — | — | — | — | — | Not Occupied | 34 - 37 | — | — | — | — | — |
| 38 | 0.75 | VT / RD | 4049 | I | — | AC Power Outlet Sensor High Reference | 38 | 0.5 | VT / RD | 4049 | III | — |
| 39 | — | — | — | — | — | Not Occupied | 39 | — | — | — | — | — |
| 40 | 0.35 | WH | 4055 | I | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 40 | 0.5 | WH | 4055 | III | — |
| 41 | — | — | — | — | — | Not Occupied | 41 | — | — | — | — | — |
| 42 | 0.75 | BU / BN | 6807 | I | — | DC/AC Inverter Control | 42 | 0.5 | BU / BN | 6807 | III | — |
| 43 | — | — | — | — | — | Not Occupied | 43 | — | — | — | — | — |
| 44 | 0.75 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 44 | 0.75 | YE | 6817 | III | — |
| 45 | 0.35 | BU / GY | 4054 | I | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 45 | 0.5 | BU / GY | 4054 | III | — |

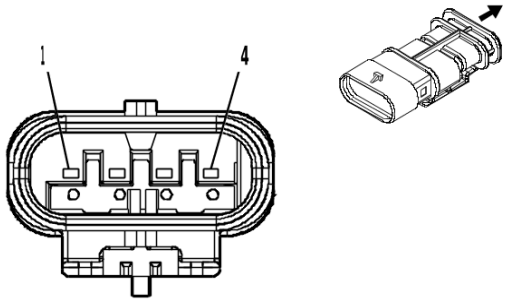
## X227 Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | 0.35 | WH | 4055 | I | — | Private Serial Data Powertrain CAN Bus [+] Serial Data | 46 | 0.5 | WH | 4055 | III | — |
| 47 | 0.35 | BK | 1451 | I | — | Signal Ground | 47 | 0.75 | BK / WH | 1451 | III | — |
| 48 | 0.35 | VT | 4701 | I | — | Retained Accessory Power Control | 48 | 0.35 | VT | 4701 | III | — |
| 49 - 52 | — | — | — | — | — | Not Occupied | 49 - 52 | — | — | — | — | — |
| 53 | 0.35 | BU / GY | 4054 | I | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 53 | 0.5 | BU / GY | 4054 | III | — |
| 54 - 55 | — | — | — | — | — | Not Occupied | 54 - 55 | — | — | — | — | — |

# X237 Instrument Panel Wiring Harness to Passenger Instrument Panel Air Bag Jumper Wiring Harness




4900699




5149228

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35053710
Service Connector: 19371193
Description: 4-Way F 1.2 MCON-CB Series, Sealed( YE)

### Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M ( YE)

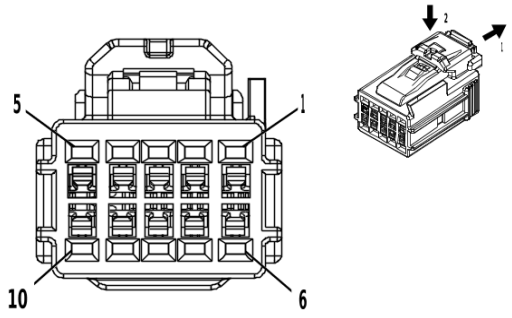
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

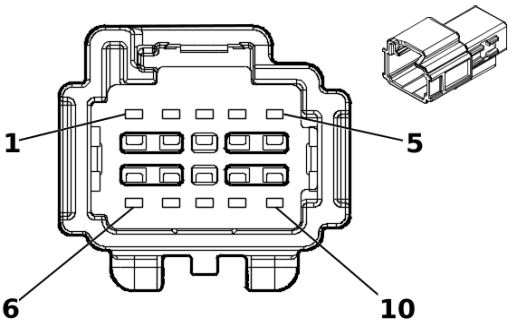
## X237 Instrument Panel Wiring Harness to Passenger Instrument Panel Air Bag Jumper Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | YE / OG | 3025 | I | — | Passenger Instrument Panel Air Bag Stage 1 High Control | 1 | 0.35 | YE / OG | 3025 | II | — |
| 2 | 0.35 | OG / WH | 3024 | I | — | Passenger Instrument Panel Air Bag Stage 1 Low Control | 2 | 0.35 | OG / WH | 3024 | II | — |
| 3 | 0.35 | GY / OG | 3027 | I | — | Passenger Instrument Panel Air Bag Stage 2 High Control | 3 | 0.35 | GY / OG | 3027 | II | — |
| 4 | 0.35 | OG / VT | 3026 | I | — | Passenger Instrument Panel Air Bag Stage 2 Low Control | 4 | 0.35 | OG / VT | 3026 | II | — |

# X250 Instrument Panel Wiring Harness to Heater Wiring Harness




4254030




5355759

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327186
Service Connector: 13532428
Description: 10-Way F 1.2 Series( BK)

### Connector Part Information

Harness Type: Heater Wiring Harness
OEM Connector: 6098-9079
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M 1.2 MCON Series( BK)

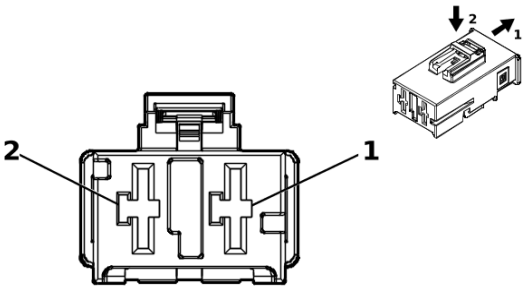
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 84962854 | J-35616-12 (BU) | J-38125-215A |
| II | Not required | J-35616-13 (BU) | No Tool Required |

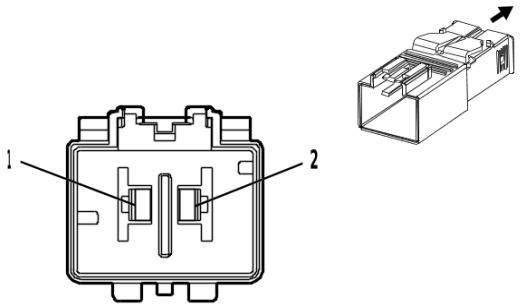
## X250 Instrument Panel Wiring Harness to Heater Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.5 | BK | 1050 | I | — | Ground | 2 | 0.35 | BK | 1050 | II | — |
| 3 - 4 | — | — | — | — | — | Not Occupied | 3 - 4 | — | — | — | — | — |
| 5 | 0.35 | GY | 6137 | I | — | A/C Evaporator Temperature Sensor Signal | 5 | 0.35 | BN | 6137 | II | — |
| 6 | 0.35 | GN / VT | 2852 | I | — | Body Control Module LIN Bus 6 | 6 | 0.35 | BU | 2852 | II | — |
| 7 | 0.35 | BK / YE | 407 | I | — | Sensor Low Reference | 7 | 0.35 | BK / YE | 407 | II | — |
| 8 | 0.5 | VT / BK | 339 | I | — | Run/Crank Ignition 1 Voltage | 8 | 0.35 | VT / BK | 339 | II | — |
| 9 | 0.35 | WH / YE | 4634 | I | — | HVAC Remote Enable Signal | 9 | 0.35 | RD | 4634 | II | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

# X251 HVAC Wiring Harness to Body Wiring Harness (C32)




5187955




4891120

### Connector Part Information

Harness Type: HVAC Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 9.5 MCON-LL Series( BK)

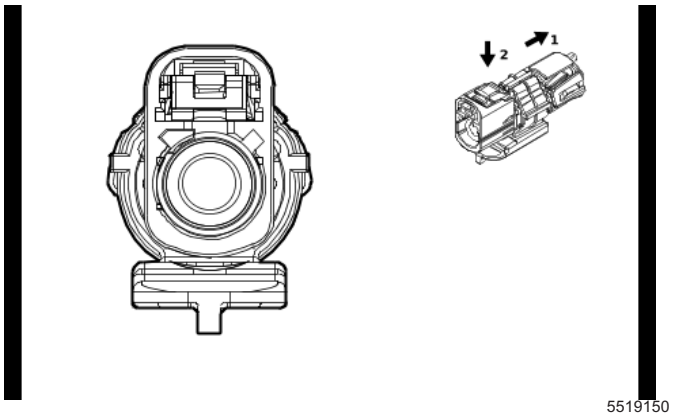
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-22 (RD) | No Tool Required |
| II | Not required | J-35616-21 (RD) | No Tool Required |

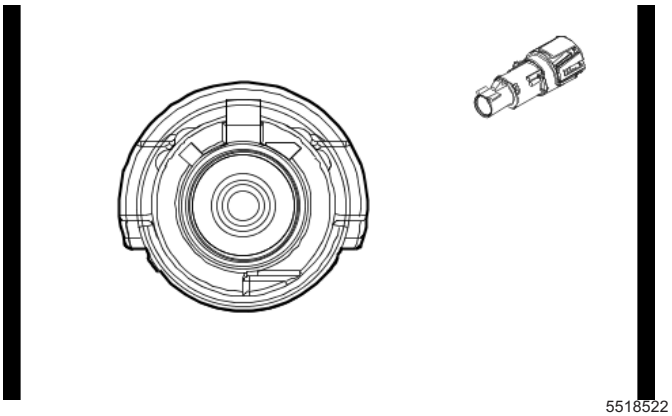
## X251 HVAC Wiring Harness to Body Wiring Harness (C32)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 10 | RD / GY | 642 | I | — | Battery Positive Voltage | 2 | 10 | RD / GY | 642 | II | — |

# X309 Body Wiring Harness to Inside Rearview Mirror Wiring Harness - Jumper (UVN)




5519150



5518522

## Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187047

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type, Sealed( BK)

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper COAX

OEM Connector: 33355538

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type( BK)

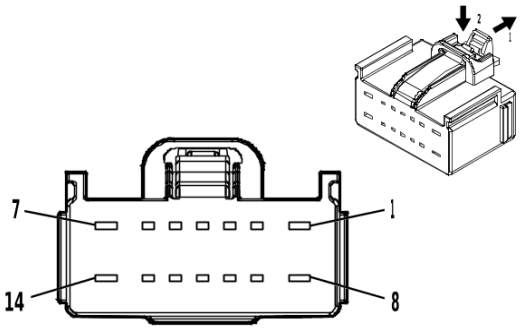
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

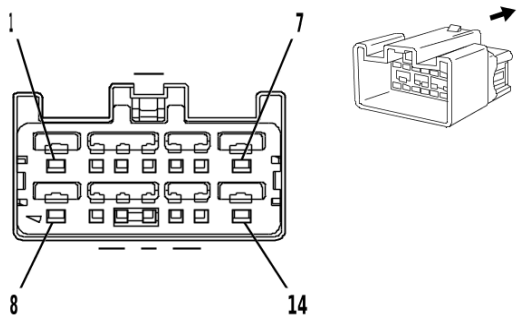
## X309 Body Wiring Harness to Inside Rearview Mirror Wiring Harness - Jumper (UVN)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Cargo Bed Rear Vision Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

# X324 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5)




4934172




1283905

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35105595
Service Connector: 13513604
Description: 14-Way F 1.5, 2.8 YESC Series( BK)

### Connector Part Information

Harness Type: Body Rear Wiring Harness Extension Harness
OEM Connector: 10846900
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way M 1.5, 2.8 YESC Series( L-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13575850 | J-35616-2A (GY) | J-38125-557 |
| II | 84962855 | J-35616-4A (PU) | J-38125-11A |
| III | Not required | J-35616-3 (GY) | No Tool Required |
| IV | Not required | J-35616-5 (PU) | No Tool Required |

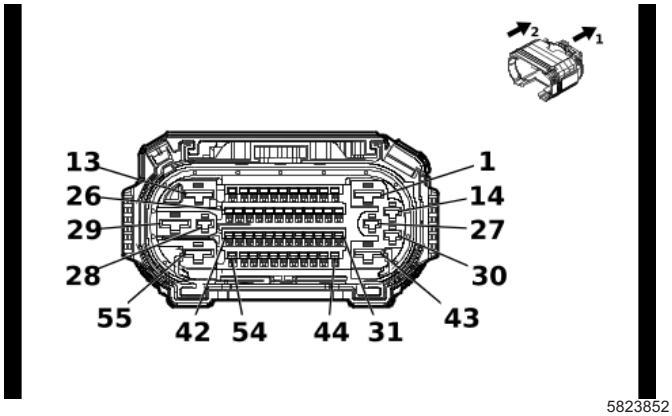
## X324 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 10117 | II | — | AC Outlet Phase A Control | 1 | 0.75 | BK | 10117 | IV | — |
| 2 | 0.5 | VT / RD | 4049 | I | — | AC Power Outlet Sensor High Reference | 2 | 0.5 | VT / RD | 4049 | III | — |
| 3 | 0.35 | VT / WH | 239 | I | — | Run/Crank Ignition 1 Voltage | 3 | 0.35 | VT / WH | 239 | III | — |
| 4 | 0.5 | WH / GN | 4628 | I | — | DC/AC Inverter Relay Control | 4 | 0.5 | WH / GN | 4628 | III | — |
| 5 | 0.5 | BU / BN | 6807 | I | — | DC/AC Inverter Control | 5 | 0.5 | BU / BN | 6807 | III | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.75 | BK / WH | 10120 | II | — | AC Outlet 2 Phase A Control | 7 | 0.75 | BK / WH | 10120 | IV | — |
| 8 | 0.75 | RD | 10118 | II | — | AC Outlet Phase B Control | 8 | 0.75 | RD | 10118 | IV | — |

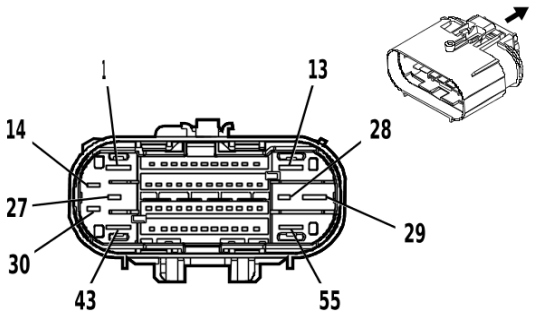
## X324 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.35 | Bare | 10116 | I | — | AC Outlet Low Reference | 9 | 0.35 | Bare | 10116 | III | — |
| 10 | 0.35 | GN / BU | 6133 | I | — | Body Control Module LIN Bus 2 | 10 | 0.5 | GN / BU | 6133 | III | — |
| 11 | — | — | — | — | — | Not Occupied | 11 | — | — | — | — | — |
| 12 | 0.5 | GN / BN | 2266 | I | — | DC/AC Inverter Control 2 | 12 | 0.5 | GN / BN | 2266 | III | — |
| 13 | 0.35 | Bare | 10119 | I | — | AC Outlet 2 Low Reference | 13 | 0.35 | Bare | 10119 | III | — |
| 14 | 0.75 | RD / WH | 10121 | II | — | AC Outlet 2 Phase B Control | 14 | 0.75 | RD / WH | 10121 | IV | — |

# X331 Front Seat Wiring Harness - Driver to Body Wiring Harness




5823852




4993301

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver

OEM Connector: 35572204

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588064

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-42 (RD) | No Tool Required |
| III | Not required | No Tool Required | No Tool Required |
| IV | 84847992 | J-35616-32 (OG) | J-38125-36 |
| V | 84867140 | J-35616-13 (BU) | J-38125-215A |

## X331 Front Seat Wiring Harness - Driver to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1550 | II | — | Ground | 1 | 2.5 | BK | 1550 | IV | — |
| 2 - 3 | — | — | — | — | — | Not Occupied | 2 - 3 | — | — | — | — | — |
| 4 | 0.5<br>0.75 | RD / BN<br>RD / BN | 2240<br>2240 | I<br>I | A45<br>- A45 | Battery Positive Voltage<br>Battery Positive Voltage | 4 | 0.5 | RD / BN | 2240 | V | — |
| 5 | 0.35 | GN / WH | 7530 | I | — | Driver Seat Adjuster Memory Module LIN Bus 1 | 5 | 0.5 | GN / WH | 7530 | V | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.35 | WH | 615 | I | — | Seat Memory Switch Signal 1 | 7 | 0.35 | WH | 615 | V | — |
| 8 | 0.35 | BU / GN | 614 | I | — | Seat Memory Switch Set Signal | 8 | 0.35 | BU / GN | 614 | V | — |
| 9 - 14 | — | — | — | — | — | Not Occupied | 9 - 14 | — | — | — | — | — |

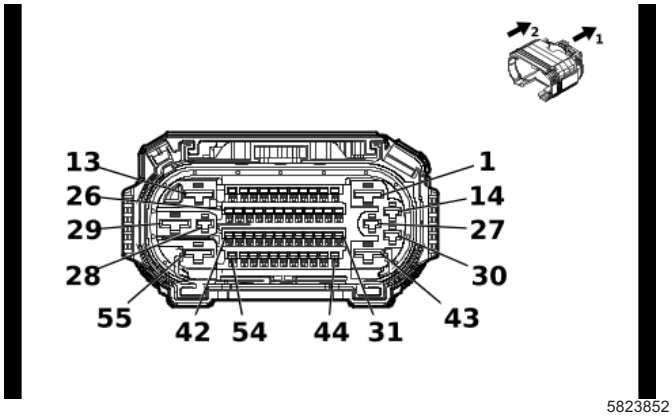
## X331 Front Seat Wiring Harness - Driver to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 0.75 | BN / VT | 2077 | I | — | Driver Seat Heating Element Control | 15 | 0.75 | BN / VT | 2077 | V | — |
| 16 | 0.75 | BN / BK | 2078 | I | — | Driver Seat Heating Element Low Reference | 16 | 0.75 | BN / BK | 2078 | V | — |
| 17 | 0.5 | YE / GY | 2079 | I | — | Driver Seat Heating Temperature Sensor Signal | 17 | 0.5 | YE / GY | 2079 | V | — |
| 18 | 0.5 | BK / YE | 2080 | I | — | Driver Heated Seat Thermistor Low Reference | 18 | 0.5 | BK / YE | 2080 | V | — |
| 19 | 0.5 | BU | 2425 | I | — | Driver Seat Back Heating Temperature Sensor Signal | 19 | 0.5 | BU | 2425 | V | — |
| 20 | 0.75 | BN | 2432 | I | — | Driver Seat Back Heating Element Control | 20 | 0.75 | BN | 2432 | V | — |
| 21 - 28 | — | — | — | — | — | Not Occupied | 21 - 28 | — | — | — | — | — |
| 29 | 2.5 | RD / YE | 5040 | II | — | Battery Positive Voltage | 29 | 2.5 | RD / YE | 5040 | IV | — |
| 30 | — | — | — | — | — | Not Occupied | 30 | — | — | — | — | — |
| 31 | 0.5 | OG / GY | 2652 | I | — | Driver Seat Belt Sensor Signal | 31 | 0.35 | OG / GY | 2652 | V | — |
| 32 | 0.5 | BK / OG | 1363 | I | — | Driver Seat Belt Switch Low Reference | 32 | 0.5 | BK / OG | 1363 | V | — |
| 33 | — | — | — | — | — | Not Occupied | 33 | — | — | — | — | — |
| 34 | 0.5 | BK / OG | 4963 | III | — | Driver Seat Back Air Bag Low Control | 34 | 0.5 | BK / OG | 4963 | V | — |
| 35 | 0.5 | OG / BU | 4962 | III | — | Driver Seat Back Air Bag High Control | 35 | 0.5 | OG / BU | 4962 | V | — |
| 36 - 40 | — | — | — | — | — | Not Occupied | 36 - 40 | — | — | — | — | — |
| 41 | 0.35 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 41 | 0.5 | BU / VT | 4101 | V | — |
| 42 | 0.35 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 42 | 0.5 | WH | 4100 | V | — |
| 43 - 49 | — | — | — | — | — | Not Occupied | 43 - 49 | — | — | — | — | — |

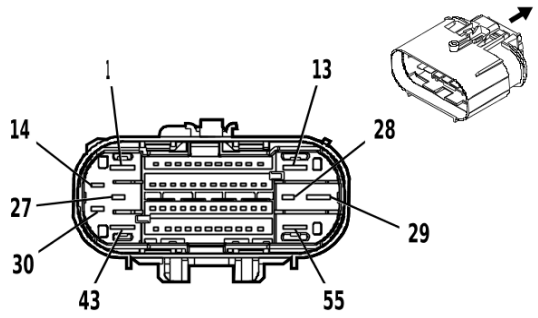
## X331 Front Seat Wiring Harness - Driver to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 0.35 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 50 | 0.5 | BU / VT | 4101 | V | — |
| 51 | 0.35 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 51 | 0.5 | WH | 4100 | V | — |
| 52 | 0.5 | GN / VT | 5906 | I | — | Driver Seat Blower Motor Control 1 | 52 | 0.5 | GN / VT | 5906 | V | — |
| 53 | 0.75 | VT / WH | 1139 | I | — | Run/Crank Ignition 1 Voltage | 53 | 0.75 | VT / WH | 1139 | V | — |
| 54 - 55 | — | — | — | — | — | Not Occu-pied | 54 - 55 | — | — | — | — | — |

# X336 Front Seat Wiring Harness - Passenger to Body Wiring Harness




5823852




4993301

## Connector Part Information

Harness Type: Front Seat Wiring Harness - Passenger

OEM Connector: 35572205

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588064

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-42 (RD) | No Tool Required |
| III | Not required | J-35616-43 (RD) | No Tool Required |
| IV | Not required | No Tool Required | No Tool Required |
| V | 84847992 | J-35616-32 (OG) | J-38125-36 |
| VI | 84867140 | J-35616-13 (BU) | J-38125-215A |

## X336 Front Seat Wiring Harness - Passenger to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5<br>0.75 | BK<br>BK | 1350<br>1350 | II<br>III | A7K<br>- A7K | Ground<br>Ground | 1 | 2.5<br>2.5 | BK<br>BK | 1350<br>1350 | V<br>V | A7K<br>- A7K |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.75 | RD / GN | 6140 | I | — | Battery Positive Voltage | 3 | 0.75 | RD / GN | 6140 | VI | — |
| 4 | 0.75<br>0.5 | RD / BN<br>RD / BN | 2240<br>2240 | I<br>I | A7K- AVU<br>AVU | Battery Positive Voltage<br>Battery Positive Voltage | 4 | 0.5<br>0.5 | RD / BN<br>RD / BN | 2240<br>2240 | VI<br>VI | A7K- AVU<br>AVU |
| 5 | 0.75 | RD / BN | 6640 | I | — | Battery Positive Voltage | 5 | 0.75 | RD / BN | 6640 | VI | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5<br>0.5 | BU<br>BU | 4987<br>4987 | I<br>I | UGN/ UKL<br>- UGN-UKL | AUTOSAR CAN Bus [+] 1 Serial Data<br>AUTOSAR CAN Bus [+] 1 Serial Data | 7 | 0.35<br>0.5 | BU<br>BU | 4987<br>4987 | VI<br>VI | UGN/ UKL<br>- UGN-UKL |

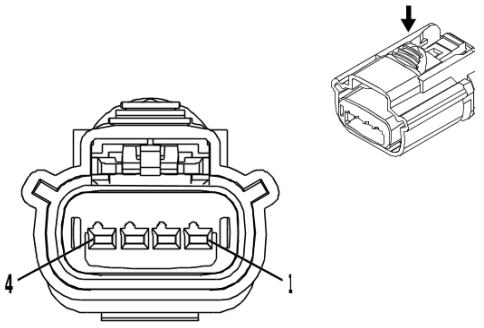
## X336 Front Seat Wiring Harness - Passenger to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.5<br>0.5 | WH<br>WH | 4986<br>4986 | I<br>I | UGN/ UKL<br>- UGN-UKL | AUTOSAR CAN Bus [-] 1 Serial Data<br>AUTOSAR CAN Bus [-] 1 Serial Data | 8 | 0.35<br>0.5 | WH<br>WH | 4986<br>4986 | VI<br>VI | UGN/ UKL<br>- UGN-UKL |
| 9 - 14 | — | — | — | — | — | Not Occupied | 9 - 14 | — | — | — | — | — |
| 15 | 0.75 | BN / VT | 2077 | I | — | Driver Seat Heating Element Control | 15 | 0.75 | BN / VT | 2077 | VI | — |
| 16 | 0.75 | BN / BK | 2078 | I | — | Driver Seat Heating Element Low Reference | 16 | 0.75 | BN / BK | 2078 | VI | — |
| 17 | 0.5 | YE / GY | 2079 | I | — | Driver Seat Heating Temperature Sensor Signal | 17 | 0.5 | YE / GY | 2079 | VI | — |
| 18 | 0.5 | BK / YE | 2080 | I | — | Driver Heated Seat Thermistor Low Reference | 18 | 0.5 | BK / YE | 2080 | VI | — |
| 19 | 0.5 | BU | 2425 | I | — | Driver Seat Back Heating Temperature Sensor Signal | 19 | 0.5 | BU | 2425 | VI | — |
| 20 | 0.75 | BN | 2432 | I | — | Driver Seat Back Heating Element Control | 20 | 0.75 | BN | 2432 | VI | — |
| 21 | 0.5 | GN / VT | 2857 | I | — | Body Control Module LIN Bus 11 | 21 | 0.35 | GN / VT | 2857 | VI | — |
| 22 | — | — | — | — | — | Not Occupied | 22 | — | — | — | — | — |
| 23 | 0.5 | RD / GN | 4440 | I | — | Battery Positive Voltage | 23 | 0.5 | RD / GN | 4440 | VI | — |
| 24 | 0.5 | GY / OG | 3946 | I | — | Passenger Automatic Locking Retractor Switch Low Reference | 24 | 0.35 | GY / OG | 3946 | VI | — |
| 25 | 0.5 | OG / BN | 3947 | I | — | Passenger Automatic Locking Retractor Switch Signal | 25 | 0.35 | OG / BN | 3947 | VI | — |
| 26 | 0.5 | BK / WH | 1251 | I | — | Signal Ground | 26 | 0.5 | BK / WH | 1251 | VI | — |
| 27 - 28 | — | — | — | — | — | Not Occupied | 27 - 28 | — | — | — | — | — |

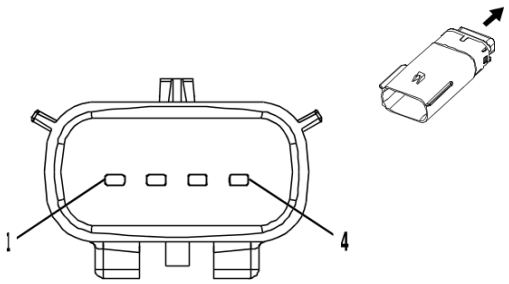
## X336 Front Seat Wiring Harness - Passenger to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 2.5<br>2.5 | RD / GY<br>RD / YE | 7440<br>7440 | II<br>II | A7K- AKE<br>AKE | Battery Positive Voltage<br>Battery Positive Voltage | 29 | 2.5<br>2.5 | RD / YE<br>RD / YE | 7440<br>7440 | V<br>V | A7K- AKE<br>AKE |
| 30 | — | — | — | — | — | Not Occupied | 30 | — | — | — | — | — |
| 31 | 0.5 | OG / VT | 1362 | I | — | Passenger Seat Belt Switch Signal | 31 | 0.35 | OG / VT | 1362 | VI | — |
| 32 | 0.5 | BK / OG | 1363 | I | — | Driver Seat Belt Switch Low Reference | 32 | 0.5 | BK / OG | 1363 | VI | — |
| 33 | — | — | — | — | — | Not Occupied | 33 | — | — | — | — | — |
| 34 | 0.5 | BU / OG | 4957 | IV | — | Passenger Seat Back Air Bag Low Control | 34 | 0.5 | BU / OG | 4957 | VI | — |
| 35 | 0.5 | OG / GY | 4956 | IV | — | Passenger Seat Back Air Bag High Control | 35 | 0.5 | OG / GY | 4956 | VI | — |
| 36 | 0.5 | GN / VT | 5906 | I | — | Driver Seat Blower Motor Control 1 | 36 | 0.5 | GN / VT | 5906 | VI | — |
| 37 | 0.75 | VT / WH | 1139 | I | — | Run/Crank Ignition 1 Voltage | 37 | 0.75 | VT / WH | 1139 | VI | — |
| 38 - 40 | — | — | — | — | — | Not Occupied | 38 - 40 | — | — | — | — | — |
| 41 | 0.35 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 41 | 0.5 | BU / VT | 4101 | VI | — |
| 42 | 0.35 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 42 | 0.5 | WH | 4100 | VI | — |
| 43 - 49 | — | — | — | — | — | Not Occupied | 43 - 49 | — | — | — | — | — |
| 50 | 0.35 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 50 | 0.5 | BU / VT | 4101 | VI | — |
| 51 | 0.35 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 51 | 0.5 | WH | 4100 | VI | — |
| 52 | 0.5 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 52 | 0.5 | BU | 4987 | VI | — |
| 53 | 0.5 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 53 | 0.5 | WH | 4986 | VI | — |
| 54 - 55 | — | — | — | — | — | Not Occupied | 54 - 55 | — | — | — | — | — |

# X340 Body Wiring Harness to Rear Seat Heater Control Wiring Harness (KA6)




4455251




2917338

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15514524
Service Connector: 19355605
Description: 4-Way F 1.5 OCS Series, Sealed( BK)

### Connector Part Information

Harness Type: Rear Seat Heater Control Wiring Harness
OEM Connector: 33481-4401
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.5 Series, Sealed( BK)

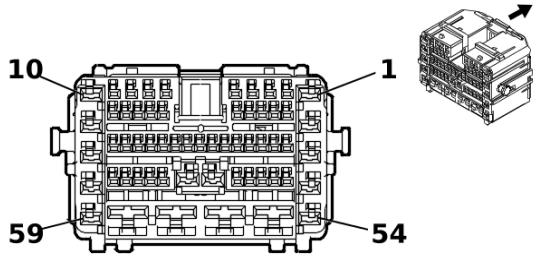
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

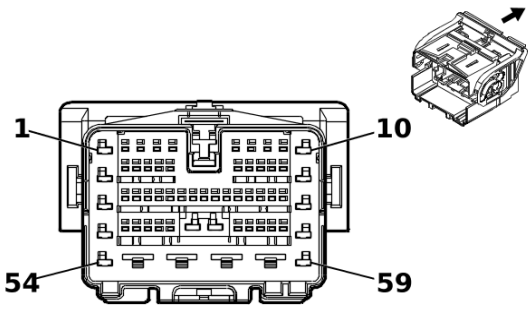
## X340 Body Wiring Harness to Rear Seat Heater Control Wiring Harness (KA6)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | RD / WH | 5740 | I | — | Battery Positive Voltage | 1 | 0.75 | RD / YE | 240 | II | — |
| 2 | 0.75 | RD / BU | 6740 | I | — | Battery Positive Voltage | 2 | 0.75 | RD / VT | 340 | II | — |
| 3 | 0.35 | GN / VT | 2857 | I | — | Body Control Module LIN Bus 11 | 3 | 0.5 | GN / BU | 6133 | II | — |
| 4 | 1 | BK | 1550 | I | — | Ground | 4 | 1 | BK | 1150 | II | — |

# X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOK)




5278767




5278741

### Connector Part Information

Harness Type: Dome Lamp Wiring Harness

OEM Connector: 33387960

Service Connector: 13528126

Description: 59-Way F 1.2 MCON, 2.8, 6.3 YESC Series( BK)

### Connector Part Information

Harness Type: Instrument Panel Wiring Harness

OEM Connector: 33387961

Service Connector: 84766292

Description: 59-Way M 1.2 MCON, 2.8, 6.3 YESC Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19331733 | J-35616-12 (BU) | J-38125-215A |
| II | 85544080 | J-35616-4A (PU) | J-38125-11A |
| III | 13578908 | J-35616-5 (PU) | J-38125-11A |
| IV | 19330704 | J-35616-13 (BU) | J-38125-215A |

## X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOK)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 240 | II | — | Battery Positive Voltage | 1 | 0.5 | RD / YE | 240 | III | — |
| 2 | 0.5<br>0.35 | VT / BK<br>VT / BK | 339<br>339 | I<br>I | DRZ<br>- DRZ | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | 2 | 0.5 | VT / BK | 339 | IV | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.35 | GN / BN | 3005 | I | — | Active Noise Cancellation Microphone 1 Signal | 4 | 0.35 | GN / BN | 3005 | IV | — |
| 5 | 0.35 | GN / BK | 3008 | I | — | Active Noise Cancellation Microphone 1 Feedback Signal | 5 | 0.35 | GN / BK | 3008 | IV | — |
| 6 | 0.35 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 6 | 0.35 | WH / GY | 4104 | IV | — |
| 7 | 0.35 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 7 | 0.35 | BU / GY | 4105 | IV | — |

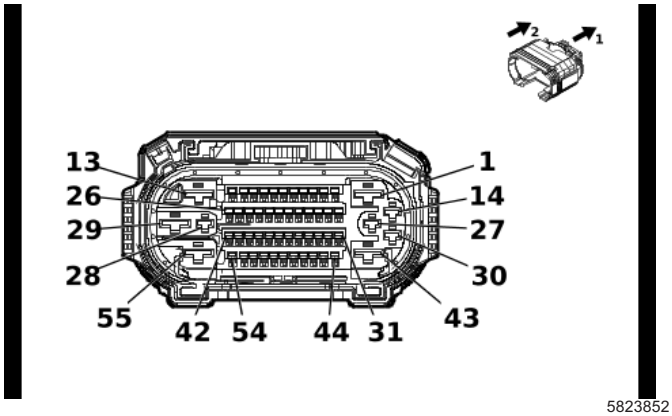
## X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOK) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.35 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 8 | 0.5 | WH / GY | 4104 | IV | — |
| 9 | 0.35 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 9 | 0.5 | BU / GY | 4105 | IV | — |
| 10 | 0.35 | YE / WH | 1690 | II | — | Mirror Dimming Signal | 10 | 0.35 | YE / WH | 1690 | III | — |
| 11 | 0.35 | BK / YE | 1691 | II | — | Automatic Day/Night Mirror Low Reference | 11 | 0.35 | BK / YE | 1691 | III | — |
| 12 | 0.35 | WH | 4978 | I | — | AUTOSAR CAN Bus [-] 2 Serial Data | 12 | 0.35 | WH | 4978 | IV | — |
| 13 | 0.35 | BU / YE | 4979 | I | — | AUTOSAR CAN Bus [+] 2 Serial Data | 13 | 0.35 | BU / YE | 4979 | IV | — |
| 14 | 0.35 | BK / BN | 654 | I | — | Cellular Telephone Microphone Low Reference | 14 | 0.35 | BK / BN | 654 | IV | — |
| 15 | 0.35 | BU | 655 | I | — | Cellular Telephone Microphone Signal | 15 | 0.35 | BU | 655 | IV | — |
| 16 | 0.35 | YE / VT | 6191 | I | — | Power Rear Window Switch Open Signal | 16 | 0.5 | YE / VT | 6191 | IV | — |
| 17 | 0.35 | WH | 6192 | I | — | Sliding Rear Window Switch Close Signal | 17 | 0.5 | WH | 6192 | IV | — |
| 18 | 0.5 | BU / BK | 1053 | I | — | Center High Mounted Stop Lamp Control 3 | 18 | 0.5 | BU / BK | 1053 | IV | — |
| 19 | 0.5 | WH / VT | 1430 | I | — | Exterior Courtesy Lamp Control | 19 | 0.5 | WH / VT | 1430 | IV | — |
| 20 | 0.35 | BU / YE | 4979 | I | — | AUTOSAR CAN Bus [+] 2 Serial Data | 20 | 0.35 | BU / YE | 4979 | IV | — |
| 21 | 0.35 | WH | 4978 | I | — | AUTOSAR CAN Bus [-] 2 Serial Data | 21 | 0.35 | WH | 4978 | IV | — |
| 22 | 0.5 | GN / WH | 24 | II | — | Backup Lamp Control | 22 | 0.5 | GN / WH | 24 | III | — |
| 23 | 0.35 | GN / WH | 2514 | II | — | Telematics Switch Signal | 23 | 0.35 | GN / WH | 2514 | III | — |
| 24 | 0.35 | GN / BK | 2515 | I | — | Telematics Switch Supply Voltage | 24 | 0.35 | GN / BK | 2515 | IV | — |
| 25 | 0.35 | YE / VT | 2516 | I | — | Telematics Switch Green LED Indicator Control | 25 | 0.35 | YE / VT | 2516 | IV | — |

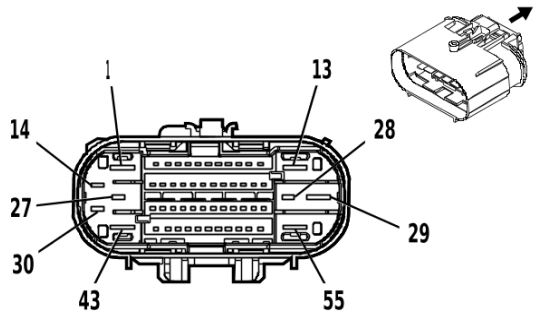
## X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOK) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.35 | BN / WH | 2517 | I | — | Telematics Switch Red LED Indicator Control | 26 | 0.35 | BN / WH | 2517 | IV | — |
| 27 | 0.5 | GN / WH | 2854 | I | — | Body Control Module LIN Bus 8 | 27 | 0.5 | GN / WH | 2854 | IV | — |
| 28 | 0.5 | GN / WH | 4115 | I | — | Body Control Module LIN Bus 5 | 28 | 0.35 | GN / WH | 4115 | IV | — |
| 29 | 0.35 | VT / YE | 7043 | I | — | Microphone [+] Signal | 29 | 0.35 | VT / YE | 7043 | IV | — |
| 30 | 0.35 | BU / BK | 7044 | I | — | Microphone [-] Signal | 30 | 0.35 | BU / BK | 7044 | IV | — |
| 31 | 0.35 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 31 | 0.35 | YE | 6817 | IV | — |
| 32 | 0.5 | VT | 801 | I | — | Retained Accessory Power Control | 32 | 0.5 | VT | 801 | IV | — |
| 33 | 0.5 | BN / YE | 820 | I | — | Center High Mounted Stop Lamp Supply Voltage | 33 | 0.5 | BN / YE | 820 | IV | — |
| 34 - 35 | — | — | — | — | — | Not Occupied | 34 - 35 | — | — | — | — | — |
| 36 | 0.35 | BK / WH | 851 | I | — | Signal Ground | 36 | 0.5 | BK / WH | 851 | IV | — |
| 37 - 38 | — | — | — | — | — | Not Occupied | 37 - 38 | — | — | — | — | — |
| 39 | 2.5 | VT / BU | 10735 | II | — | Upfitter Accessory 5 Supply Voltage | 39 | 2.5 | VT / BU | 10735 | III | — |
| 40 | 2.5 | BK | 1050 | II | — | Ground | 40 | 2.5 | BK | 1050 | III | — |
| 41 - 52 | — | — | — | — | — | Not Occupied | 41 - 52 | — | — | — | — | — |
| 53 | 2.5 | RD / BU | 4540 | II | — | Battery Positive Voltage | 53 | 2.5 | RD / BU | 4540 | III | — |
| 54 - 59 | — | — | — | — | — | Not Occupied | 54 - 59 | — | — | — | — | — |

# X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOR)




5823852




4993301

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness

OEM Connector: 35587201

Service Connector: 19371185

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Connector Part Information

Harness Type: Instrument Panel Wiring Harness

OEM Connector: 35605246

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332901 | J-35616-35 (VT) | J-38125-212 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 84634921 | J-35616-42 (RD) | J-38125-212 |
| IV | 84847992 | J-35616-32 (OG) | J-38125-36 |
| V | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VI | 84992391 | J-35616-5 (PU) | J-38125-215A |

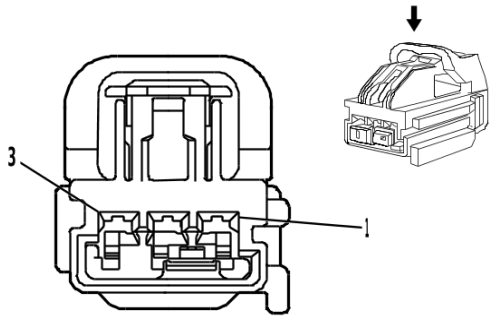
## X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOR)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / YE | 240 | III | — | Battery Positive Voltage | 1 | 0.5 | RD / YE | 240 | IV | — |
| 2 - 3 | — | — | — | — | — | Not Occupied | 2 - 3 | — | — | — | — | — |
| 4 | 0.35 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 4 | 0.35 | WH | 4978 | V | — |
| 5 | 0.35 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 5 | 0.35 | BU / YE | 4979 | V | — |
| 6 | 0.35 | BK / BN | 654 | II | — | Cellular Telephone Microphone Low Reference | 6 | 0.35 | BK / BN | 654 | V | — |
| 7 | 0.35 | BU | 655 | II | — | Cellular Telephone Microphone Signal | 7 | 0.35 | BU | 655 | V | — |
| 8 | 0.5 | BU / BK | 1053 | II | — | Center High Mounted Stop Lamp Control 3 | 8 | 0.5 | BU / BK | 1053 | V | — |

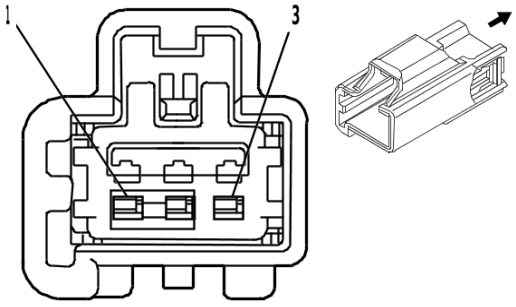
## X370 Dome Lamp Wiring Harness to Instrument Panel Wiring Harness (IOR) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | WH / VT | 1430 | II | — | Exterior Courtesy Lamp Control | 9 | 0.5 | WH / VT | 1430 | V | — |
| 10 | 0.5 | GN / WH | 24 | II | — | Backup Lamp Control | 10 | 0.5 | GN / WH | 24 | V | — |
| 11 | 0.35 | GN / WH | 2514 | II | — | Telematics Switch Signal | 11 | 0.35 | GN / WH | 2514 | V | — |
| 12 - 13 | — | — | — | — | — | Not Occupied | 12 - 13 | — | — | — | — | — |
| 14 | 0.35 | BN / WH | 2517 | I | — | Telematics Switch Red LED Indicator Control | 14 | 0.35 | BN / WH | 2517 | VI | — |
| 15 | 0.5 | GN / WH | 2854 | II | — | Body Control Module LIN Bus 8 | 15 | 0.5 | GN / WH | 2854 | V | — |
| 16 | — | — | — | — | — | Not Occupied | 16 | — | — | — | — | — |
| 17 | 0.5 | BN / YE | 820 | II | — | Center High Mounted Stop Lamp Supply Voltage | 17 | 0.5 | BN / YE | 820 | V | — |
| 18 | 0.35 | YE / VT | 2516 | II | — | Telematics Switch Green LED Indicator Control | 18 | 0.35 | YE / VT | 2516 | V | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.35 | BK / WH | 851 | II | — | Signal Ground | 20 | 0.5 | BK / WH | 851 | V | — |
| 21 | 0.5 | VT / BK | 339 | II | — | Run/Crank Ignition 1 Voltage | 21 | 0.5 | VT / BK | 339 | V | — |
| 22 - 26 | — | — | — | — | — | Not Occupied | 22 - 26 | — | — | — | — | — |
| 27 | 2.5 | BK | 1050 | I | — | Ground | 27 | 2.5 | BK | 1050 | VI | — |
| 28 | 2.5 | VT / BU | 10735 | I | — | Upfitter Accessory 5 Supply Voltage | 28 | 2.5 | VT / BU | 10735 | VI | — |
| 29 - 44 | — | — | — | — | — | Not Occupied | 29 - 44 | — | — | — | — | — |
| 45 | 0.35 | GN / BK | 2515 | II | — | Telematics Switch Supply Voltage | 45 | 0.35 | GN / BK | 2515 | V | — |
| 46 | 0.35 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 46 | 0.35 | WH | 4978 | V | — |
| 47 | 0.35 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 47 | 0.35 | BU / YE | 4979 | V | — |
| 48 - 55 | — | — | — | — | — | Not Occupied | 48 - 55 | — | — | — | — | — |

# X371 Dome Lamp Wiring Harness to High Mount Stop Lamp Wiring Harness - REGULAR CAB




1787799




1787800

### Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 10847008
Service Connector: 86825460
Description: 3-Way F 1.5 Kaizen Series( L-GY)

### Connector Part Information

Harness Type: High Mount Stop Lamp Wiring Harness
OEM Connector: 982112-02
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M 1.5 Kaizen Series( L-GY)

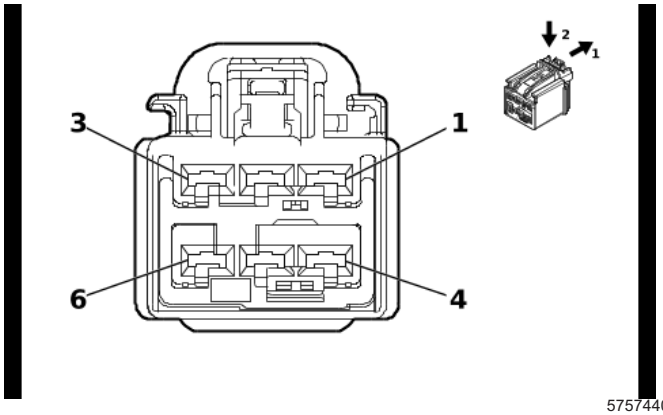
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | Not Available | No Tool Required |

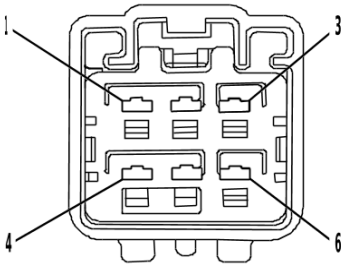
## X371 Dome Lamp Wiring Harness to High Mount Stop Lamp Wiring Harness - REGULAR CAB

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 1430 | I | — | Exterior Courtesy Lamp Control | 1 | 0.75 | BN | 1430 | II | — |
| 2 | 0.5 | BU / BK | 1053 | I | — | Center High Mounted Stop Lamp Control 3 | 2 | 0.75 | RD | 1053 | II | — |
| 3 | 1 | BK | 1050 | I | — | Ground | 3 | 0.75 | BK | 1050 | II | — |

# X371 Inside Rearview Mirror Wiring Harness - Jumper to Dome Lamp Wiring Harness - EXTENDED CAB/CREW CAB




5757440




1849802

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper
OEM Connector: 35360831
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 2.8 YESC Series( GY)

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 10847012
Service Connector: 84727361
Description: 6-Way M Kaizen Series( L-GY)

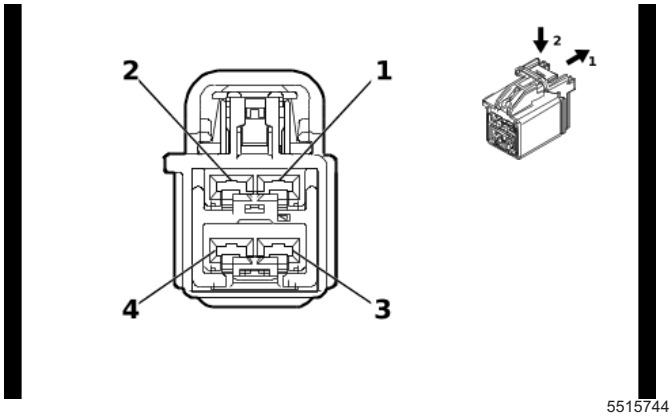
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

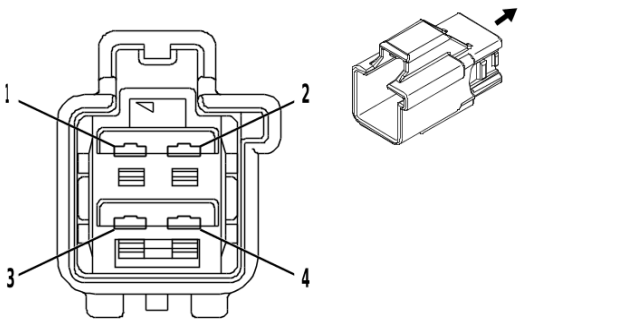
## X371 Inside Rearview Mirror Wiring Harness - Jumper to Dome Lamp Wiring Harness - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / VT | 1430 | I | — | Exterior Courtesy Lamp Control | 1 | 0.5 | WH / VT | 1430 | II | — |
| 2 | 0.5 | BN / YE | 820 | I | — | Center High Mounted Stop Lamp Supply Voltage | 2 | 0.5 | BN / YE | 820 | II | — |
| 3 | 0.5 | BK | 1050 | I | — | Ground | 3 | 1 | BK | 1050 | II | — |
| 4 | 2.5 | BK | 1050 | I | — | Ground | 4 | 2.5 | BK | 1050 | II | — |
| 5 | 2.5 | VT / BU | 10735 | I | — | Upfitter Accessory 5 Supply Voltage | 5 | 2.5 | VT / BU | 10735 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

## X375 Sunroof Wiring Harness to Dome Lamp Wiring Harness (CF5)




5515744




4257143

### Connector Part Information

Harness Type: Sunroof Wiring Harness
OEM Connector: 7289-7224-40
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 YESC Series( GY)

### Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 10847009
Service Connector: 89046843
Description: 4-Way M 2.8 YESC Series( GY)

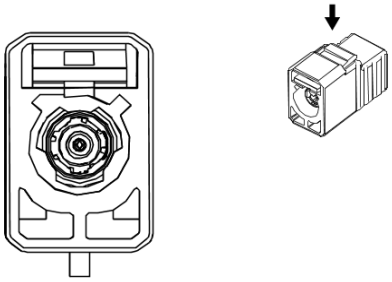
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

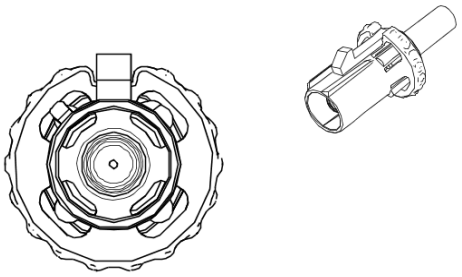
### X375 Sunroof Wiring Harness to Dome Lamp Wiring Harness (CF5)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1050 | I | — | Ground | 1 | 2.5 | BK | 1050 | II | — |
| 2 | 0.5 | GN / BN | 2854 | I | — | Body Control Module LIN Bus 8 | 2 | 0.5 | GN / WH | 2854 | II | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 2.5 | RD / GY | 4540 | I | — | Battery Positive Voltage | 4 | 2.5 | RD / BU | 4540 | II | — |

# X381 Inside Rearview Mirror Coaxial Cable to Rearview Driver Information Camera Rear Closure Coaxial Cable (DRZ)



2893647



4109605

### Connector Part Information

Harness Type: Inside Rearview Mirror Coaxial Cable COAX

OEM Connector: 13581683

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BK)

### Connector Part Information

Harness Type: Rearview Driver Information Camera Rear Closure Coaxial Cable COAX

OEM Connector: 13581672

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type( BK)

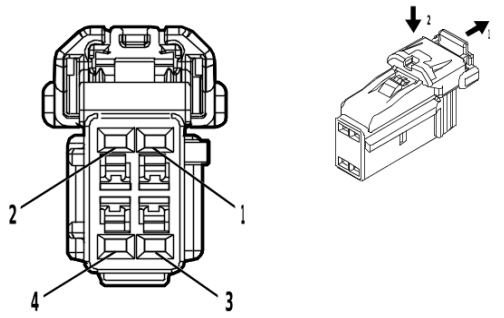
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

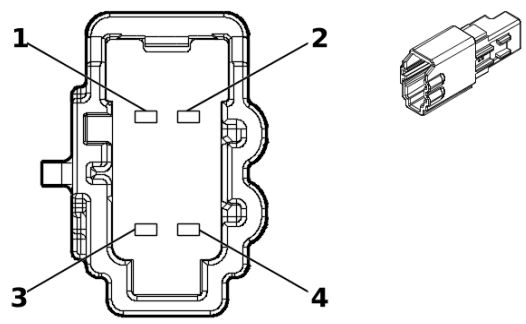
## X381 Inside Rearview Mirror Coaxial Cable to Rearview Driver Information Camera Rear Closure Coaxial Cable (DRZ)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Full Display Mirror Rear Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

# X382 Headlamp Automatic Control Ambient Light Sensor Wiring Harness to Dome Lamp Wiring Harness to Dome Lamp Wiring Harness (ASV&CE1)




4872683




5360963

### Connector Part Information

Harness Type: Headlamp Automatic Control Ambient Light Sensor Wiring Harness to Dome Lamp Wiring Harness
OEM Connector: 13533335
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series( BK)

### Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35264699
Service Connector: 84847258
Description: 4-Way M 1.2 MCON Series( BK)

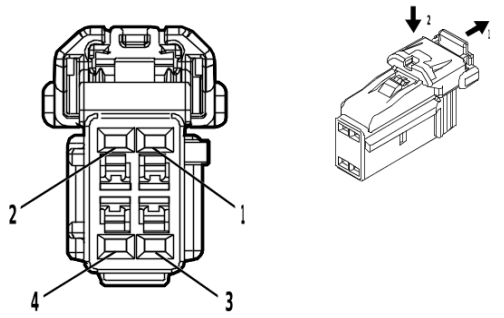
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |
| III | Not required | J-35616-17 (L-GN) | No Tool Required |

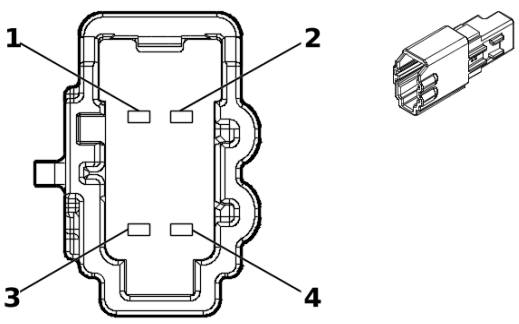
## X382 Headlamp Automatic Control Ambient Light Sensor Wiring Harness to Dome Lamp Wiring Harness to Dome Lamp Wiring Harness (ASV&CE1)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / VT | 339 | I | — | Run/Crank Ignition 1 Voltage | 1 | 0.35 | VT / BK | 339 | II | — |
| 2 | 0.35 | BK | 851 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 851 | III | — |
| 3 | 0.35 | GN / BN | 4115 | I | — | Body Control Module LIN Bus 5 | 3 | 0.5 | GN / WH | 4115 | III | — |
| 4 | — | — | — | — | — | Not Occu-pied | 4 | — | — | — | — | — |

# X382 Inside Rearview Mirror Wiring Harness - Jumper to Dome Lamp Wiring Harness to Dome Lamp Wiring Harness (ASV-CE1)




4872683




5360963

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper
OEM Connector: 13533335
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series( BK)

## Connector Part Information

Harness Type: Dome Lamp Wiring Harness
OEM Connector: 35264699
Service Connector: 84847258
Description: 4-Way M 1.2 MCON Series( BK)

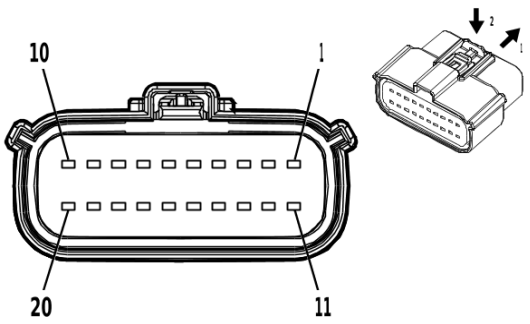
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |
| III | Not required | J-35616-17 (L-GN) | No Tool Required |

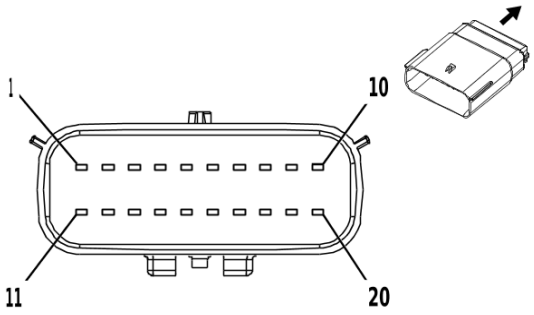
## X382 Inside Rearview Mirror Wiring Harness - Jumper to Dome Lamp Wiring Harness to Dome Lamp Wiring Harness (ASV-CE1)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | RD / VT | 339 | I | — | Run/Crank Ignition 1 Voltage | 1 | 0.35 | VT / BK | 339 | II | — |
| 2 | 0.35 | BK | 851 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 851 | III | — |
| 3 | 0.35 | GN / BN | 4115 | I | — | Body Control Module LIN Bus 5 | 3 | 0.5 | GN / WH | 4115 | III | — |
| 4 | — | — | — | — | — | Not Occu-pied | 4 | — | — | — | — | — |

# X400 Body Wiring Harness to Chassis Wiring Harness




4574194




2871861

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35602781
Service Connector: 19300557
Description: 20-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35554983
Service Connector: 19351705
Description: 20-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | 19331234 | J-35616-14 (GN) | J-38125-557 |

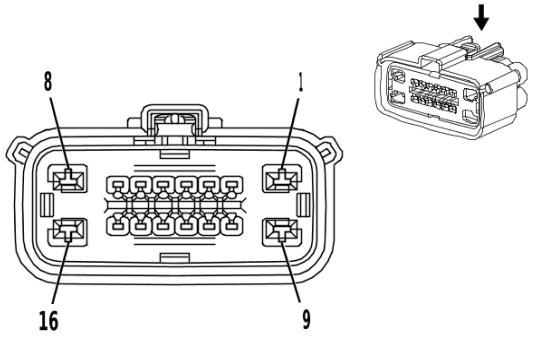
## X400 Body Wiring Harness to Chassis Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.5 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 3 | 0.5 | WH | 4986 | II | — |
| 4 | 0.5 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 4 | 0.5 | BU | 4987 | II | — |
| 5 | 0.5 | GY | 830 | I | — | Left Front Wheel Speed Sensor Signal | 5 | 0.5 | GY | 830 | II | — |
| 6 | 0.5 | GY / WH | 7064 | I | — | Left Front Wheel Speed Sensor Control | 6 | 0.5 | GY / WH | 7064 | II | — |
| 7 | 0.5 | YE | 872 | I | — | Right Front Wheel Speed Sensor Signal | 7 | 0.5 | YE | 872 | II | — |
| 8 | 0.5 | GY / BN | 7065 | I | — | Right Front Wheel Speed Sensor Control | 8 | 0.5 | GY / BN | 7065 | II | — |
| 9 | 0.5 | BN / BU | 1602 | I | — | Front Brake Pad Wear Sensor Signal | 9 | 0.5 | BN / BU | 1602 | II | — |

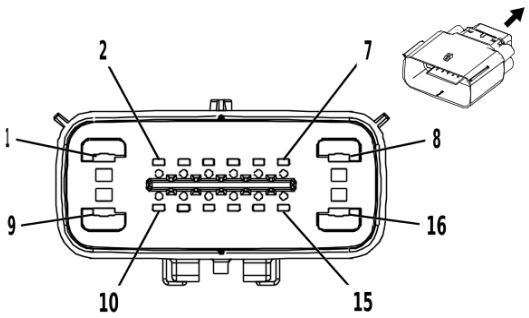
## X400 Body Wiring Harness to Chassis Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.35 | GY | 7292 | I | — | Major Endgate Release Switch Signal Exterior | 10 | 0.5 | GY | 7292 | II | — |
| 11 | 0.35 | YE | 7294 | I | — | Minor Endgate Release Switch Discrete Signal Exterior | 11 | 0.5 | YE | 7294 | II | — |
| 12 - 20 | — | — | — | — | — | Not Occupied | 12 - 20 | — | — | — | — | — |

# X401 Engine Wiring Harness to Chassis Wiring Harness (LZ0)




3684497




2373686

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33218250
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33129084
Service Connector: 19331031
Description: 16-Way M 1.5, 2.8 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A |
| II | 85528055 | J-35616-2A (GY) | J-38125-217 |
| III | 19366658 | J-35616-5 (PU) | J-38125-12A |
| IV | 86800300 | J-35616-3 (GY) | J-38125-217 |

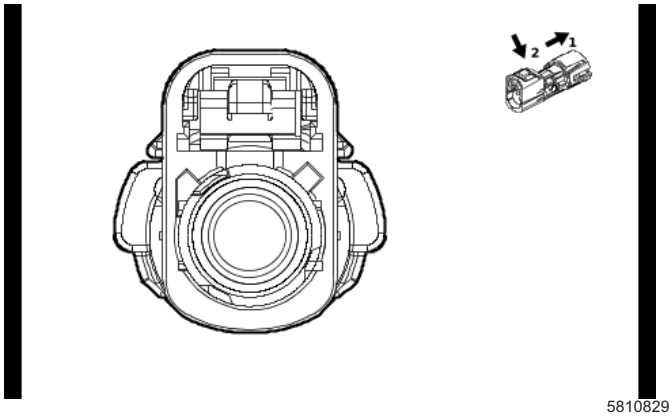
## X401 Engine Wiring Harness to Chassis Wiring Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.5 | GN / GY | 465 | II | — | Fuel Pump Primary Relay Control | 3 | 0.5 | GN / GY | 465 | IV | — |
| 4 | 1 | BK / WH | 1151 | II | — | Signal Ground | 4 | 1 | BK / WH | 1151 | IV | — |
| 5 | 1.5 | VT / GN | 4320 | II | — | Powertrain Sensor Bus Enable | 5 | 1.5 | VT / GN | 4320 | IV | — |
| 6 | 0.5 | BU / BK | 4977 | II | — | AUTOSAR CAN Bus [+] 3 Serial Data | 6 | 0.5 | BU / BK | 4977 | IV | — |
| 7 | 0.5 | WH | 4976 | II | — | AUTOSAR CAN Bus [-] 3 Serial Data | 7 | 0.5 | WH | 4976 | IV | — |
| 8 | 0.5 | BU / RD | 460 | I | — | Engine Control Sensors 5 Volt Reference 1 | 8 | 0.5 | BU / RD | 460 | III | — |
| 9 | 0.5 | BN / GN | 4305 | I | — | Exhaust Flow Control Valve 1 | 9 | 0.5 | BN / GN | 4305 | III | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

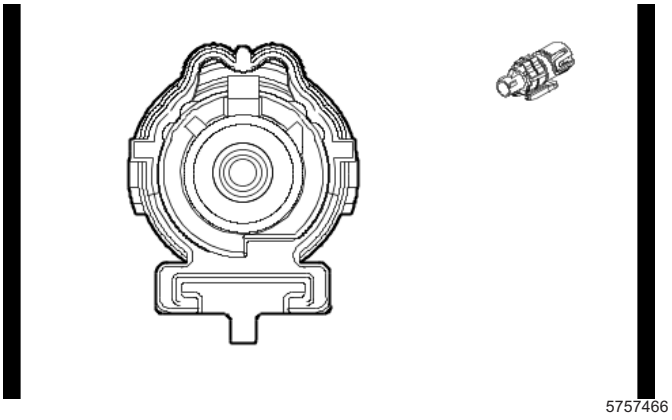
## X401 Engine Wiring Harness to Chassis Wiring Harness (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 0.75 | YE / BN | 1420 | II | — | Exhaust Restrictor Motor Open Control | 11 | 0.75 | YE / BN | 1420 | IV | — |
| 12 | 0.75 | BN | 1421 | II | — | Exhaust Restrictor Motor Closed Control | 12 | 0.75 | BN | 1421 | IV | — |
| 13 | 0.5 | BK / YE | 548 | II | — | Engine Control Sensors Low Reference 1 | 13 | 0.5 | BK / YE | 548 | IV | — |
| 14 | 0.5 | BU / BK | 4977 | II | — | AUTOSAR CAN Bus [+] 3 Serial Data | 14 | 0.5 | BU / BK | 4977 | IV | — |
| 15 | 0.5 | WH | 4976 | II | — | AUTOSAR CAN Bus [-] 3 Serial Data | 15 | 0.5 | WH | 4976 | IV | — |
| 16 | — | — | — | — | — | Not Occupied | 16 | — | — | — | — | — |

# X402A Body Wiring Harness to Chassis Wiring Harness (UV2)



5810829


5757466

### Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187033

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( WH)

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338240

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( WH)

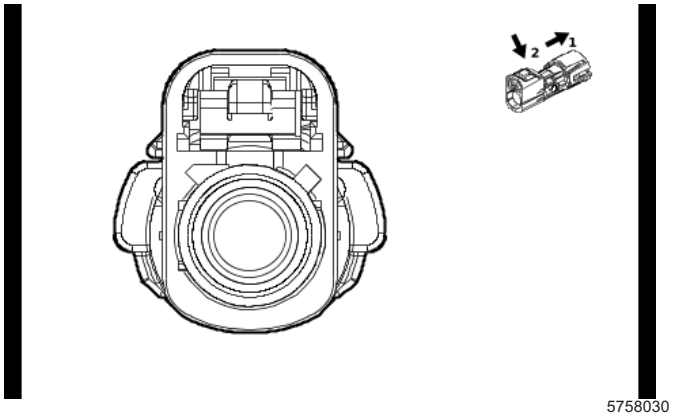
## Terminal Part Information

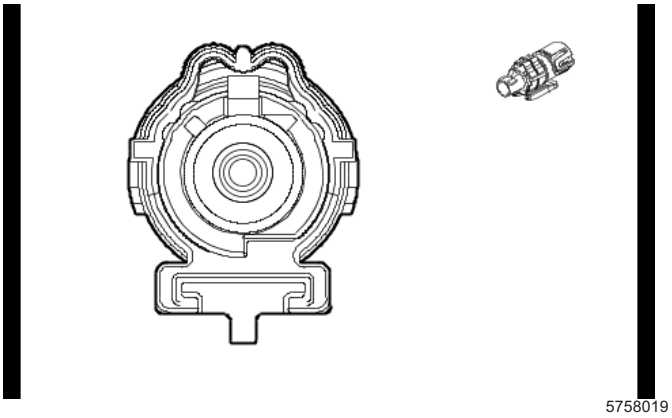
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

## X402A Body Wiring Harness to Chassis Wiring Harness (UV2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Trailer 2 Rear Vision Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

## X402B Body Wiring Harness to Chassis Wiring Harness (UV2)




### Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187032

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338239

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( BK)

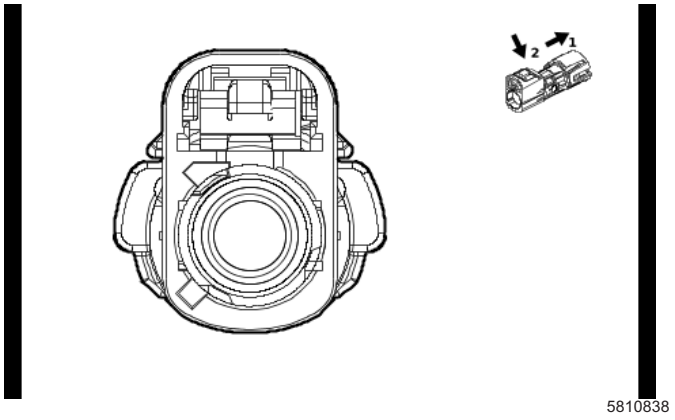
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

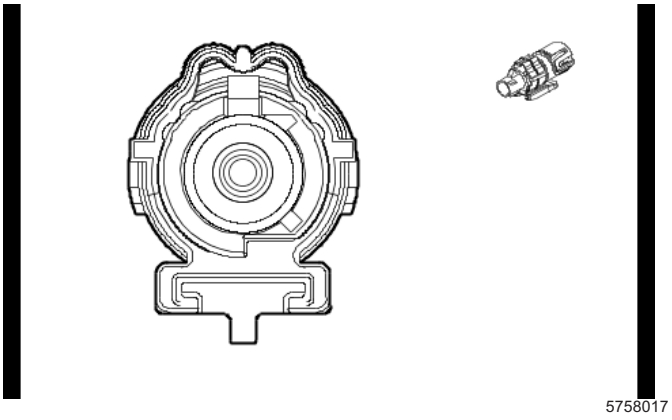
### X402B Body Wiring Harness to Chassis Wiring Harness (UV2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Trailer Rear Vision Camera Coaxial Video Signal | — | — | Coax Cable | — | I | — |

## X402C Body Wiring Harness to Chassis Wiring Harness (UV2)




5810838



5758017

### Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187037

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BN)

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338245

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( BN)

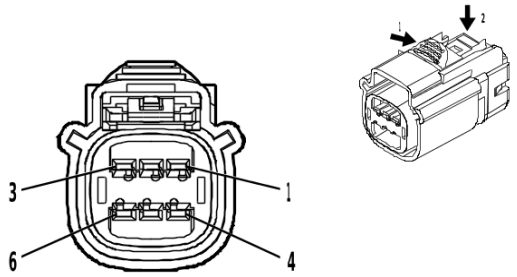
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

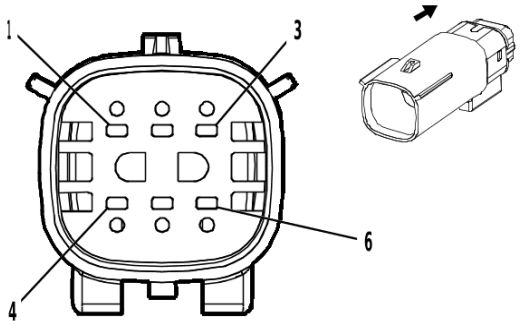
### X402C Body Wiring Harness to Chassis Wiring Harness (UV2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Rear Vision Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

# X403 Chassis Wiring Harness to Power Steering Wiring Harness Extension Harness




5004419




1986159

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35325491
Service Connector: 84999473
Description: 6-Way F 1.5 OCS Series, Sealed( BK)

## Connector Part Information

Harness Type: Power Steering Wiring Harness Extension Harness
OEM Connector: 13520576
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

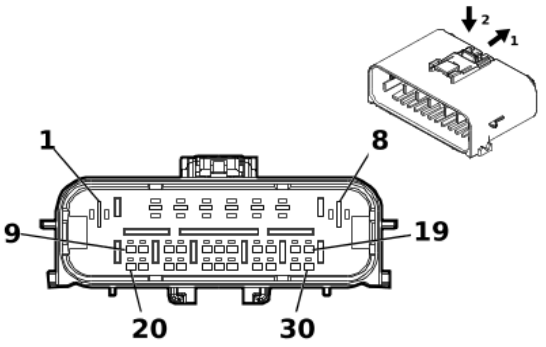
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

## X403 Chassis Wiring Harness to Power Steering Wiring Harness Extension Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 1 | 0.5 | WH / BU | 4987 | II | — |
| 2 - 5 | — | — | — | — | — | Not Occu-pied | 2 - 5 | — | — | — | — | — |
| 6 | 0.5 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 6 | 0.5 | BU / WH | 4986 | II | — |

# X404 Emission Reduction Fluid Tank Reservoir Wire Harness to Chassis Wiring Harness (LZ0)

—




5377298

### Connector Part Information

Harness Type: Emission Reduction Fluid Tank Reservoir Wire Harness

OEM Connector: 123014624

Service Connector: Service by Harness - See Part Catalog

Description: 30-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed

### Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 35538391

Service Connector: 84861014

Description: 30-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed( GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | 13575376 | J-35616-43 (RD) | No Tool Required |
| III | 13578827 | J-35616-5 (PU) | No Tool Required |
| IV | 19330704 | J-35616-13 (BU) | No Tool Required |

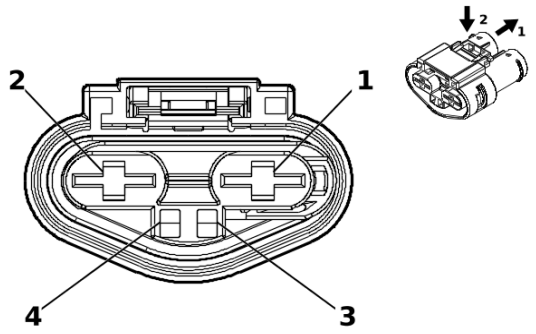
## X404 Emission Reduction Fluid Tank Reservoir Wire Harness to Chassis Wiring Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | BK | 2040 | I | — | Battery Positive Voltage | 1 | 2.5 | RD / WH | 2040 | II | — |
| 2 | 2.0 | RD | 3440 | I | — | Battery Positive Voltage | 2 | 1.5 | RD / WH | 3440 | III | — |
| 7 | 2.0 | BK | 1650 | I | — | Ground | 7 | 1 | BK | 1650 | III | — |
| 8 | 3.0 | WH | 1650 | I | — | Ground | 8 | 2.5 | BK | 1650 | II | — |
| 11 | 0.5 | BU | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 11 | 0.5 | BU / BK | 4977 | IV | — |
| 12 | 0.5 | BN | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 12 | 0.5 | WH | 4976 | IV | — |
| 22 | 0.5 | BU | 4977 | I | — | AUTOSAR CAN Bus [+] 3 Serial Data | 22 | 0.5 | BU / BK | 4977 | IV | — |
| 23 | 0.5 | BN | 4976 | I | — | AUTOSAR CAN Bus [-] 3 Serial Data | 23 | 0.5 | WH | 4976 | IV | — |

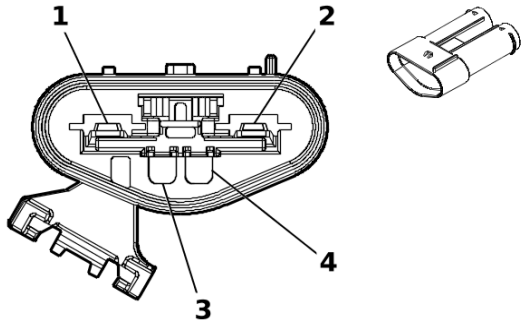
## X404 Emission Reduction Fluid Tank Reservoir Wire Harness to Chassis Wiring Harness (LZ0) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 0.5 | BN | 639 | I | — | Run/Crank Ignition 1 Voltage | 25 | 0.5 | VT / WH | 639 | IV | — |

# X405 Power Steering Control Module Wiring Harness to Power Steering Wiring Harness




5330342




5330353

## Connector Part Information

Harness Type: Power Steering Wiring Harness
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 2.8 MAK Series, Sealed( BK)

## Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 13582138
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 2.8, 12 MAK Series, Sealed( BK)

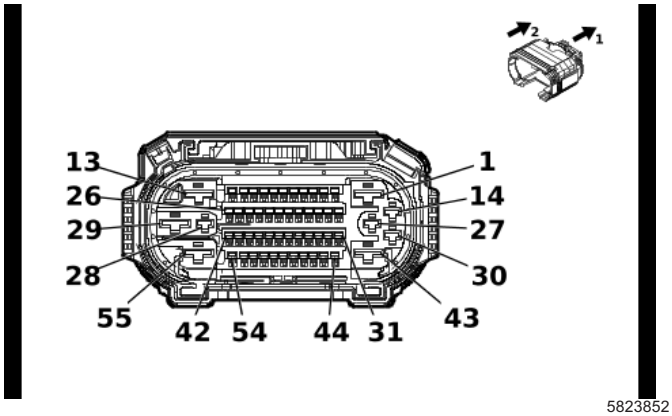
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | Not Available | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

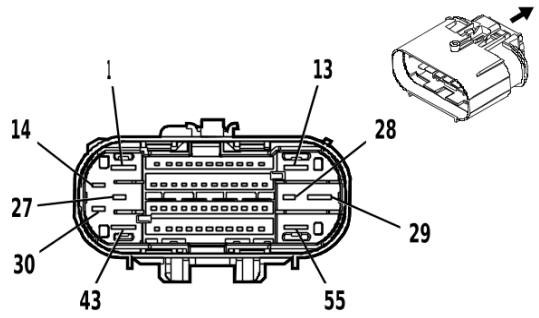
## X405 Power Steering Control Module Wiring Harness to Power Steering Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 25 | BK | 350 | I | — | Ground | 1 | 20 | BK | 350 | II | — |
| 2 | 25 | RD / VT | 3542 | I | — | Battery Positive Voltage | 2 | 20 | RD | 3542 | II | — |
| 3 - 4 | — | — | — | — | — | Not Occupied | 3 - 4 | — | — | — | — | — |

## X410 Chassis Wiring Harness to Body Wiring Harness




5823852




4993301

### Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 35588033

Service Connector: 19371185

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

### Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35588063

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed( BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19332901 | J-35616-35 (VT) | J-38125-212 |
| II | 19370818 | J-35616-12 (BU) | J-38125-215A |
| III | 84634921 | J-35616-42 (RD) | J-38125-212 |
| IV | 84847992 | J-35616-32 (OG) | J-38125-36 |
| V | 84867140 | J-35616-13 (BU) | J-38125-215A |
| VI | 84992391 | J-35616-5 (PU) | J-38125-215A |

### X410 Chassis Wiring Harness to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | GN / VT | 1988 | III | — | Right Park Brake Motor Apply Control | 1 | 2.5 | GN / VT | 1988 | IV | — |
| 2 | 0.75 | BU / VT | 1335 | II | — | Right Rear Turn Signal Lamp Control 2 | 2 | 0.75 | BU / VT | 1335 | V | — |
| 3 | 0.5 | YE / GN | 7122 | II | — | Axle Differential Lock Switch Signal | 3 | 0.35 | YE / GN | 7122 | V | — |
| 4 | 0.5 | GN / BU | 2733 | II | — | Brake System Control Module LIN Bus 2 | 4 | 0.5 | GN / BU | 2733 | V | — |
| 5 | 0.5 | BN / GN | 3568 | II | — | Rear Closure Passive Entry Antenna High Signal | 5 | 0.35 | BN / GN | 3568 | V | — |

## X410 Chassis Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | GN / GY | 3569 | II | — | Rear Closure Passive Entry Antenna Low Signal | 6 | 0.35 | GN / GY | 3569 | V | — |
| 7 | 0.75 | BU / WH | 1334 | II | — | Left Rear Turn Signal Lamp Control 2 | 7 | 0.75 | BU / WH | 1334 | V | — |
| 8 | 0.5 | WH / VT | 1430 | II | — | Exterior Courtesy Lamp Control | 8 | 0.5 | WH / VT | 1430 | V | — |
| 9 | 0.5 | GN / YE | 1616 | II | — | Rear Brake Pad Wear Sensor Signal | 9 | 0.5 | GN / YE | 1616 | V | — |
| 10 | 0.5 | WH / BK | 2223 | II | — | Trailer Brake Apply Signal | 10 | 0.5 | WH / BK | 2223 | V | — |
| 11 | 0.5 | GN / YE | 2862 | II | — | Body Control Module LIN Bus 16 | 11 | 0.35 | GN / YE | 2862 | V | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 5 | WH | 2001 | III | — | Left Park Brake Motor Apply Control | 13 | 2.5 | WH | 2001 | IV | — |
| 14 | 2.5 | RD / VT | 4442 | I | — | Primary Fused Battery Positive Voltage | 14 | 2.5 | RD / VT | 4442 | VI | — |
| 15 | 0.5 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 15 | 0.5 | BU / YE | 4979 | V | — |
| 16 | 0.5 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 16 | 0.5 | WH | 4978 | V | — |
| 17 | 0.5 | YE / WH | 2377 | II | — | Right Rear Middle Parking Assist Sensor Signal | 17 | 0.5 | YE / WH | 2377 | V | — |
| 18 | 0.75 | BN / BU | 6993 | II | — | Left Rear Park Lamp Control | 18 | 0.75 | BN / BU | 6993 | V | — |
| 19 | 0.75 | WH / BK | 7544 | II | — | Right Rear Turn Signal Lamp Feedback Signal | 19 | 0.35 | WH / BK | 7544 | V | — |
| 20 | — | — | — | — | — | Not Occupied | 20 | — | — | — | — | — |
| 21 | 0.5 | VT | 882 | II | — | Right Rear Wheel Speed Sensor Signal | 21 | 0.5 | VT | 882 | V | — |
| 22 | 0.5 | GY / YE | 7128 | II | — | Right Rear Wheel Speed Sensor Control | 22 | 0.5 | GY / YE | 7128 | V | — |

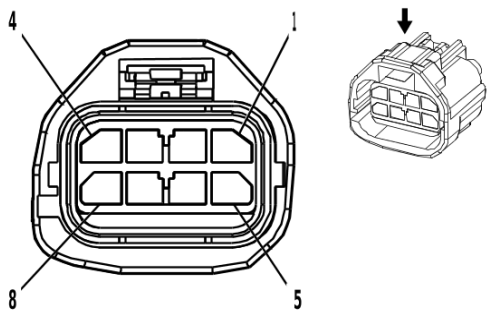
## X410 Chassis Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 0.5 | BU | 884 | II | — | Left Rear Wheel Speed Sensor Signal | 23 | 0.5 | BU | 884 | V | — |
| 24 | 0.5 | GY / BK | 7127 | II | — | Left Rear Wheel Speed Sensor Control | 24 | 0.5 | GY / BK | 7127 | V | — |
| 25 | 0.5 | YE | 7115 | II | — | Rear Axle Differential Lock Indicator Control | 25 | 0.35 | YE | 7115 | V | — |
| 26 | 0.5 | BN / YE | 820 | II | — | Center High Mounted Stop Lamp Supply Voltage | 26 | 0.5 | BN / YE | 820 | V | — |
| 27 | — | — | — | — | — | Ground | 27 | 2.5 | BK | 150 | VI | — |
| 28 | 2.5 | BU | 47 | I | — | Trailer Auxiliary Control | 28 | 2 | BU | 47 | VI | — |
| 29 | 5 | GY / BK | 4369 | III | — | Left Park Brake Motor Low Reference | 29 | 2.5 | GY / BK | 4369 | IV | — |
| 30 | 2.5 | RD / BN | 3640 | I | — | Battery Positive Voltage | 30 | 2.5 | RD / BN | 4142 | VI | — |
| 31 | 0.5 | VT / RD | 4049 | II | — | AC Power Outlet Sensor High Reference | 31 | 0.5 | VT / RD | 4049 | V | — |
| 32 | 0.35 | VT / WH | 639 | II | — | Run/Crank Ignition 1 Voltage | 32 | 0.5 | VT / WH | 639 | V | — |
| 33 | 0.5 | GY / BU | 7762 | II | — | Cargo Lamp Control | 33 | 0.5 | GY / BU | 7762 | V | — |
| 34 | 0.5 | YE / BK | 2224 | II | — | Trailer Brake Enable Signal | 34 | 0.5 | YE / BK | 2224 | V | — |
| 35 | 0.5 | GN / BN | 2266 | II | — | DC/AC Inverter Control 2 | 35 | 0.5 | GN / BN | 2266 | V | — |
| 36 | 0.5 | BN / WH | 2374 | II | — | Object Sensor Voltage Reference | 36 | 0.5 | BN / WH | 2374 | V | — |
| 37 | 0.5 | YE | 2375 | II | — | Left Rear Outer Parking Assist Sensor Signal | 37 | 0.5 | YE | 2375 | V | — |
| 38 | 0.5 | YE / BU | 2376 | II | — | Left Rear Middle Parking Assist Sensor Signal | 38 | 0.5 | YE / BU | 2376 | V | — |
| 39 | 0.5 | WH | 4978 | II | — | AUTOSAR CAN Bus [-] 2 Serial Data | 39 | 0.35 | WH | 4978 | V | — |

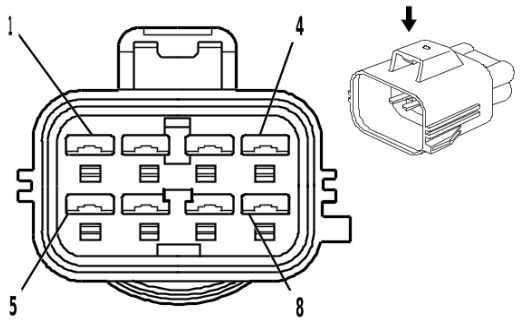
## X410 Chassis Wiring Harness to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 0.5 | YE / VT | 2378 | II | — | Right Rear Outer Parking Assist Sensor Signal | 40 | 0.5 | YE / VT | 2378 | V | — |
| 41 | 0.5 | BK / GY | 2379 | II | — | Object Sensor Low Reference | 41 | 0.5 | BK / GY | 2379 | V | — |
| 42 | 0.5 | GN / WH | 24 | II | — | Backup Lamp Control | 42 | 0.5 | GN / WH | 24 | V | — |
| 43 | 5 | GY | 4368 | III | — | Right Park Brake Motor Low Reference | 43 | 2.5 | GY | 4368 | IV | — |
| 44 | 0.75 | BK / WH | 10120 | II | — | AC Outlet 2 Phase A Control | 44 | 0.75 | BK / WH | 10120 | V | — |
| 45 | 0.75 | RD / WH | 10121 | II | — | AC Outlet 2 Phase B Control | 45 | 0.75 | RD / WH | 10121 | V | — |
| 46 | 0.35 | BN | 10119 | II | — | AC Outlet 2 Low Reference | 46 | 0.35 | BN | 10119 | V | — |
| 47 | 0.5 | VT / GN | 4320 | II | — | Powertrain Sensor Bus Enable | 47 | 0.5 | VT / GN | 4320 | V | — |
| 48 | 0.5 | VT / GY | 7117 | II | — | Front Axle Differential Lock Indicator Control | 48 | 0.35 | VT / GY | 7117 | V | — |
| 49 | 0.5 | GN / GY | 465 | II | — | Fuel Pump Primary Relay Control | 49 | 0.5 | GN / GY | 465 | V | — |
| 50 | — | — | — | — | — | Not Occupied | 50 | — | — | — | — | — |
| 51 | 0.75 | WH / VT | 6567 | II | — | Rear Turn Signal Lamp Feedback Signal | 51 | 0.35 | WH / VT | 6567 | V | — |
| 52 | 0.5 | GN / YE | 6846 | II | — | Rear License Plate Lamp Control | 52 | 0.5 | GN / YE | 6846 | V | — |
| 53 | 0.5 | BU / YE | 4979 | II | — | AUTOSAR CAN Bus [+] 2 Serial Data | 53 | 0.35 | BU / YE | 4979 | V | — |
| 54 | 0.75 | BN / GY | 6995 | II | — | Right Rear Park Lamp Control | 54 | 0.75 | BN / GY | 6995 | V | — |
| 55 | — | — | — | — | — | Battery Positive Voltage | 55 | 6 | RD / WH | 1642 | IV | — |

# X412 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS)




1401778




1856785

### Connector Part Information

Harness Type: Running Board Control Module Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed( D-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

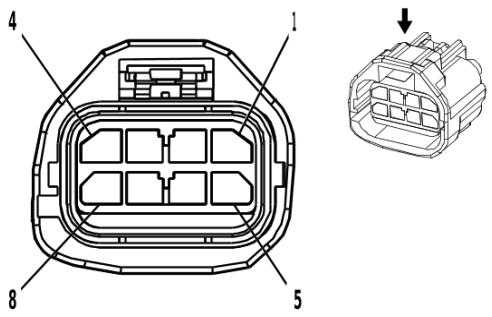
## X412 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | GY | 7472 | I | — | Left Running Board Step Motor Control Retract | 1 | 2 | GY | 7472 | II | — |
| 2 | 0.5 | VT / RD | 7468 | I | — | Left Running Board Step Motor Hall Sensor 5V Reference | 2 | 0.5 | VT / RD | 7468 | II | — |
| 3 | 0.5 | YE | 7467 | I | — | Left Running Board Step Motor Hall Sensor Signal | 3 | 0.5 | YE | 7467 | II | — |
| 4 | 0.5 | YE / BN | 7466 | I | — | Left Running Board Step Motor Hall Sensor Low Reference | 4 | 0.5 | YE / BN | 7466 | II | — |
| 5 | 2 | WH / BN | 7471 | I | — | Left Running Board Step Motor Control Extend | 5 | 2 | WH / BN | 7471 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

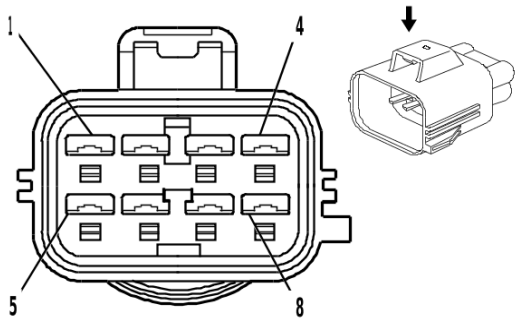
## X412 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | BU / GN | 4746 | I | — | Running Board Step Left Kick Switch Signal | 7 | 0.5 | BU / GN | 4746 | II | — |
| 8 | 0.5 | BK / WH | 1151 | I | — | Signal Ground | 8 | 0.5 | BK / WH | 1151 | II | — |

# X413 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS)




1401778




1856785

### Connector Part Information

Harness Type: Running Board Control Module Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed( D-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-4A (PU) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

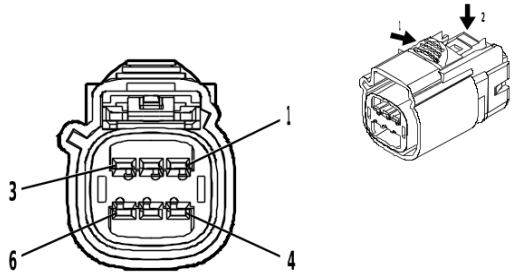
## X413 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | GN | 7469 | I | — | Right Left Running Board Step Motor Control Retract | 1 | 2 | GN | 7469 | II | — |
| 2 | 0.5 | GN / RD | 7464 | I | — | Right Running Board Step Motor Hall Sensor 5V Reference | 2 | 0.5 | GN / RD | 7464 | II | — |
| 3 | 0.5 | VT | 7465 | I | — | Right Running Board Step Motor Hall Sensor Signal | 3 | 0.5 | VT | 7465 | II | — |
| 4 | 0.5 | YE / BK | 7463 | I | — | Right Running Board Step Motor Hall Sensor Low Reference | 4 | 0.5 | YE / BK | 7463 | II | — |

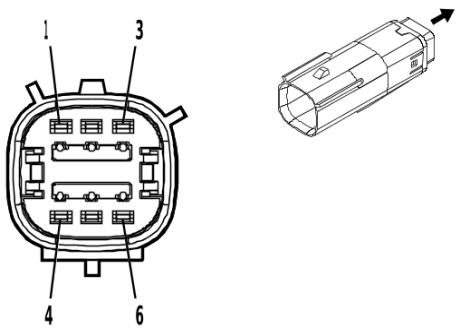
## X413 Running Board Control Module Jumper Wiring Harness to Chassis Wiring Harness (BRS) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 2 | BU | 7470 | I | — | Right Running Board Step Motor Control Extend | 5 | 2 | BU | 7470 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5 | WH | 4747 | I | — | Running Board Step Right Kick Switch Signal | 7 | 0.5 | WH | 4747 | II | — |
| 8 | 0.5 | BK / WH | 1151 | I | — | Signal Ground | 8 | 0.5 | BK / WH | 1151 | II | — |

# X414 Chassis Rear Wiring Harness to Chassis Wiring Harness (KC9/KCA)




4996962




4992963

### Connector Part Information

Harness Type: Chassis Rear Wiring Harness
OEM Connector: 15513505
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 OCS Series, Sealed( GY)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15513475
Service Connector: 19371205
Description: 6-Way M 1.5 OCS Series, Sealed( GY)

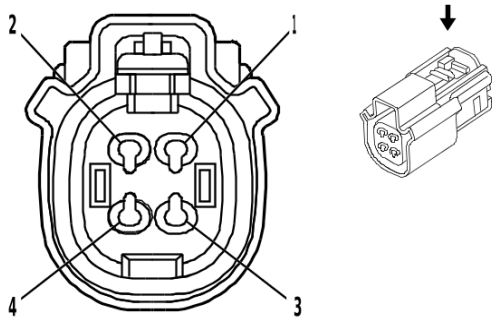
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

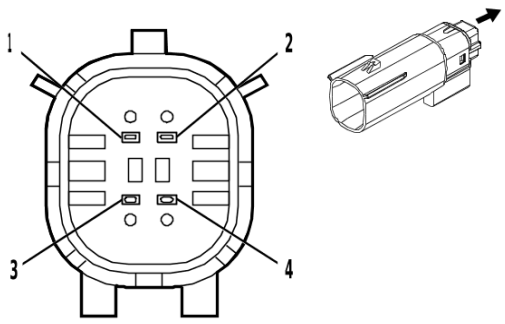
## X414 Chassis Rear Wiring Harness to Chassis Wiring Harness (KC9/KCA)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK / WH | 10120 | I | — | AC Outlet 2 Phase A Control<br>AC Outlet 2 Phase A Control | 1 | 0.75 | BK / WH | 10120 | II | — |
| 2 | 0.5 | BN | 10119 | I | — | AC Outlet 2 Low Reference | 2 | 0.5 | BN | 10119 | II | — |
| 3 | 0.5 | VT / RD | 4049 | I | — | AC Power Outlet Sensor High Reference | 3 | 0.5 | VT / RD | 4049 | II | — |
| 4 | 0.75 | RD / WH | 10121 | I | — | AC Outlet 2 Phase B Control<br>AC Outlet 2 Phase B Control | 4 | 0.75 | RD / WH | 10121 | II | — |
| 5 | 0.5 | GN / BN | 2266 | I | — | DC/AC Inverter Control 2 | 5 | 0.5 | GN / BN | 2266 | II | — |
| 6 | 0.5 | BK | 1750 | I | — | Ground | 6 | 1.5 | BK | 1750 | II | — |

# X415A Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Engine Wiring Harness (NP0/NQH)




1960031




2368875

### Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness

OEM Connector: 33346391

Service Connector: Service by Harness - See Part Catalog

Description: 4-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 33344515

Service Connector: 84838880

Description: 4-Way M 1.5 MX Series, Sealed( BK)

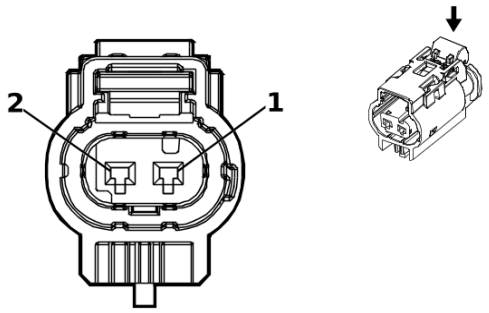
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

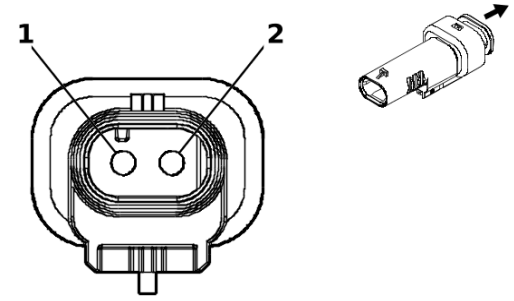
## X415A Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Engine Wiring Harness (NP0/NQH)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY / BK | 1570 | I | — | Front Axle Actuator Control | 1 | 0.5 | GY / BK | 1570 | II | — |
| | | | | | | Front Axle Actuator Control | | | | | | |
| 2 | 0.5 | YE / WH | 1695 | I | — | 4WD Locked Range Indicator Control | 2 | 0.5 | YE / WH | 1695 | II | — |
| | | | | | | 4WD Locked Range Indicator Control | | | | | | |
| 3 | 0.5 | GN | 8016 | I | — | Secondary Axle Motor Control | 3 | 0.5 | GN | 8016 | II | — |
| 4 | 0.5 | BK | 450 | I | — | Ground | 4 | 0.75 | BK | 450 | II | LM2+ ( NP0/ NQH) |
| | | | | | | Ground | | 1 | BK | 450 | II | ( L84/ L87) + ( NP0/ NQH) |

# X415B Chassis Wiring Harness to Front Disc Brake Pad Wear Sensor (JBP)




3747581




5202142

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed( BK)

### Connector Part Information

Harness Type: Front Disc Brake Pad Wear Sensor
OEM Connector: 13583196
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MLK Series, Sealed( BK)

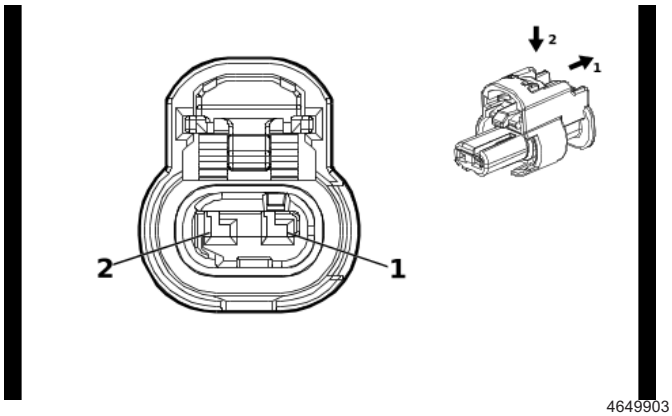
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

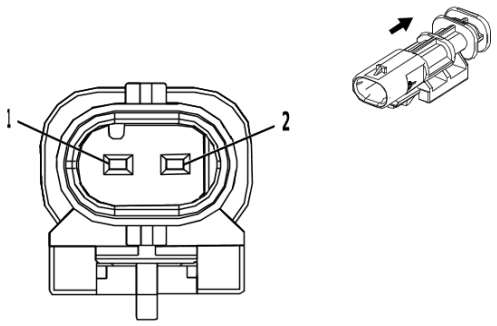
## X415B Chassis Wiring Harness to Front Disc Brake Pad Wear Sensor (JBP)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN / BU | 1602 | I | — | Front Brake Pad Wear Sensor Signal | 1 | 0.5 | BN / BU | 1602 | II | — |
| 2 | 0.5 | BK / WH | 1151 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 1151 | II | — |

# X416A Chassis Wiring Harness to Electronic Suspension Strut Wiring Harness Extension Harness - Front (Z45)




4649903




2474755

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Connector Part Information

Harness Type: Electronic Suspension Strut Wiring Harness Extension Harness - Front
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( BK)

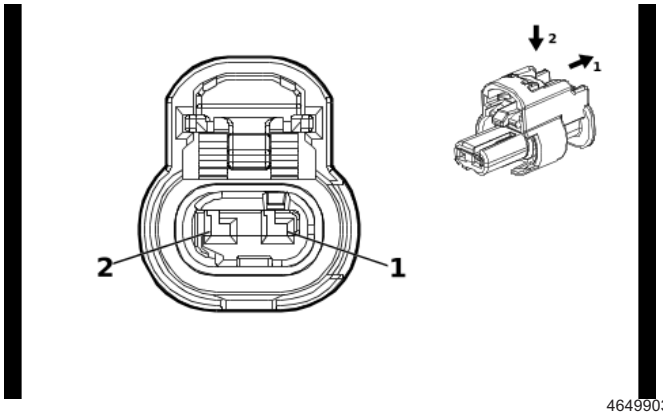
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

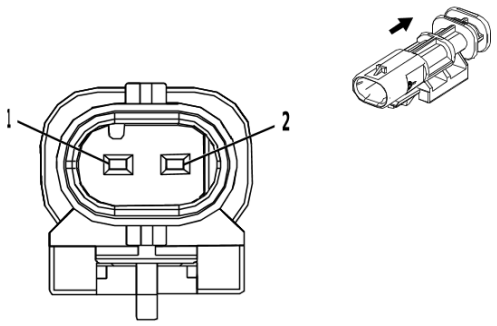
## X416A Chassis Wiring Harness to Electronic Suspension Strut Wiring Harness Extension Harness - Front (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / WH | 1107 | I | — | Left Front Shock Absorber Actuator Control | 1 | 0.75 | BU / WH | 1116 | II | — |
| 2 | 0.75 | GY / BU | 1113 | I | — | Left Front Shock Absorber Actuator Control | 2 | 0.75 | GY | 1117 | II | — |

# X416B Chassis Wiring Harness to Electronic Suspension Strut Wiring Harness Extension Harness - Front (Z45)




4649903




2474755

## Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Connector Part Information

Harness Type: Electronic Suspension Strut Wiring Harness Extension Harness - Front
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed( BK)

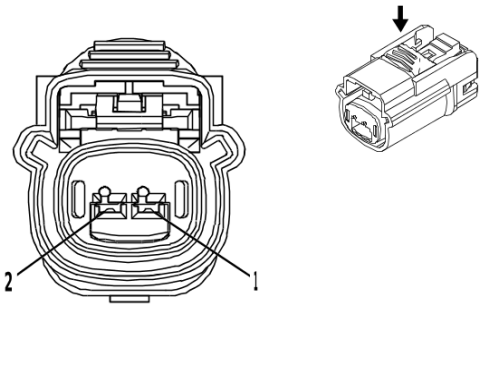
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

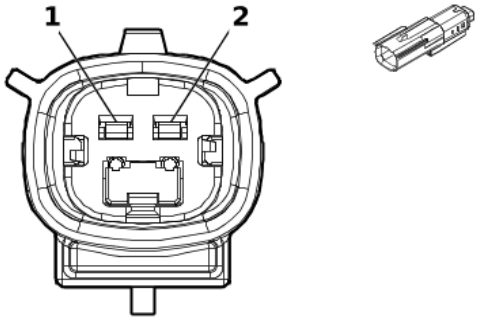
## X416B Chassis Wiring Harness to Electronic Suspension Strut Wiring Harness Extension Harness - Front (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 1116 | I | — | Right Front Shock Absorber Actuator Control | 1 | 0.75 | BU / WH | 1107 | II | — |
| 2 | 0.75 | GY / WH | 1117 | I | — | Right Front Shock Absorber Actuator Control | 2 | 0.75 | GY | 1113 | II | — |

# X416C Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Chassis Wiring Harness (G93)




4332222




5921817

## Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness

OEM Connector: 15514573

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way F 1.5 OCS Series, Sealed( BK)

## Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 15514550

Service Connector: 86825463

Description: 2-Way M 1.5 OCS Series, Sealed( BK)

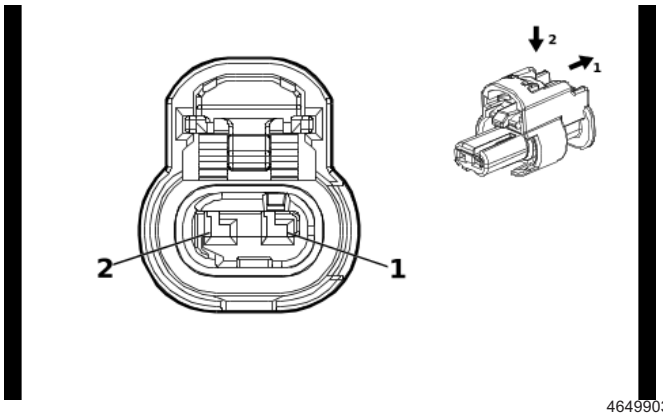
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

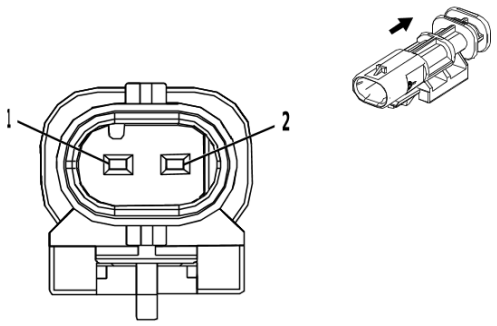
## X416C Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Chassis Wiring Harness (G93)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | WH / BK | 7254 | I | — | Front Differential Lock Actuator Low Control | 1 | 0.75 | WH / BK | 7254 | II | — |
| 2 | 0.75 | VT / WH | 7256 | I | — | Front Differential Lock Actuator Control | 2 | 0.75 | VT / WH | 7256 | II | — |

# X417 Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Front Differential Locking Actuator Jumper Wiring Harness (G93)




4649903




2474755

## Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness

OEM Connector: 33327048

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way F 1.2 MCON Series, Sealed( BK)

## Connector Part Information

Harness Type: Front Differential Locking Actuator Jumper Wiring Harness

OEM Connector: 13591337

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way M 1.2 MCON Series, Sealed( BK)

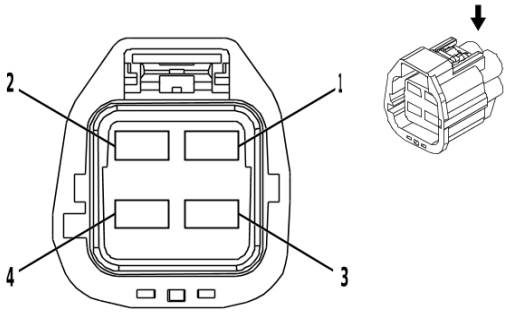
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

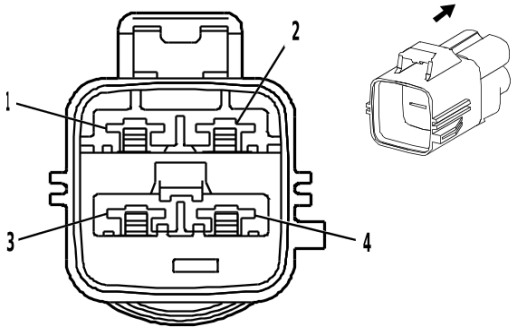
## X417 Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Front Differential Locking Actuator Jumper Wiring Harness (G93)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | VT / WH | 7256 | I | — | Front Differential Lock Actuator Control | 1 | 0.75 | VT / WH | 7256 | II | — |
| 2 | 0.75 | WH / BK | 7254 | I | — | Front Differential Lock Actuator Low Control | 2 | 0.75 | WH / BK | 7254 | II | — |

# X420A Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness




2852121




1853524

### Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 7283-3601-10
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 6.3 Series, Sealed( GY)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33360098
Service Connector: 19371198
Description: 4-Way M 6.3 Series, Sealed( GY)

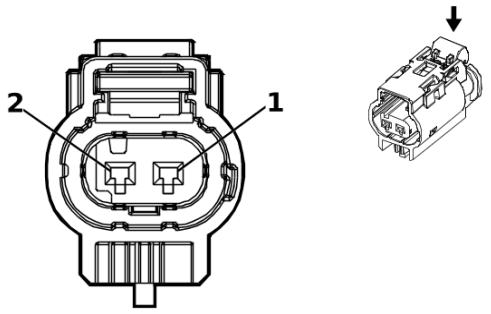
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-43 (RD) | No Tool Required |

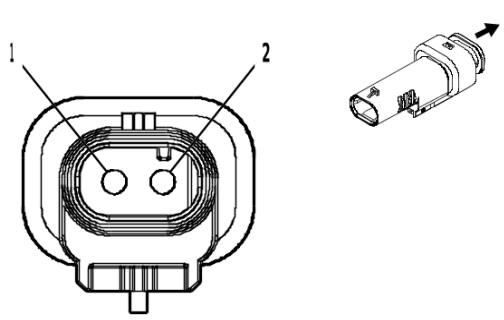
## X420A Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | WH | 2001 | I | Z45+ G94 | Left Park Brake Motor Apply Control | 1 | 5 | WH | 2001 | II | — |
| 2 | 2.5 | GY / BK | 4369 | I | Z45+ G94 | Left Park Brake Motor Low Reference | 2 | 5 | GY / BK | 4369 | II | — |
| 3 | 2.5 | GN / VT | 1988 | I | Z45+ G94 | Right Park Brake Motor Apply Control | 3 | 5 | GN / VT | 1988 | II | — |
| 4 | 2.5 | GY | 4368 | I | Z45+ G94 | Right Park Brake Motor Low Reference | 4 | 5 | GY | 4368 | II | — |

# X420B Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness (-Z45-G94)




5207726




4992757

## Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness

OEM Connector: 10094237

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way F 1.2 Multilock Series, Sealed( GY)

## Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 33356666

Service Connector: 19371200

Description: 2-Way M 1.2 MLK Series, Sealed( GY)

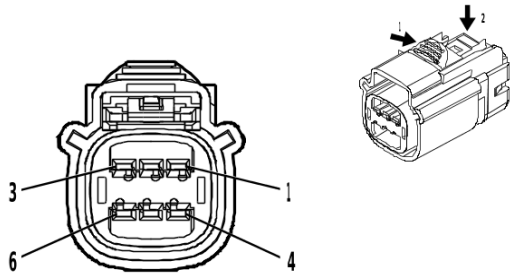
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-17 (L-GN) | No Tool Required |

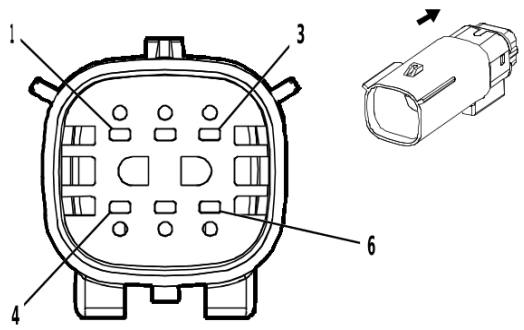
## X420B Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness (-Z45-G94)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / YE | 1616 | I | — | Rear Brake Pad Wear Sensor Signal | 1 | 0.5 | GN / YE | 1616 | II | — |
| 2 | 0.75 | BK / WH | 1751 | I | — | Signal Ground | 2 | 0.5 | BK / WH | 1951 | II | — |

# X420B Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z45/G94)




5004419




1986159

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15513504
Service Connector: 84999473
Description: 6-Way F 1.5 OCS Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 33482-3601
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

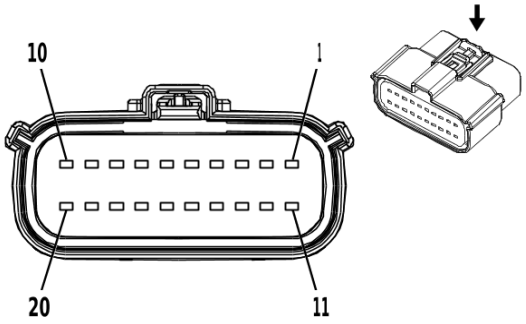
## X420B Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z45/G94)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / GY | 1114 | I | — | Left Rear Shock Absorber Actuator Control | 1 | 0.75 | BU / GY | 1114 | II | Z45 |
| 2 | 0.5 | GN / YE | 1616 | I | — | Rear Brake Pad Wear Sensor Signal | 2 | 0.75 | GN / YE | 1616 | II | Z45+ G94 |
| 3 | 0.75<br>0.75 | GY / BK<br>BN / GN | 7253<br>1118 | I<br>I | G94<br>Z45 | Rear Differential Lock Actuator Low Control<br>Right Rear Shock Absorber Actuator Control | 3 | 0.75<br>0.75 | GY / BK<br>BN / GN | 7253<br>1118 | II<br>II | G94<br>Z45 |
| 4 | 0.75 | GN / VT | 1115 | I | — | Left Rear Shock Absorber Actuator Control | 4 | 0.75 | GN / VT | 1115 | II | Z45 |
| 5 | 0.5 | BK / WH | 1951 | I | — | Signal Ground | 5 | 0.75 | BK / WH | 1751 | II | Z45+ G94 |

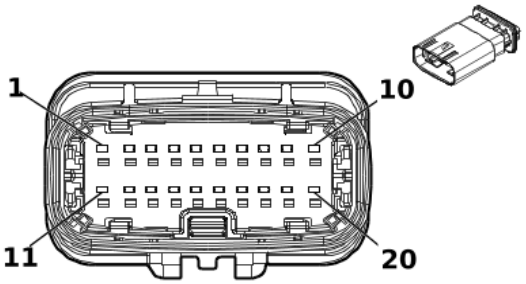
## X420B Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z45/ G94) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.75<br>0.75 | VT / BN<br>GN / GY | 7258<br>1119 | I<br>I | G94<br>Z45 | Rear Differential Lock Actuator Control<br>Right Rear Shock Absorber Actuator Control | 6 | 0.75<br>0.75 | VT / BN<br>GN / GY | 7258<br>1119 | II<br>II | G94<br>Z45 |

# X424 Body Wiring Harness to Chassis Wiring Harness (FHS)




2871898




6081336

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13650143
Service Connector: 19300557
Description: 20-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13544152
Service Connector: 85625526
Description: 20-Way M 1.2 MCON-CB Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | 84867140 | J-35616-13 (BU) | J-38125-215A |
| III | 84867141 | J-35616-13 (BU) | J-38125-215A |

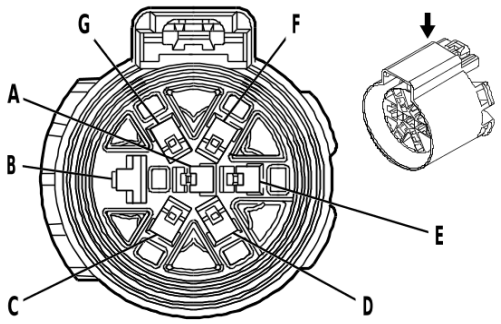
## X424 Body Wiring Harness to Chassis Wiring Harness (FHS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BU / GY | 4054 | I | — | Private Serial Data Power-train CAN Bus [-] Serial Data | 1 | 1 | VT | 7725 | III | — |
| 2 | 0.5 | WH | 4055 | I | — | Private Serial Data Power-train CAN Bus [+] Serial Data | 2 | 0.5 | WH | 4986 | II | — |
| 3 | 0.5 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 3 | 0.5 | WH | 4100 | II | — |
| 4 | 0.5 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 4 | 0.5 | BU / VT | 4101 | II | — |
| 5 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 5 | 0.5 | WH / GY | 4104 | II | — |
| 6 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 6 | 0.5 | BU / GY | 4105 | II | — |
| 7 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 7 | 0.5 | WH / GY | 4104 | II | — |

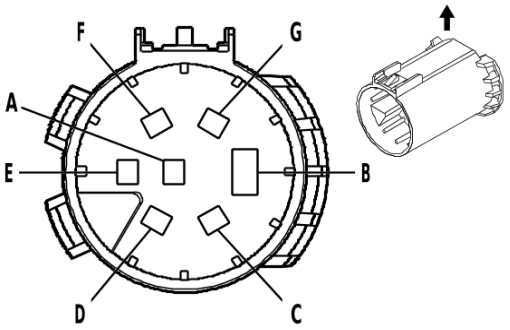
## X424 Body Wiring Harness to Chassis Wiring Harness (FHS) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 8 | 0.5 | BU / GY | 4105 | II | — |
| 9 | 0.35 | YE | 1144 | I | — | Endgate Release Switch Discrete Signal Exterior | 9 | 0.5 | YE | 1144 | II | — |
| 10 | 1 | GN | 1299 | I | — | Major Endgate Motor Control | 10 | 1 | GN | 1299 | III | — |
| 11 | 0.5 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 11 | 1 | BK | 9003 | III | — |
| 12 | 0.5 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 12 | 0.5 | BU | 4987 | II | — |
| 13 | 0.35 | YE / BU | 7295 | I | — | Left Minor Endgate Ajar Signal | 13 | 0.75 | YE / BU | 7295 | II | — |
| 14 | — | — | — | — | — | Private Serial Data Powertrain CAN Bus [-] Serial Data | 14 | 0.5 | BU / GY | 4054 | II | — |
| 15 | 1 | VT | 7725 | I | — | Minor Endgate Motor Control | 15 | 0.5 | WH | 4055 | II | — |
| 16 | 1 | YE / BK | 7730 | I | — | Major Endgate Motor Low Reference | 16 | — | — | — | — | — |
| 17 | 0.5 | WH | 4986 | I | — | AUTOSAR CAN Bus [-] 1 Serial Data | 17 | 0.5 | WH | 4986 | II | — |
| 18 | 0.5 | BU | 4987 | I | — | AUTOSAR CAN Bus [+] 1 Serial Data | 18 | 0.5 | BU | 4987 | II | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | — | — | — | — | — | Major Endgate Motor Low Reference | 20 | 1 | YE / BK | 7730 | III | — |

# X480 Chassis Wiring Harness to Backup Alarm Wiring Harness (8S3)




2056936




366087

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13857223
Service Connector: 86816072
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed( BK)

### Connector Part Information

Harness Type: Backup Alarm Wiring Harness
OEM Connector: 15317327
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way M 280 Metri-Pack Series, Sealed( BK)

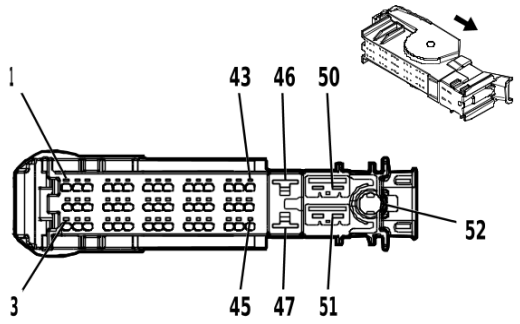
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-42 (RD) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | Not required | J-35616-43 (RD) | No Tool Required |
| IV | Not required | J-35616-5 (PU) | No Tool Required |

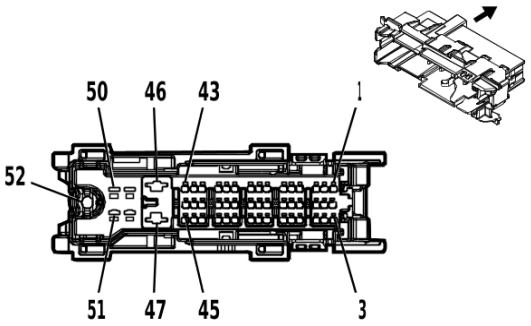
## X480 Chassis Wiring Harness to Backup Alarm Wiring Harness (8S3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | GY | 1624 | II | — | Trailer Back-up Lamp Control | A | 1 | GN | 1624 | IV | — |
| B | 5 | WH | 22 | I | — | Trailer Ground | B | 5 | WH | 22 | III | — |
| C | 2.5 | BU | 47 | II | — | Trailer Auxiliary Control | C | 3 | BU | 47 | IV | — |
| D | 1 | GN | 1619 | II | — | Right Rear Trailer Stop/ Turn Lamp Control | D | 0.8 | GN | 1619 | IV | — |
| E | 4 | OG | 3940 | II | — | Battery Positive Voltage | E | 3 | RD / BK | 742 | IV | — |
| F | 1.5 | BN | 2109 | II | — | Trailer Park Lamp Control | F | 1 | BN | 2109 | IV | — |
| G | 1 | YE | 1618 | II | — | Left Rear Trailer Stop/ Turn Lamp Control | G | 0.8 | YE | 1618 | IV | — |

# X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness




4992530




4993484

### Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35077349
Service Connector: Service by Harness - See Part Catalog
Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35190453
Service Connector: 13527236
Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-42 (RD) | No Tool Required |
| III | Not required | No Tool Required | No Tool Required |
| IV | 19301536 | J-35616-43 (RD) | J-38125-11A |
| V | 84616651 | J-35616-13 (BU) | J-38125-215A |
| VI | Service by Cable | No Tool Required | J-38125-12A |

## X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.5 | RD / BU | 1240 | I | — | Battery Positive Voltage | 2 | 0.5 | RD / BU | 1240 | V | — |
| 3 - 5 | — | — | — | — | — | Not Occupied | 3 - 5 | — | — | — | — | — |
| 6 | 0.5 | BK / OG | 6628 | I | — | Left Front Side Impact Sensor Low Reference | 6 | 0.5 | BK / OG | 6628 | V | — |
| 7 | 0.75 | BN / BU | 118 | I | — | Left Front Speaker [-] Control 1 | 7 | 0.75 | BN / BU | 118 | V | — |
| 8 | 0.75 | BU | 201 | I | — | Left Front Speaker 1 [+] Control | 8 | 0.75 | BU | 201 | V | — |
| 9 | 0.5 | OG / GN | 2132 | I | — | Left Front Side Impact Sensor Signal | 9 | 0.5 | OG / GN | 2132 | V | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

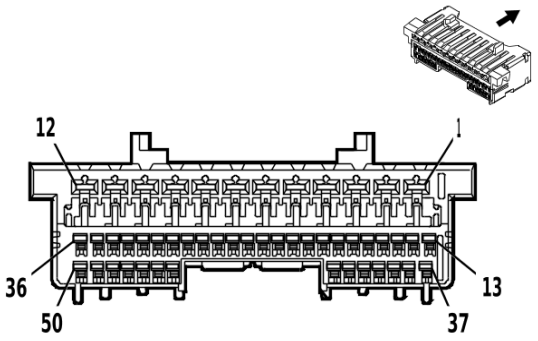
## X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 0.5 | VT | 4301 | I | — | Passive Entry Left Front Antenna Signal High | 11 | 0.35 | VT | 4301 | V | — |
| 12 | 0.5 | VT / GY | 4302 | I | — | Passive Entry Left Front Antenna Signal Low | 12 | 0.35 | VT / GY | 4302 | V | — |
| 13 | 0.5 | VT / GY | 126 | I | — | Left Front Door Open Switch Signal | 13 | 0.35 | VT / GY | 126 | V | — |
| 14 | 0.5 | YE / WH | 1690 | I | — | Mirror Dimming Signal | 14 | 0.35 | YE / WH | 1690 | V | — |
| 15 | 0.5 | BK / YE | 1691 | I | — | Automatic Day/Night Mirror Low Reference | 15 | 0.35 | BK / YE | 1691 | V | — |
| 16 | 0.5 | WH / GY | 2114 | I | — | Left Turn Signal Lamp Control 2 | 16 | 0.35 | WH / GY | 2114 | V | — |
| 17 | 0.5 | BU | 2675 | I | — | Left Front Exterior Door Handle Switch Unlock Signal | 17 | 0.35 | BU | 2675 | V | — |
| 18 | 0.75 | WH | 2679 | I | — | Lock Actuators Unlock Control 1 | 18 | 0.75 | WH | 2679 | V | — |
| 19 | 0.75 | GY | 2681 | I | — | Left Front Door Lock Actuator Lock Control | 19 | 0.75 | GY | 2681 | V | — |
| 20 - 22 | — | — | — | — | — | Not Occupied | 20 - 22 | — | — | — | — | — |
| 23 | 0.5 | WH / GN | 5966 | I | — | Approach Lamp Control | 23 | 0.5 | WH / GN | 5966 | V | — |
| 24 | — | — | — | — | — | Not Occupied | 24 | — | — | — | — | — |
| 25 | 0.5 | BU / GN | 614 | I | — | Seat Memory Switch Set Signal | 25 | 0.35 | BU / GN | 614 | V | — |
| 26 | 0.5 | BU / YE | 7761 | I | — | Backup Illumination Lamp Control | 26 | 0.35 | BU / YE | 7761 | V | — |
| 27 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 27 | 0.5 | YE | 6817 | V | — |
| 28 | — | — | — | — | — | Not Occupied | 28 | — | — | — | — | — |
| 29 | 0.5 | GN / YE | 6134 | I | — | Body Control Module LIN Bus 3 | 29 | 0.35 | GN / YE | 6134 | V | — |
| 30 | 0.5 | BN / GN | 4246 | I | — | Identification Lamp Control | 30 | 0.5 | BN / GN | 4246 | V | — |

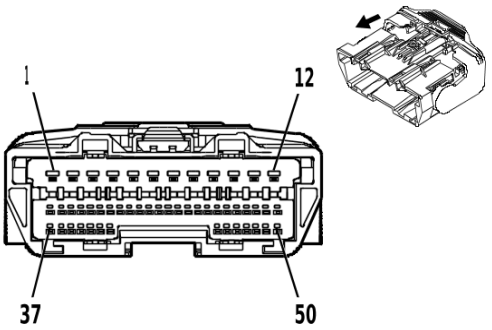
## X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 0.5 | BK / WH | 1551 | I | — | Ground<br>Signal Ground | 31 | 0.5<br>0.5 | BK<br>BK / WH | 1550<br>1551 | V<br>V | REGULAR CAB<br>EXTENDED CAB/ CREW CAB |
| 32 | 0.5 | YE / GY | 2933 | I | — | Task Lamp Control Left | 32 | 0.35 | YE / GY | 2933 | V | — |
| 33 | 0.5 | WH | 615 | I | — | Seat Memory Switch Signal 1 | 33 | 0.35 | WH | 615 | V | — |
| 34 - 45 | — | — | — | — | — | Not Occupied | 34 - 45 | — | — | — | — | — |
| 46 | 2.5 | RD / GY | 3540 | II | — | Battery Positive Voltage | 46 | 2.5 | RD / GY | 3540 | IV | — |
| 47 | 2.5 | BK | 1550 | II | — | Ground | 47 | 2.5 | BK | 1550 | IV | — |
| 48 - 51 | — | — | — | — | — | Not Occupied | 48 - 51 | — | — | — | — | — |
| 52 | — | BK | 4725 | III | — | Left Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | 52 | 0.8 | BK | 4725 | VI | — |

# X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver




4997556




5022037

### Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35283943
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series( BK)

### Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way M 1.2, 2.8 OCS Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | Not required | J-35616-17 (L-GN) | No Tool Required |
| IV | Not required | J-35616-5 (PU) | No Tool Required |

## X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / BU | 1240 | II | — | Battery Positive Voltage | 1 | 0.5 | RD / BU | 1240 | IV | — |
| 2 | 0.5 | GY / YE | 1760 | II | — | Left Side Object Detection LED Control | 2 | 0.35 | GY / YE | 1760 | IV | — |
| 3 | — | — | — | — | — | Not Occupied | 3 | — | — | — | — | — |
| 4 | 0.5 | GY / GN | 2763 | II | — | Window Switch Left Front Up Signal | 4 | 0.5 | GY / GN | 2763 | IV | — |
| 5 | — | — | — | — | — | Not Occupied | 5 | — | — | — | — | — |
| 6 | 0.5 | WH / BN | 2764 | II | — | Window Switch Left Front Down Signal | 6 | 0.5 | WH / BN | 2764 | IV | — |
| 7 | — | — | — | — | — | Not Occupied | 7 | — | — | — | — | — |

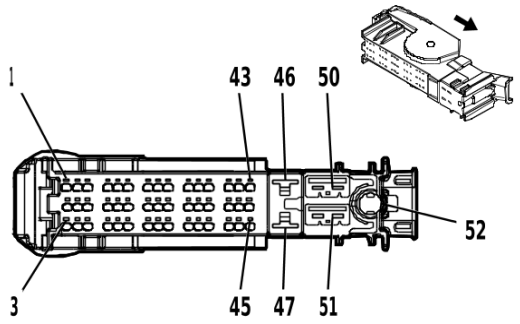
## X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.5 | GN | 2766 | II | — | Power Window Switch Left Front Express Signal | 8 | 0.5 | GN | 2766 | IV | — |
| 9 - 11 | — | — | — | — | — | Not Occupied | 9 - 11 | — | — | — | — | — |
| 12 | 0.5 | GY / WH | 2785 | II | — | Left Front Mirror Motor Fold Out Control | 12 | 0.5 | GY / WH | 2785 | IV | — |
| 13 | 0.5 | WH / GN | 2786 | I | — | Left Front Mirror Motor Fold In Control | 13 | 0.5 | WH / GN | 2786 | III | — |
| 14 | 0.5 | GY / BN | 2787 | I | — | Left Front Mirror Position Sensor Up [+] Down [-] Signal | 14 | 0.5 | GY / BN | 2787 | III | — |
| 15 | 0.5 | VT / BU | 2788 | I | — | Left Front Mirror Motor Up [+] Down [-] Control | 15 | 0.5 | VT / BU | 2788 | III | — |
| 16 | 0.5 | YE / BN | 2789 | I | — | Left Front Mirror Motor Common Control | 16 | 0.5 | YE / BN | 2789 | III | — |
| 17 | 0.5 | BN / BK | 2790 | I | — | Left Front Mirror Motor Right [+] Left [-] Control | 17 | 0.5 | BN / BK | 2790 | III | — |
| 18 | 0.5 | VT / RD | 2791 | I | — | Left Front Mirror Position Sensor High Reference | 18 | 0.5 | VT / RD | 2791 | III | — |
| 19 | 0.5 | WH / YE | 2792 | I | — | Left Front Mirror Position Sensor Left [-] Right [+] Signal | 19 | 0.5 | WH / YE | 2792 | III | — |
| 20 | 0.5 | WH | 606 | I | — | Left Outside Rearview Mirror Heater Control | 20 | 0.5 | WH | 606 | III | — |
| 21 | 0.5 | GN / YE | 6134 | I | — | Body Control Module LIN Bus 3 | 21 | 0.5 | GN / YE | 6134 | III | — |
| 22 | 0.5 | BU / GN | 614 | I | — | Seat Memory Switch Set Signal | 22 | 0.5 | BU / GN | 614 | III | — |
| 23 | 0.5 | WH | 615 | I | — | Seat Memory Switch Signal 1 | 23 | 0.5 | WH | 615 | III | — |
| 24 | 0.5 | BK / BN | 673 | I | — | Left Outside Rearview Mirror Position Sensor Low Reference | 24 | 0.5 | BK / BN | 673 | III | — |

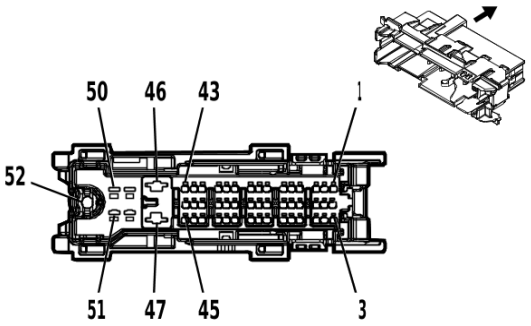
## X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 25 | 0.5 | YE | 6817 | III | — |
| 26 | — | — | — | — | — | Not Occupied | 26 | — | — | — | — | — |
| 27 | 0.5 | BK | 1550 | I | — | Ground | 27 | 0.5 | BK | 1550 | III | — |
| 28 | 0.5 | BK / WH | 1551 | I | — | Signal Ground | 28 | 0.5 | BK / WH | 1551 | III | — |
| 29 | 0.5 | WH / VT | 4258 | I | — | Left Front Door Lock Status Signal | 29 | 0.5 | WH / VT | 4258 | III | — |
| 30 - 50 | — | — | — | — | — | Not Occupied | 30 - 50 | — | — | — | — | — |

# X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness




4992530




4993484

## Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35077349
Service Connector: Service by Harness - See Part Catalog
Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series( BK)

## Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35190453
Service Connector: 13527236
Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-42 (RD) | No Tool Required |
| III | Not required | No Tool Required | No Tool Required |
| IV | 19301536 | J-35616-43 (RD) | J-38125-11A |
| V | 84616651 | J-35616-13 (BU) | J-38125-215A |
| VI | Service by Cable | No Tool Required | J-38125-12A |

## X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | — | — | Not Occupied | 1 - 4 | — | — | — | — | — |
| 5 | 0.75 | YE | 200 | I | — | Right Front Speaker 1 [+] Control | 5 | 0.75 | YE | 200 | V | — |
| 6 | 0.75 | YE / BK | 117 | I | — | Right Front Speaker [-] Control 1 | 6 | 0.75 | YE / BK | 117 | V | — |
| 7 | — | — | — | — | — | Not Occupied | 7 | — | — | — | — | — |
| 8 | 0.5 | BN / OG | 2134 | I | — | Right Front Side Impact Sensor Signal | 8 | 0.5 | BN / OG | 2134 | V | — |
| 9 | 0.5 | BK / OG | 6629 | I | — | Right Front Side Impact Sensor Low Reference | 9 | 0.5 | BK / OG | 6629 | V | — |

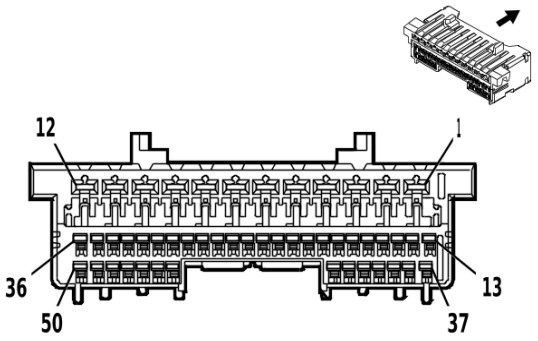
## X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | GN / YE | 4303 | I | — | Passive Entry Right Front Door Antenna Signal High | 10 | 0.35 | GN / YE | 4303 | V | — |
| 11 | 0.5 | GN / BK | 4304 | I | — | Passive Entry Right Front Door Antenna Signal Low | 11 | 0.35 | GN / BK | 4304 | V | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | GN / GY | 2115 | I | — | Right Turn Signal Lamp Control 2 | 13 | 0.35 | GN / GY | 2115 | V | — |
| 14 | 0.5 | GY / VT | 2676 | I | — | Right Front Door Exterior Switch Unlock Signal | 14 | 0.35 | GY / VT | 2676 | V | — |
| 15 | 0.75 | GY / BK | 2680 | I | — | Lock Actuators Unlock Control 2 | 15 | 0.75 | GY / BK | 2680 | V | — |
| 16 | 0.75 | YE / GN | 2682 | I | — | Right Front Door Lock Actuator Lock Control | 16 | 0.75 | YE / GN | 2682 | V | — |
| 17 - 19 | — | — | — | — | — | Not Occupied | 17 - 19 | — | — | — | — | — |
| 20 | 0.5 | WH / GN | 5966 | I | — | Approach Lamp Control | 20 | 0.5 | WH / GN | 5966 | V | — |
| 21 | — | — | — | — | — | Not Occupied | 21 | — | — | — | — | — |
| 22 | 0.5 | BK / GY | 626 | I | — | Engine Control Vehicle Sensors Low Reference 1 | 22 | 0.5 | BK / GY | 626 | V | — |
| 23 | 0.5 | BU / GY | 636 | I | — | Ambient Air Temperature Sensor Signal | 23 | 0.5 | BU / GY | 636 | V | — |
| 24 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 24 | 0.5 | YE | 6817 | V | — |
| 25 | — | — | — | — | — | Not Occupied | 25 | — | — | — | — | — |
| 26 | 0.5 | BU / YE | 7761 | I | — | Backup Illumination Lamp Control | 26 | 0.35 | BU / YE | 7761 | V | — |
| 27 | — | — | — | — | — | Not Occupied | 27 | — | — | — | — | — |
| 28 | 0.5 | BK / WH | 1451 | I | — | Signal Ground | 28 | 0.75 | BK / WH | 1451 | V | — |
| 29 | 0.5 | GN / YE | 6134 | I | — | Body Control Module LIN Bus 3 | 29 | 0.35 | GN / YE | 6134 | V | — |
| 30 | 0.5 | YE / WH | 2934 | I | — | Task Lamp Control Right | 30 | 0.35 | YE / WH | 2934 | V | — |

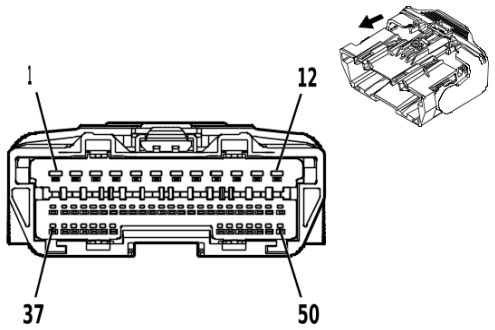
## X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 0.5 | BN / GN | 4246 | I | — | Identification Lamp Control | 31 | 0.5 | BN / GN | 4246 | V | — |
| 32 - 45 | — | — | — | — | — | Not Occupied | 32 - 45 | — | — | — | — | — |
| 46 | 2.5 | RD / BN | 4240 | II | — | Battery Positive Voltage | 46 | 2.5 | RD / BN | 4240 | IV | — |
| 47 | 2.5 | BK | 1350 | II | — | Ground | 47 | 2.5 | BK | 1350 | IV | — |
| 48 - 51 | — | — | — | — | — | Not Occupied | 48 - 51 | — | — | — | — | — |
| 52 | — | BK | 4724 | III | — | Right Side-view Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal | 52 | — | BK | 4724 | VI | — |

# X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger




4997556




5022037

### Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger

OEM Connector: 35283943

Service Connector: Service by Harness - See Part Catalog

Description: 50-Way F 1.2, 2.8 OCS Series( BK)

### Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger

OEM Connector: 33390111

Service Connector: Service by Harness - See Part Catalog

Description: 50-Way M 1.2, 2.8 OCS Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | Not required | J-35616-17 (L-GN) | No Tool Required |
| IV | Not required | J-35616-5 (PU) | No Tool Required |

## X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / BN | 4240 | II | — | Battery Positive Voltage | 1 | 2.5 | RD / BN | 4240 | IV | — |
| 2 | 0.5 | GN | 1184 | II | — | Window Switch Right Front Up Signal | 2 | 0.5 | GN | 1184 | IV | — |
| 3 | 0.5 | GY | 1761 | II | — | Right Side Object Detection LED Control | 3 | 0.35 | GY | 1761 | IV | — |
| 4 | — | — | — | — | — | Not Occupied | 4 | — | — | — | — | — |
| 5 | 0.5 | VT / GY | 2765 | II | — | Window Switch Right Front Express Signal | 5 | 0.5 | VT / GY | 2765 | IV | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |
| 8 | 0.5 | YE / WH | 2793 | II | — | Right Front Mirror Motor Fold Out Control | 8 | 0.5 | YE / WH | 2793 | IV | — |

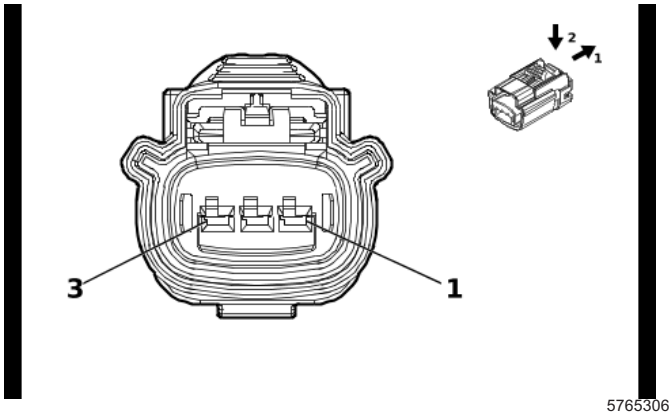
## X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | BU / GY | 2794 | II | — | Right Front Mirror Motor Fold In Control | 9 | 0.5 | BU / GY | 2794 | IV | — |
| 10 | 2.5 | BK | 1350 | II | — | Ground | 10 | 2.5 | BK | 1350 | IV | — |
| 11 | 2 | GN / GY | 666 | II | — | Right Front Window Motor Up Control | 11 | 2.5 | GN / GY | 666 | IV | — |
| 12 | 2 | YE / BU | 667 | II | — | Right Front Window Motor Down Control | 12 | 2.5 | YE / BU | 667 | IV | — |
| 13 | 0.5 | GN / BK | 2798 | I | — | Right Front Mirror Motor Right [+] Left [-] Control | 13 | 0.5 | GN / BK | 2798 | III | — |
| 14 | 0.5 | YE / RD | 2799 | I | — | Right Front Mirror Position Sensor High Reference | 14 | 0.5 | YE / RD | 2799 | III | — |
| 15 | 0.5 | VT / WH | 2800 | I | — | Right Front Mirror Position Sensor Left [-] Right [+] Signal | 15 | 0.5 | VT / WH | 2800 | III | — |
| 16 | 0.5 | BN | 5295 | I | — | Window Switch Right Front Down Signal | 16 | 0.5 | BN | 5295 | III | — |
| 17 | 0.5 | BN / VT | 607 | I | — | Right Outside Rearview Mirror Heater Control | 17 | 0.5 | BN / VT | 607 | III | — |
| 18 | 0.5 | GN / YE | 6134 | I | — | Body Control Module LIN Bus 3 | 18 | 0.5 | GN / YE | 6134 | III | — |
| 19 - 20 | — | — | — | — | — | Not Occupied | 19 - 20 | — | — | — | — | — |
| 21 | 0.5 | BK / GN | 675 | I | — | Right Outside Rearview Mirror Position Sensor Low Reference | 21 | 0.5 | BK / GN | 675 | III | — |
| 22 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control 1 | 22 | 0.5 | YE | 6817 | III | — |
| 23 - 46 | — | — | — | — | — | Not Occupied | 23 - 46 | — | — | — | — | — |
| 47 | 0.5 | GY | 746 | I | — | Right Front Door Ajar Switch Signal | 47 | 0.5 | GY | 746 | III | — |

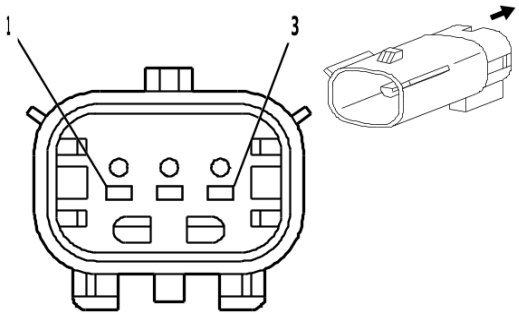
## X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | 0.5 | BU / YE | 2795 | I | — | Right Front Mirror Position Sensor Up [+] Down [-] Signal | 48 | 0.5 | BU / YE | 2795 | III | — |
| 49 | 0.5 | YE / VT | 2796 | I | — | Right Front Mirror Motor Up [+] Down [-] Control | 49 | 0.5 | YE / VT | 2796 | III | — |
| 50 | 0.5 | WH | 2797 | I | — | Right Front Mirror Motor Common Control | 50 | 0.5 | WH | 2797 | III | — |

# X618A Engine Wiring Harness to Active Grille Air Shutter Actuator Wiring Harness (VTI/WMI)




5765306




1870038

## Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15514762
Service Connector: 85535179
Description: 3-Way F 1.5 YESC Series, Sealed( BK)

## Connector Part Information

Harness Type: Active Grille Air Shutter Actuator Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M ( BK)

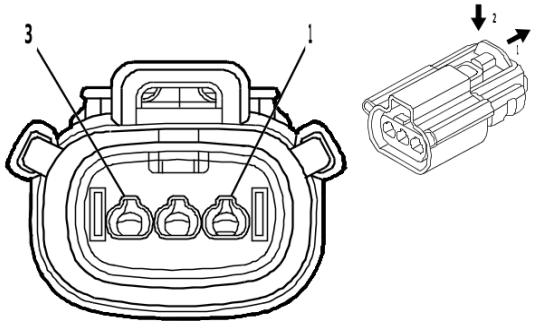
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

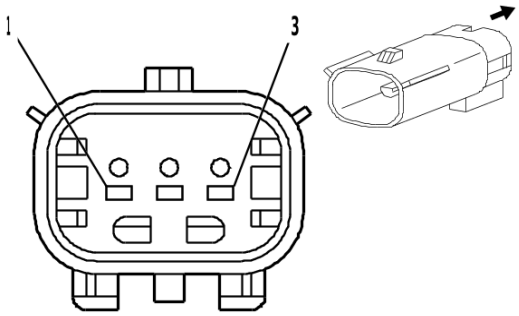
## X618A Engine Wiring Harness to Active Grille Air Shutter Actuator Wiring Harness (VTI/WMI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5705 | I | — | Powertrain Main Relay Control | 1 | 0.5 | VT / BU | 5705 | II | — |
| 2 | 0.5 | GN / VT | 4621 | I | — | Engine Control Module LIN Bus 1 | 2 | 0.5 | GN / VT | 4621 | II | — |
| 3 | 0.5 | BK | 450 | I | L3B | Ground | 3 | 0.5 | BK | 450 | II | L3B |
| | 1 | BK | 450 | I | L84 | Ground | | 1 | BK | 450 | II | L84 |
| | 0.5 | BK | 6550 | I | LM2 | Ground | | 0.5 | BK | 6550 | II | LM2 |

# X618L Active Grille Air Shutter to Active Grille Air Shutter Jumper (WMI)




5095610




1870038

### Connector Part Information

Harness Type: Active Grille Air Shutter
OEM Connector: 13526813
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.5 Series, Sealed( BK)

### Connector Part Information

Harness Type: Active Grille Air Shutter Jumper
OEM Connector: 13526822
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M 1.5 MX Series, Sealed( BK)

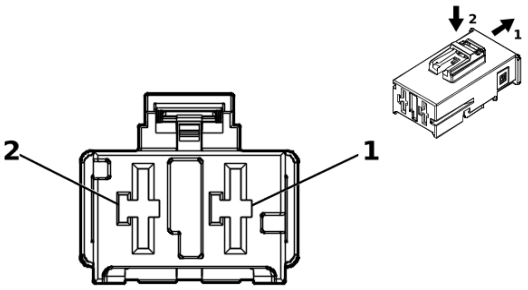
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-3 (GY) | No Tool Required |
| II | Not required | J-35616-14 (GN) | No Tool Required |

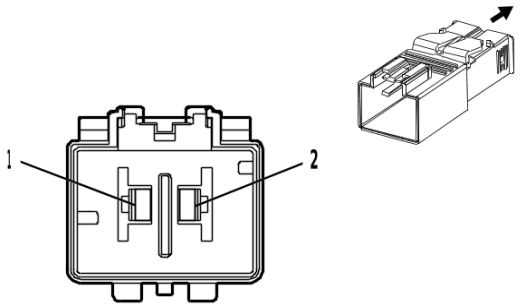
## X618L Active Grille Air Shutter to Active Grille Air Shutter Jumper (WMI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT / BU | 5705 | I | — | Powertrain Main Relay Control | 1 | 0.5 | VT / BU | 5705 | II | — |
| 2 | 0.5 | GN / VT | 4621 | I | — | Engine Control Module LIN Bus 1 | 2 | 0.5 | GN / VT | 4621 | II | — |
| 3 | 0.5<br>0.5 | BK<br>BK | 450<br>6550 | I<br>I | L84/ L87<br>LM2 | Ground<br>Ground | 3 | 0.5<br>0.5 | BK<br>BK | 450<br>6550 | II<br>II | L84/ L87<br>LM2 |

# X630 Auxiliary Fuse Block Wiring Harness to Auxiliary Fuse Block Wiring Harness




5187955




4891120

### Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 35134698
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 9.5 MCON-LL Series( BK)

### Connector Part Information

Harness Type: Auxiliary Fuse Block Wiring Harness
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 9.5 MCON-LL Series( BK)

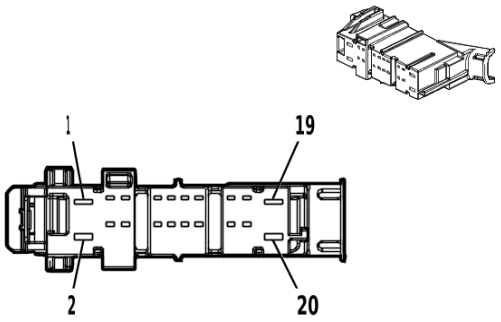
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-22 (RD) | No Tool Required |
| II | Not required | J-35616-21 (RD) | No Tool Required |

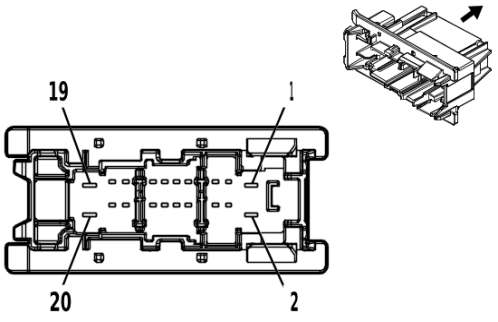
## X630 Auxiliary Fuse Block Wiring Harness to Auxiliary Fuse Block Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10 | RD / VT | 542 | I | — | Battery Positive Voltage | 1 | 10 | RD / VT | 542 | II | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |

# X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness - EXTENDED CAB/CREW CAB




4650257




4663657

### Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33303652
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.2 MCON, 2.8 MCP Series( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35215020
Service Connector: 13527239
Description: 20-Way M 1.2 MCON, 2.8 MCP Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-35 (VT) | No Tool Required |
| III | 13586064 | J-35616-5 (PU) | J-38125-36 |
| IV | 84616651 | J-35616-13 (BU) | J-38125-215A |
| V | 84726946 | J-35616-13 (BU) | J-38125-215A |

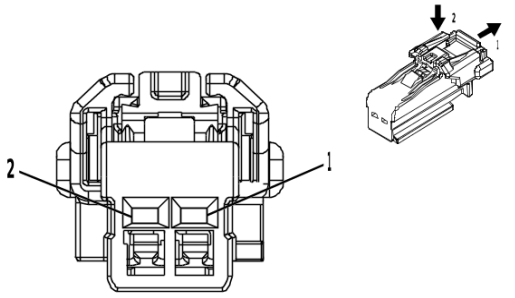
## X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | RD / BU | 3240 | II | — | Battery Positive Voltage | 1 | 2.5 | RD / BU | 3240 | III | — |
| 2 - 5 | — | — | — | — | — | Not Occupied | 2 - 5 | — | — | — | — | — |
| 6 | 0.75 | WH | 2679 | I | — | Lock Actuators Unlock Control 1 | 6 | 0.75 | WH | 2679 | IV | — |
| 7 | 0.75 | BU / YE | 1091 | I | — | Left Rear Door Lock Actuator Lock Control | 7 | 0.75 | BU / YE | 1091 | IV | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |
| 9 | 0.5 | BK / OG | 6623 | I | — | Left Rear Side Impact Sensor Low Reference | 9 | 0.5 | BK / OG | 6623 | IV | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

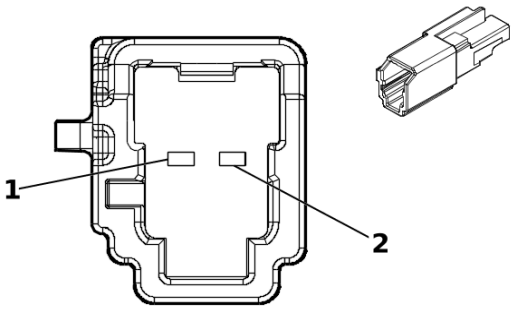
## X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness - EXTENDED CAB/CREW CAB (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 0.5 | OG / BU | 6622 | I | — | Left Rear Side Impact Sensor Signal | 11 | 0.5 | OG / BU | 6622 | IV | — |
| 12 | 0.5 | GN / GY | 6135 | I | — | Body Control Module LIN Bus 4 | 12 | 0.35 | GN / GY | 6135 | IV | — |
| 13 - 16 | — | — | — | — | — | Not Occupied | 13 - 16 | — | — | — | — | — |
| 17 | 0.75 | GN | 199 | I | — | Left Rear Speaker [+] Control<br>Left Rear Speaker [+] Control | 17 | 1.5<br>0.75 | GN<br>GN | 199<br>199 | V<br>IV | UQS<br>UQA/ UQF |
| 18 | 0.75 | GN / BK | 116 | I | — | Left Rear Speaker [-] Control<br>Left Rear Speaker [-] Control | 18 | 1.5<br>0.75 | GN / BK<br>GN / BK | 116<br>116 | V<br>IV | UQS<br>UQA/ UQF |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 2.5 | BK | 1550 | II | — | Ground | 20 | 2.5 | BK | 1550 | III | — |

# X701 Rear Side Door Door Wiring Harness - Left to Rear Side Door Wiring Harness - Tweeter Jumper (UQS)




4373379




5360948

### Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35311601
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( GY)

### Connector Part Information

Harness Type: Rear Side Door Wiring Harness - Tweeter Jumper
OEM Connector: 35264701
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series( GY)

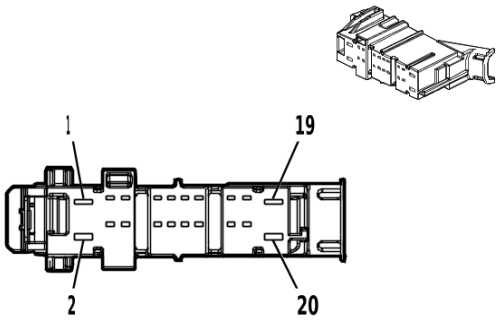
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

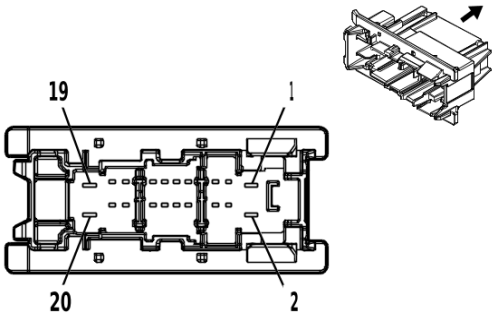
## X701 Rear Side Door Door Wiring Harness - Left to Rear Side Door Wiring Harness - Tweeter Jumper (UQS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | GN / BK | 116 | I | — | Left Rear Speaker [-] Control | 1 | 0.75 | GN / BK | 116 | II | — |
| 2 | 0.75 | GN | 199 | I | — | Left Rear Speaker [+] Control | 2 | 0.75 | GN | 199 | II | — |

# X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness - EXTENDED CAB/CREW CAB




4650257




4663657

### Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 33303652
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.2 MCON, 2.8 MCP Series( BK)

### Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35215020
Service Connector: 13527239
Description: 20-Way M 1.2 MCON, 2.8 MCP Series( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-35 (VT) | No Tool Required |
| III | 13586064 | J-35616-5 (PU) | J-38125-36 |
| IV | 84616651 | J-35616-13 (BU) | J-38125-215A |
| V | 84726946 | J-35616-13 (BU) | J-38125-215A |

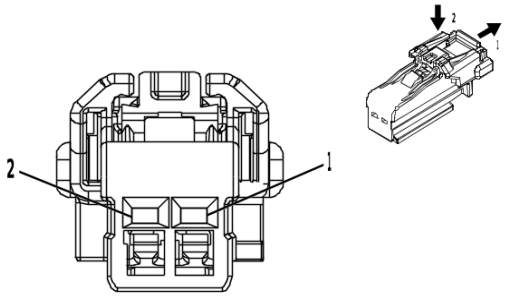
## X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness - EXTENDED CAB/CREW CAB

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | YE / BK | 4840 | II | — | Battery Positive Voltage | 1 | 2.5 | RD / GY | 4840 | III | — |
| 2 - 5 | — | — | — | — | — | Not Occupied | 2 - 5 | — | — | — | — | — |
| 6 | 0.75 | GY / BK | 2680 | I | — | Lock Actuators Unlock Control 2 | 6 | 0.75 | GY / BK | 2680 | IV | — |
| 7 | 0.75 | VT / WH | 1094 | I | — | Right Rear Door Lock Actuator Lock Control | 7 | 0.75 | VT / WH | 1094 | IV | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |
| 9 | 0.5 | BK / OG | 6627 | I | — | Right Rear Side Impact Sensor Low Reference | 9 | 0.5 | BK / OG | 6627 | IV | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

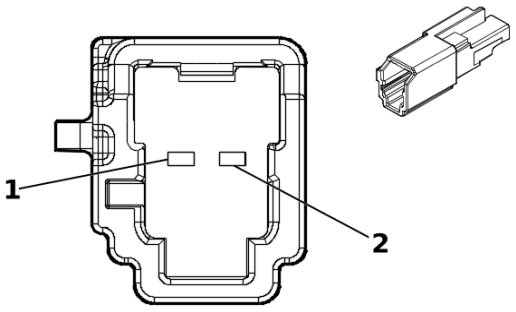
## X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness - EXTENDED CAB/CREW CAB (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 0.5 | OG / WH | 6626 | I | — | Right Rear Side Impact Sensor Signal | 11 | 0.5 | OG / WH | 6626 | IV | — |
| 12 | 0.5 | GN / GY | 6135 | I | — | Body Control Module LIN Bus 4 | 12 | 0.35 | GN / GY | 6135 | IV | — |
| 13 - 16 | — | — | — | — | — | Not Occupied | 13 - 16 | — | — | — | — | — |
| 17 | 0.75 | WH | 46 | I | — | Right Rear Speaker [+] Control<br>Right Rear Speaker [+] Control | 17 | 1.5<br>0.75 | WH<br>WH | 46<br>46 | V<br>IV | UQS<br>UQA/ UQF |
| 18 | 0.75 | BU / BK | 115 | I | — | Right Rear Speaker [-] Control<br>Right Rear Speaker [-] Control | 18 | 1.5<br>0.75 | BU / BK<br>BU / BK | 115<br>115 | V<br>IV | UQS<br>UQA/ UQF |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 2.5 | BK | 1350 | II | — | Ground | 20 | 2.5 | BK | 1350 | III | — |

# X801 Rear Side Door Door Wiring Harness - Right to Rear Side Door Wiring Harness - Tweeter Jumper (UQS)




4373379




5360948

## Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35311601
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series( GY)

## Connector Part Information

Harness Type: Rear Side Door Wiring Harness - Tweeter Jumper
OEM Connector: 35264701
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series( GY)

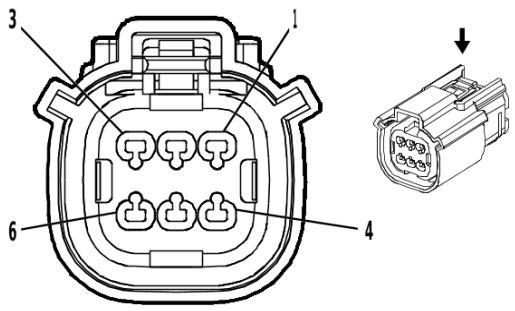
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

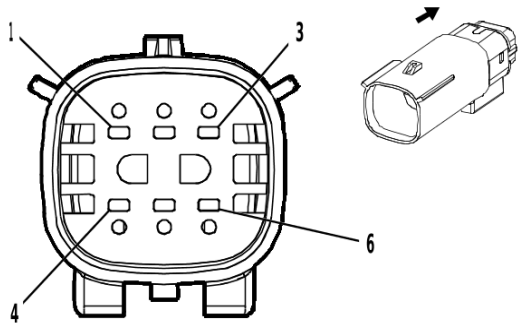
## X801 Rear Side Door Door Wiring Harness - Right to Rear Side Door Wiring Harness - Tweeter Jumper (UQS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BU / BK | 115 | I | — | Right Rear Speaker [-] Control | 1 | 0.75 | GN / BK | 115 | II | — |
| 2 | 0.75 | WH | 46 | I | — | Right Rear Speaker [+] Control | 2 | 0.75 | GN | 46 | II | — |

# X910 Tail Lamp Wiring Harness - Left to Chassis Wiring Harness (GA4 / GFG / GFU / GFW / GFY)




1986157




1986159

### Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: 19178149
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35014074
Service Connector: 19367742
Description: 6-Way M 1.5 MX Series, Sealed( BK)

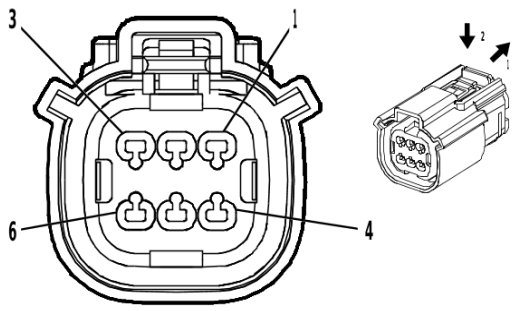
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

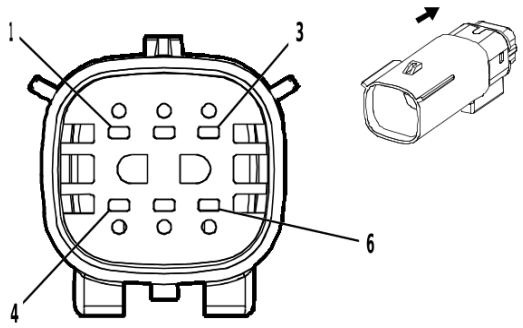
## X910 Tail Lamp Wiring Harness - Left to Chassis Wiring Harness (GA4 / GFG / GFU / GFW / GFY)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 6993 | I | — | Left Rear Park Lamp Control | 1 | 0.75 | BN / BU | 6993 | II | — |
| 2 | 0.75 | RD | 6567 | I | — | Rear Turn Signal Lamp Feedback Signal | 2 | 0.75 | WH / VT | 6567 | II | — |
| 3 | 0.75 | BU | 7762 | I | — | Cargo Lamp Control | 3 | 0.5 | GY / BU | 7762 | II | — |
| 4 | 0.75 | GN | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN / WH | 24 | II | — |
| 5 | 0.75 | GN | 1334 | I | — | Left Rear Turn Signal Lamp Control 2 | 5 | 0.75 | BU / WH | 1334 | II | — |
| 6 | 0.75 | BK | 1951 | I | — | Signal Ground | 6 | 0.75 | BK | 1951 | II | — |

# X910 Tail Lamp Wiring Harness - Left to Chassis Wiring Harness (GFF / GFI / GFJ / GFS)




4574736




1986159

### Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Left
OEM Connector: 13592504
Service Connector: 19367742
Description: 6-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35014074
Service Connector: 19367742
Description: 6-Way M 1.5 MX Series, Sealed( BK)

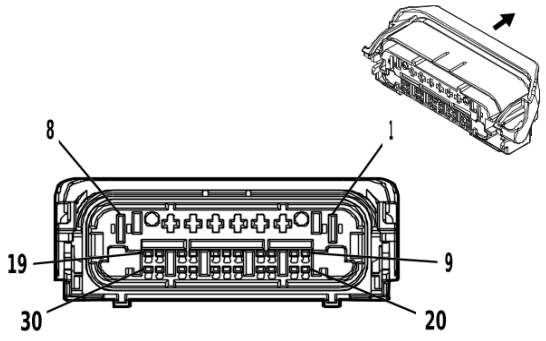
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

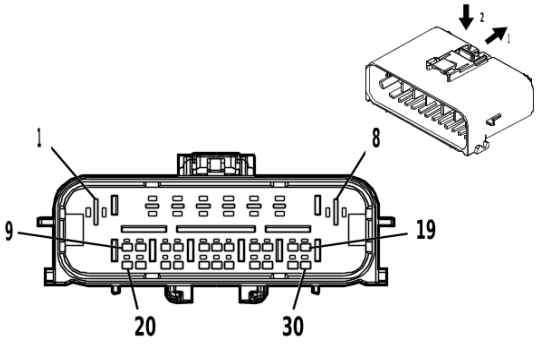
## X910 Tail Lamp Wiring Harness - Left to Chassis Wiring Harness (GFF / GFI / GFJ / GFS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / BU | 6993 | I | — | Left Rear Park Lamp Control | 1 | 0.75 | BN / BU | 6993 | II | — |
| 2 | 0.75 | WH / VT | 6567 | I | — | Rear Turn Signal Lamp Feedback Signal | 2 | 0.75 | WH / VT | 6567 | II | — |
| 3 | 0.5 | GY / BU | 7762 | I | — | Cargo Lamp Control | 3 | 0.5 | GY / BU | 7762 | II | — |
| 4 | 0.5 | GN / WH | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN / WH | 24 | II | — |
| 5 | 0.75 | BU / WH | 1334 | I | — | Left Rear Turn Signal Lamp Control 2 | 5 | 0.75 | BU / WH | 1334 | II | — |
| 6 | 0.75 | BK | 1951 | I | — | Signal Ground | 6 | 0.75 | BK | 1951 | II | — |

# X918 Endgate Wiring Harness to Chassis Wiring Harness




4650150




4817393

### Connector Part Information

Harness Type: Endgate Wiring Harness

OEM Connector: 35573111

Service Connector: Service by Harness - See Part Catalog

Description: 30-Way F 1.2 MCON, 2.8, 6.3 MCP Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 35547577

Service Connector: 19371177

Description: 30-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-16 (L-GN) | No Tool Required |
| II | Not required | J-35616-4A (PU) | No Tool Required |
| III | 13578827 | J-35616-5 (PU) | J-38125-36 |
| IV | 19330704 | J-35616-13 (BU) | J-38125-215A |

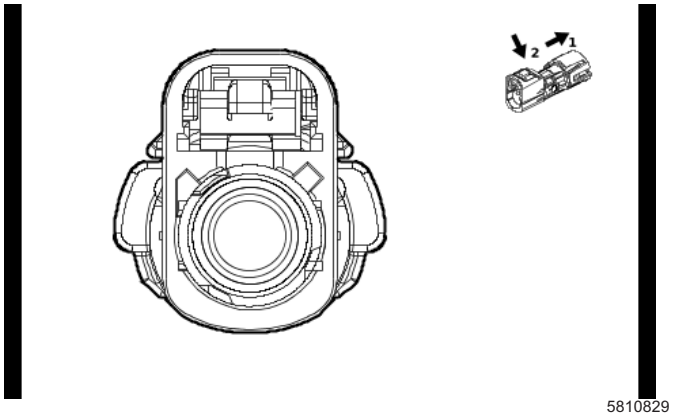
## X918 Endgate Wiring Harness to Chassis Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 2.5 | RD / VT | 4442 | II | — | Primary Fused Battery Positive Voltage | 2 | 2.5 | RD / VT | 4442 | III | — |
| 3 | 2.5 | BK | 1850 | II | — | Ground | 3 | 2.5 | BK | 1850 | III | — |
| 4 | 1 | VT | 7725 | II | — | Minor Endgate Motor Control | 4 | 1 | VT | 7725 | III | — |
| 5 | 1 | YE / BK | 7730 | II | — | Major Endgate Motor Low Reference | 5 | 1 | YE / BK | 7730 | III | — |
| 6 | 1 | GN | 1299 | II | — | Major Endgate Motor Control | 6 | 1 | GN | 1299 | III | — |
| 7 - 8 | — | — | — | — | — | Not Occupied | 7 - 8 | — | — | — | — | — |
| 9 | 0.5 | WH / VT | 1430 | I | — | Exterior Courtesy Lamp Control | 9 | 0.5 | WH / VT | 1430 | IV | — |

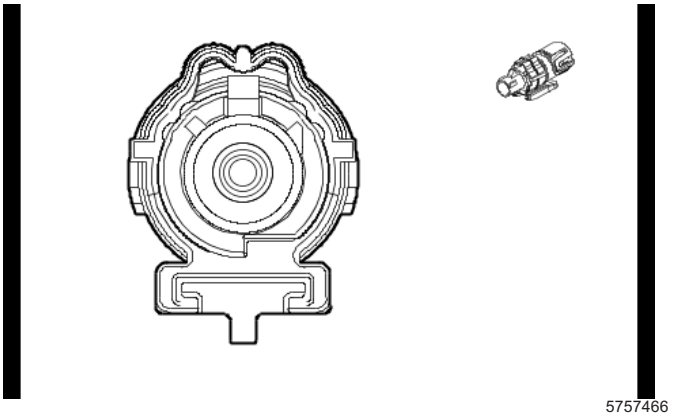
## X918 Endgate Wiring Harness to Chassis Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | YE | 7294 | I | — | Minor Endgate Release Switch Discrete Signal Exterior | 10 | 0.5 | YE | 7294 | IV | — |
| 11 | 0.75 | YE / BU | 7295 | I | — | Left Minor Endgate Ajar Signal | 11 | 0.75 | YE / BU | 7295 | IV | — |
| 12 - 17 | — | — | — | — | — | Not Occupied | 12 - 17 | — | — | — | — | — |
| 18 | 0.5 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 18 | 0.5 | BU / VT | 4101 | IV | — |
| 19 | 0.5 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 19 | 0.5 | WH | 4100 | IV | — |
| 20 | 0.5 | YE | 1144 | I | — | Endgate Release Switch Discrete Signal Exterior | 20 | 0.5 | YE | 1144 | IV | — |
| 21 | 0.5 | GY | 7292 | I | — | Major Endgate Release Switch Signal Exterior | 21 | 0.5 | GY | 7292 | IV | — |
| 22 - 28 | — | — | — | — | — | Not Occupied | 22 - 28 | — | — | — | — | — |
| 29 | 0.5 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 29 | 0.5 | WH | 4100 | IV | — |
| 30 | 0.5 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 30 | 0.5 | BU / VT | 4101 | IV | — |

# X919 Endgate Wiring Harness to Chassis Wiring Harness



5810829


5757466

### Connector Part Information

Harness Type: Endgate Wiring Harness COAX

OEM Connector: 35187033

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( WH)

### Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338240

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( WH)

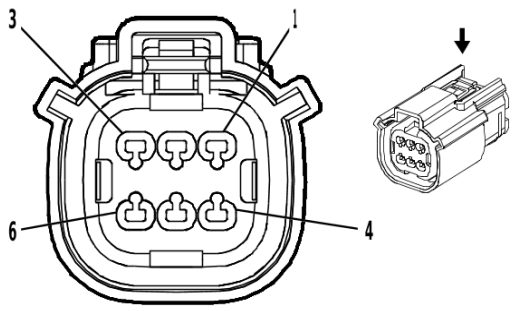
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

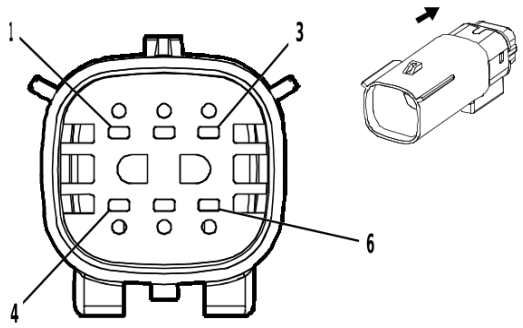
## X919 Endgate Wiring Harness to Chassis Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Rear Vision Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

# X920 Tail Lamp Wiring Harness - Right to Chassis Wiring Harness (GA4 / GFG / GFU / GFW / GFY)




1986157




1986159

### Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: 19178149
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35014074
Service Connector: 19367742
Description: 6-Way M 1.5 MX Series, Sealed( BK)

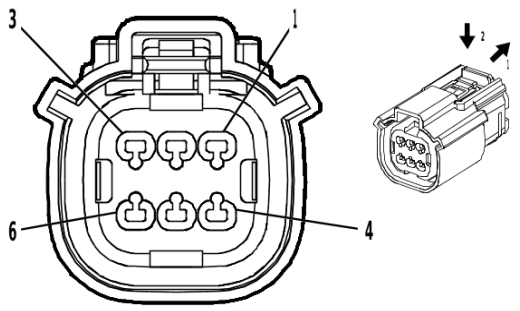
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

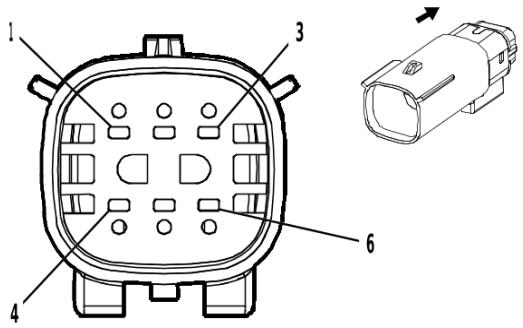
## X920 Tail Lamp Wiring Harness - Right to Chassis Wiring Harness (GA4 / GFG / GFU / GFW / GFY)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 6995 | I | — | Right Rear Park Lamp Control | 1 | 0.75 | BN / GY | 6995 | II | — |
| 2 | 0.75 | RD | 7544 | I | — | Right Rear Turn Signal Lamp Feed-back Signal | 2 | 0.75 | WH / BK | 7544 | II | — |
| 3 | 0.75 | BU | 7762 | I | — | Cargo Lamp Control | 3 | 0.5 | GY / BU | 7762 | II | — |
| 4 | 0.75 | GN | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN / WH | 24 | II | — |
| 5 | 0.75 | GN | 1335 | I | — | Right Rear Turn Signal Lamp Control 2 | 5 | 0.75 | BU / VT | 1335 | II | — |
| 6 | 0.75 | BK | 1850 | I | — | Ground | 6 | 0.75 | BK | 1850 | II | — |

# X920 Tail Lamp Wiring Harness - Right to Chassis Wiring Harness (GFF / GFI / GFJ / GFS)




4574736




1986159

### Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right
OEM Connector: 13592504
Service Connector: 19367742
Description: 6-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35014074
Service Connector: 19367742
Description: 6-Way M 1.5 MX Series, Sealed( BK)

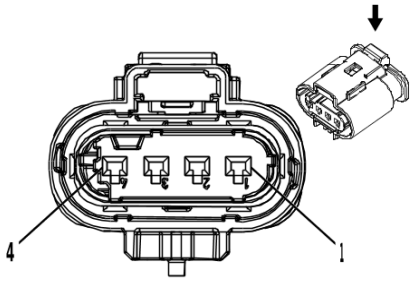
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

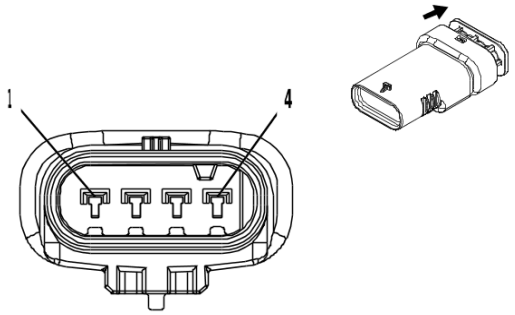
## X920 Tail Lamp Wiring Harness - Right to Chassis Wiring Harness (GFF / GFI / GFJ / GFS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN / GY | 6995 | I | — | Right Rear Park Lamp Control | 1 | 0.75 | BN / GY | 6995 | II | — |
| 2 | 0.75 | WH / BK | 7544 | I | — | Right Rear Turn Signal Lamp Feed-back Signal | 2 | 0.75 | WH / BK | 7544 | II | — |
| 3 | 0.5 | GY / BU | 7762 | I | — | Cargo Lamp Control | 3 | 0.5 | GY / BU | 7762 | II | — |
| 4 | 0.5 | GN / WH | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN / WH | 24 | II | — |
| 5 | 0.75 | BU / VT | 1335 | I | — | Right Rear Turn Signal Lamp Control 2 | 5 | 0.75 | BU / VT | 1335 | II | — |
| 6 | 0.75 | BK | 1850 | I | — | Ground | 6 | 0.75 | BK | 1850 | II | — |

# X944 Engine Wiring Harness to Engine Coolant Temperature Sensor Harness (LZ0)




2717079




4560843

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed( BK)

### Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Harness
OEM Connector: 13503594
Service Connector: 13587299
Description: 4-Way M 1.2 Multilock Series, Sealed( GY)

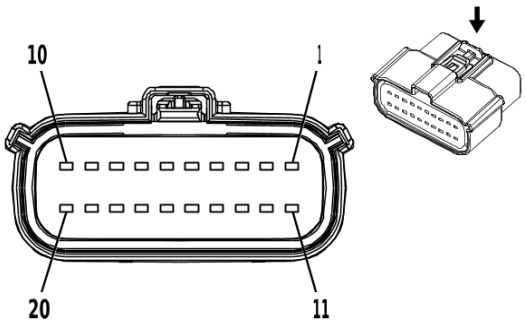
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-12 (BU) | No Tool Required |
| II | Not required | J-35616-13 (BU) | No Tool Required |

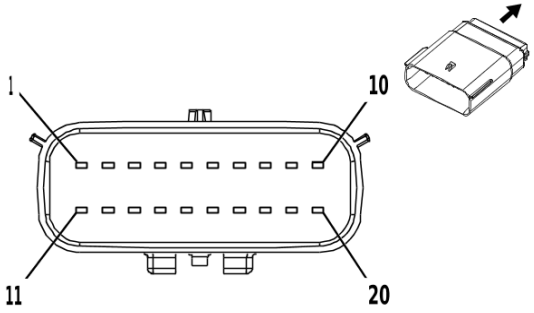
## X944 Engine Wiring Harness to Engine Coolant Temperature Sensor Harness (LZ0)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.5 | VT | 2988 | I | — | Engine Outlet Coolant Temperature Signal | 3 | 0.5 | VT | 2988 | II | — |
| 4 | 0.5 | BK / GY | 626 | I | — | Engine Control Vehicle Sensors Low Reference 1 | 4 | 0.5 | BK / GY | 626 | II | — |

# X950 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness




2871898




2871861

### Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13650143
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35554993
Service Connector: 19351705
Description: 20-Way M 1.5 MX Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | 19331234 | J-35616-14 (GN) | J-38125-557 |

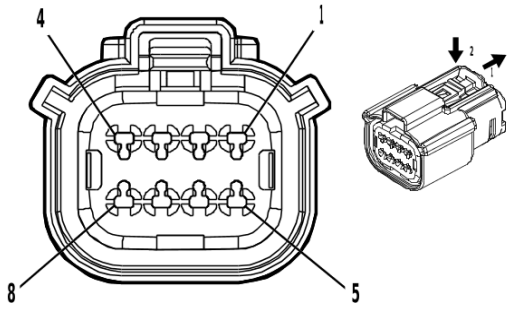
## X950 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD / GN | 6940 | I | — | Battery Positive Voltage | 1 | 0.5 | RD / GN | 6940 | II | — |
| 2 | 0.5 | RD / BU | 5240 | I | — | Battery Positive Voltage | 2 | 0.5 | RD / BU | 5240 | II | — |
| 3 | 0.5 | WH | 4100 | I | — | AUTOSAR CAN Bus [-] 4 Serial Data | 3 | 0.5 | WH | 4100 | II | — |
| 4 | 0.5 | BU / VT | 4101 | I | — | AUTOSAR CAN Bus [+] 4 Serial Data | 4 | 0.5 | BU / VT | 4101 | II | — |
| 5 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 5 | 0.5 | WH / GY | 4104 | II | — |
| 6 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 6 | 0.5 | BU / GY | 4105 | II | — |
| 7 | 0.5 | WH / GY | 4104 | I | — | AUTOSAR CAN Bus [-] 8 Serial Data | 7 | 0.5 | WH / GY | 4104 | II | — |
| 8 | 0.5 | BU / GY | 4105 | I | — | AUTOSAR CAN Bus [+] 8 Serial Data | 8 | 0.5 | BU / GY | 4105 | II | — |
| 9 | 0.5 | BN / WH | 2374 | I | — | Object Sensor Voltage Reference | 9 | 0.5 | BN / WH | 2374 | II | — |

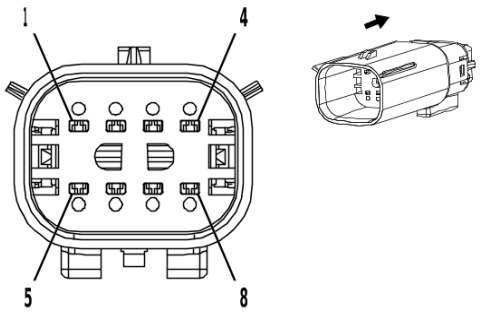
## X950 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | YE | 2375 | I | — | Left Rear Outer Parking Assist Sensor Signal | 10 | 0.5 | YE | 2375 | II | — |
| 11 | 0.5 | YE / BU | 2376 | I | — | Left Rear Middle Parking Assist Sensor Signal | 11 | 0.5 | YE / BU | 2376 | II | — |
| 12 | 0.5 | YE / WH | 2377 | I | — | Right Rear Middle Parking Assist Sensor Signal | 12 | 0.5 | YE / WH | 2377 | II | — |
| 13 | 0.5 | YE / VT | 2378 | I | — | Right Rear Outer Parking Assist Sensor Signal | 13 | 0.5 | YE / VT | 2378 | II | — |
| 14 | 0.5 | BK / GY | 2379 | I | — | Object Sensor Low Reference | 14 | 0.5 | BK / GY | 2379 | II | — |
| 15 | 0.5 | GN / YE | 6846 | I | — | Rear License Plate Lamp Control | 15 | 0.5 | GN / YE | 6846 | II | — |
| 16 | 0.75 | BK | 1850 | I | — | Ground | 16 | 0.75 | BK | 1850 | II | — |
| 17 | 0.5 | BK / WH | 1951 | I | — | Signal Ground | 17 | 0.5 | BK / WH | 1951 | II | — |
| 18 - 20 | — | — | — | — | — | Not Occupied | 18 - 20 | — | — | — | — | — |

# X961 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87)




4846407




2667653

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35037827
Service Connector: 84928314
Description: 8-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Engine Control Module Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M ( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-14 (GN) | No Tool Required |
| II | Not required | No Tool Required | No Tool Required |

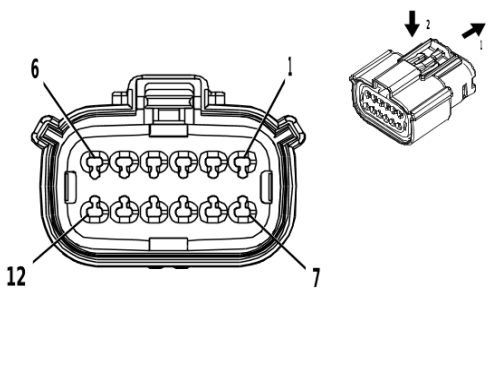
## X961 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GN | 2492 | I | — | Cylinder Shutoff Solenoid Enable Signal 2 | 1 | 0.5 | WH / GN | 2492 | II | — |
| 2 | 0.5 | GN | 5492 | I | — | Cylinder Deactivation Solenoid Valve Control 2 | 2 | 0.5 | GN | 5492 | II | — |
| 3 | 0.5 | YE / GY | 2493 | I | — | Cylinder Shutoff Solenoid Enable Signal 3 | 3 | 0.5 | YE / GY | 2493 | II | — |
| 4 | 0.5 | GY | 5493 | I | — | Cylinder Deactivation Solenoid Valve Control 3 | 4 | 0.5 | GY | 5493 | II | — |
| 5 | 0.5 | WH / VT | 2495 | I | — | Cylinder Shutoff Solenoid Enable Signal 5 | 5 | 0.5 | WH / VT | 2495 | II | — |
| 6 | 0.5 | VT | 5495 | I | — | Cylinder Deactivation Solenoid Valve Control 5 | 6 | 0.5 | VT | 5495 | II | — |

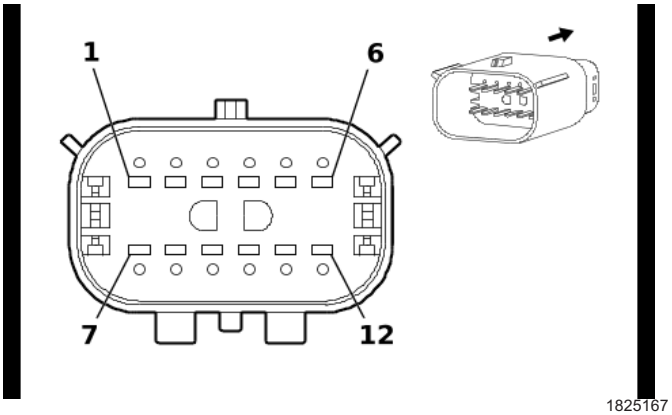
## X961 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | WH / YE | 2498 | I | — | Cylinder Shutoff Solenoid Enable Signal 8 | 7 | 0.5 | WH / YE | 2498 | II | — |
| 8 | 0.5 | YE | 5498 | I | — | Cylinder Deactivation Solenoid Valve Control 8 | 8 | 0.5 | YE | 5498 | II | — |

# X962 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87)




2871860




1825167

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33362189
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed( BK)

### Connector Part Information

Harness Type: Engine Control Module Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M ( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 |
| II | Not required | J-35616-3 (GY) | No Tool Required |

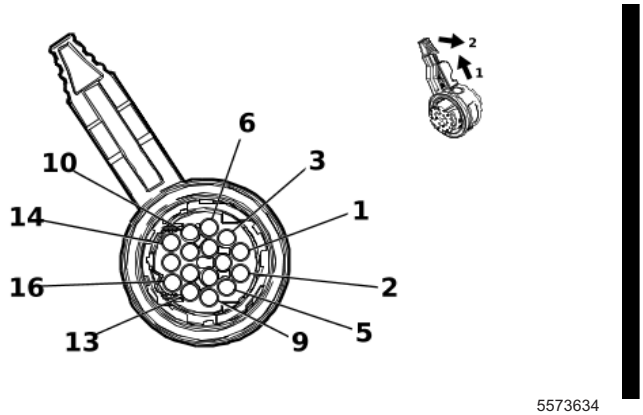
## X962 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / BU | 2491 | I | — | Cylinder Shutoff Solenoid Enable Signal 1 | 1 | 0.5 | WH / BU | 2491 | II | — |
| 2 | 0.5 | BU / VT | 5491 | I | — | Cylinder Deactivation Solenoid Valve Control 1 | 2 | 0.5 | BU / VT | 5491 | II | — |
| 3 | 0.5 | YE / GN | 2494 | I | — | Cylinder Shutoff Solenoid Enable Signal 4 | 3 | 0.5 | YE / GN | 2494 | II | — |
| 4 | 0.5 | YE / BU | 5494 | I | — | Cylinder Deactivation Solenoid Valve Control 4 | 4 | 0.5 | YE / BU | 5494 | II | — |
| 5 | 0.5 | YE / BN | 2496 | I | — | Cylinder Shutoff Solenoid Enable Signal 6 | 5 | 0.5 | YE / BN | 2496 | II | — |
| 6 | 0.5 | BN | 5496 | I | — | Cylinder Deactivation Solenoid Valve Control 6 | 6 | 0.5 | BN | 5496 | II | — |

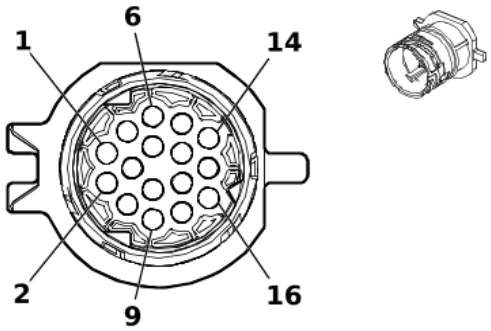
## X962 Engine Wiring Harness to Engine Control Module Jumper Wiring Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | GN / GY | 2497 | I | — | Cylinder Shutoff Solenoid Enable Signal 7 | 7 | 0.5 | GN / GY | 2497 | II | — |
| 8 | 0.5 | WH | 5497 | I | — | Cylinder Deactivation Solenoid Valve Control 7 | 8 | 0.5 | WH | 5497 | II | — |
| 9 | 0.5 | BU | 410 | I | — | Engine Coolant Temperature Sensor Signal | 9 | 0.5 | BU | 410 | II | — |
| 10 | 0.5 | BK / GY | 626 | I | — | Engine Control Vehicle Sensors Low Reference 1 | 10 | 0.5 | BK / GY | 626 | II | — |
| 11 - 12 | — | — | — | — | — | Not Occupied | 11 - 12 | — | — | — | — | — |

# X963 Valve Rocker Arm Oil Control Valve Extension Harness to Valve Rocker Arm Oil Control Valve Harness (L84/L87)




5573634




5575849

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Extension Harness
OEM Connector: 10354998
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.5 LKS Series, Sealed( BK)

## Connector Part Information

Harness Type: Valve Rocker Arm Oil Control Valve Harness
OEM Connector: 10140573
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.5 LKS Series, Sealed( BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-2A (GY) | No Tool Required |
| II | Not required | J-35616-3 (GY) | No Tool Required |

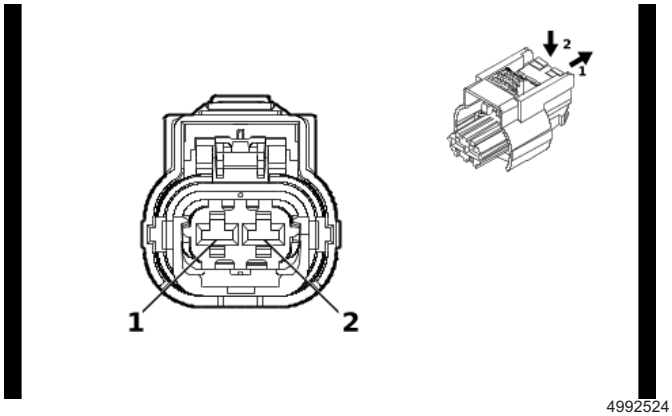
## X963 Valve Rocker Arm Oil Control Valve Extension Harness to Valve Rocker Arm Oil Control Valve Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH / GN | 2492 | I | — | Cylinder Shutoff Solenoid Enable Signal 2 | 1 | 0.5 | WH / GN | 2492 | II | — |
| 2 | 0.5 | GN | 5492 | I | — | Cylinder Deactivation Solenoid Valve Control 2 | 2 | 0.5 | GN | 5492 | II | — |
| 3 | 0.5 | YE / GY | 2493 | I | — | Cylinder Shutoff Solenoid Enable Signal 3 | 3 | 0.5 | YE / GY | 2493 | II | — |
| 4 | 0.5 | GY | 5493 | I | — | Cylinder Deactivation Solenoid Valve Control 3 | 4 | 0.5 | GY | 5493 | II | — |
| 5 | 0.5 | WH / VT | 2495 | I | — | Cylinder Shutoff Solenoid Enable Signal 5 | 5 | 0.5 | WH / VT | 2495 | II | — |

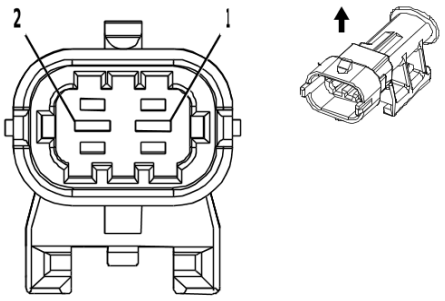
## X963 Valve Rocker Arm Oil Control Valve Extension Harness to Valve Rocker Arm Oil Control Valve Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | VT | 5495 | I | — | Cylinder Deactivation Solenoid Valve Control 5 | 6 | 0.5 | VT | 5495 | II | — |
| 7 | 0.5 | WH / YE | 2498 | I | — | Cylinder Shutoff Solenoid Enable Signal 8 | 7 | 0.5 | WH / YE | 2498 | II | — |
| 8 | 0.5 | YE | 5498 | I | — | Cylinder Deactivation Solenoid Valve Control 8 | 8 | 0.5 | YE | 5498 | II | — |
| 9 | 0.5 | WH / BU | 2491 | I | — | Cylinder Shutoff Solenoid Enable Signal 1 | 9 | 0.5 | WH / BU | 2491 | II | — |
| 10 | 0.5 | BU | 5491 | I | — | Cylinder Deactivation Solenoid Valve Control 1 | 10 | 0.5 | BU | 5491 | II | — |
| 11 | 0.5 | YE / GN | 2494 | I | — | Cylinder Shutoff Solenoid Enable Signal 4 | 11 | 0.5 | YE / GN | 2494 | II | — |
| 12 | 0.5 | YE / BU | 5494 | I | — | Cylinder Deactivation Solenoid Valve Control 4 | 12 | 0.5 | YE / BU | 5494 | II | — |
| 13 | 0.5 | YE / BN | 2496 | I | — | Cylinder Shutoff Solenoid Enable Signal 6 | 13 | 0.5 | YE / BN | 2496 | II | — |
| 14 | 0.5 | BN | 5496 | I | — | Cylinder Deactivation Solenoid Valve Control 6 | 14 | 0.5 | BN | 5496 | II | — |
| 15 | 0.5 | GN / GY | 2497 | I | — | Cylinder Shutoff Solenoid Enable Signal 7 | 15 | 0.5 | GN / GY | 2497 | II | — |
| 16 | 0.5 | WH | 5497 | I | — | Cylinder Deactivation Solenoid Valve Control 7 | 16 | 0.5 | WH | 5497 | II | — |

# X977 Engine Wiring Harness to Accessory Wiring Harness (VYU)




4992524




2667643

### Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed( BK)

### Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 10864494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 2.8 Timer Series, Sealed( BK)

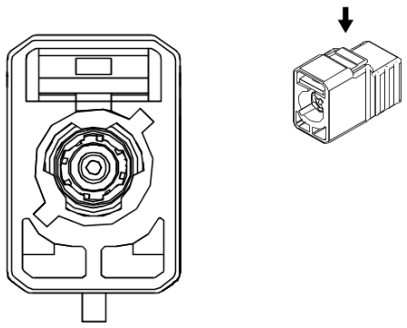
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | J-35616-35 (VT) | No Tool Required |
| II | Not required | J-35616-5 (PU) | No Tool Required |

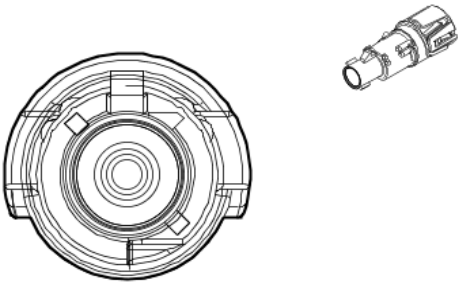
## X977 Engine Wiring Harness to Accessory Wiring Harness (VYU)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | I | — | Charge Indicator Control | 1 | 0.5 | BN | 25 | II | — |
| 2 | 0.5 | GY | 23 | I | — | Generator Field Duty Cycle Signal | 2 | 0.5 | GY | 23 | II | — |

# X985 Rearview Driver Information Camera Rear Closure Coaxial Cable to Inside Rearview Mirror Wiring Harness - Jumper (DRZ)



3293625



5633901

## Connector Part Information

Harness Type: Rearview Driver Information Camera Rear Closure Coaxial Cable COAX

OEM Connector: 13583914

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type( BU)

## Connector Part Information

Harness Type: Inside Rearview Mirror Wiring Harness - Jumper COAX

OEM Connector: 33355540

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed( BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool |
|---|---|---|---|
| I | Not required | No Tool Required | No Tool Required |

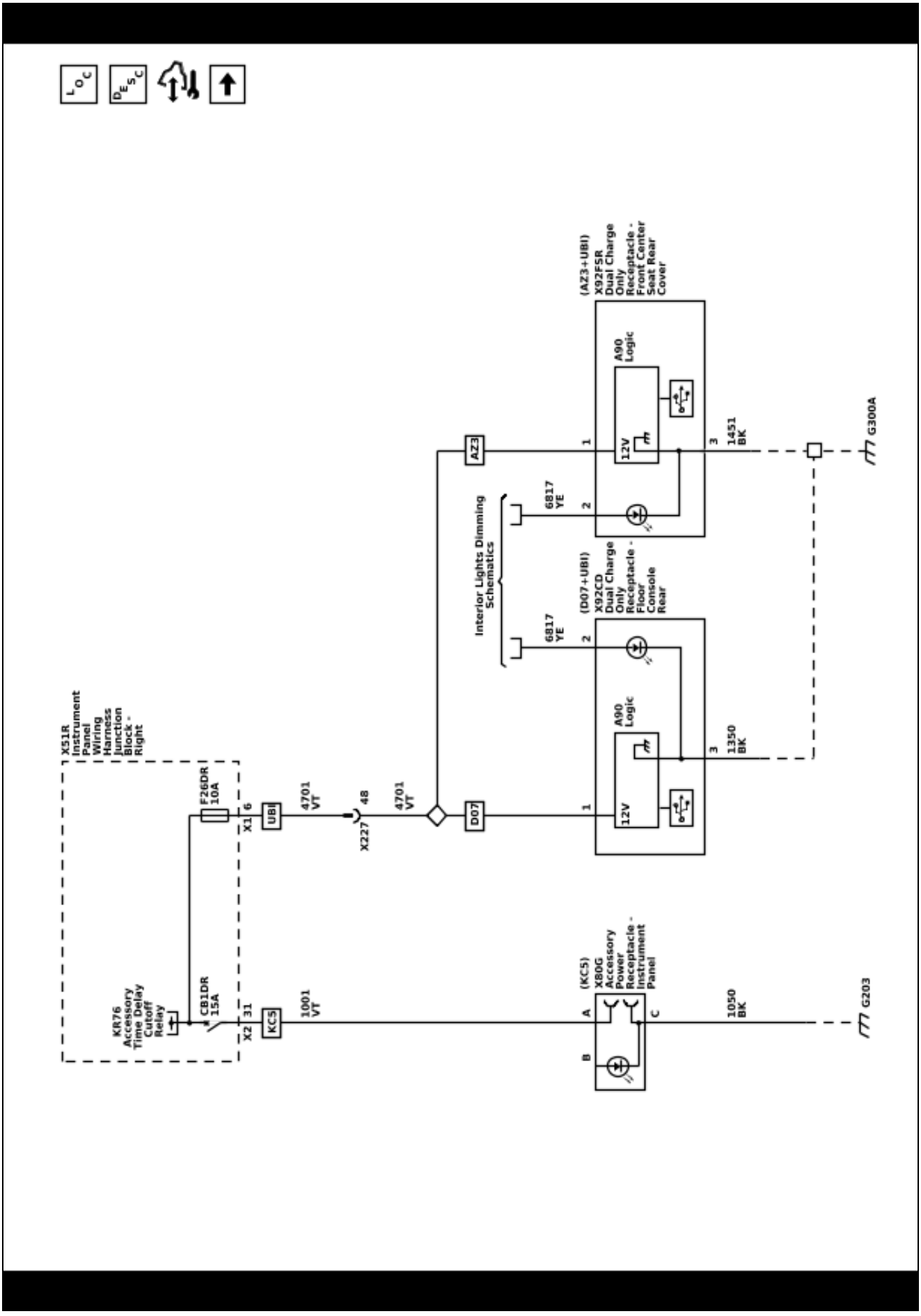
## X985 Rearview Driver Information Camera Rear Closure Coaxial Cable to Inside Rearview Mirror Wiring Harness - Jumper (DRZ)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax Cable | — | I | — | Full Display Mirror Rear Camera Co-axial Video Signal | — | — | Coax Cable | — | I | — |

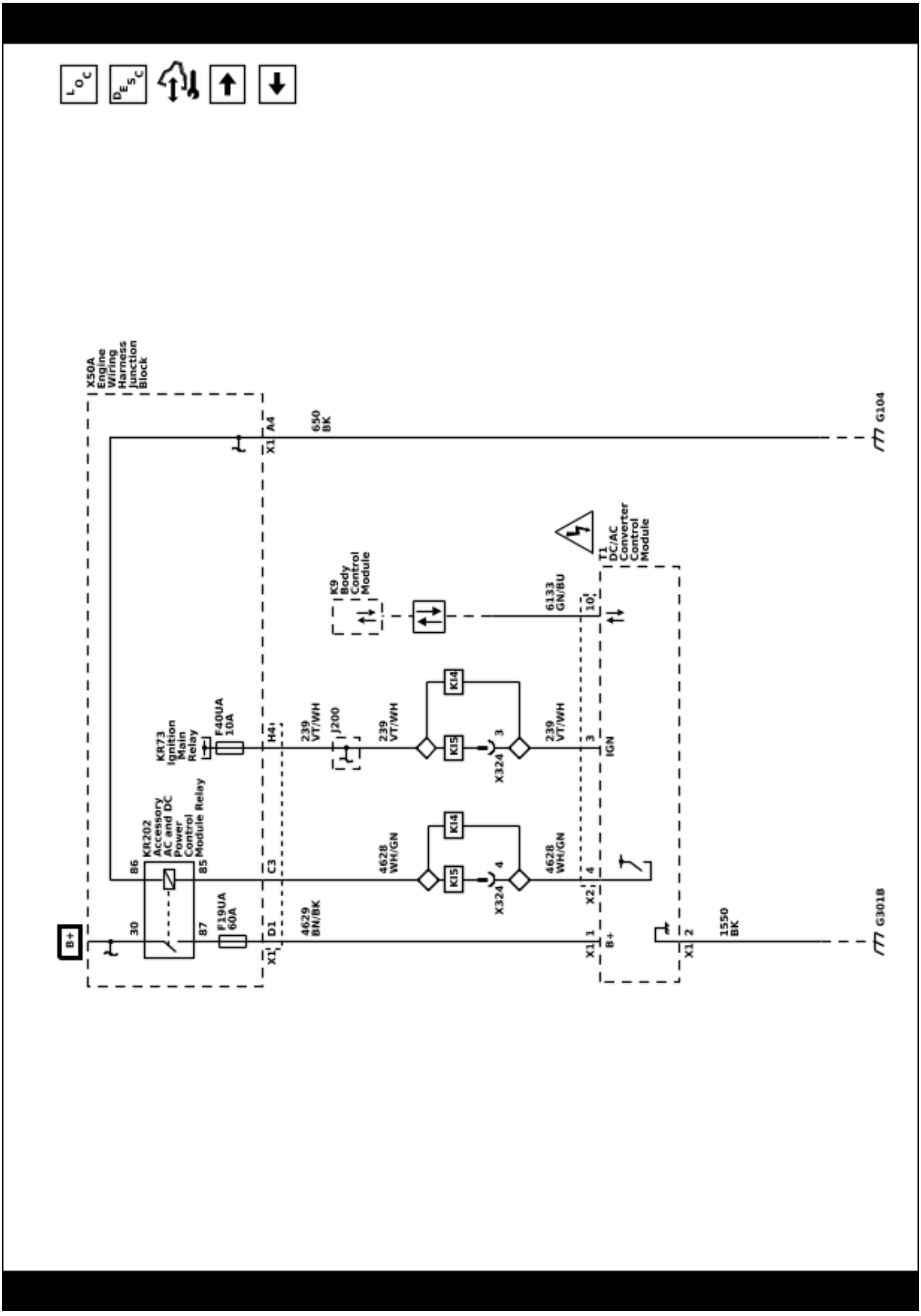
# Power Outlets

## Schematic and Routing Diagrams

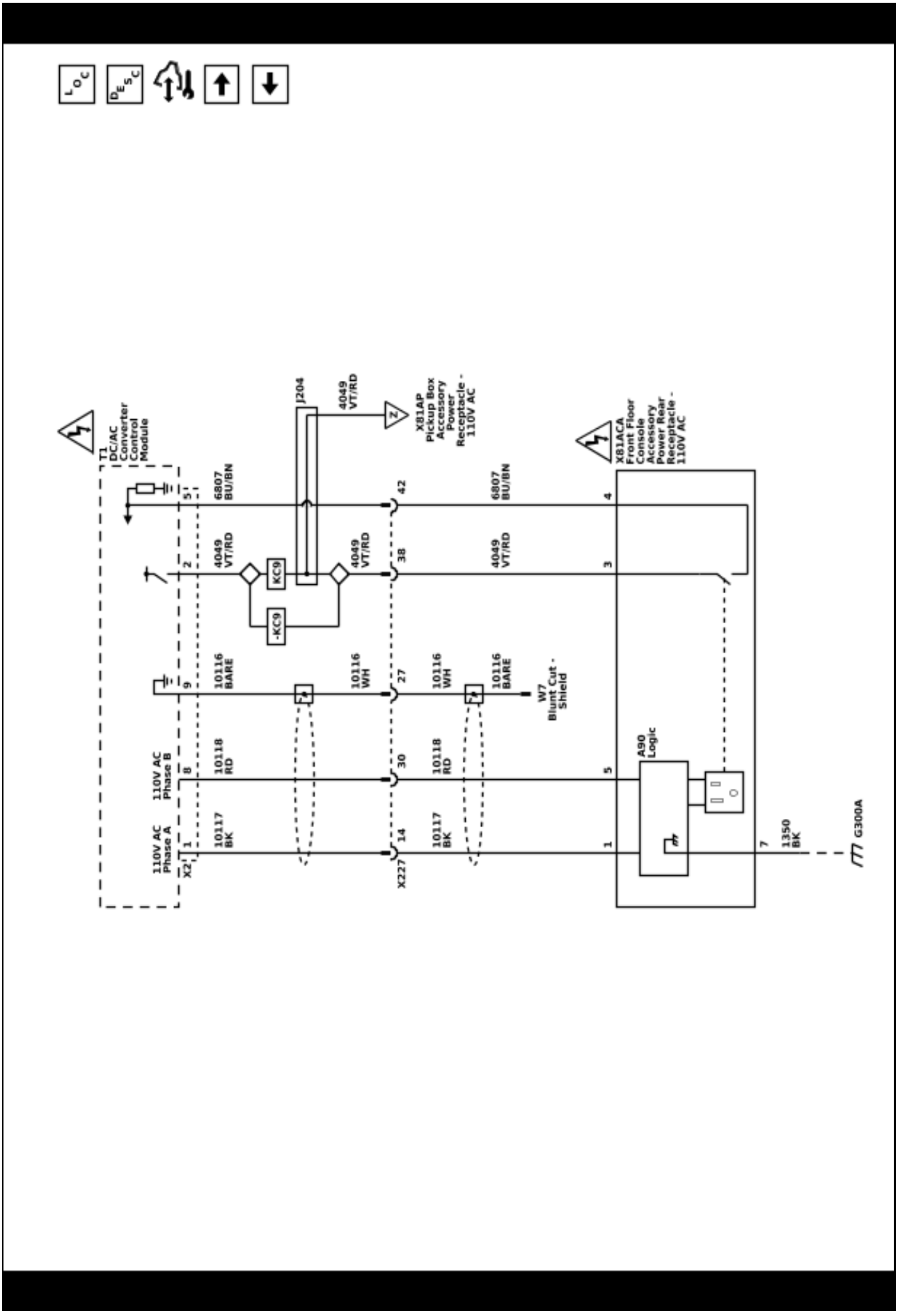
## Cigar Lighter/Power Outlet Schematics (Power and Charge Receptacles (KC5/UBI))



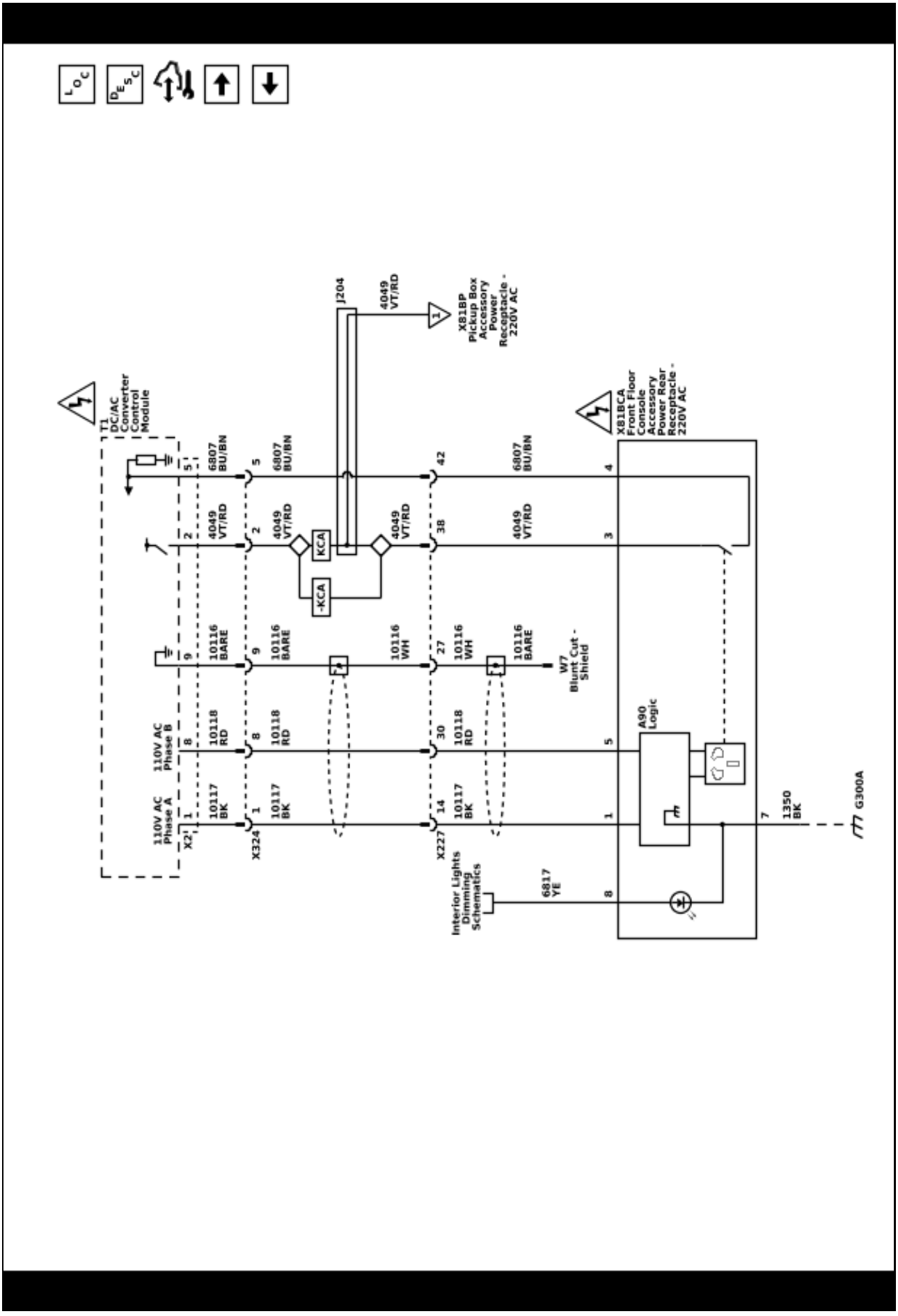
## Cigar Lighter/Power Outlet Schematics (Inverter Module Power, Ground, and Serial Data (KI4/KI5/KCA/KC9))



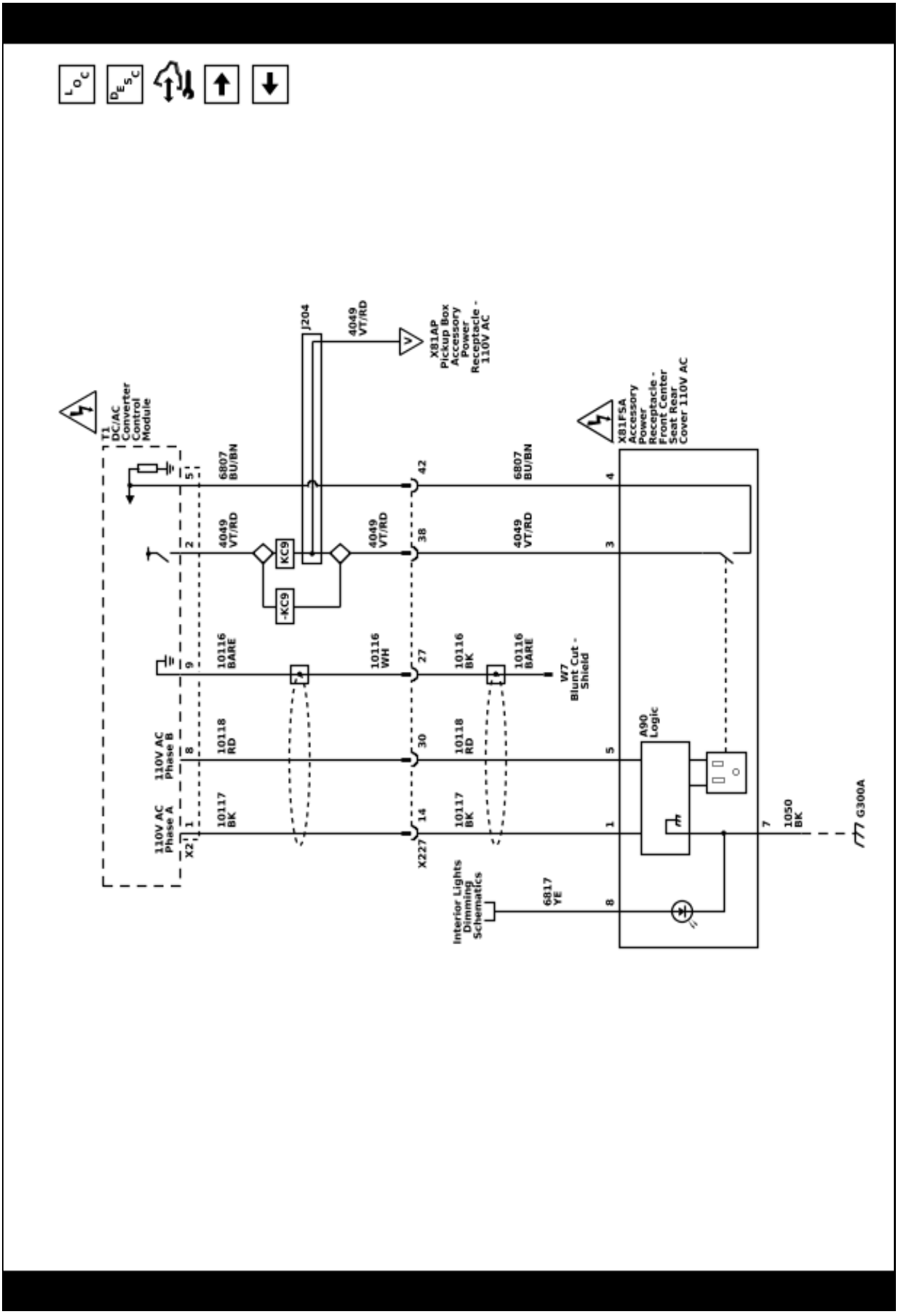
## Cigar Lighter/Power Outlet Schematics (110V AC Accessory Power Rear Receptacle - Front Floor Console (KI4&D07))



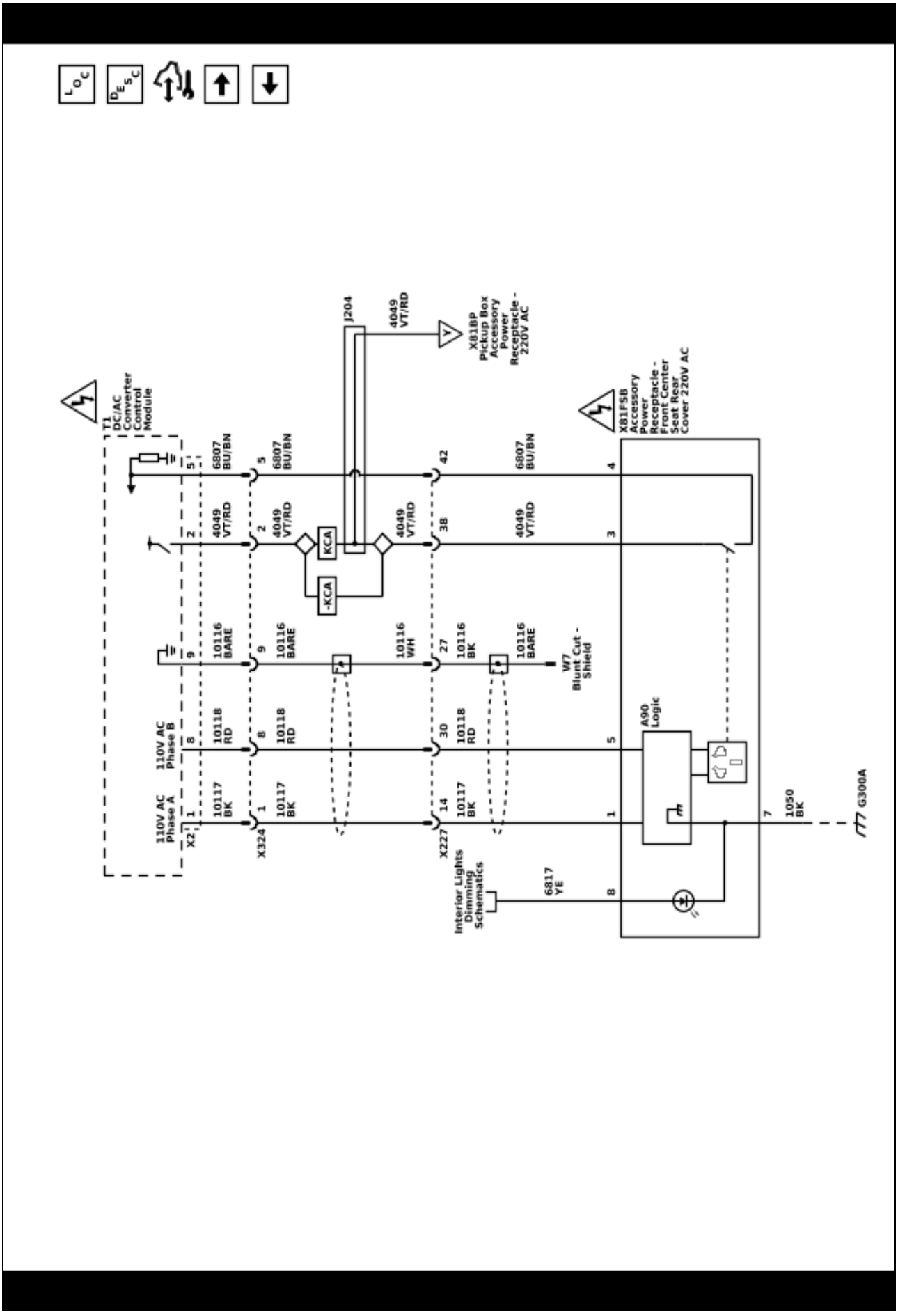
## Cigar Lighter/Power Outlet Schematics (220V AC Accessory Power Rear Receptacle - Front Floor Console (KI5&D07))



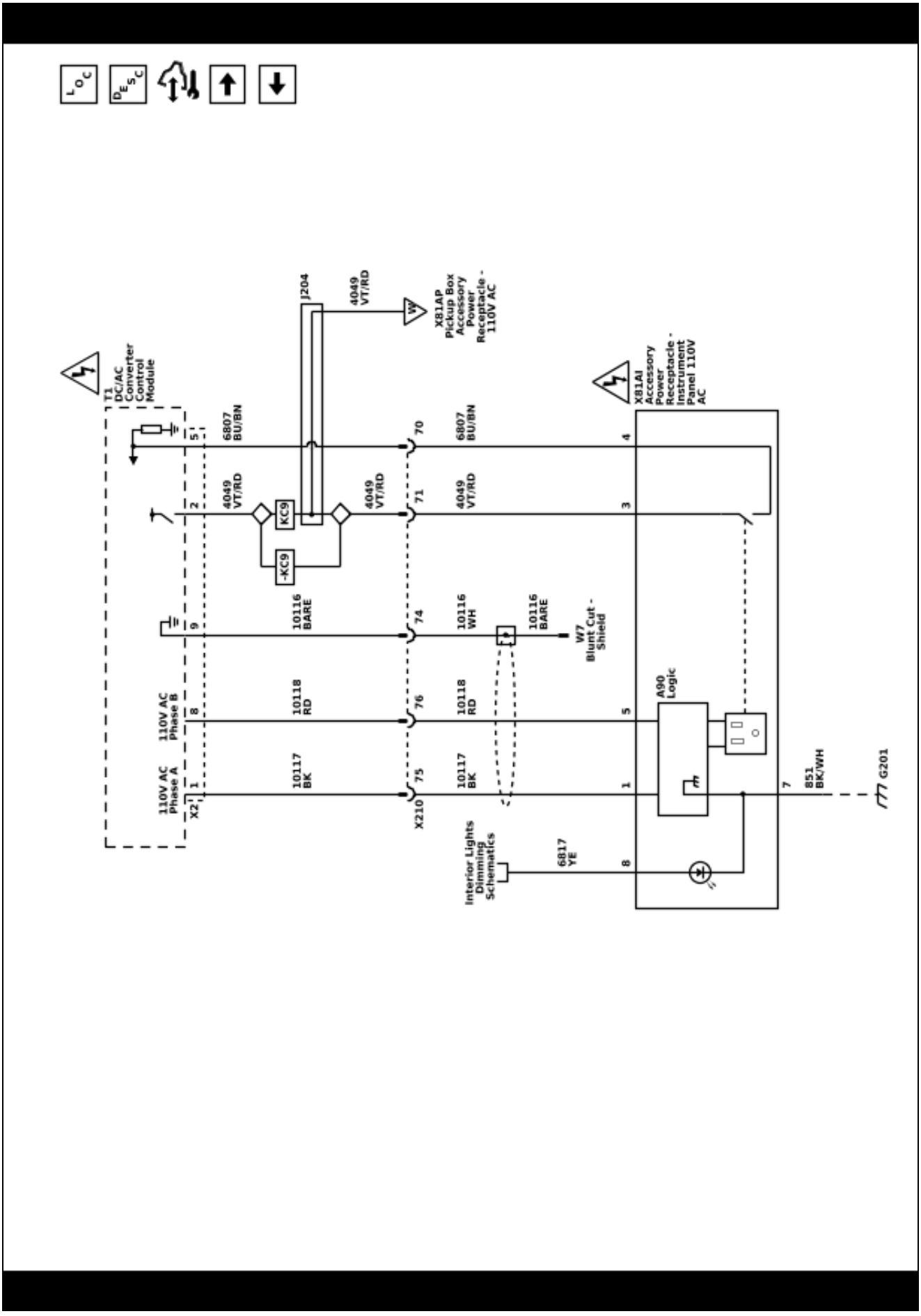
## Cigar Lighter/Power Outlet Schematics (110V AC Accessory Power Receptacle - Front Center Seat Rear (KI4&AZ3))



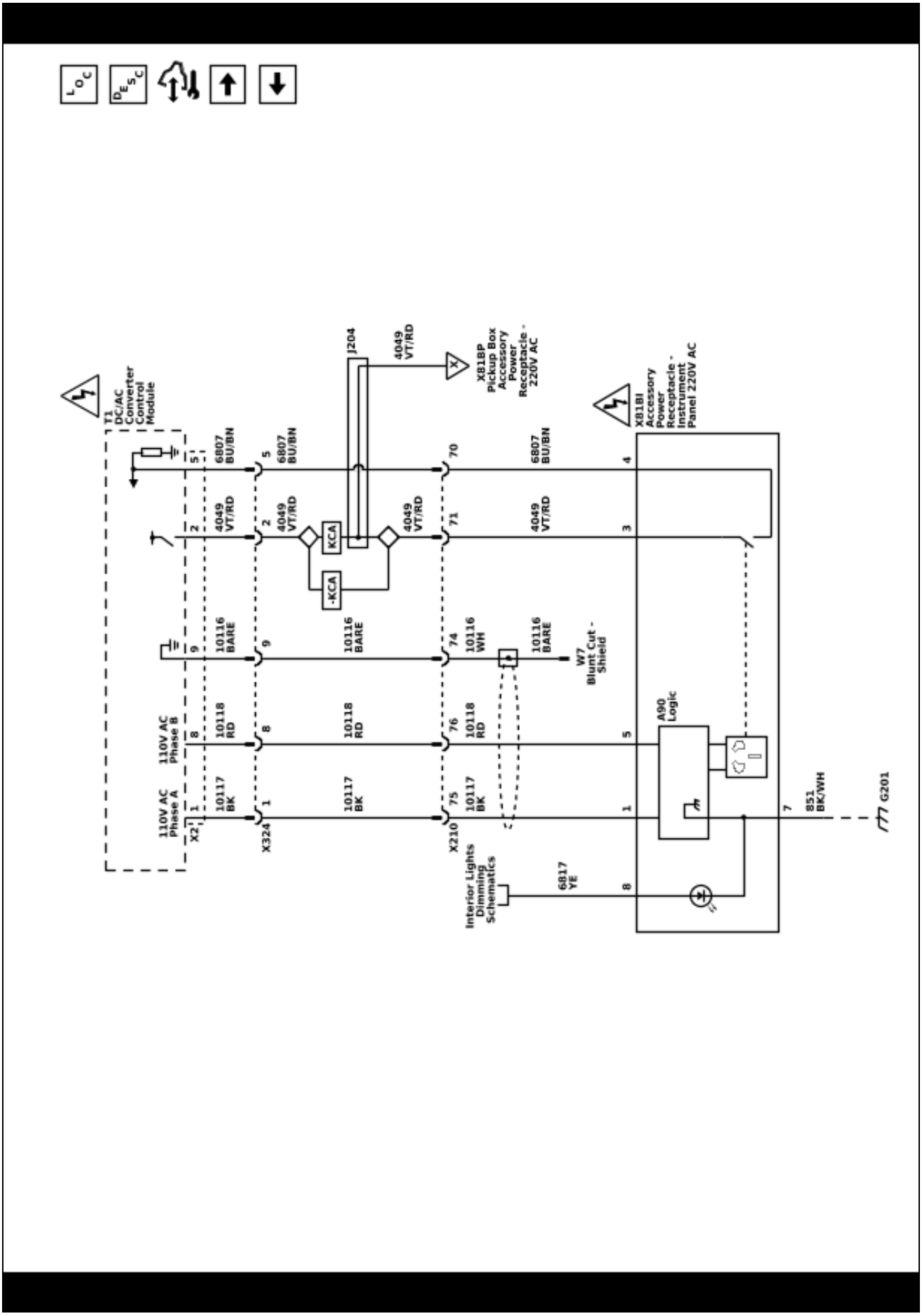
## Cigar Lighter/Power Outlet Schematics (220V AC Accessory Power Receptacle - Front Center Seat Rear (KI5&AZ3))



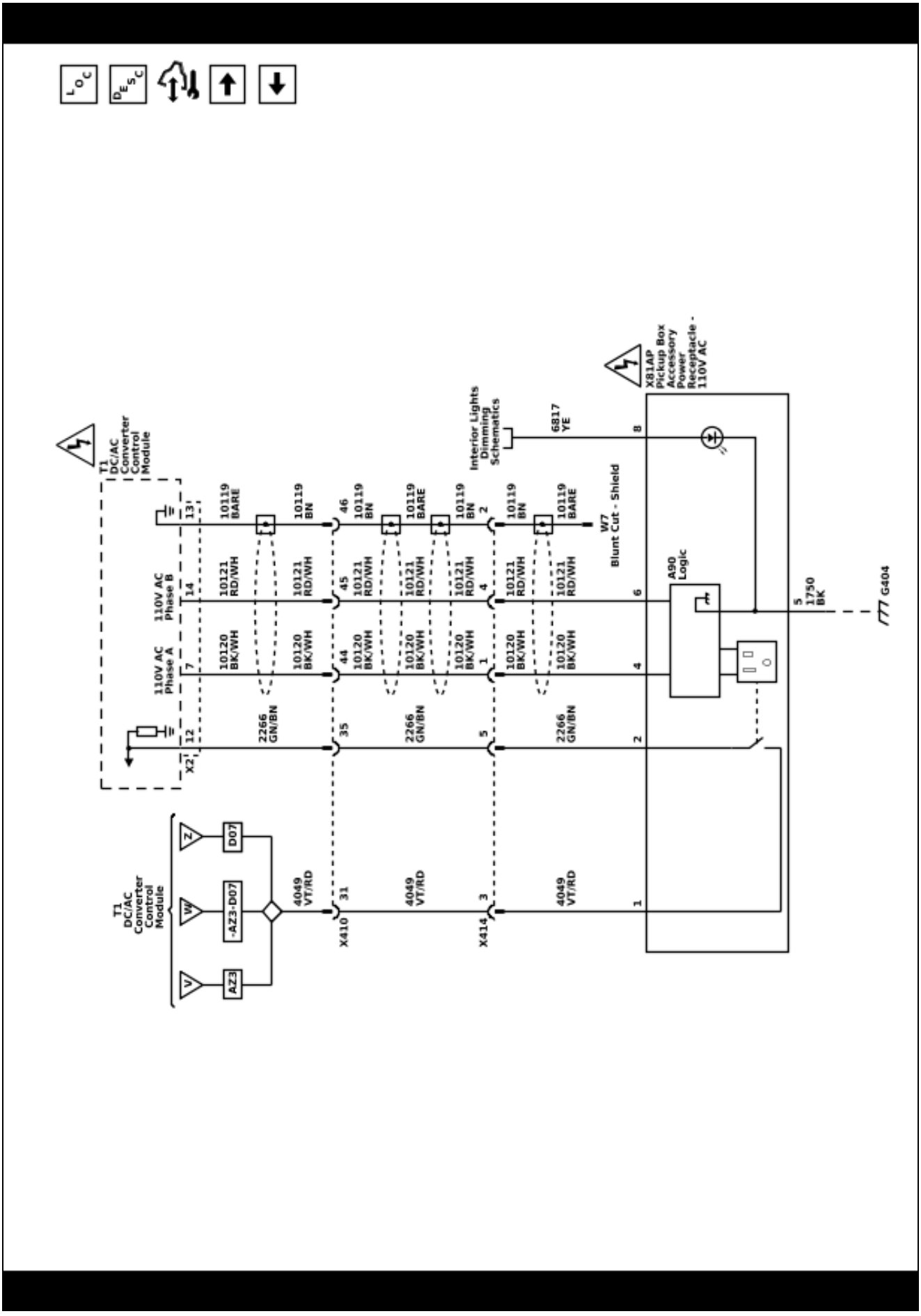
## Cigar Lighter/Power Outlet Schematics (110V AC Accessory Power Receptacle - Instrument Panel (KI4-AZ3-D07))



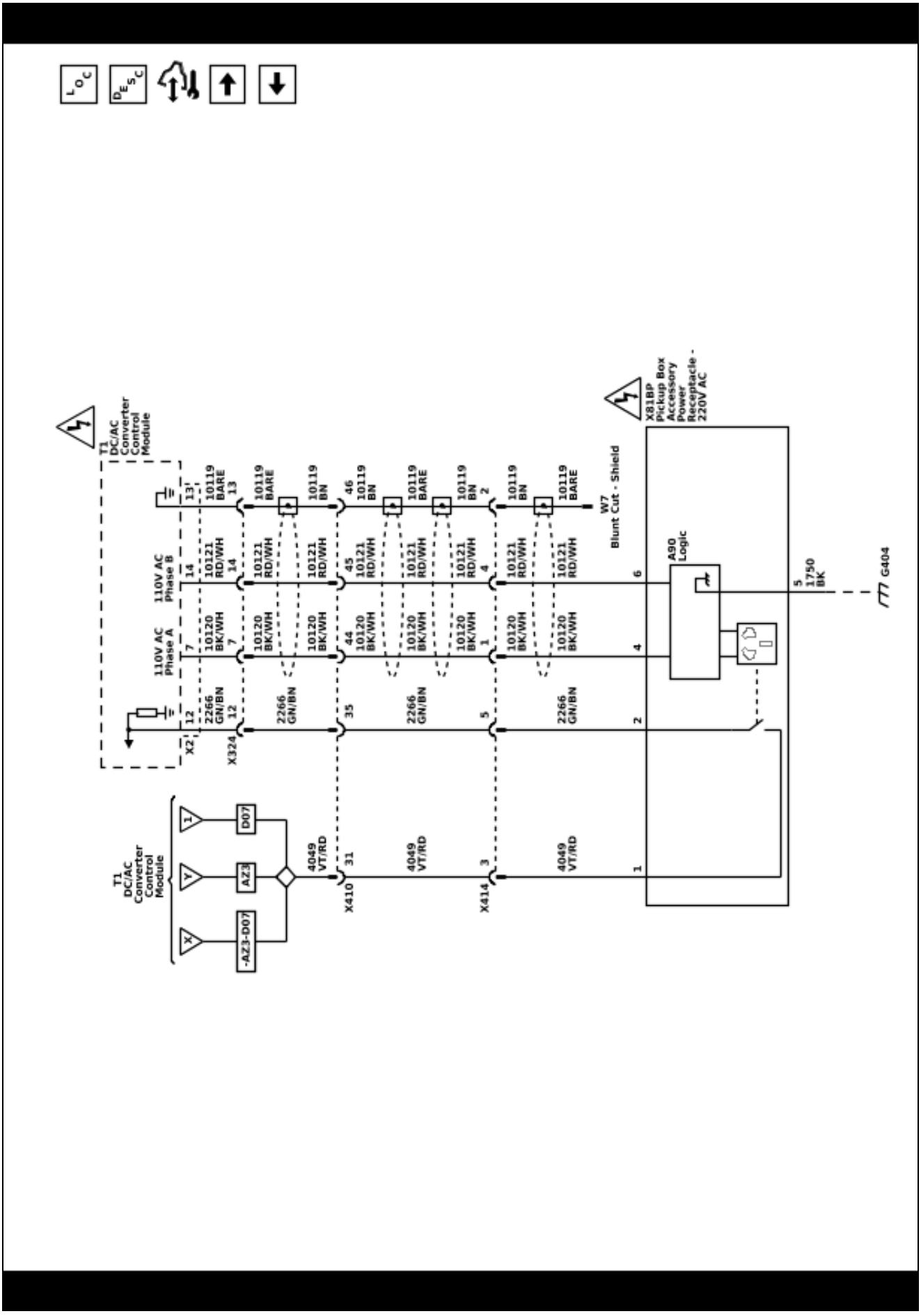
## Cigar Lighter/Power Outlet Schematics (220V AC Accessory Power Receptacle - Instrument Panel (KI5-AZ3-D07))



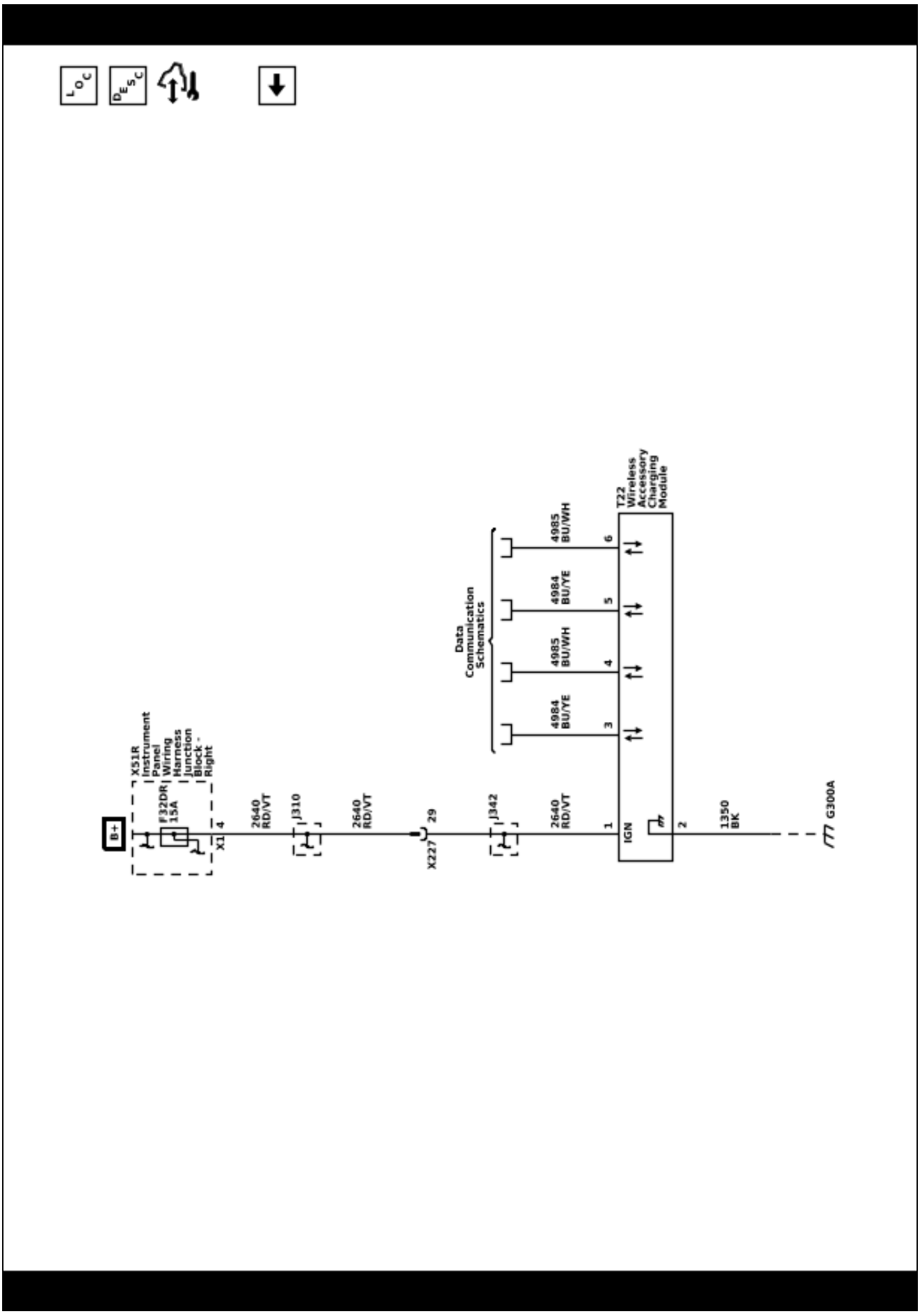
## Cigar Lighter/Power Outlet Schematics (110V AC Pickup Box Accessory Power Receptacle (KC9))



## Cigar Lighter/Power Outlet Schematics (220V AC Pickup Box Accessory Power Receptacle (KCA))



## Cigar Lighter/Power Outlet Schematics (Wireless Charging (K4C))



# Description and Operation

## Mobile Device Wireless Charger Description and Operation

### Mobile Device Wireless Charging System

The Mobile Device Wireless Charging System (WCS) is an system for wirelessly charging mobile devices. It is capable of charging the batteries of compatible mobile devices. A compatible device is one that is compliant with Power Matters Alliance (PMA), Wireless Power Consortium (WPC) Standard, or Alliance for Wireless Power (A4WP), meaning that it is equipped with a PMA, WPC, or A4WP wireless charge “receiver” that will work with the charge “transmitter” installed in the vehicle. The devices may utilize built-in charging circuitry or an adapter (external plug-in device which contains the charging circuitry). To check for phone or other device compatibility, refer to GM Total Connect.

***Warning: Remove all objects from the charging pad before charging your mobile device. Objects, such as coins, keys, rings, paper clips, or cards, between the phone and charging pad will become very hot. On the rare occasion that the charging system does not detect an object, and the object gets wedged between the phone and charger, remove the phone and allow the object to cool before removing it from the charging pad, to prevent burns.***

### Charging

To charge a device, place it on the charging surface in the vehicle. There is a charging coil located in the center of the charging surface. The device has a charging coil typically near the center of the device. These coils must be lined up in order for charging to proceed. When the interruptible retained accessory power (IRAP) relay is closed (this is true typically when vehicle ignition is in Run or Accessory position), the WCS will detect the device, establish communications with the device to confirm it is a compatible device, and then deliver charging power to the device via wireless interface. The WCS will be able to deliver 5W to 15W of power as requested by the compatible device. It shall only enter a charging state if communication is established and a compatible device is identified.

The WCS shall not enter a charging state if there is no communication established with a compatible device. Due to differences in objects, a foreign object detection protocol is employed to detect a non-compliant device and hold power transfer initiation until the non-compliant object has been removed and a compliant object has been detected. The charger monitors its internal temperature and will shut down if the charger temperature exceeds 185F (85C).

### Indicator

The body control module will detect the device battery is charging and send a serial data message on the GMLAN bus to the radio display. The radio display will indicate a device is currently charging by displaying a lightning bolt over the phone icon. When the indicator is toggling on and off this indicates a thermal limit has been reached and the device will not charge. For more information refer to the owners manual.

### Cooling

The wireless charger is kept cool using the HVAC system. There is a dedicated HVAC duct that connects to the Wireless Charging Module bracket (which holds the module and the mat).

## Power Outlets Description and Operation

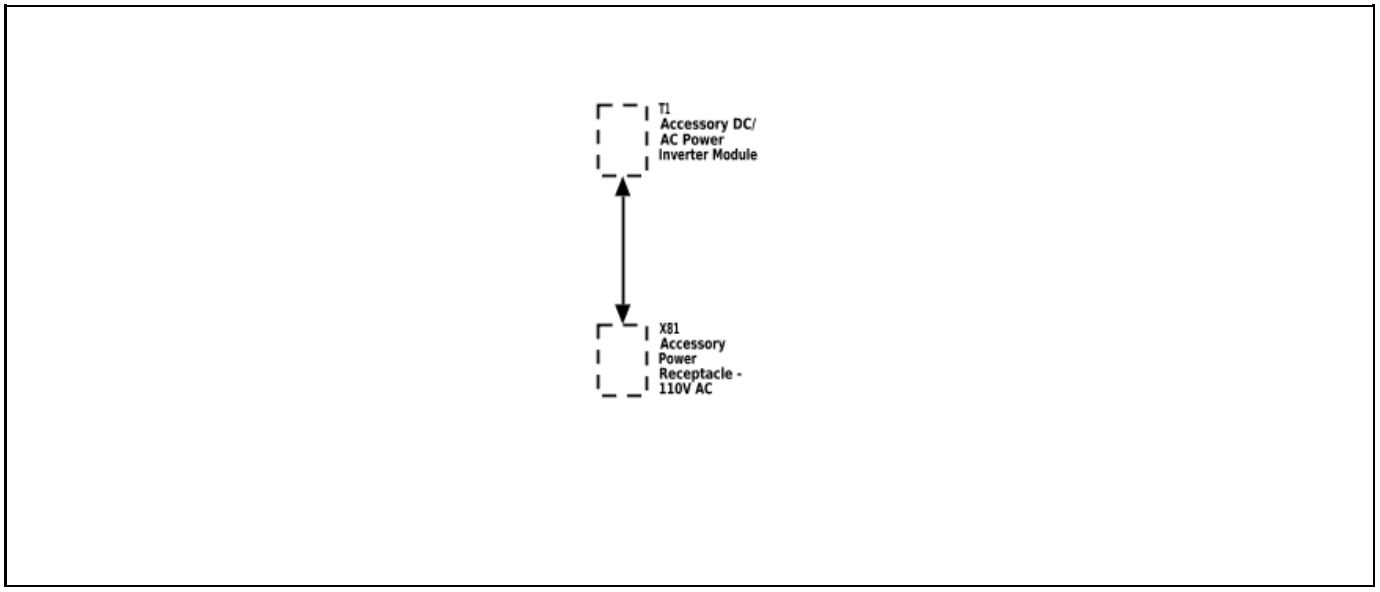
### 12 Volt Power Outlet Receptacle Description and Operation

The 12 V accessory power receptacles are supplied with power by the accessory relay.

The vehicle is fitted with a cigarette lighter and/or with a 12 V accessory power receptacle. The cigarette lighter and accessory power outlets are controlled by an ignition operated relay. The accessory power receptacle and cigarette lighter are operational when the ignition is turned to either the On or the Accessories positions. To operate the cigarette lighter, press in the lighter knob. When the element is hot, the lighter automatically pops out and is ready for use.

# 110 Volt Power Outlet Receptacle System Description

## Power Outlets Block Diagram




3403851

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 110 V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 110 V at 60 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 110 V AC provides the usual connection for AC powered devices.

## 110 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 110 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 110 V AC, the normally open switch in the accessory power receptacle – 110 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 110 V AC switch, the inverter module begins to supply 110 V AC to the accessory power receptacle – 110 V AC after a 1.5 s delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

## 110 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 110 V circuit for a short to vehicle chassis ground. If a 110 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 110 Volt Power Outlet Receptacle Overload Shutdown

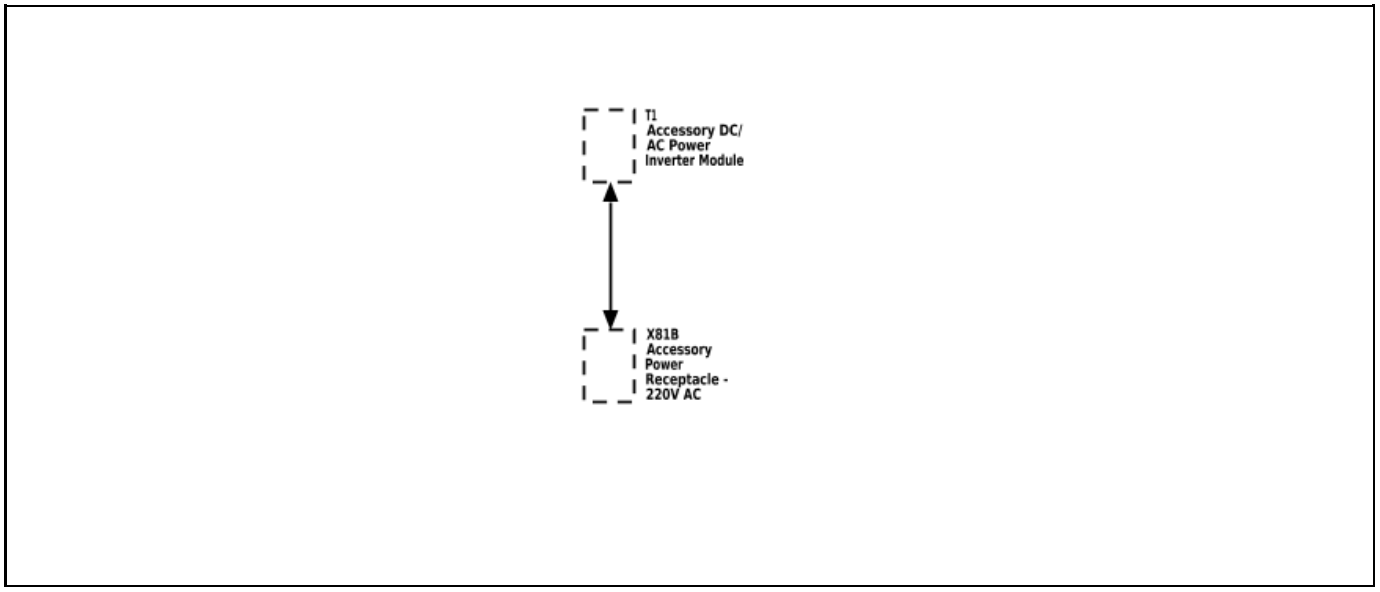
The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 s , or 2.5 A for 10 s . The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 110 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the outlet, and then plugged into the outlet.

## 230 Volt Power Outlet Receptacle System Description

### Power Outlets Block Diagram




3403853

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 220V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 220–230 V at 50 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 220V AC provides the usual connection for AC powered devices.

## 230 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 220V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 220V AC, the normally open switch in the accessory power receptacle – 220V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 220V AC switch, the inverter module begins to supply 220–230 V AC to the accessory power receptacle – 220V AC after a 1.5 second delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

## 230 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 230 V circuit for a short to vehicle chassis ground. If a 230 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 230 Volt Power Outlet Receptacle Overload Shutdown

The accessory AC/DC power control module will turn OFF if the current in the 230 V circuit is greater than 3.8 A for 1 second, or 2.5 A for 10 seconds. The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

## 230 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the accessory power receptacle – 220V AC, and then plugged into the accessory power receptacle – 220V AC.

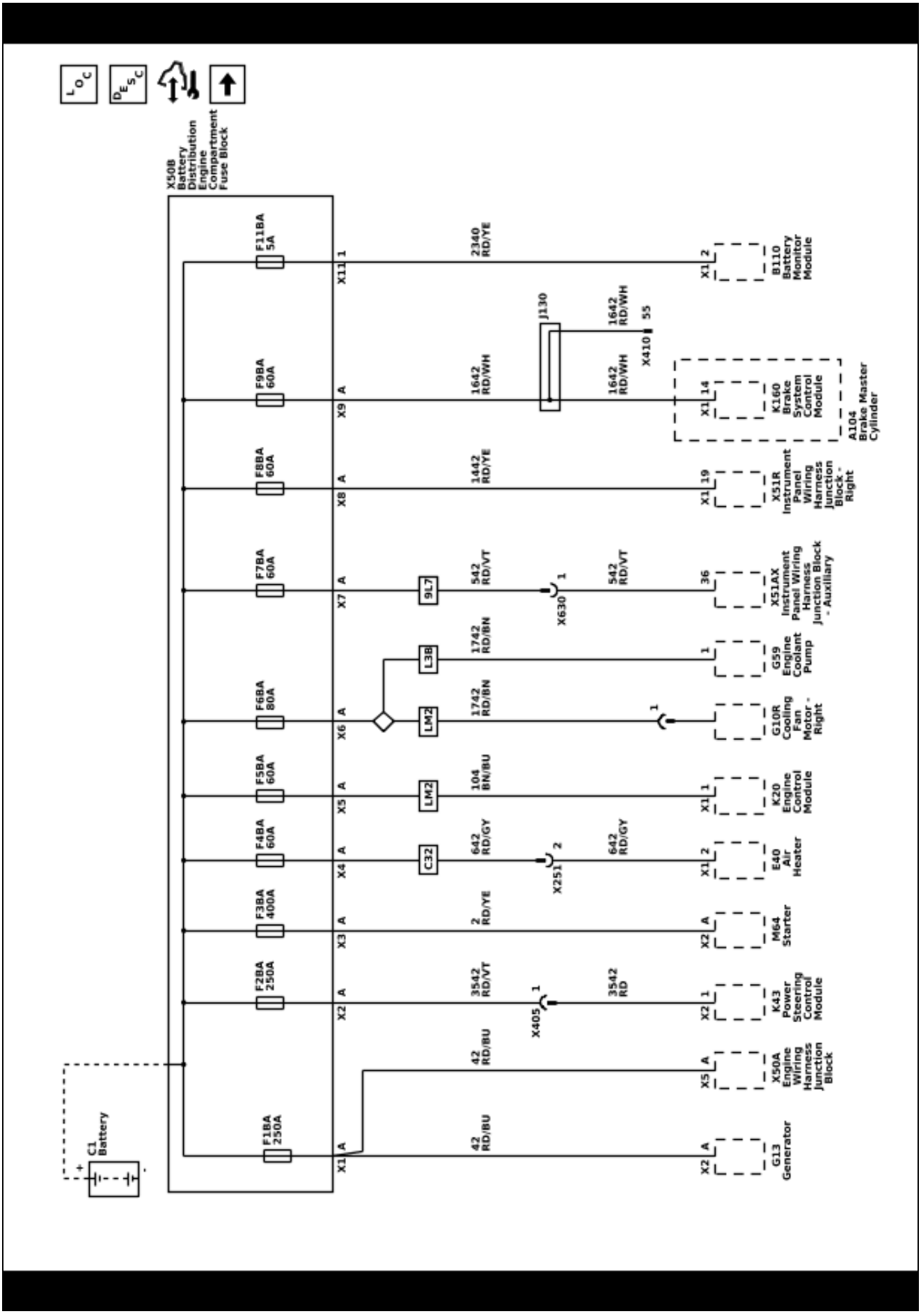
## USB Receptacle Description and Operation (USS)

The vehicle is fitted with USB charge port receptacles at the rear of the floor console. These USB receptacles are for charging devices only. The USB receptacles are controlled by an ignition operated relay and are operational when the ignition is turned to either the On or the Accessories positions.

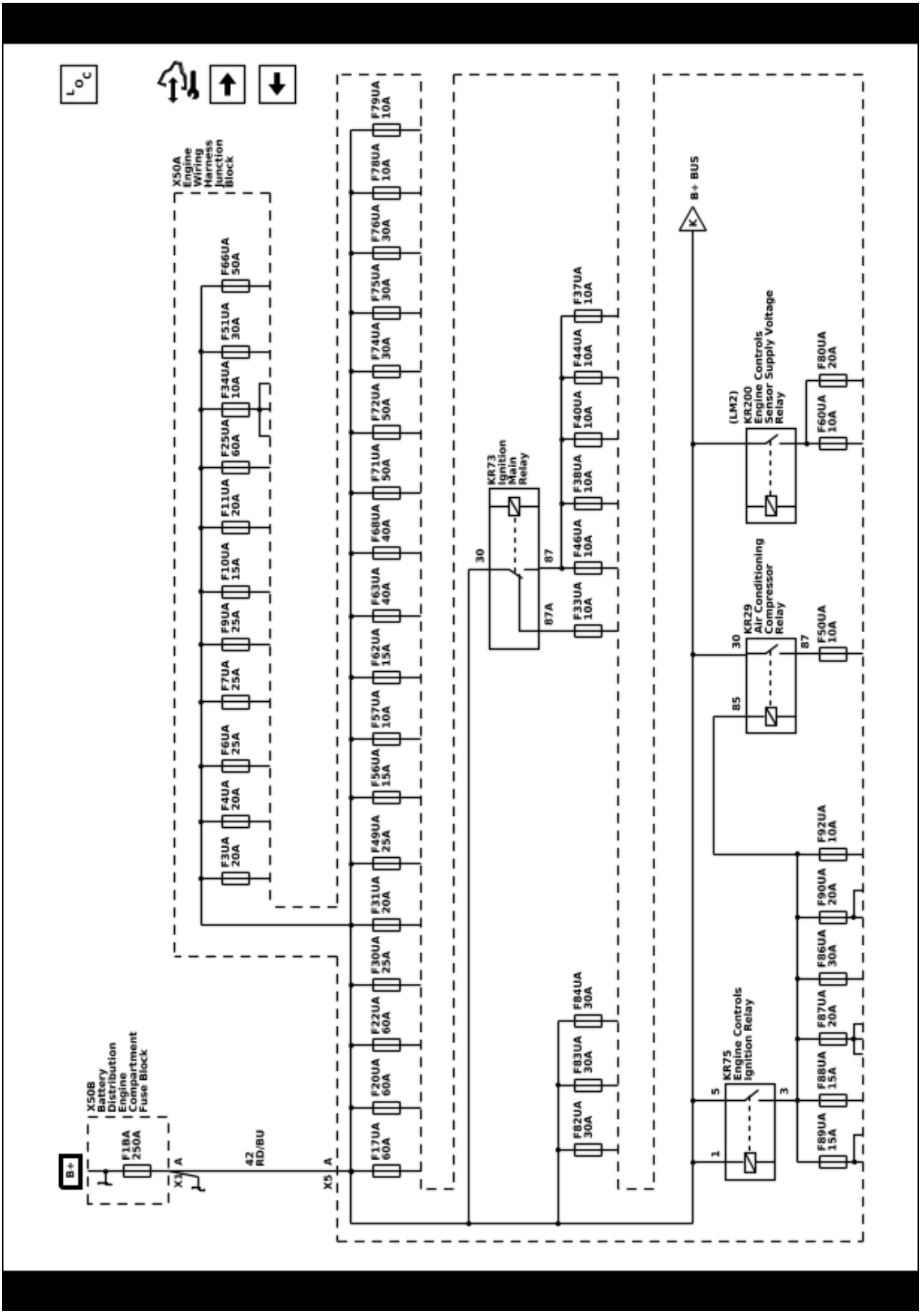
# Wiring Systems and Power Management

## Schematic and Routing Diagrams

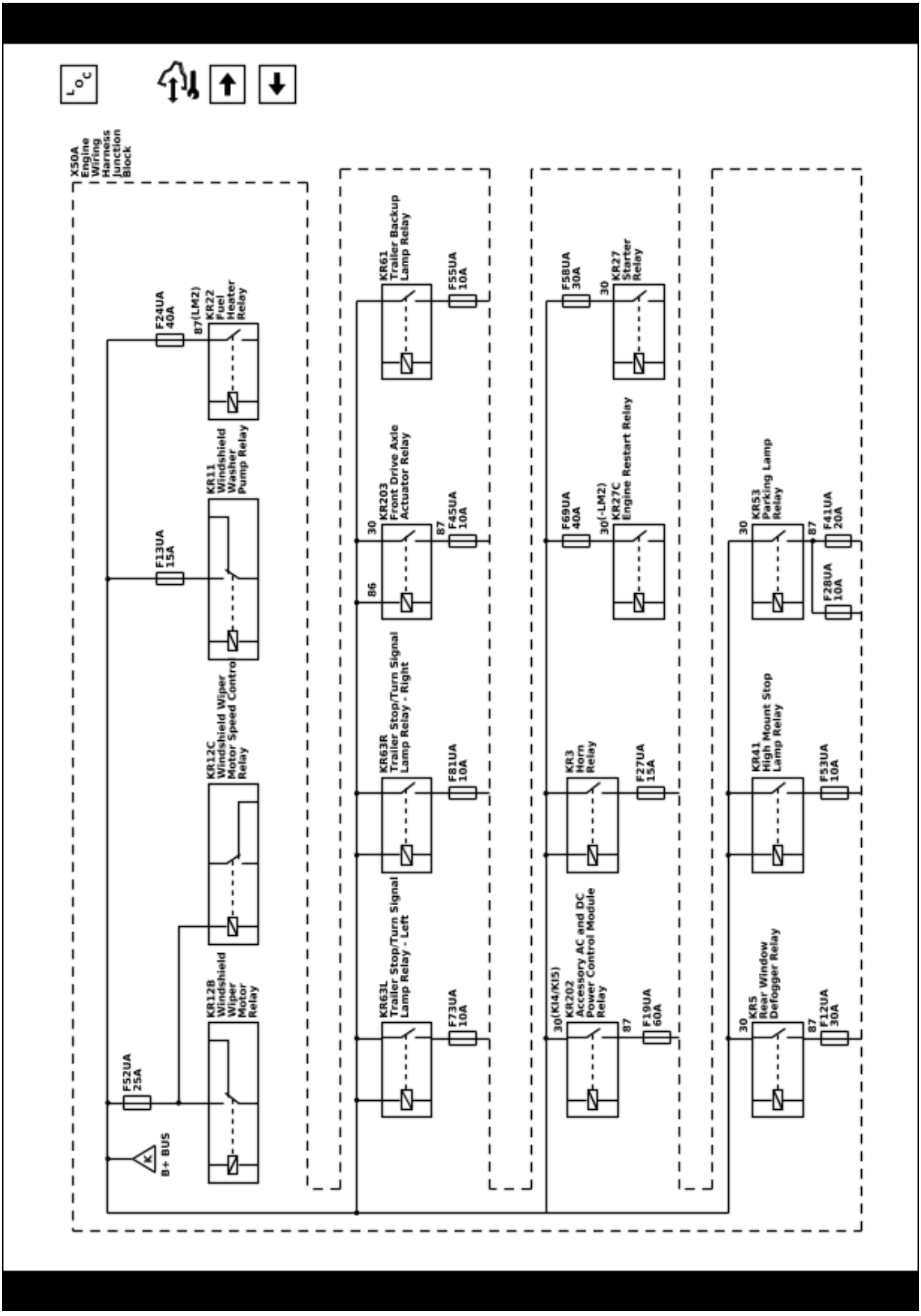
## Power Distribution Schematics (Battery Distribution Engine Compartment Fuse Block)



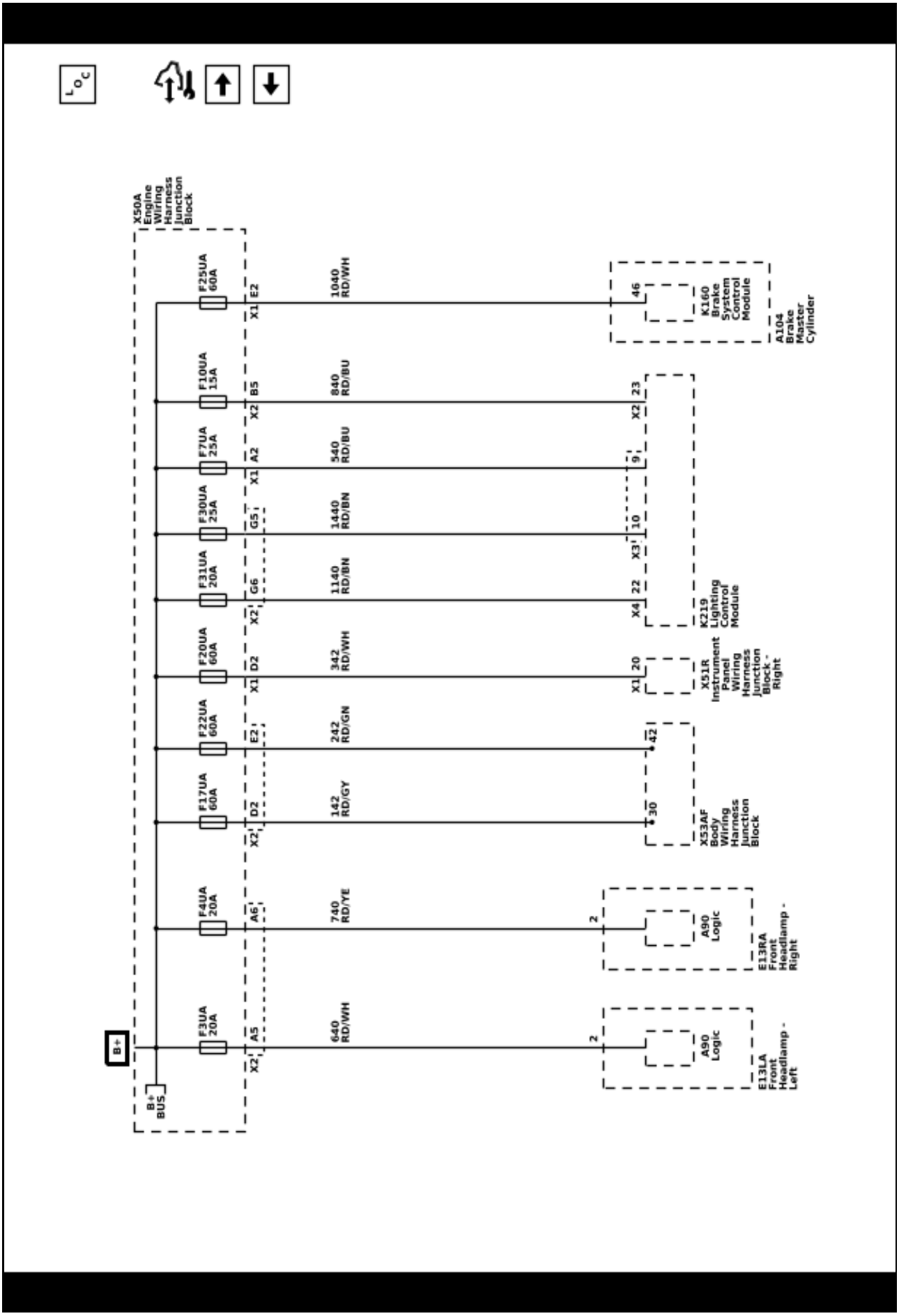
## Power Distribution Schematics (Engine Wiring Harness Junction Block - B+ Bus - 1 of 2)



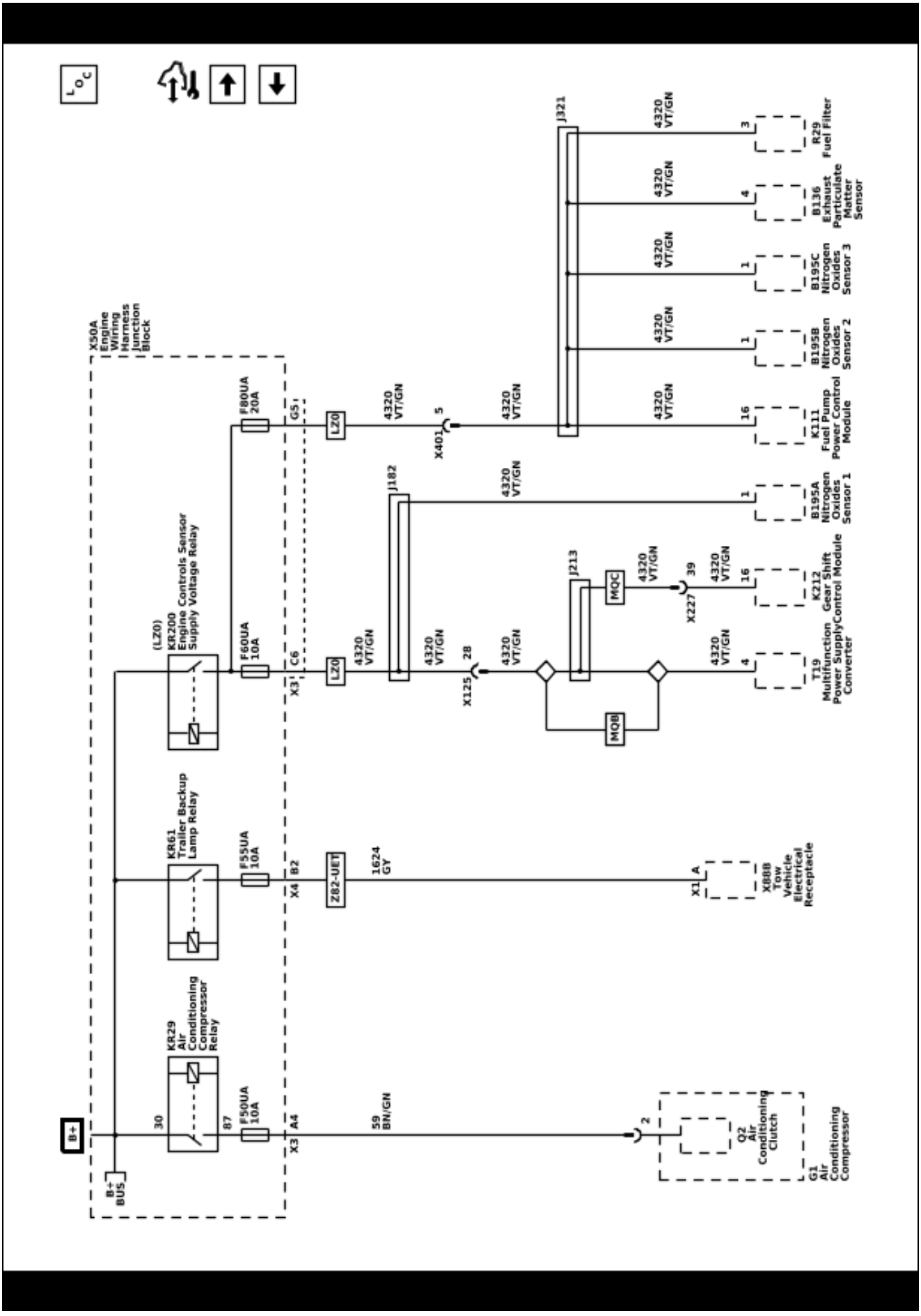
## Power Distribution Schematics (Engine Wiring Harness Junction Block - B+ Bus - 2 of 2)



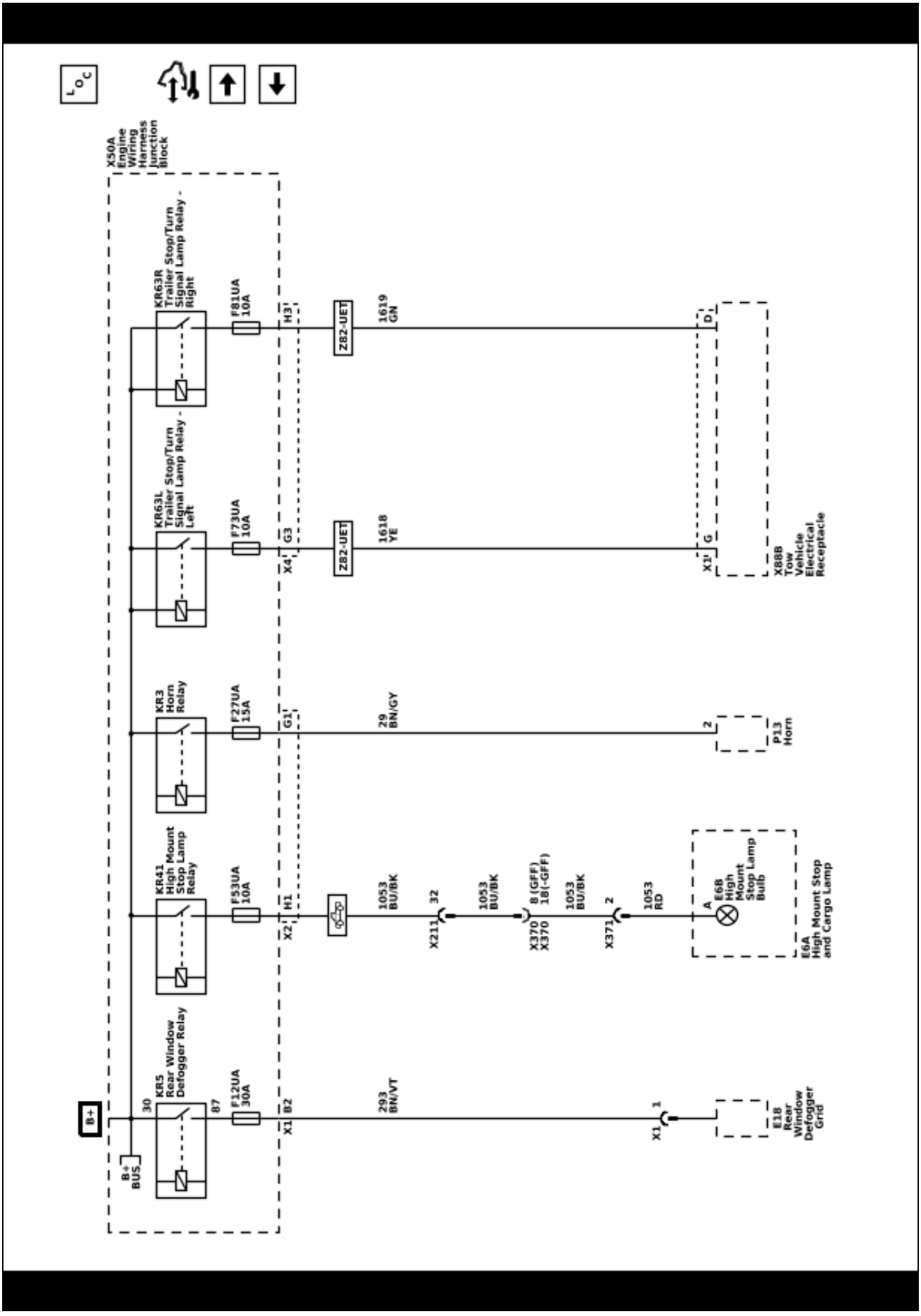
## Power Distribution Schematics (F3UA, F4UA, F6UA, F7UA, F9UA, F10UA, F17UA, F20UA, F22UA, F25UA, F30UA, and F31UA Fuses)



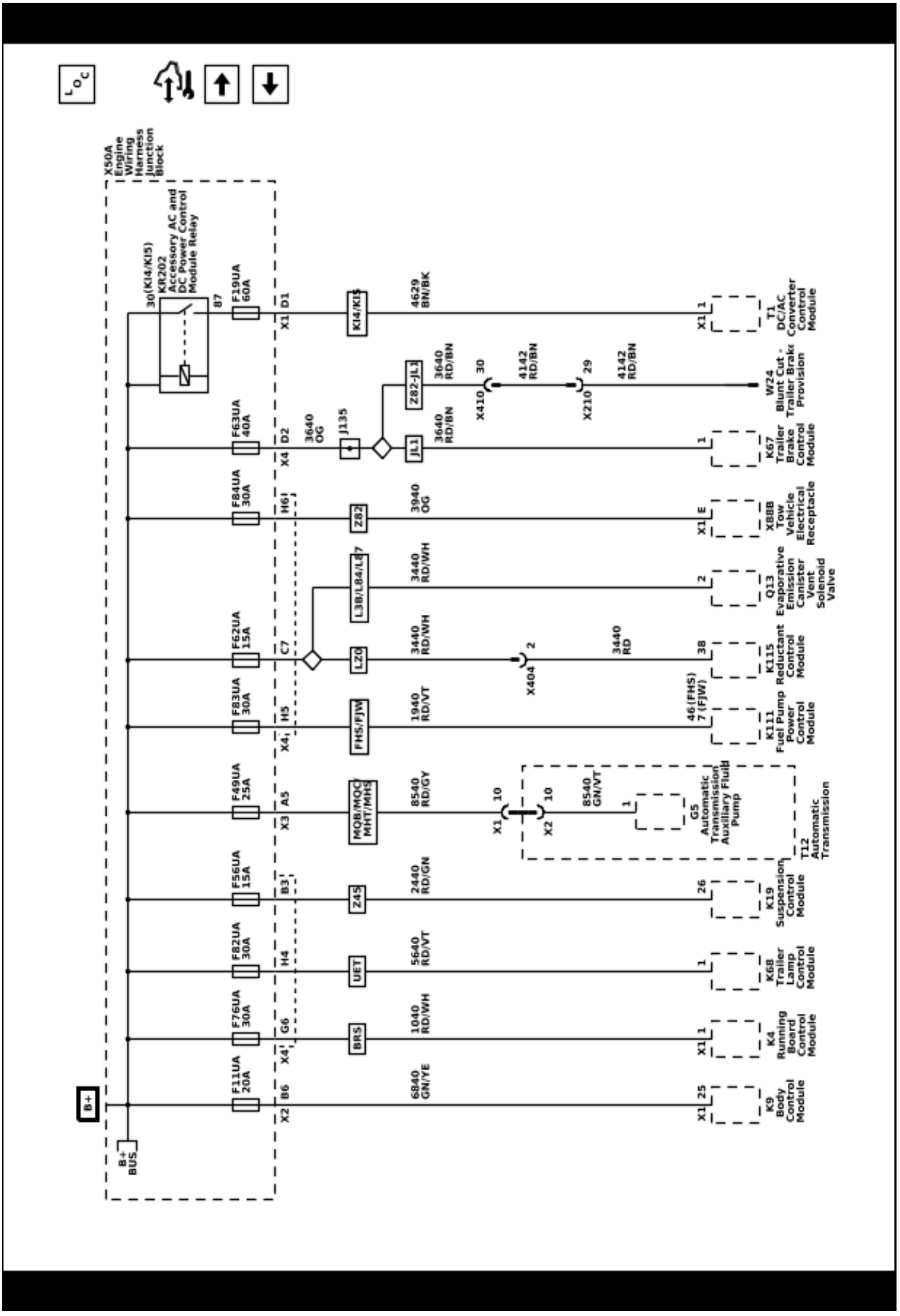
## Power Distribution Schematics (F50UA, F55UA, F60UA, and F80UA Fuses)



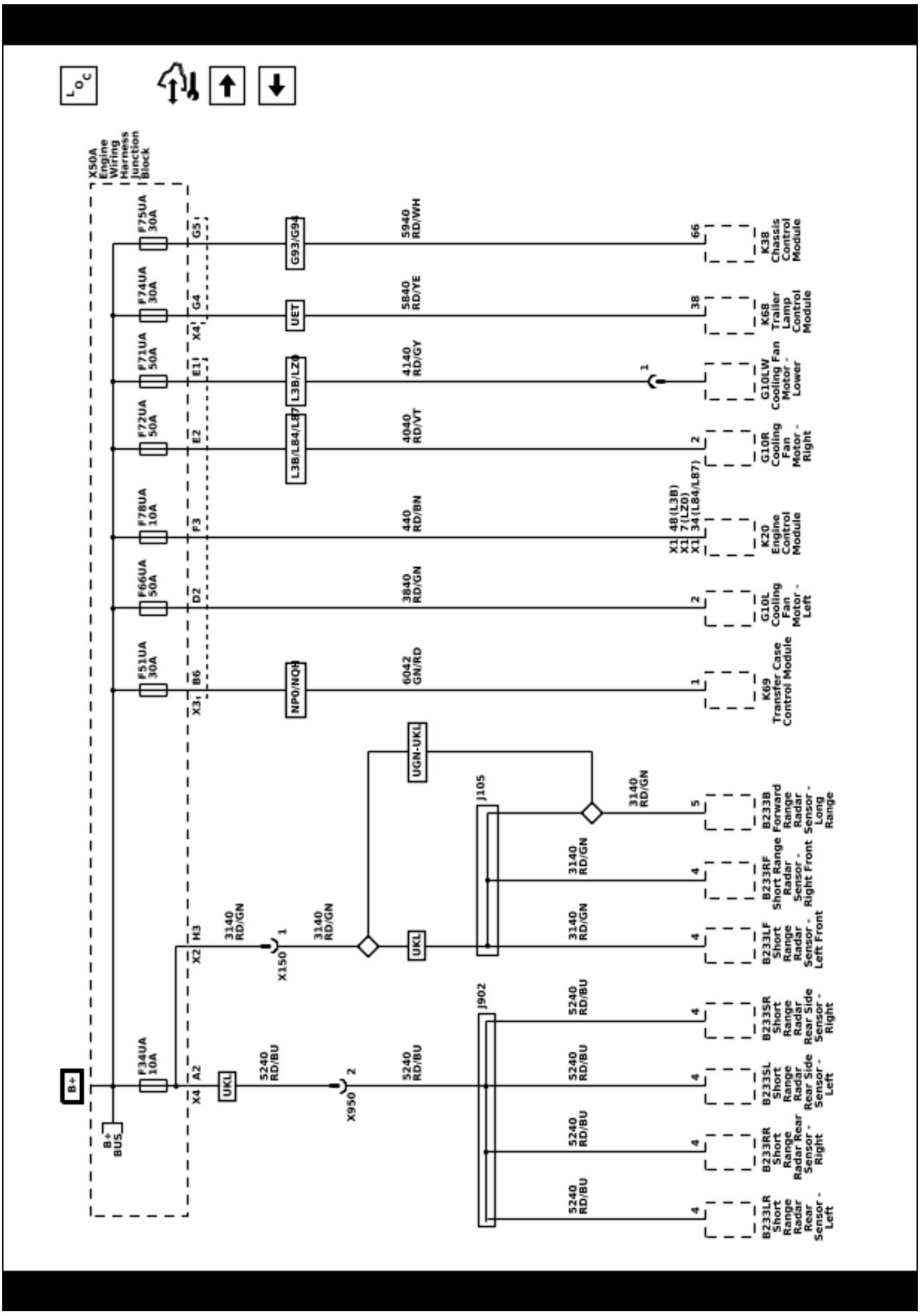
## Power Distribution Schematics (F12UA, F27UA, F53UA, F73UA, and F81UA Fuses)



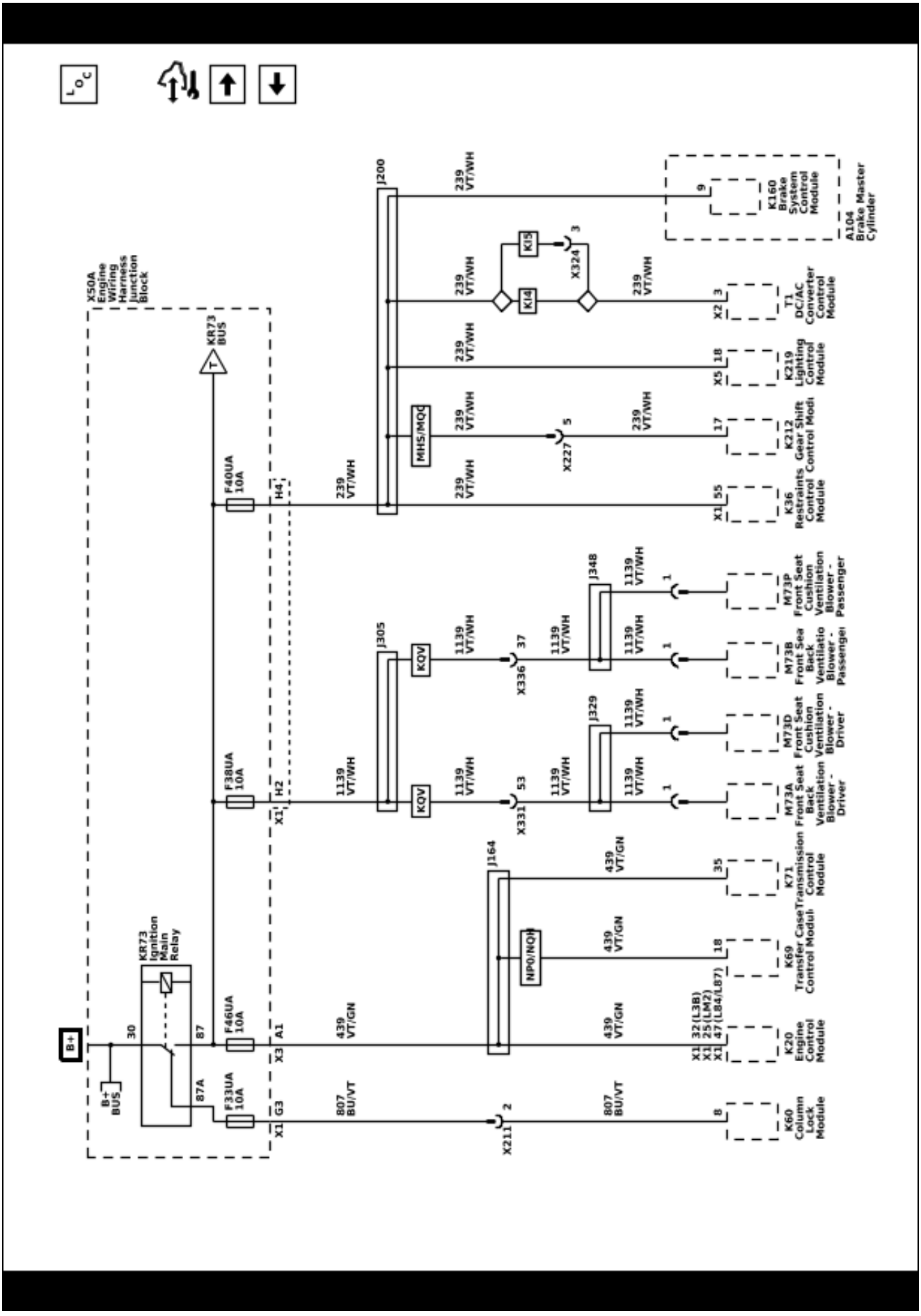
## Power Distribution Schematics (F11UA, F19UA, F49UA, F56UA, F62UA, F63UA, F76UA, F82UA, F83UA, and F84UA Fuses)



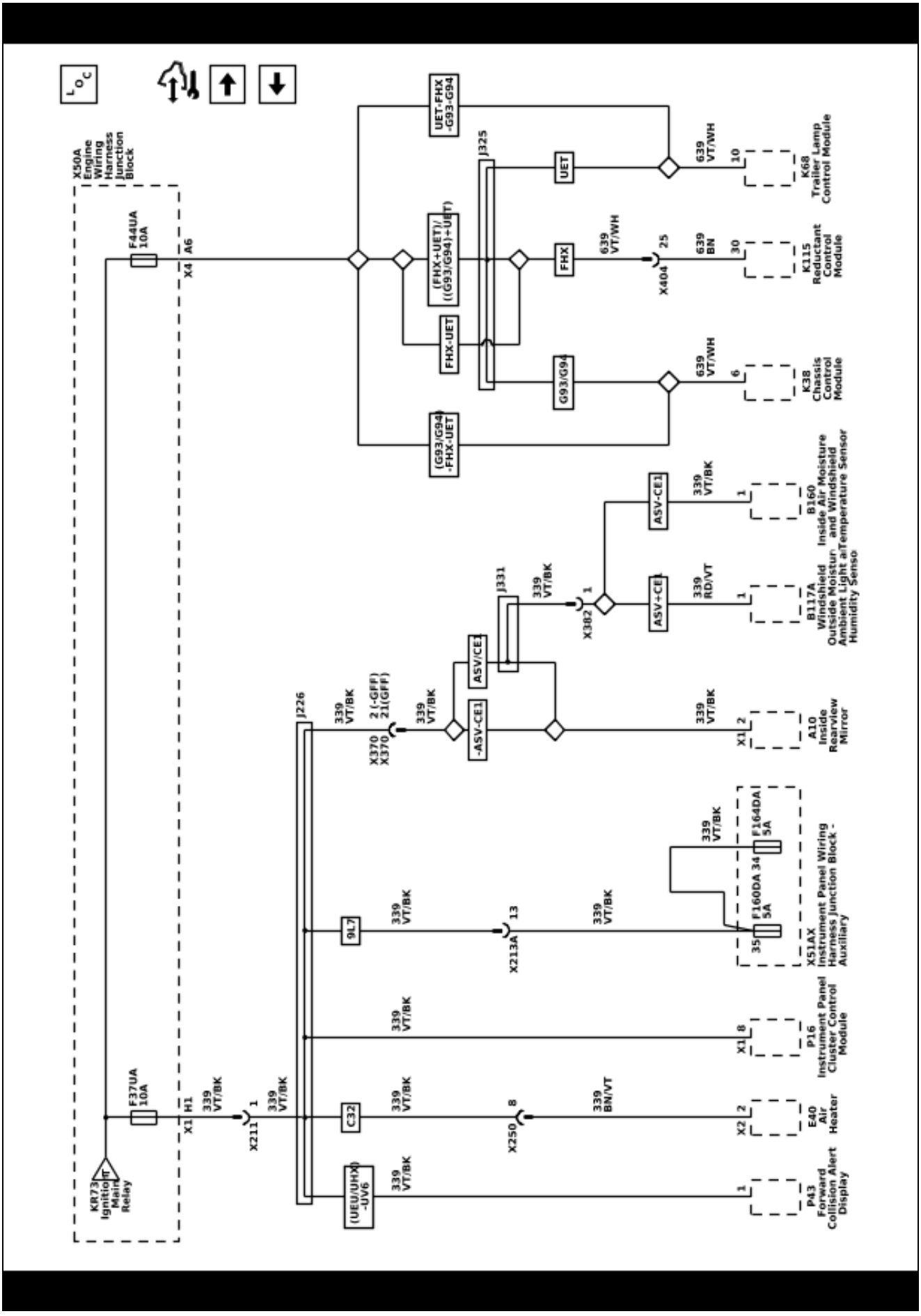
## Power Distribution Schematics (F34UA, F51UA, F66UA, F71UA, F72UA, F74UA, F75UA, and F78UA Fuses)



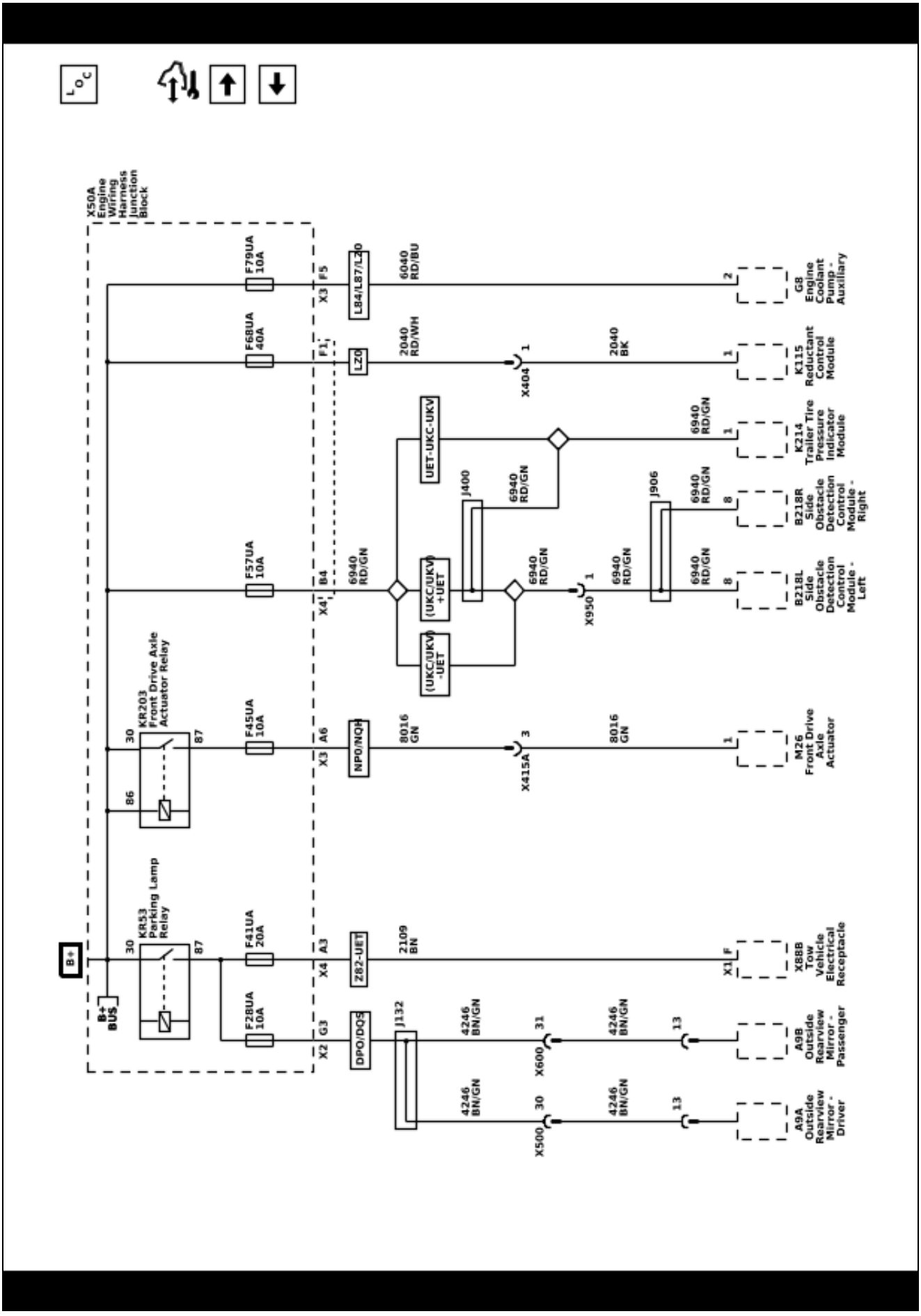
## Power Distribution Schematics (F33UA, F38UA, F40UA, and F46UA Fuses)



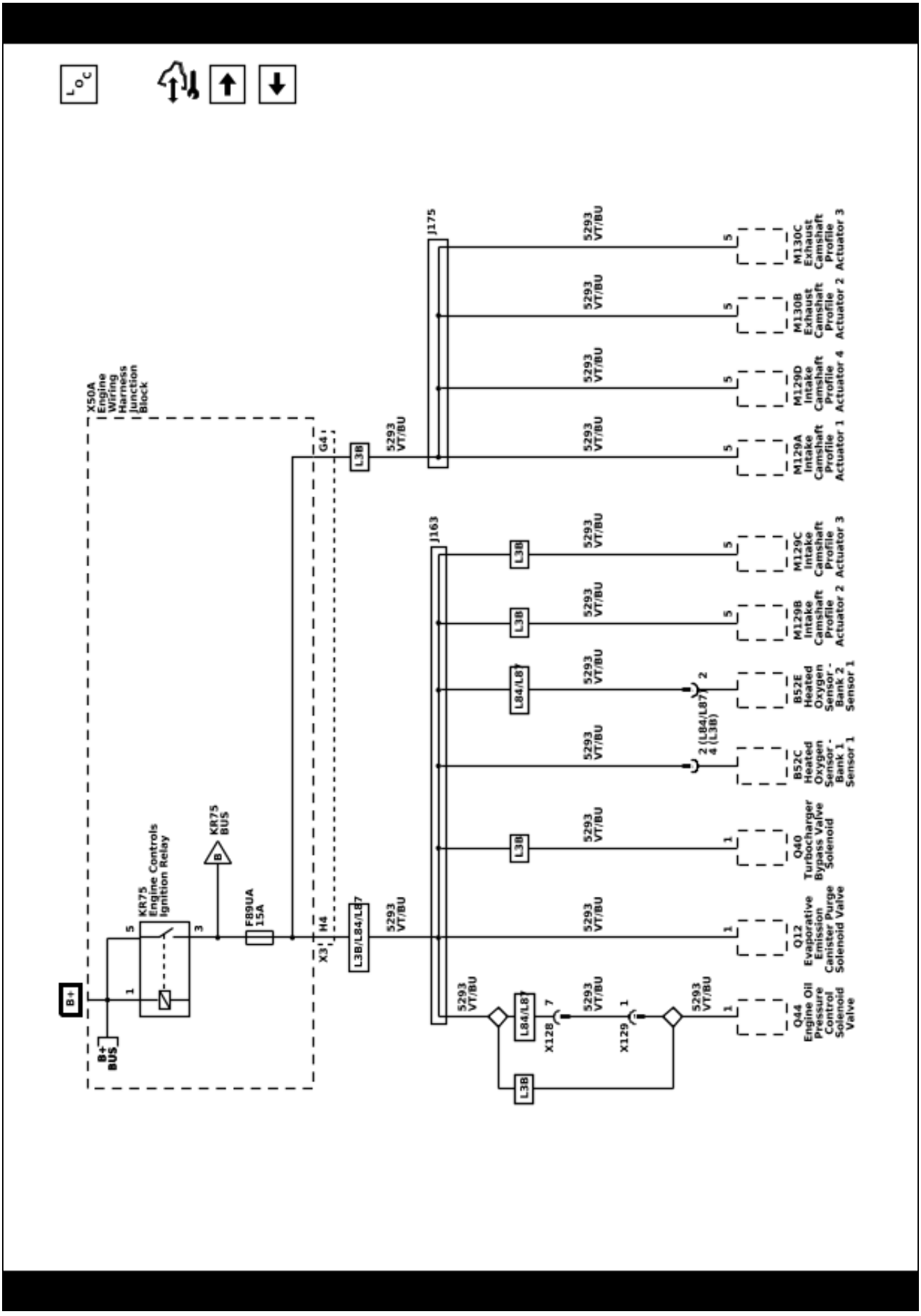
## Power Distribution Schematics (F37UA and F44UA Fuses)



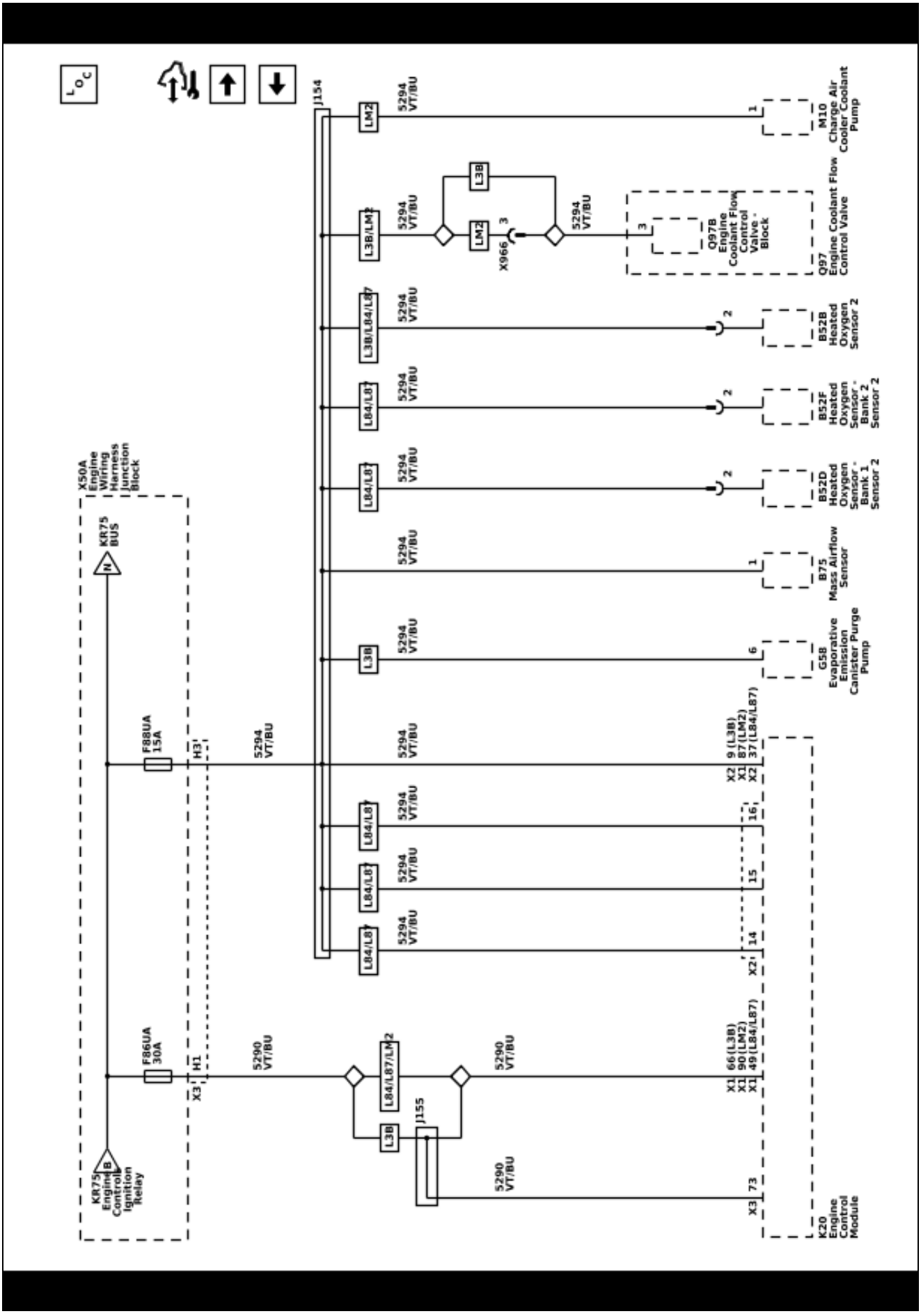
## Power Distribution Schematics (F28UA, F41UA, F45UA, F57UA, F68UA, and F79UA Fuses)



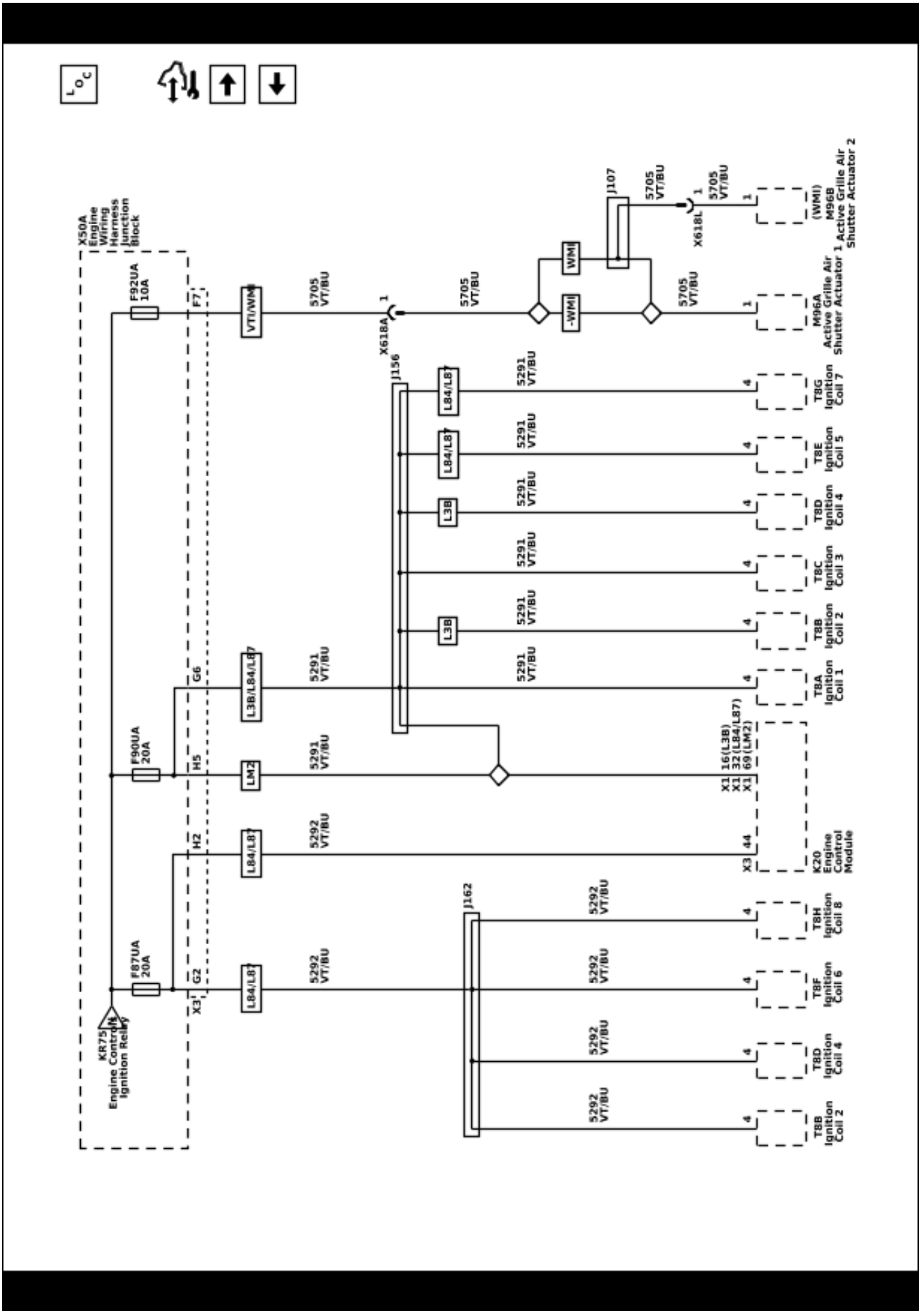
## Power Distribution Schematics (F89UA Fuse)



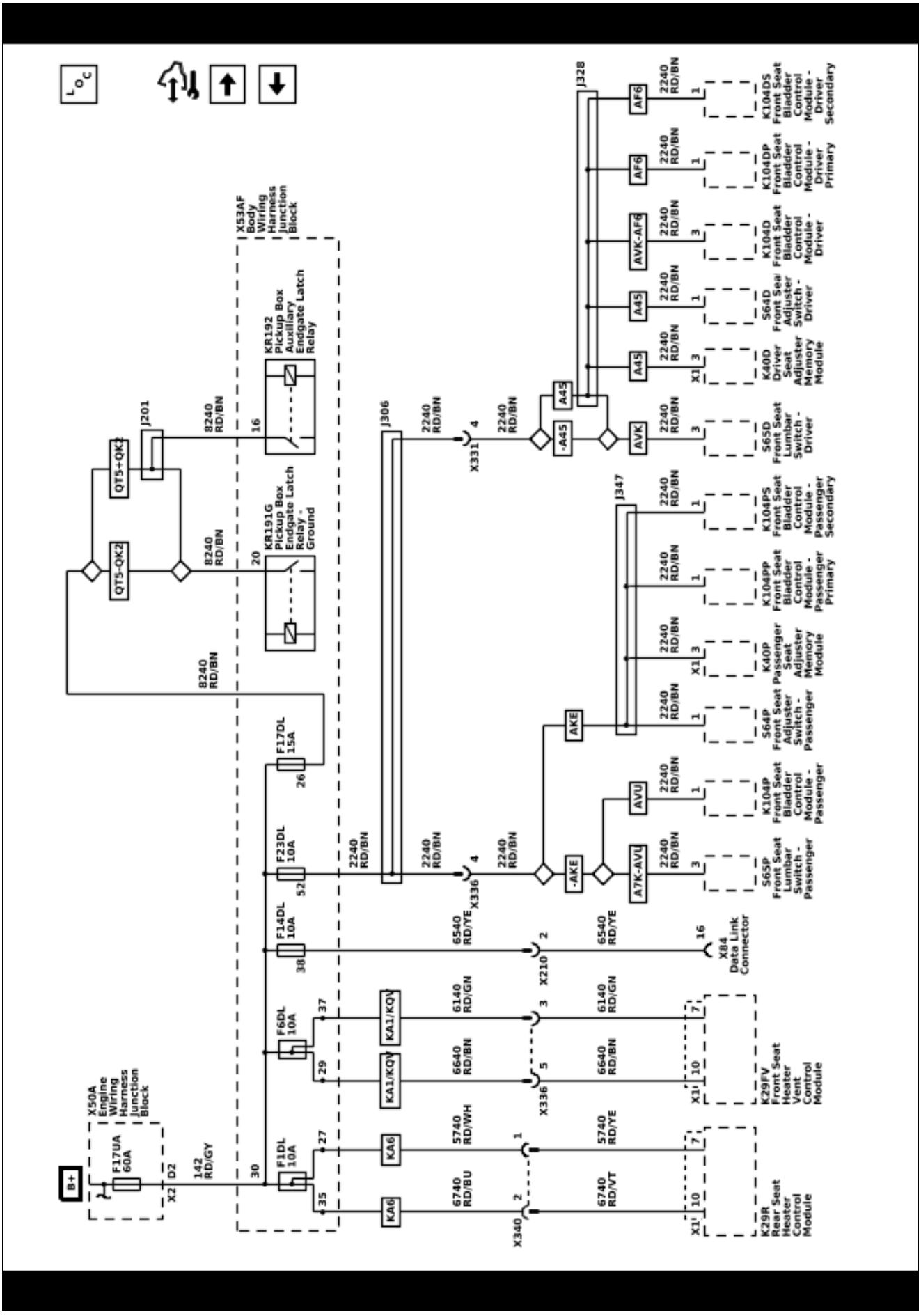
## Power Distribution Schematics (F86UA and F88UA Fuses)



## Power Distribution Schematics (F87UA, F90UA, and F92UA Fuses)

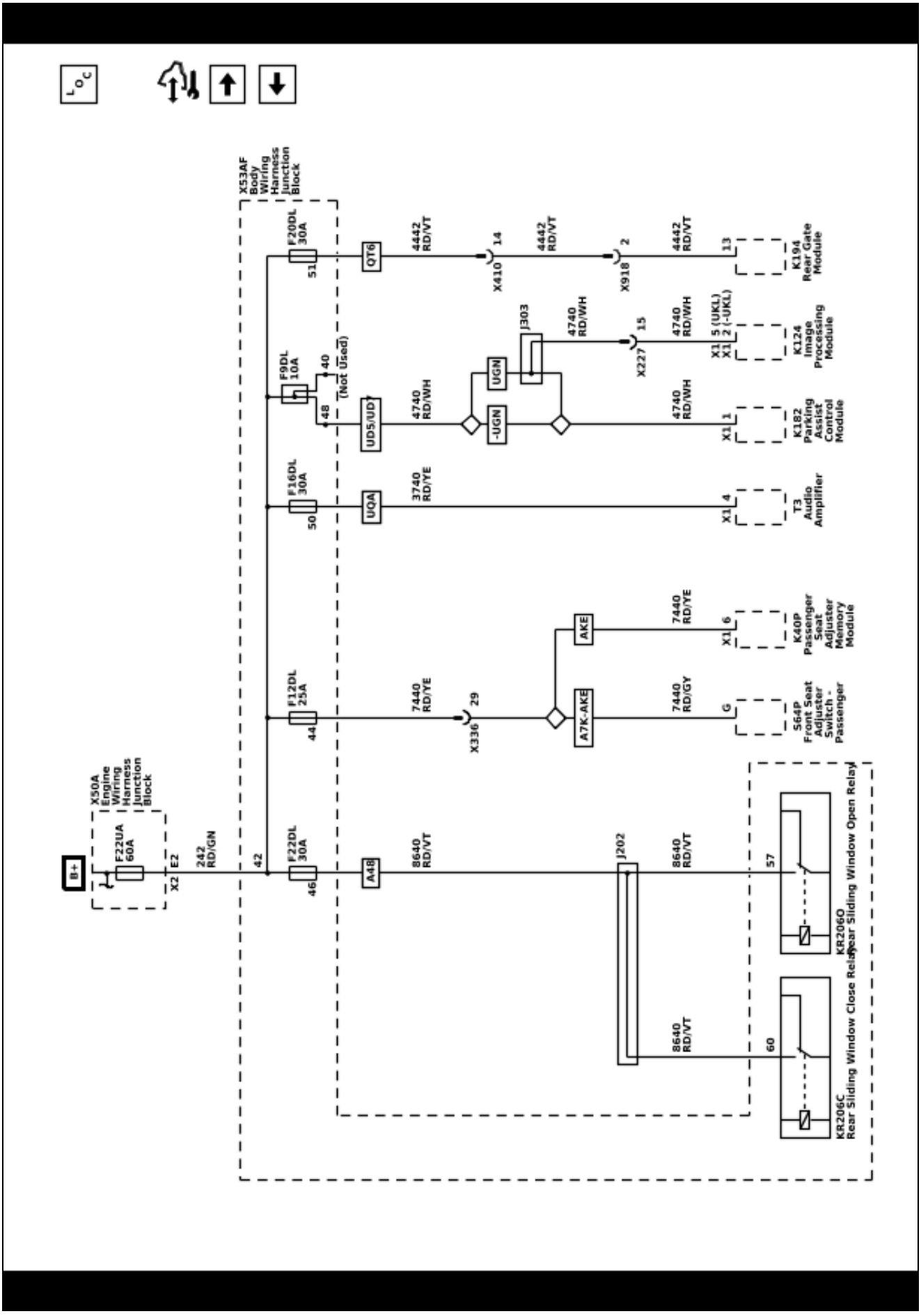


## Power Distribution Schematics (F1DL, F6DL, F14DL, F17DL, and F23DL Fuses)

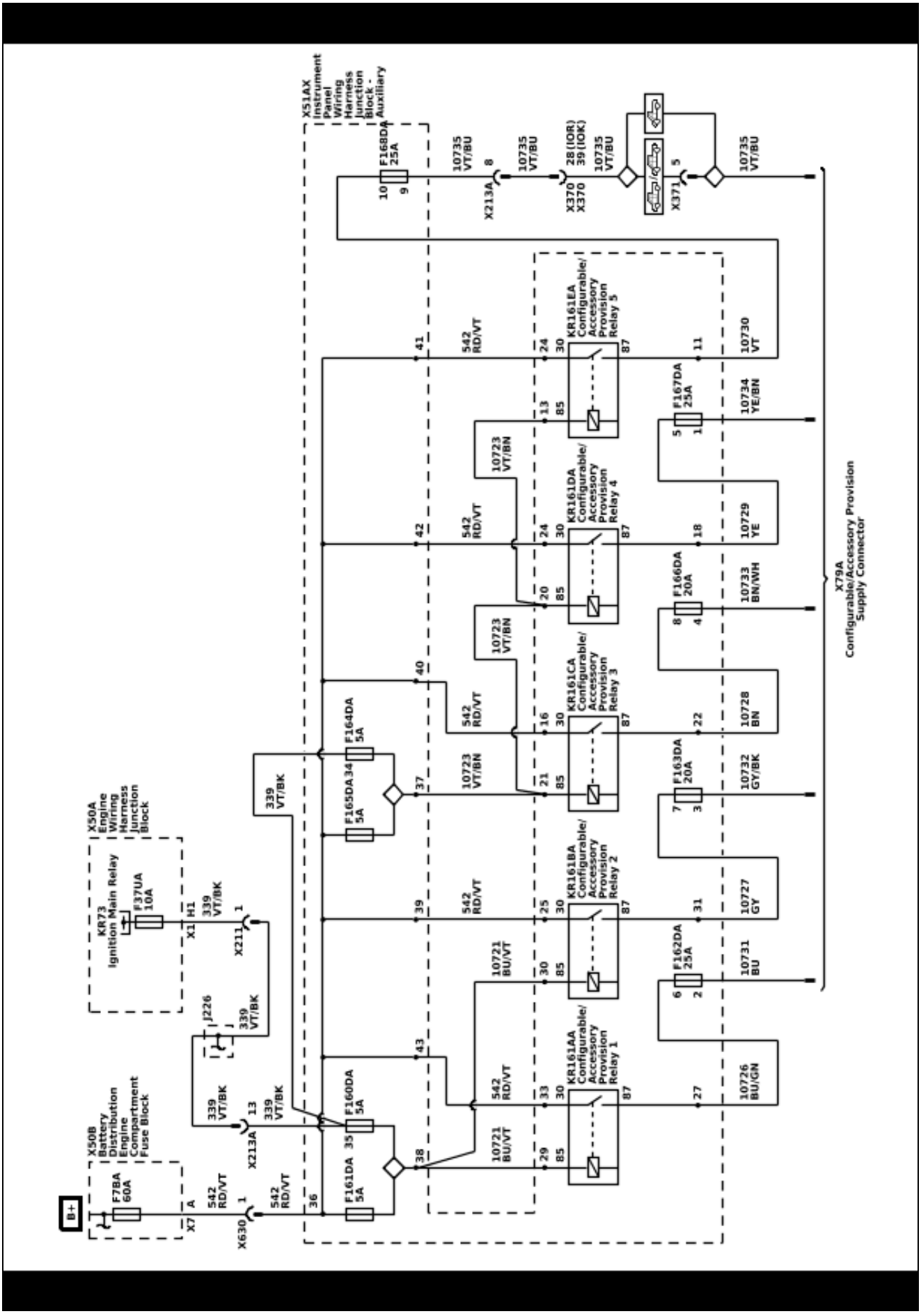



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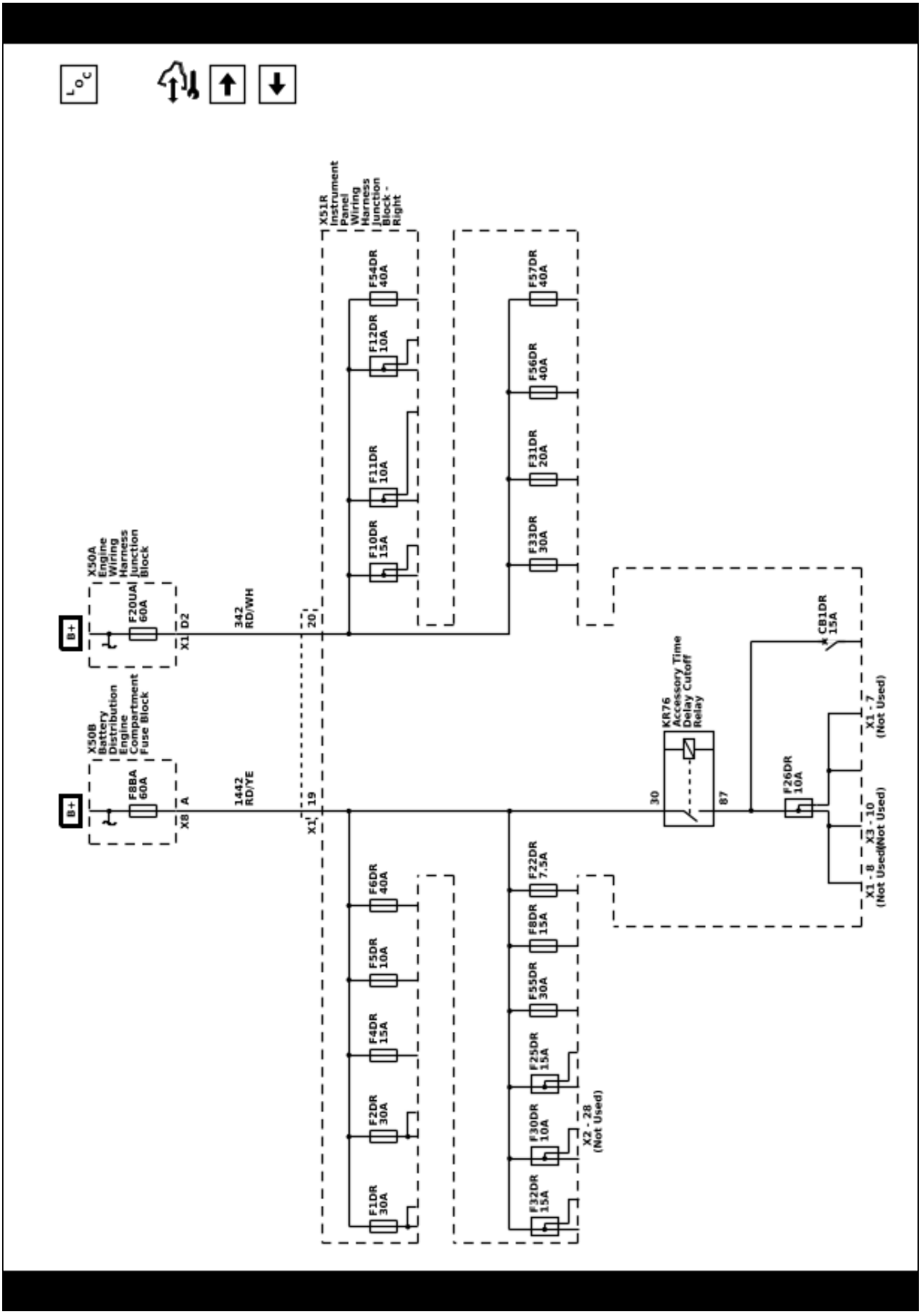
## Power Distribution Schematics (F9DL, F12DL, F16DL, F20DL, and F22DL Fuses)



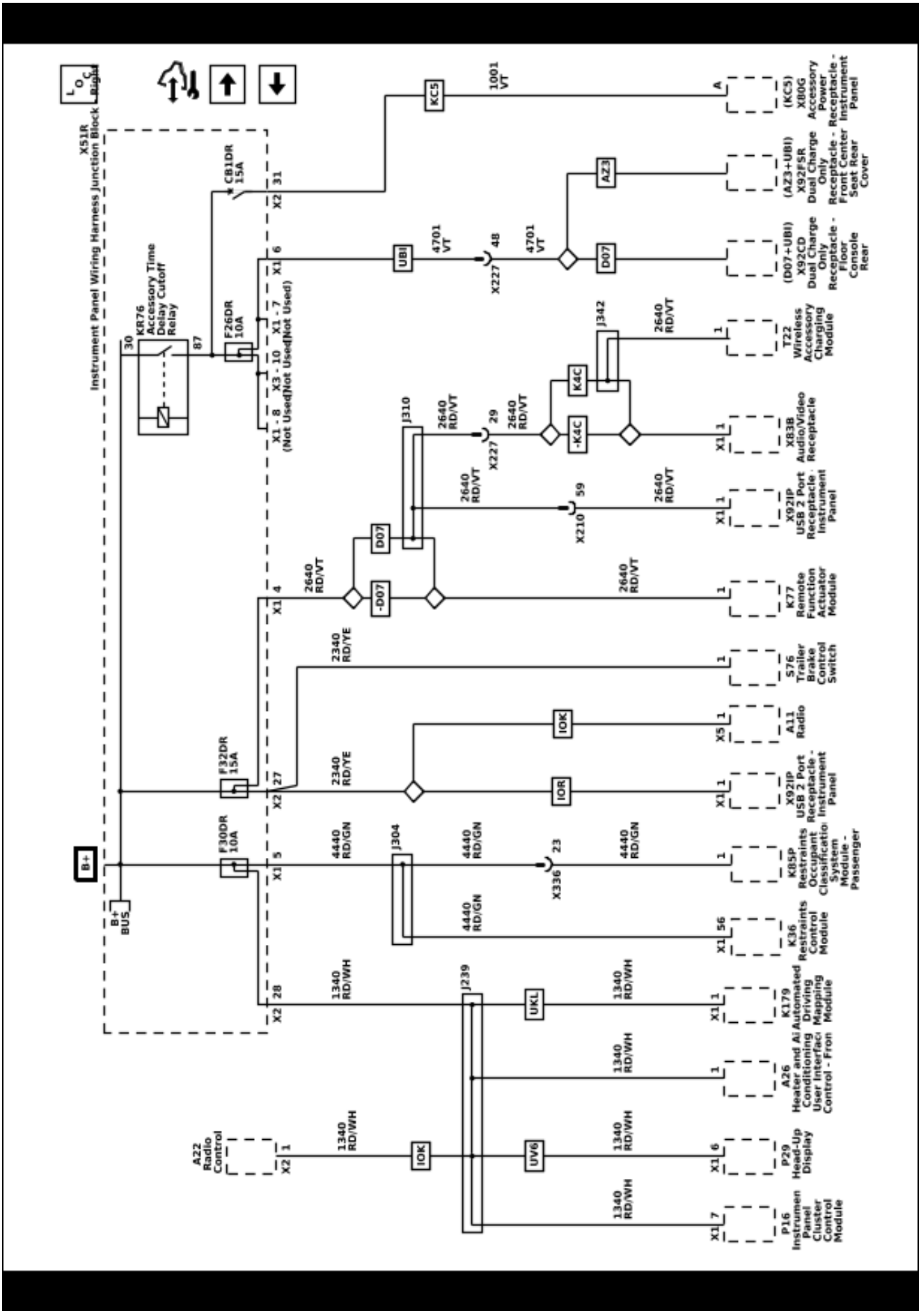
## Power Distribution Schematics (Instrument Panel Wiring Harness Junction Block - Auxiliary)



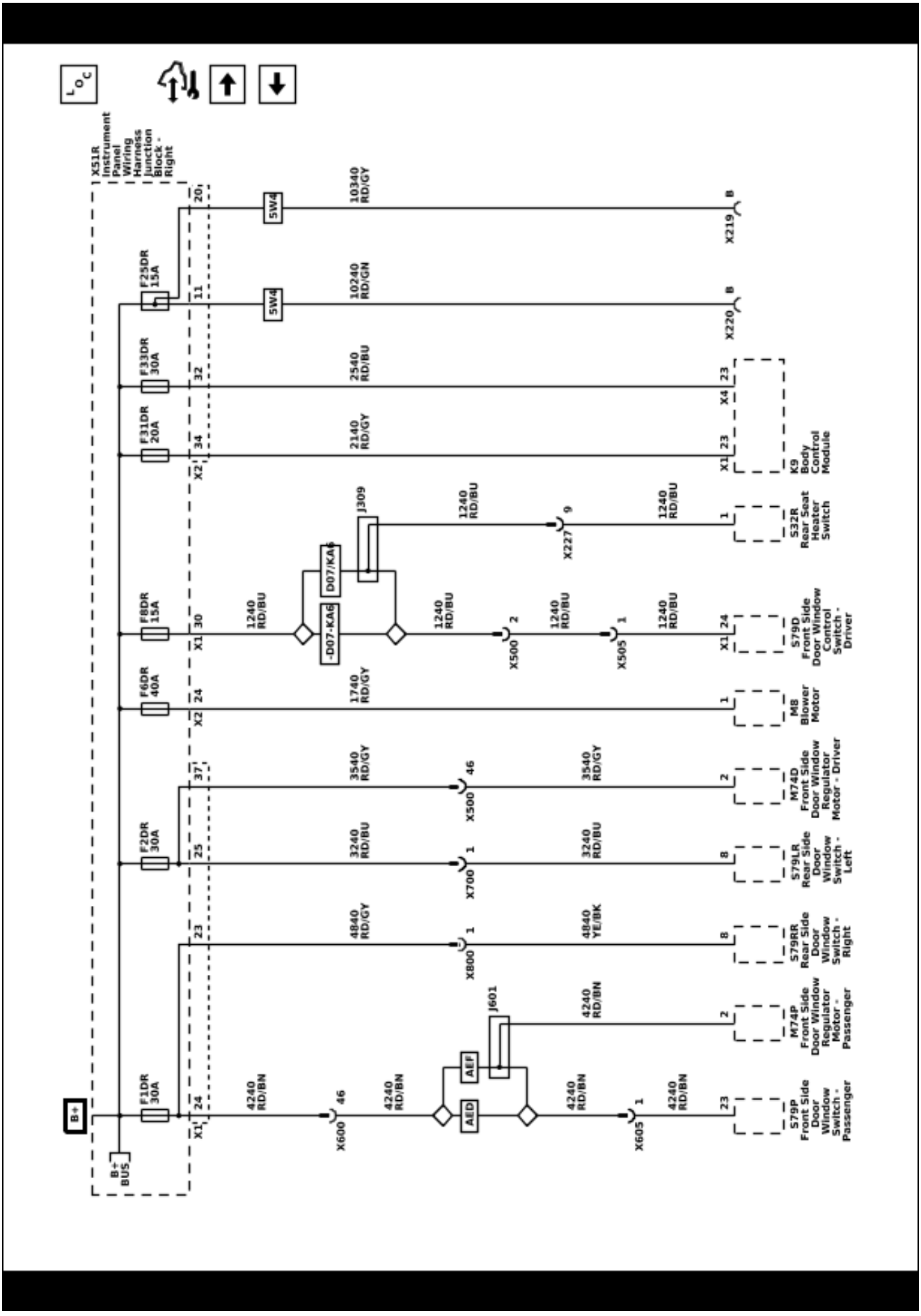
## Power Distribution Schematics (Instrument Panel Wiring Harness Junction Block - Right - B+ Bus)



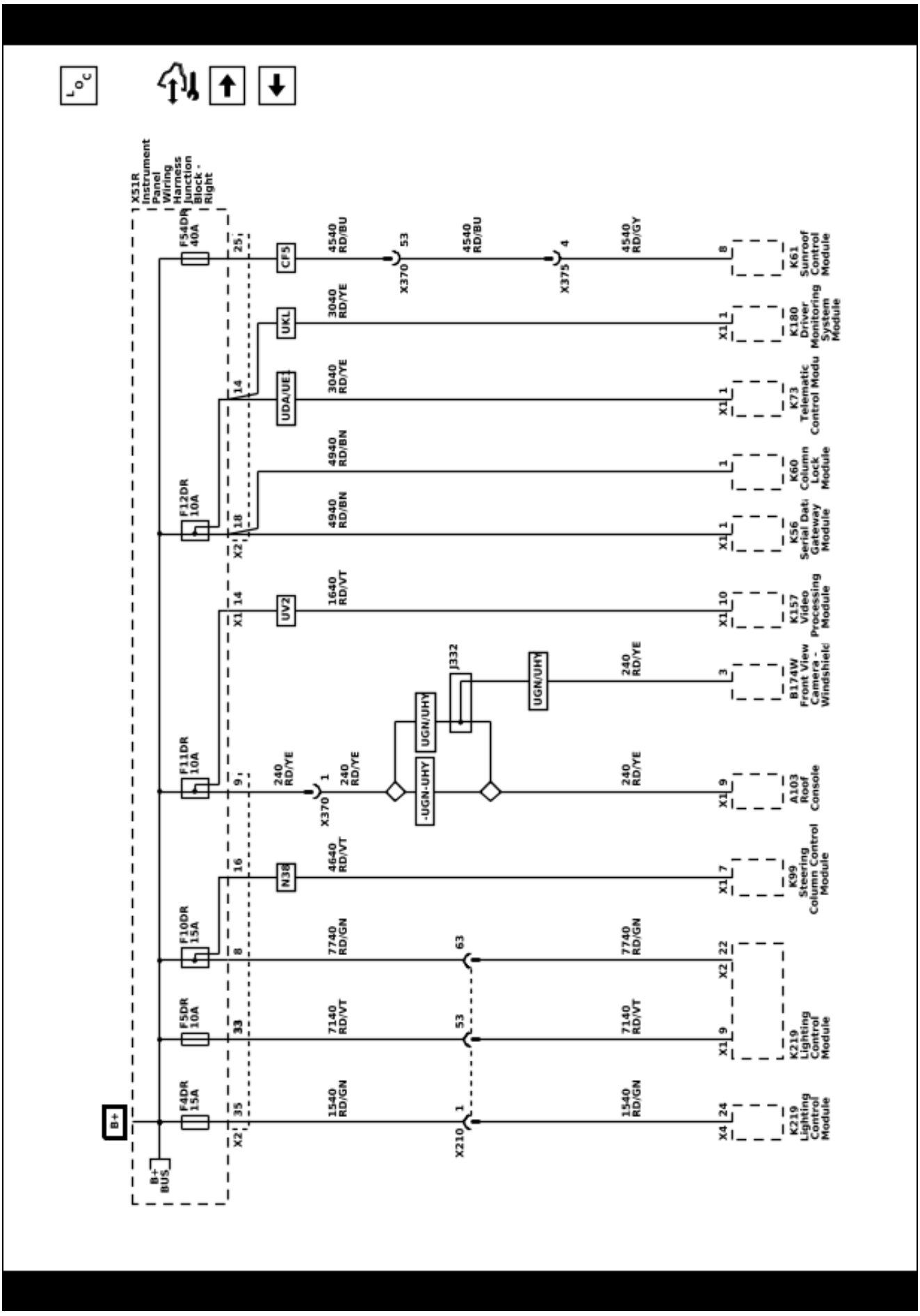
## Power Distribution Schematics (CB1DR Circuit Breaker, F26DR, F30DR, and F32DR Fuses)



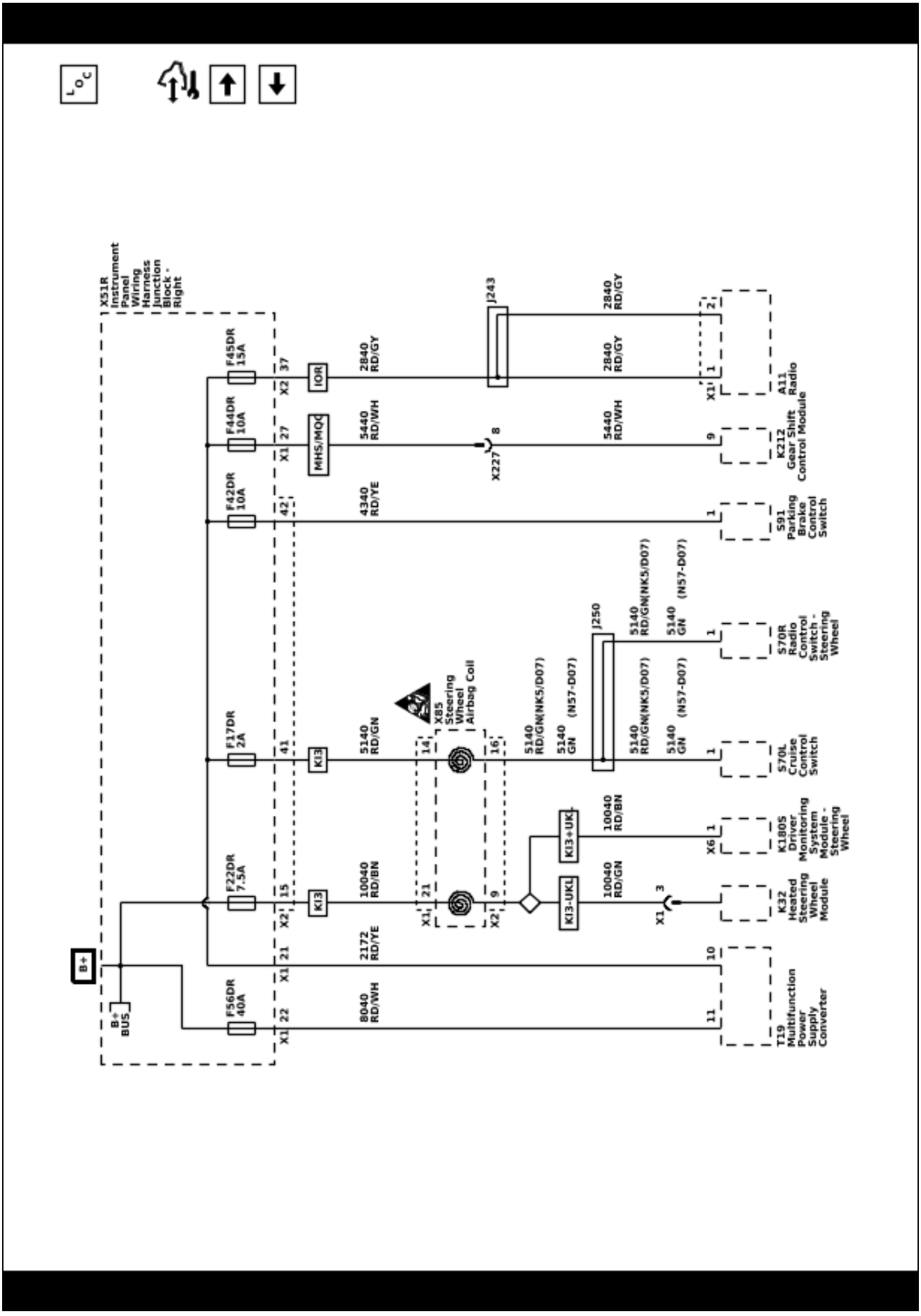
## Power Distribution Schematics (F1DR, F2DR, F6DR, F8DR, F25DR, F31DR, and F33DR Fuses)



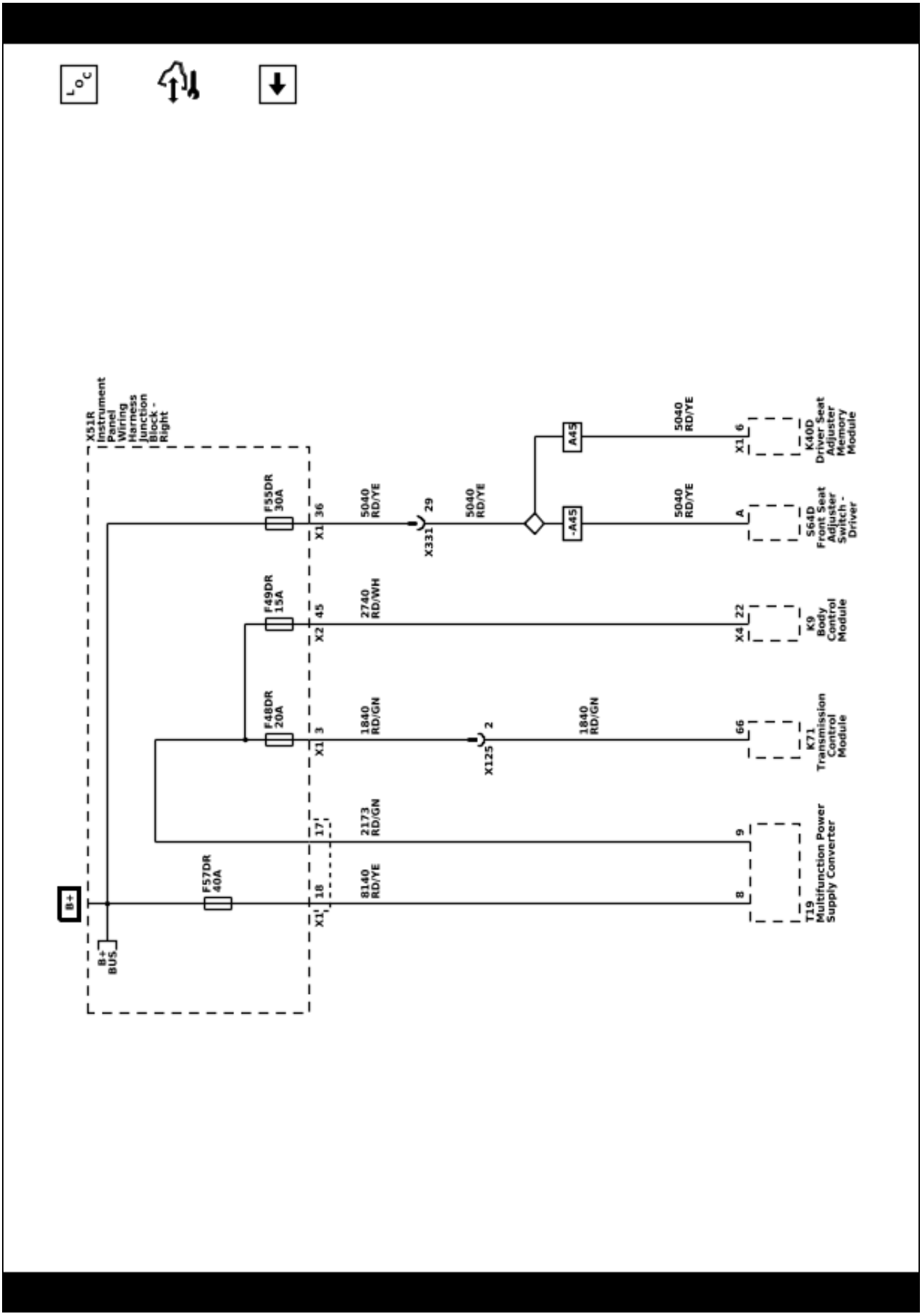
## Power Distribution Schematics (F4DR, F5DR, F10DR, F11DR, F12DR, and F54DR Fuses)



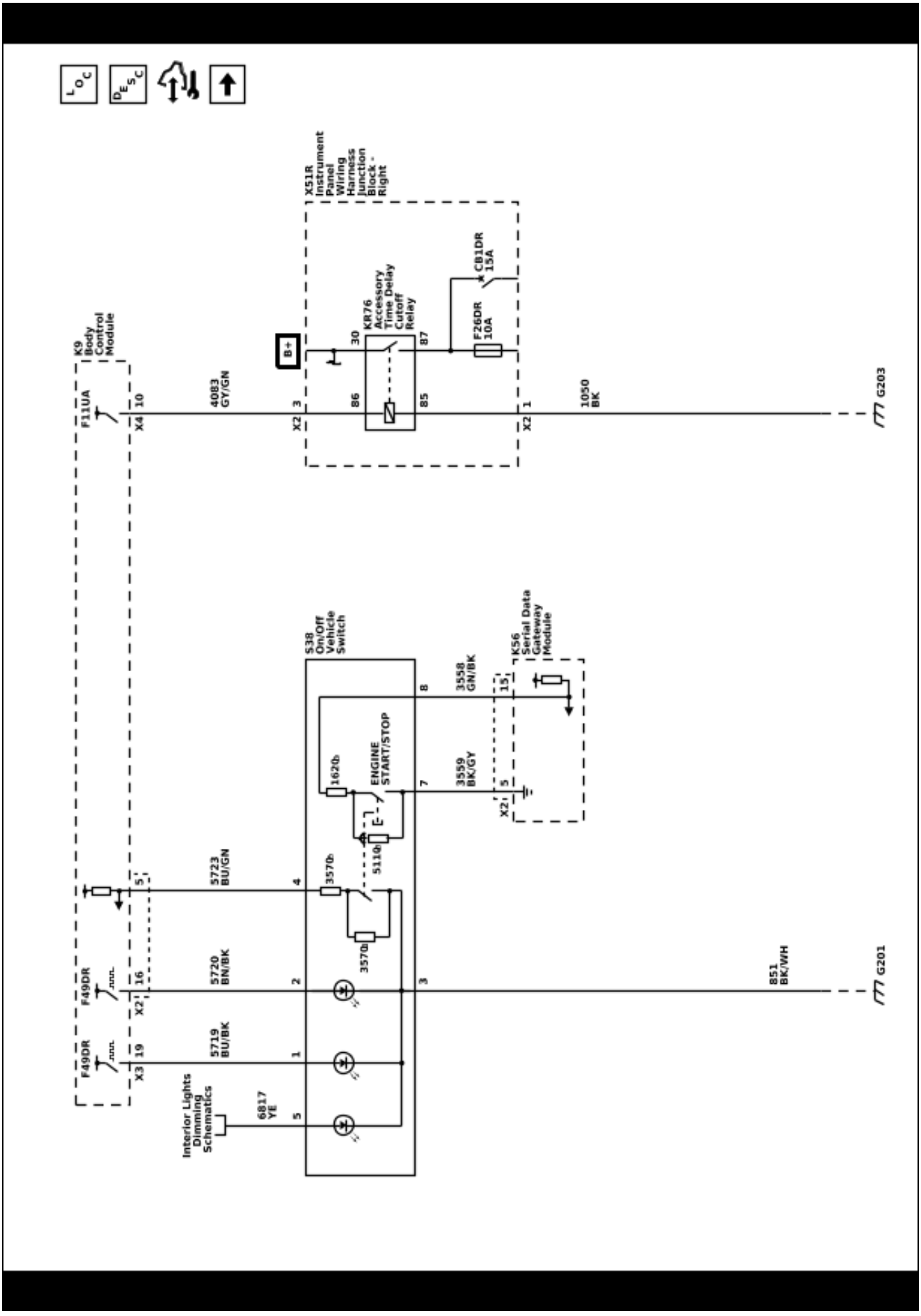
## Power Distribution Schematics (F17DR, F22DR, F42DR, F44DR, F45DR, and F56DR Fuses)



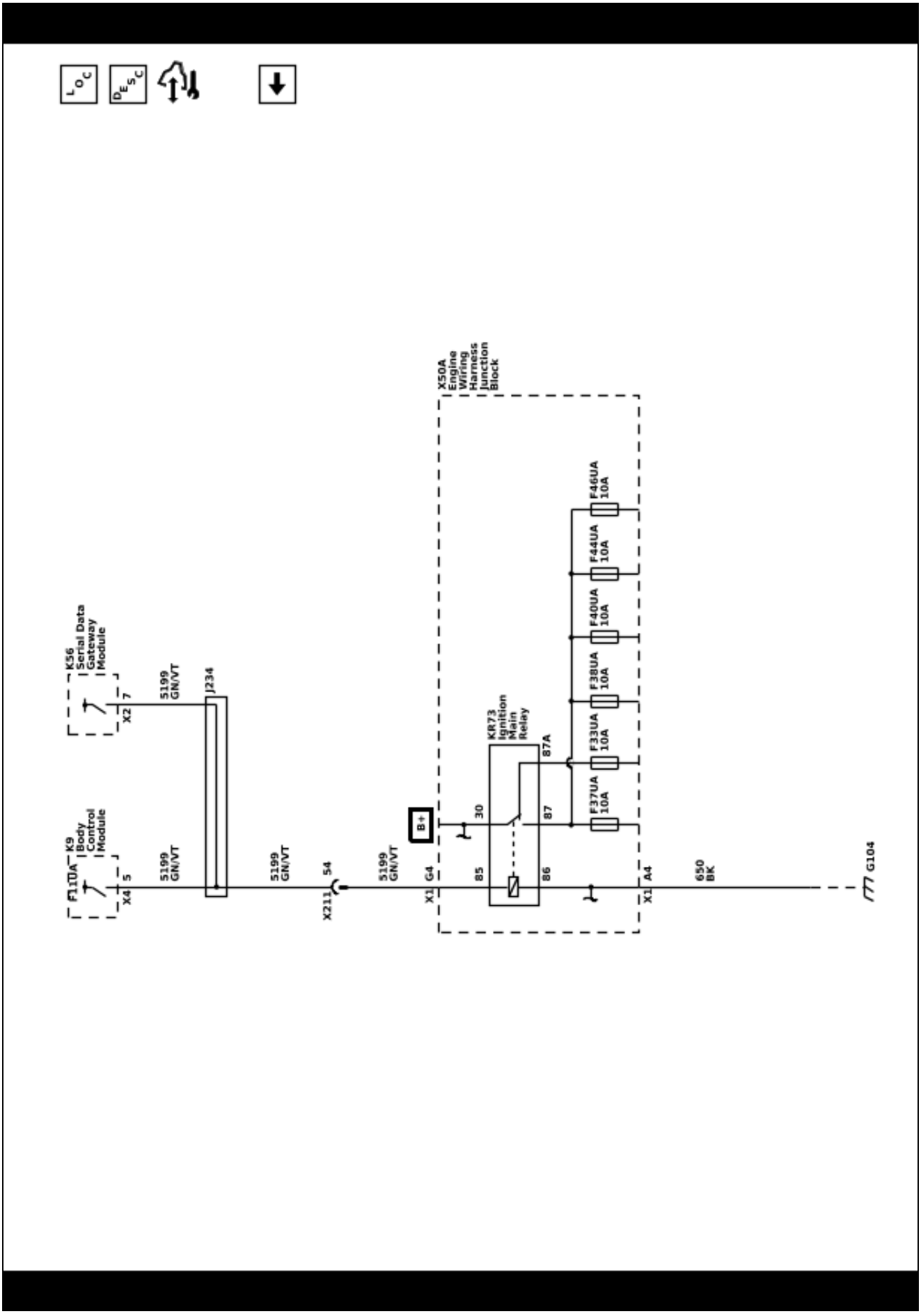
## Power Distribution Schematics (F48DR, F49DR, F55DR, and F57DR Fuses)



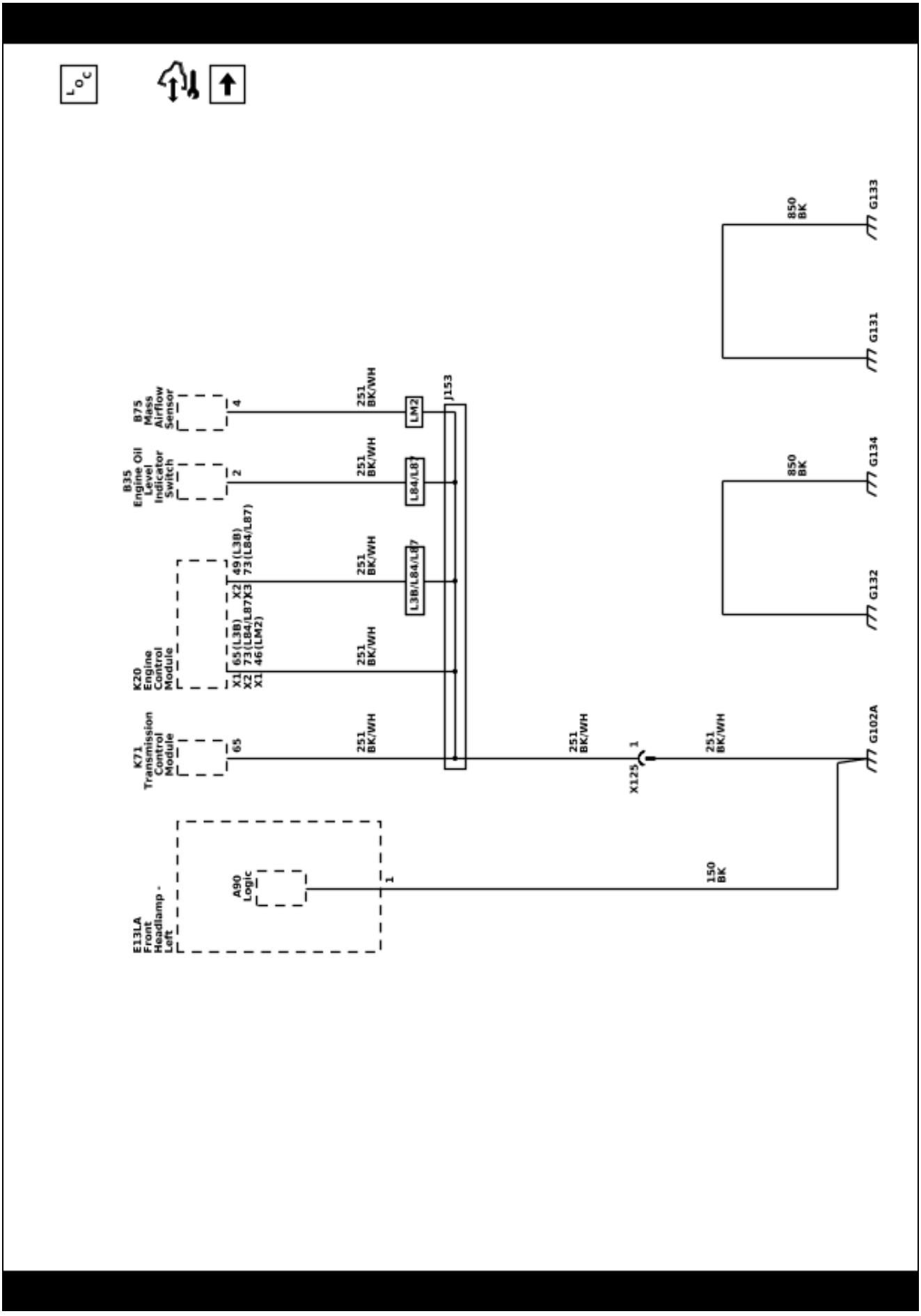
## Power Moding Schematics (On/Off Vehicle Switch and Retained Accessory Power)



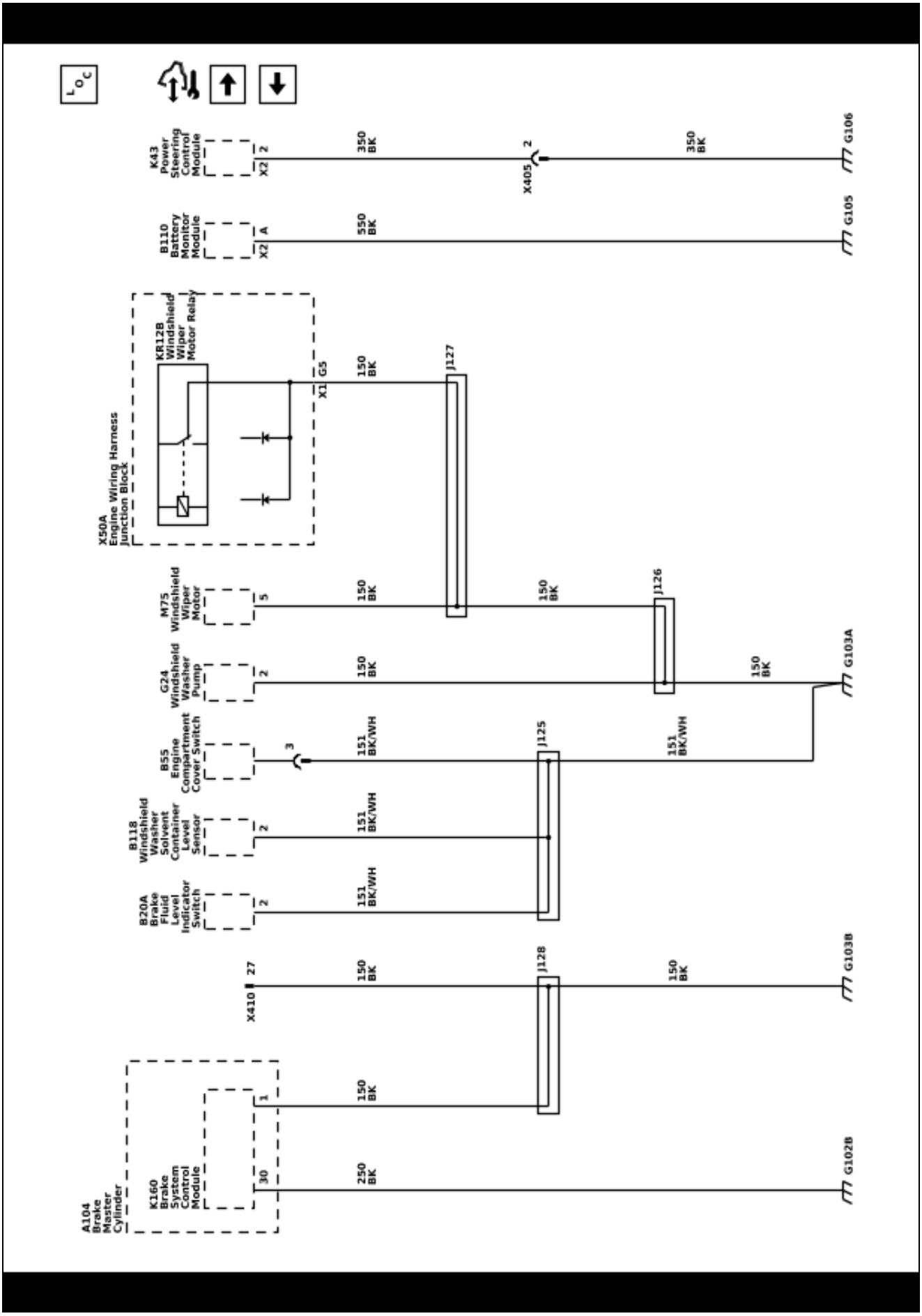
## Power Moding Schematics (Ignition Main Relay)



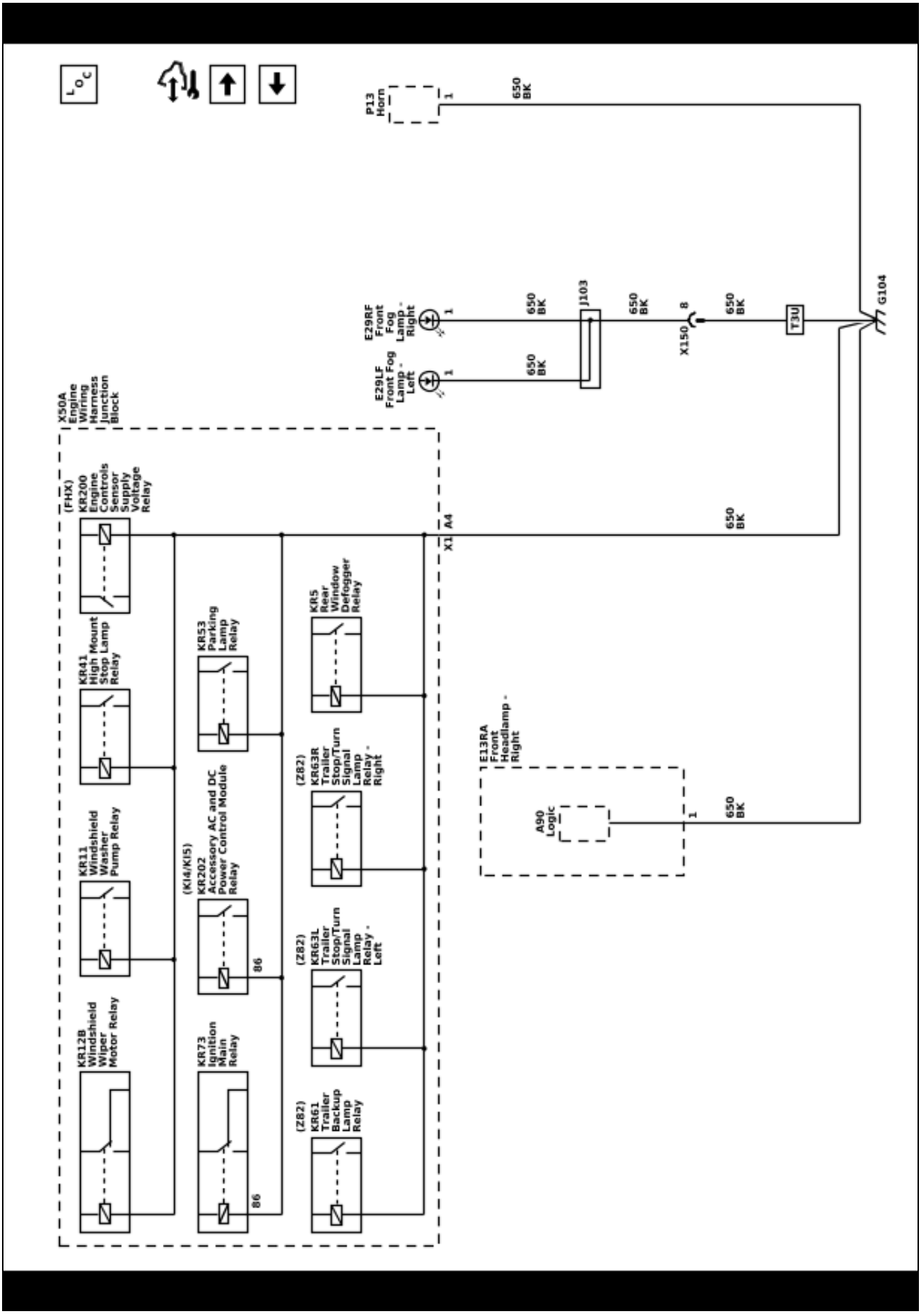
## Ground Distribution Schematics (G102A, G131, G132, G133, and G134)



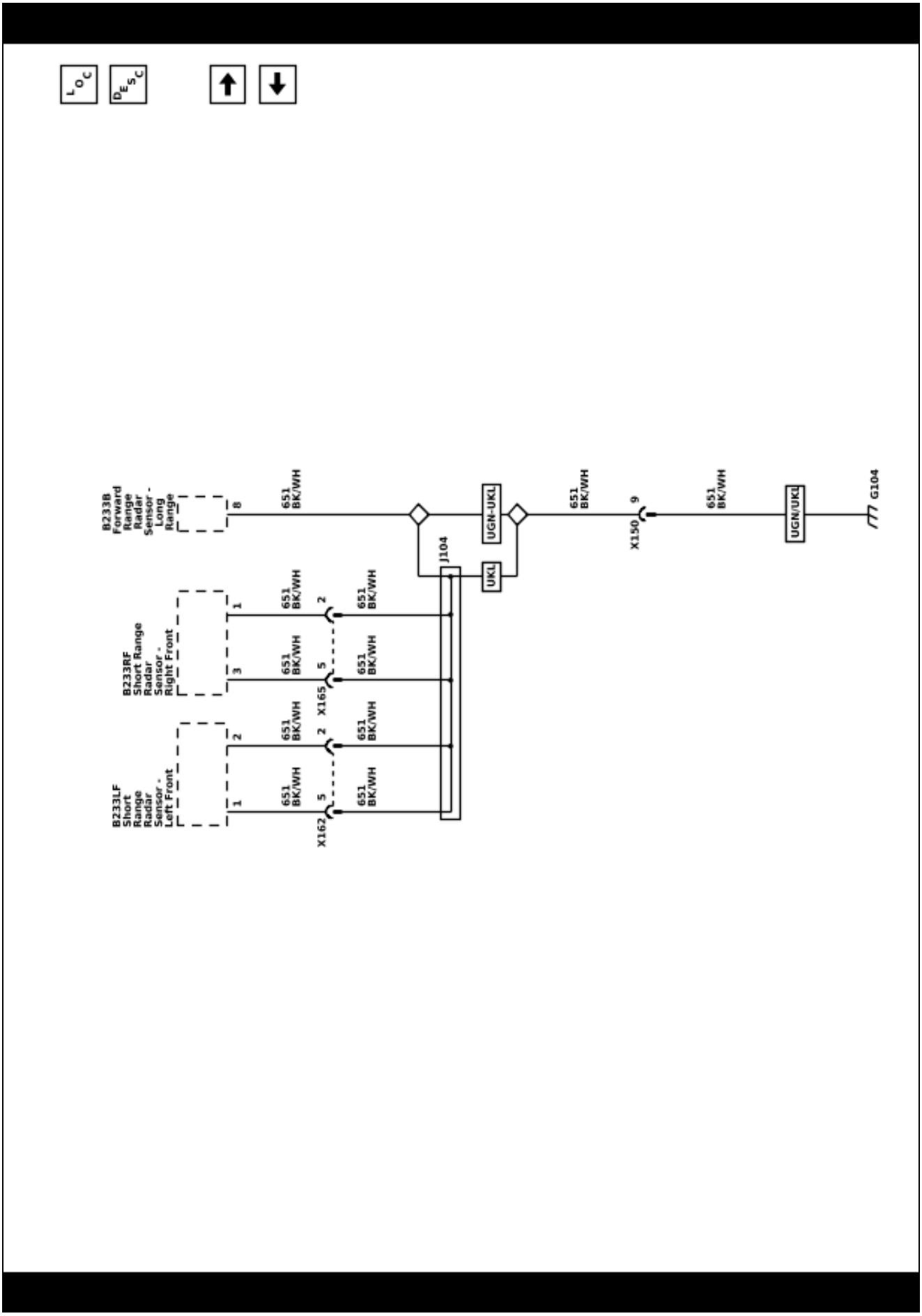
## Ground Distribution Schematics (G102B, G103A, G103B, G105, and G106)



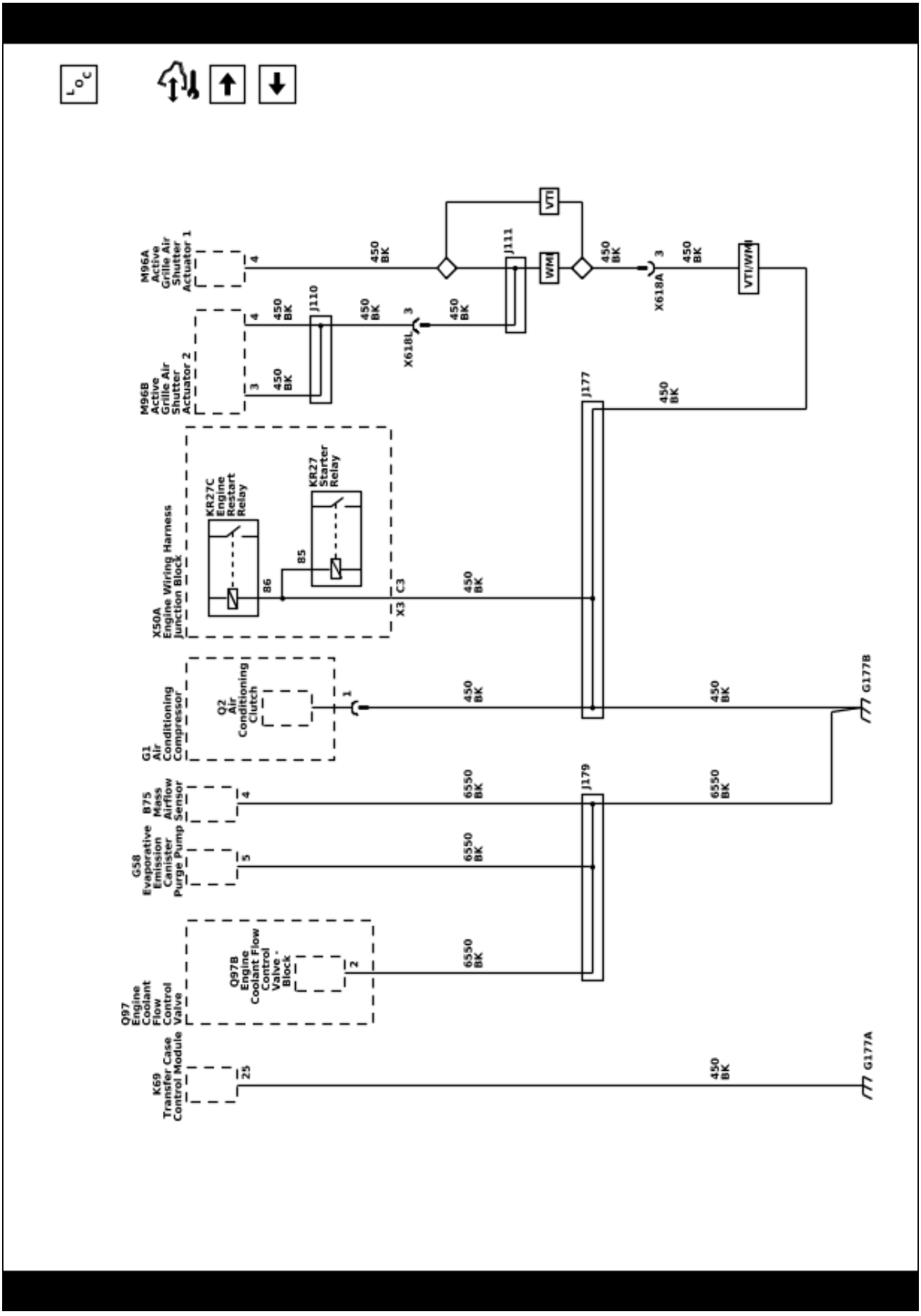
## Ground Distribution Schematics (G104 - 1 of 2)



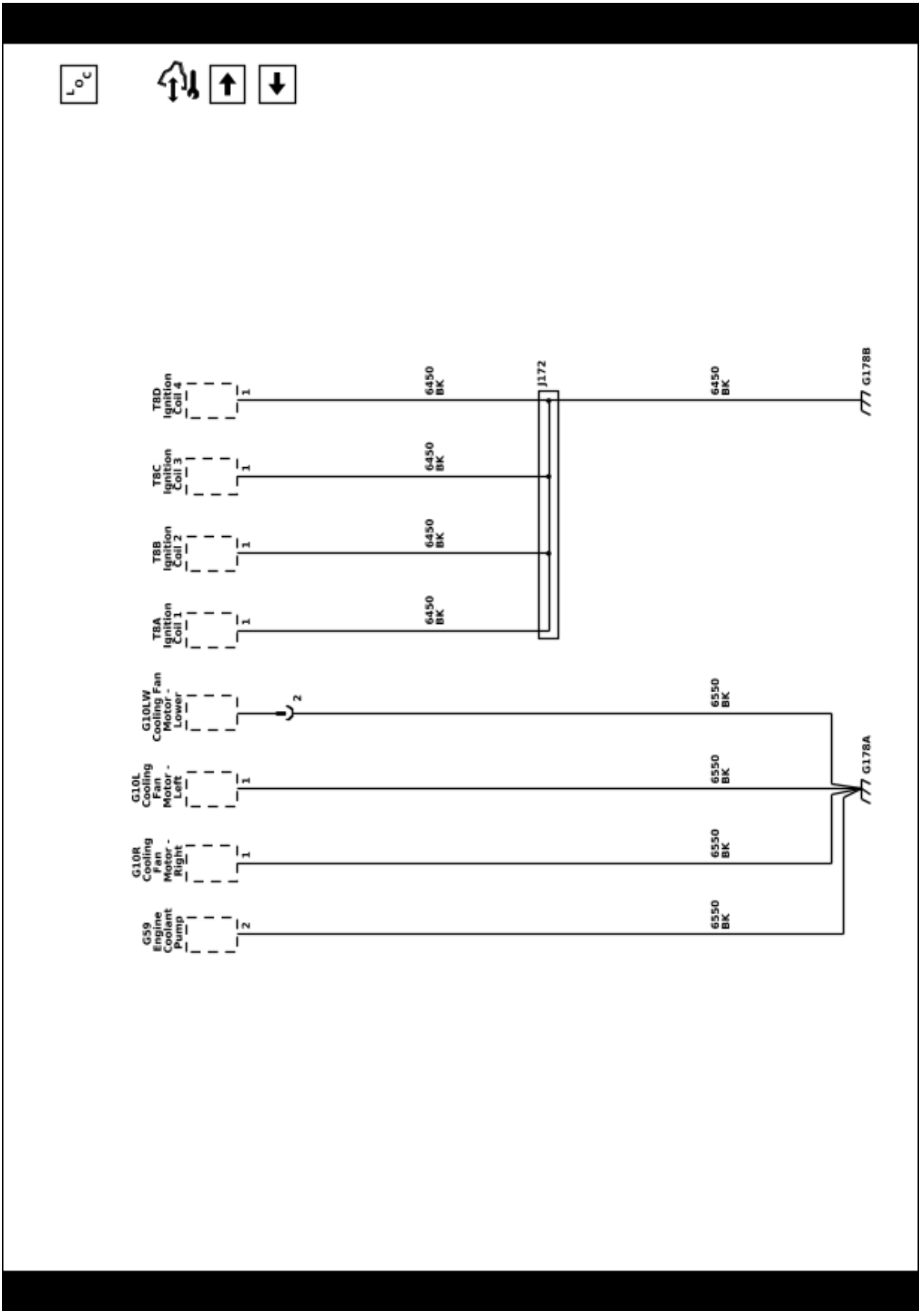
## Ground Distribution Schematics (G104 - 2 of 2)



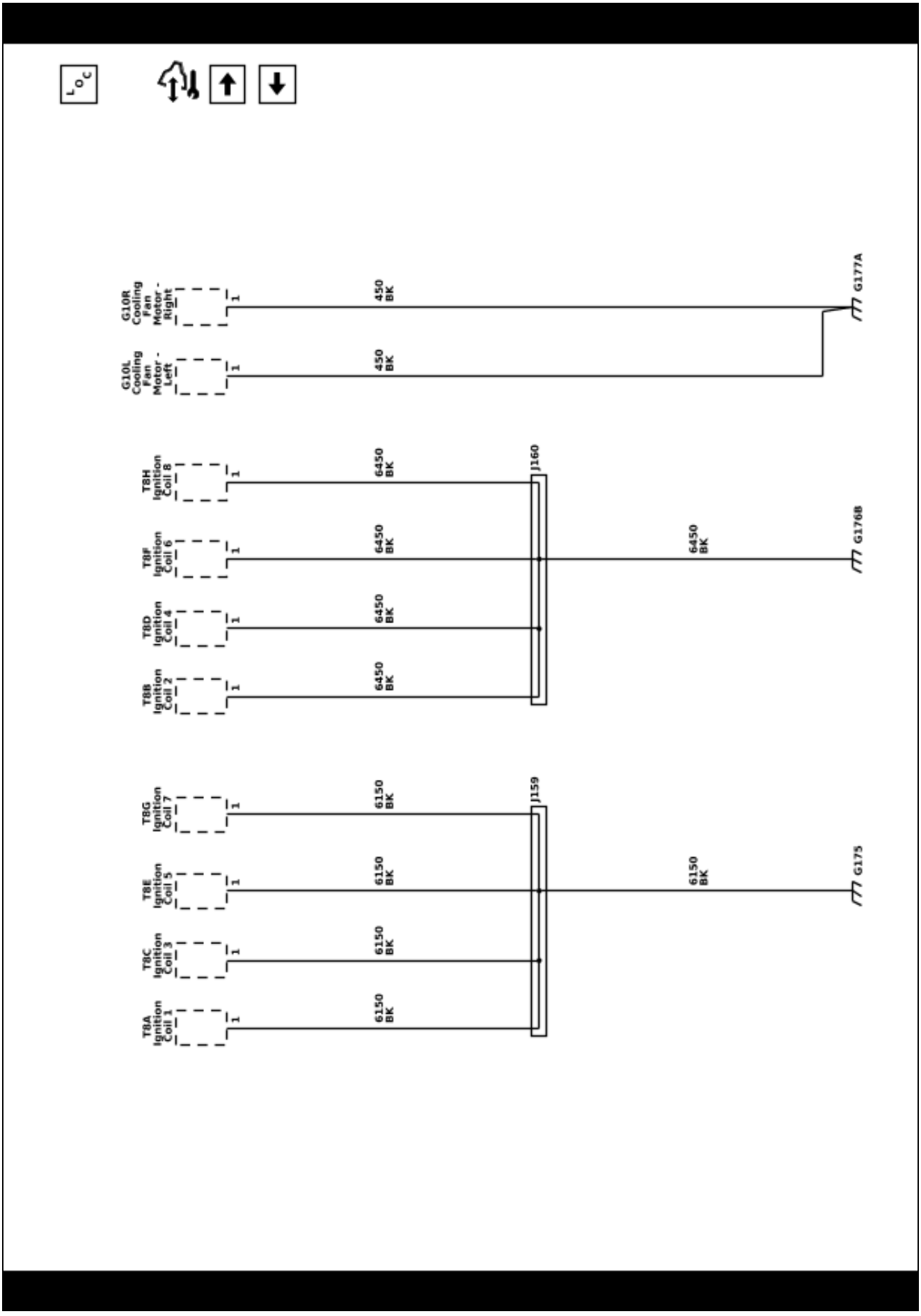
## Ground Distribution Schematics (G177A and G177B (L3B))



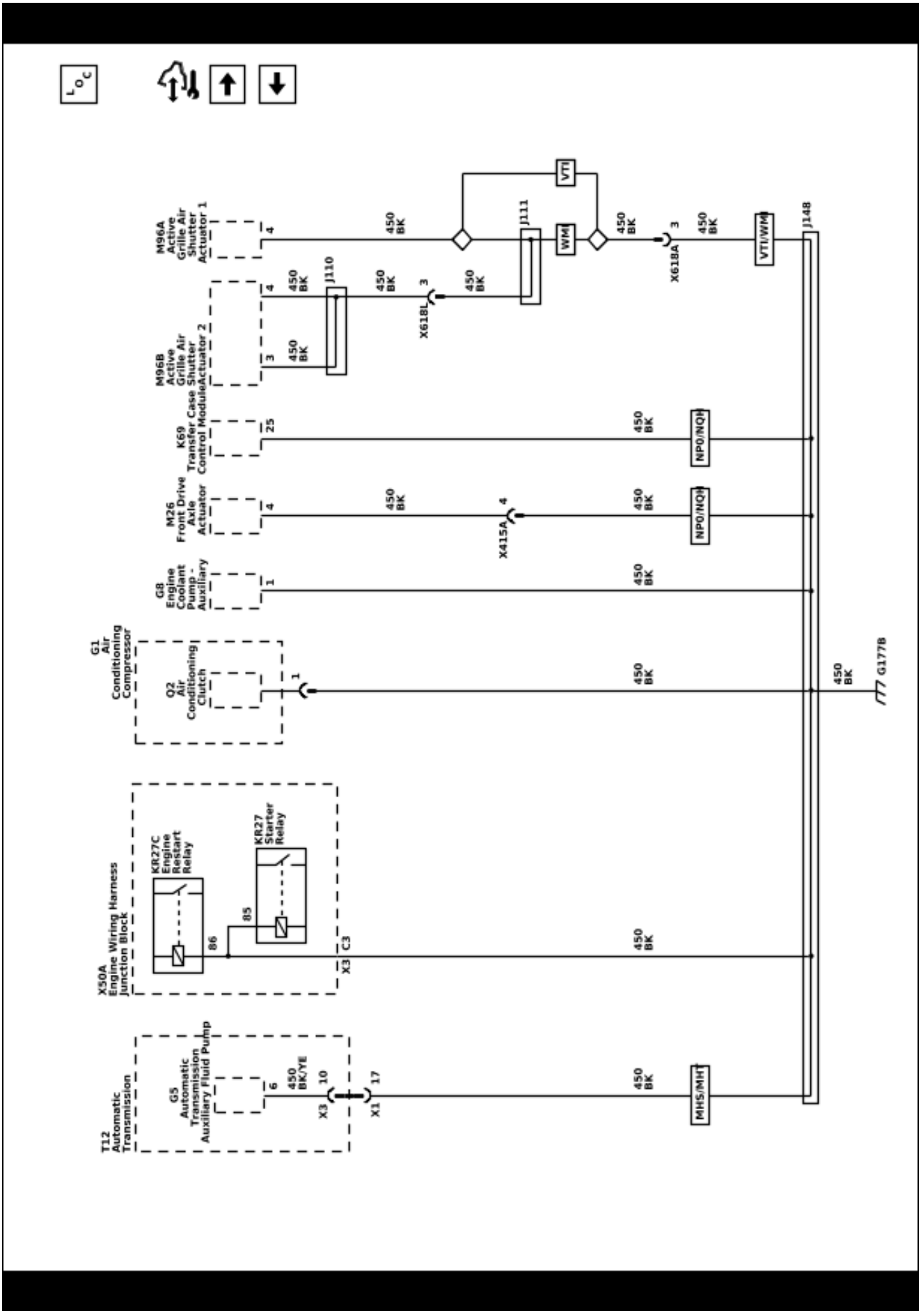
## Ground Distribution Schematics (G178A and G178B (L3B))



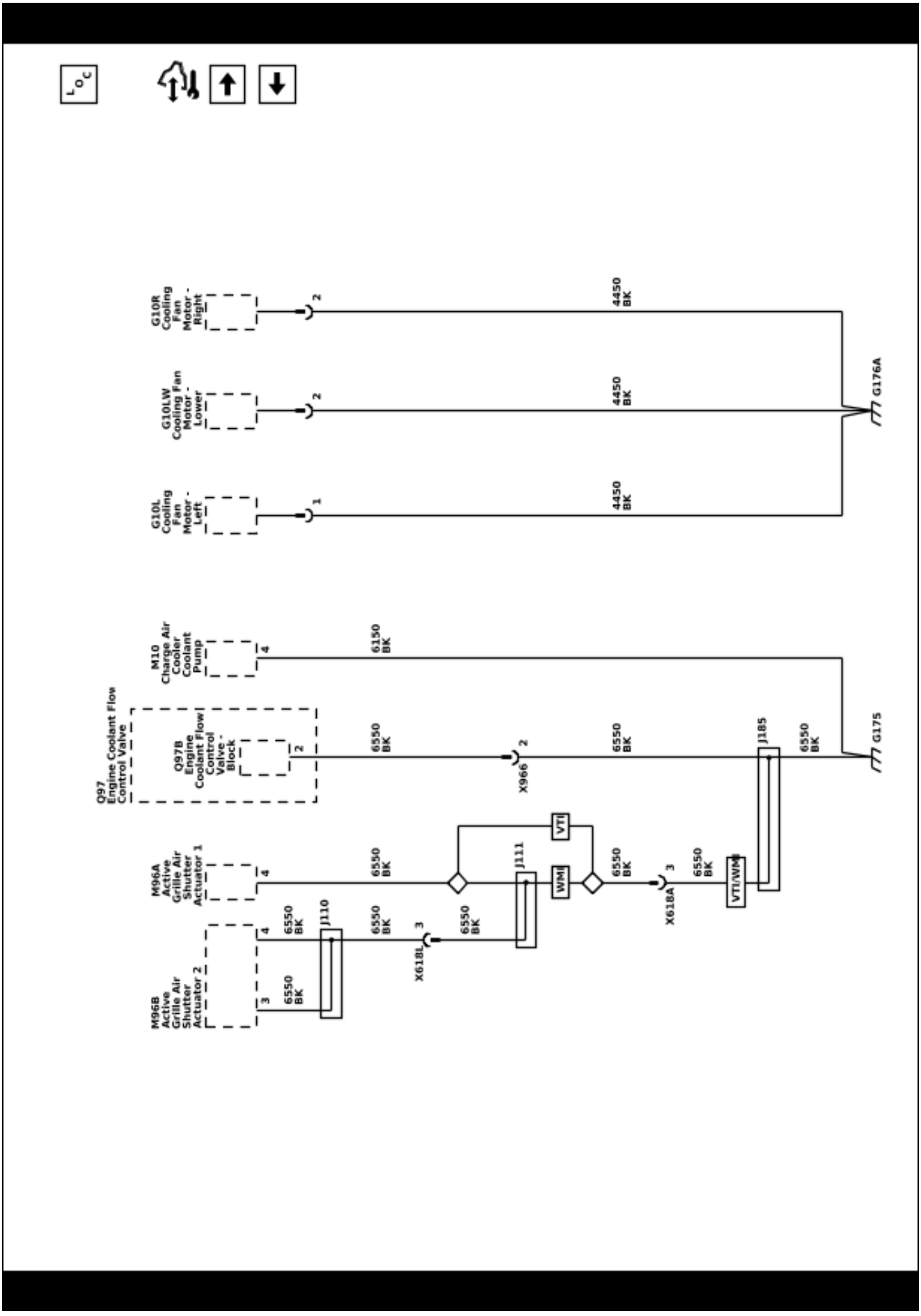
## Ground Distribution Schematics (G175, G176B, and G177A (L84/L87))



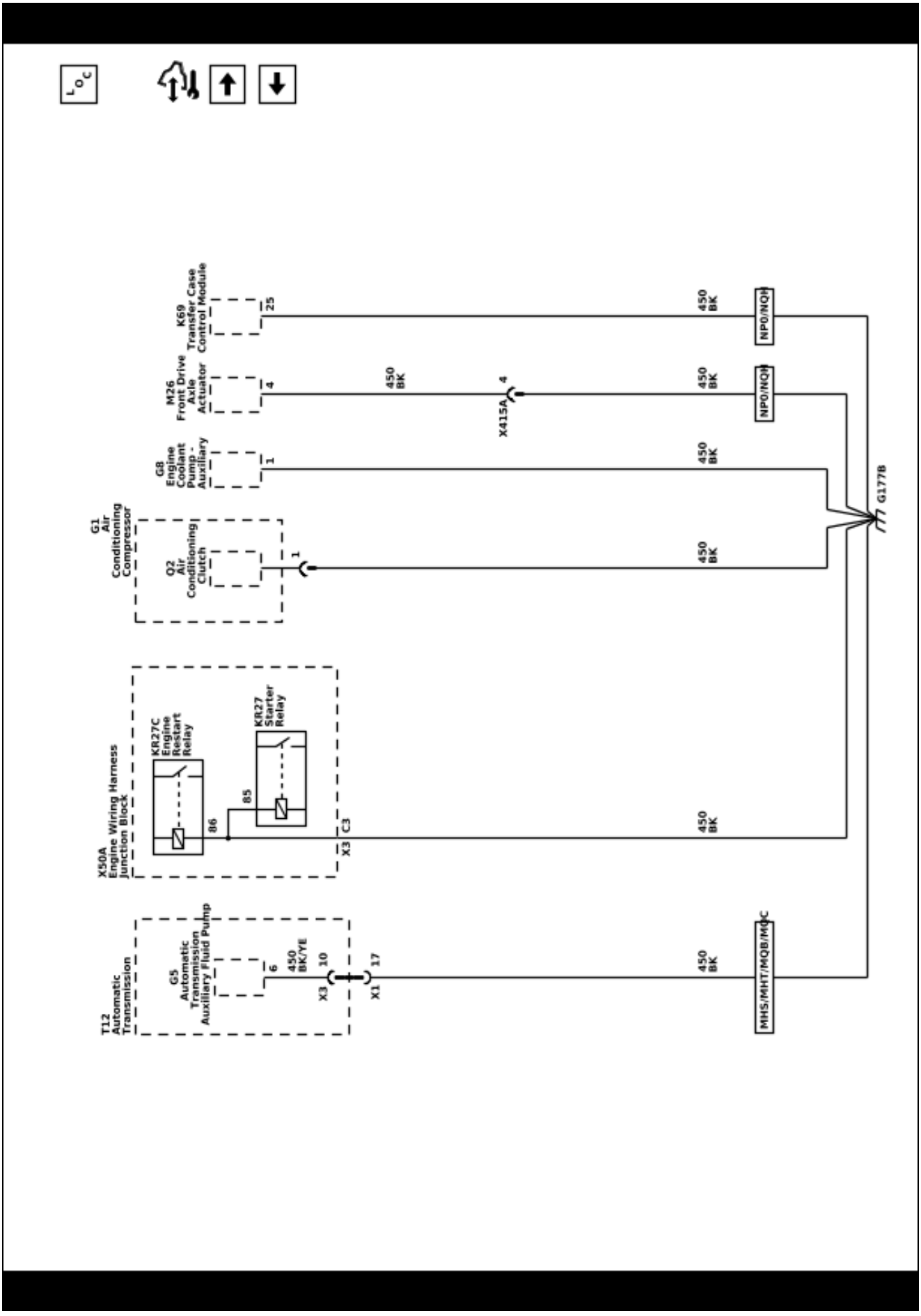
## Ground Distribution Schematics (G177B (L84/L87))



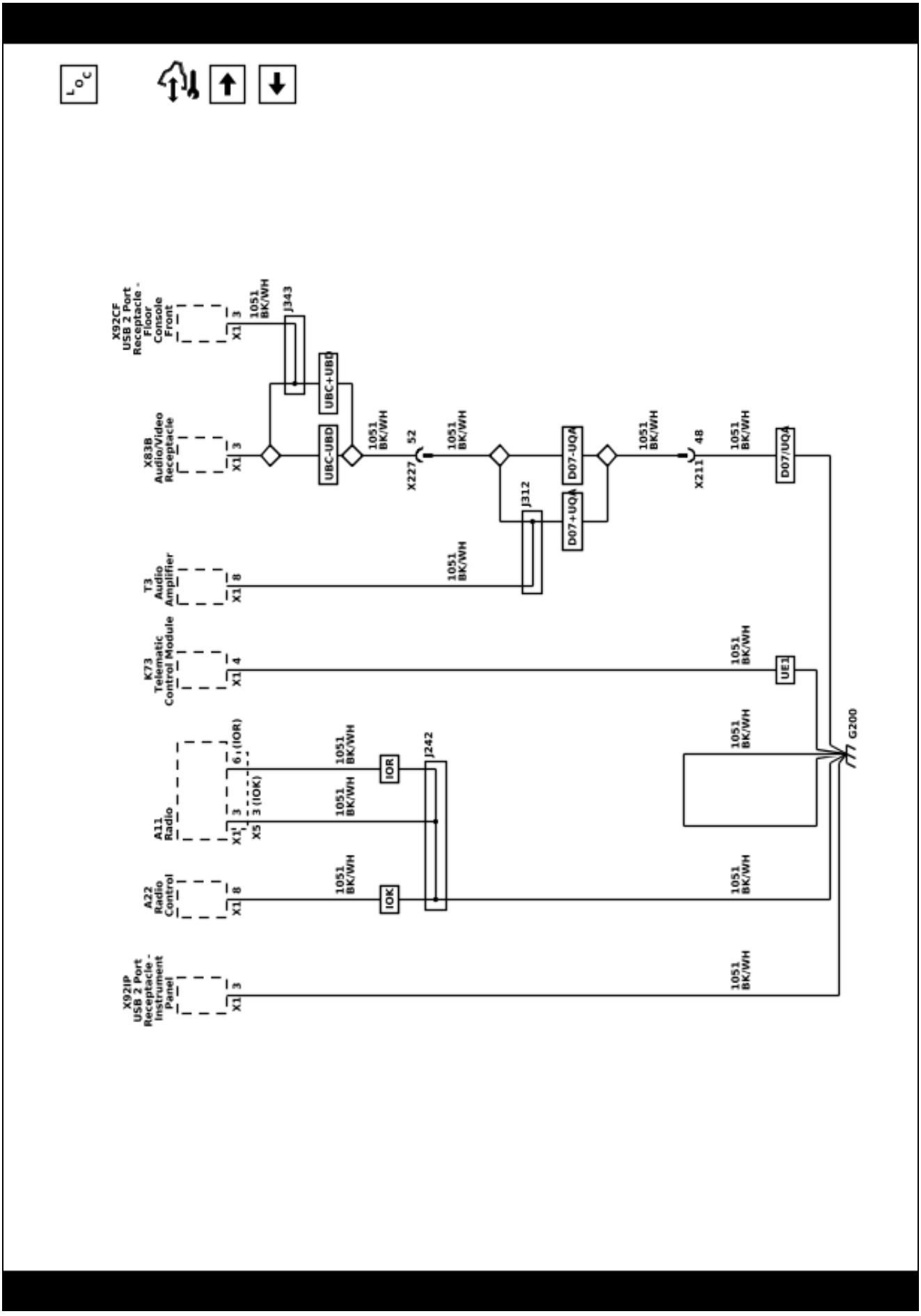
## Ground Distribution Schematics (G175 and G176A (LM2))



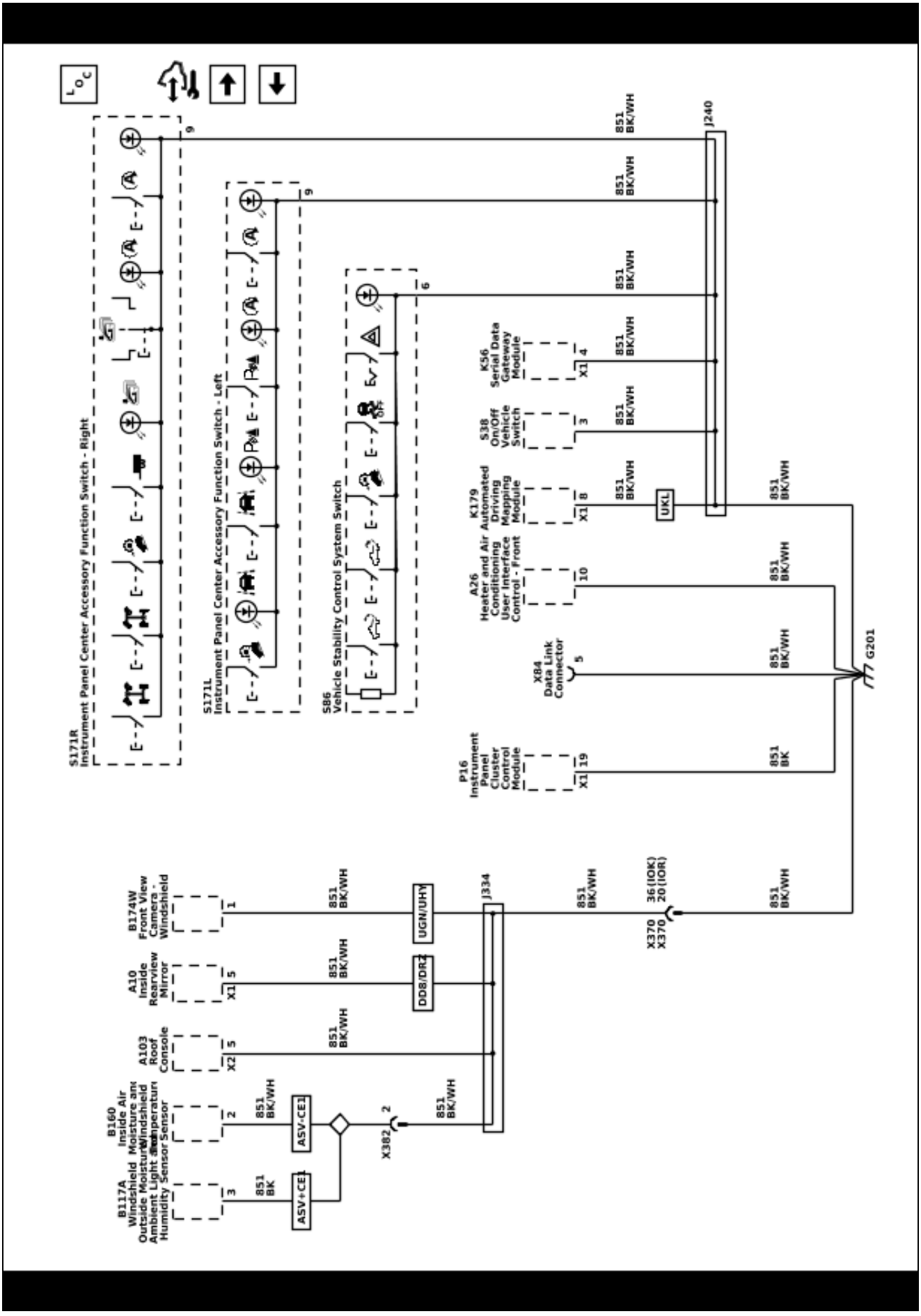
## Ground Distribution Schematics (G177B (LZ0))



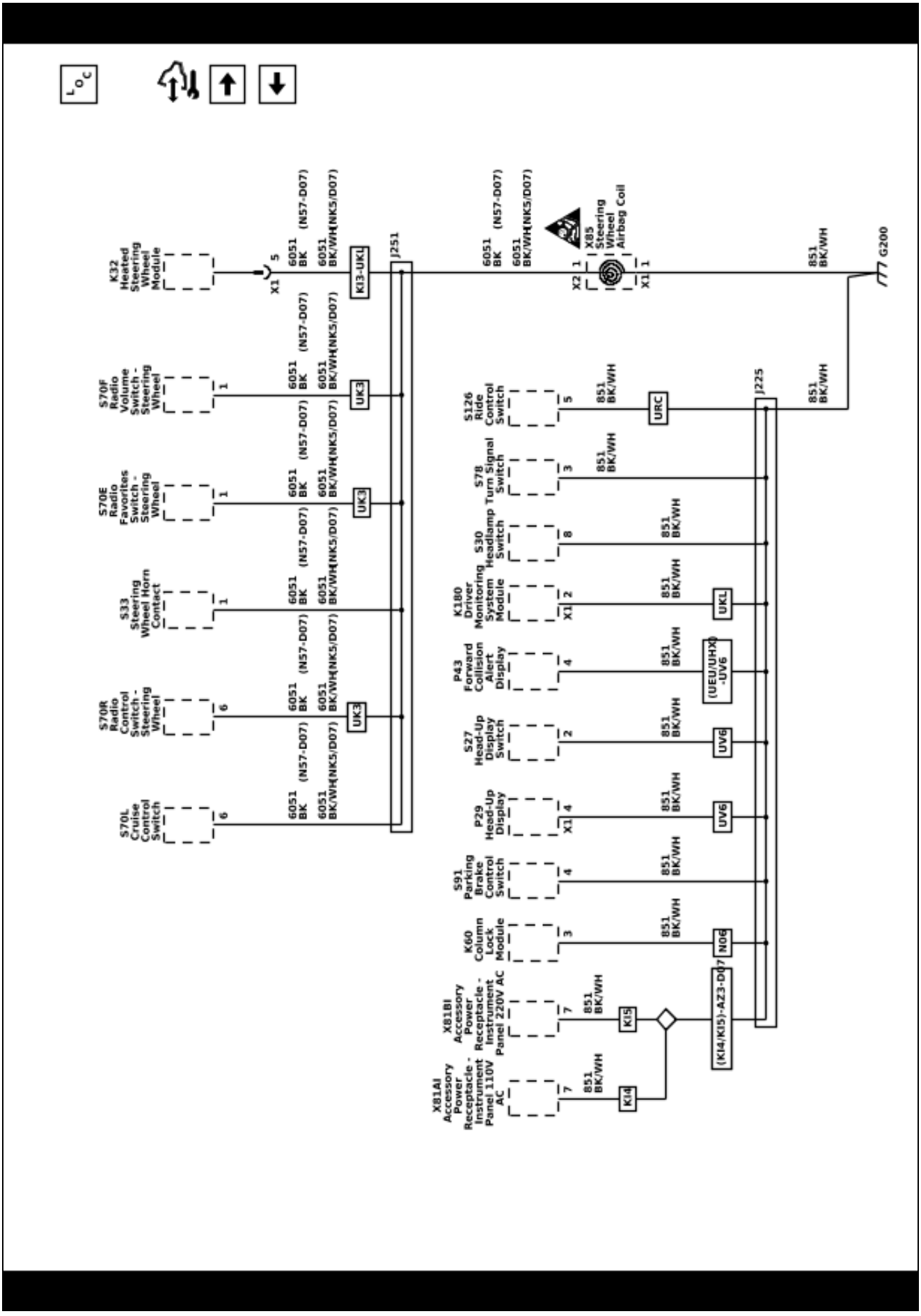
## Ground Distribution Schematics (G200)



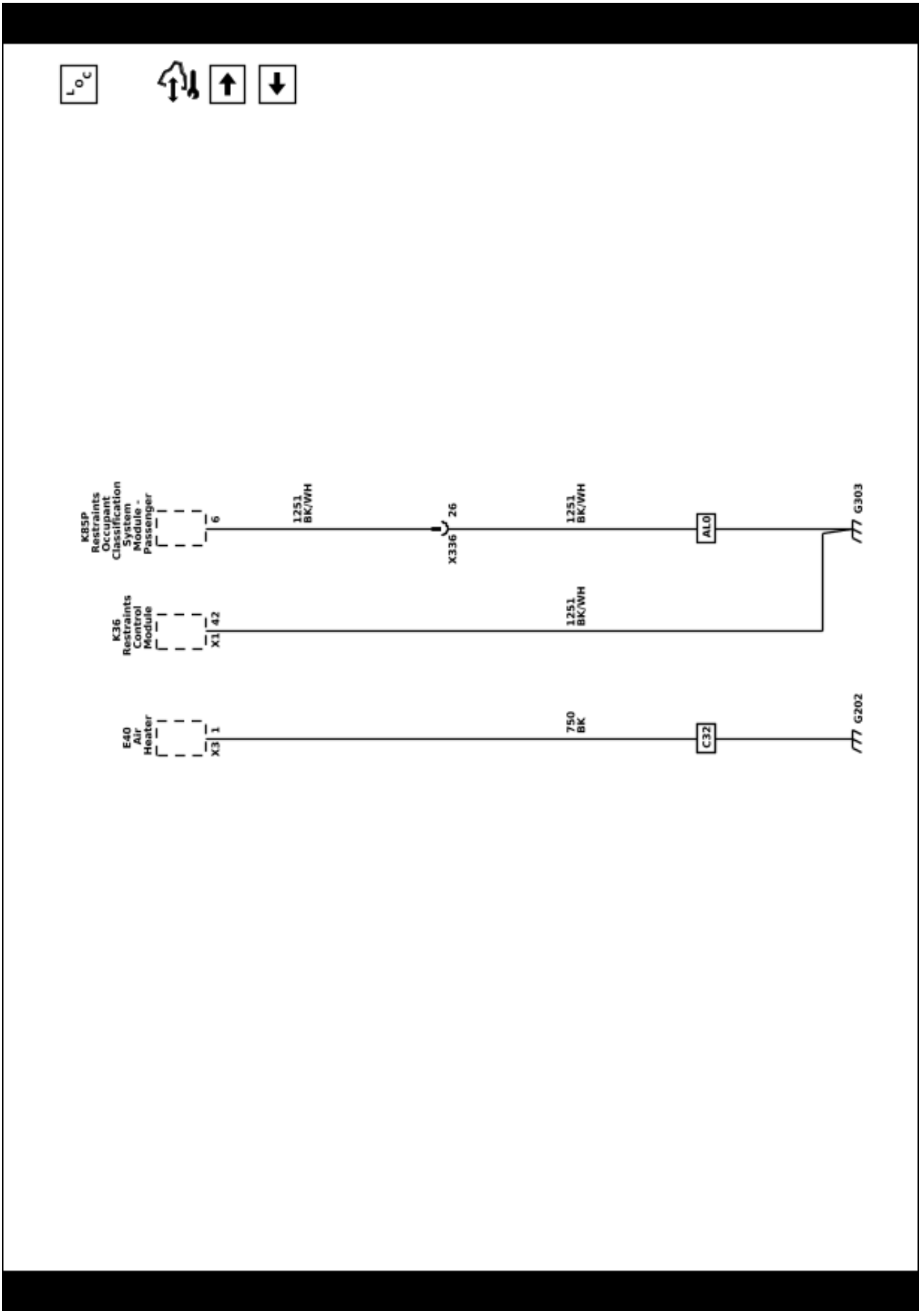
## Ground Distribution Schematics (G201 - 1 of 2)



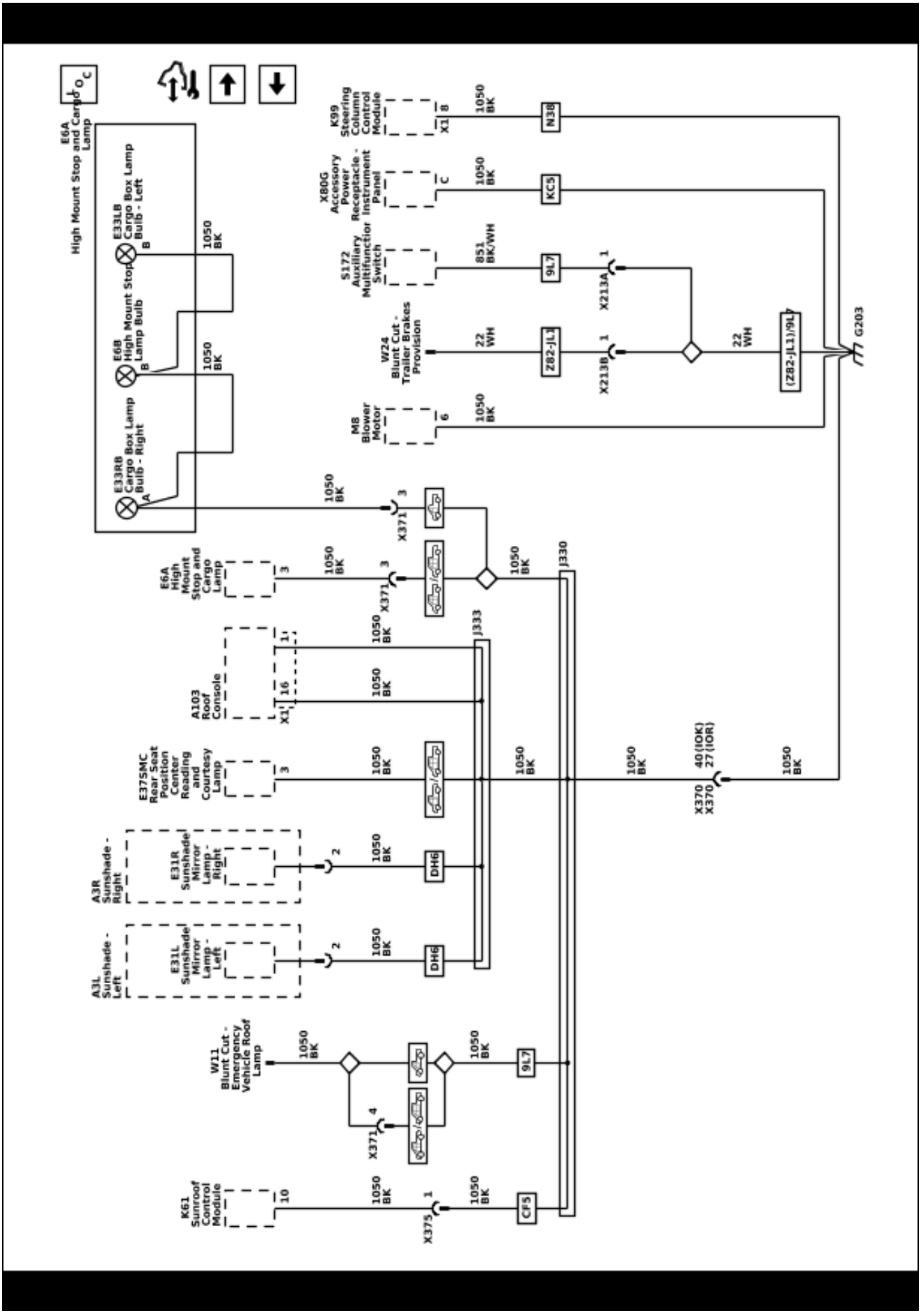
## Ground Distribution Schematics (G201 - 2 of 2)



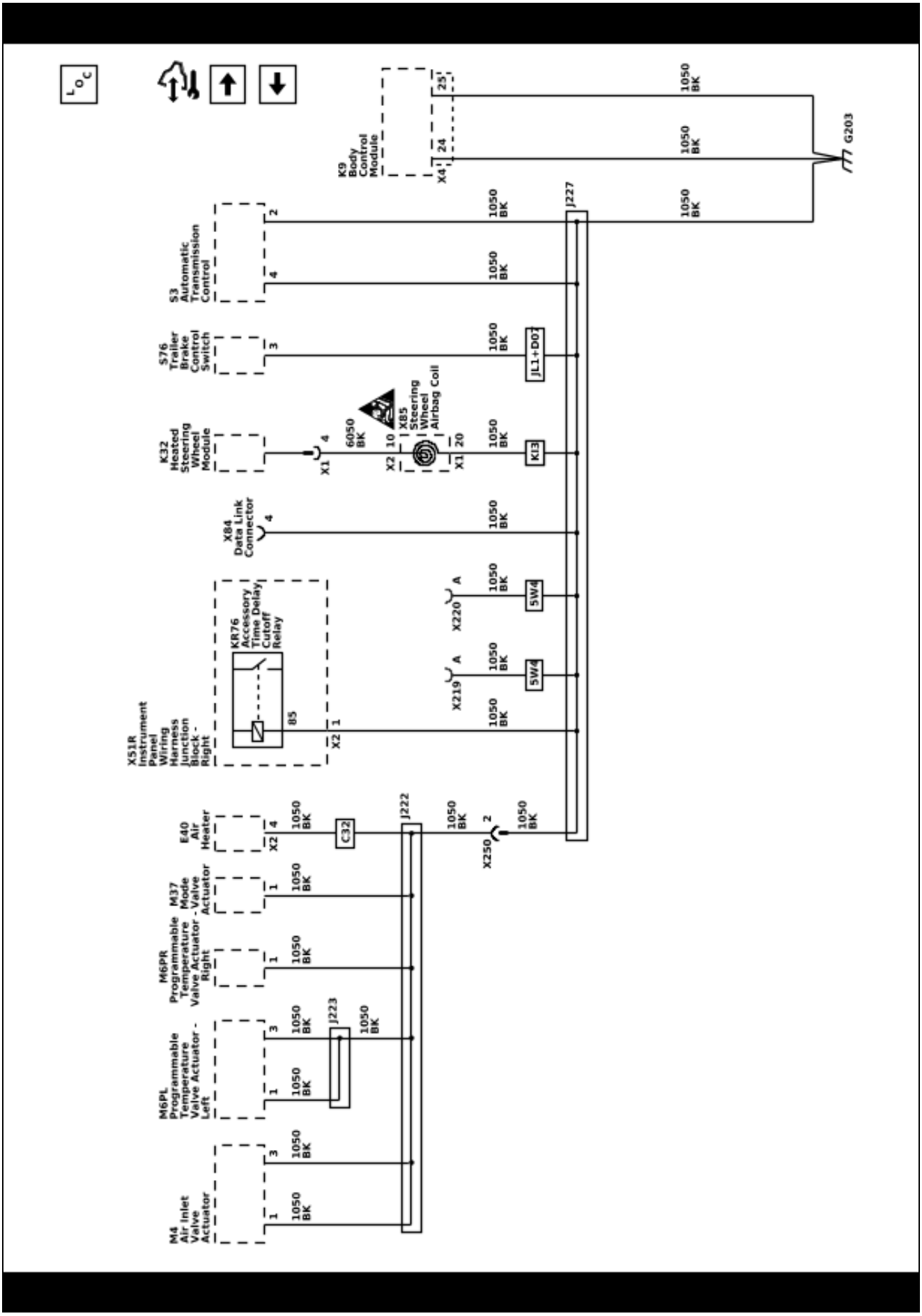
## Ground Distribution Schematics (G202 and G303)



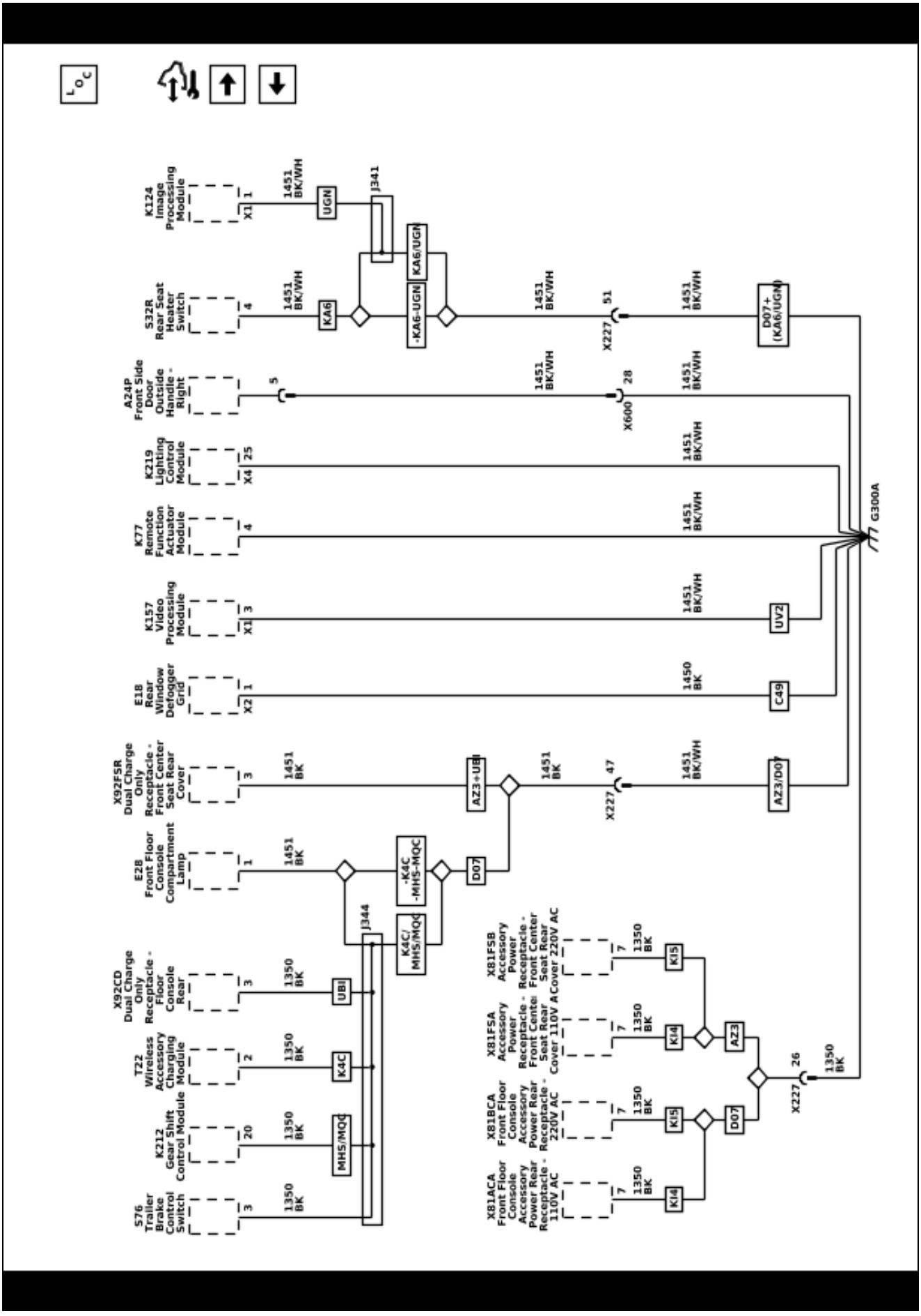
## Ground Distribution Schematics (G203 - 1 of 2)



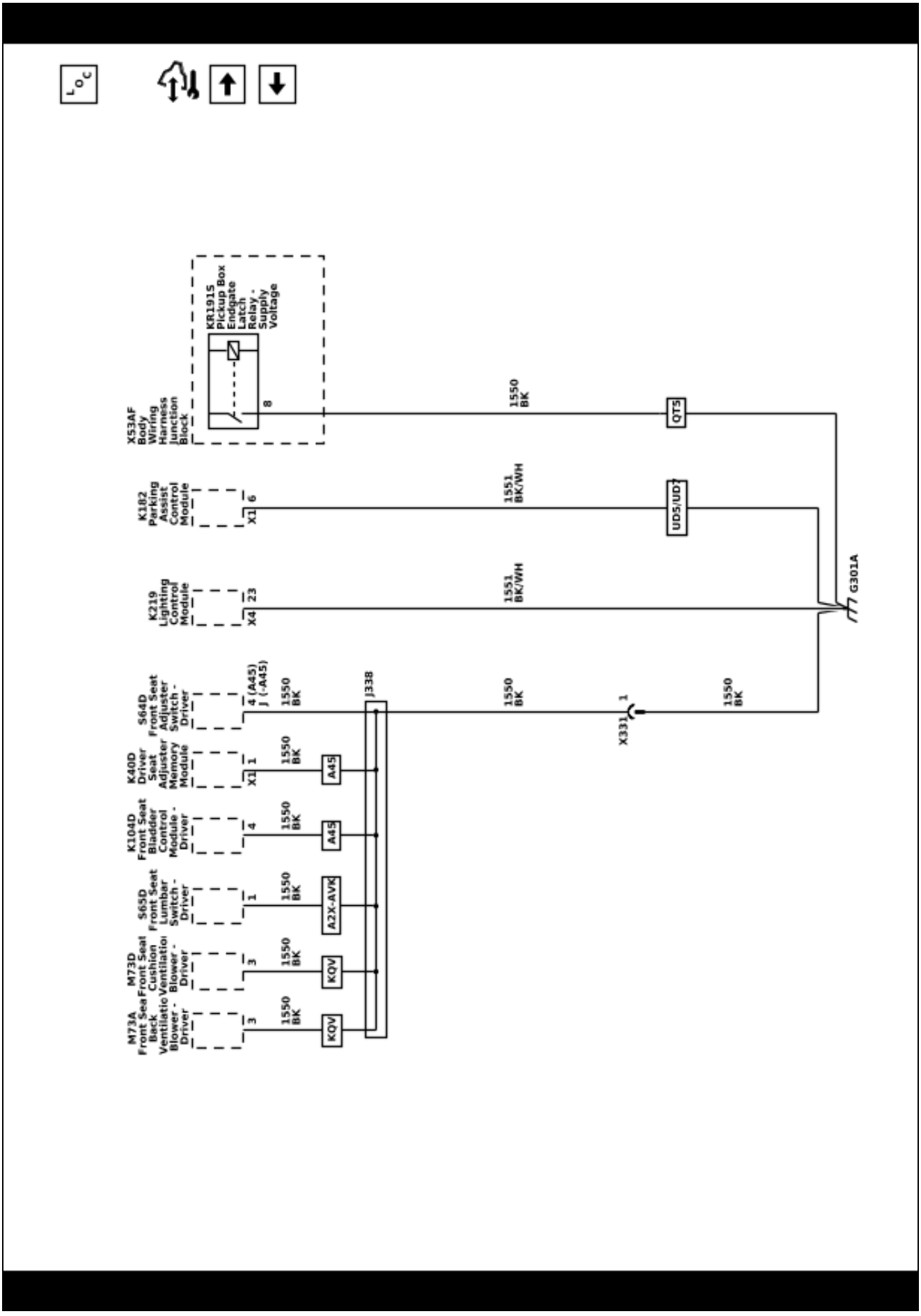
## Ground Distribution Schematics (G203 - 2 of 2)



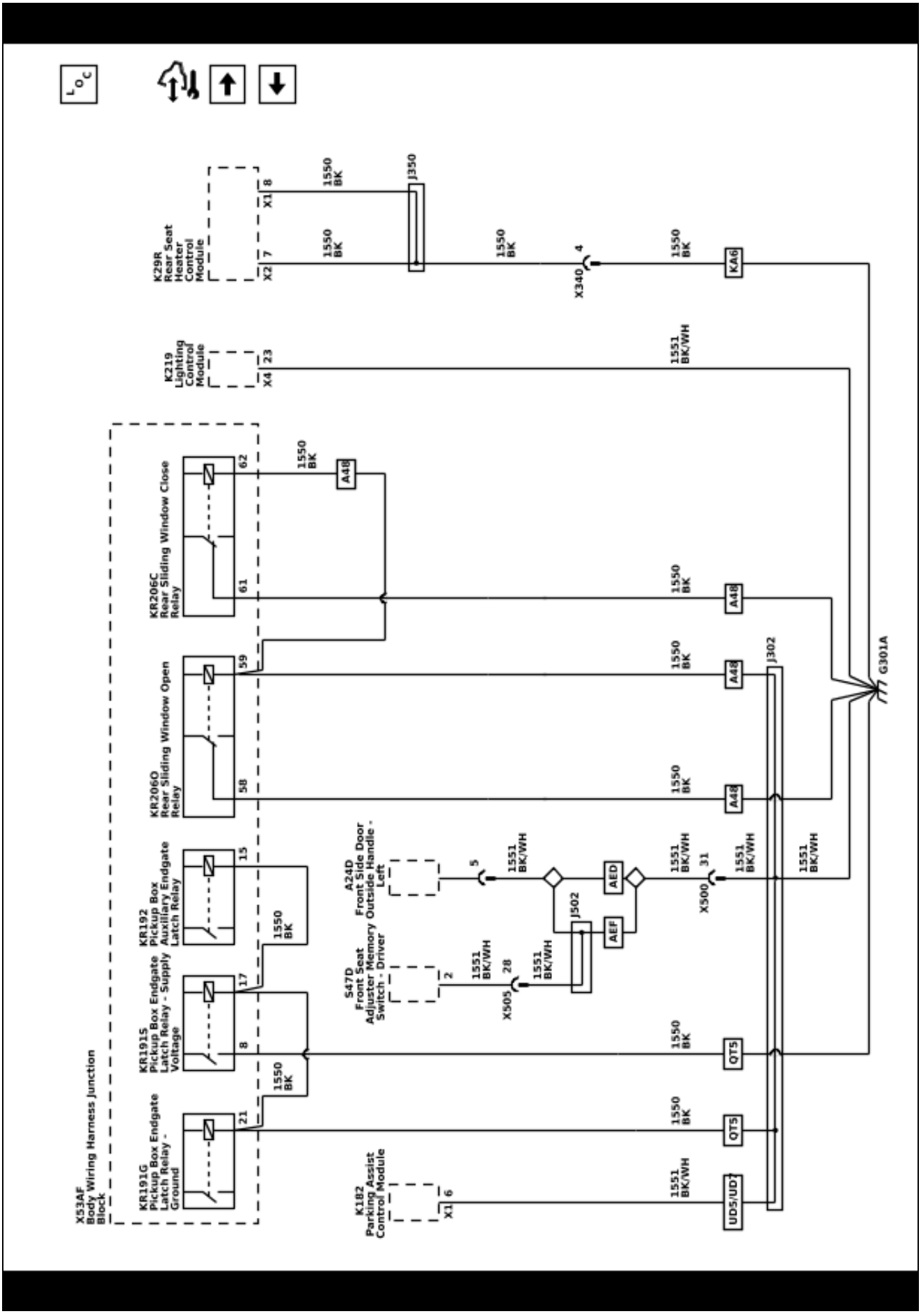
## Ground Distribution Schematics (G300)



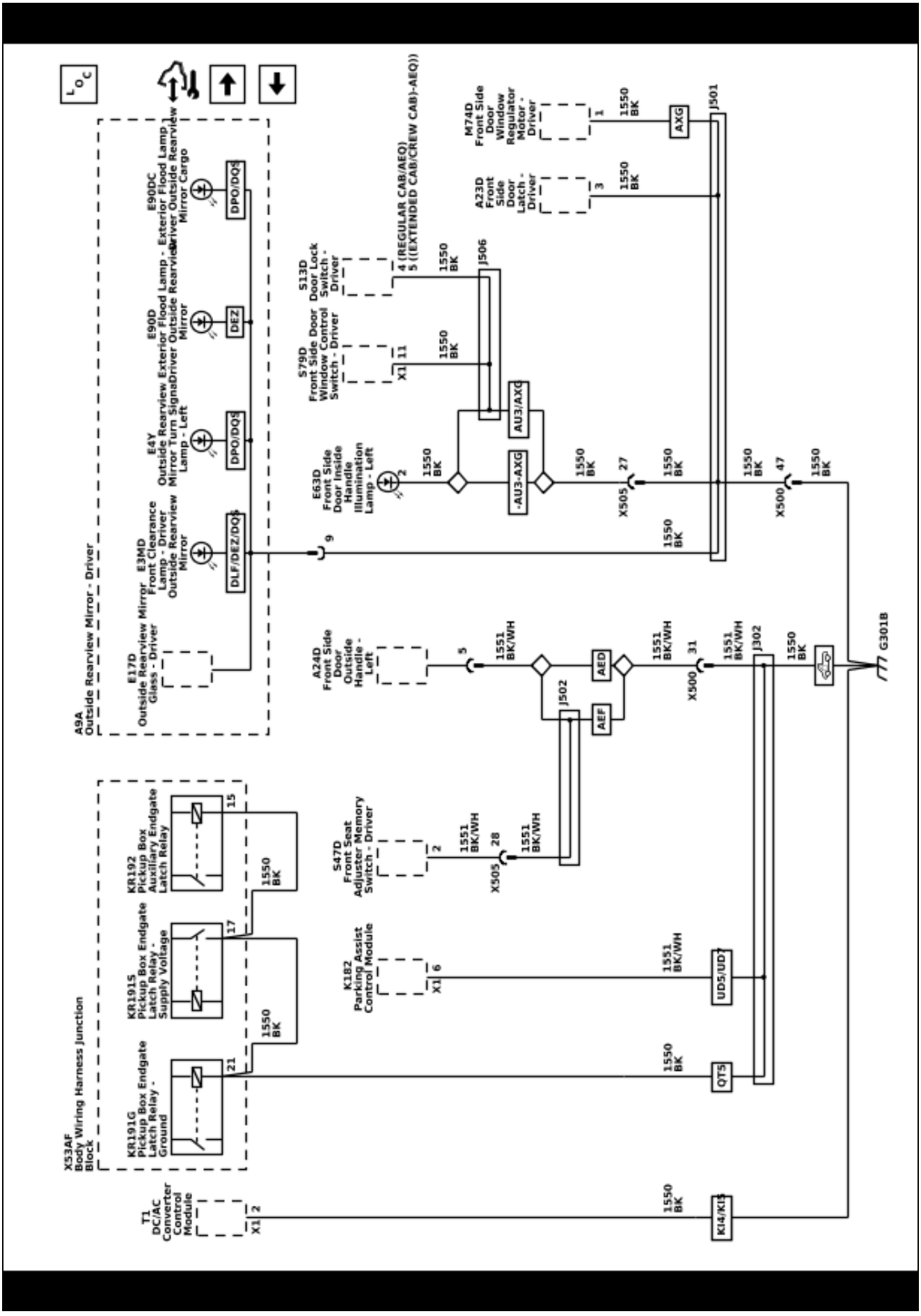
## Ground Distribution Schematics (G301A - Regular Cab)



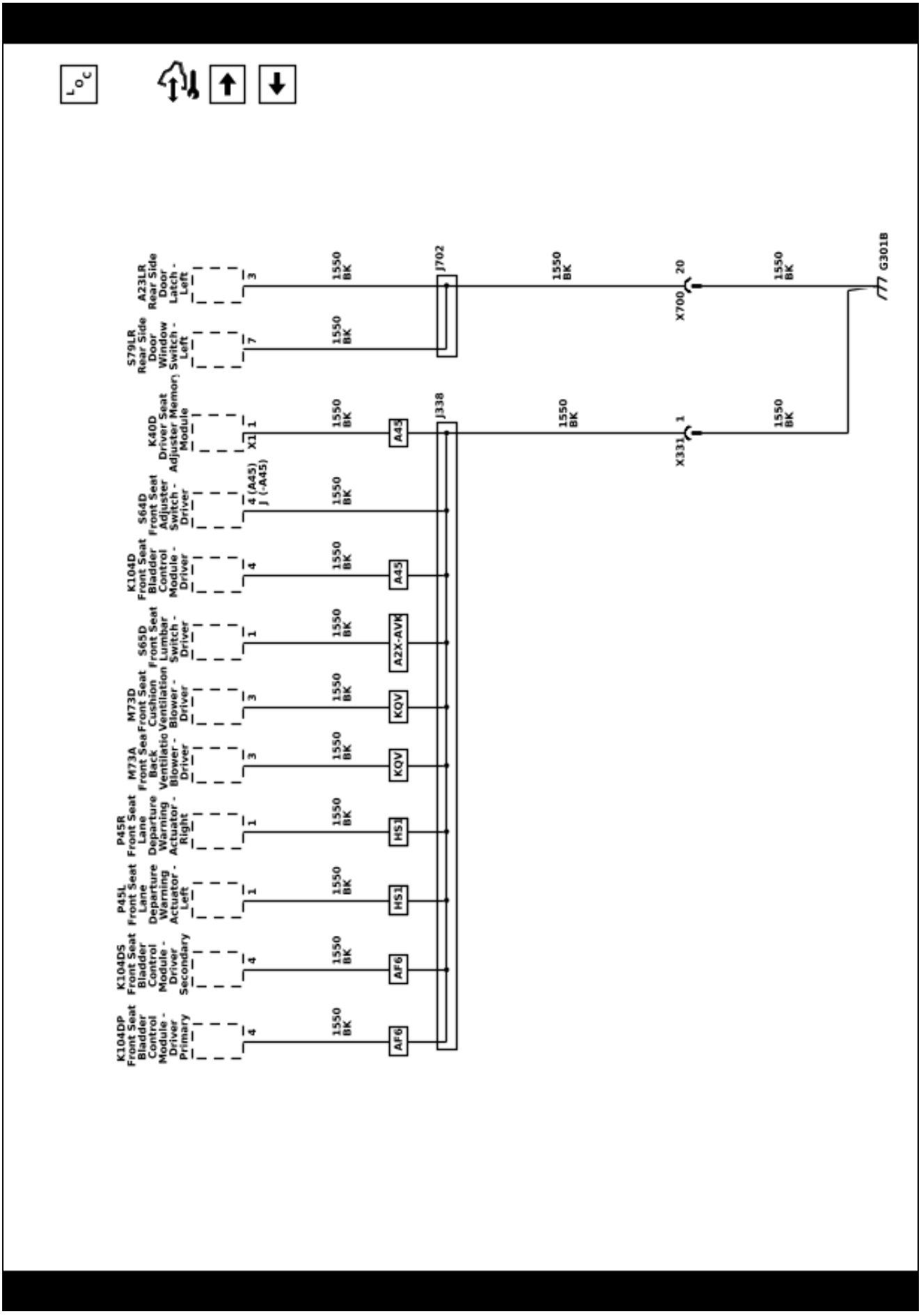
## Ground Distribution Schematics (G301A - Extended Cab/Crew Cab)



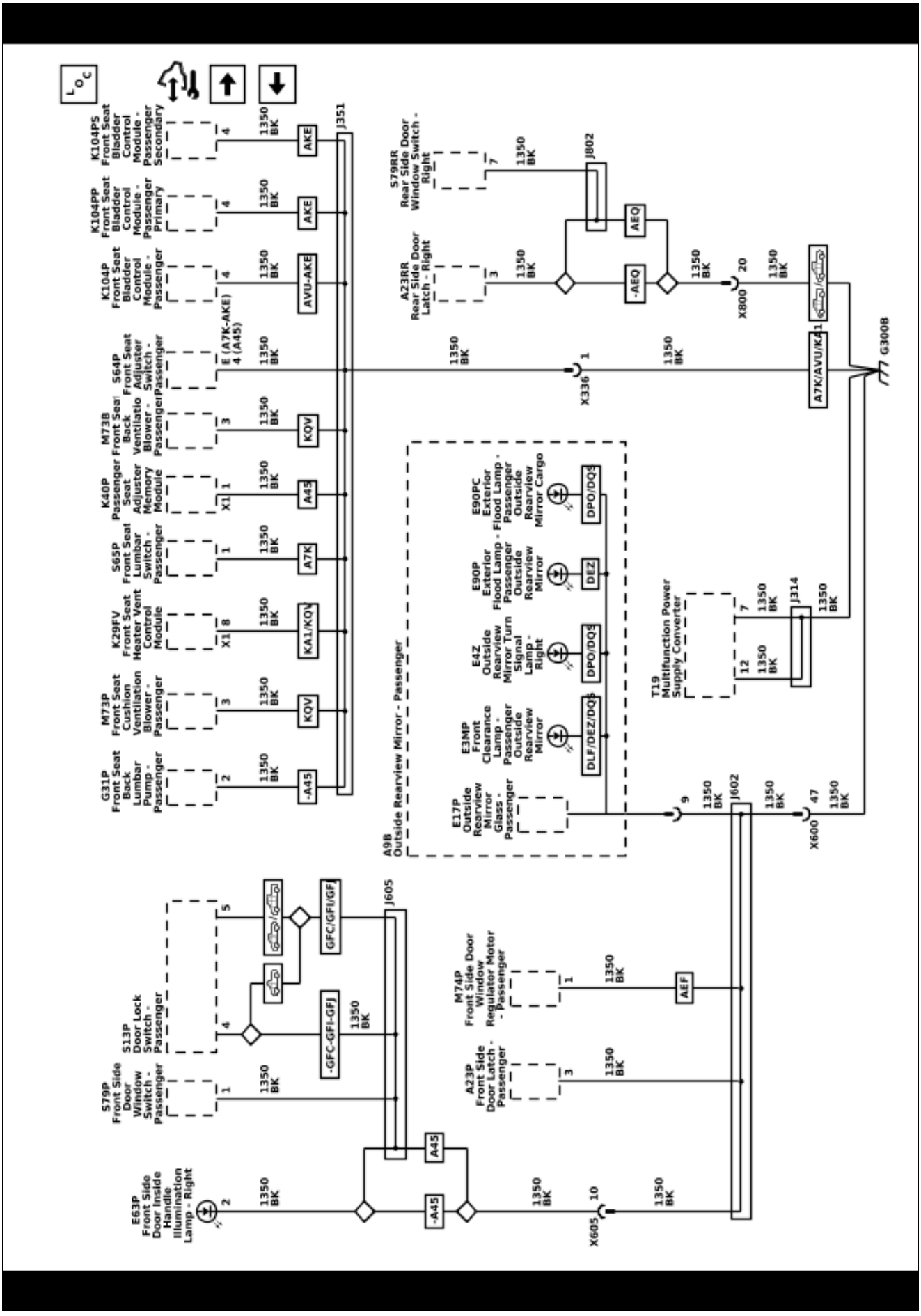
## Ground Distribution Schematics (G301B - 1 of 2)



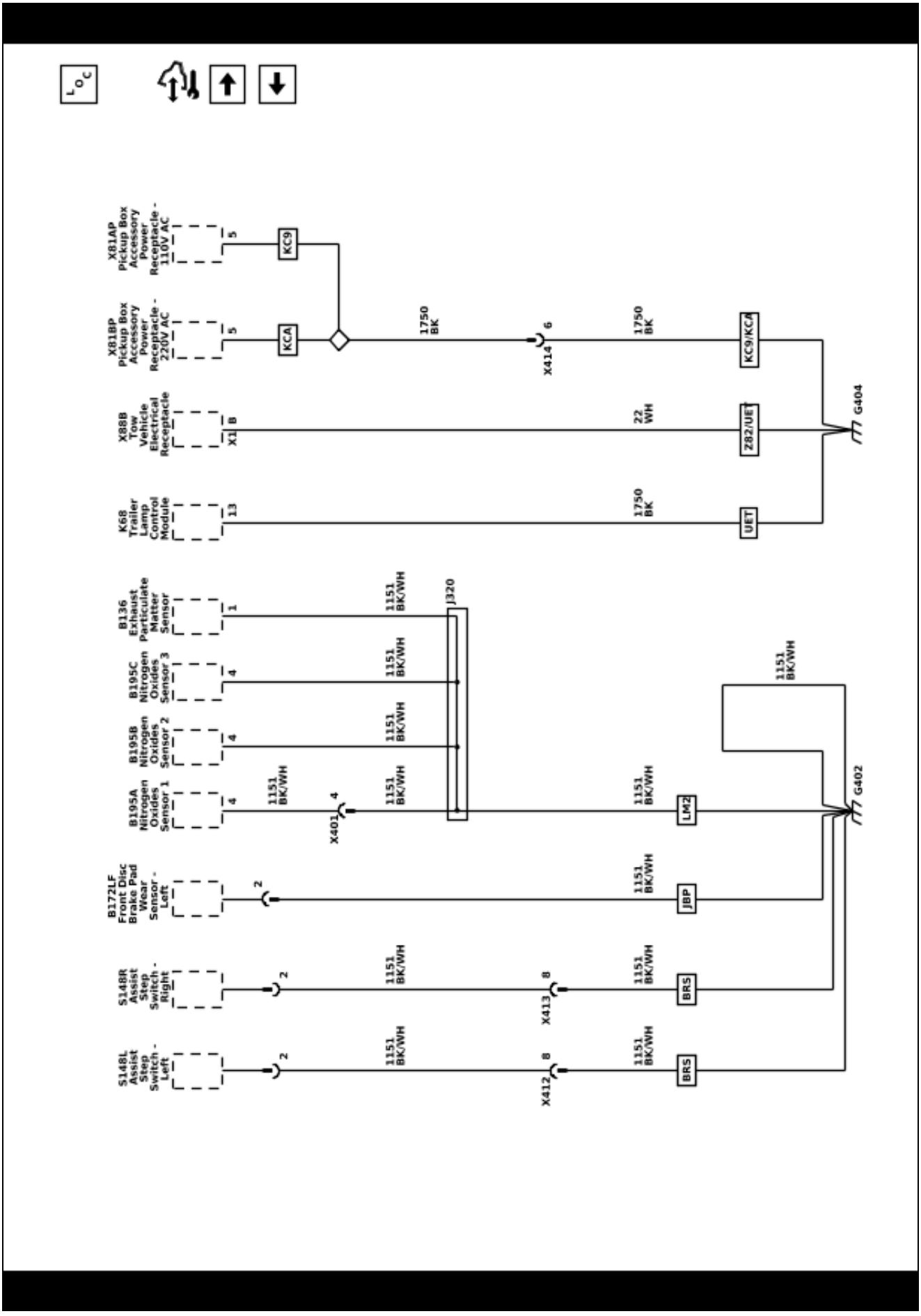
## Ground Distribution Schematics (G301B - 2 of 2 - Extended Cab/Crew Cab)



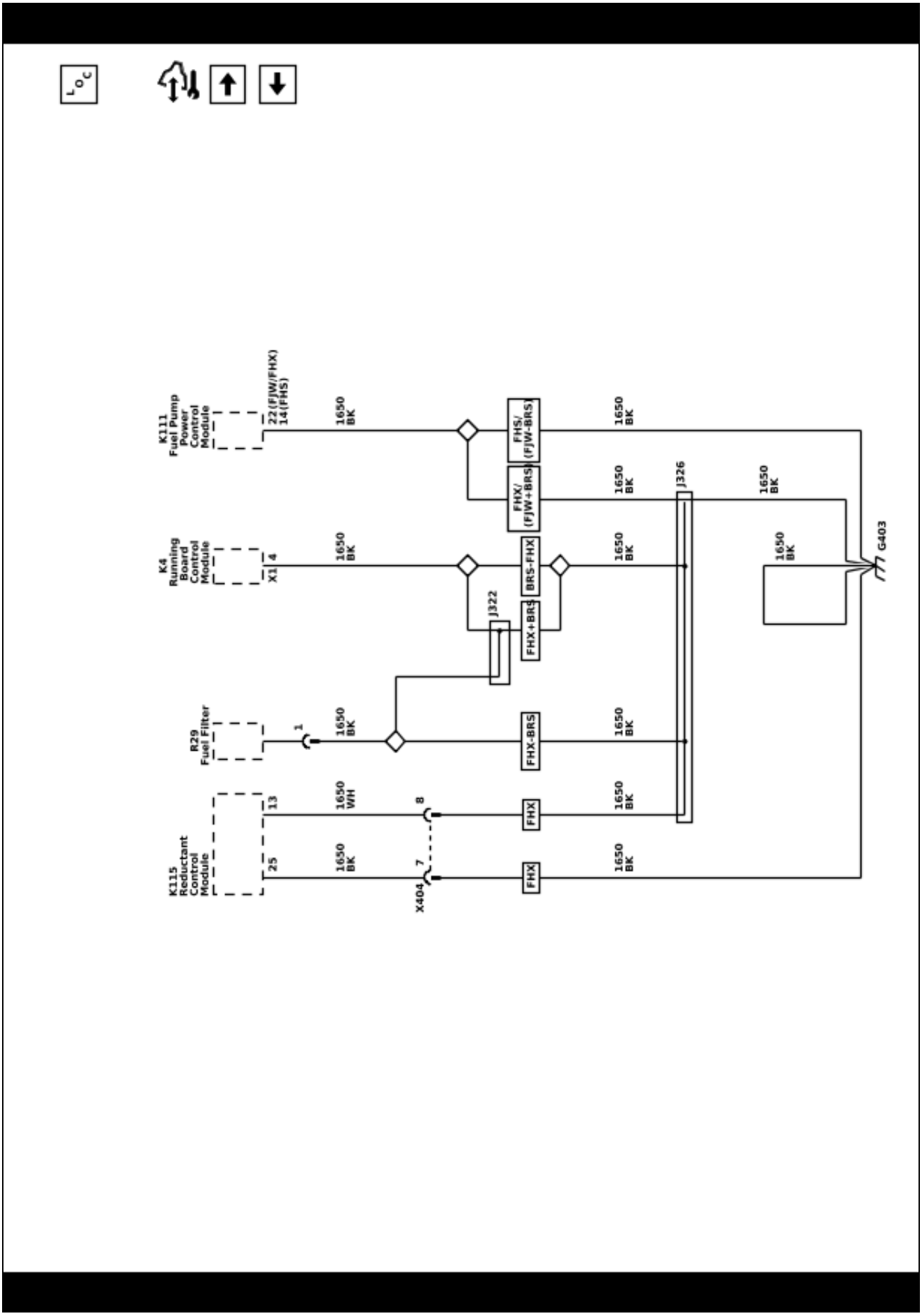
## Ground Distribution Schematics (G302)



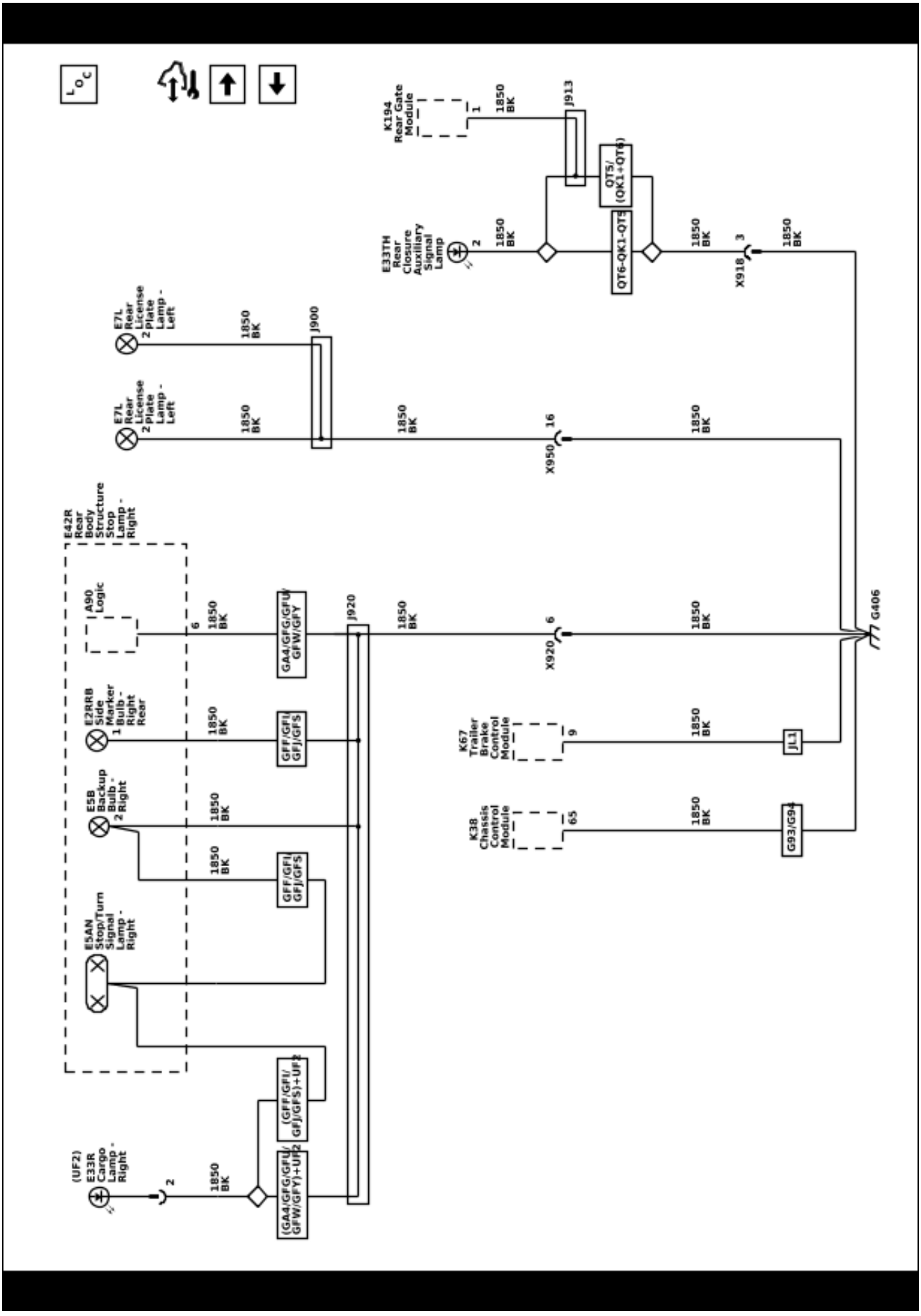
## Ground Distribution Schematics (G402 and G404)



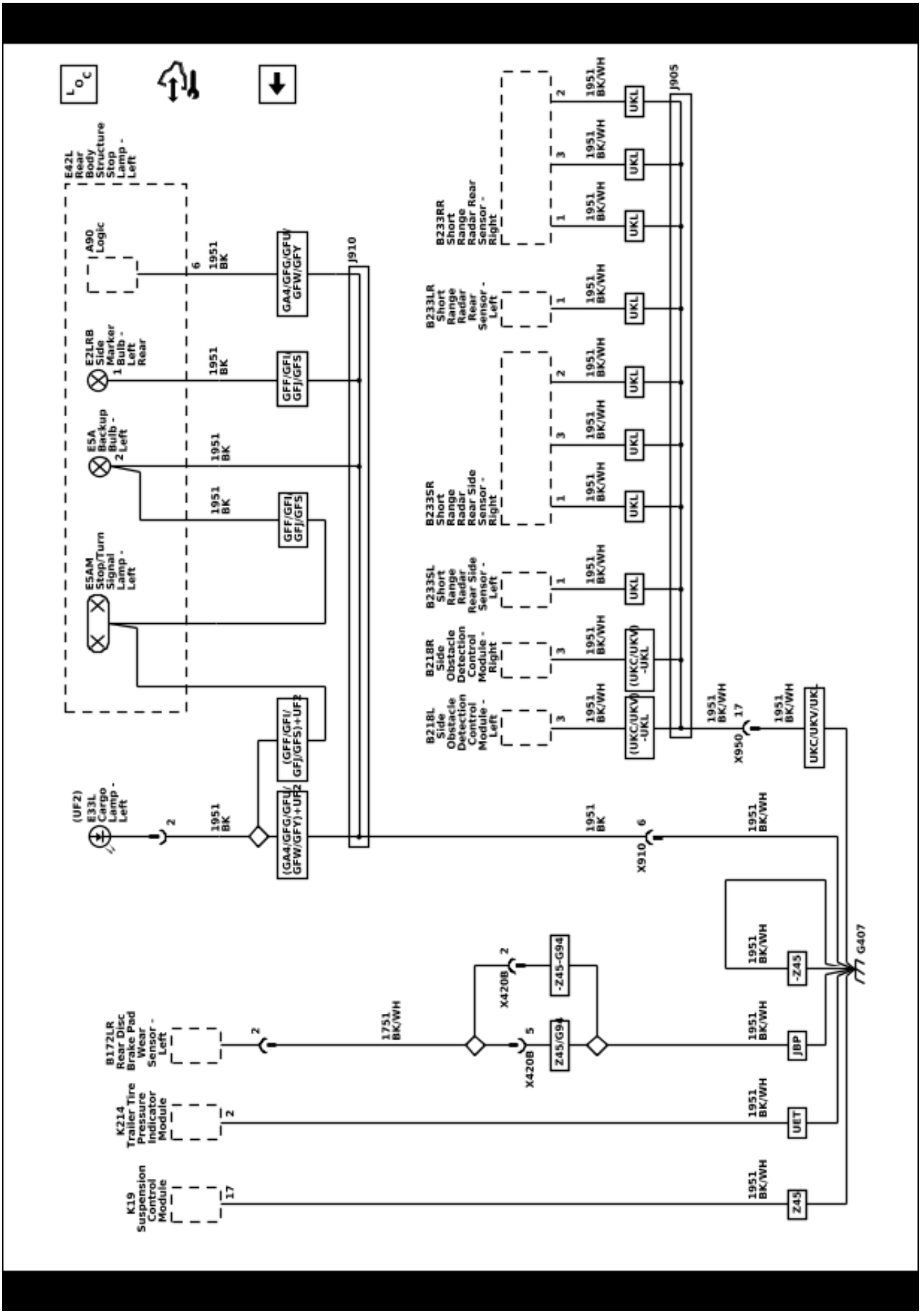
## Ground Distribution Schematics (G403)

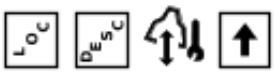


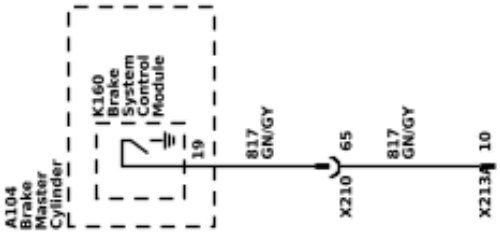
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## Ground Distribution Schematics (G407)

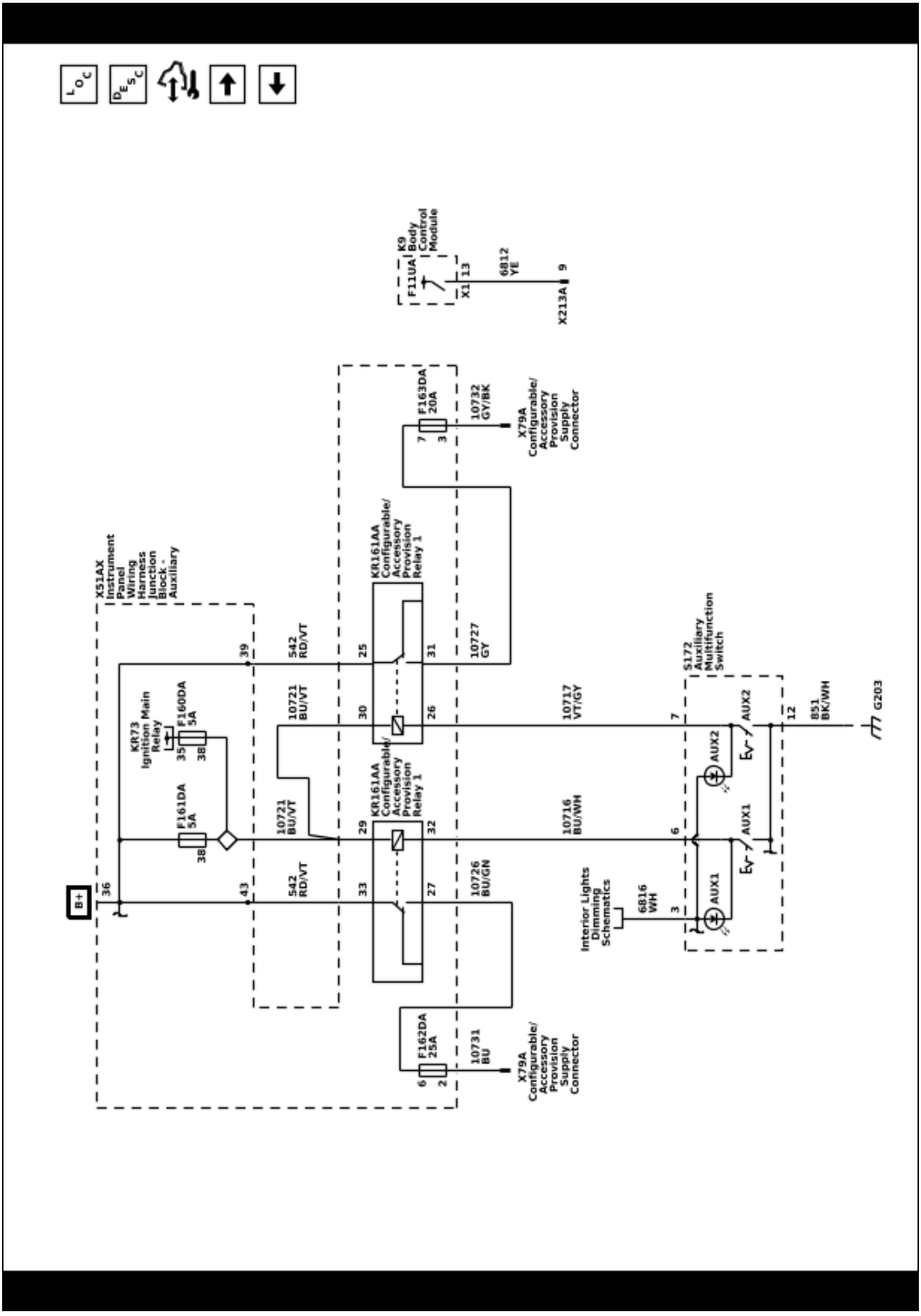




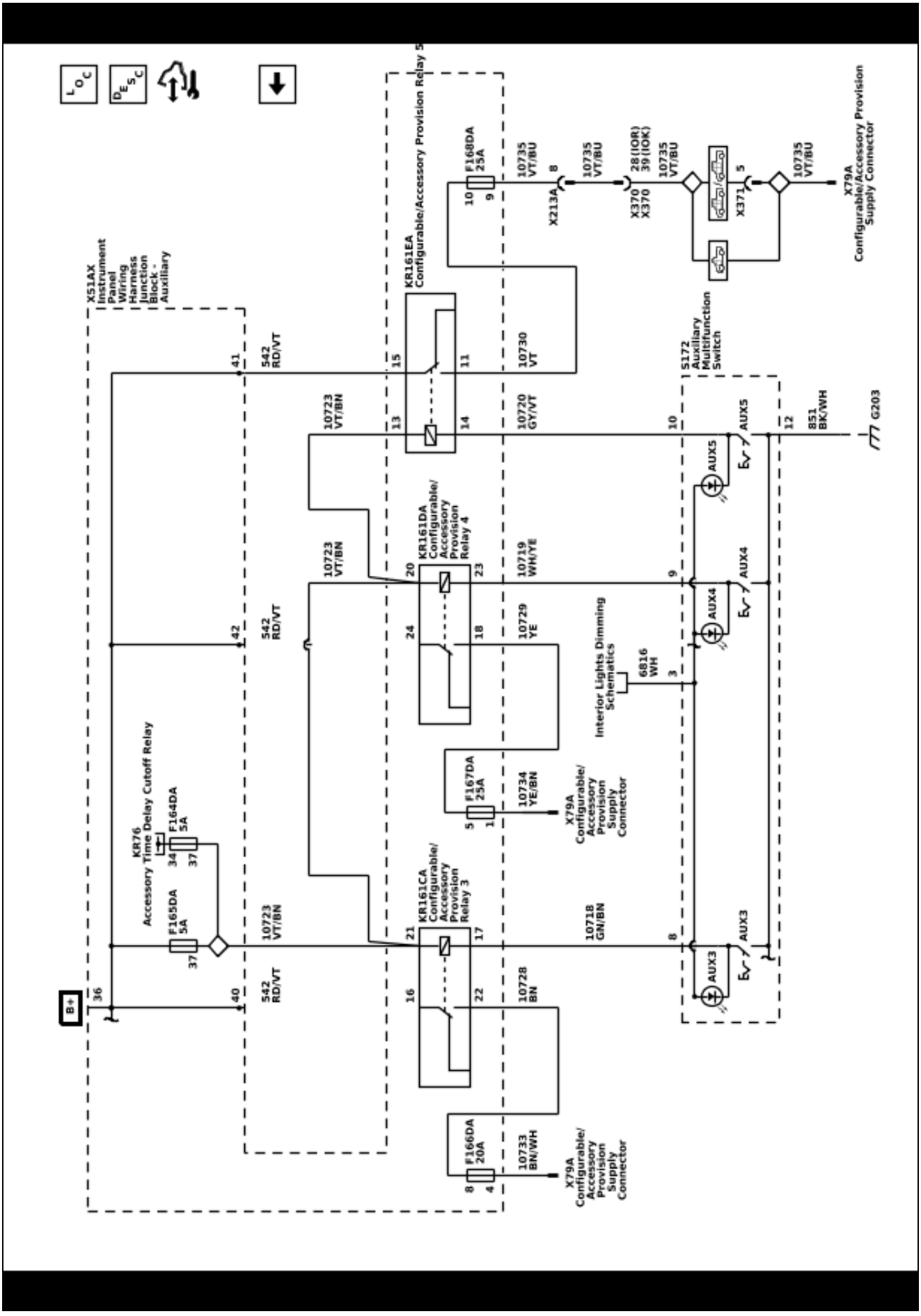

A104
Brake
Master
Cylinder
K160
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System
Control
Module
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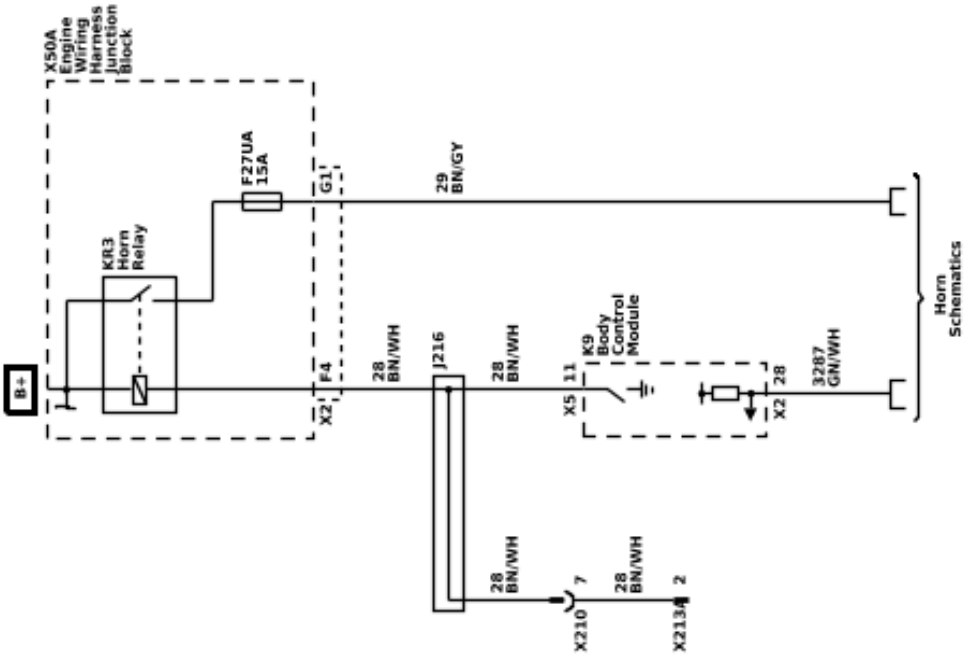
## Upfitter Provision Schematics (Configurable/Accessory Provision - 1 of 2 (9L7))



## Upfitter Provision Schematics (Configurable/Accessory Provision - 2 of 2 (9L7))

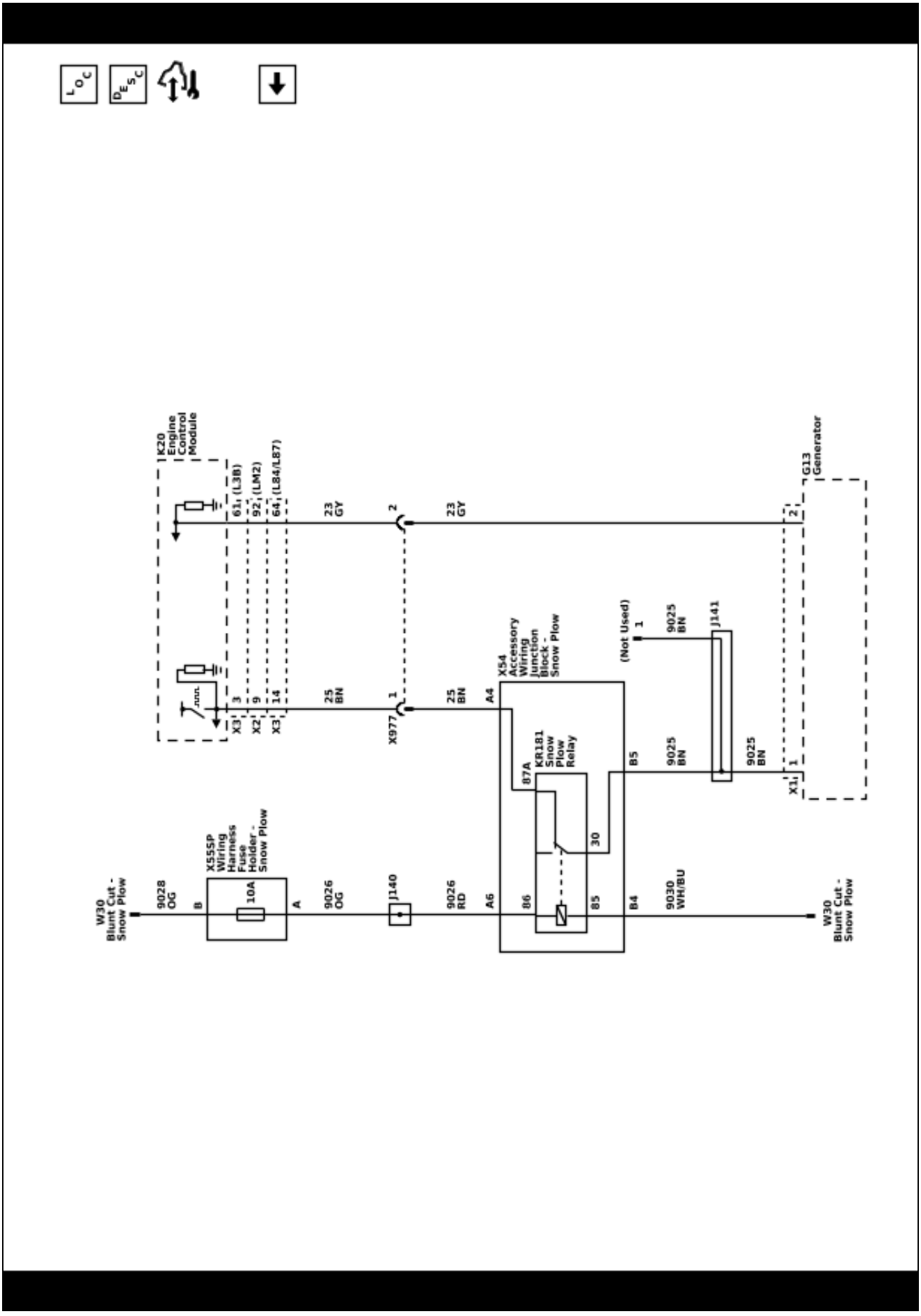


## Upfitter Provision Schematics (Horn Provision (5W4))




6041139

## Upfitter Provision Schematics (Snow Plow Provision (VYU))



# Description and Operation

## Power Mode Description and Operation

### Serial Data Power Mode Master

The K9 Body Control Module (BCM) is the Power Mode Master and the K56 Serial Data Gateway Module is the Back-Up Power Mode Master.

The Power Mode Master uses various vehicle status conditions and inputs to determine the desired vehicle power mode state. The Power Mode (Off, Accessory, Run, Propulsion, Start) is communicated to other modules via Serial Data and other electrical signals in order to provide the proper feature operation for the appropriate power mode.

If the Power Mode Master cannot control or determine the correct Power Mode, the Backup Power Mode Master will take over and become the vehicle Power Mode Master and place the vehicle into the proper Power Mode by communicating with other modules via Serial Data to provide the proper electrical signals to provide the proper feature operation for the appropriate power mode.

### S38 On/Off Vehicle Switch

There are 5 power modes to convey driver intent:

- OFF – A low power mode that allows maximum stand time until next start
- ACCY – Allows use of certain features that require operator authorization (Power windows for example). Propulsion is specifically disallowed.
- RUN – All features enabled except propulsion (motive force)
- PROPULSION – All features enabled
- START - This will transition to PROPULSION, including turning off non-essential loads to provide additional power for starting.

## Power Mode States

| Customer Action | Expected Vehicle Power Mode | S38 Vehicle On/Off Switch BCM Scan Tool Parameter | S38 Vehicle On/Off Switch Voltages |
|---|---|---|---|
| Vehicle OFF, S38 On/Off Vehicle Switch not pressed, Transmitter in Range | Vehicle Off Mode | Inactive | 1.4 – 3.0 V (Switch Pressed)<br>3.35 – 4.26 V (Switch Released)<br>4.5 — 5.0 V (Switch Disconnected) |
| Vehicle OFF, S38 On/Off Vehicle Switch not pressed, Transmitter out of Range/ Away from vehicle | Vehicle Off Mode | Inactive | |
| Vehicle in any Power Mode EXCEPT OFF, then Press the S38 On/Off Vehicle Switch Foot On or Off the Brake Pedal, Transmitter in Vehicle | Vehicle Off Mode | Active (pushed) / Inactive (not pushed) | |
| Vehicle in Propulsion Mode, momentarily Press and Release the S38 On/Off Vehicle Switch Foot On or Off the Brake Pedal, Transmitter out of Range/Away from vehicle | Run Mode, With DIC Message No Remote Detected Press Brake to Restart | Active (pushed) Inactive (not pushed) | |
| Vehicle Off Power Mode, then Press the S38 On/Off Vehicle Switch for less than 5 s with foot Off the Brake Pedal; Transmitter in Vehicle | Vehicle Accessory Mode | Active (pushed) / Inactive (not pushed) | |
| Vehicle Off Power Mode, then S38 On/Off Vehicle Switch with foot On the Brake Pedal; Transmitter in Vehicle | Vehicle Start/ Propulsion Mode (vehicle cranks then engine running (for Internal Combustion Engine) or Propulsion System Active for EV) power mode timeout is enabled | Active (pushed) / Inactive (not pushed) | |
| Vehicle Off Power Mode, then S38 On/Off Vehicle Switch with foot On the Brake Pedal for 5 to 10 s; Transmitter in Vehicle | Vehicle Start/ Propulsion Mode (vehicle cranks then Propulsion Mode Active) power mode timeout will be disabled. | Active (pushed) / Inactive (not pushed) | |
| Vehicle OFF Power Mode, then Press and Hold the S38 On/Off Vehicle Switch for 5 s with foot Off the Brake Pedal; Transmitter in Vehicle | Vehicle Run Mode (Ignition ON without the Propulsion system Active) | Active (pushed) / Inactive (not pushed) | |
| Vehicle OFF Power Mode, then Press and Hold the S38 On/Off Vehicle Switch for 5 s with foot Off the Brake Pedal; Transmitter in Vehicle | Vehicle Start/ Propulsion Mode (vehicle cranks then Propulsion Active) power mode timeout is disabled | Active (pushed) / Inactive (not pushed) | |
| Vehicle Propulsion Mode with vehicle speed detected above 4 km/h (2.5 MPH) press and hold S38 On/Off Vehicle Switch for 2 s or press and release it 2 times within 5 S. | Vehicle will transition from Propulsion Mode to Run Mode (Ignition On Propulsion system Inactive). | Active (pushed) / Inactive (not pushed) | |
| **NOTE: If the transmitter is not moved for more than 1 hour it will become inactive.** | | | |

## Service Mode

Service Mode is the Run Power Mode with power mode timeout disabled. This can only be done with the Service Tool.

## Automatic Power Mode Timeouts

**Note:** If the Transmitter/Fob remains stationary and is not moved for one hour, it will go to sleep and may create a fob not in range condition.

This system is designed to prevent batteries from going dead in the event the ignition is left on while unattended, it is also designed to shut the vehicle off if left running unattended. After a Power Mode timeout, the Power Mode Master is responsible for shutting down the or transitioning the vehicle into the low parasitic sleep state “OFF” Power Mode. This Power Mode timeout strategy uses Vehicle Speed, Vehicle Power Mode, Parked Status and other Vehicle Conditions to make the timeout determination.

### Accessory Power Mode

The Accessory Power Mode will timeout after approximately 5 minutes. The timer will Start once the system has determined it is in the Accessory Power Mode status. After the timer expires the Power Mode will change to the OFF Power Mode.

### Run Power Mode

if the conditions listed below are met the Run Power Mode will timeout after approximately 40 minutes if the transmitter is in range, or 20 minutes if the transmitter is out of range. The timer will Start once the system has determined it is in the Run Power Mode status and all of the following conditions are met. After the timer expires the Power mode will change to OFF Power Mode.

If any of the following conditions are not met and/or if there is a change in the Brake Pedal or Clutch Pedal status, the Run Mode timeout timer will be disabled, and the timer will restart after all of the conditions are met again.

- Vehicle in Run Mode (Vehicle powered up S38 On/Off Vehicle Switch Green indicator on Propulsion Mode Inactive)
- Propulsion is Inactive
- Vehicle in Park.
- Vehicle Speed is 0 KM/MPH.
- Fast Idle is inactive (If Equipped).
- PTO Remote Start Status is inactive (If Equipped).
- Particulate Filter Cleaning Status is Inactive (if Equipped)
- S38 Vehicle On/Off switch was held for more than 5 to 10 seconds while starting the vehicle the actual time may vary based on model and/or year.

### Propulsion Power Mode

If the following conditions listed below are met the Propulsion Power Mode will timeout after approximately 30 minutes if the transmitter is in range, or 15 minutes if the transmitter is out of range. The timer will Start once the system has determined it is in the Propulsion Power Mode status and all of the following conditions are met. After he timer expires the Power mode will change to the OFF Power Mode.

The Propulsion Power Mode timeout can be disabled with then vehicle in Off Power Mode, apply and continue to hold the brake pedal, then press and hold the S38 Vehicle On/Off switch for 5 to 10 seconds (the actual time may vary based on model and/or year). A DIC message will be displayed when Power Mode timeout is disabled.

If any of the following conditions are not met and/or if there is a change in the Brake Pedal or Clutch Pedal status, the Propulsion Mode timeout timer will be disabled, and the timer will restart after all of the conditions are met again.

- Vehicle in Propulsion Mode (Propulsion Active).
- Vehicle in Park.
- Vehicle Speed is 0 KM/MPH.
- Fast Idle is Inactive (If Equipped).
- PTO Remote Start Status is inactive (If Equipped).
- Particulate Filter Cleaning Status is Inactive (if Equipped)
- S38 Vehicle On/Off switch was held for more than 5 to 10 seconds while starting the vehicle the actual time may vary based on model and/or year.

## Relay Controlled Power Mode

The BCM uses discrete push button switch inputs, transmitter in range status, current power mode state, and brake pedal position state to distinguish the correct power mode (Off, Accessory Mode, Run Mode, Start/Propulsion Mode). The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay remains on for a timed period after the Ignition Mode is OFF. Refer to *Retained Accessory Power Description and Operation on page 7-1029* for more information on the retained accessory power function.

## Push Button Start

The ignition mode switch has 2 LEDs that indicate the vehicle power mode Amber for Accessory Mode and Green for Run or Start/Propulsion Modes. When the vehicle is in the OFF mode, both LED's will be OFF. Momentarily pressing the S38 On/Off Vehicle Switch button once, brake pedal not applied, the vehicle will enter into the Accessory Mode and the Amber LED will illuminate. The Accessory Mode will timeout after approximately 5 min to help reduce battery drain. With the ignition OFF, brake pedal not pressed, then pressing and holding the S38 On/Off Vehicle Switch for 5 s will place the vehicle in Run Mode (Ignition ON without the Propulsion Mode Active). The vehicle will stay powered up for approximately 40 minutes if the transmitter is in range, or 20 minutes if the transmitter is out of range, and the Green LED will illuminate.

With the ignition OFF brake pedal pressed, then press and release the iS38 On/Off Vehicle Switch, the vehicle will enter Start/Propulsion Mode and the Green LED will illuminate, the engine will crank and the engine will be running for Internal combustion engines (ICE), or Propulsion mode will go Active on Electric Vehicles (EV). The Propulsion Mode will timeout after approximately 30 minutes if the transmitter is in range, or 15 minutes if the transmitter is out of range. The timer will stop when the vehicle is shifted out of PARK or the brake pedal is pressed and released, the timer will reset after the vehicle is placed back in PARK with the Propulsion Mode Active.

Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the passive entry passive start module (PEPS) and to the BCM. The PEPS module sends a redundant signal to the BCM with the ignition mode switch status.

## Transport Mode

Transport Mode is designed to reduce the parasitic load of some modules during shipping and/or during vehicle storage. Some features may be disabled or have

reduced functionality while Transport Mode is ON. Transport Mode is enabled and disabled by either of the following methods:

- With the Scan Tool Diagnostics > Body Control Module > Control Functions > Power Mode.
- Turning the hazard flashers ON, apply and hold the brake pedal, then press and hold the ignition mode switch for greater than 15 s. For vehicles equipped with a DIC a message Transport Mode On when it is enabled and Transport Mode Off when it is disabled will be displayed for a predetermined amount of time. For vehicles equipped without a DIC, the battery indicator light will constantly flash on the Instrument Cluster when Transport Mode is enabled.

## Battery Saver Mode

There are 7 different Battery Saver Modes. Battery Saver Modes 1 to 3 occur in Accessory and Run Power Modes (vehicle on propulsion system Inactive) if the battery voltage drops below approximately 11.5 V. Battery Saver Modes 4 to 7 occur in the Off Power Mode only. Battery Saver Modes 4 to 7 may set DTC's.

- Battery Saver Mode 1: DIC message "Battery Low, Start Vehicle", 4 chimes
- Battery Saver Mode 2: DIC message "Battery Low, Start Vehicle", Load Shed Level 3 is activated
- Battery Saver Mode 3: DIC message "Battery Low, Start Vehicle", Radio/Infotainment shut off, Load Shed Level 3 active
- Battery Saver Mode 4: Battery Saver Mode Ignition Off – Parasitic Current draw of 100 mA or greater
- Battery Saver Mode 5: Battery Saver Mode Ignition Off – Parasitic Current draw of 1 A or greater
- Battery Saver Mode 6: Battery Saver Mode Ignition Off – Battery Voltage less than 12.0 V
- Battery Saver Mode 7: Battery Saver Mode Ignition Off – Battery Voltage less than 11.6 V

## Load Shedding

Prior to Load shedding Idle Boost will occur, the idle speeds will be increased by 25 to 300 RPM to help maintain a normal battery voltage. Idle Boost may be noticeable to the driver. If the battery voltage continues to drop below a normal state then load shedding will go active and it will start to reduce electric loads for components that will not impact the safe operation of vehicle. At load shed levels 2 and 3 a DIC message will be displayed "Reducing Features To Save Battery". When load shedding is active the customer may begin to notice features starting to have reduced functions or may become inoperative. Examples of affected loads are radio, HVAC blower(s) front and rear (if equipped), heated/ventilated seats, heated mirrors, rear defogger and other devices with heavy electrical draws. Idle Boost and load shed levels can be observed with the scan tool.

**Idle Boost 1**

Idle is increased by 25-100 RPM and generally is not noticeable to most drivers.

**Idle Boost 2**

Idle is increased by 50–200 RPM and generally is not noticeable to most drivers.

**Idle Boost 3**

Idle is increased by 100–300 RPM and may be noticeable to most drivers.

**Load Shed Level 1**

Reduces load current by 25%.

**Load Shed Level 2**

Reduces load current by 50%.

**Load Shed Level 3**

Electric loads for components that will not impact the safe operation of vehicle will be turned Off.

## BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

# Retained Accessory Power Description and Operation

## Retained Accessory Power

The Retained Accessory Power (RAP) & Interruptible RAP (IRAP) Circuits are controlled by the K9 Body Control Module (BCM). The BCM is the Power Mode Master, it utilizes various Vehicle inputs to determine the Vehicle Power Mode and sends this information via Serial Data and providing associated electrical signals to the entire vehicle for proper feature operation.

The BCM monitors the vehicles power modes, and door ajar/open switch status to determine whether the retained accessory power should be initiated and remain active or be terminated. The RAP output is optional based on the vehicles option contents. When utilized, the RAP Output control can be used to control

a RAP Relay, it may provide direct power, or s serial data message to vehicle devices/modules from the BCM.

## Retained Accessory Power Relay Coil Control Circuit (If Equipped)

The BCM keeps the device or relay (if equipped) energized during all power modes, except Off-Awake and Crank. The device(s) remain active for approximately 10 min after the Vehicle is placed into the OFF Power Mode, provided none of the doors are opened.

Retained accessory power will end when one of the following conditions are met:

- The BCM receives an input from any door ajar switch indicating the opening of the door after the OFF Power Mode is achieved.

  **Note:** If the BCM is receives a door open/ajar active signal when the vehicle is placed into the OFF Power Mode, the retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 min.

Systems powered by the retained accessory power control circuit during the retained accessory power mode are as follows:

**Note:** The vehicle may not be equipped with all components as listed below.

- 12 V Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Window Switches
- Sunroof Control Module (If Equipped)
- Sunroof Switch (If Equipped)
- Mobile Device Wireless Charger Module
- Mobile Telephone Control Module (If Equipped)
- Traffic Data Receiver (If Equipped)
- Transmission Shift Lever Position Indicator (w/ floor mounted console gear shift)

## Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

### Radio

Radio retained accessory power activation/termination is the same as relay operation with one exception; the only door that will turn the radio off during retained accessory power is the driver door open/ajar switch. The USB Ports will function the same as the radio.

### Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call and the vehicle is placed in the OFF Power Mode, the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

## Interruptible Retained Accessory Power

The Power Mode Master (PMM) Controls components as needed If equipped with a RAP relay, the BCM controls the Retained Accessory Power with an exception, Interruptible Retained Accessory Power (IRAP) is deactivated during transmitter authentication. During Transmitter Authentication the PMM will deactivate components including IRAP to prevent Radio Frequency (RF) Interference (RFI) that may cause a “NO REMOTE DETECTED” message to be displayed on the drivers information center.

**Note:** If transmitter Authentication occurs while in Run or Propulsion Modes, it is normal to for IRAP to be interrupted momentarily (i.e. items connected to auxiliary power ports or chargers may momentarily go off then come back on).

If a remote transmitter was not been previously detected, Transmitter Authentication can occurs under any of the following conditions:

- The drivers side front door is opened.
- The drivers side rear door is opened.
- The S38 Vehicle On/Off Switch is pressed.

# Section 8

# Safety and Security

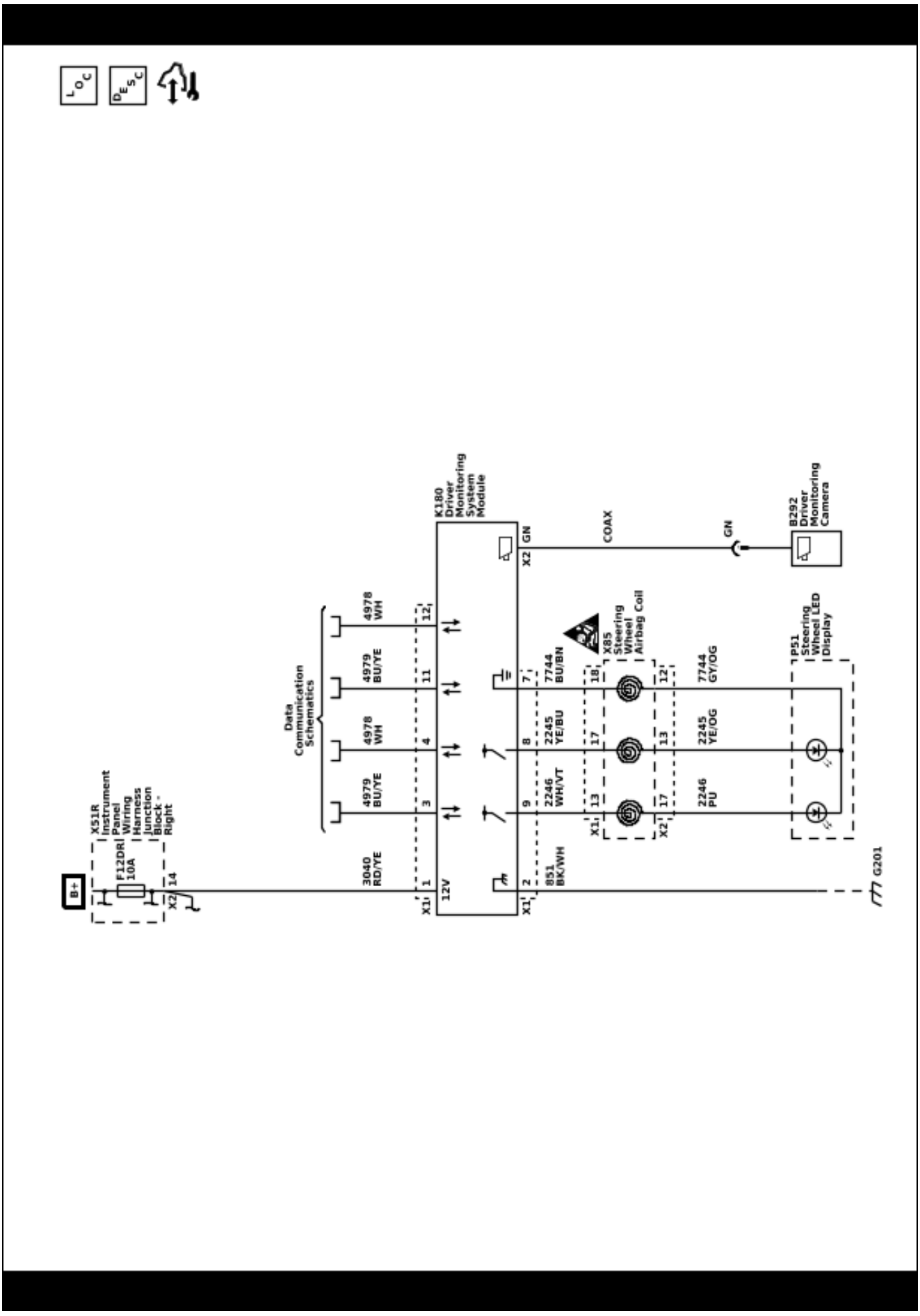
**Driver Monitoring** ..... 8-3
**Schematic and Routing Diagrams** ..... 8-3
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Garage Door Opener Description and Operation ..... 8-17
Keyless Entry System Description and Operation ..... 8-17

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# Driver Monitoring

## Schematic and Routing Diagrams

## Driver Monitoring Schematics (Driver Monitoring System)



# Description and Operation

## Driver Monitoring Description and Operation

### System Operation

The driver monitoring system is part of the Adaptive Cruise Control with Lane Following (RPO: UKL) feature.

The driver monitoring system (DMS) utilizes an infrared camera located on the steering column, and infrared illumination provided by IR LEDs embedded in the steering wheel to monitor the driver and provide an estimate of the driver's attention state to the Image Processing Module. The resultant image of the Driver is not visible to the driver or GM Service. The driver monitoring system is used as an input to enable/disable the SuperCruise system; therefore driver monitoring system should only be active when its function is requested by the Image Processing Module. For many drivers, the driver monitoring system IR LEDs may be visible as a dim red glow when the system is active.

The driver monitoring system requires the IR illumination LEDs to be illuminated for operation. The LEDs turned on by K124 Image Processing Module command and will only be illuminated when the Adaptive Cruise Control (ACC) with Lane Following is engaged by the customer.

Additionally, all the video signal circuits are twisted and shielded to prevent any interference that may lead to a loss of video signal resolution and cause a degraded video image. These circuits must not be spliced/ removed from shielding or will cause image degradation.

### Driver Monitoring Components

The Driver Monitoring system consists of the following components:

- Driver Monitoring Camera
- Driver Monitoring Control Module
- Driver Monitoring Indicators

### Driver Monitoring System Outputs

Driver Monitoring System will monitor driver's head position and area of interest and notify Image Processing Module of the driver's attention state. Possible attention states are:

- On Road
- Off Road
- Lap Zone (a special case of Off Road)
- Center Console (a special case of Off Road)
- PVOE (Eyes Closed): eyes closed or eyes not visible
- Unknown: This value indicates that the driver cannot be tracked or driver's visual attention state cannot be estimated, for whatever reason
- Invalid: This value indicates that the driver monitor system is not presently attempting to determine the driver's attention state due to, either a fault is present in the system, or the system has not completed a self-diagnostic and therefore cannot provide a trustworthy output

### Driver Monitoring System Operation

In order for the driver monitor system to function correctly, the driver's face must be oriented such the camera can view that facial features from above the eyes to below the mouth. See the driver interaction section below for helping customers understand conditions that might prevent the system from recognizing a driver. When assessing the driver's area of attention (where the driver is looking), the driver monitor system primarily uses the orientation of the face, and uses the eyes/eyelids as a secondary input. Therefore, if a driver looks at a location with the eyes only (without turning his/her head) driver monitor system will most likely report where the face is oriented as if the eyes are straight forward. This is critical if the driver is required to look at a small area of interest such as the center console; the face must be distinctly oriented towards the center console region for driver monitor system to acknowledge a glance, such as for a driver alertness check glance.

The driver monitor system Control Module receives constant power from a direct connection to battery; a constant ground signal; and a wake-up signal (COMM_ENABLE) and GM_LAN communication from the Image Processing Module. The Control Module supplies power and command signal to the driver monitor system camera, and the camera provides live images and camera exposure information to the Control Module through a co-axial cable connection. The Control Module also provides power and control signals to the IR LEDs located within the steering wheel.

The Image Processing Module wakes/puts to sleep up the driver monitor system system through a COMM_ENABLE signal; a high signal wakes the driver monitor system, and low signal puts the driver monitor system to sleep.

Once the driver monitor system is awake, the Image Processing Module forces the driver monitor system IR LEDs to an OFF state if the driver monitor system function is not required (SuperCruise is not requested by the driver). In this case, driver monitor system will report over GM-LAN that driver monitor system is unavailable (driver monitor system_Available = FALSE).

Once the driver requests SuperCruise function, the Image Processing Module will allow driver monitor system to control the IR LEDs. Once IR LED control is allowed, the driver monitor system will begin to attempt to track the driver, and report driver attention state as described above.

During normal operation of driver monitor system, because of normal, transient behavior of the driver, it will be normal for the driver monitor system to occasionally report "Unknown" driver attention state, such as if the driver turns their face away from the camera, or moves their head out of camera view.

If the driver monitor system is unable to track the head and/or eyes for an extended period of time, which can be due to driver behavior and/or appearance, the driver monitor system may conclude that it is unable to safely track and report the driver attention. In this case, the driver monitor system will report that it is unavailable for use (driver monitor system_Available = FALSE). This will cause the SuperCruise function to disengage, and the IR LEDs will be forced off by the Image Processing

Module again. The driver monitor system will not resume operation again until the Image Processing Module once again returns control of the IR LEDs to the driver monitor system.

The video signal is shielded to prevent any interference that may lead to a loss of video signal resolution which could degrade the system performance and cause the driver monitor system to lose track of the driver's facial features. The video circuit must not be spliced/removed from shielding or the image could be degraded and driver monitor system performance negatively affected

## Driver Monitoring – Driver Interaction

If a customer complains that Adaptive Cruise Control (ACC) with Lane Following (LF) is not engaging as they would expect or lighting the steering wheel mounted light bar yellow or red too often, and there are no DTC codes set with any of the related components, the system may be turning off because the driver is not recognized. Careful questioning of the driver about their driving habits and when the condition occurs made aid in resolving the issue to their satisfaction.

For best system performance, follow these guidelines:

- Do not block the driver monitor system camera with personal items
- Do not block the indicators on the steering wheel
- When the driver is seated and using the feature, the driver's head must be above the steering wheel rim. Driver must also be able to reach the steering wheel to control the vehicle while ACC/LF is in use, driver monitor system will not recognize a driver seated in an excessively reclined seat.
- As noted in the Owner's Manual, if the driver's head height is similar to the steering wheel rim, lowering the steering wheel tilt may improve the driver monitor system ability to recognize the driver.
- Driver must no have face is fully or partially obscured, such as by clothing, hair, hand gestures or held items (food, phone, cigarettes, etc.)
- Sunglasses may reduce the systems ability to track the driver, avoid glasses with reflective lenses. Not all sunglasses will work with the system.
- Avoid apparel that covers the face and/or eyes.

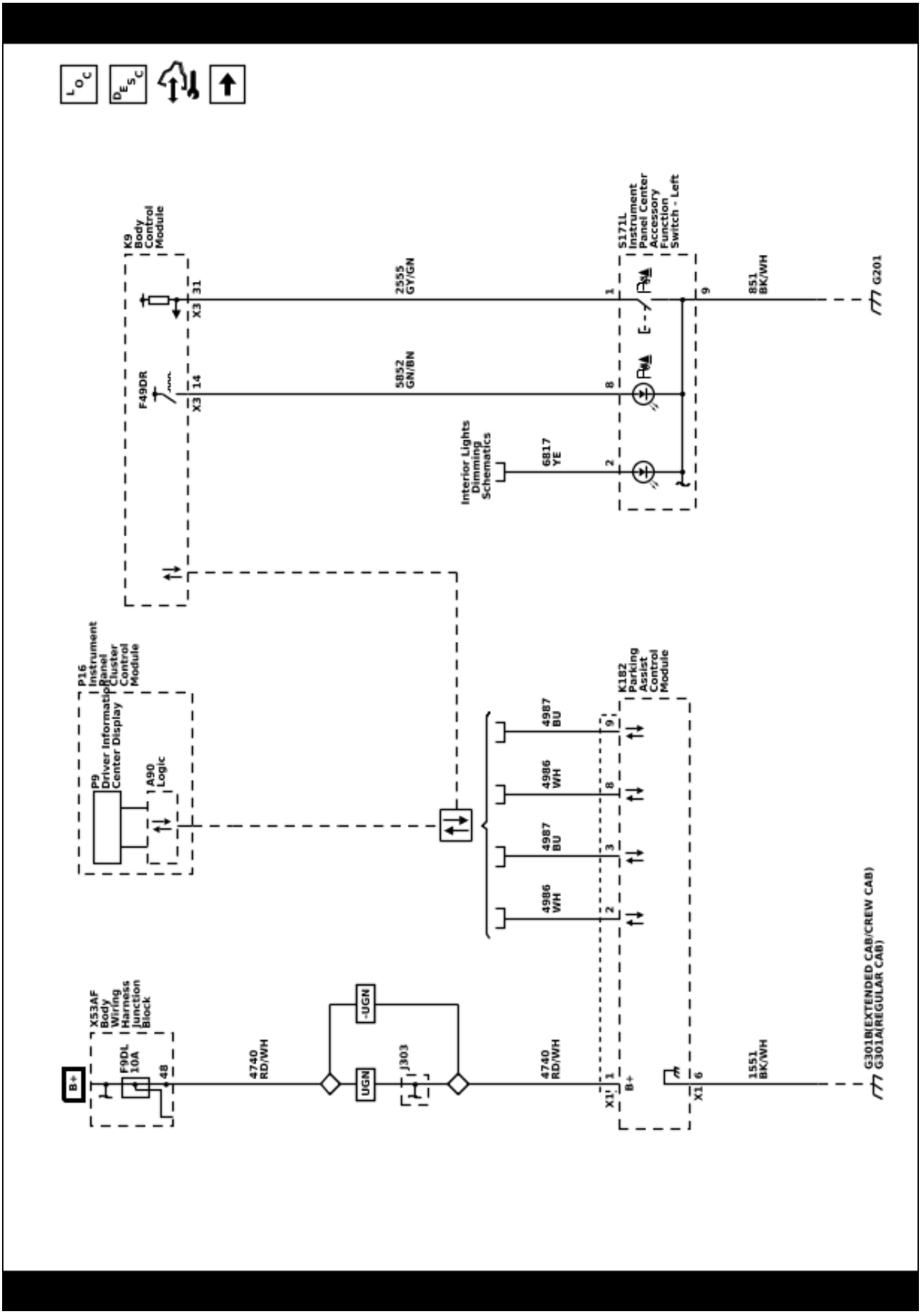
## Driver Monitoring Camera Cleaning

The driver monitor system is designed to function without any period maintenance. However, over the course of time and normal vehicle use it is possible that the camera lens cover may become dirty and affect camera performance. If the camera lens cover requires cleaning, it may be cleaned with a soft cloth and normal household non-abrasive cleaners, such as glass cleaner. Never use any abrasive cloths and/or abrasive cleaners to clean the camera lens cover. Never use corrosive chemicals of any kind on the camera lens cover.

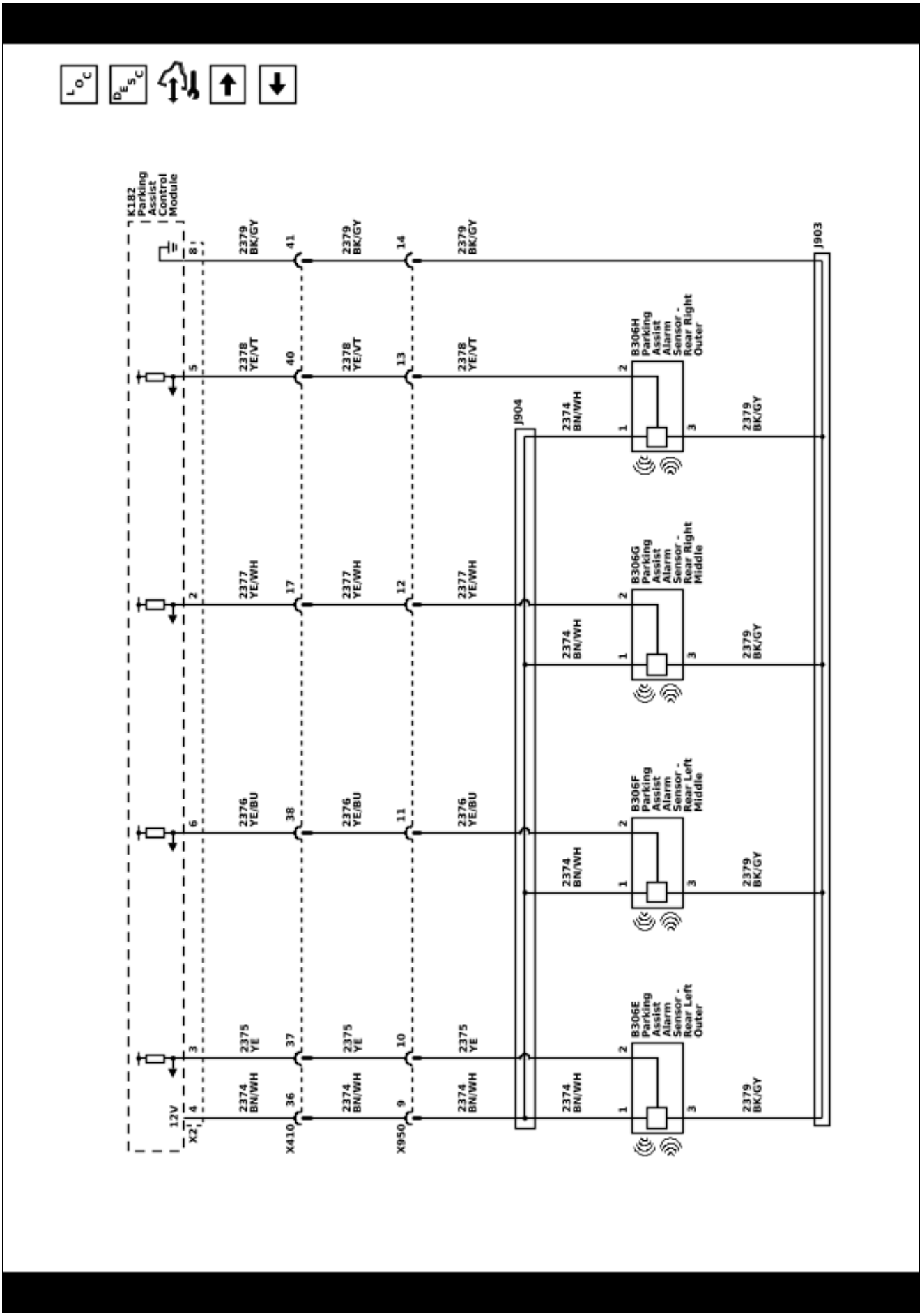
# Parking Assistance Systems

## Schematic and Routing Diagrams

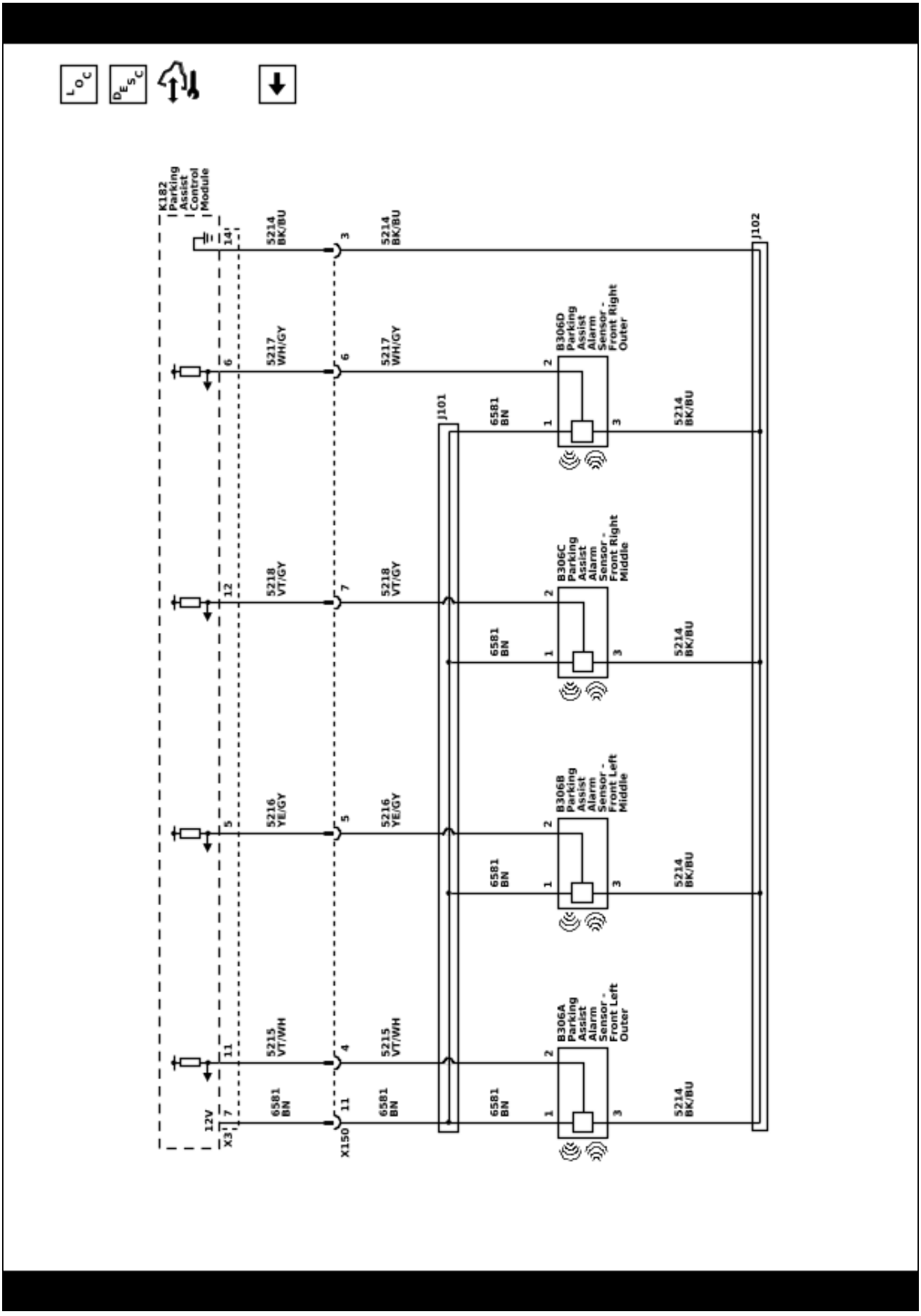
## Parking Assistance Systems Schematics (Park Assist - Power, Ground, and Serial Data (UD5/UD7))



## Parking Assistance Systems Schematics (Park Assist - Rear Sensors (UD5/UD7))



## Parking Assistance Systems Schematics (Park Assist - Front Sensors (UD5))



# Description and Operation

## Parking Assist Description and Operation (UD5)

The parking assist system can help drivers avoid certain objects in their path during low-speed parking. The distance and location of the object is determined by four object sensors located in the rear fascia. The parking assist system may not detect all children, pedestrians, bicyclists, animals or objects below the bumper. Drivers should remember to always check the area around the vehicle before shifting into REVERSE. The parking assist system will not stop or slow down a vehicle. It does not engage a vehicle's throttle or braking. No safety system can take the place of an alert and engaged driver.

The parking assist system is made up of the following components:

- K182 Parking Assist Control Module
- B306 Parking Assist Alarm Sensors
- Infotainment system

#### K182 Parking Assist Control Module

The K182 Parking Assist Control Module provides a reference voltage and a low reference to the B306 Parking Assist Alarm Sensors. The K182 Parking Assist Control Module receives individual signals from each of the four B306 Parking Assist Alarm Sensors and determines the location and distance of an object based on these inputs. When an object is detected, the K182 Parking Assist Control Module will send a serial data message to the infotainment system requesting an audible alert.

#### B306 Parking Assist Alarm Sensors

The B306 Parking Assist Alarm Sensors are located in the rear fascia of the vehicle. The sensors are used to determine the distance between an object and the bumper. Each sensor emits an ultrasonic frequency which is reflected off any object located behind the vehicle. These reflections are received by the sensors. The time difference between the emission of the frequency and when the reflection is received is known as sensor echo time; it is used to determine the distance to the object. The sensors report this information to the K182 Parking Assist Control Module.

#### Infotainment System

The infotainment system controls the audible alert for the parking assist system. If the an object is detected the infotainment system will command beeps as an audible alert to the driver.

## Rear Parking Assist Operation

The rear parking assist system uses four B306 Parking Assist Alarm Sensors located on the rear fascia and functions when the transmission is in REVERSE. When a driver is backing up at a low speed, up to about 11 km/h (7 mph), the B306 Parking Assist Alarm Sensors may detect objects up to 1.8 m (6 ft) behind the vehicle. When an object is within the measuring range of the B306 Parking Assist Alarm Sensors, the ultrasonic pulse is reflected and is received by the sending or a neighboring sensor. The sensor converts this signal into a voltage signal and sends this signal to the K182 Parking Assist Control Module. The K182 Parking Assist Control Module evaluates the received sensor signals.

When an object is within 0.6 m (2 ft) of the rear bumper, 5 repeating low-pitched beeps are played from the rear speakers, followed by a continuous tone. If the vehicle is equipped with the Safety Alert Seat (HS1), it will pulse 5 times on both sides.

Some vehicles may have a park assist display on the P16 Instrument Panel Cluster Module with bars that show "distance to object," driving direction, and object location information for the parking assist system. As the vehicle gets closer to the detected object, distance-to-object information and caution triangles may be displayed that changes from yellow to amber to red.

The parking assist system can be turned on and off using the parking assist switch.

The K182 Parking Assist Control Module carries out a self test and monitors the sensors for electrical and mechanical faults. Monitored is the power supply of each sensor and the sensor signals. Mud, ice and snow may cause obstruction of the function of the sensors. The K182 Parking Assist Control Module also determines if the correct type of sensor is installed. If any of these tests fails, a DTC with corresponding symptom is set and the parking assist system is deactivated.

## Parking Assist System Messages

#### SERVICE PARKING ASSIST or SERVICE DRIVER ASSIST

The driver information center displays SERVICE PARKING ASSIST or SERVICE DRIVER ASSIST when the K182 Parking Assist Control Module detects a malfunction in the parking assist system and the system is disabled.

#### PARK ASSIST OFF

The PARK ASSIST OFF message is displayed in the driver information center when the parking assist system is disabled due to conditions that disable or inhibit the system. The K182 Parking Assist Control Module requests the driver information center display PARK ASSIST OFF when it detects such a condition.

## Parking Assist System Operational Checks

The scan tool Parking Assist Disable History 1–8 data can be used to diagnose a malfunction within the parking assist system or an intermittent concern. The following is a brief description of potential causes which may aid in diagnosis. For each potential issue, perform an appropriate inspect of the component or system and refer to the specific service information subsection related to that system for further diagnosis:

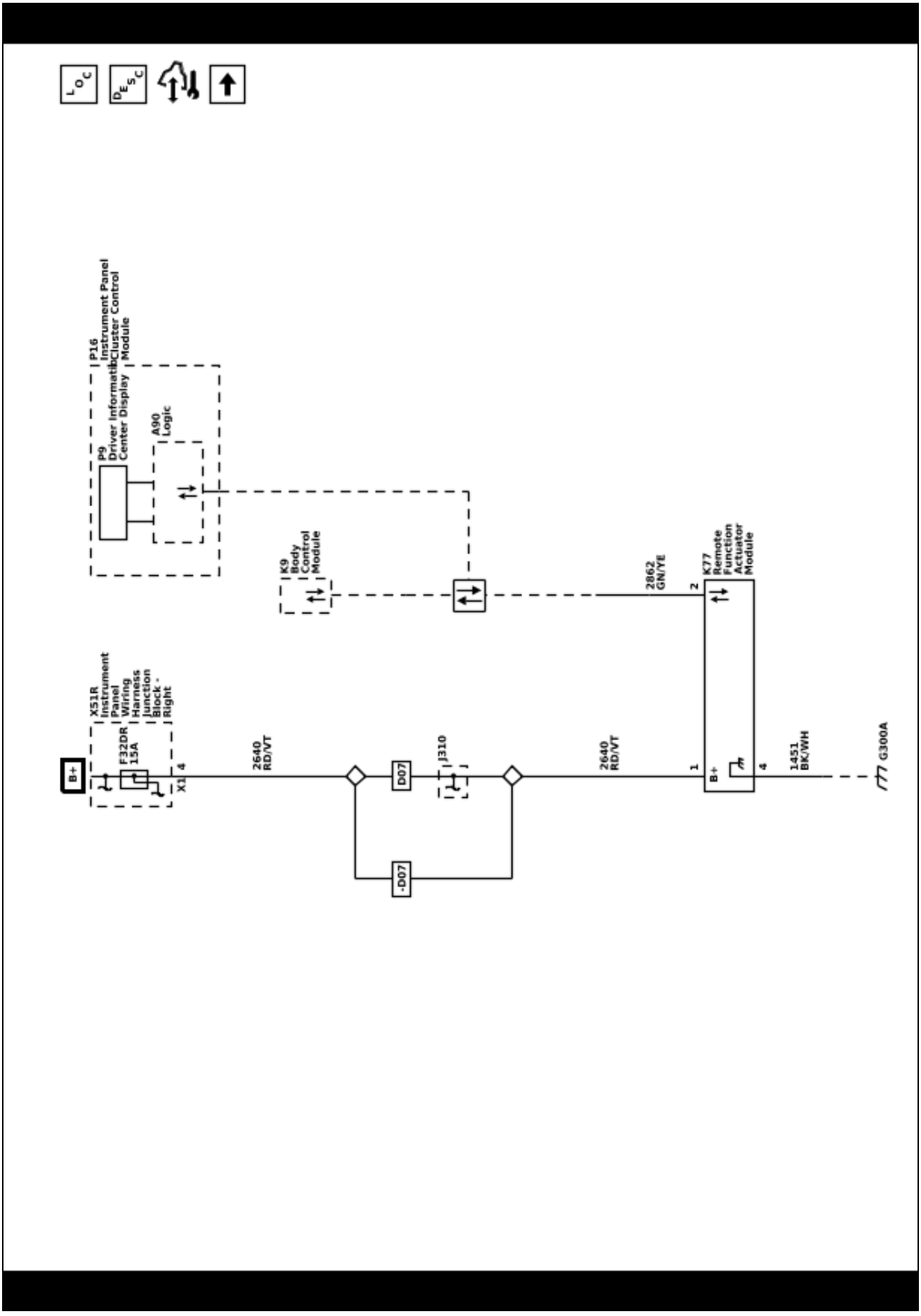
- Disable by Switch – The parking assist system has been disabled through the parking assist switch.
- Disabled by Customization Menu – The parking assist system has been disabled through the vehicle personalization menu.

- Vehicle Speed Too High – The vehicle is travelling too fast in reverse at speeds of greater than 8 km/h (5 mph).
- Vehicle Speed Invalid – The vehicle is unable to determine the vehicle speed.
- Steering Angle Signal Invalid – The vehicle is unable to determine the steering angle.
- Front Attached Object Detected – An object has been determined to be attached to the front of the vehicle. Common items such as a brush guards, light bars, and license plates may cause this concern. Additionally, damage to the front of the vehicle or a misaligned sensor may cause this concern. If the vehicle is damaged in a manner that causes the sensor to detect the bumper itself, the parking assist control module will interpret this as an attached object and disable the system. Carefully inspect the bumper, bumper mounting surface, and sensor retainers before continuing with normal diagnosis. After the detected cause has been addressed the vehicle must be driven at speed greater than 40 km/h (25 MPH).
- Rear Attached Object Detected – An object has been determined to be attached to the rear of the vehicle. Common items such as a hitch receiver, trailer, or a bicycle rack may cause this concern. Additionally, damage to the rear of the vehicle or a misaligned sensor may cause this concern. If the vehicle is damaged in a manner that causes the sensor to detect the bumper itself, the parking assist control module will interpret this as an attached object and disable the system. Carefully inspect the bumper, bumper mounting surface, and sensor retainers before continuing with normal diagnosis. After the detected cause has been addressed the vehicle must be driven at speed greater than 40 km/h (25 MPH).
- Front And Rear Attached Object Detected – An object has been determined to be attached to the front and rear of vehicle.
- Parking Assist Alarm Sensor Blocked – One of the following conditions may be present:
  - One or more of the sensors may be blocked by snow, mud, ice, or other debris. This might happen after going through a car wash in cold weather.
  - Silicone insulator surrounding sensor maybe missing, cut, or twisted.
  - Improperly installed sensor, sensor maybe be crooked due to a tight wire harness.
  - One or more of the sensors may be scratched or the paint maybe chipped.
  - Excessive paint thickness on a sensor may cause an excessive sensor ring time. When replacing or refinishing a sensor, do not apply an excessive amount of paint or clear coat.
- Haptic Seat Malfunction – A fault exists with the safety alert seat. Check for DTCs.
- Chime Malfunction – A fault exists with the vehicle chime. Check for DTCs.
- Parking Assist Switch Malfunction – A fault exists with the parking assist switch. Check for DTCs.
- Invalid Gear – The vehicle has determine a plausibility fault exists with the transmission range.
- Incorrect Power Mode – The vehicle is in an incorrect power mode for parking assist operation.

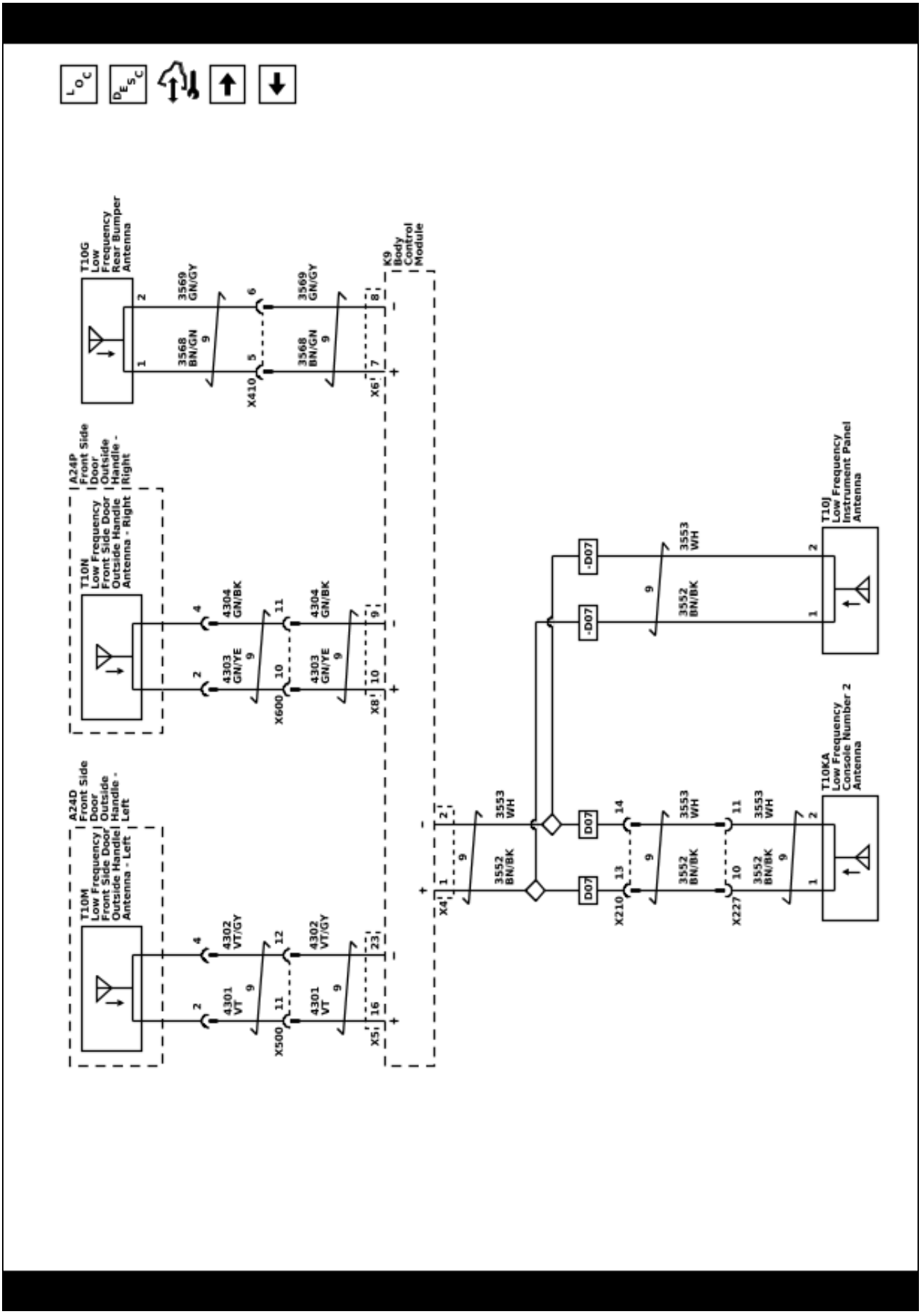
# Remote Functions

## Schematic and Routing Diagrams

## Remote Function Schematics (Keyless Entry - Active)

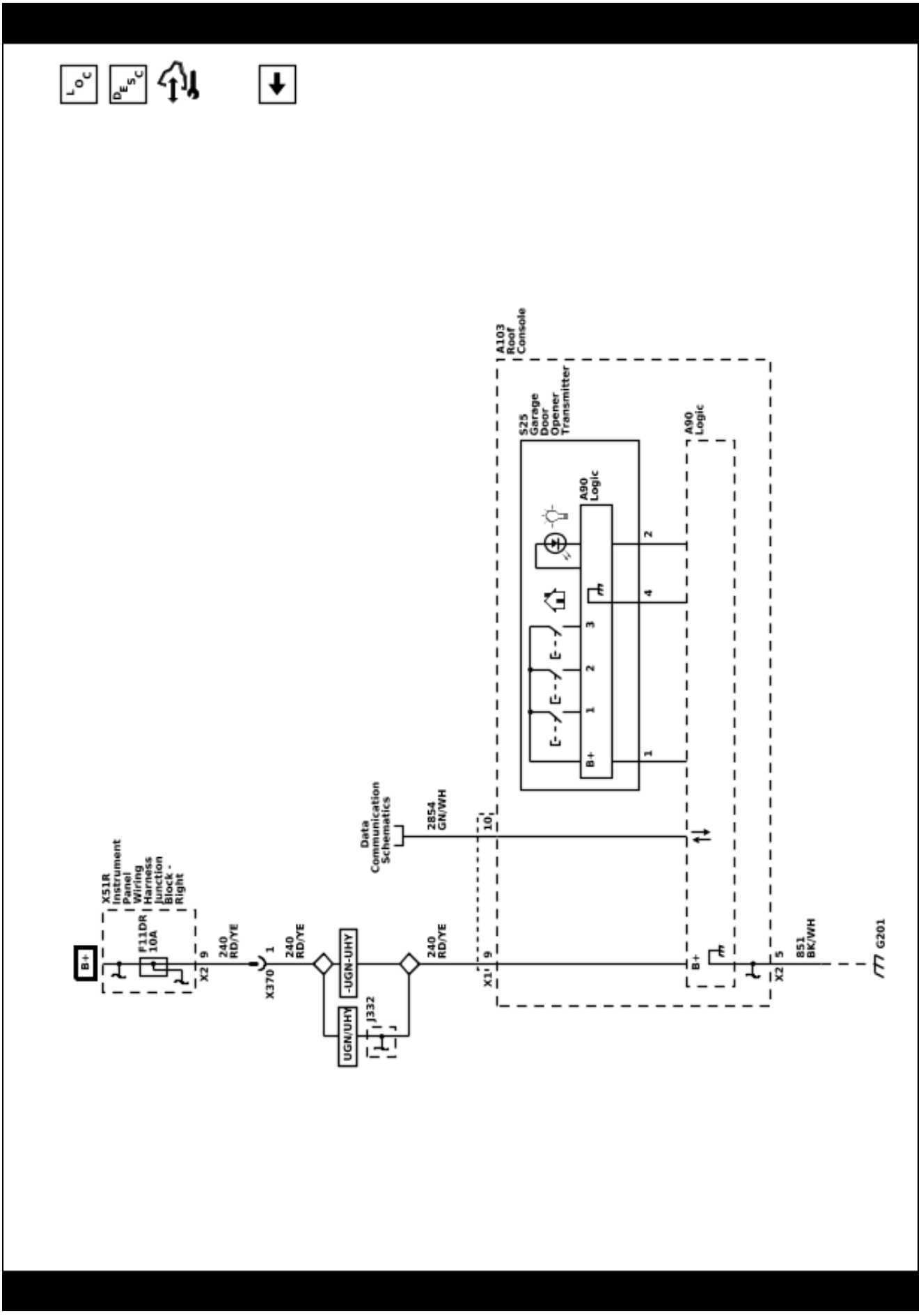


## Remote Function Schematics (Keyless Entry - Passive and Keyless Start)




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## Remote Function Schematics (Garage Door Opener (UG1))



# Description and Operation

## Garage Door Opener Description and Operation

The garage door opener is fixed and rolling code capable. Rolling code is a system that allows the code that the customers receiver receives from the garage door opener to change every time the garage door opener is used within operating range of the receiver. Rolling code programming requires the customer to push a learn/program button on the garage door opener receiver at their home. This button is usually located on the receiver unit under a cover (light cover) on one end of the unit. The customer must follow the garage door opener manufacturers instructions to program/learn the receiver to accept the Universal Home Remote System as an authorized opener for their unit . When the receiver and the garage door opener are initially programmed together, a code is established and a new code is created for every new transmission. The software in the receiver recognizes the garage door opener and accepts the new code.

The garage door opener is compatible with most, but not all types and brands of transmitters.

The garage door opener is a transmitter operating between 288–434 MHz. The power and range of the transmitter is limited to comply with laws governing the generation of radio frequency interference. The transmitter is programmed by the user to accept the signal generated by the user's transmitters.

The garage door opener has 3 buttons that may be programmed for individual transmitter/receiver combinations to control up to 3 garage door openers, security gates, lighting systems, etc. Each button represents a transmitter code section of the transmitter, which operates separately from any other button, and may be considered a separate transmitter. Operation consists of simply pressing a button to activate the corresponding transmitter.

The garage door opener does not need any programming after it is replaced. However, for the opener function it must be programmed to the customer’s garage door or other devices such as a gate. The programming can only be performed at the device being programmed, it cannot be programmed at a service facility. Instructions for programming are listed in the Garage Door Opener Malfunction document in a Diagnostic Aid.

**Note:** Do not use the garage door opener (GDO) with any garage door opener that does not have the stop and reverse safety feature. This includes any garage door opener model manufactured before April 1, 1982.

## Keyless Entry System Description and Operation

### Keyless Entry System Description and Operation – Active

The keyless entry system is a vehicle entry device. The keyless entry system is used in conjunction with the door locks to unlock the vehicle. Keyless entry will lock/unlock a door or open the rear compartment lid when a corresponding button on the keyless entry transmitter is pressed. This is accomplished by the transmitter sending a radio frequency to the remote control door lock receiver that has a direct link to the body control module (BCM). The BCM interprets the signal and activates the requested function or requests the appropriate ECU to activate the function via a serial data message. A low transmitter battery or radio frequency interference from aftermarket devices, such as 2-way radios, power inverters, computers, etc., may cause a system malfunction. High radio frequency traffic areas, such as gas stations that use pay-at-the-pump radio frequency transponders, may also cause interference that could lead to a malfunction. Keyless entry allows you to operate the following features:

- Door lock/unlock
- Rear compartment lid release
- Illuminated entry lamps
- Panic alarm/vehicle locator
- Remote vehicle start
- Passive keyless entry able/disable
- Automatic window express down, if equipped
- Automatic window express up, if equipped
- Automatic power mirror folding/unfolding, if equipped

### Keyless Entry System Description and Operation – Passive

Passive keyless entry allows entry to a locked vehicle without pressing any buttons on the keyless entry transmitter. The passive entry system uses low frequency antennas in several different areas on the vehicle to determine the location of the transmitter. When passively opening a locked door or the rear compartment, you must have a programmed transmitter with you in your pocket, purse, or briefcase within a one meter range.

When an exterior door handle button is pressed or the rear compartment touch pad is pressed, the body control module activates the low frequency antenna which sends out a challenge to the keyless entry transmitter. Because of the low frequency, communication range is limited. The antenna will emit the challenge in a one meter range. The transmitter must be within this range to receive the challenge. The transmitter receives this challenge and emits it's response as an RF message, which is received by the remote control door lock receiver. If the response is correct, entry into the vehicle will be allowed.

As a customer convenience feature, the keyless entry system will notify the driver if the transmitter has been left in the vehicle after exiting by chirping the vehicle horn three times and displaying a message on the DIC. This may be turned off using vehicle personalization. Also, if the transmitter is left in the vehicle after the central door lock switch has been used to lock the vehicle, the driver door will remain unlocked after exiting the vehicle. This is intended to prevent locking the transmitter in the vehicle and being unable to access it.

**Keyless Entry System Description and Operation – Keyless Start**

The keyless start portion of the keyless entry system allows vehicle starting, having only the transmitter as your key. The keyless start system uses low frequency antennas in three different locations on the vehicle to determine the location of the transmitter. Multiple antenna are used to ensure complete coverage of the vehicle interior and rear compartment. When using the keyless start system, a programmed transmitter must be in the vehicle's interior, in the driver's pocket, purse, or briefcase.

When the ignition mode switch is pressed, the low frequency antennas emit a challenge to the keyless entry transmitter. The transmitter receives this challenge and emits it's response as an RF message, which is received by the remote control door lock receiver. If the response is correct, vehicle starting will be allowed. If RF communication is interrupted, a “No Remote Detected” message will be displayed on the DIC. In these cases, the transmitter can be placed in the transmitter pocket located in the center console. The immobilizer antenna coil is located directly beneath the transmitter pocket. Placing the transmitter in the pocket will create a low powered coupling between the transmitter and immobilizer antenna, allowing communications to occur and enabling vehicle starting. If the key has been idle the DIC may display “Key In Sleep Mode, Move Key, Then Start”. In this case move the vehicle key to start the vehicle.

The keyless entry system has the following components:

- Keyless entry integrated key/transmitter
- Driver and passenger side antennas
- Driver and passenger door handle switches (part of the door handle assembly)
- Rear fascia antenna
- Immobilizer antenna coil (front console antenna function)
- Rear console antenna
- Trunk antenna (rear compartment)
- Body control module (BCM)
- Remote control door lock receiver

## Keyless Entry Transmitters

By operating any of the exterior door handle buttons or the start/stop switch, a nearby transmitter is challenged by a keyless entry antenna. The transmitter will send an RF response to the remote control door lock receiver, which communicates with the BCM. The BCM will interpret this communication and either allow or deny vehicle entry or starting.

## Side Antennas

The keyless entry side antennas are used to transmit low frequency communications to the keyless entry transmitters.

The keyless entry side antennas are located in the driver and passenger body sides. The antennas are controlled by the body control module. When the exterior door handle button is pressed, the respective antenna will send out a challenge to the keyless entry transmitter, which begins the passive entry communications.

## Rear Fascia Antenna

The rear fascia antenna is used to transmit low frequency communication to the keyless entry transmitters for entry to rear compartment.

The rear fascia antenna is located behind the rear fascia. The antenna is controlled by the body control module. When the rear compartment touch pad is pressed, the antenna sends out a challenge to the keyless entry transmitter, which begins the passive entry communications.

## Immobilizer Coil Antenna

This antenna is located in the front of the center console.

The Immobilizer antenna coil is used for vehicle starting functions and for learning vehicle keys. When the ignition mode switch is pressed, the antenna is energized or "pinged". This emits a low frequency challenge signal that is received by the keyless entry transmitter. The transmitter will then reply to this challenge with a response and, if correct, vehicle starting will occur. If the transmitter battery is dead, weak, or the RF signal is being interrupted, the transmitter may be placed in the pocket to create a low powered coupling between the transmitter and immobilizer coil antenna, allowing communications to occur and enabling vehicle starting.

## Rear Console Antenna

This antenna is located in the rear of the center console.

The rear console antenna is used for vehicle starting functions. When the ignition mode switch is pressed, the antenna is energized or "pinged". This emits a low frequency challenge signal that is received by the keyless entry transmitter. The transmitter will then reply to this challenge with a response and, if correct, vehicle starting will occur.

## Rear Compartment Antenna

This antenna is located near the center of the rear compartment area.

The rear compartment antenna is used for vehicle starting functions. When the ignition mode switch is pressed, the antenna is energized or "pinged". This emits a low frequency challenge signal that is received by the keyless entry transmitter. The transmitter will then reply to this challenge with a response and, if correct, vehicle starting will occur.

## OnStar® Remote Link

A vehicle operator may have the ability to perform some of the keyless entry functions using applications on personal devices such as smart phones. Refer to OnStar Description and Operation.

## Body Control Module (BCM)

The BCM is a multi-function module that performs the following functions:

- Receive and authenticate active transmitter and keyless start/entry signals from the remote control door lock receiver
- Determines the function requested by the transmitter signal
- Performs the function requested by the transmitter signal
- Activating vehicle antennas for passive keyless entry functions
- Activating vehicle antennas for keyless start functions
- Backup control for the ECM accessory wakeup and the run/crank relay
- If equipped, controls the electronic steering column lock
- Receiver of the exterior door handle switch inputs and door open switch (not the door ajar switch)
- Ignition mode switch monitoring

## Unlock Driver Door Only – Active

Momentarily press the transmitter UNLOCK button in order to perform the following functions:

- Unlock only the driver door or all doors, if enabled through personalization
- Illuminate the interior lamps for a determined length of time, or until the ignition is turned ON
- Flash the exterior lights, if enabled through personalization
- Disarm the Content Theft Deterrent (CTD) system
- Deactivate the CTD system when in the alarm mode

## Unlock All Doors – Second Operation – Active

Momentarily press the transmitter UNLOCK button a second time, within 5 seconds of the first press, to perform the following function:

Unlock the remaining doors

## Unlock Driver Door Only – Passive

If enabled through personalization, approach the driver door with a valid keyless entry transmitter and press the door handle button to perform the following functions:

- Unlock and open only the driver door
- Disarm the CTD system, if equipped
- Deactivate the CTD system when in the alarm mode

## Unlock All Doors – Passive

Approach any non driver door (front or rear) or, if enabled through personalization, the driver door with a valid keyless entry transmitter and press the door handle button to perform the following functions:

- Unlock all vehicle doors
- Disarm the CTD system, if equipped
- Deactivate the CTD system when in the alarm mode

## Lock All Doors – Active

Press the transmitter LOCK button to perform the following functions:

- Lock all vehicle doors
- Immediately turn off the interior lamps
- Flash the exterior lights, if enabled through personalization
- Chirp the horn, if enabled through personalization
- Arm the CTD system

## Lock All Doors – Passive

Exit the vehicle (with ignition off) with the keyless entry transmitter to automatically perform the following functions, if equipped.

- Lock all vehicle doors after a delay
- Flash the exterior lights, if enabled through personalization
- Chirp horn, if enabled through personalization
- Arm the CTD system

When all doors are closed, they can also be locked from the exterior by operating a front door handle button or touch pad while having a valid transmitter within range. Vehicles equipped with a rear door button can also lock all doors from the rear doors.

## Rear Compartment Lid Release – Active

If the vehicle transaxle is in PARK or NEUTRAL, a double press of the transmitter rear compartment release button will open the rear compartment lid.

## Rear Compartment Lid Release – Passive

Approach the rear of a locked vehicle with a valid keyless entry transmitter. Press the rear compartment lid release touch pad. The rear compartment lid will open.

## Vehicle Locator/Panic Alarm/Active

A single press of the panic button performs the following functions. Some functions may be dependent on personalization settings:

- Pulses the horn three times
- Flashes the exterior lamps three times

A press and hold of the panic button performs the following functions:

- Pulses the horn and flashes the parking lamps for 30 second or until the following conditions occur:
  - The panic button is pressed
  - The ignition switch is turned to the RUN position with a valid key

## Remote Vehicle Start/Active

The remote vehicle start function allows engine starting while not in the vehicle. It also allows the vehicle HVAC system and other vehicle systems to enable, providing a comfortable vehicle upon entry. The remote vehicle start sequence begins by pressing and releasing the remote vehicle start button on the keyless entry transmitter twice. The turn signal lamps will illuminate to indicate the vehicle has received the remote start request. Each time a remote vehicle start is performed,

the vehicle doors are locked, however they may then be unlocked/locked with the transmitter at any time. Once activated, the engine is allowed to run for 15 minutes. The remote start operation can be repeated as many times as desired up to a total run time of 30 minutes. The remote vehicle start event may be cancelled at any time by pressing only the remote vehicle start button on the transmitter or by entering the vehicle and turning ON the hazard lamps.

## Hood Ajar Switch/Active

The hood switch provides status of the hood to the BCM for remote vehicle start purposes. The switch is integrated into the hood latch assembly. The hood ajar switch provides 2 separate inputs to the BCM. These separate inputs allow the BCM to actively monitor for a hood ajar switch fault.

## Remote Vehicle Start Circuit Description/Active

The BCM receives a signal from the keyless entry transmitter indicating a remote vehicle start request. The BCM and ECM use the following inputs to verify the system is ready to enable a remote vehicle start event:

- Vehicle is not in valet mode
- Vehicle is in park
- Keyless entry transmitter is not in the vehicle
- The hood is closed
- The hazard switch is OFF
- Vehicle power mode is OFF
- The malfunction indicator lamp (MIL) is not commanded ON by the ECM
- Remote start timer does not equal 0 (the 30 minute maximum time has not been used)

When the BCM determines all conditions meet those required for a remote vehicle start event, a message is sent via serial data to the ECM. While the ECM is in remote vehicle start mode it will cut fuel to the engine if any of the following monitored conditions occur:

- Vehicle speed is greater than 0
- Transmission is not in P
- Excessive engine coolant temperature
- Low oil pressure
- Engine crank time is greater than 30 seconds
- Excessive engine speed
- Accelerator pedal position too high
- Immobilizer system indicates a theft attempt

If any conditions prevent a remote start or cause a remote start operation to be cancelled there is a record of the cause in the scan tool.

## Keyless Entry Personalization

Vehicle lock/unlock functions and remote vehicle start settings may be personalized for the vehicle. This includes the capability of turning the passive entry system completely off. For functional descriptions and programming instructions, refer to the vehicle owners manual.

# Section 9

# Transmission

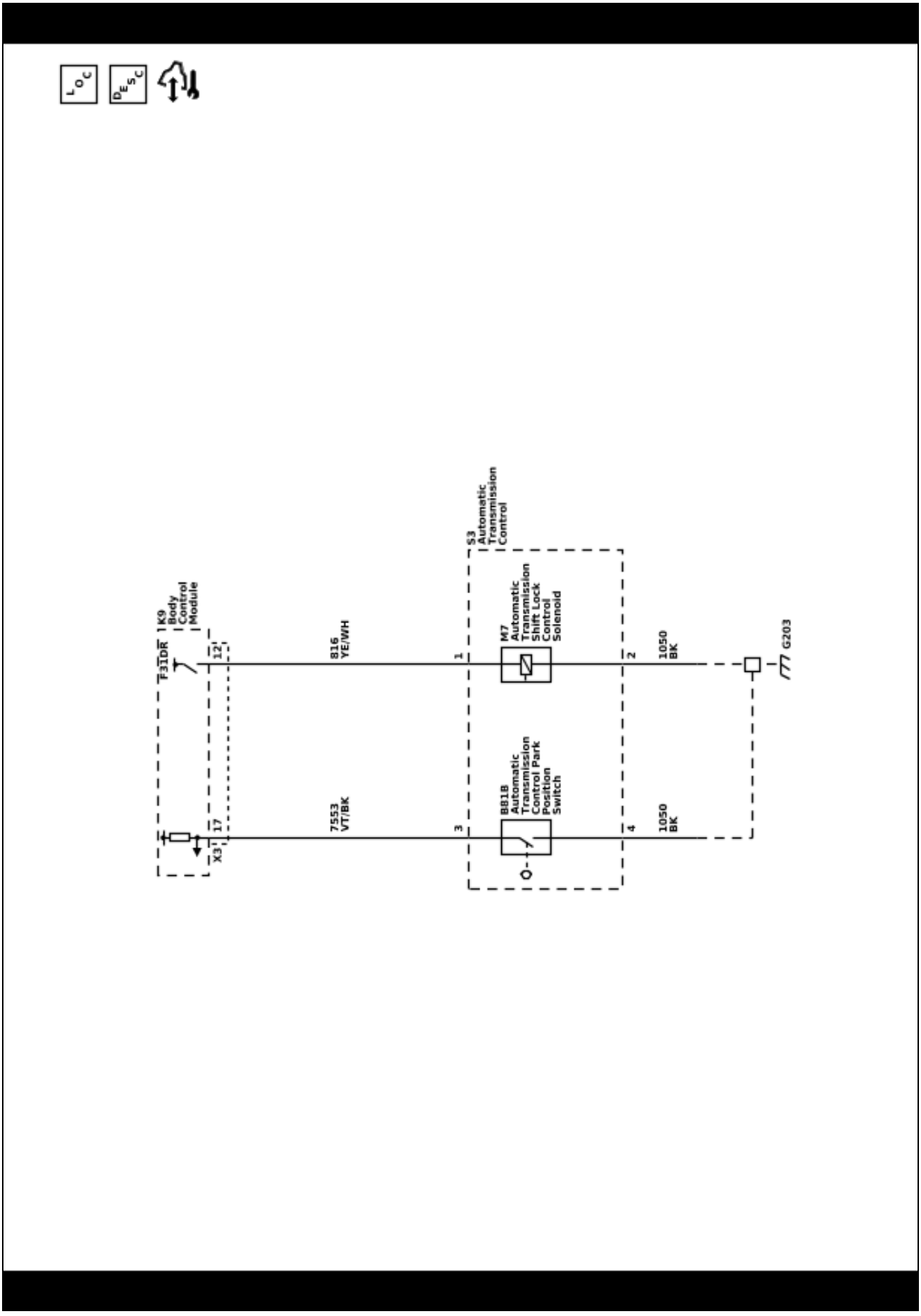
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# Shift Lock Control

## Schematic and Routing Diagrams

## Shift Lock Control Schematics (Shift Lock Control)



# Description and Operation

## Automatic Transmission Shift Lock Control Description and Operation

The Automatic Transmission Shift Lock Control System is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the following components:

- The Automatic Transmission Shift Lock Solenoid (serviced as the Automatic Transmission Shift Lock Actuator)
- The Body Control Module (BCM)
- The Engine Control Module (ECM)

The BCM controls the voltage to the shift lock control solenoid though the shift lock control solenoid controlled voltage circuit. The following conditions must be met before the BCM will supply voltage to the shift lock control solenoid:

- The ignition is in the ON position.
- The ECM sends an input via GMLAN serial data to the BCM when the Transmission Control Module (TCM) indicates the transmission is in the PARK position.
- The BCM receives a brake applied input from the stop lamp switch.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, releasing the mechanical lock on the shift lever as the solenoid energizes. The energized solenoid allows the driver to move the shift lever out of the PARK position. When the brake pedal is not applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. When the transmission is in the PARK position, the de-energized shift lock control solenoid will prevent shifting as the lever is mechanically locked in the PARK position.

During remote start operation the BCM will de-energize the automatic transmission shift lock control circuit, locking the shift lever in the PARK position

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