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Section 1

General Information

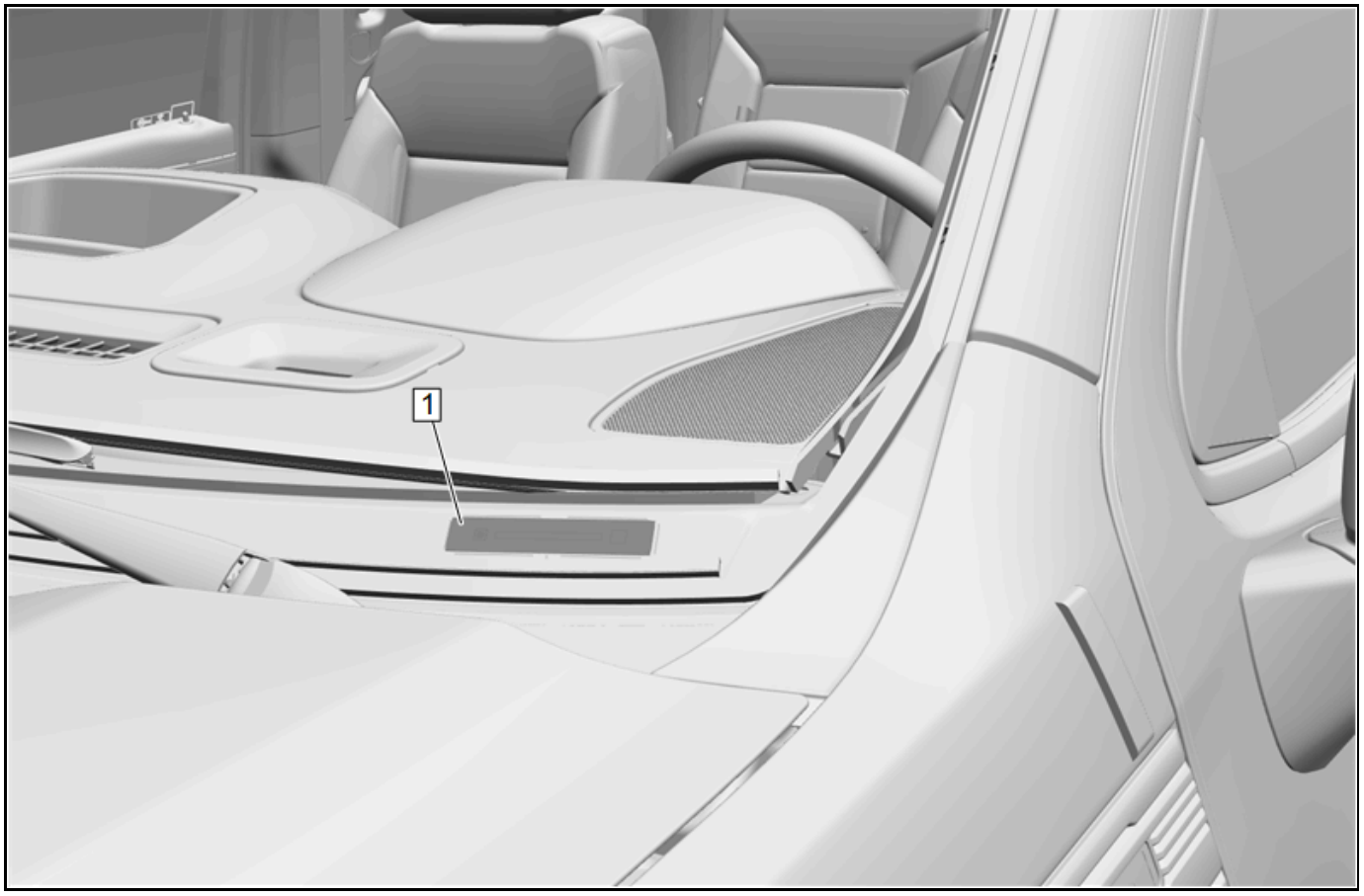
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General Information

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
		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	8/A	GMC Sierra 1500, Fleet/Base 2WD
		8/B	GMC Sierra 1500, SLE 2WD
		8/C	GMC Sierra 1500, Elevation 2WD
		8/D	GMC Sierra 1500, SLT 2WD
		8/F	GMC Sierra 1500, Denali 2WD
		8/9	GMC Sierra 2WD, (Non-US, Non-Canada)
		9/A	GMC Sierra 1500, Fleet/Base 4WD
		9/B	GMC Sierra 1500, SLE 4WD
		9/C	GMC Sierra 1500, Elevation 4WD
		9/D	GMC Sierra 1500, SLT 4WD
		9/E	GMC Sierra 1500, AT4 4WD
		9/F	GMC Sierra 1500, Denali 4WD
		9/9	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
		F	RPO L82, Engine Gas, 8 Cylinder, 5.3L, DI, AFM, Aluminum, GEN 5, VAR 1
		H	RPO LV3. Engine Gas, 6 Cylinder, 4.3L, GEN 5, SIDI, V6, VVT, OHV, E85 MAX, Aluminum
		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
		T	RPO LM2, Engine Diesel, 6 Cylinder, 3.0L, CRI, V6, DOHC, Turbo, VGT, Aluminum
9	Check Digit	—	Check Digit
10	Model Year	K	2019
11	Plant Location	Z	Fort Wayne, Indiana, USA
		G	Silao, Mexico
12–17	Plant Sequence Number	—	Plant Sequence Number

2.7L (L3B) Engine ID and VIN Derivative Location

Engine Identification

3.0L (LM2) Diesel Engine ID and VIN Derivative Location

Engine Identification

4.3L (LV3) Engine ID and VIN Derivative Location

Engine Identification

5.3L (L82 L84) or 6.2L (L87) Engine ID and VIN Derivative Location

Engine Identification

10L80 (MQB) Transmission ID and VIN Derivative Location

Transmission Identification Information

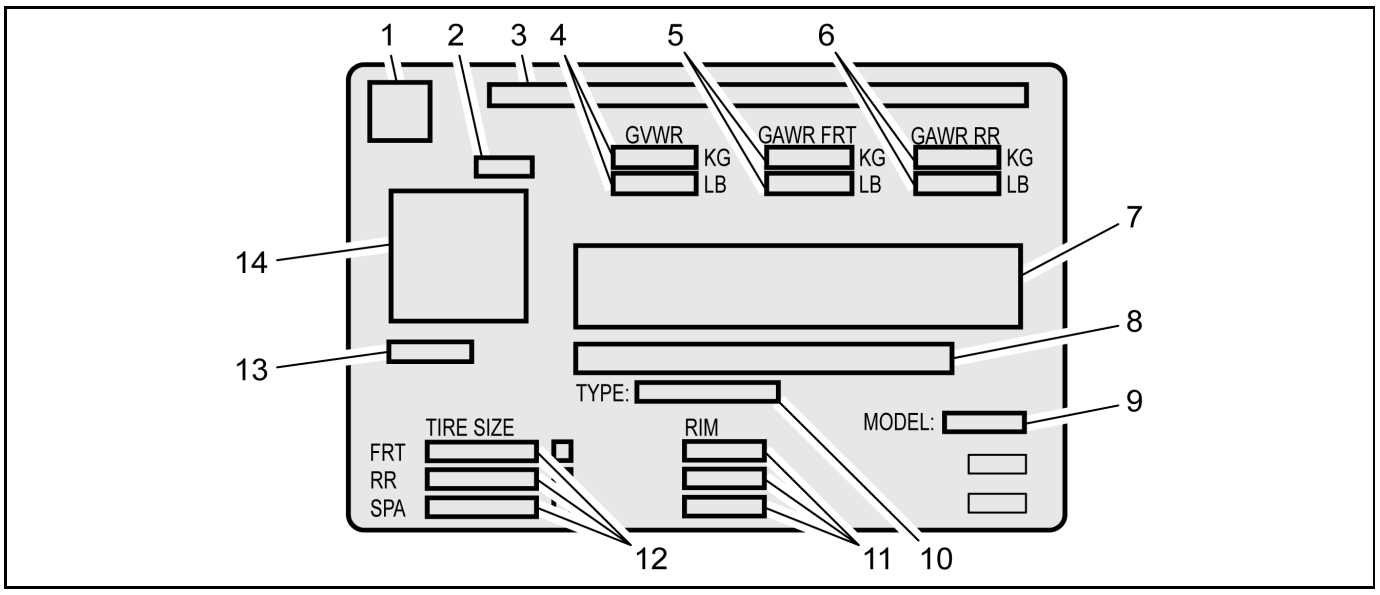
6L80 (MYC) Transmission ID and VIN Derivative Location

Transmission Identification Information

8L90 (MQE) Transmission ID and VIN Derivative Location

Transmission Identification Information

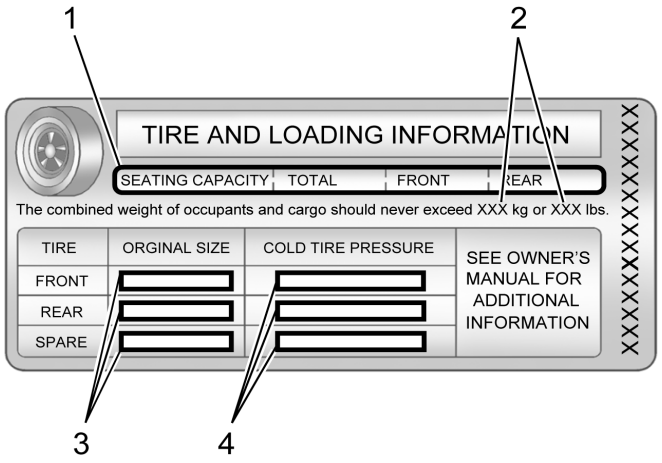
Vehicle Certification, Tire Placard, and Anti-Theft Label



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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) 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 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
00A	WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 2 (SEO)
01U	PRIMARY COLOR-EXTERIOR, SPECIAL (02)
1SA	PACKAGE-OPTION 01
3SA	PACKAGE-SLE OPTION 1
3SB	PACKAGE-SLE OPTION 2
4AA	INTERIOR TRIM-JET BLACK
4F2	INTERIOR TRIM-JET BLACK / KALAHARI
4JJ	INTERIOR TRIM-GIDEON/VY DK ATMOSPHERE
4JR	INTERIOR TRIM-DARK ASH GRAY/VY DK ATMOSPHERE
4SA	PACKAGE-SLT OPTION 1
4SB	PACKAGE-SLT OPTION 2
5A7	WHEEL SPARE-NONE
5AZ	ACCESSORY-SAFETY KIT - UNIVERSAL
5H1	KEY-SINGLE KEY SYSTEM, 2 SPARE KEYS
5JL	ACCESSORY-BRAKE UPGRADE PKG 1 - COMPLETE
5L5	THEFT DETERENT SYS-FLEET IMMOBILIZER MODIFICATIONS (SEO)
5SA	PACKAGE-DENALI OPTION 1
5VI	ACCESSORY-TIE DOWN RINGS - CARGO AREA
5W7	ACCESSORY-AIR FILTER - PERFORMANCE
5Z4	TIRE & WHEEL-SPARE WHEEL & CARRIER - NONE (SEO)
63B	ACCESSORY-TONNEAU - RR COMPT - TRI FOLDING
63G	ACCESSORY-TAILGATE ASSIST LIGHTING
6K5	SALES PACKAGE-CONVENIENCE II
6M9	TIRE SPARE-265/70R17 SL 115S BW AT (SE0)
8F2	ORNAMENTATION-NONE
9B9	GOVERNOR-ELECTRONIC SPEED SENSOR - 70 MPH
9C2	GOVERNOR-ELECTRONIC SPEED SENSOR - 65 MPH
9D7	GOVERNOR-ELECTRONIC SPEED SENSOR - 75 MPH
9J4	BUMPER RR-(NONE)
9L3	TIRE SPARE-NONE
9L7	EQUIPMENT-ACSRY WRG JUNC BLK
9M4	DECAL-ENDGATE - NONE (SE0)
9R1	DECAL-PICKUP BOX SIDE - NONE (SEO)
9V5	COLOR-WOODLAND GREEN (SEO)
9W3	COLOR-WHEATLAND YELLOW, LEAD FREE (SEO)
9W4	COLOR-TANGIER ORANGE, LEAD FREE (SEO)
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
A52	SEAT-FRT BENCH
A60	LOCK CONTROL RR CMPT-LID, TAILGATE, KEY ACTIVATED
A68	SEAT RR-SPLIT, FOLDING
A6Q	WINDOW REG DRVR DR-MANUAL OPERATED
A6R	WINDOW REG PASS DR-MANUAL OPERATED
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
AAC	PARTS PKG-SHIPPED LOOSE
ACO	IDENTIFICATION-ACCESSORY CATALOG OFFERING
AE7	SEAT-FRT SPLIT, DRIVER, PASS
AED	WINDOW REG PASS DR-POWER OPERATED, EXPRESS DOWN
AEF	WINDOW REG PASS DR-POWER OPERATED, EXPRESS UP/DOWN
AEQ	WINDOW REG REAR DR-POWER OPERATED, EXPRESS DOWN

RPO	Description
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
ATH	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, ALL DOORS
AU3	LOCK CONTROL-SIDE DR, ELEC
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
BAG	PARTS PKG-EXPORT
BAQ	SALES PACKAGE-STYLE VAR 1
BG9	COVERING FLOOR-RUBBER
BGP	SALES PACKAGE-SAFETY PACKAGE VAR. 2
BRS	STEPS, RUNNINGBOARD-SIDE, RETRACTABLE, POWER, BRIGHT
BTM	SWITCH-ENGINE START, KEYLESS
BTV	REMOTE START-ENGINE
BVT	STEPS, RUNNINGBOARD-SIDE, CHROME
BWN	STEPS-CORNER ASSIST, BUMPER
C32	HEATER AIR SYSTEM-HEATING/ DEFROSTER SYSTEM, REINFORCED, ELECTRIC
C49	DEFOGGER-RR WINDOW, ELECTRIC
C4P	HVAC SYSTEM-AIR CONDITIONER FRT, SEMIAUTOMATIC, ELECTRONIC CONTROLS
C59	VENT-AIR, CONSOLE, RR
C67	HVAC SYSTEM-AIR CONDITIONER FRT, ELECTRONIC CONTROLS

RPO	Description
C9I	SWITCH-ROLL OVER SENSING
CF5	ROOF-SUN, GLASS, SLIDING, ELEC
CGN	LINER-PUBX, SPRAY ON
CJ2	HVAC SYSTEM-AIR CONDITIONER FRT, AUTO TEMP CONT, AUX TEMP CONT
CK2	COUNTRY-YEMEN
CTT	HITCH ASSIST-GUIDELINES
CU7	COUNTRY-KUWAIT
CU8	COUNTRY-SAUDI ARABIA
CV3	COUNTRY-MEXICO
CV8	COUNTRY-IRAQ
CWM	SALES PACKAGE-TECHNOLOGY
CX9	COUNTRY-LEBANON
CY2	COUNTRY-JORDAN
D07	CONSOLE-FRT COMPT, FLOOR, CUSTOM
D31	MIRROR I/S R/V-TILT
D3S	COUNTRY-QATAR
D4C	COUNTRY-BAHRAIN
D5P	COUNTRY-UNITED ARABIC EMIRATES
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
DRZ	MIRROR I/S R/V-LT SENSITIVE, FULL VIDEO DISPLAY
DT4	ASHTRAY-CIGARETTE LIGHTER
E20	HANDLE O/S DOOR-CHROME
E35	PICKUP BOX INNER-STEEL
E63	BODY EQUIPMENT-FLEETSIDE PICK-UP BOX
E6H	COUNTRY-OMAN
EF7	COUNTRY-UNITED STATES OF AMERICA (USA)
ENL	ENG CONTROL DISABLE-STOP/START, NON-LATCHING
EXP	EXPORT-

RPO	Description
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)
G2X	PRIMARY COLOR-EXTERIOR, HAVANA MET-1 (439C)
G7C	PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X)
G80	AXLE POSITRACTION-LIMITED SLIP
G9K	PRIMARY COLOR-EXTERIOR, SATIN STEEL GRAY MET-3 (464C)
GA0	PRIMARY COLOR-EXTERIOR, SOME KINDA BLUE MET -1 (619D)
GAN	PRIMARY COLOR-EXTERIOR, SWITCHBLADE SILVER MET (G) 636R
GAZ	PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624
GBA	PRIMARY COLOR-EXTERIOR, BLACK (G) 8555
GFF	TRIM PACKAGE-BASE
GFG	TRIM PACKAGE-AT4
GFI	TRIM PACKAGE-SLE
GFJ	TRIM PACKAGE-ELEVATION
GFU	TRIM PACKAGE-SLT
GFW	TRIM PACKAGE-DENALI
GJI	PRIMARY COLOR-EXTERIOR, DARK SHADOW MET -1 (626D)
GPJ	PRIMARY COLOR-GLORY RED TINT-2 (434B)
GS6	PRIMARY COLOR-EXTERIOR, SCORPION MET -1 (634D)
GU5	AXLE REAR-3.23 RATIO
GU6	AXLE REAR-3.42 RATIO
H0U	INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, JET BLACK
H1T	INTERIOR TRIM CONFIG-CLOTH, LEVEL 1, JET BLACK
H1Y	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK
H2G	INTERIOR TRIM CONFIG-VINYL, LEVEL 1, JET BLACK
H2X	INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, JET BLACK
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

RPO	Description
HVD	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK/KALAHARI
HVE	INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, GIDEON/VY DK ATMOSPHERE
HVH	INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, MED DARK ASH GRAY / VY DK ATMOSPHERE
I19	ENGINEERING YEAR-2019
IOR	RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDLEVEL CONNECTIVITY 3.X
IOS	RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, MID SD NAV CAPABLE
IOT	RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, PREMIUM SD NAV
J61	BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 17"
JBP	BRAKE LINING WEAR SY-LIFE SPAN PROGNOSTIC INDICATOR
JHD	CONTROL-HILL DESCENT, GEAR HOLD
JL1	CONTROL-INTEGRATED TRAILER BRAKE
K05	HEATER ENG-BLOCK
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K47	AIR CLEANER-HIGH CAPACITY
K4C	CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE
KA1	HEATER SEAT FRT-DRVR & PASS
KA6	HEATER SEAT-REAR
KC4	COOLING SYSTEM-ENG OIL
KC5	RECEPTACLE-ELECTRICAL, ACCESSORY
KC9	RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT, PUBX
KCA	RECEPTACLE-ELECTRICAL, ACCESSORY 230 VOLT, PUBX
KI3	STEERING WHEEL HEAT-AUTOMATIC
KI4	RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT
KI5	RECEPTACLE-ELECTRICAL, ACCESSORY 230 VOLT
KL9	ENG CONTROL-STOP/START SYS, CONVENTIONAL AT, CONVENTIONAL MT OR BRAKE RELEASE LATE RESTART
KNP	COOLING SYSTEM-TRANS, HD
KPA	RECEPTACLE-ELECTRICAL, FRT CONSOLE RR
KQV	HEATER-SEAT, VENTED, FRT
KW5	GENERATOR-220 AMP
KW7	GENERATOR-170 AMP
L3B	ENGINE-GAS, 4 CYL, L4, 2.7L, SIDI, VVT, TURBO, DOHC, ALUM
L82	ENGINE-GAS, 8 CYL, 5.3L, V8, DI, AFM, ALUM, GEN 5, VAR 1

RPO	Description
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
LM2	ENGINE-DIESEL, 6 CYL, 3.0L, CRI, L6, DOHC, TURBO, VGT, ALUM, CSS50V
LV3	ENGINE-GAS, 6 CYL, 4.3L, GEN 5, SIDI, V6, VVT, OHV, E85 MAX, ALUM
MAH	MARKETING AREA-US, PUERTO RICO/USVI
MAM	MARKETING AREA-MIDDLE EAST
MBC	MARKETING AREA-CANADA
MCR	RECEPTACLE-MEMORY CARD
MCX	MARKETING AREA-MEXICO
MCY	PORT, ELEK DEVICE-USB ONLY
MCZ	PORT, MULTI ELEK DEV-USB
MQB	TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, CPA, GEN 2
MQE	TRANSMISSION-AUTO 8 SPD, 8L90, ATSS, CPA, GEN 1
MSL	PLANT CODE-SILAO, MEXICO
MYC	TRANSMISSION-AUTO 6 SPD, HMD, 6L80
N01	LOCK CONTROL-FUEL PLUG
N06	STEERING COLUMN LOCK-ELECTRICAL
N10	EXHAUST SYSTEM-DUAL
N33	STEERING COLUMN-TILT TYPE
N37	STEERING COLUMN-TILT, TELESCOPING
NB5	EXHAUST SYSTEM-SINGLE
NE1	CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION FOR VEHICLES UP TO 14, 000 LBS GVW (USE 2003 MDL YR
NE8	EVAPORATIVE SYSTEM-LEVEL 3 EMISSIONS
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
NUF	EMISSION SYSTEM-CALIFORNIA, ULEV125
NZH	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 8
NZM	WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 10
NZZ	SALES PACKAGE-SKID PLATE, "OFF ROAD" SPORT
PTT	TRAILER TIRE PRESSUR-MANUAL LEARN

RPO	Description
PZ8	IMAGE ADJUSTMENT-HITCH VIEW
Q5U	WHEEL-17 X 8.0, J, ALUMINUM, DESIGN 2
Q7L	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 2
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
QK1	GATE TYPE-PUBX END STANDARD
QK2	GATE TYPE-PUBX END ENHANCED
QT2	GATE FUNCTION-MANUAL
QT3	GATE FUNCTION-MANUAL ASSIST
QT5	GATE FUNCTION-MANUAL ASSIST POWER RELEASE
R13	APPEARANCE PACKAGE-CHROME EXTERIOR
R3O	TIRE ALL-LT275/65R18 C 110/113Q BW OOR, VAR1
R7O	SEAT RR-SPLIT, FOLDING, BASE STORAGE
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 110/113Q BW MT 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
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
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
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

RPO	Description
RWS	ACCESSORY-FLOOR MATS - CARPET
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
S0P	ACCESSORY-INSERT - FLOOR CONSOLE
S0Y	ACCESSORY-LAMPS - CARGO AREA
S1O	ACCESSORY-CONTAINER - LOCKABLE STORAGE - INTERIOR
S1V	ACCESSORY-HEADPHONES - RSE
S3U	ACCESSORY-LAMP KIT - FRONT FOG
S41	ACCESSORY-LINER - WHEEL HOUSE
S47	ACCESSORY-LUG NUTS
S4X	ACCESSORY-MIRROR COVERS/SKULL CAPS - ALTERNATE FINISH - PAINTED
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
SBY	ACCESSORY-SPORT BAR - BED MOUNTED - DESIGN 1
SCZ	ACCESSORY-TAILGATE HANDLE - ALTERNATE FINISH - CHROME
SD5	ACCESSORY-TIRE PRESSURE MONITOR
SDA	ACCESSORY-TOW HOOKS
SDE	ACCESSORY-TRAILER HITCH - REMOVABLE
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
SF0	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 7
SF6	ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - PAINTED
SFE	ACCESSORY-WHEEL LOCKS
SFJ	ACCESSORY-WINDOW SHADES - REFLECTIVE
SFW	CALIBRATION-BACK UP ELECTRICAL ALARM (SEO)
SFZ	ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1

RPO	Description
SG3	ACCESSORY-SPRINGS - SPORT SUSPENSION
SGM	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 9
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
SJ9	ACCESSORY-GRILLE / GRILLE INSERTS - ALTERNATE FINISH 1
SKY	ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 1
SL7	ACCESSORY-PUBX LADDER / UTILITY RACK STANCHIONS
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
SUR	ACCESSORY-TRAILER TIRE PRESSURE MONITOR
T3U	LAMP FRT FOG-FRT FOG
TDM	MODE-TEEN DRIVER SETTINGS
TGK	COLOR COMBINATION-SOLID, SPECIAL PAINT
TQ5	HEADLAMP HIGH BEAM-AUTO CONTROL
TRO	ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED
TT0	ACCESSORY-TRAILERING HOOKUP ASSIST
TUF	ORNAMENTATION-EMBLEM, "TEXAS EDITION"
U12	LAMP-EXTR, OSRV MIRROR, TASK
U19	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER
U1D	INDICATOR-TRAILER INFORMATION
U2J	DIGITAL AUDIO SYSTEM-S-BAND - NONE
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U2L	RECEPTION-HD
U73	ANTENNA-FIXED, RADIO
U95	SPEAKER SYSTEM-2, BASE
UD5	PARK ASSIST-FRONT AND REAR
UD7	PARK ASSIST-REAR
UDC	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (ONE COLOR GRAPHIC)
UDD	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR STANDARD GRAPHIC)
UDU	PROVISIONS-REAR CAMERA PREP

RPO	Description
UE0	COMMUNICATION SYSTEM-VEHICLE - NONE
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UE4	SENSOR INDICATOR-FOLLOWING DISTANCE
UEU	SENSOR INDICATOR-FORWARD COLLISION ALERT
UF2	LAMP-CARGO
UFG	REAR CROSS TRAFFIC-ALERT
UG1	OPENER-GARAGE DOOR, UNIVERSAL
UGA	HOOK-TOW, RED
UHN	WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 3
UHS	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR ENHANCED GRAPHIC)
UHX	LANE ACTIVE SAFETY-KEEP ASSIST
UHY	COLL IMMINENT BRK-LOW SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST
UIJ	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WVGA 800X480P
UIK	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WXGA 1280X768P
UIR	INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 7", WVGA 800X480P
UJM	TIRE PRESS INDICATOR-MANUAL LEARN
UK3	CONTROL-STEERING WHEEL, ACCESSORY
UKC	SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED
UKJ	PED DETECTION FRT-BASIC, PEDESTRIANS
UL8	FREQUENCIES-SAUDI ARABIAN
ULK	ACCESSORY-TOW HOOKS - RED
UMN	SPEEDOMETER-INST, MILES & KILO, MILES ODOMETER
UQA	SPEAKER SYSTEM-PREMIUM AUDIO, BRANDED AMPLIFIER
UQF	SPEAKER SYSTEM-STANDARD AUDIO
URC	SWITCH-FLEXRIDE MODE SYSTEM
USS	RECEPTACLE-USB CHARGE PORT
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
UVC	VISION-REAR VIEW, MONO, ANALOG
UVI	VISION-270 & REAR TRAILER VIEW, MONO, HD DIGITAL(DO NOT USE AFTER MY2022)
V46	BUMPER FRT-CHROME
V76	HOOK-TOW

RPO	Description
V87	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - GULF STATES ORGANIZATION
V8C	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT
V8D	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS
V8E	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - CANADA CMVSS
VAV	ACCESSORY-FLOOR MATS - ALL WEATHER
VB5	BUMPER FRT-COLOR
VBJ	ACCESSORY-UNDERSEAT STORAGE
VBN	ACCESSORY-PUBX CARPET
VBR	ACCESSORY-PUBX RUBBER MAT
VBX	LANGUAGE LABEL-ARABIC
VGC	PROTECTOR-FILM, PAINT ETCH PREVENTIVE
VH6	BUMPER FRT-BLACK
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
VKY	ACCESSORY-DOOR HANDLES - ALTERNATE FINISH - CHROME
VLQ	HOOK-TOW, CHROME
VOZ	ACCESSORY-TONNEAU - RR COMPT - HARD FOLDING - ALT DESIGN
VPB	ACCESSORY-TONNEAU - RR COMPT - VINYL W/ INTEGRAL CROSSBOW SUPPORTS
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY
VQK	ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED
VQM	ACCESSORY-ASSIST STEPS - CHROME
VQO	ACCESSORY-ASSIST STEPS - BLACK
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
VTI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR
VUK	ACCESSORY-TAILGATE LINER - PUBX
VW9	ACCESSORY-CENTER CAP - WHEEL - DESIGN 3

RPO	Description
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
VYU	PROVISIONS-SNOW PLOW PREP
VZX	ACCESSORY-PUBX BEDLINER
W09	ACCESSORY-TAILGATE GAP COVER
W2D	ACCESSORY-CARGO NET
WBC	ACCESSORY-EXHAUST UPGRADE
WLD	WINDOW CONTROL-REMOTE EXPRESS DOWN, ALL WINDOWS
WMI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR
WMK	VIN MODEL YEAR-2019
WPC	SALES PACKAGE-COMFORT AND CONVENIENCE
WPF	SALES PACKAGE-PREFERRED
X31	APPEARANCE PACKAGE-GMC "X31 OFF ROAD"
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

RPO	Description
XD5	ACCESSORY TIRE-TIRE ALL-275/50R22 SL 111T BW AL2
YF5	CERTIFICATION-EMISSION, CALIFORNIA
YM8	IDENTIFICATION-LIMITED PERSONALIZATION OPTION (LPO)
Z45	CHASSIS PACKAGE-CONTINUOUS DAMPING CONTROL
Z49	COUNTRY-CANADA
Z5X	MIRROR PROVISIONS-ARABIC LANGUAGE
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
ZW9	BODY EQUIPMENT-BASE BODY OR CHASSIS

Section 2

Body Systems

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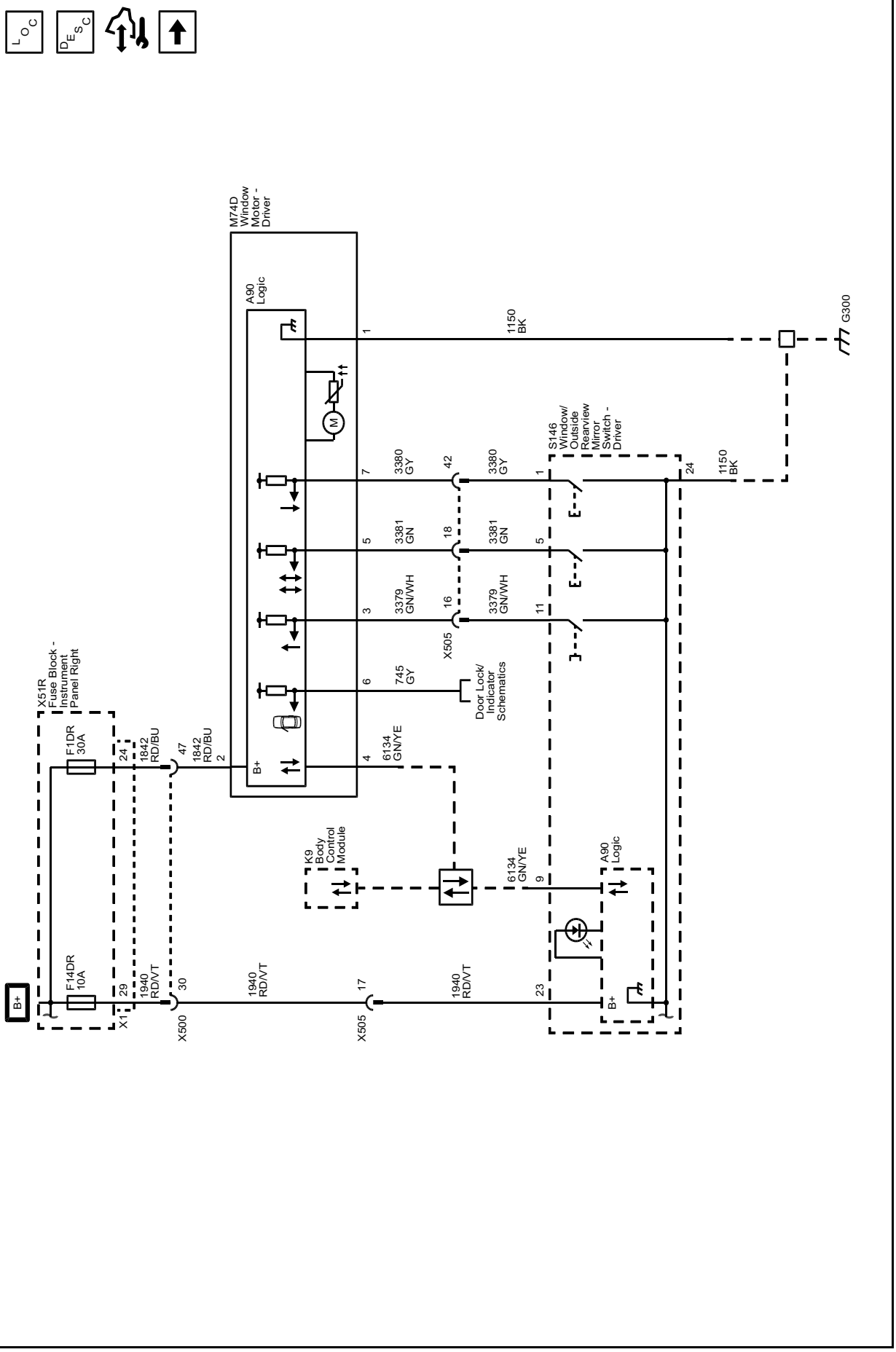
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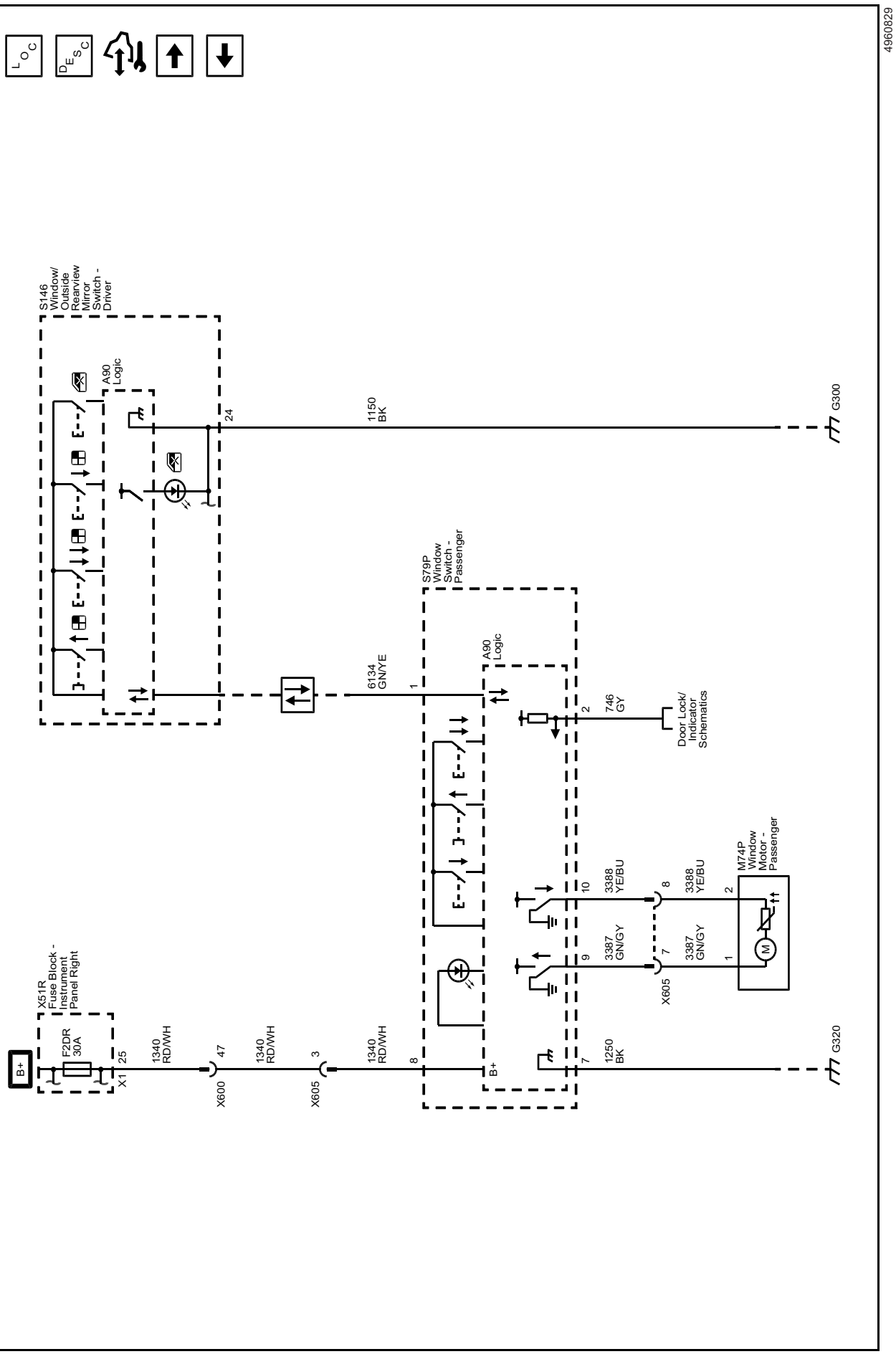
Fixed and Moveable Windows

Schematic and Routing Diagrams

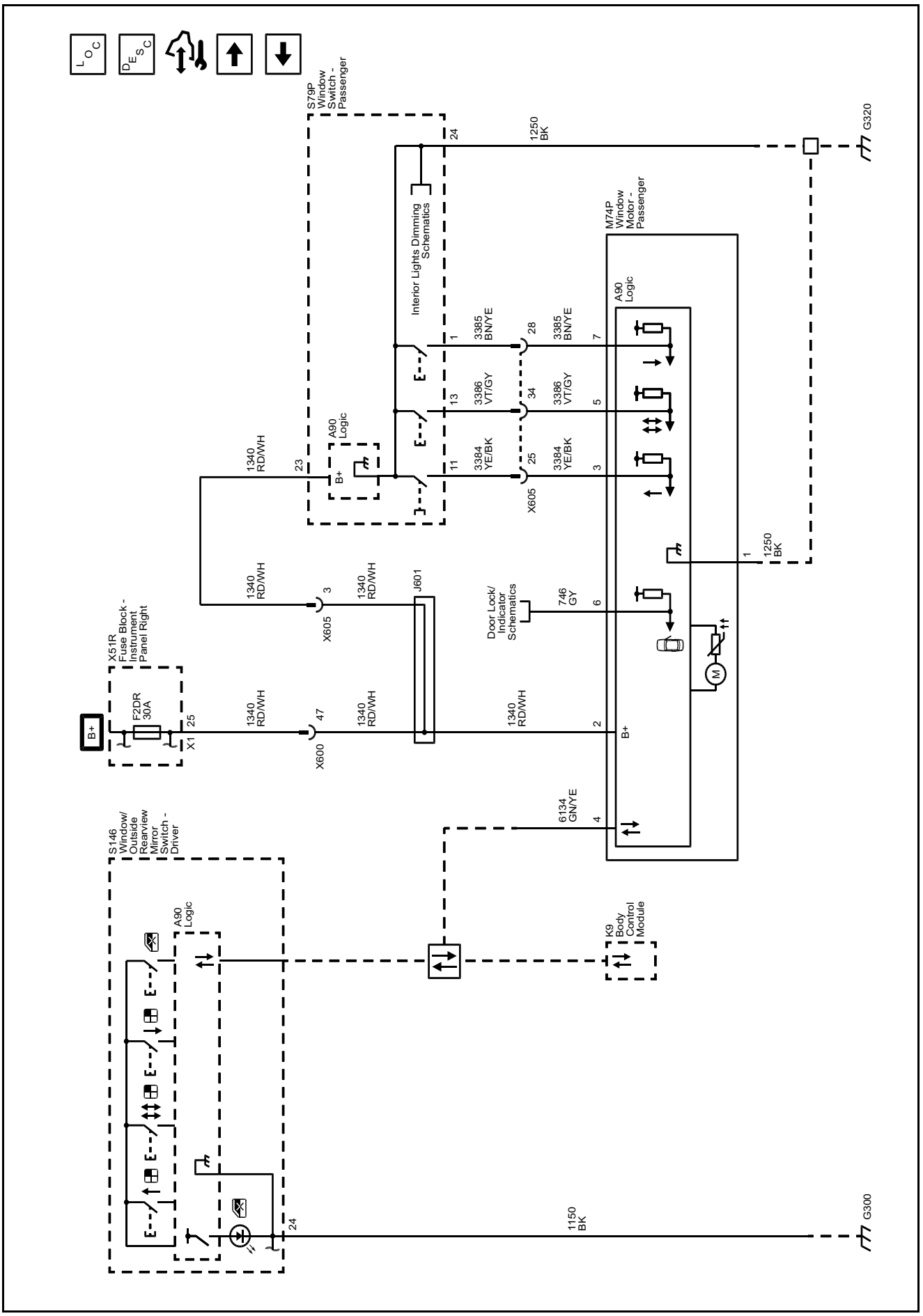
Moveable Window Schematics (Driver Window (AXG))



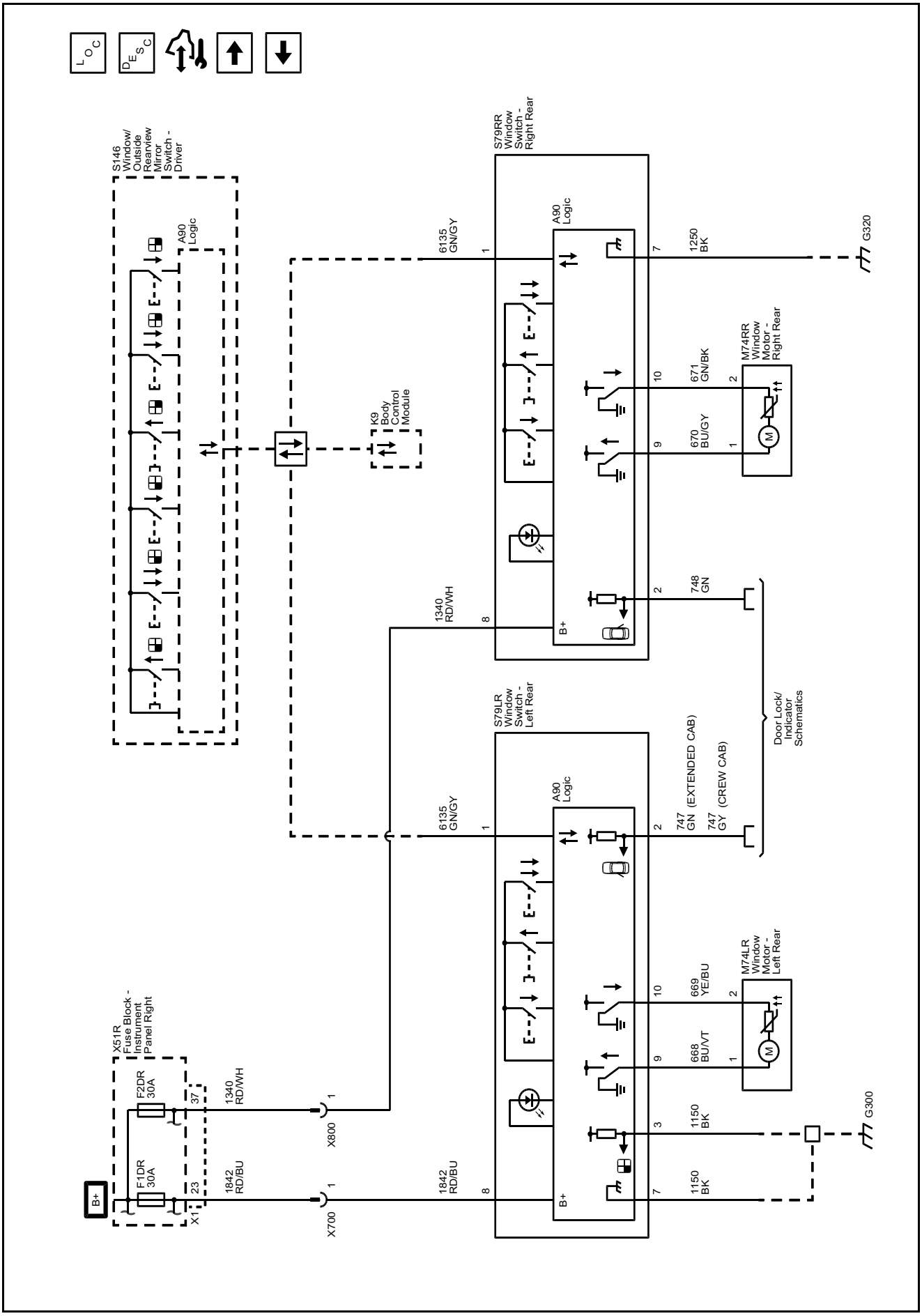
Moveable Window Schematics (Passenger Window (AED))



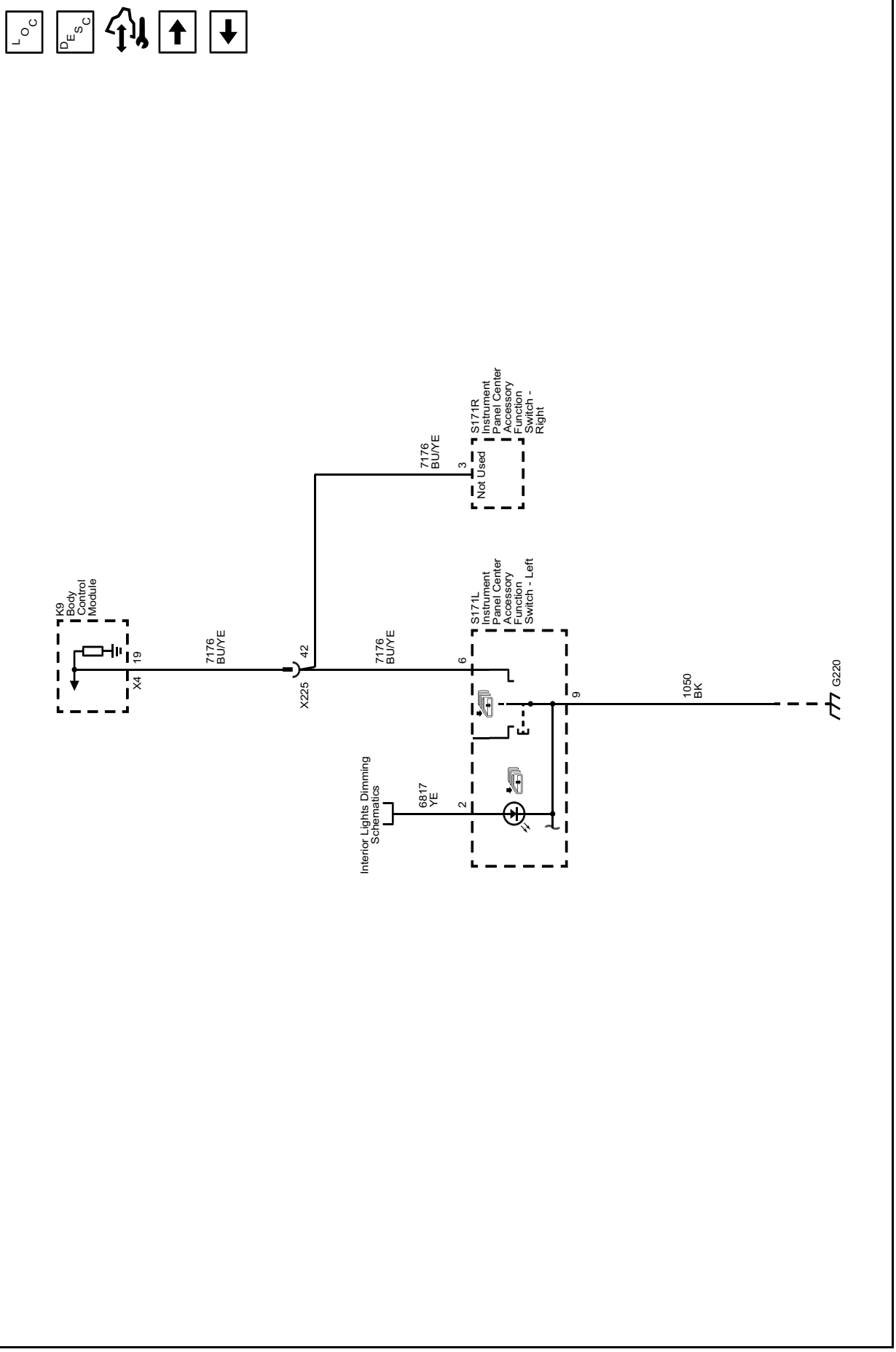
Moveable Window Schematics (Passenger Window (AEF))



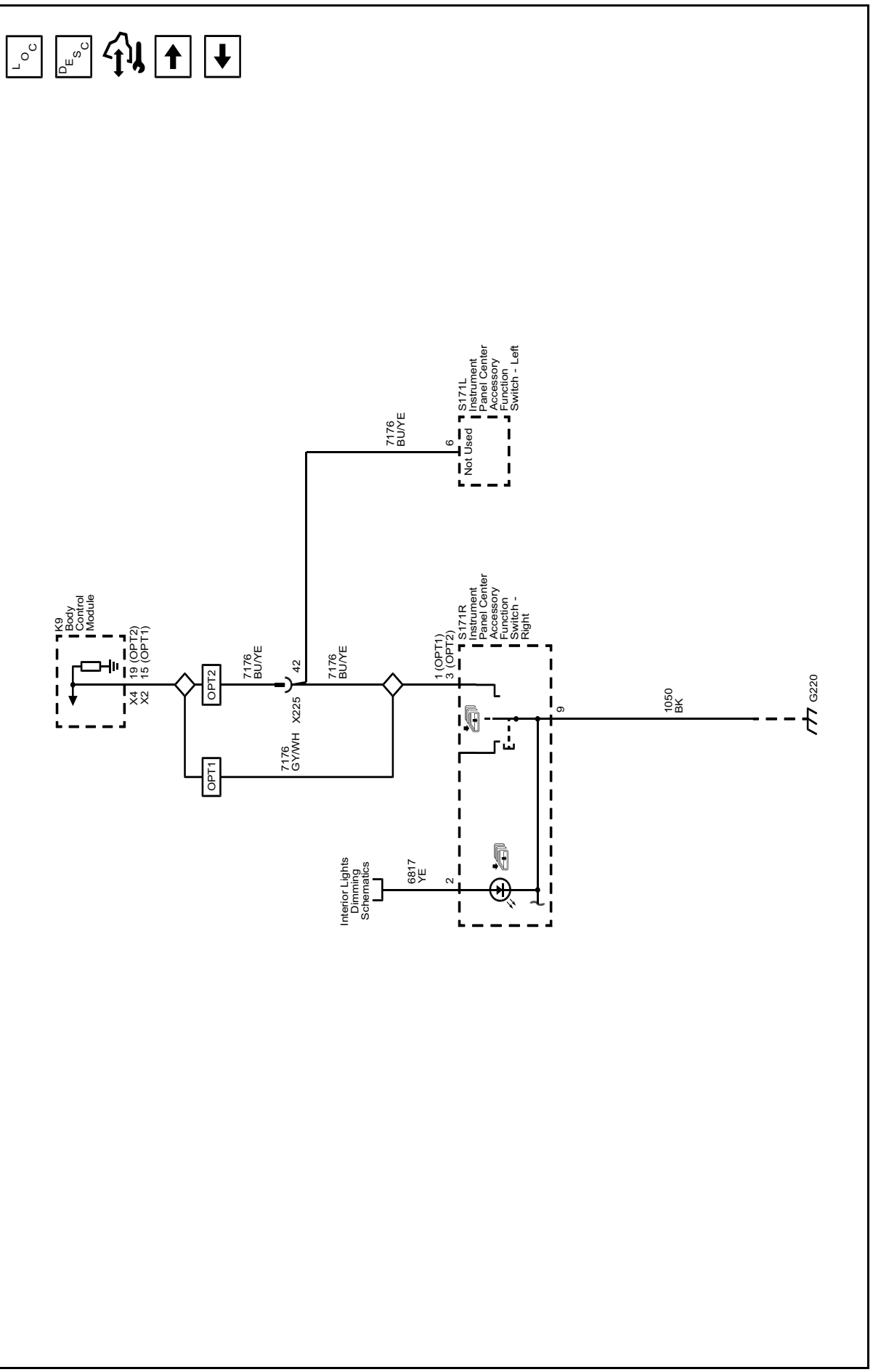
Moveable Window Schematics (Rear Windows (AEQ))



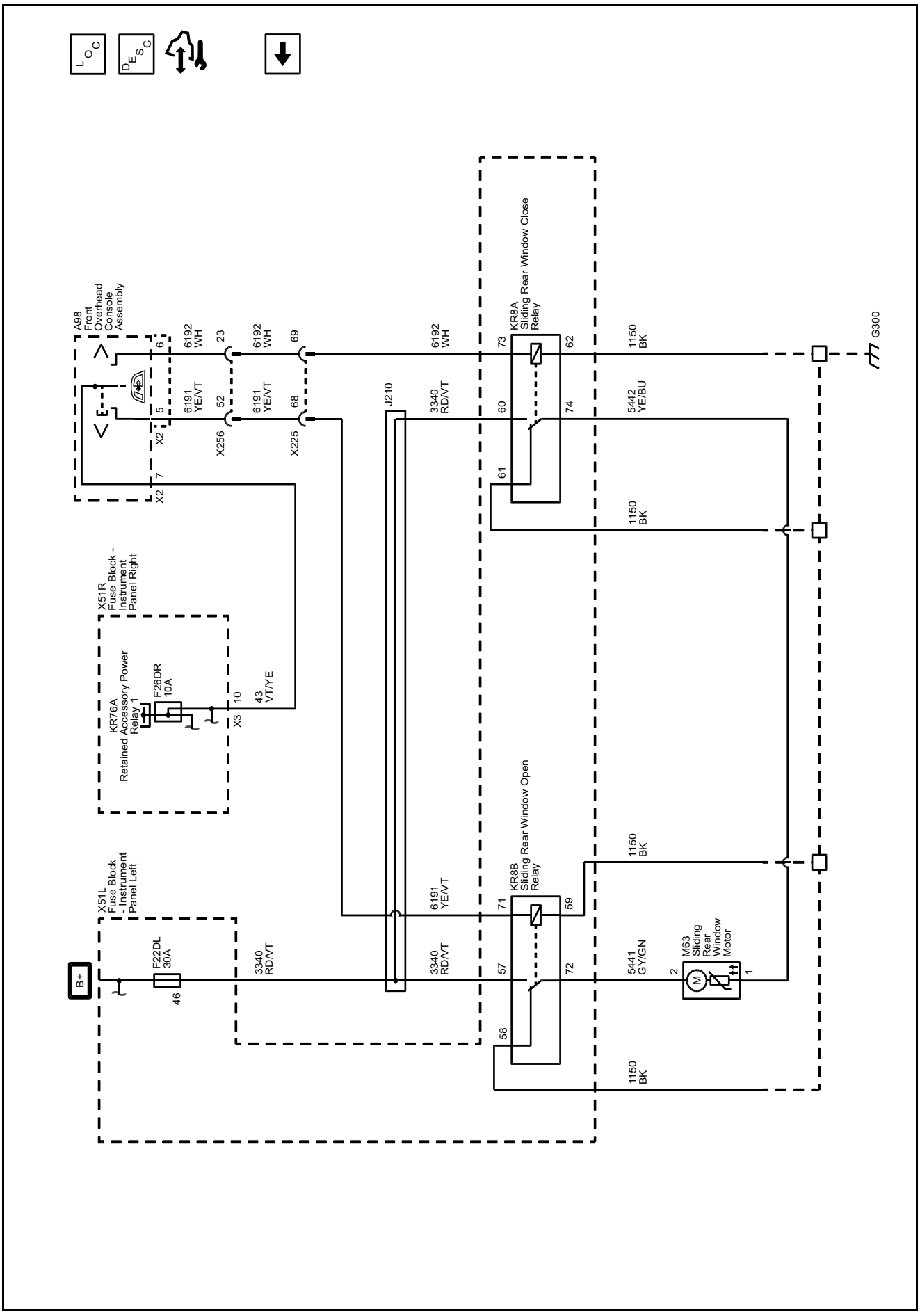
Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Left IP Accessory Function Switch))



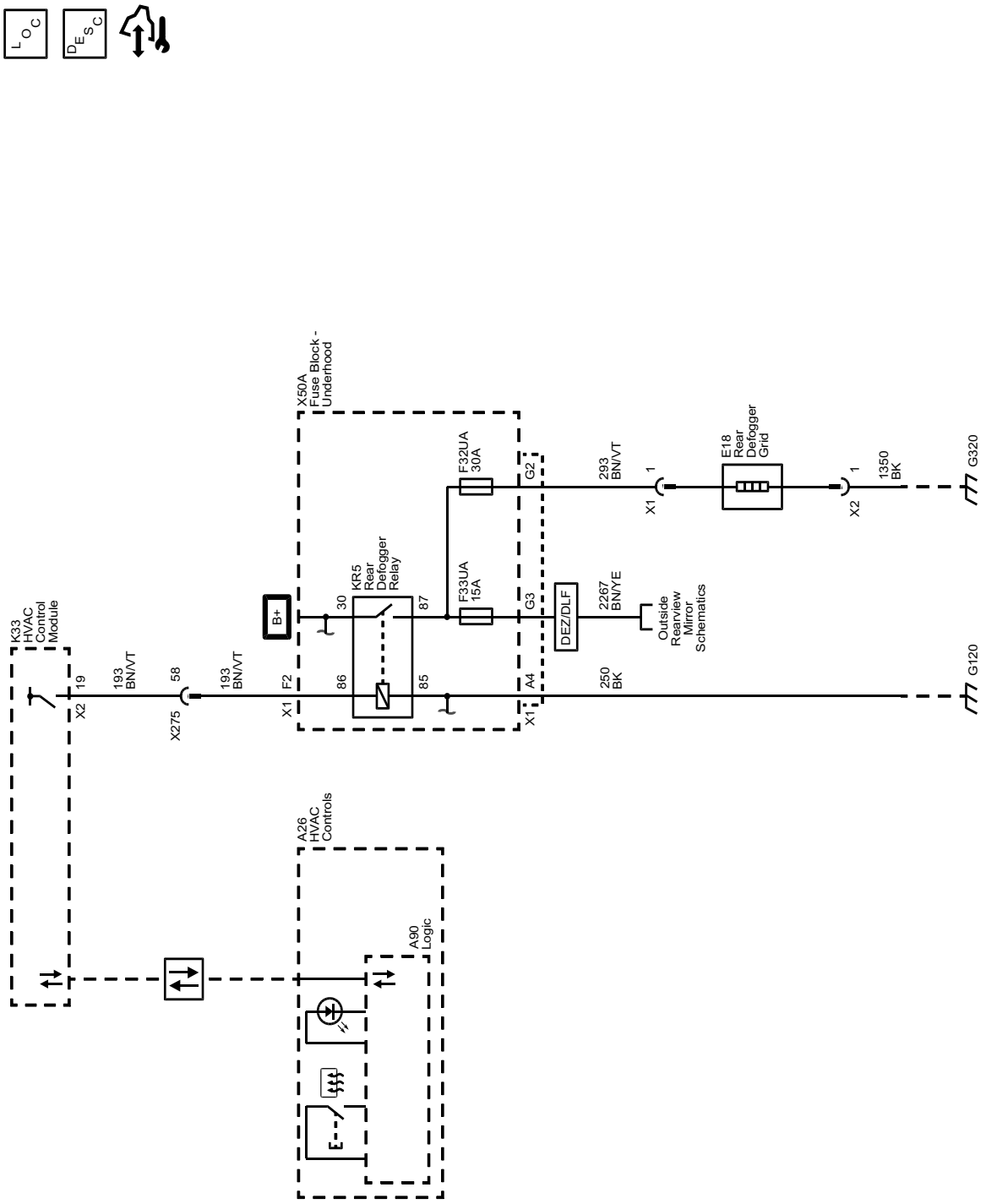
Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Right IP Accessory Function Switch))



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 window switch
- Passenger window switch
- Left rear window switch
- Right rear window switch
- Global express down window switch
- Window motors in each of the doors
- 30A Fuse
- Body control module (BCM)

Power Window System

This vehicle may be equipped with the following power window configurations:

- Driver door with express up and express down window motor
- Passenger door with express up and express down window motor
- Passenger door with express down only window motor
- Left rear door with express down only window motor
- Right rear door with express down only window motor

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 window 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 window 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 window 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.

Passenger, Left Rear and Right Rear Express Down Only Window Motors

For the passenger, 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.

The passenger and rear window switches communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger, left rear or right rear window, the driver will use the appropriate switch on the driver window 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 door window switch which will then command that window to move in the direction requested.

Global Window Express Down Switch

The global express down switch (part of the instrument panel multifunction switch) may be used to commanded all windows to perform the express down function

Lockout Switch Feature

The driver window 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 window switches, deactivating them. The rear windows will still function normally from the switches on the driver window switch.

Power Sliding Rear Window

NOTE: Power window lockout switch disables left rear and right rear passenger window switches only and has no effect on the operation of the power sliding window switch.

The power sliding rear window motor is controlled from the rear window OPEN/CLOSE switch through OPEN and CLOSE relays. The OPEN/CLOSE switch is supplied voltage from the body control module accessory voltage output circuit. When the switch is pressed in the OPEN or CLOSED position the OPEN or CLOSED relay coil will be supplied accessory voltage and energized through the appropriate relay control circuit. While the OPEN and CLOSE relays are in a de-energized state both motor control circuits will be closed to ground. When one of the relays is energized its motor control circuit will be closed to the battery voltage supply circuit and the other motor control circuit will remain grounded through the de-energized relay.

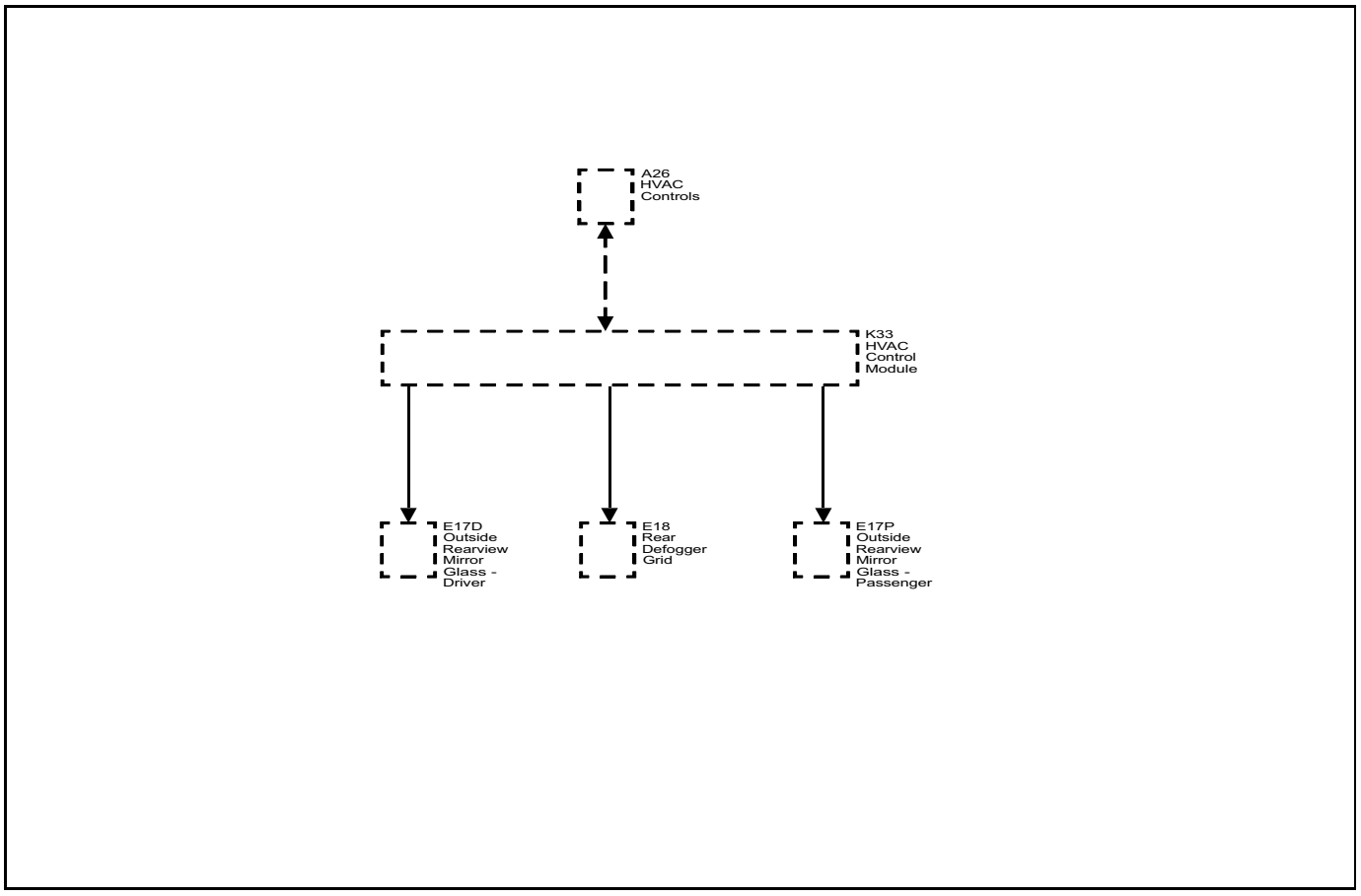
Rear Window Defogger Description and Operation

Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- HVAC Control Module
- HVAC Controls
- Rear Defogger Relay
- Rear Defogger Grid
- Driver Outside Rearview Mirror
- Passenger Outside Rearview Mirror
- 40A Fuse

A26-K33-X50A Defogger Block Diagram



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Rear Window Defogger Operation

The rear defog control system utilizes a single zone backlight design, driven with a single relay configuration. Additionally, up to two outside rear view mirrors can be heated if required. A switch for the customer to control the system is provided within the HVAC controls. Also included in the HVAC controls 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 HVAC controls to send a serial data message to the HVAC control module requesting rear window defog operation. The HVAC 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)

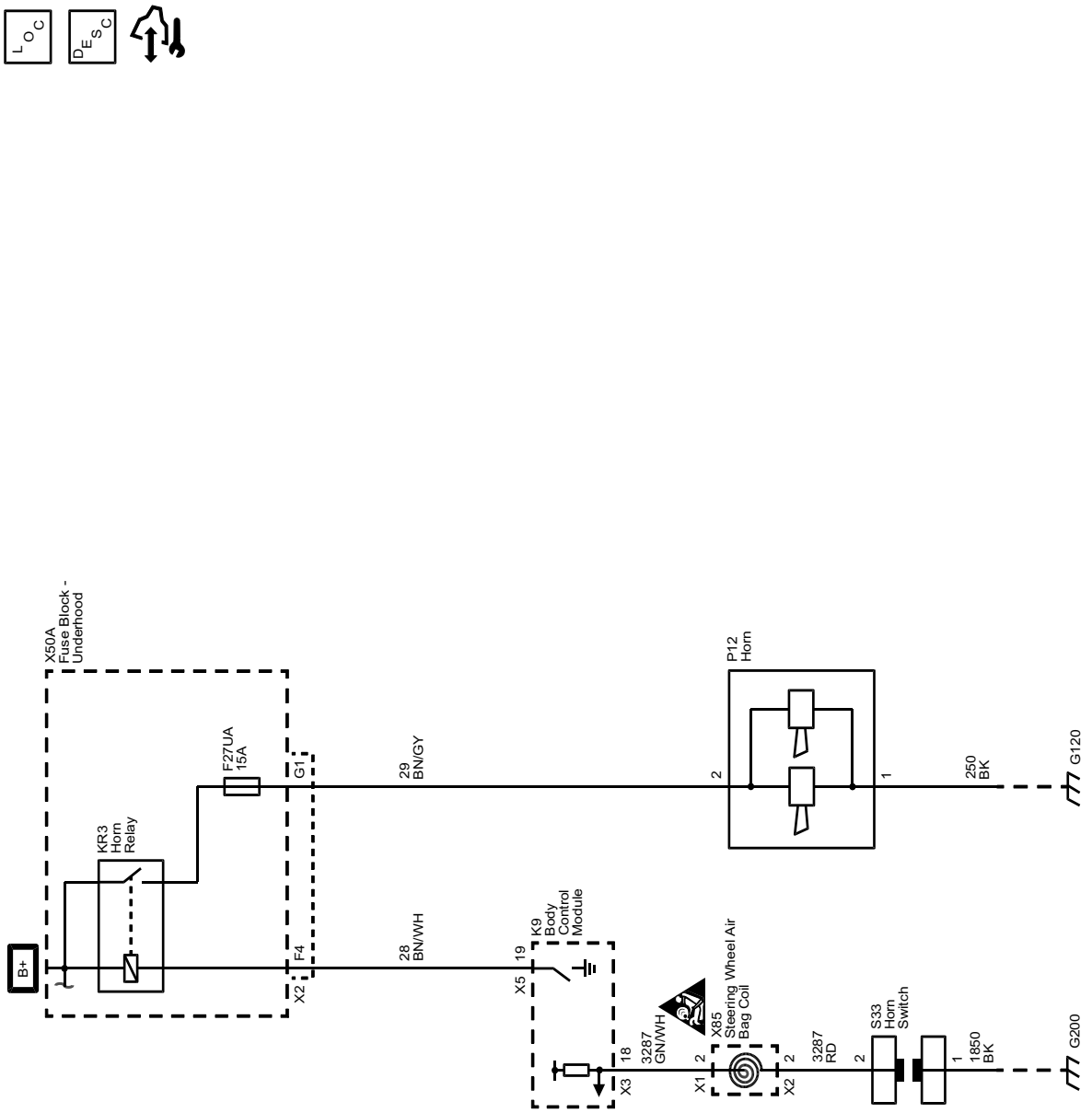
Heated Mirrors

The heated mirrors are also controlled through the rear defogger relay. Whenever the rear window defogger is turned on battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

Horns and Pedestrian Alerts

Schematic and Routing Diagrams

Horn Schematics (Horn)



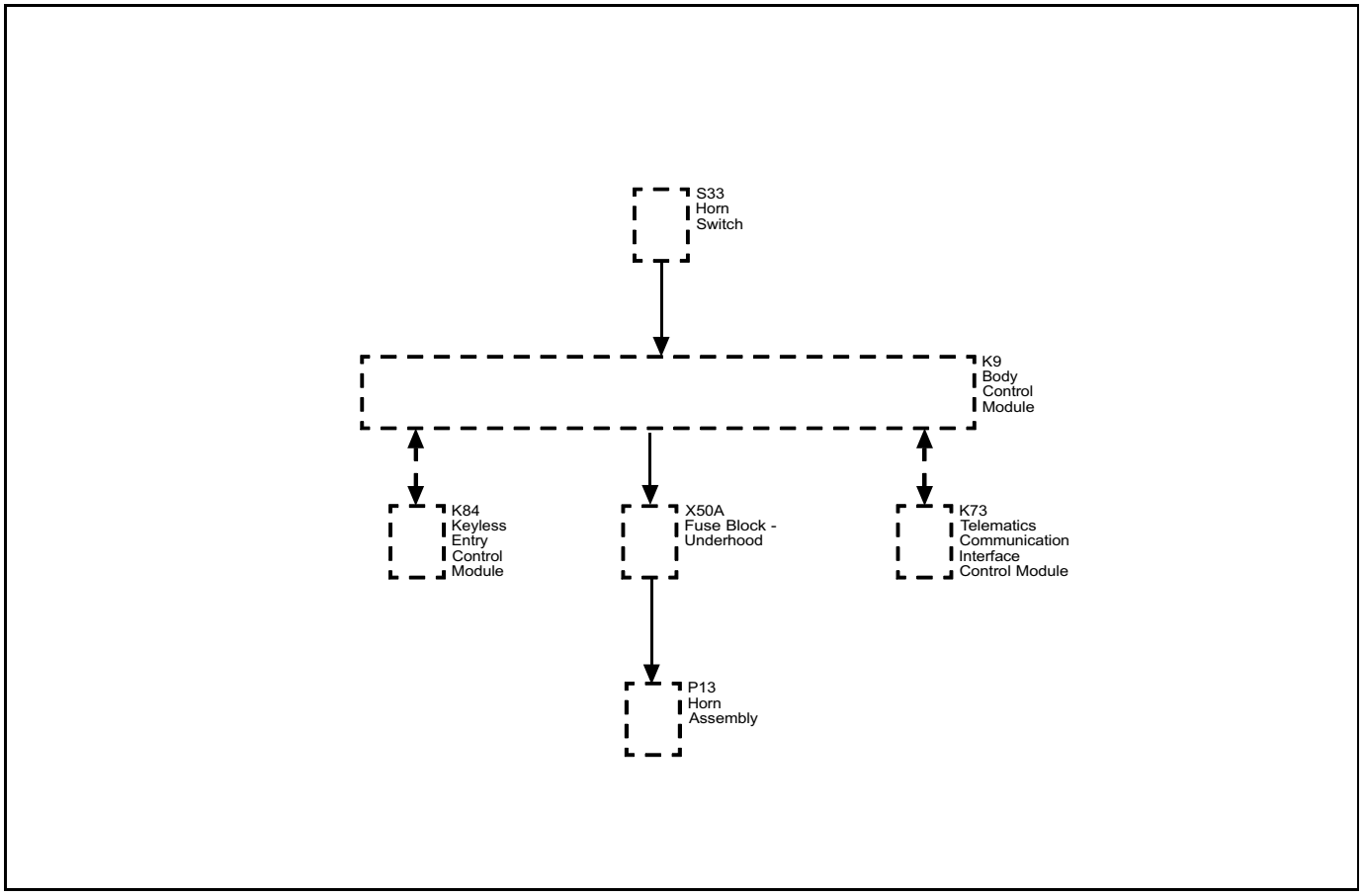
Description and Operation

Horns System Description and Operation

System Description

The horn system consists of the following components:

- HORN fuse
- Underhood fuse block (Contains PCB horn relay)
- Horn switch
- Horn assembly
- Body control module (BCM)



3270443

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.
  - 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.
  - When the OnStar® system is used to sound the horns if equipped—For further information, refer to OnStar Description and Operation.

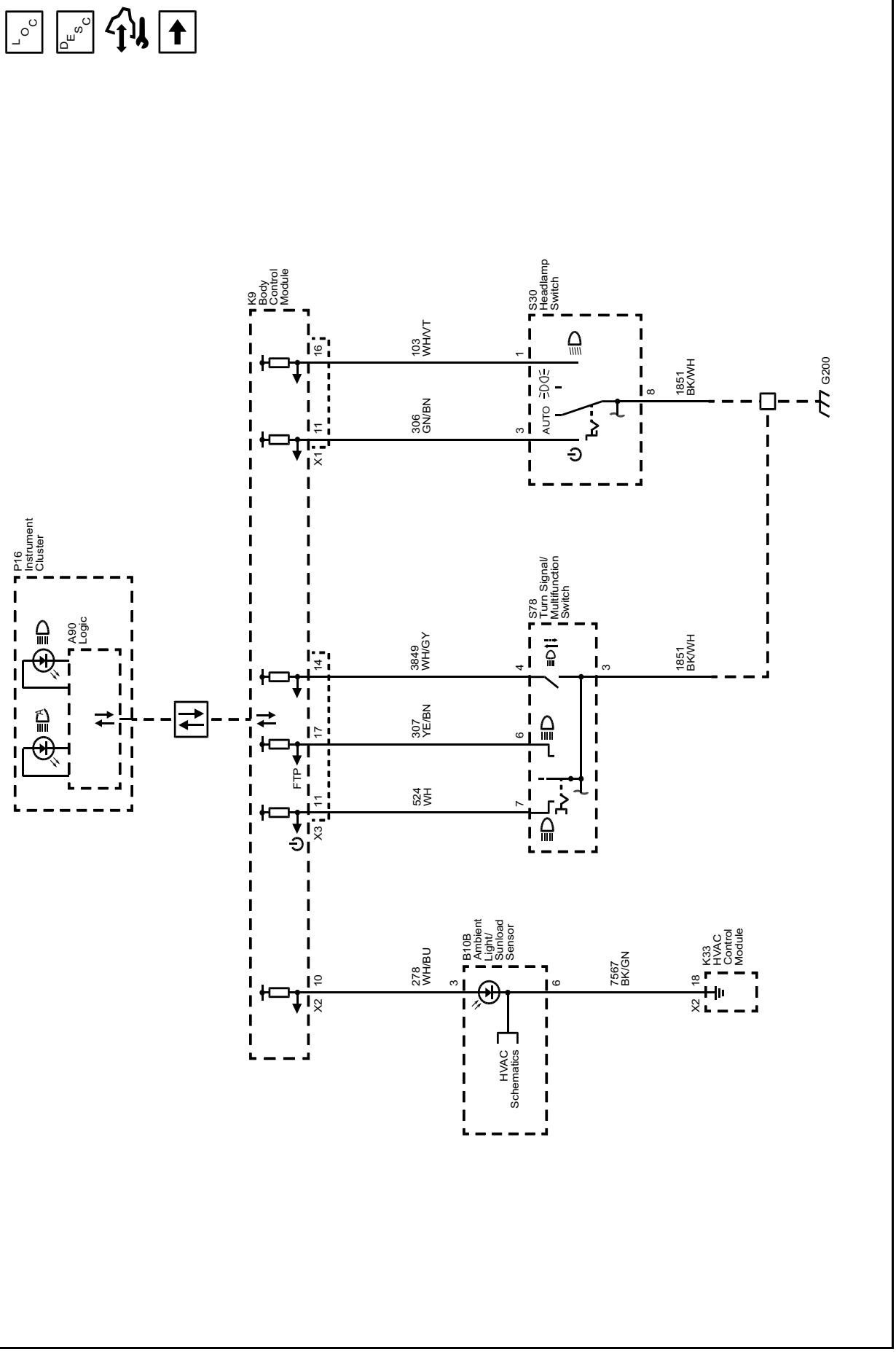
Circuit Operation

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.

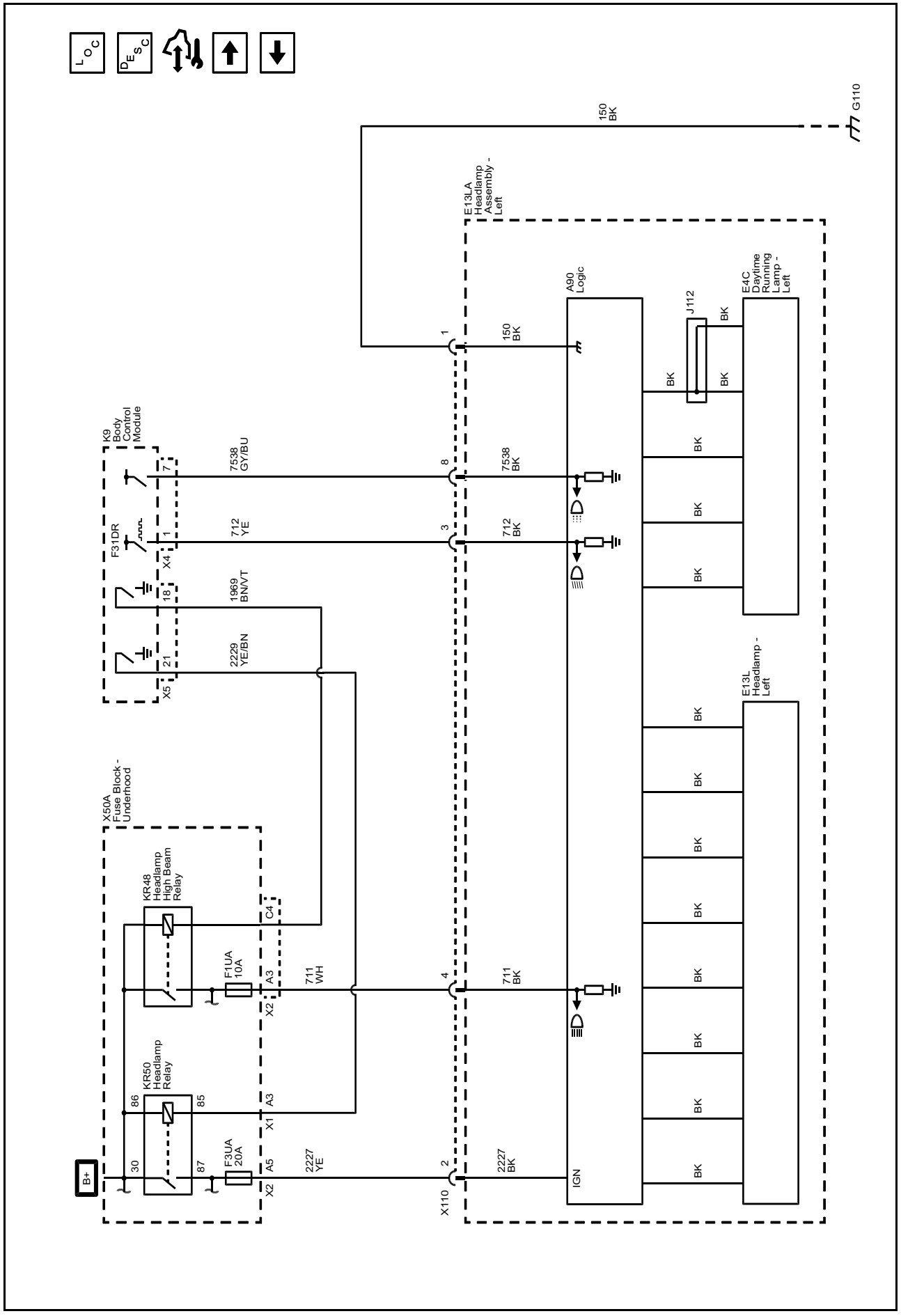
Lighting

Schematic and Routing Diagrams

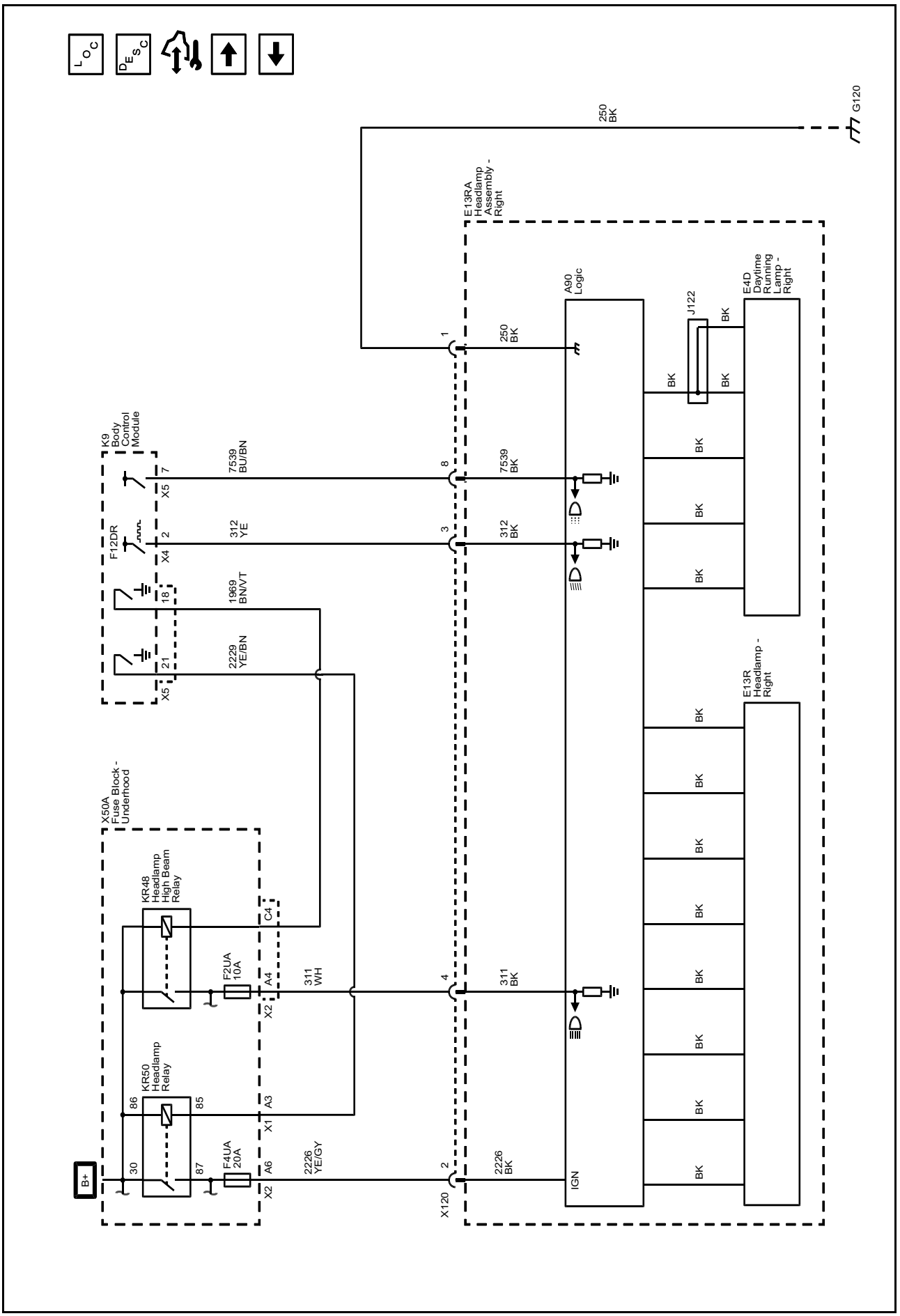
Headlights/Daytime Running Lights (DRL) Schematics (Controls and Indicators)



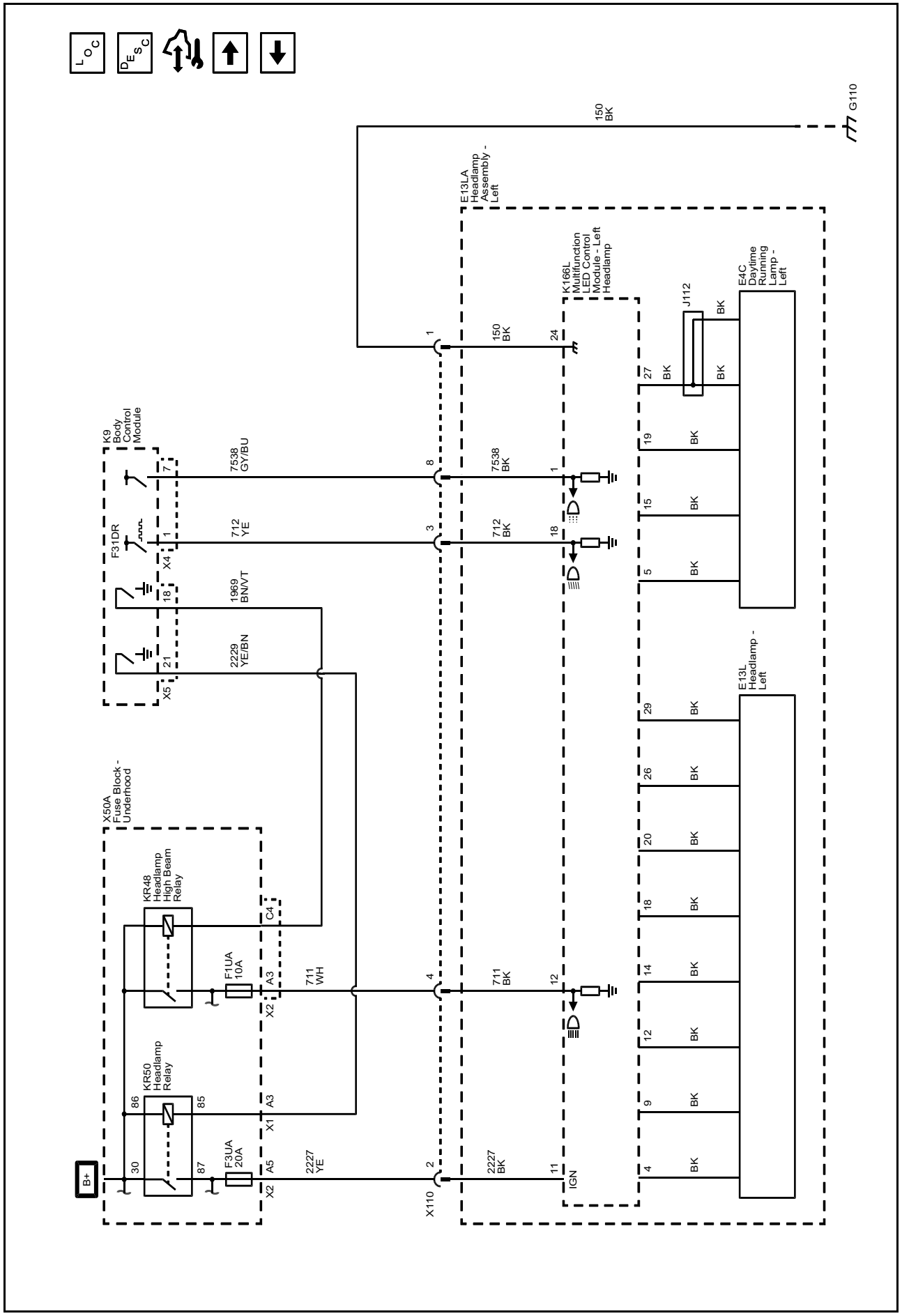
Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GFF/GFI/GFJ))



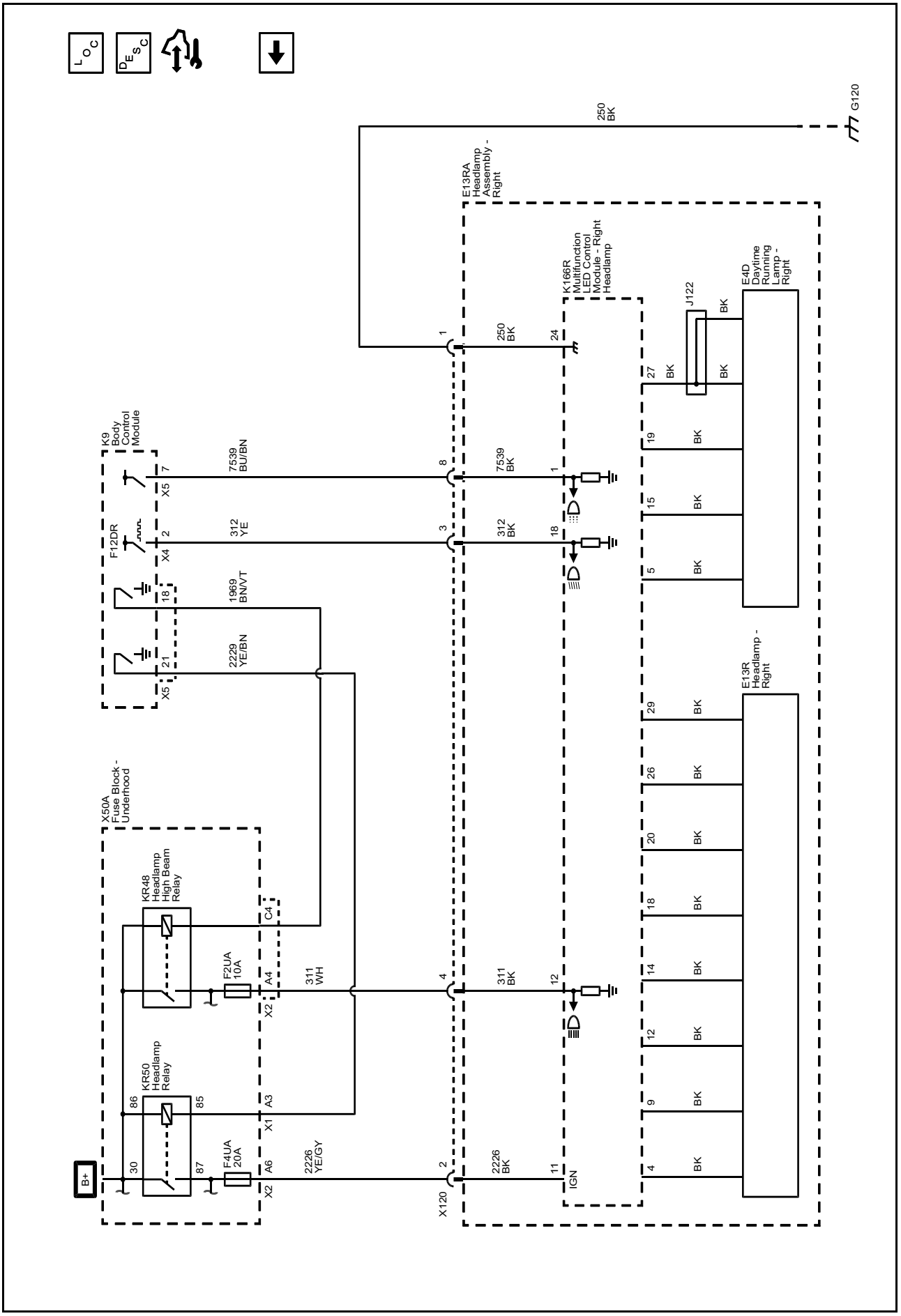
Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GFF/GFI/GFJ))



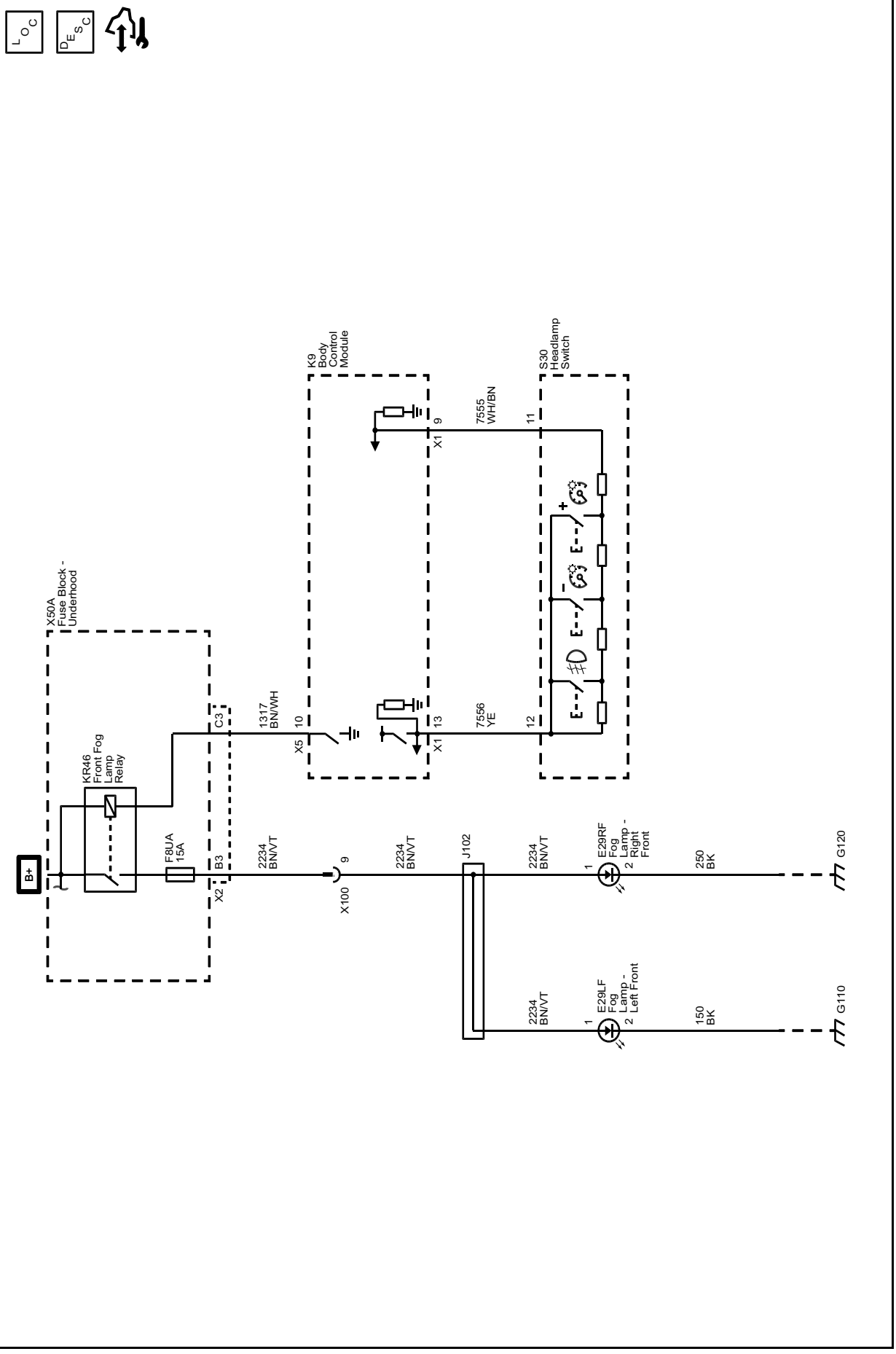
Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GFG/GFU/GFW))

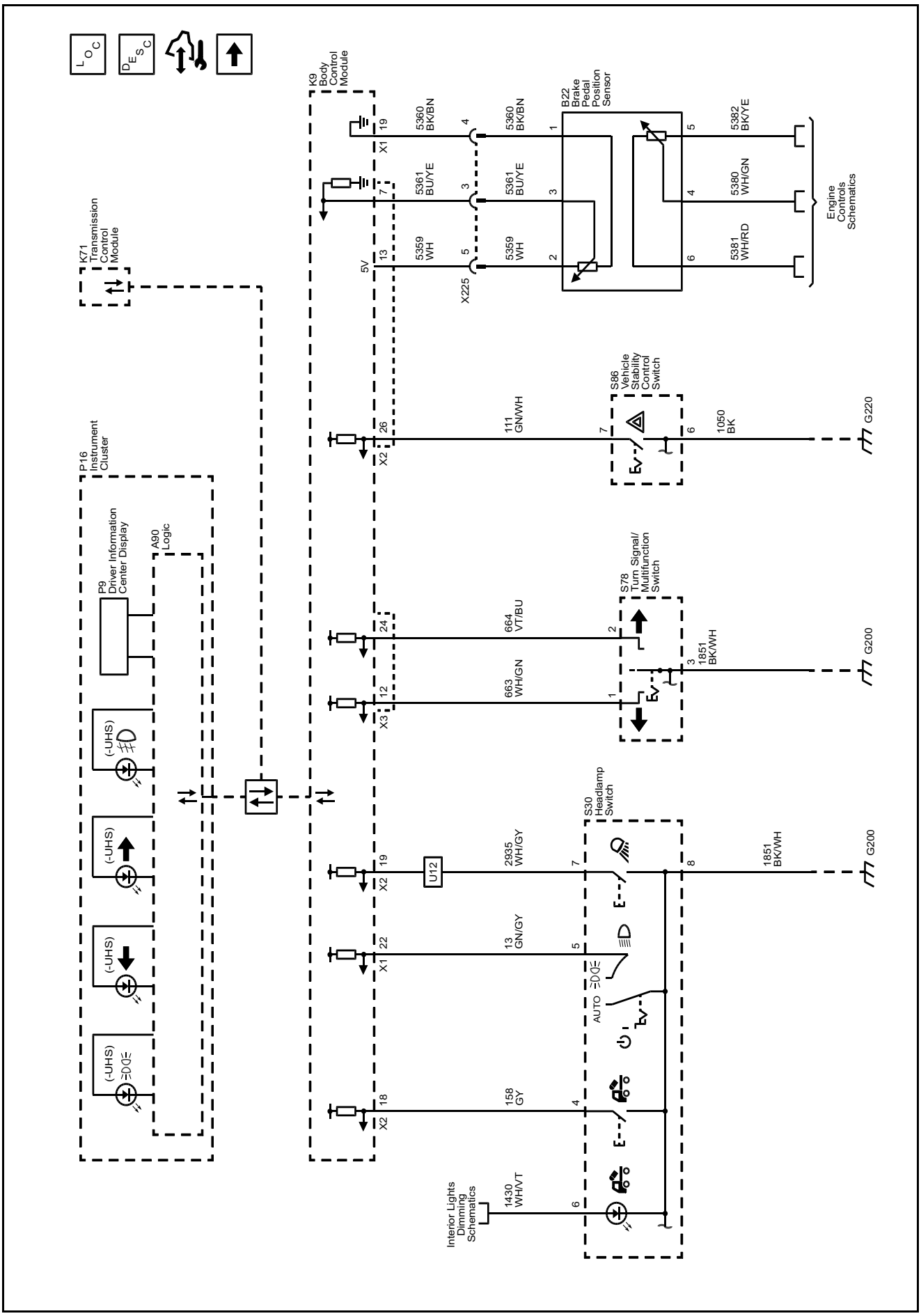


Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GFG/GFU/GFW))

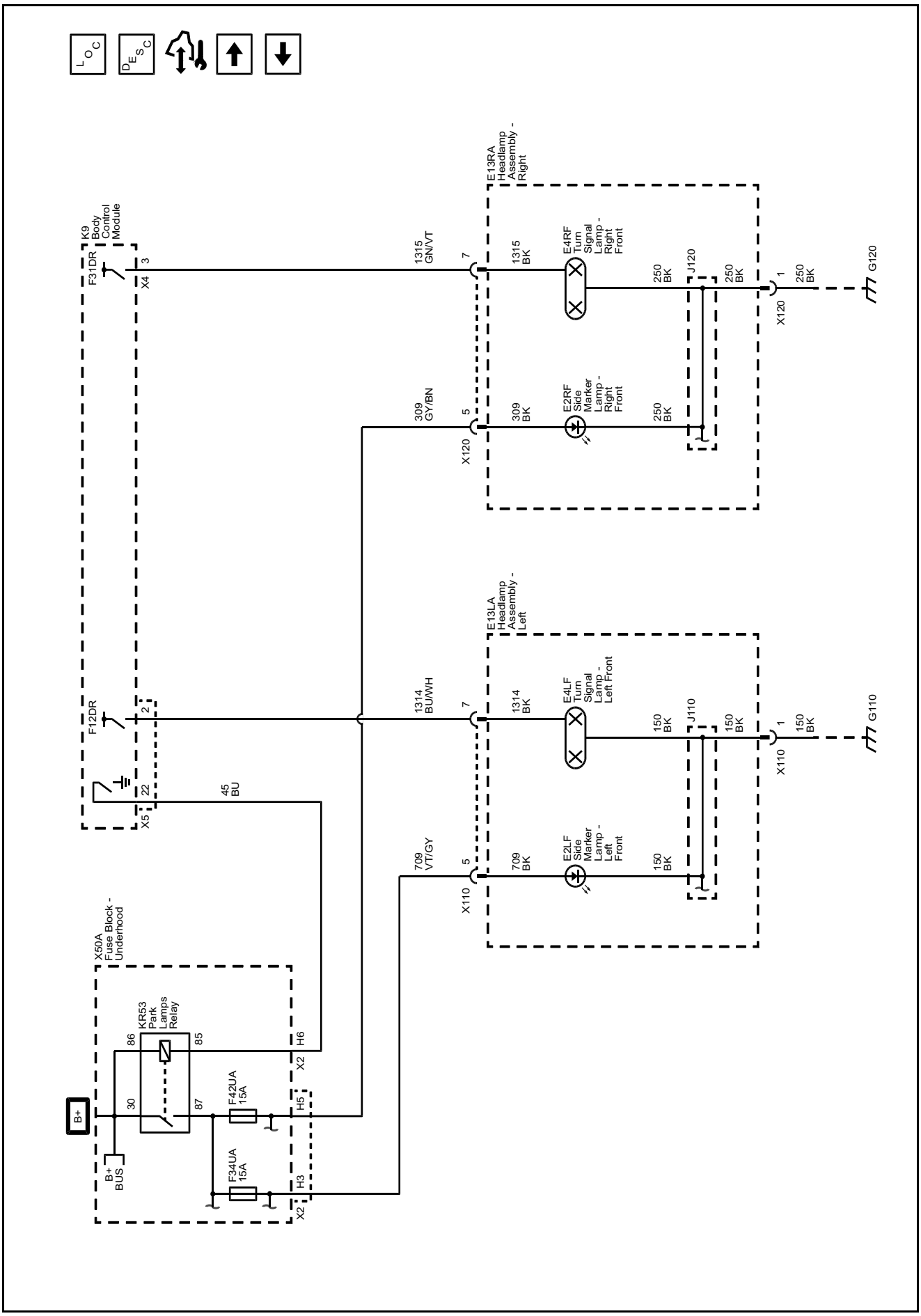


Fog Lights Schematics (Fog Lamps (T3U))

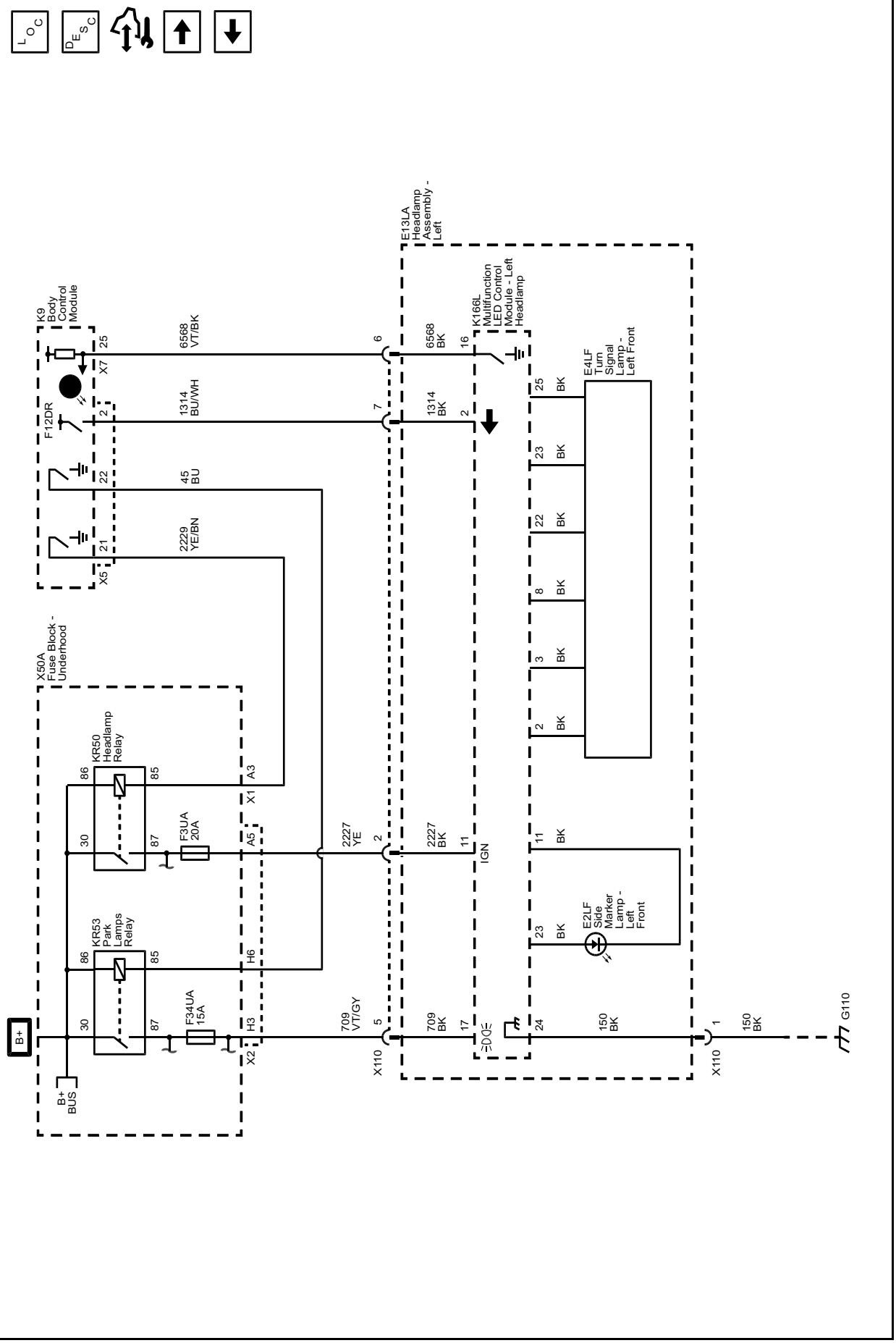



Exterior Lights Schematics (Controls and Indicators)
5082194
K9 Body Control Module
K71 Transmission Control Module
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
B22 Brake Pedal Position Sensor
S86 Vehicle Stability Control Switch
S78 Turn Signal/ Multifunction Switch
S30 Headlamp Switch
U12
X225
Engine Controls Schematics
Interior Lights Dimming Schematics
5360 BK/BN
5361 BU/YE
5359 WH
5382 BK/YE
5380 WH/GN
5381 WH/RD
111 GN/WH
1050 BK
664 VT/BU
663 WH/GN
1851 BK/WH
2935 WH/GY
13 GN/GY
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1430 WH/VT
G220
G200
5V
AUTO

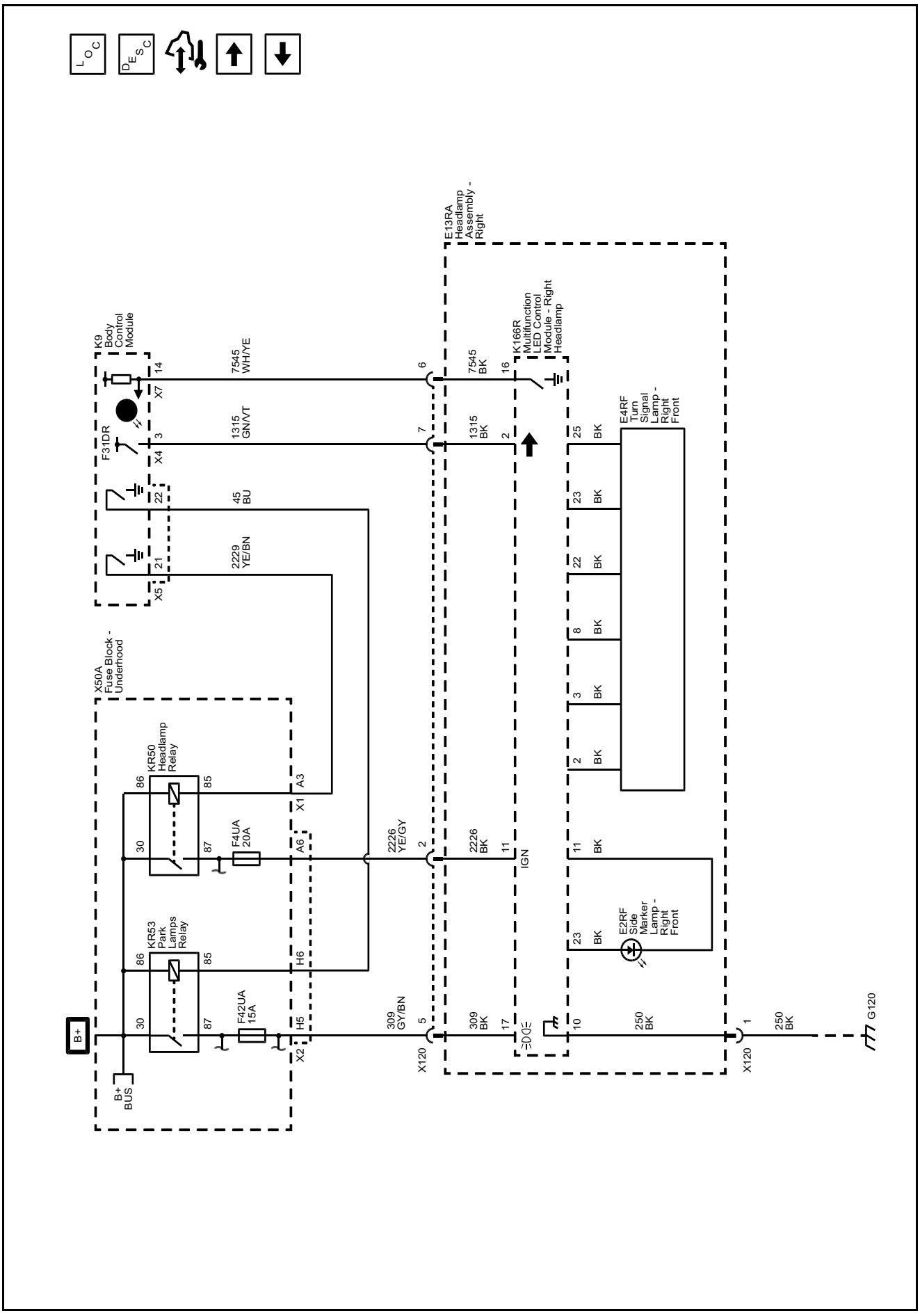
Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps (GFF/GFI/GFJ))



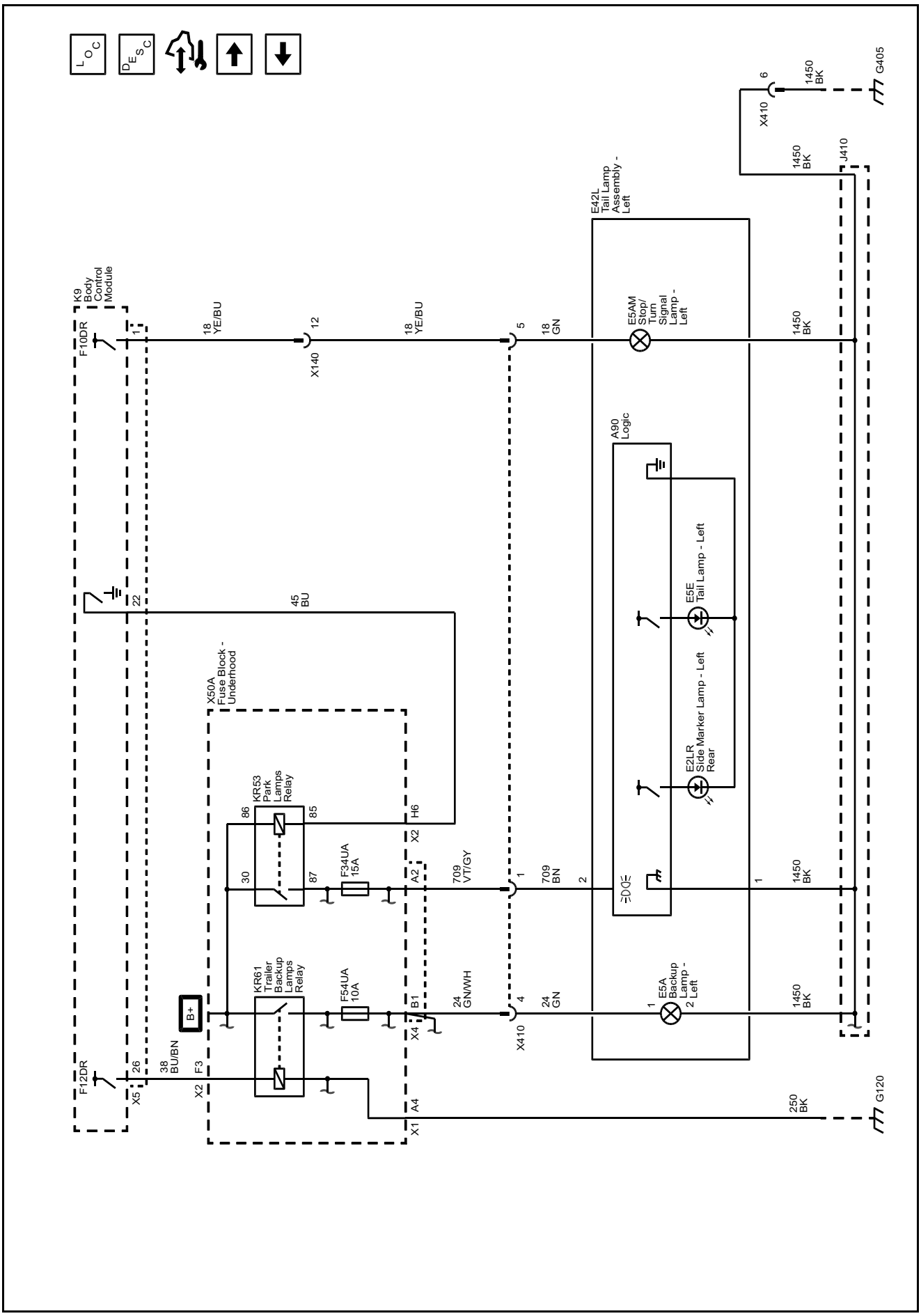
Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Left (GFG/GFU/GFW))



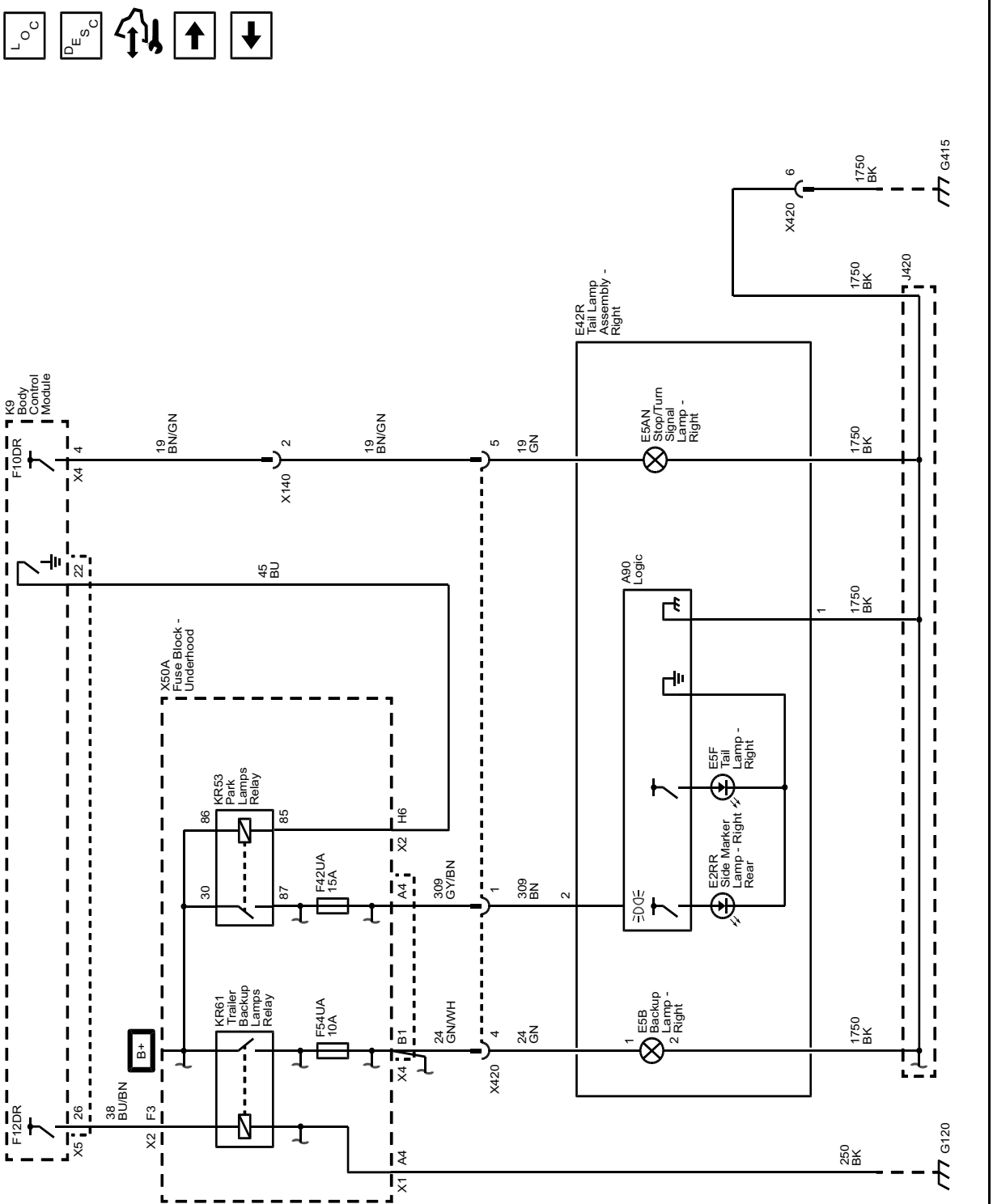
Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Right (GFG/GFU/GFW))



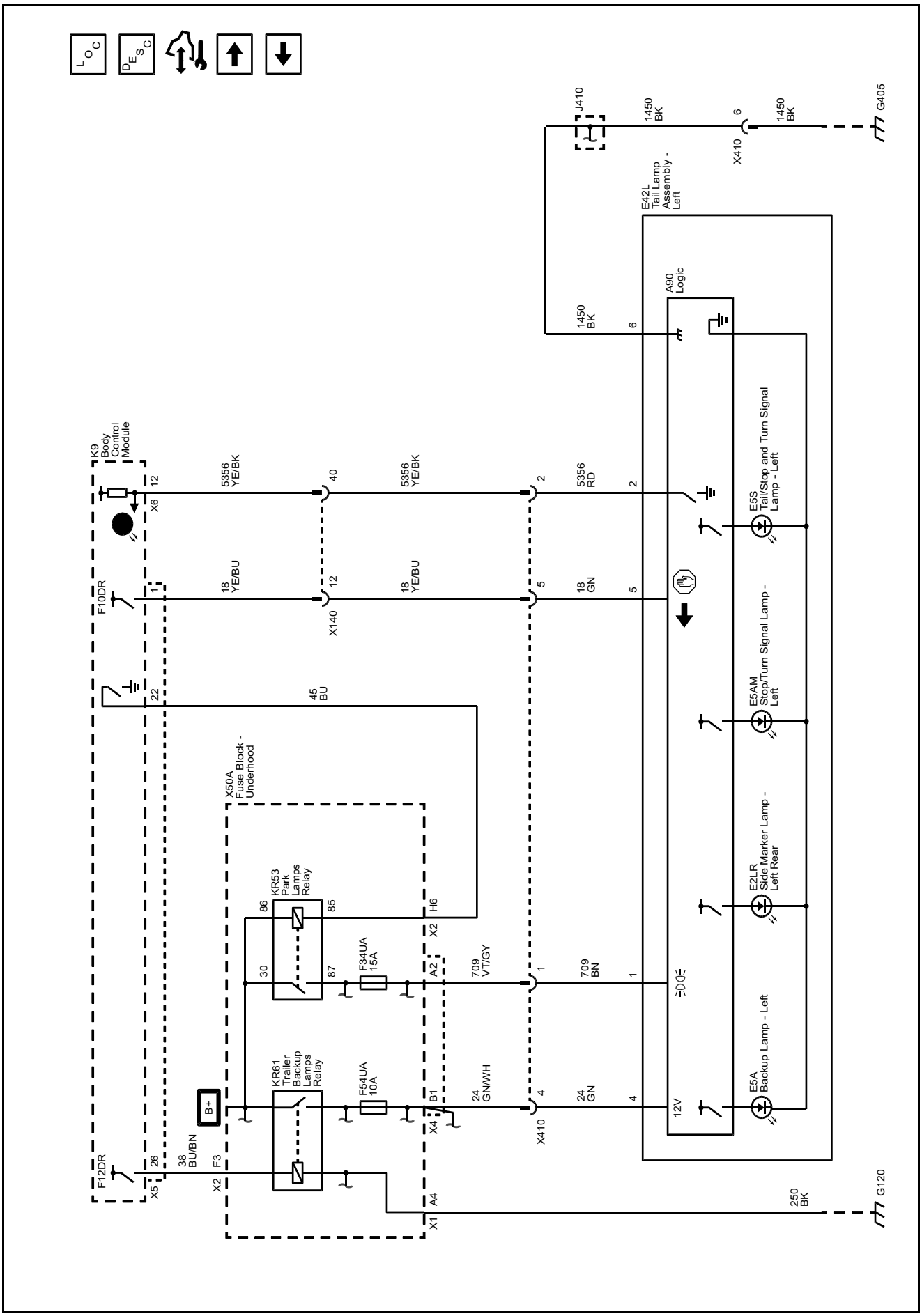
Exterior Lights Schematics (Tail Lamp Assembly - Left (GFF/GFI/GFJ))



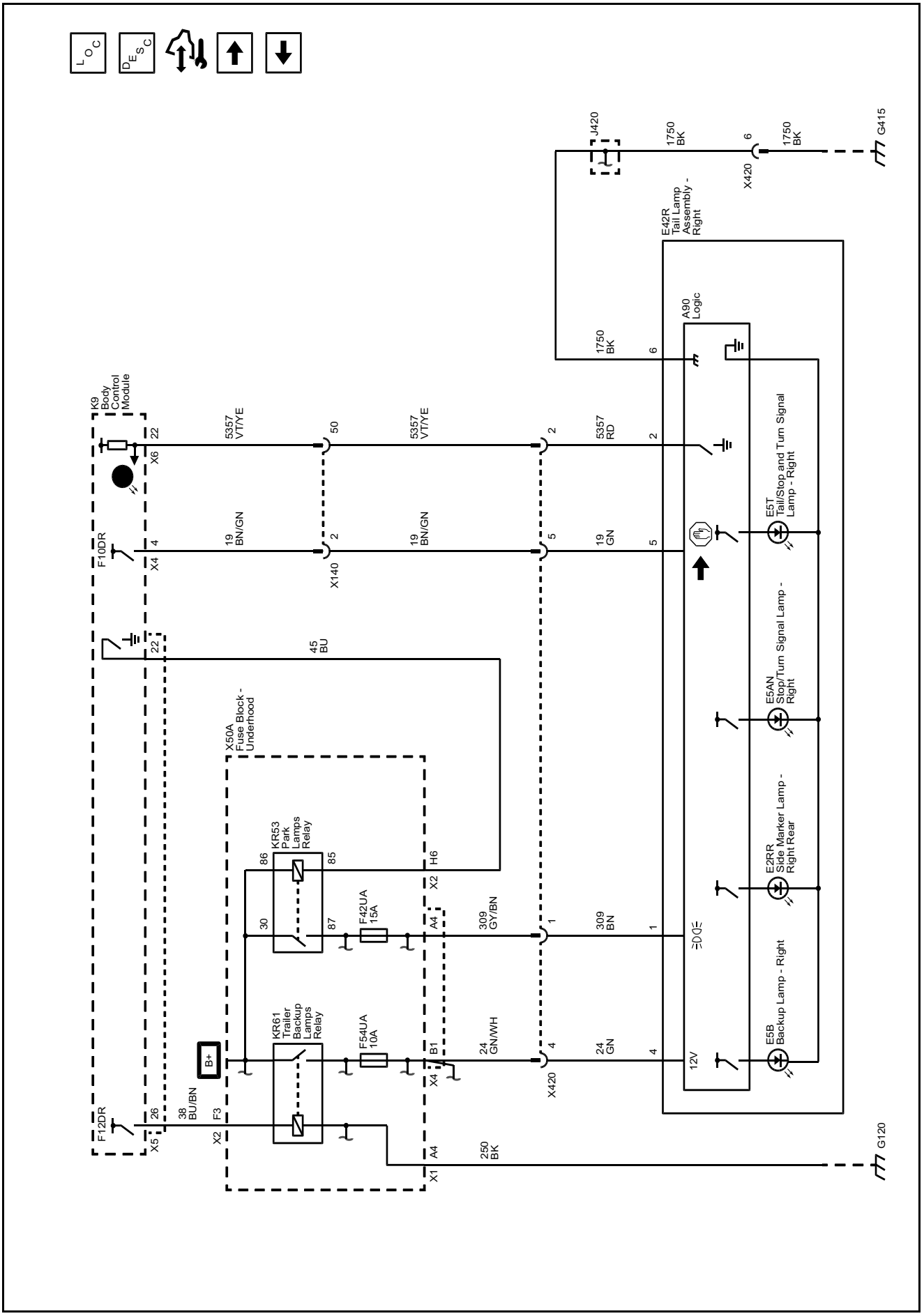
Exterior Lights Schematics (Tail Lamp Assembly - Right (GFF/GFI/GFJ))



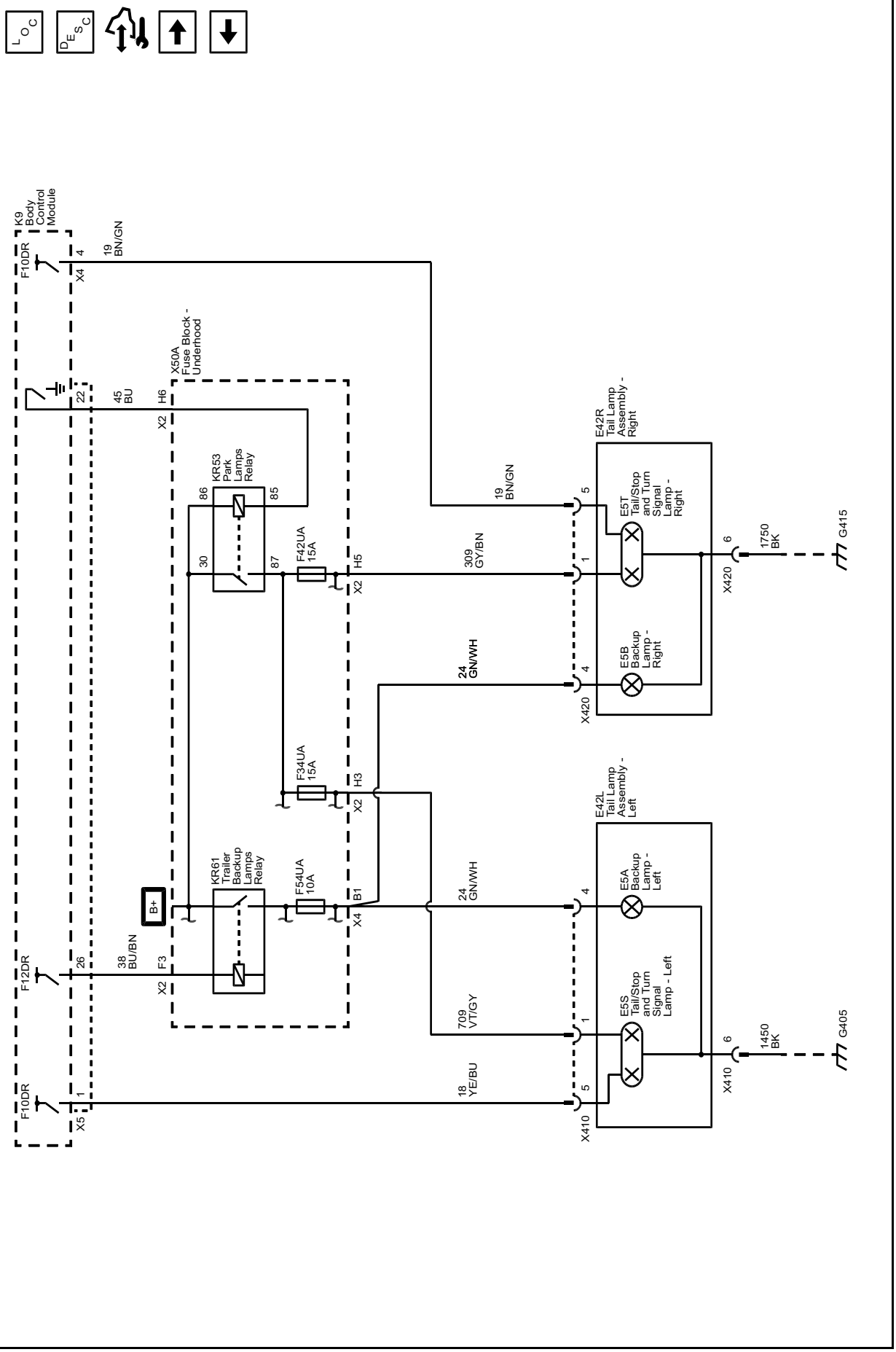
Exterior Lights Schematics (Tail Lamp Assembly - Left (GFG/GFU/GFW))



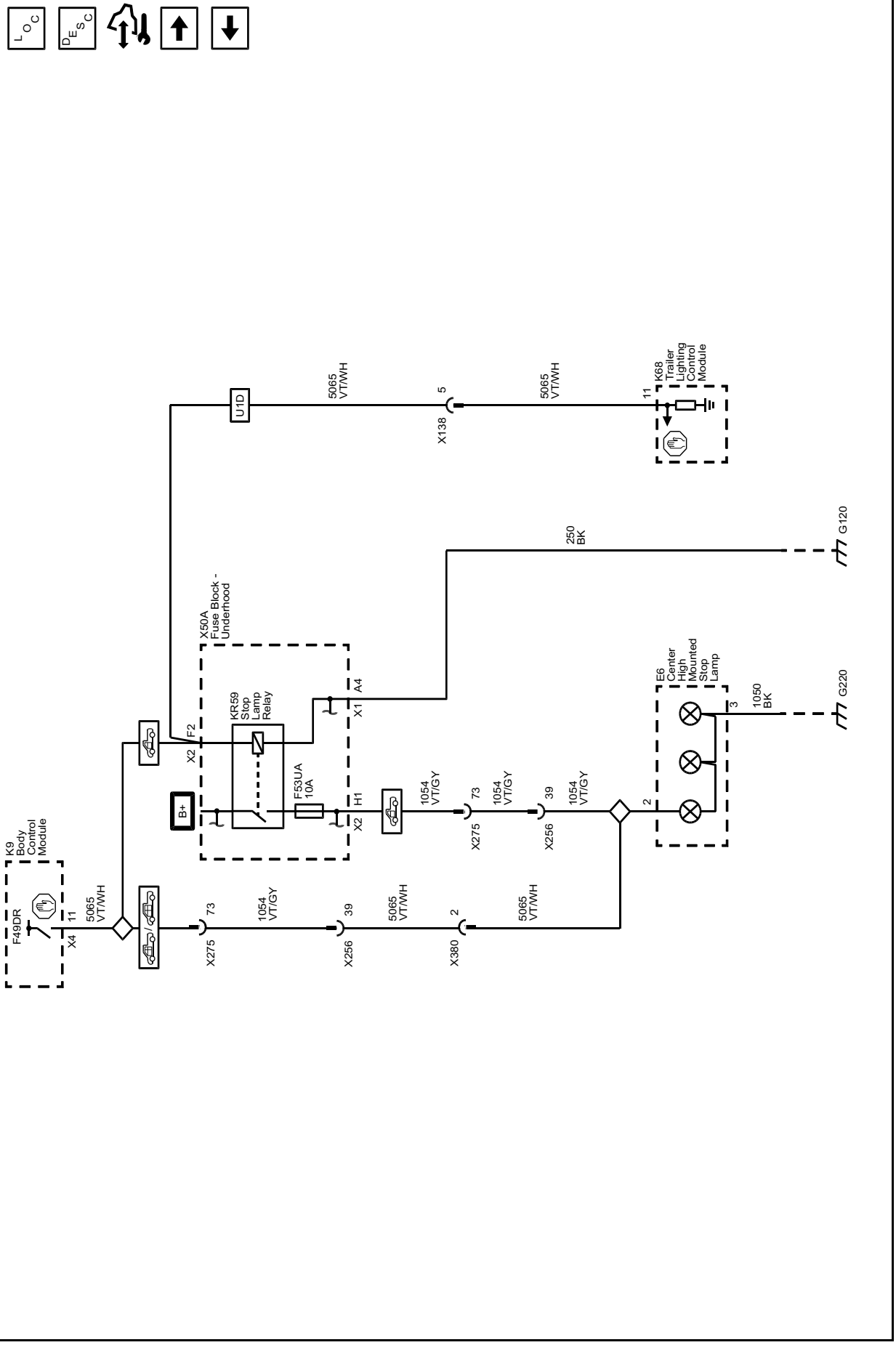
Exterior Lights Schematics (Tail Lamp Assembly - Right (GFG/GFU/GFW))



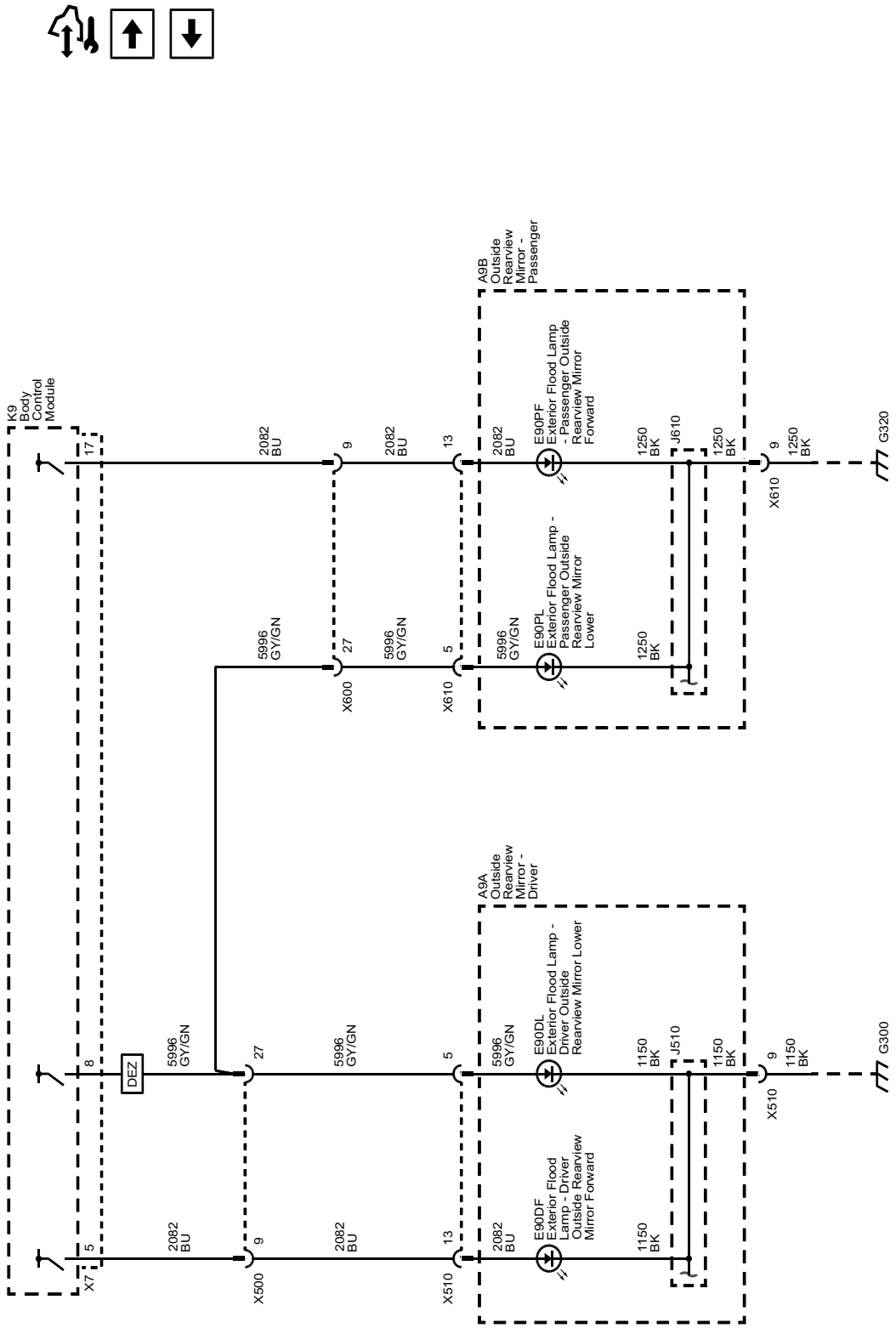
Exterior Lights Schematics (Tail Lamp Assemblies (ZW9))



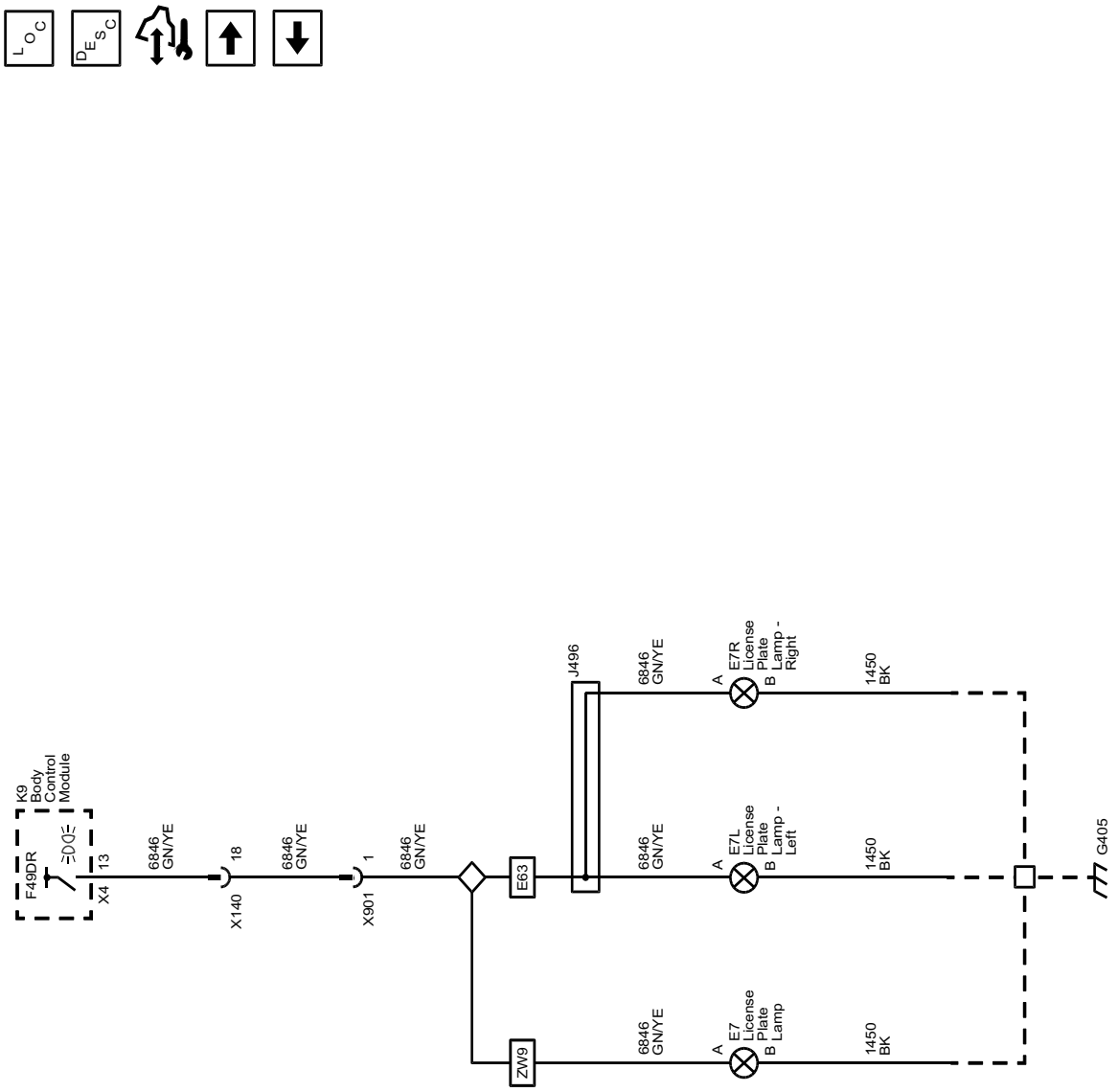
Exterior Lights Schematics (Center High Mounted Stop Lamp)



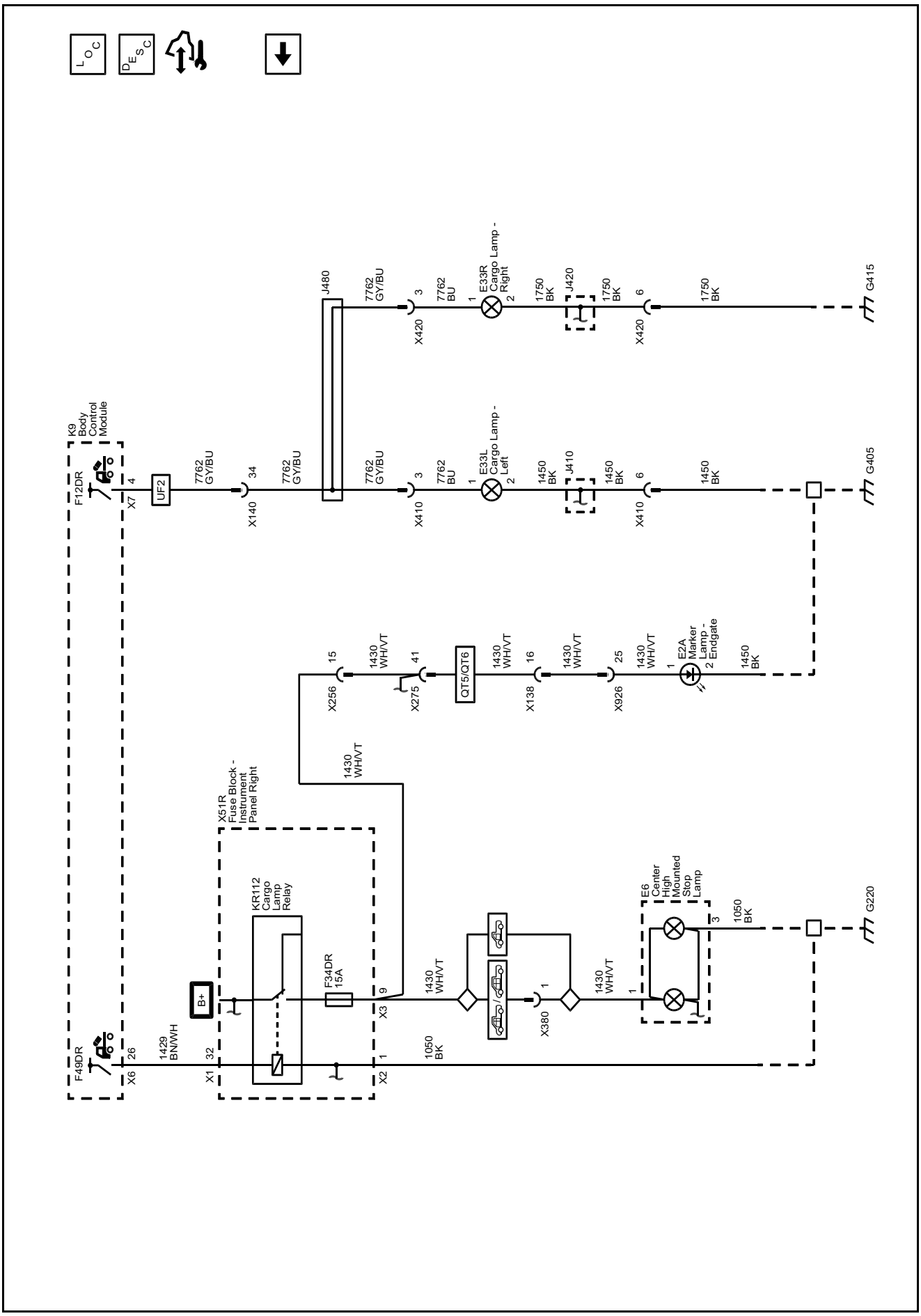
Exterior Lights Schematics (Mirrors (DEZ/DLF))



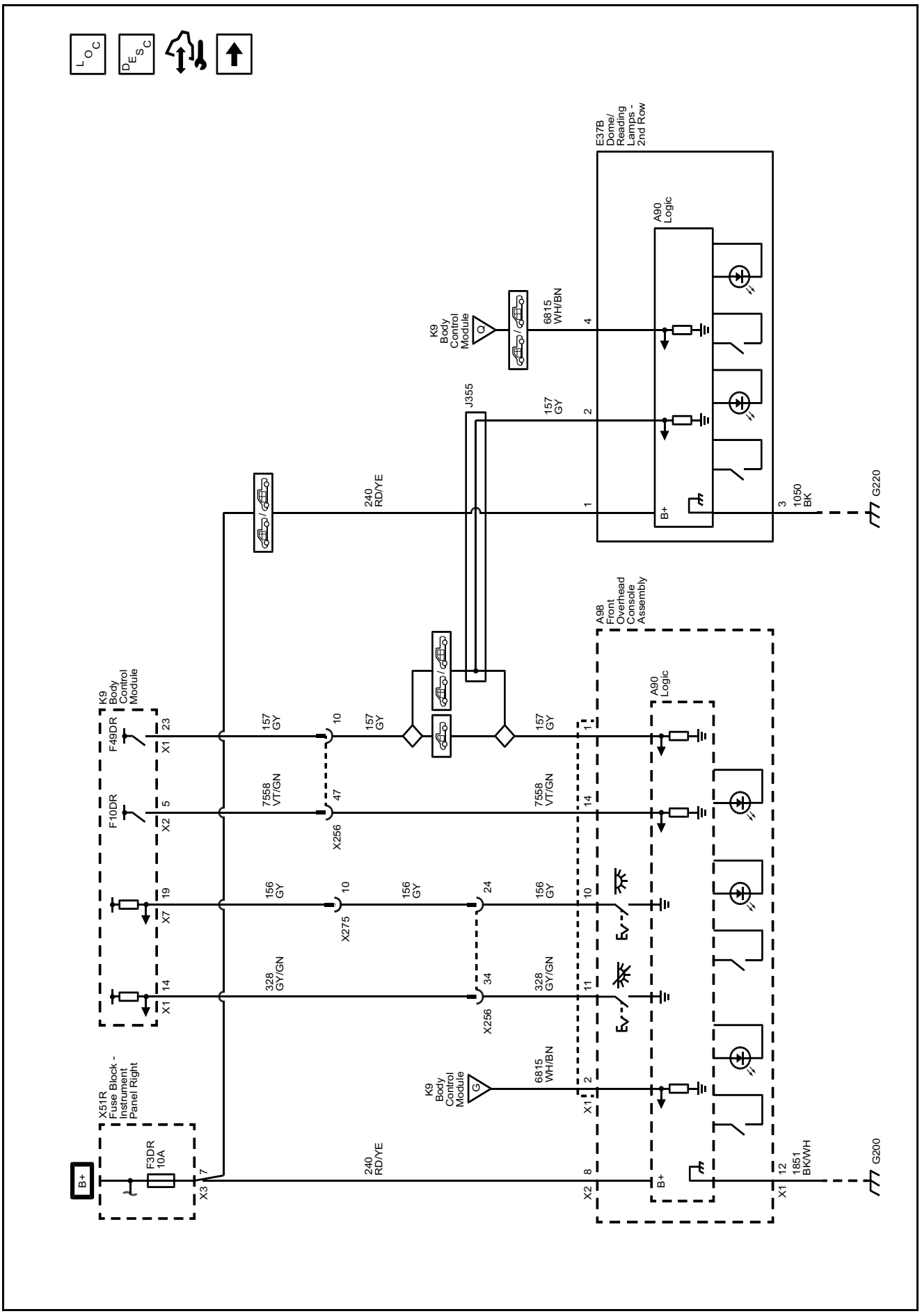
Exterior Lights Schematics (License Plate Lamps)



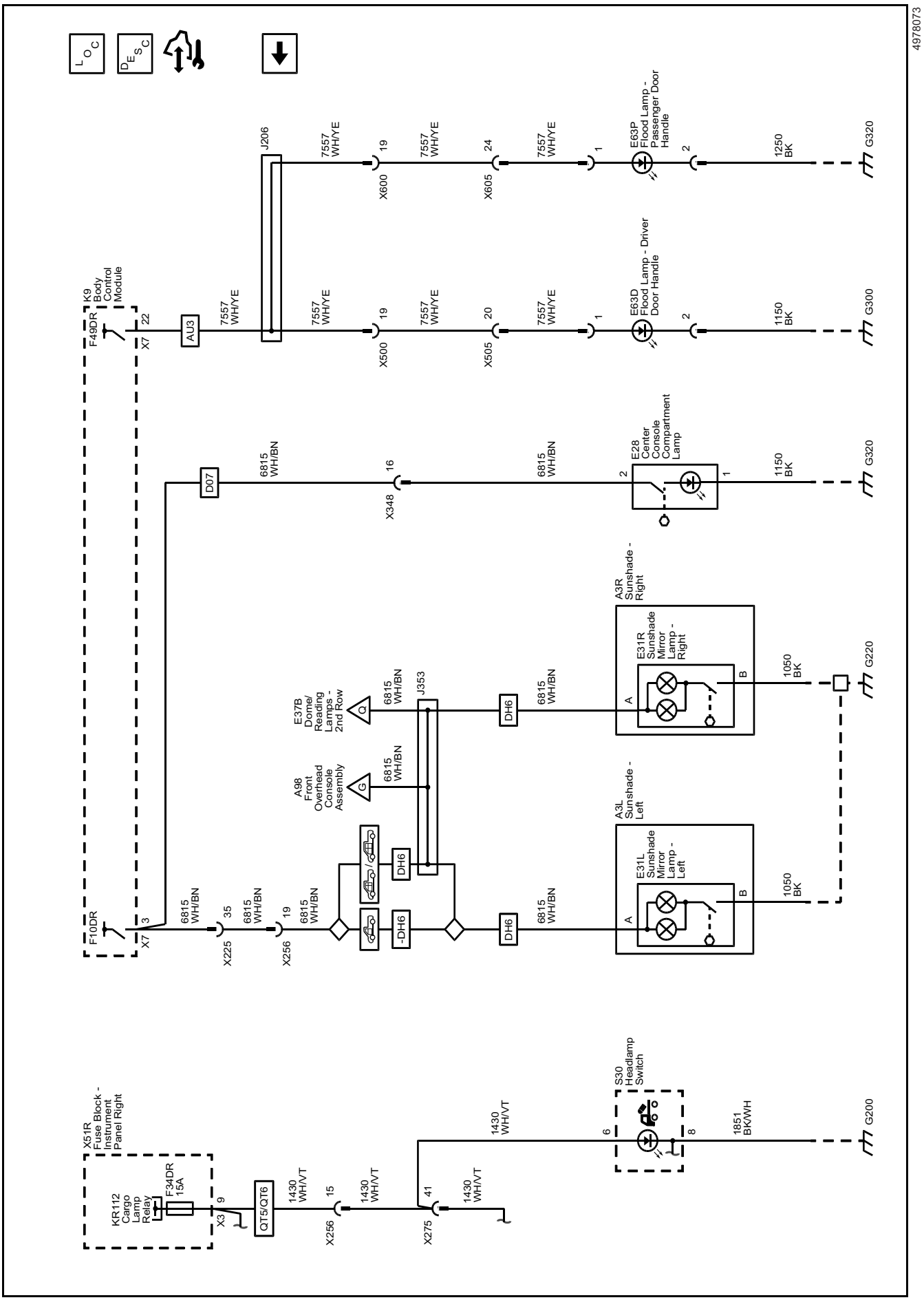
Exterior Lights Schematics (Cargo Lamps (UF2))



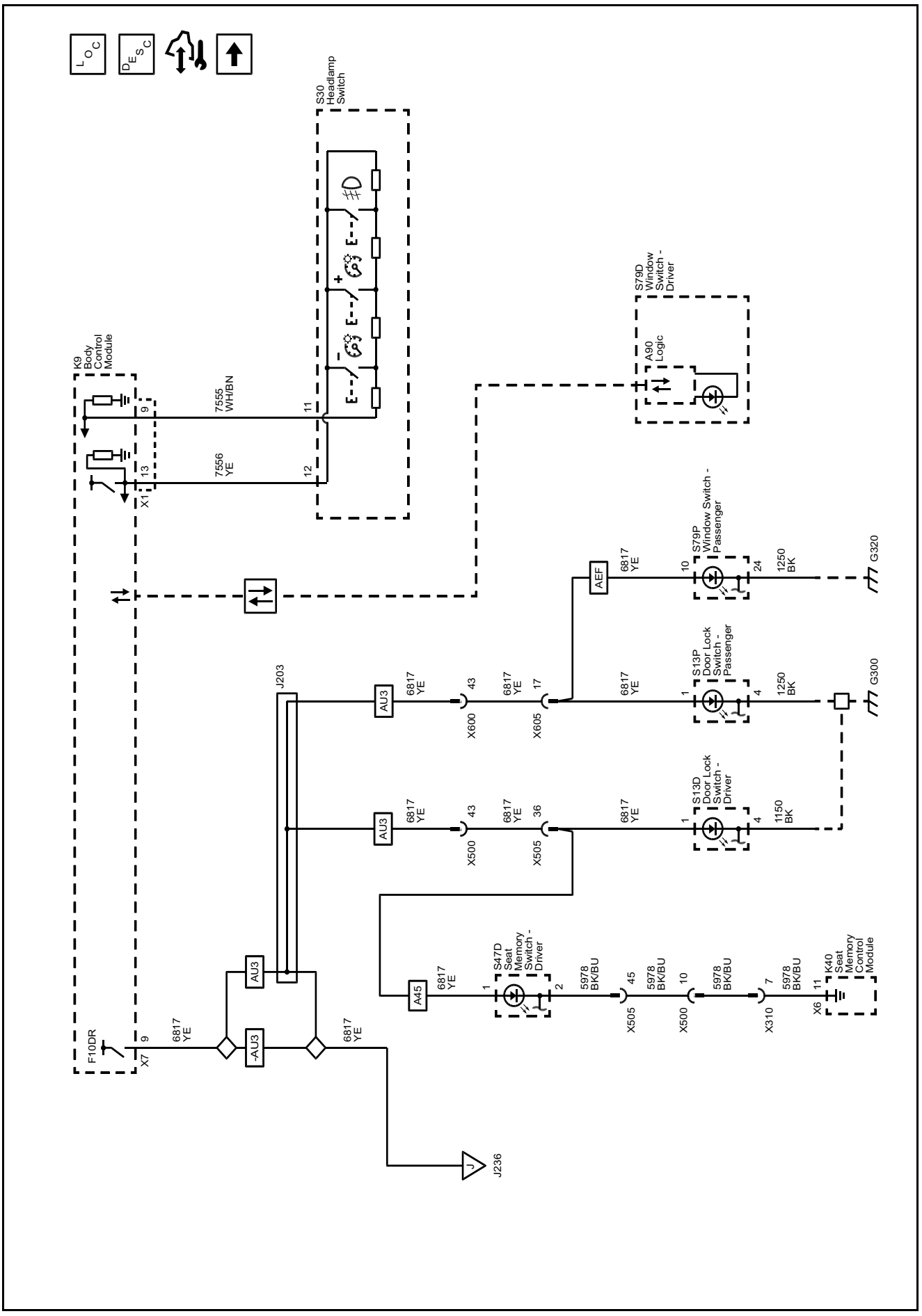
Interior Lights Schematics (Controls and Overhead Lamps)



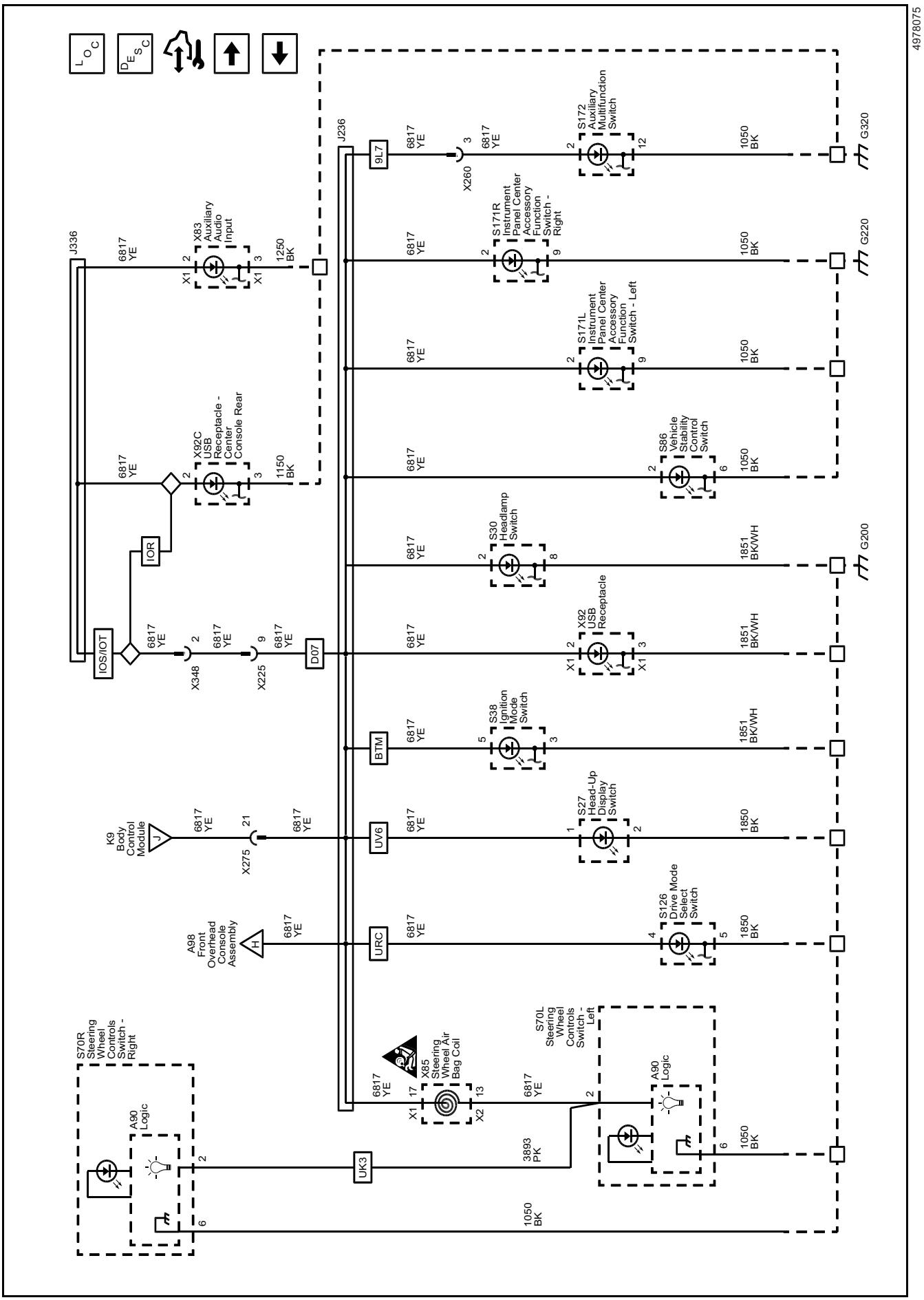
Interior Lights Schematics (Cargo Lamp Indicator, Sunshade, Center Console, and Door Lamps)



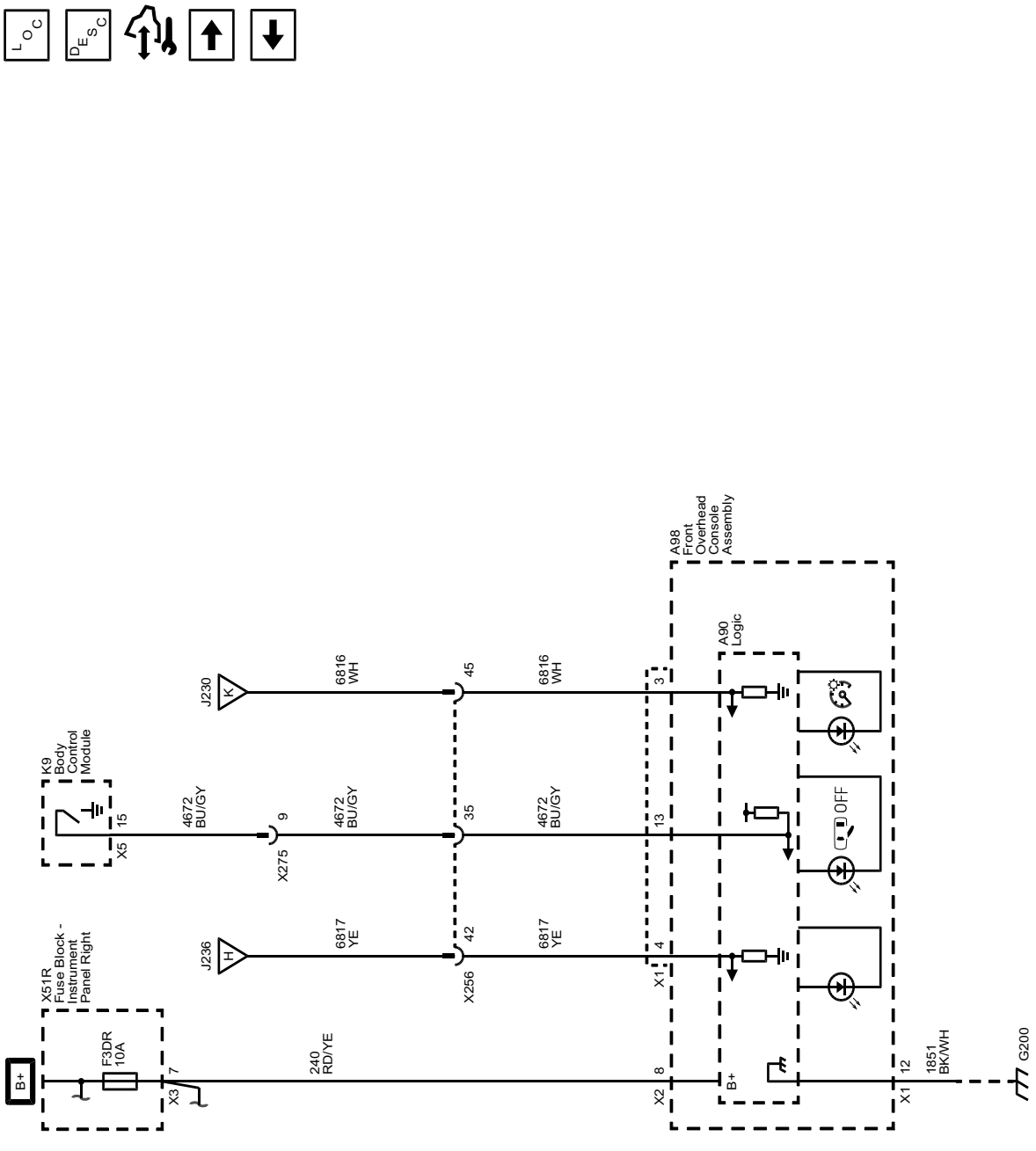
Interior Lights Dimming Schematics (Controls and Backlights (1 of 2))



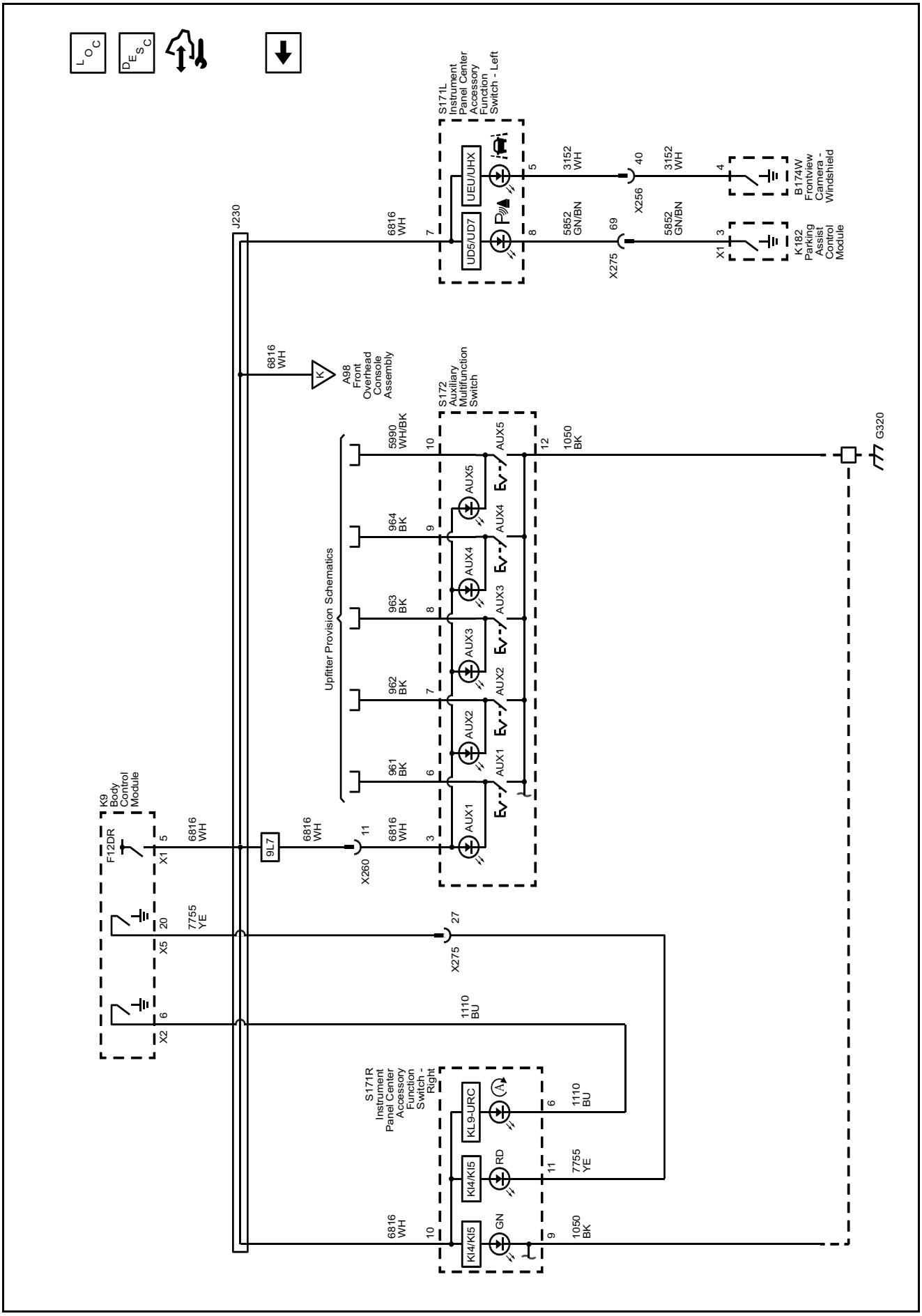
Interior Lights Dimming Schematics (Backlights (2 of 2))



Interior Lights Dimming Schematics (Front Overhead Console Assembly)



Interior Lights Dimming Schematics (Indicators)



Description and Operation

Exterior Lighting Systems Description and Operation

The exterior lighting system consist of the following lamps:

- Automatic high beam assist
- Backup lamps
- Daytime running lamps
- Front fog lamps
- Hazard warning lamps
- Headlamps
- Park, tail, license, and marker lamps
- Stop lamps
- Turn signal lamps
- Trailer lighting

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
- When the headlamp switch is placed in the AUTO position, with the windshield wipers ON in daylight conditions, after a 6 second delay

The BCM will also command the low beam headlamps ON during daylight conditions when the following conditions are met:

- Headlamp switch in the AUTO position
- Windshield wipers ON
- Vehicle in any gear but PARK

When the BCM commands the low beam headlamps ON, the vehicle operator will notice the interior backlighting for the instrument cluster and the various switches with backlighting control will dim to the level of brightness selected by the instrument panel dimmer switch.

The body control module (BCM) monitors three signal circuits from the headlamp switch. When the headlamp switch is in the AUTO position, all three signal circuits are open. When placed in the AUTO position, the BCM monitors inputs from the ambient light sensor 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 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 position, the headlamp switch park lamps ON signal circuit is grounded, indicating that the park lamps have been requested. When the headlamp switch is placed in the HEADLAMP position, both the headlamp switch park lamps ON signal circuit and the headlamp switch headlamps ON signal circuit are grounded. The BCM responds to the inputs by illuminating the park lamps and headlamps. When the low beam headlamps are requested, the BCM applies B+ to both low beam headlamp control circuits illuminating the low beam headlamps.

High Beam Headlamps

When the low beam headlamps are ON and the turn signal/multifunction switch is placed in the high beam position, ground is applied to the BCM through the high beam signal circuit. The BCM responds to the high beam request by applying ground to the high beam relay control circuit which energizes the high beam relay. With the high beam relay energized, the switch contacts close allowing battery voltage to flow through the high beam fuse to the high beam control circuits to there respective high beam solenoid actuators located within the headlamp assemblies. With the left and right high beam solenoid actuators active, the solenoid shutters open in each headlamp assembly exposing the remaining portion of the headlamp that was covered by the shutters illuminating the high beams at full intensity.

Automatic High Beam Assist (AHBA)

The automatic high beam assist (AHBA) system operates the high beam headlamps ON and OFF automatically when the system is activated and certain conditions are met. 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. AHBA can be deactivated when the headlamp dimmer switch is moved from the neutral position to the high beam or flash to pass positions. AHBA can be reactivated by operating the high beam select switch from the neutral position to the high beam position twice within 2 seconds.

AHBA System Activation

- Vehicle ON
- Headlamp switch placed in the AUTO position
- Headlamp dimmer switch must be in the neutral 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 dimmer 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 will illuminate continuously when the following conditions are met:

- The ignition is in the RUN or CRANK position
- The shift lever is out of the PARK position for vehicles equipped with automatic transmissions or the parking brake is released for vehicles with manual transmissions
- The low and high beam headlamps are OFF

The ambient light 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 body control module (BCM) provides a 5 V reference signal to the ambient light sensor and the HVAC control module provides a low reference ground. The BCM monitors the ambient light sensor signal circuit to determine if outside lighting conditions are correct for either daytime running lights or automatic lamp control when the headlamp switch is in the AUTO position. In daylight conditions the BCM applies B+ to both daytime running lamp control circuits to the left and right multifunction light emitting diode (LED) control modules located in each headlamp assembly. The multifunction LED control modules respond the to the B+ input from the BCM by illuminating the left and right daytime running lamp LED's. Any function or condition that turns on the low beam headlamps will cancel daytime running lamps operation.

Flash to Pass

When the turn signal/multifunction 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 body control module (BCM) through the flash to pass switch signal circuit. The BCM responds to the flash to pass request by applying ground to the high beam relay control circuit. This energizes the high beam relay, closing the switch side contacts of the high beam relay, applying battery voltage to the 3 pin high beam fuse. Battery voltage is applied from the high beam fuse through the high beam control circuit to the high beam headlamp assemblies. This causes the high beam headlamps to illuminate at full brightness momentarily.

Front Fog Lamps

The front fog lamp relay is supplied with battery voltage at all times. The front fog lamp switch signal circuit is grounded momentarily by pressing the front fog lamp switch. The body control module (BCM) energizes the front fog lamp relay by applying ground to the front fog lamp relay control circuit. When the front fog lamp relay is energized, the relay switch contacts close and battery voltage is applied through the front fog lamp fuse to the front fog lamp supply voltage circuit which illuminates the front fog lamps.

Hazard Lamps

The hazard flashers may be activated in any power mode. The hazard switch signal circuit is momentarily grounded when the hazard switch is pressed. The body control module (BCM) responds to the hazard switch signal input by supplying battery voltage to all four turn signal lamps in an ON and OFF duty cycle. When the hazard switch is activated, the BCM sends a serial data message to the instrument panel cluster requesting both turn signal indicators to be cycled ON and OFF.

The instrument panel dimmer switch controls the brightness of the interior backlighting components. When the instrument panel dimmer switch is placed in a desired brightness position, the body control module (BCM) receives a signal from the instrument panel dimmer switch and responds by applying a pulse width modulated voltage to the hazard switch light emitting diode (LED) backlighting control circuit illuminating the LED to the desired level of brightness.

Park, Tail, and License Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, and license lamps control circuits illuminating the park, tail, and license lamps.

Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will apply 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.

Turn Signal Lamps

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 body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the front and rear turn signal lamps through there respective control circuits. When a turn signal request is received by the BCM, a serial data message is sent to the instrument cluster requesting the respective turn signal indicator be pulsed ON and OFF.

Backup Lamps

Automatic Transmission

With the engine ON and the transmission in the REVERSE position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the REVERSE position. The BCM applies battery voltage to the backup lamps control circuit illuminating the backup lamps. Once the driver moves the gear selector out of the REVERSE position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamps control circuit. The engine must be ON for the backup lamps to operate.

Manual Transmission

The engine control module (ECM) provides a signal circuit to the backup lamp switch which is permanently grounded. With the engine running and the transmission in the reverse position, the backup lamp switch signal circuit is pulled low and the ECM responds by sending a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the ECM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit. The engine must be running for the backup lamps to operate.

Exterior Courtesy Lighting

Cargo Lamps

The cargo lamps are controlled by a cargo lamp relay and a dedicated cargo lamp control circuit from the body control module (BCM). The cargo lamp relay is supplied with ground at all times. The cargo lamp switch signal circuit is grounded momentarily by pressing the cargo lamp switch located within the headlamp switch. The body control module (BCM) responds by energizing the cargo lamp relay by applying battery voltage to the cargo lamp relay control circuit as well as the dedicated cargo lamp control circuit. When the cargo lamp relay is energized, the relay switch contacts close and battery voltage is applied through the cargo lamp fuse to the cargo lamp supply voltage circuit which illuminates the cargo lamps. Cargo lamps are located in the center high mounted stop lamp assembly, truck bed, and tailgate handle when equipped.

Forward Flood Lamps

The flood lamp switch signal circuit is grounded momentarily by pressing the flood lamp switch located within the headlamp switch. The body control module (BCM) responds by applying battery voltage to the exterior flood lamp control circuits which illuminates the forward exterior flood lamps located within the exterior mirror assemblies. If the exterior flood lamps are left on with the vehicle off, the lights will shut off after approximately 10 minutes to prevent total battery discharge. The exterior flood lamps will immediately turn off if the vehicle leaves the parked position.

Lower Flood Lamps

The body control module (BCM) supplies battery voltage to the exterior LED lighting located under each outside rearview mirror for approach lighting. When the keyless entry transmitter is operated to either the lock or unlock functions the LED lighting located under each outside rearview mirror are commanded ON for approach lighting.

Trailer Lighting (With U1D)

The trailer lighting control module is supplied with battery voltage as well as ignition voltage and is permanently grounded. For lighting operation, the trailer lighting control module receives serial data messages from the body control module (BCM) indicating what lamps have been activated on the vehicle. The trailer lighting control module responds by applying voltage to the appropriate control circuits for the requested lamps illuminating the lamps on the attached trailer. The trailer lighting 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 lighting 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.

Backup Lamps

With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message that indicates the gear selector is in the reverse position. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Backup Lamps control circuit when a trailer is connected. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the Trailer Lighting Control Module to remove battery voltage from the backup lamp control circuit.

Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Park Lamp control circuit when a trailer is connected.

Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the stop lamp relay circuit by applying voltage to the stop lamp relay control circuit. The Trailer Lighting Control Module senses the voltage on the stop lamp relay circuit and responds by applying voltage to the X88 Trailer Connector on the left and right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

Turn Signal Lamps

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 body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on either the left or right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

Trailer Lighting (Without U1D)

Backup Lamps

For backup lamp operation, the backup lamp relay is supplied with battery voltage at all times. With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit.

Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, license lamps, and trailer park lamps control circuits illuminating the park, tail, license, and trailer park lamps.

Stop Lamps

For stop lamp operation, the left and right trailer stop/ turn signal lamp relay's are supplied with battery voltage at all times. The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the left and right trailer stop/turn signal lamp relay's by applying voltage to the left and right stop lamp relay control circuits. With the left and right trailer stop/turn signal lamp relay's energized, the relay switch contacts close and battery voltage is applied through the left and right trailer stop/turn signal fuse's to the trailer stop lamp control circuits which illuminates the trailer stop lamps.

Turn Signal Lamps

For turn signal lamp operation, the left and right trailer stop/turn signal lamp relay's are supplied with battery voltage at all times. 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 body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the left and right trailer stop/turn signal lamp relay control circuits energizing the relay's in an ON and OFF cycle. With the left and right trailer stop/turn signal lamp relay's energized, the relay switch contacts cycle ON and OFF applying battery voltage through the left and right trailer stop/turn signal fuse's to the trailer turn signal lamp control circuits which illuminates the trailer turn signal lamps in an ON and OFF cycle.

Battery Run Down Protection/ Inadvertent Power

To provide battery run down protection, the exterior lamps will be deactivated automatically under certain conditions. The BCM monitors the state of the headlamp switch. If the park or headlamp switch is ON when the ignition switch is placed in either the CRANK or RUN position and then placed in the OFF position, the BCM initiates a 10 minute timer. At the end of the 10 minutes, the BCM will turn off the control power output to the park lamp controls as well as the headlamp relay coils, deactivating the exterior lamps. 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 placed in 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 may not be dimmed.

- Dome lamps
- Center console compartment lamps
- Reading lamps
- Sunshade mirror lamps

Dome Lamps

The dome lamp switch has 3 positions: DOOR, OFF, and ON. The ON position provides a ground for continuous operation and the dome lamp will remain illuminated until the switch is placed in either the DOOR or OFF position. When in the DOOR position, the dome lamp operation is controlled by the 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 illuminates the dome lamp when any door is opened or 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. When the driver places the dome lamp switch in the OFF position, the dome lamp will be disabled. In the event that the dome lamp were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position and no doors opened, 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 inadvertent power supply voltage circuit from the BCM provides battery voltage to the center console compartment lamp. When the center console is opened, the center console compartment lamp switch contacts close providing a path to ground and the center console compartment lamp illuminates. If the operator inadvertently leaves the center console compartment door open with the center console compartment lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Reading Lamps

The inadvertent power supply voltage circuit from the BCM provides battery positive voltage to each reading lamp. When a reading lamp switch is activated, the switch contacts close providing a path to ground and the reading lamp illuminates. If the operator inadvertently leaves a reading lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Sunshade Mirror Lamps

The inadvertent power supply voltage circuit from the BCM provides battery voltage to each set of sunshade mirror lamps. When the sunshade mirror cover is opened, a switch closes providing ground and the sunshade lamps illuminate. If the operator inadvertently leaves a sunshade mirror cover open with the lamps ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

Keyless Entry Interior Illumination

When the operator uses the keyless entry transmitter in order to unlock the doors, the 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.

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) illumination.

- Dome/reading lamps – front
- Dome/reading lamps – rear
- Door lock switch – driver
- Door lock switch – passenger
- Garage door opener switch
- Headlamp switch
- HVAC control head assembly
- Multifunction switch – instrument panel
- Outside rearview mirror switch
- Park brake switch
- Radio
- Roof beacon switch
- Seat memory switch – driver
- Sliding rear window switch
- Steering wheel control switch – left
- Steering wheel control switch – right
- Sun roof switch
- Sun roof tilt switch
- Transfer case shift control switch
- Trailer brake control switch
- Window switch – driver
- Window switch – passenger

With the headlamp switch in the PARK or HEAD position, the park lamp switch signal circuit provides an input to the body control module (BCM). The BCM responds by applying voltage to the park lamps as well as the backlight dimming control circuits illuminating all components with interior backlighting. All interior backlighting turns ON at the dimming level indicated by the instrument panel dimmer switch. The instrument panel dimmer switch is a momentary type switch and utilizes a resistor ladder to increase and decrease the brightness of the interior backlighting components. The

instrument panel dimmer switch provides a voltage signal to the BCM that will increase as the brightness of the lights are increased and decrease as the brightness of the lights are decreased. The BCM provides a low reference signal and a B+ circuit to the instrument panel dimmer switch. When the instrument panel dimmer switch is held in the desired position, the dimmed voltage setting is applied from the instrument panel dimmer switch through the instrument panel dimmer switch signal circuit to the BCM. The BCM interprets the signal and applies a pulse width modulated voltage through the backlighting control circuits illuminating the interior backlighting to the requested level of brightness.

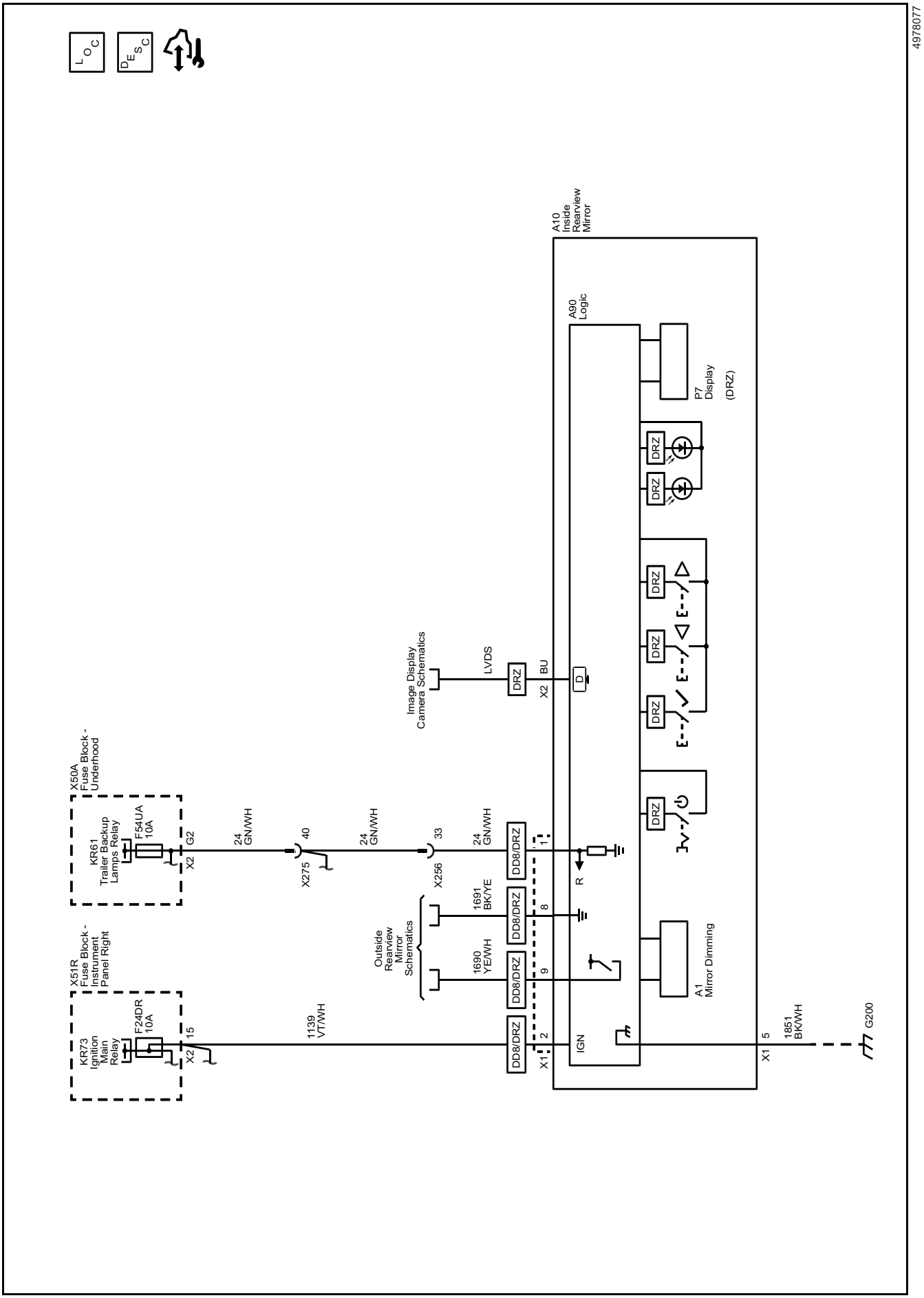
Battery Rundown Protection/ Inadvertent Power

The 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.

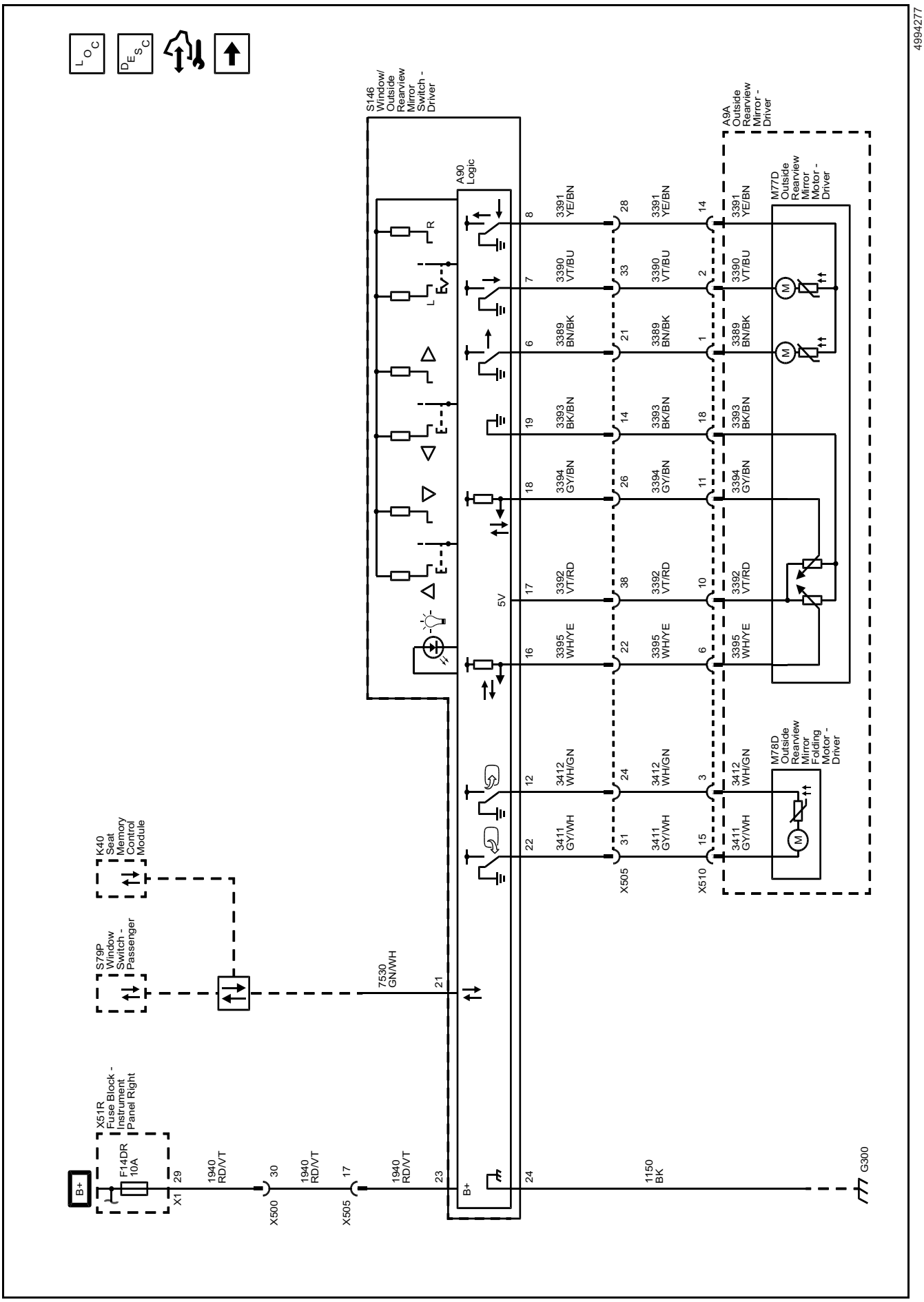
Mirrors

Schematic and Routing Diagrams

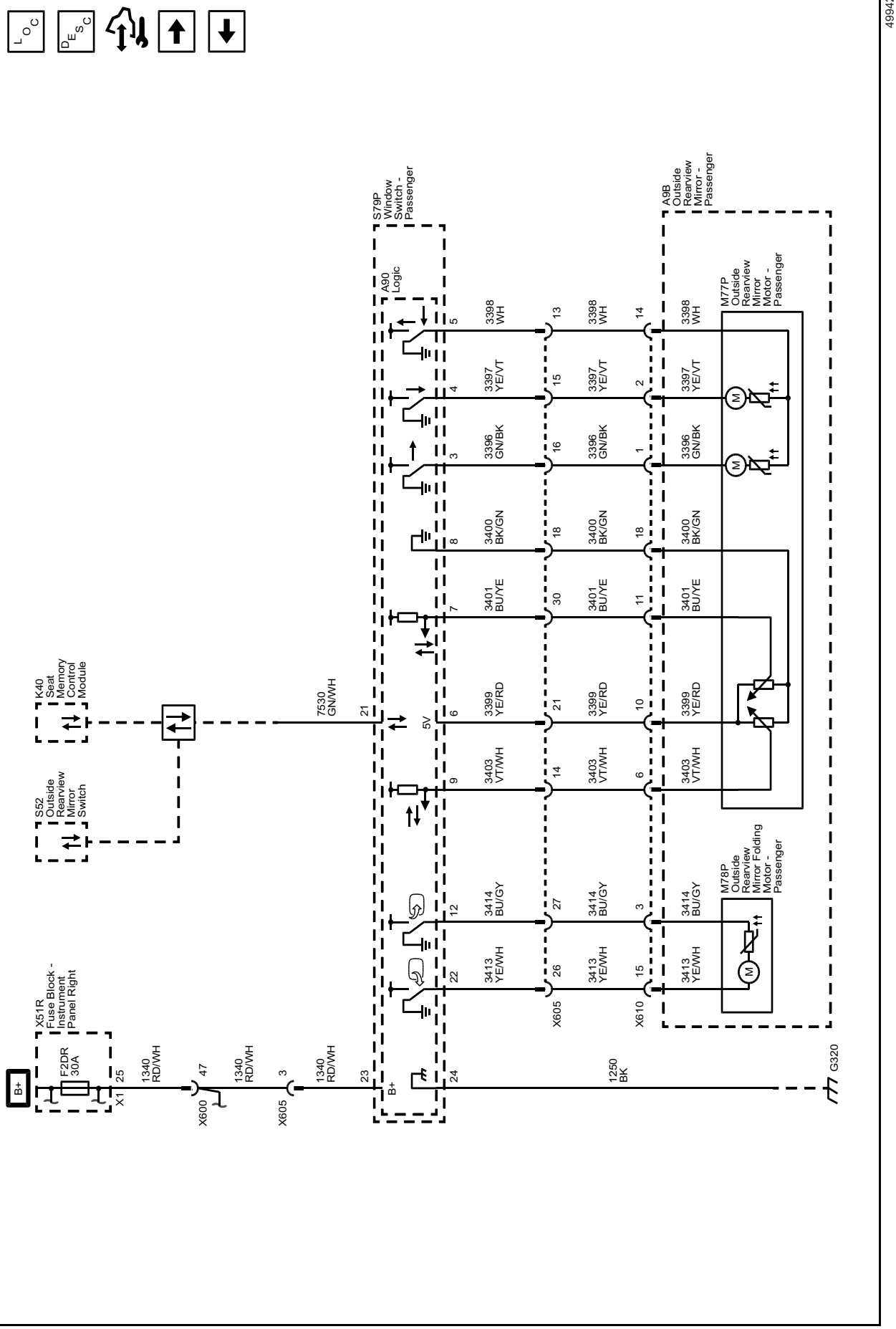
Inside Rearview Mirror Schematics (Inside Rearview Mirror)



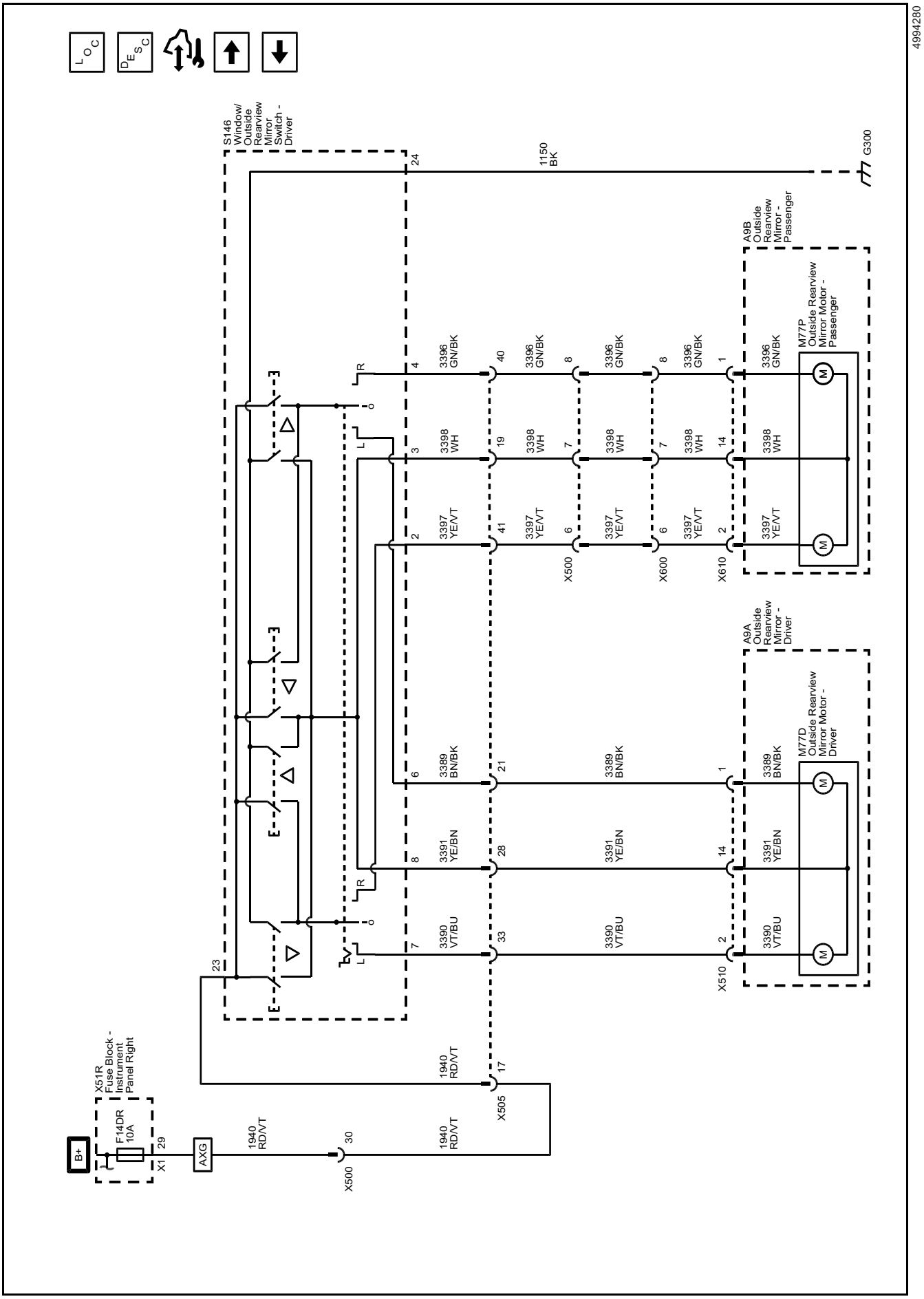
Outside Rearview Mirror Schematics (Controls and Driver (A45))



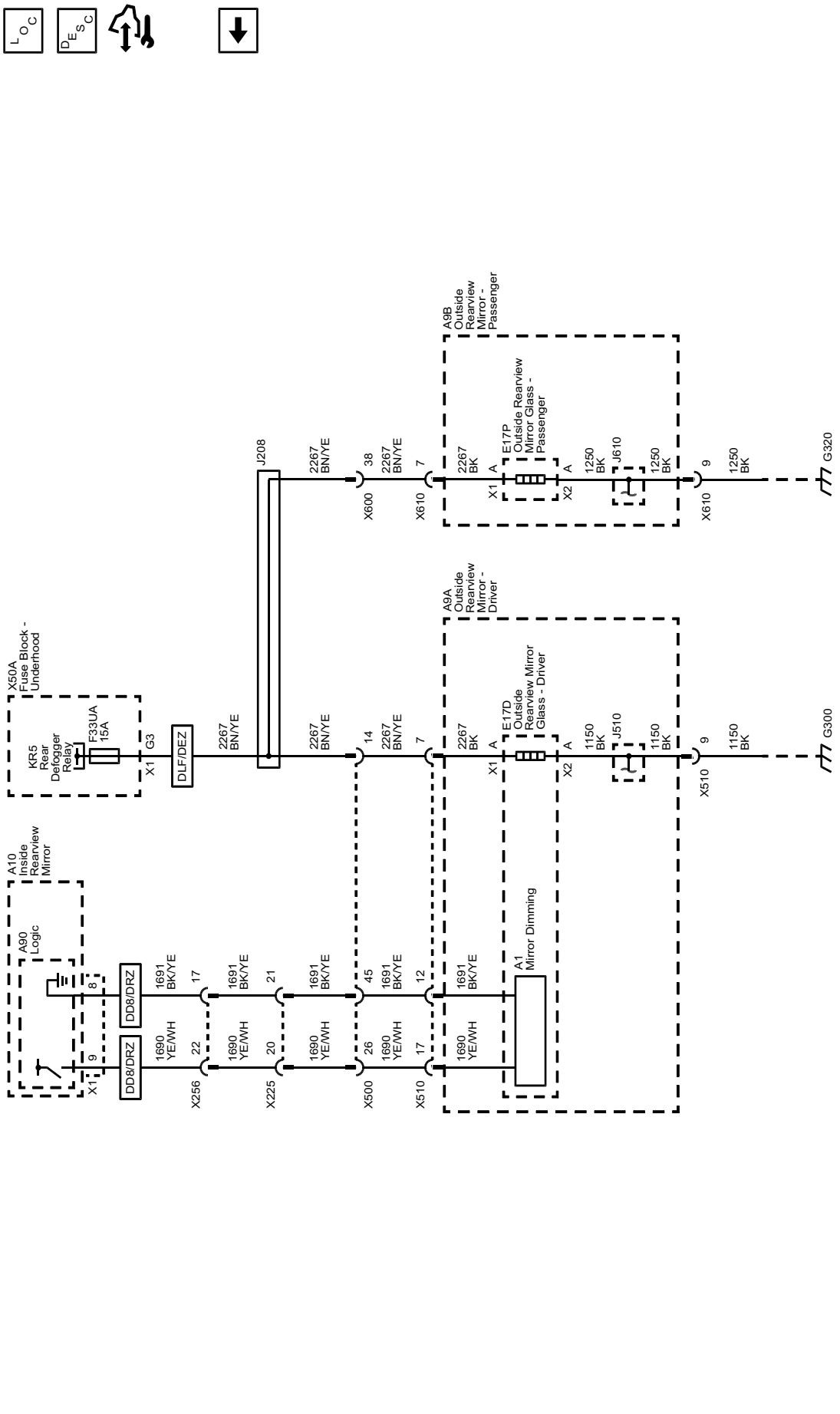
Outside Rearview Mirror Schematics (Passenger (A45))



Outside Rearview Mirror Schematics (Position (AXG-A45))



Outside Rearview Mirror Schematics (Dimming (DD8/DRZ) and Heating (DLF/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 engine running, 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.

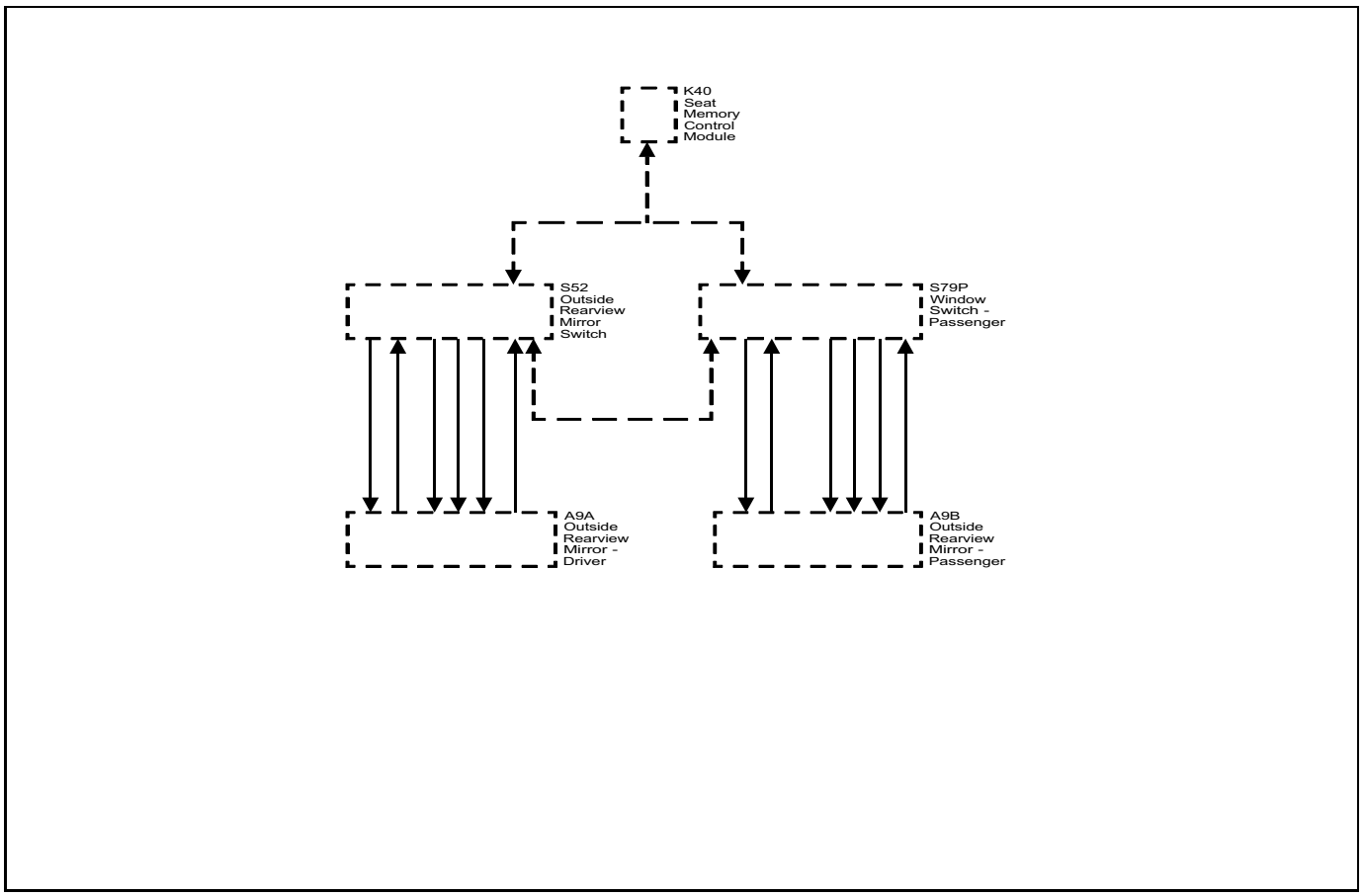
Outside Mirror Description and Operation (With A45)

Power Mirror System Components

The power mirror system consists of the following components:

- Memory Seat Control Module
- Outside Rearview Mirror Switch
- Passenger Window Switch
- Driver Outside Rearview Mirror
- Passenger Outside Rearview Mirror

Power Mirrors with A45 Block Diagram



3520568

Power Mirror System Controls

The outside mirror switch and passenger window switch are on a serial data circuit with the memory seat control module as the master. The mirror select and directional control switches are inputs to the memory seat module through the serial data circuit. When the memory seat module receives switch inputs from the outside mirror switch, mirror output commands are sent to the appropriate switch through the serial data circuit. The outside mirror switch and passenger window switch control the left and right outside rear view mirrors 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 is determined by both horizontal and vertical position sensors in each of the power mirrors. The outside mirror switch and passenger window switch supply 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 switches and the signal circuit voltage levels represent the mirror positions. The mirror positions are sent to the memory seat module through the serial data circuit where they are stored for memory mirror operation. When the memory seat module receives a memory recall command, the memory seat module will send the go to position commands to the outside mirror switch and passenger window switch. The switches will then drive the appropriate mirror motors to the commanded position sensor settings.

Heated Mirrors

The heated mirrors are controlled through the rear defog relay. Whenever the rear window defogger is turned on battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

Outside Mirror Description and Operation (Without A45)

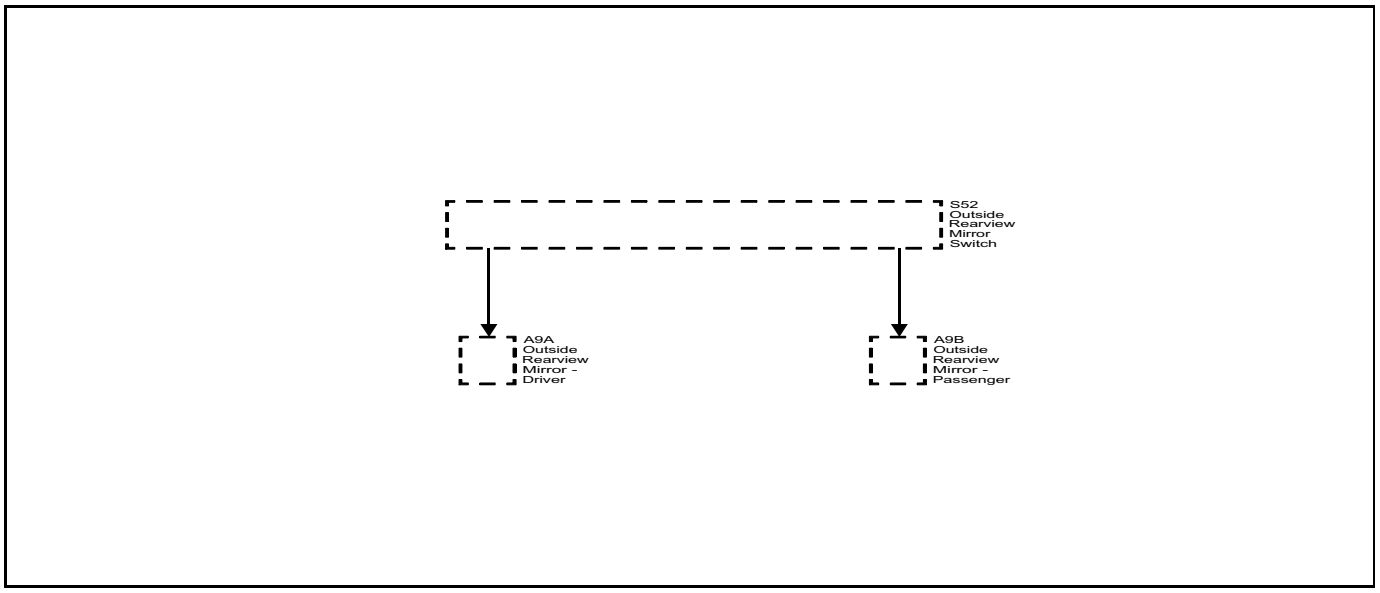
Power Mirror System Components

The power mirror system consists of the following components:

- Mirror direction switch — Controls the left, right, up and down movements of the mirrors
- Mirror select switch — Allows the operator to select the mirror to be moved
- Left outside mirror — Contains both the horizontal and vertical mirror motors
- Right outside mirror — Contains both the horizontal and vertical mirror motors

Each of the outside power mirrors contains 2 motors. The up-down motor operates the vertical directions and the left-right motor operates the horizontal directions. Each of the power mirror motors are internally circuit breaker protected.

Power Mirrors Without A45 Block Diagram



3270441

Power Mirror System Controls

The outside mirror switch incorporates a mirror select switch and a 4 position mirror direction switch.

The mirror select switch allows the driver to select the mirror to be moved by turning the switch to L position enabling the left outside mirror or turning the switch to R position enabling the right outside mirror.

The mirror direction switch is a 4 position switch that allows the operator to move the selected mirror up, down, left or right.

Power Mirror System Operation

The outside mirror switch receives power through the battery positive voltage circuit from the underhood fuse block. The outside mirror switch also receives a constant ground.

The 4 positions of the direction switch have multiple switch contacts. When not in use, the directional contacts are isolated from any circuit. Each of the contacts are connected to opposing sides of the appropriate mirror motors through the selector switch. The selector switch interrupts or completes these circuits depending on the position of the selector switch, L or R.

If the mirror select switch is placed in the L position and the up switch is pressed, battery voltage will be supplied to the driver outside mirror vertical motor through the driver mirror motor up control circuit and return to the mirror switch through the driver mirror motor left/down control circuit, then to ground and the mirror will move up. If the down switch is pressed, the driver mirror motor left/down control circuit supplies battery voltage and the driver mirror motor up control circuit completes the path to the mirror switch, then to ground and the mirror will move down.

The remainder of the mirror functions operate in the same manner as described above. Placing the mirror control switch in opposing positions, left/right or up/down, will reverse the voltage polarity to the mirror motor, utilizing the same circuits and the mirror will move accordingly.

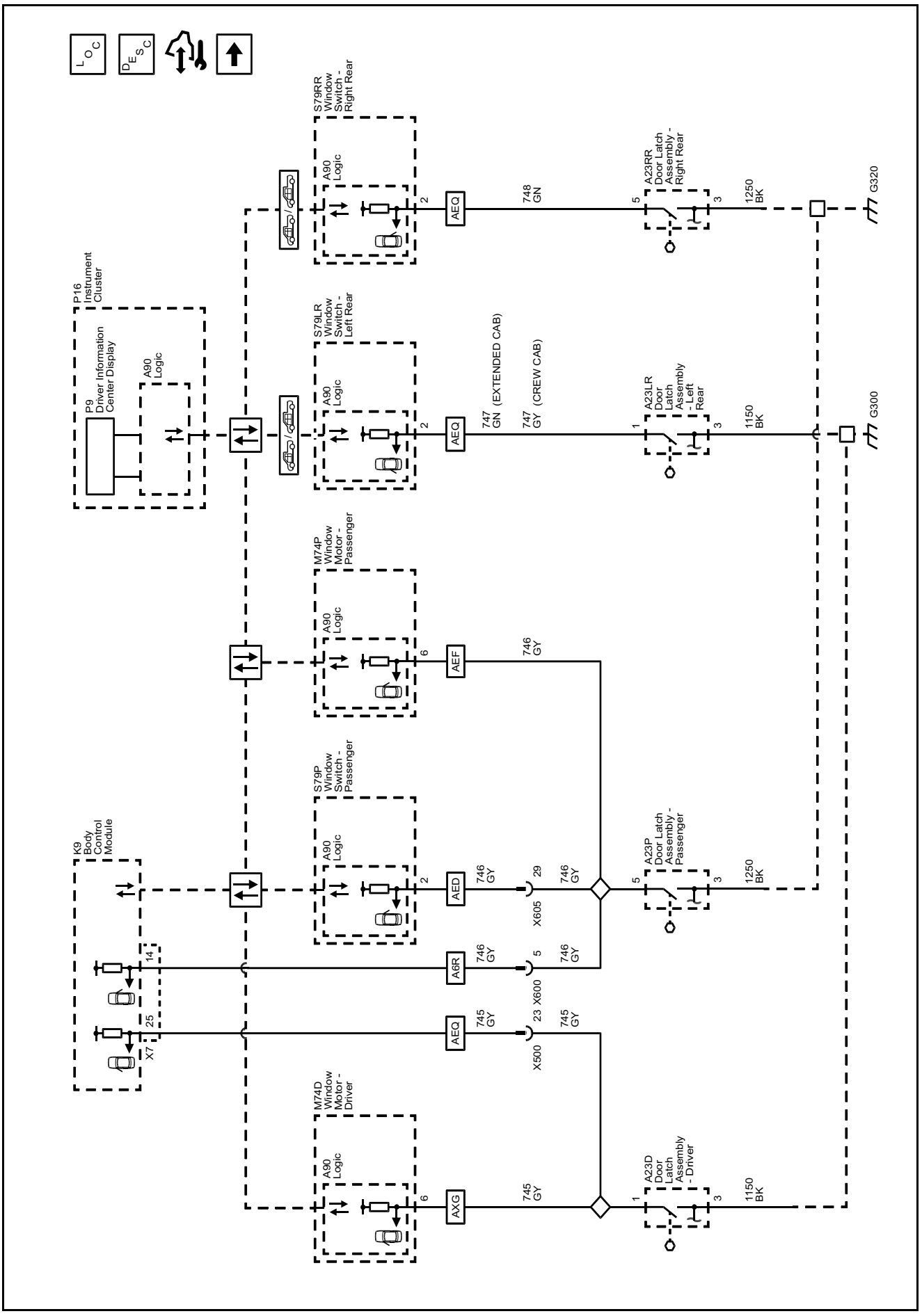
Heated Mirrors

The heated mirrors are controlled through the rear defog relay. Whenever the rear window defogger is turned ON, battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

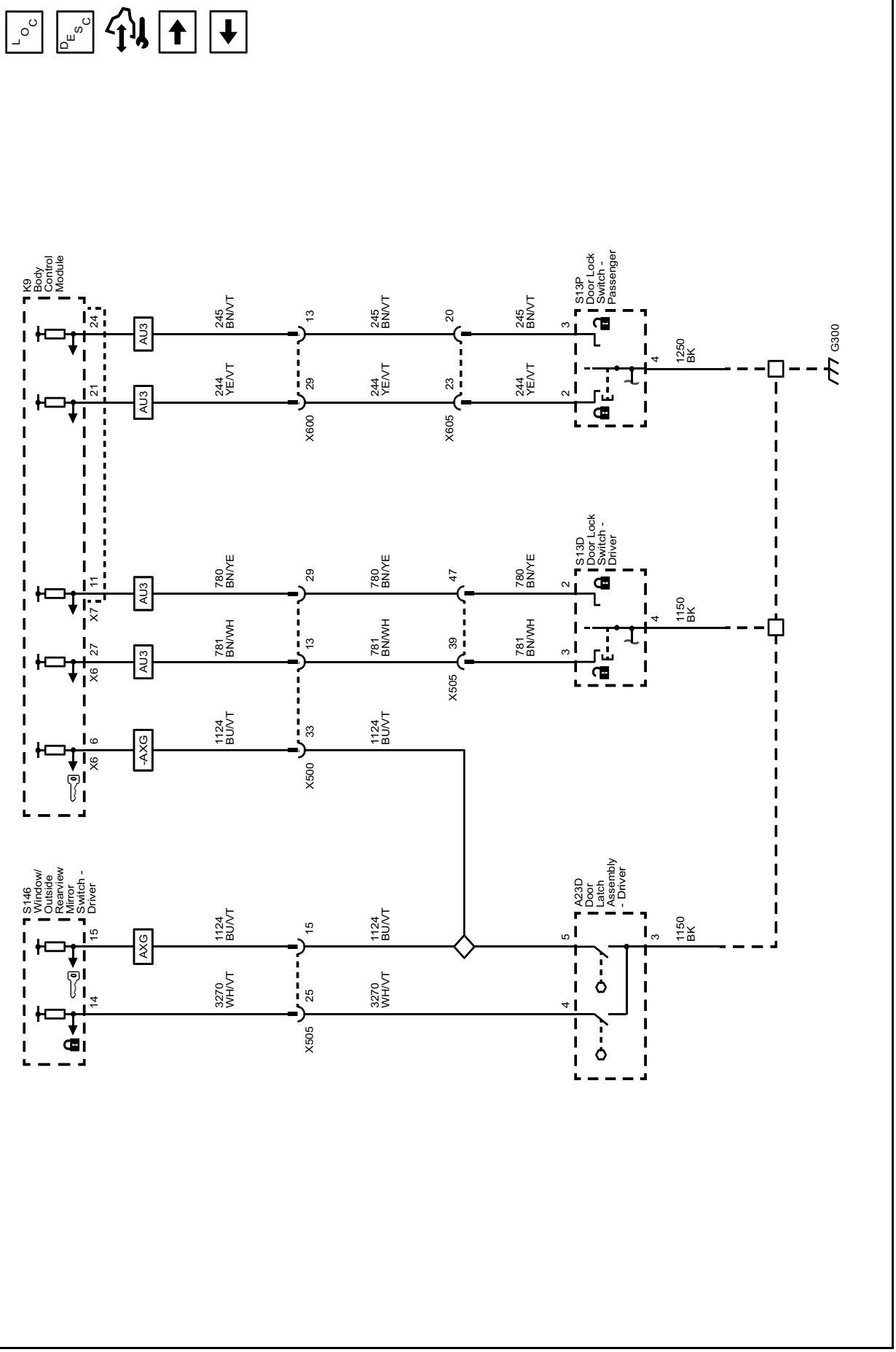
Vehicle Access

Schematic and Routing Diagrams

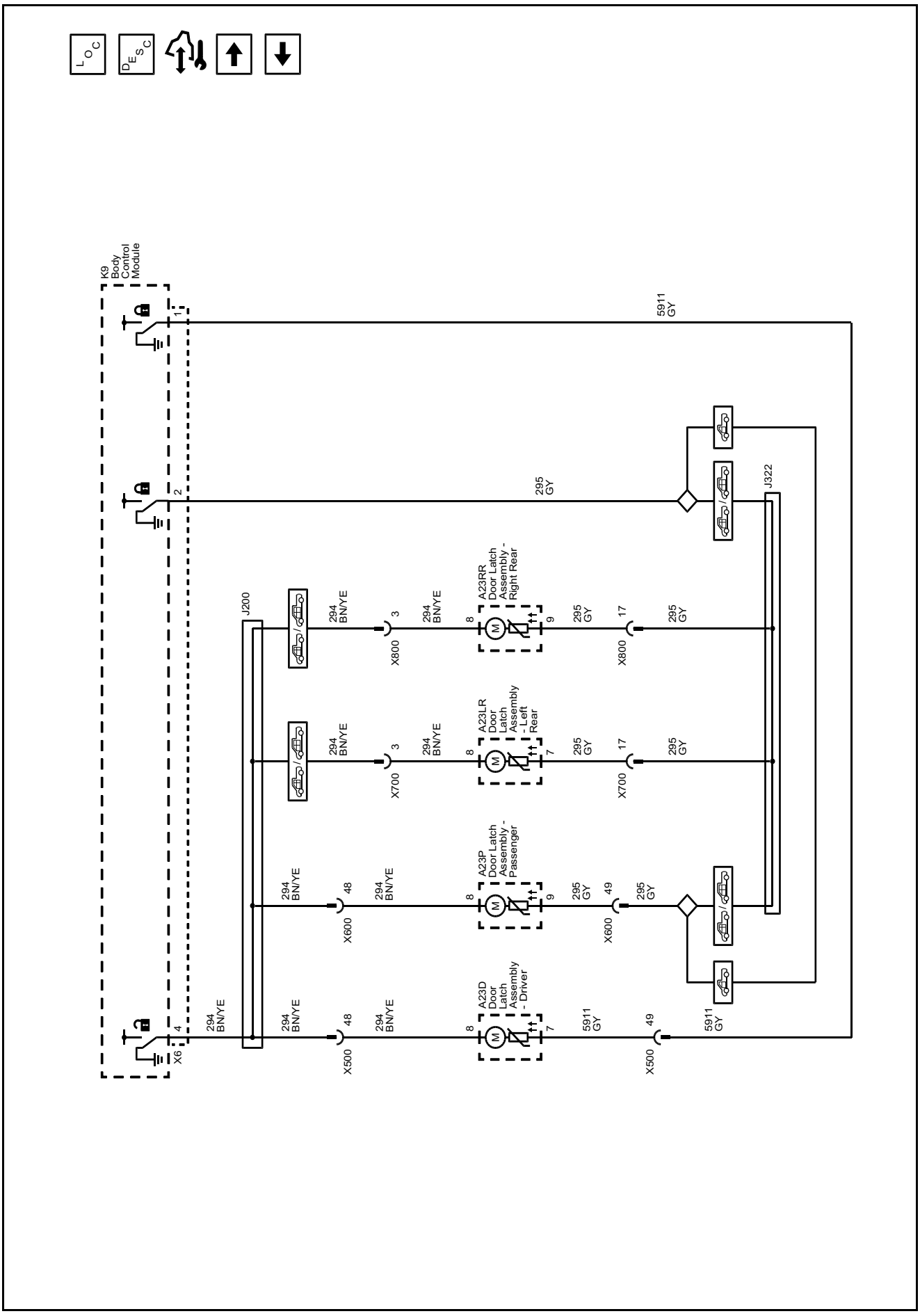
Door Lock/Indicator Schematics (Ajar Switches)



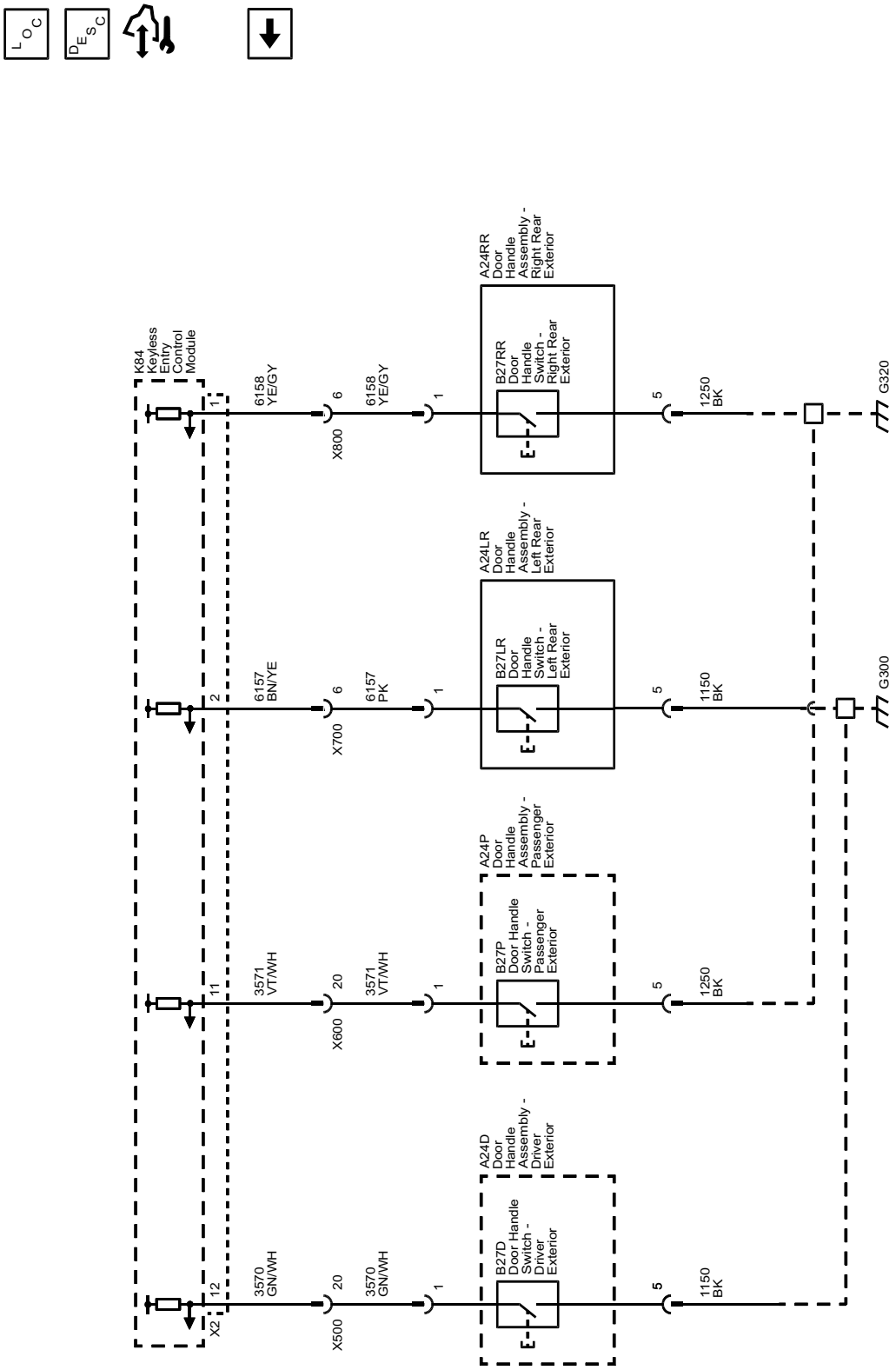
Door Lock/Indicator Schematics (Controls and Lock Indicators)



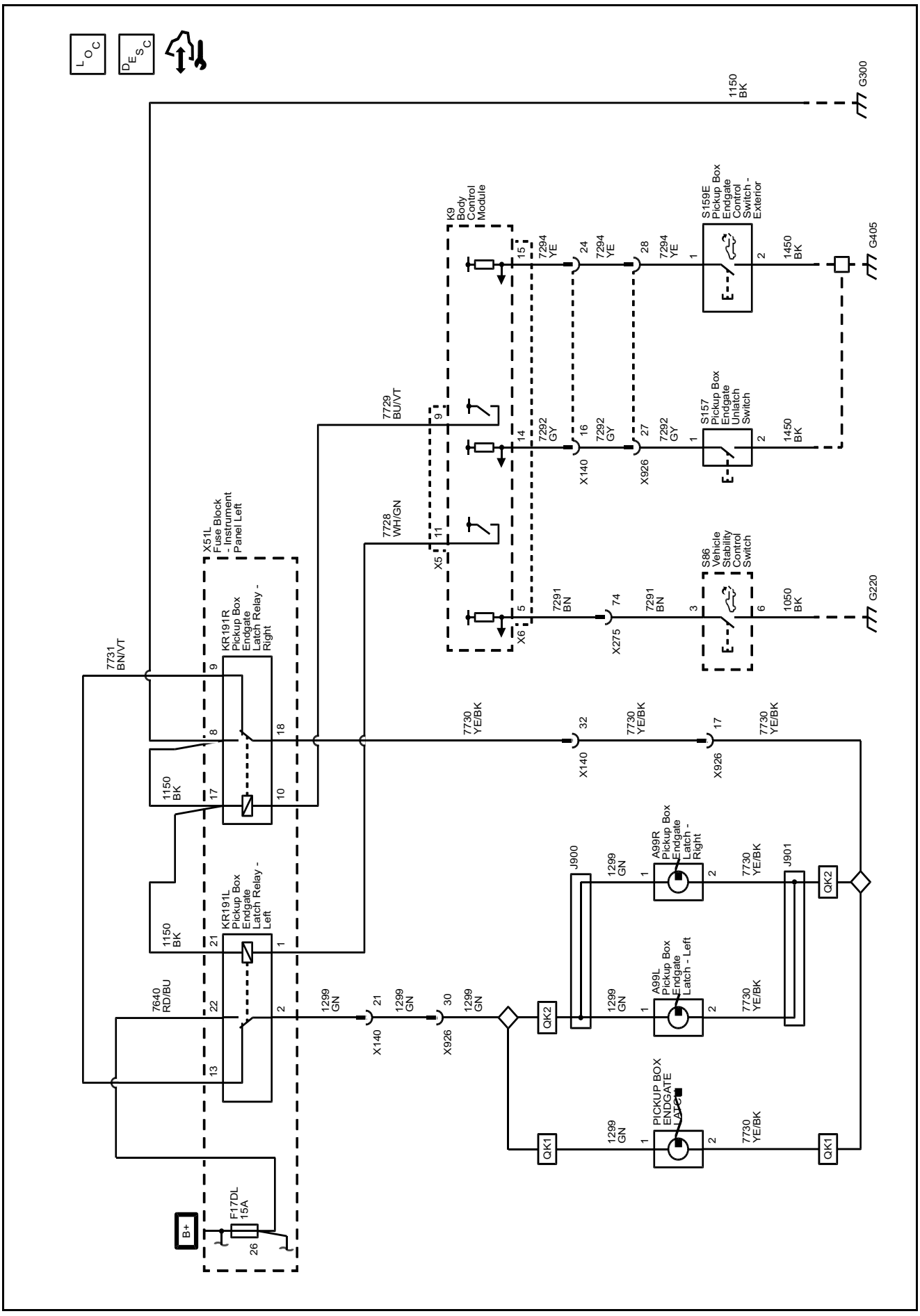
Door Lock/Indicator Schematics (Actuators)



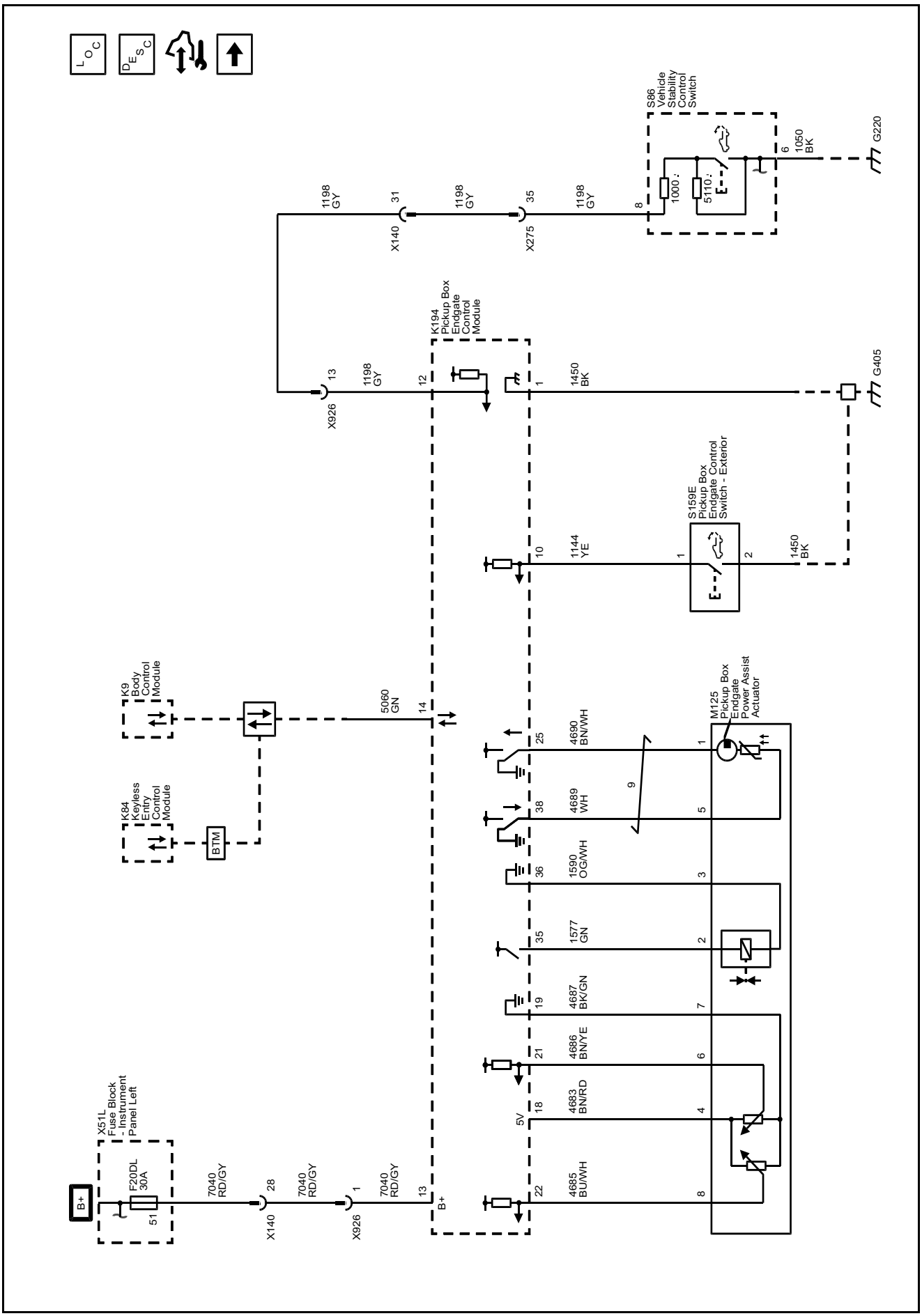
Door Lock/Indicator Schematics (Handle Switches)



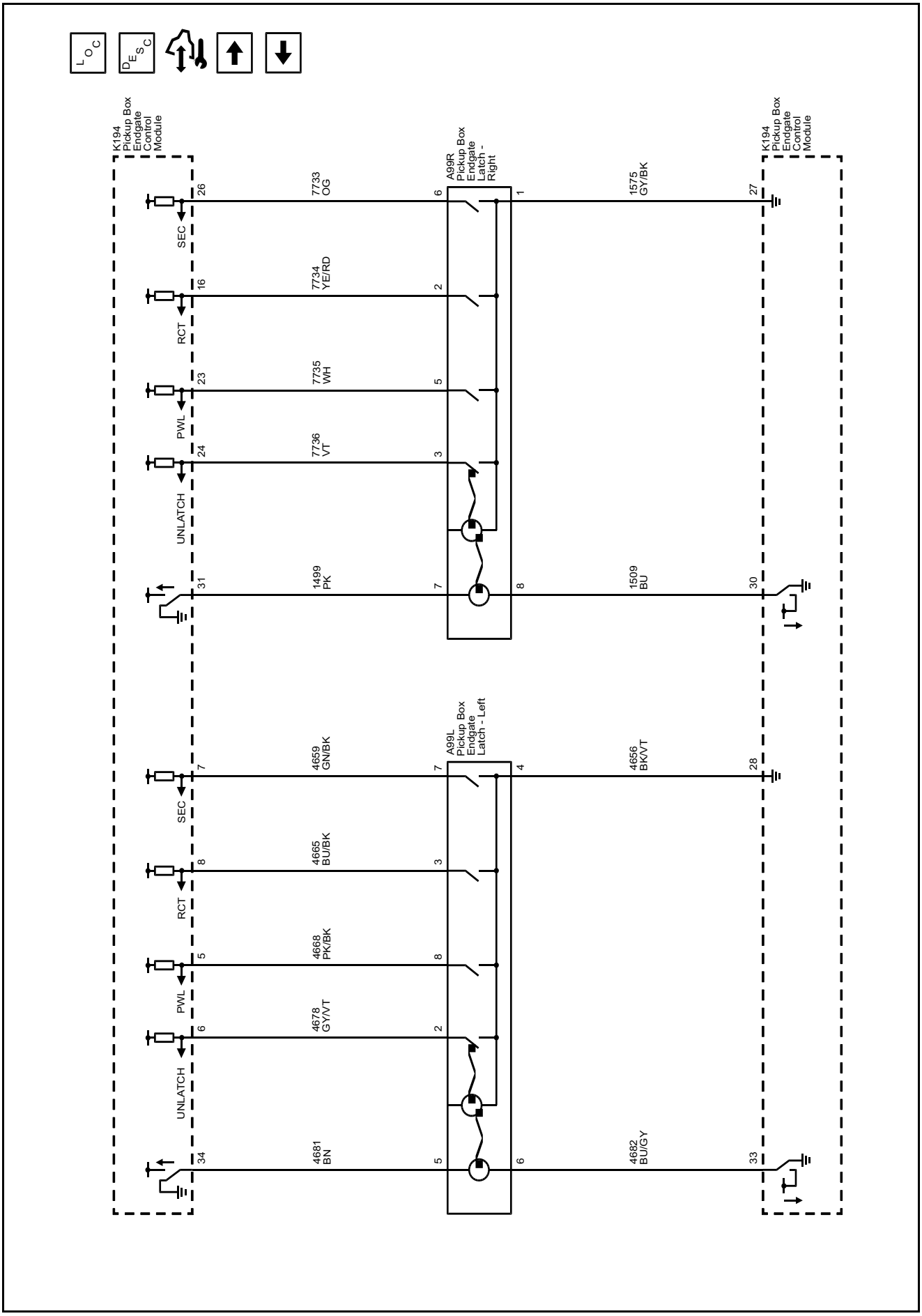
Release Systems Schematics (Endgate Release (QT5))



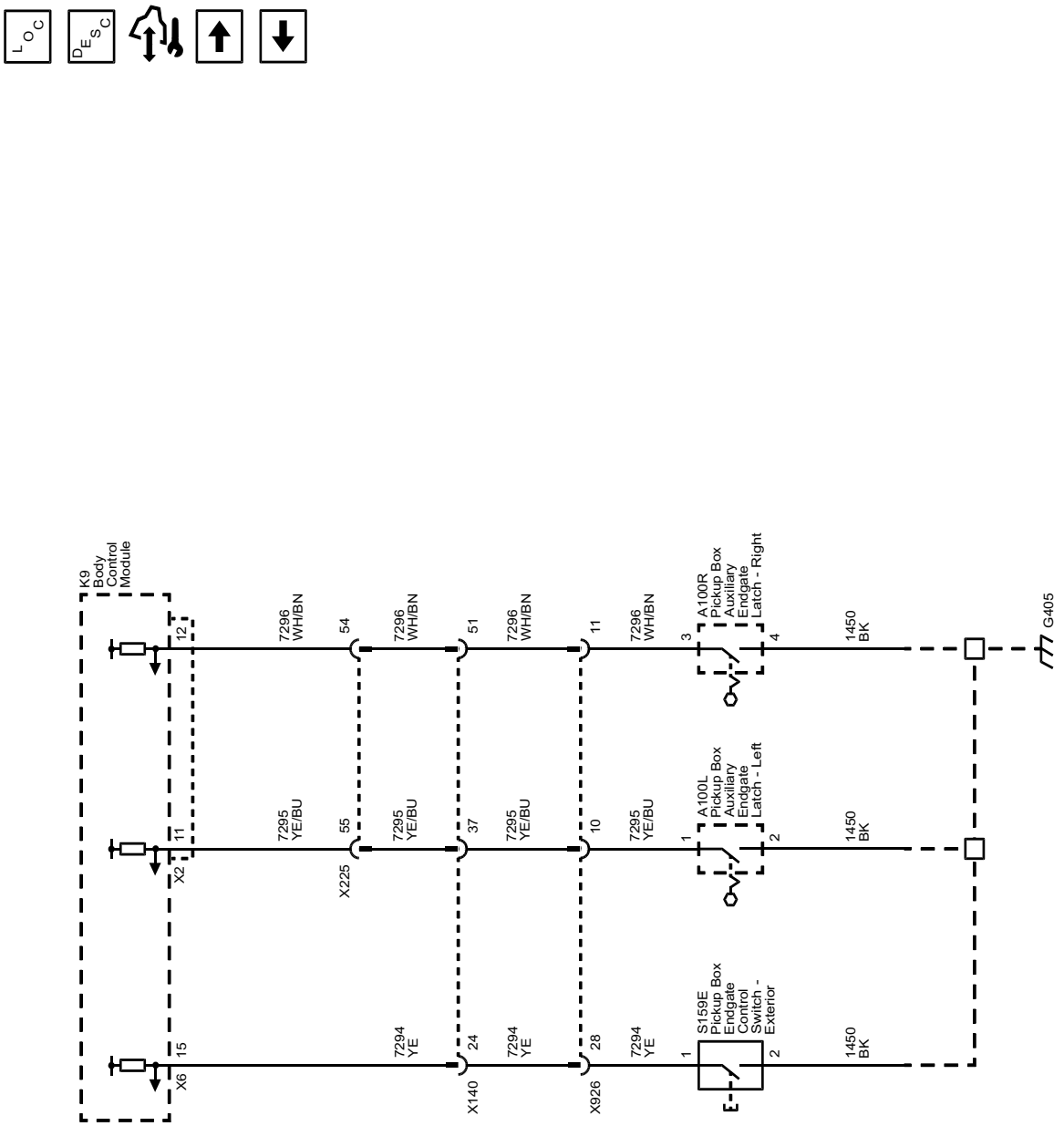
Endgate Schematics (Power Endgate Controls (QT6))



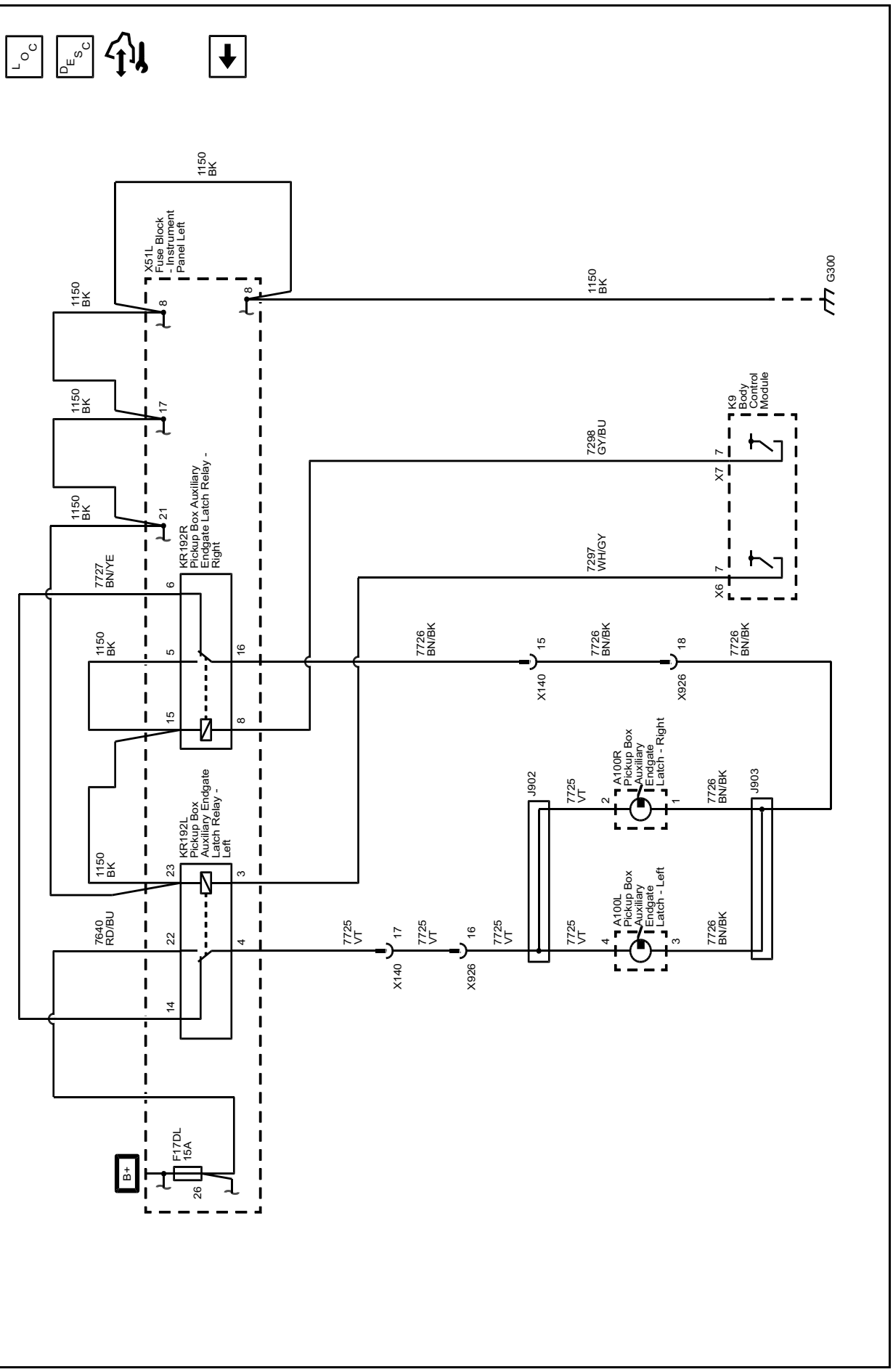
Endgate Schematics (Power Endgate Latches (QT6))



Endgate Schematics (Auxiliary Endgate Latch Controls and Switches (QK2))



Endgate Schematics (Auxiliary Endgate Latch Motors (QK2))



Description and Operation

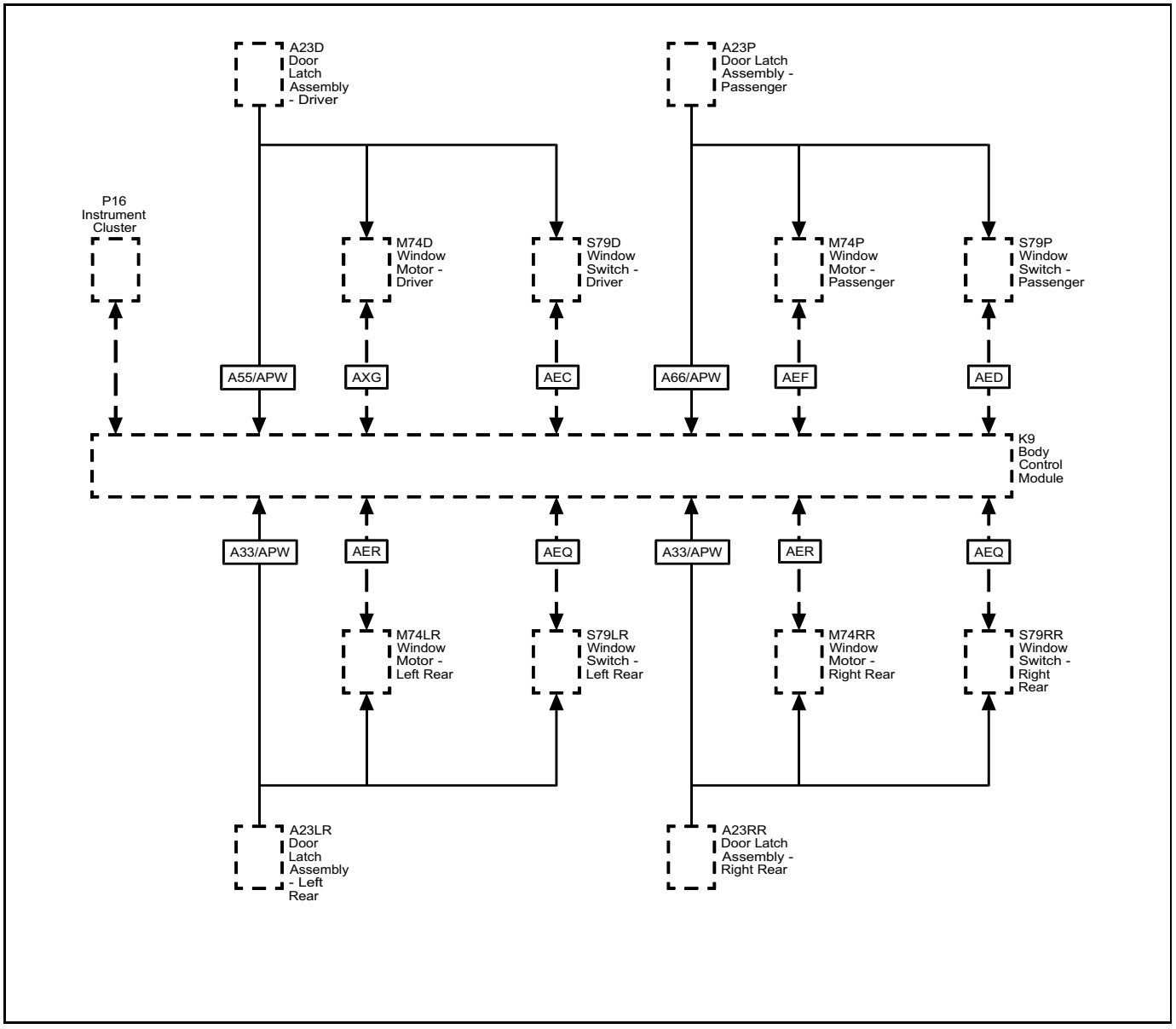
Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module
- Instrument cluster
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Driver window motor (AXG)
- Driver window switch (AEC)
- Passenger window motor (AEF)
- Passenger window switch (AED)
- Left rear window motor (AER)
- Left rear window switch (AEQ)
- Right rear window motor (AER)
- Right rear window switch (AEQ)

Door Ajar Indicator Block Diagram



3556440

Door Ajar System

Depending upon if the vehicle is equipped with express up/down power windows, express down only power windows, power windows without any express functions or manual crank windows affects how the driver and passenger door ajar signal circuits are configured and monitored.

Driver, Passenger and Rear Door Ajar (AXG, AEF and AER)

The window motors provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window motor will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

Driver, Passenger and Rear Doors Ajar (AEC, AED and AEQ)

The driver, passenger and rear window switches provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window switch will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

Driver, Passenger and Rear Doors Ajar (A55, A66, A33 or Manual Crank Windows)

The body control module provides a 12V signal to each door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The body control module will detect the voltage drop in the ajar signal circuit and will send a message to the instrument cluster which will illuminate the door ajar icon

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 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 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.

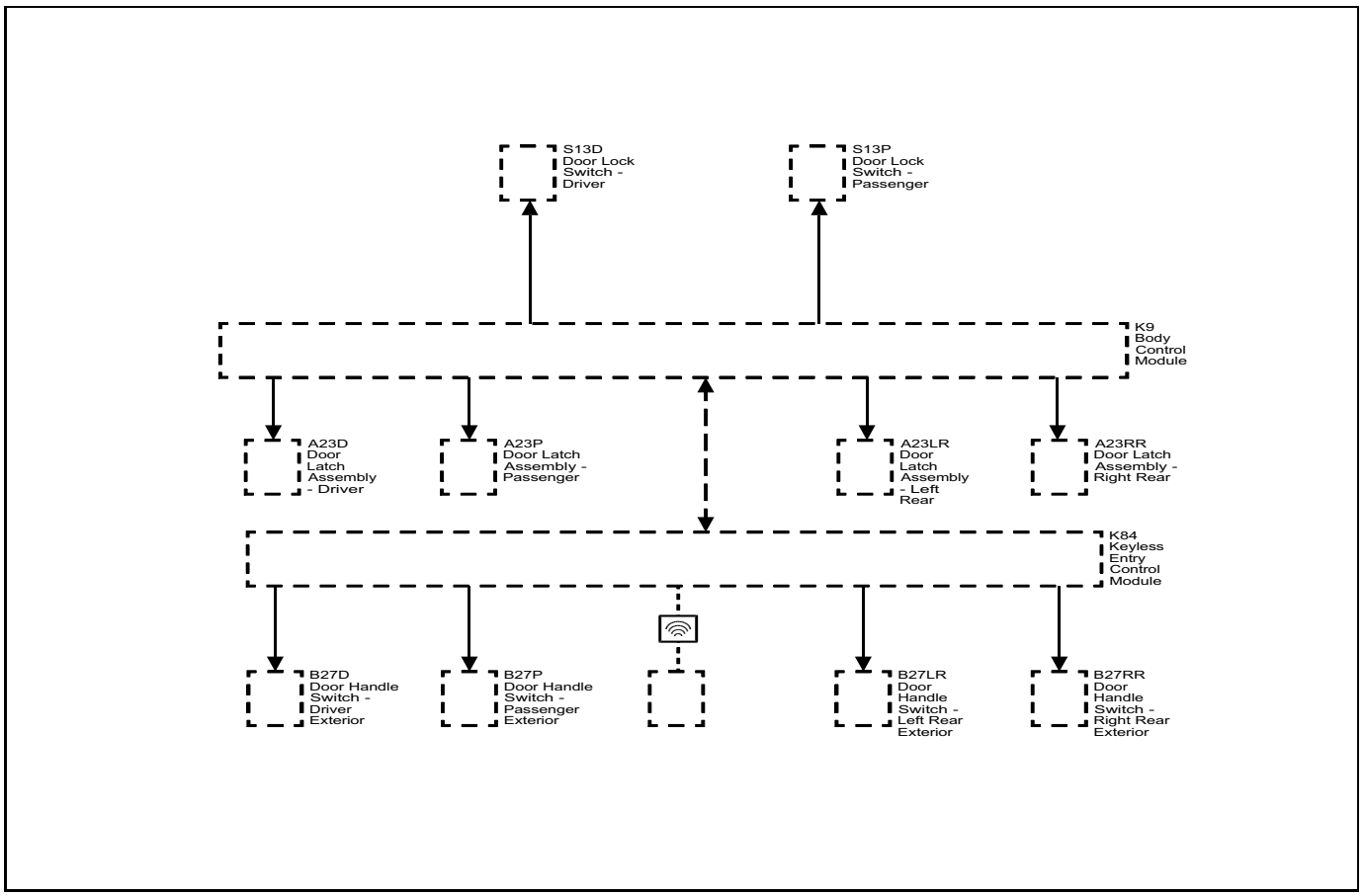
Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Key cylinder switch
- Body control module (BCM)
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Exterior door handle switches
- Keyless entry control module

Power Door Locks Block Diagram



3270435

Door Lock and Unlock Operation

When the driver or passenger door lock switch is activated in the lock or unlock position, the BCM will receive a ground signal on either the door lock switch lock or unlock signal circuits.

The BCM, upon receipt of a lock switch lock or unlock signal, 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 will then lock or unlock as commanded.

The following three circuits are used to operate the lock:

- Driver door unlock
- Passenger door unlock
- All door lock

The driver door lock actuator is isolated so it can be unlocked by itself using the keyless entry transmitter.

Key Cylinder Switch

The driver window switch monitors the voltage level of the driver door lock motor status signal circuit. When the key is inserted into the driver door key cylinder and turned to the Lock position, a switch within the driver door latch closes causing the voltage to drop within the driver door lock motor status signal circuit. The driver window switch will detect the drop in voltage and will send a serial data message to the BCM commanding all the doors to Lock.

The driver key cylinder switch is used by the customer for programming the keyless entry transmitters, The driver window/outside rearview mirror switch monitors the voltage level of the key switch unlock signal circuit and when it detects a reprogramming request, it will send a serial data message to the body control module.

Passive Door Lock/Unlock Operation

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door lock or a door unlock request. The keyless entry control module provides a 12 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 keyless entry 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 keyless entry control module will send a serial data message to the body control module to command the door(s) to be locked or unlocked

Section 3

Driver Information and Entertainment

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Rearview Camera Full Display Mirror Description and Operation 3-8
Rear Vision Camera Description and Operation (UVC) 3-8
Rear Vision Camera Description and Operation (UVB) 3-8
Surround Vision Camera Description and Operation (UV2) 3-8
Surround Vision Camera Description and Operation (Trailer Vision System (UVI)) 3-10

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Image Display Cameras

Schematic and Routing Diagrams

Image Display Camera Schematics (Rearview Camera (DRZ))

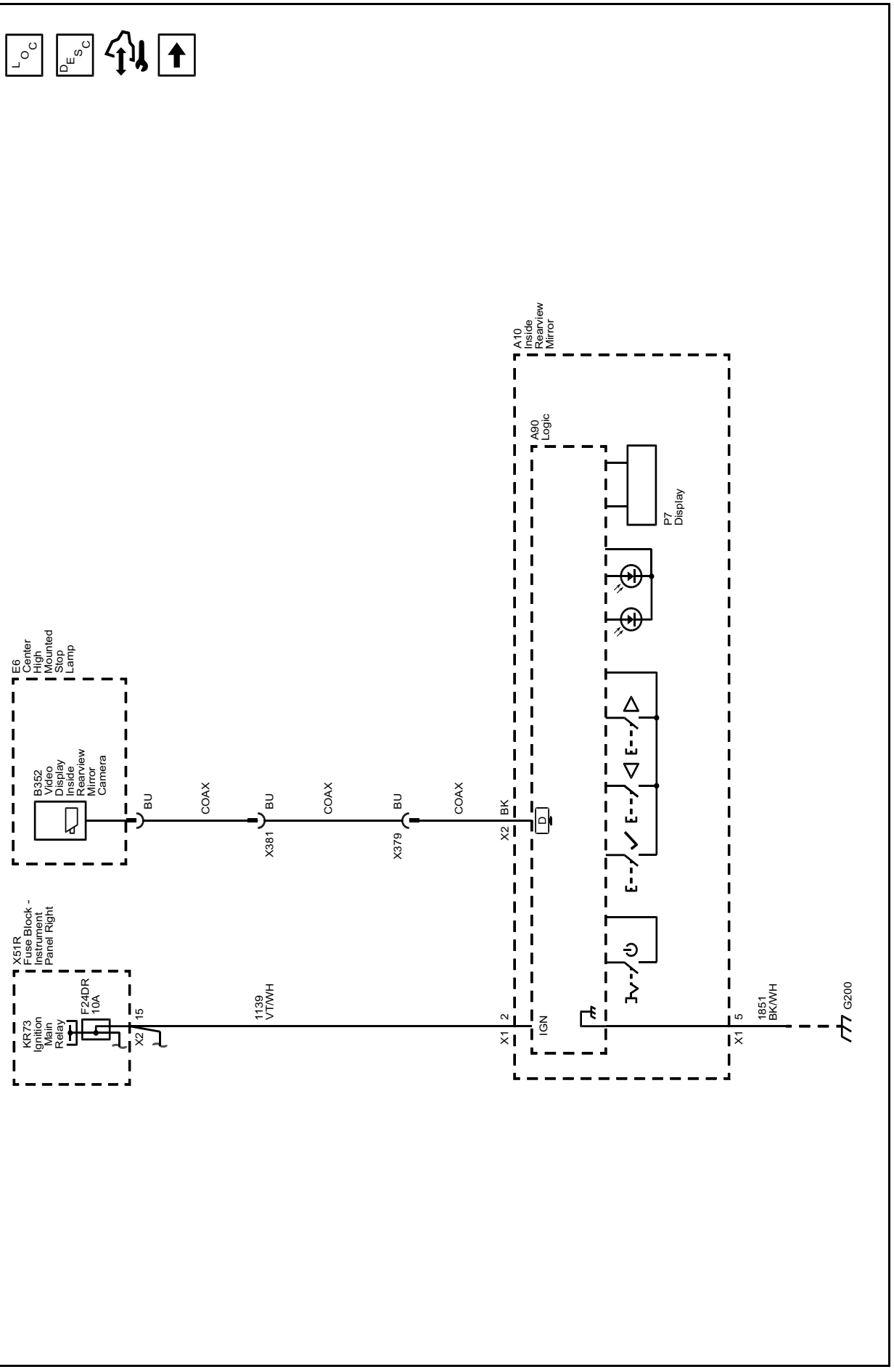


Image Display Camera Schematics (Rearview Camera (UVC))

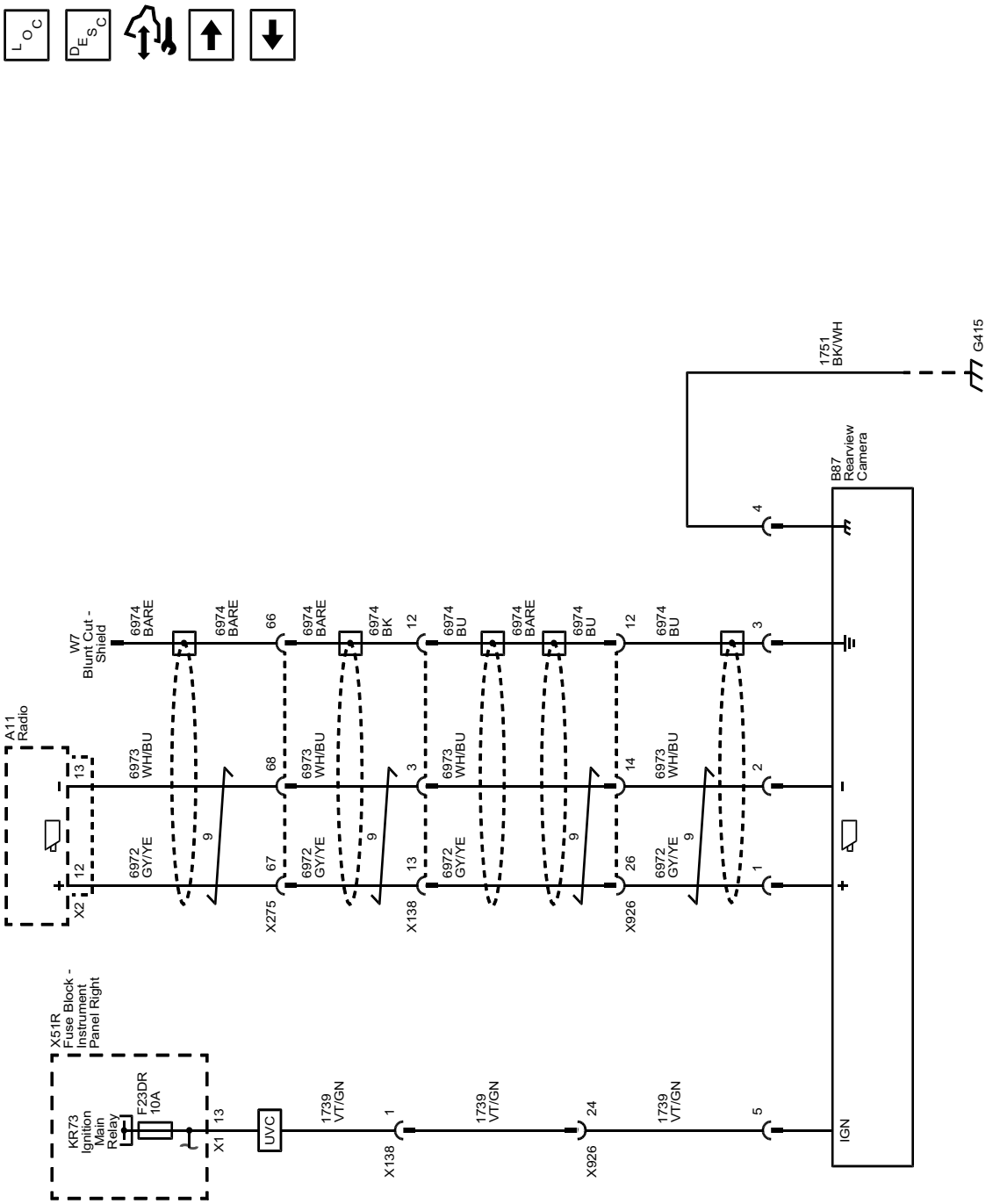
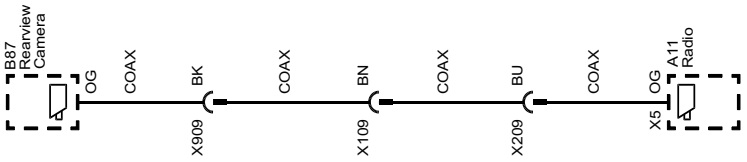


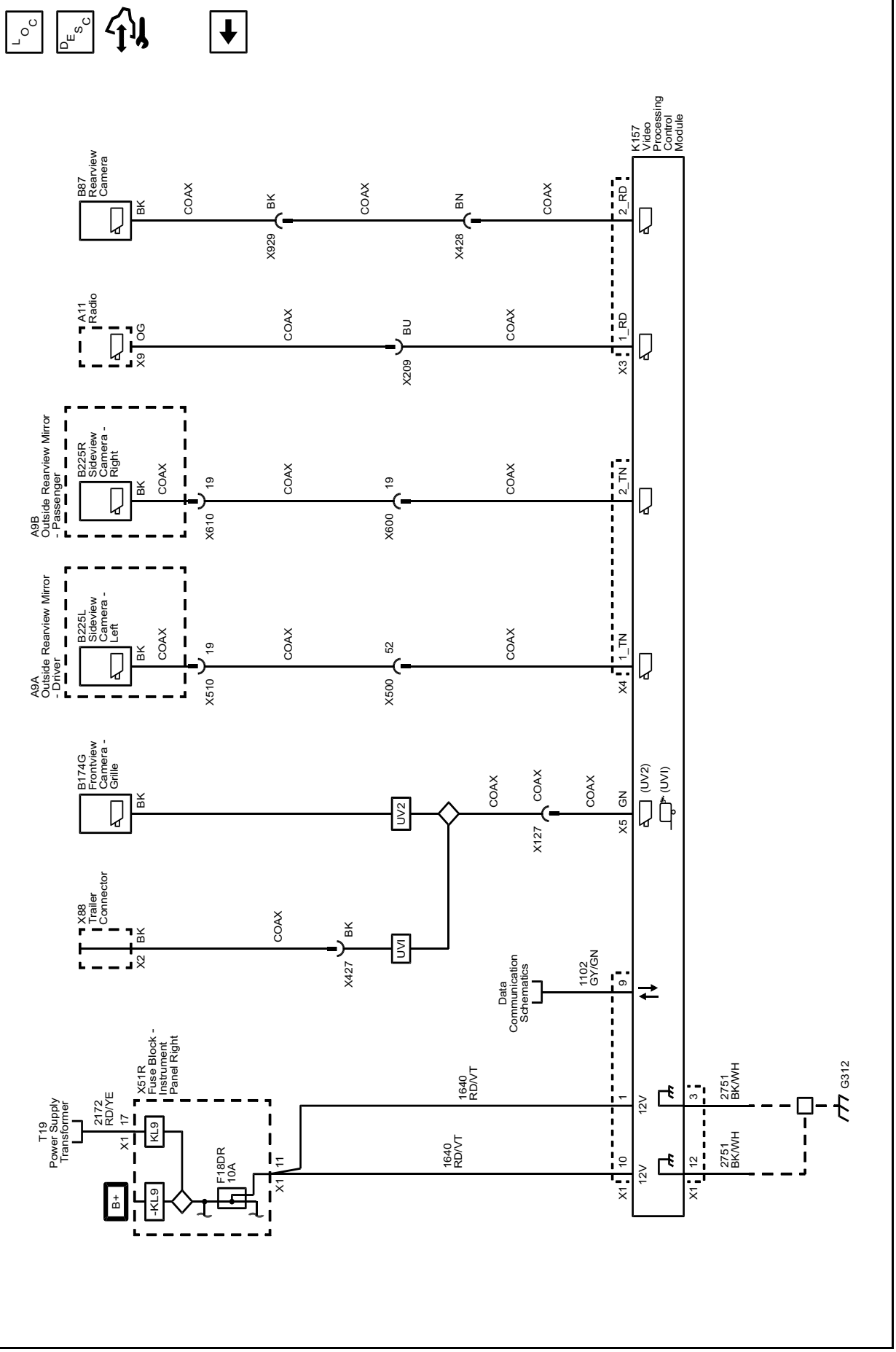
Image Display Camera Schematics (Rearview Camera (UVB))





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Image Display Camera Schematics (270/360 Degree Vision (UVI/UV2))



5002815

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 (UVC)

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 indicates to the Radio that the vehicle is in reverse and image display is requested. The rear vision camera receives ignition voltage and a constant ground to power the camera. Video signal + and video signal – circuits carry the video image from the rear vision camera to the radio. Additionally, the video signal circuits are shielded to prevent any interference which may lead to a loss of video signal resolution and a degraded video image. The shield is provided a ground path by the rear vision 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.

Rear Vision Camera Description and Operation (UVB)

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.

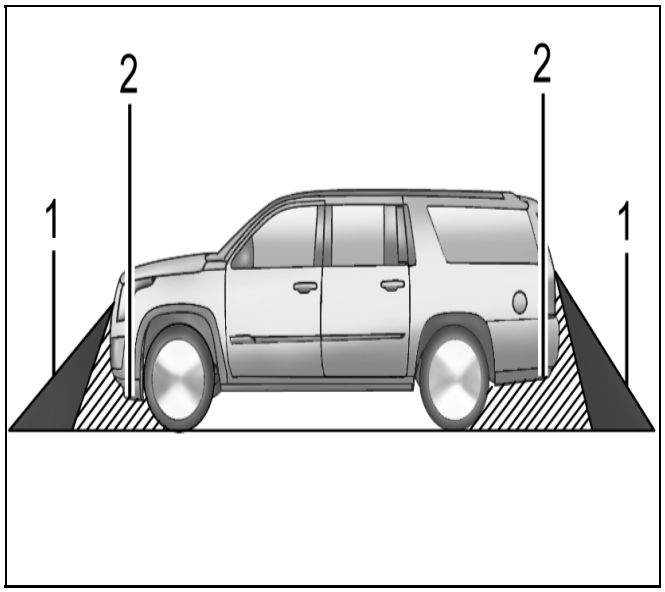
The following conditions may cause a degraded rear vision camera image:

- 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.

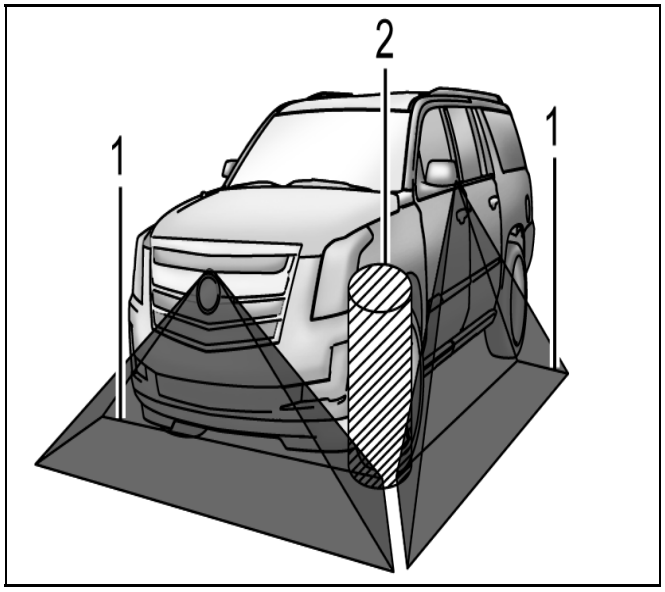
Surround Vision Camera Description and Operation (UV2)

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.



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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

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

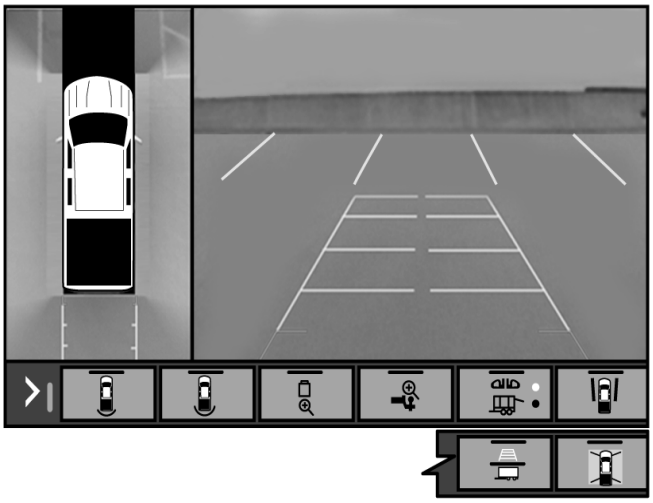
The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the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

The video processing control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the 360 surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

The video processing control module system has a memory card receptacle 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.

Surround Vision Camera Description and Operation (Trailer Vision System (UVI))

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.



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The Surround Vision- Trailer Vision camera system consists of the following components:

- B87 Rearview Camera
- Rearview Trailer Camera (if equipped)
- K157 Video Processing Control Module
- A11 Radio
- P17 Info Display Module
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right

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.

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

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

Surround Vision displays an overhead view of the area surrounding the vehicle, along with the rear camera views in the center stack. The side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate, and a rearview trailer camera can be mounted on the rear of a trailer.

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) and Rearview Trailer Camera view (if equipped) alongside overhead view is displayed in reverse
- Rearview Trailer Camera (if equipped) view alongside overhead view is displayed after shifting out of reverse to Neutral or Drive
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch
- Hitch View (when selected) displays a rear view camera image with a single guideline, which aids in aligning the truck to the trailer. If the driver shifts into PARK while in Hitch View, the parking brake is engaged to keep the vehicle from rocking when the driver gets out of the vehicle to hitch the trailer.

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 control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

Section 4

Engine/Propulsion

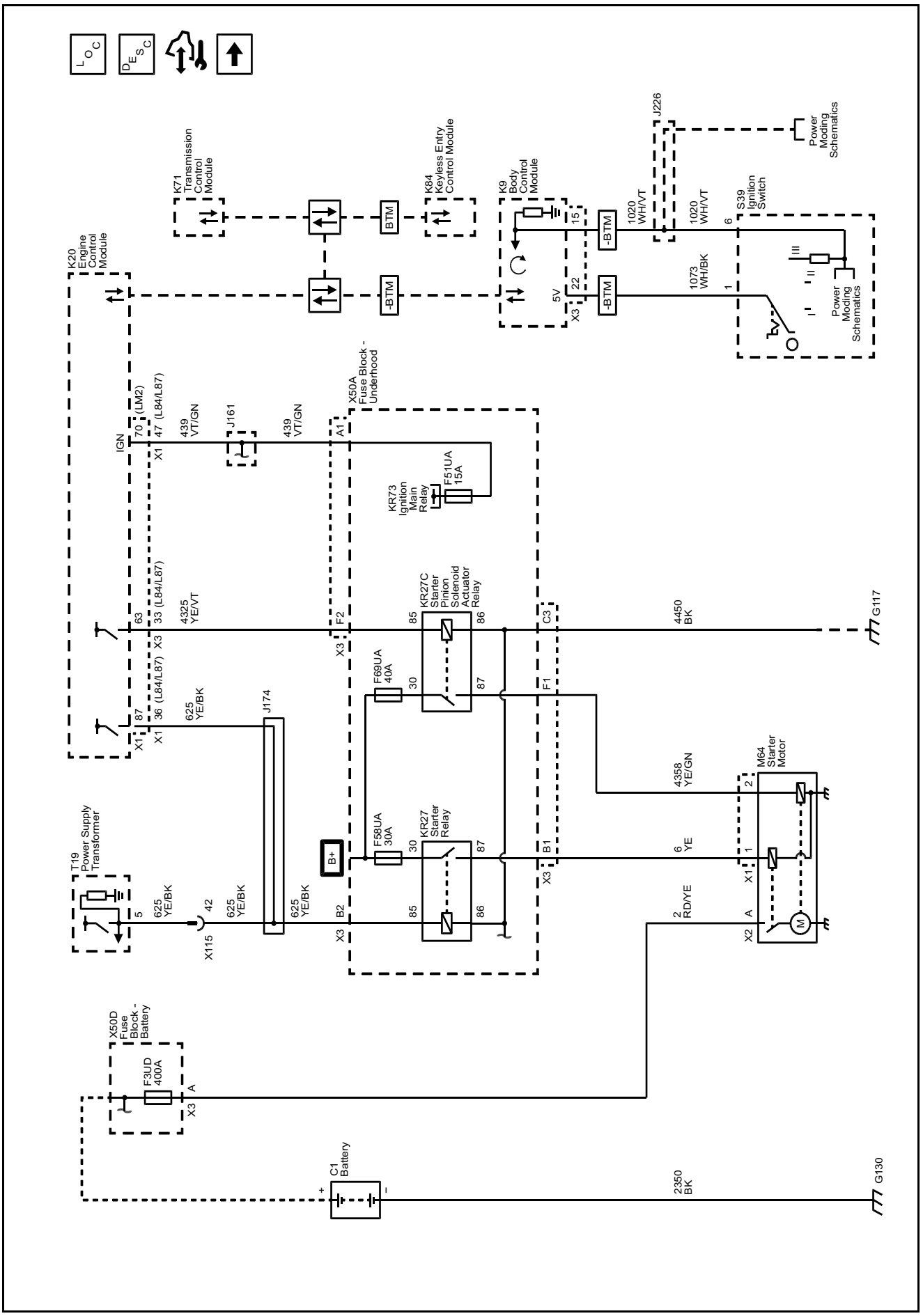
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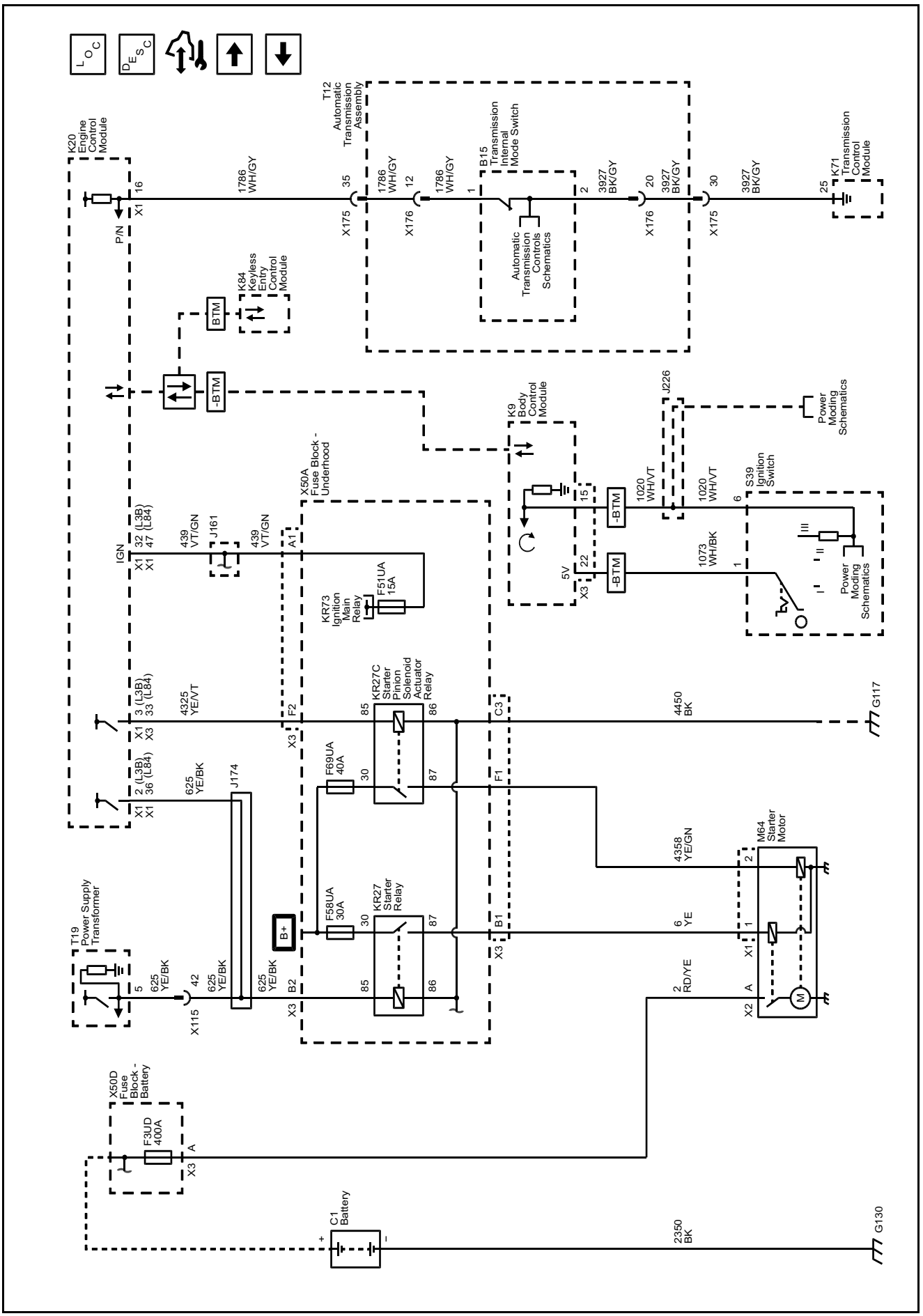
12 V Starting and Charging

Schematic and Routing Diagrams

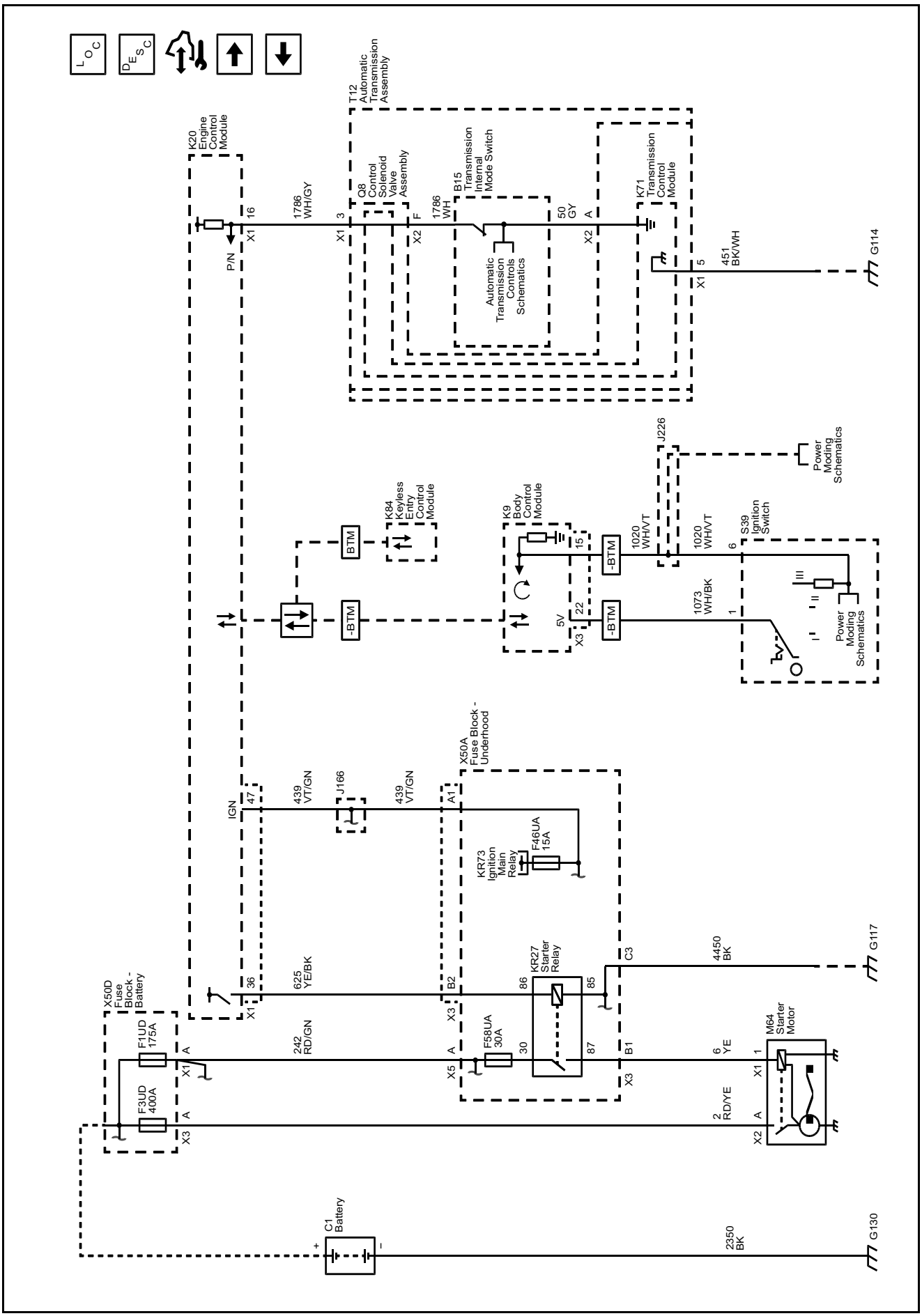
Starting and Charging Schematics (Starting (MQB))



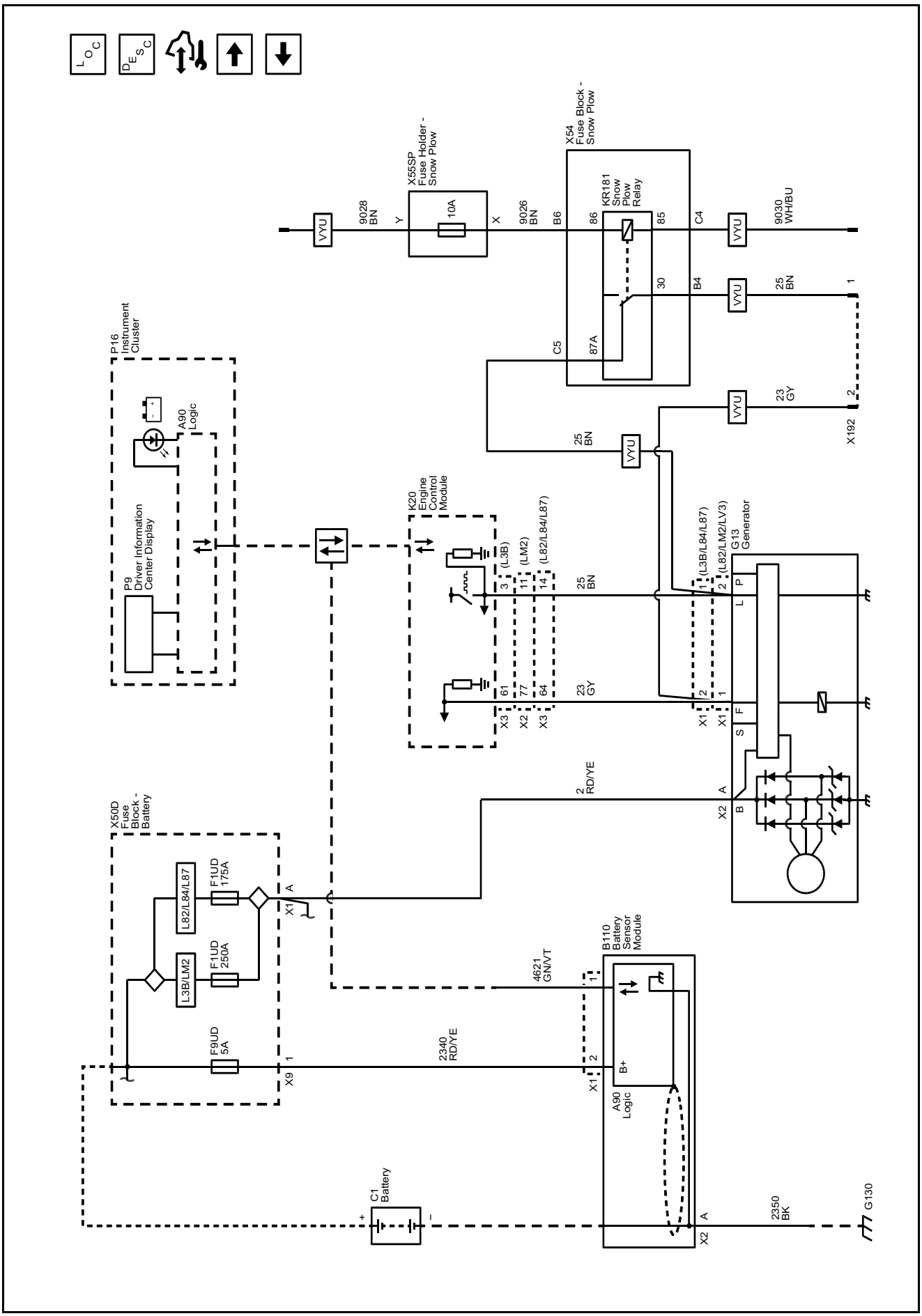
Starting and Charging Schematics (Starting (MQE))



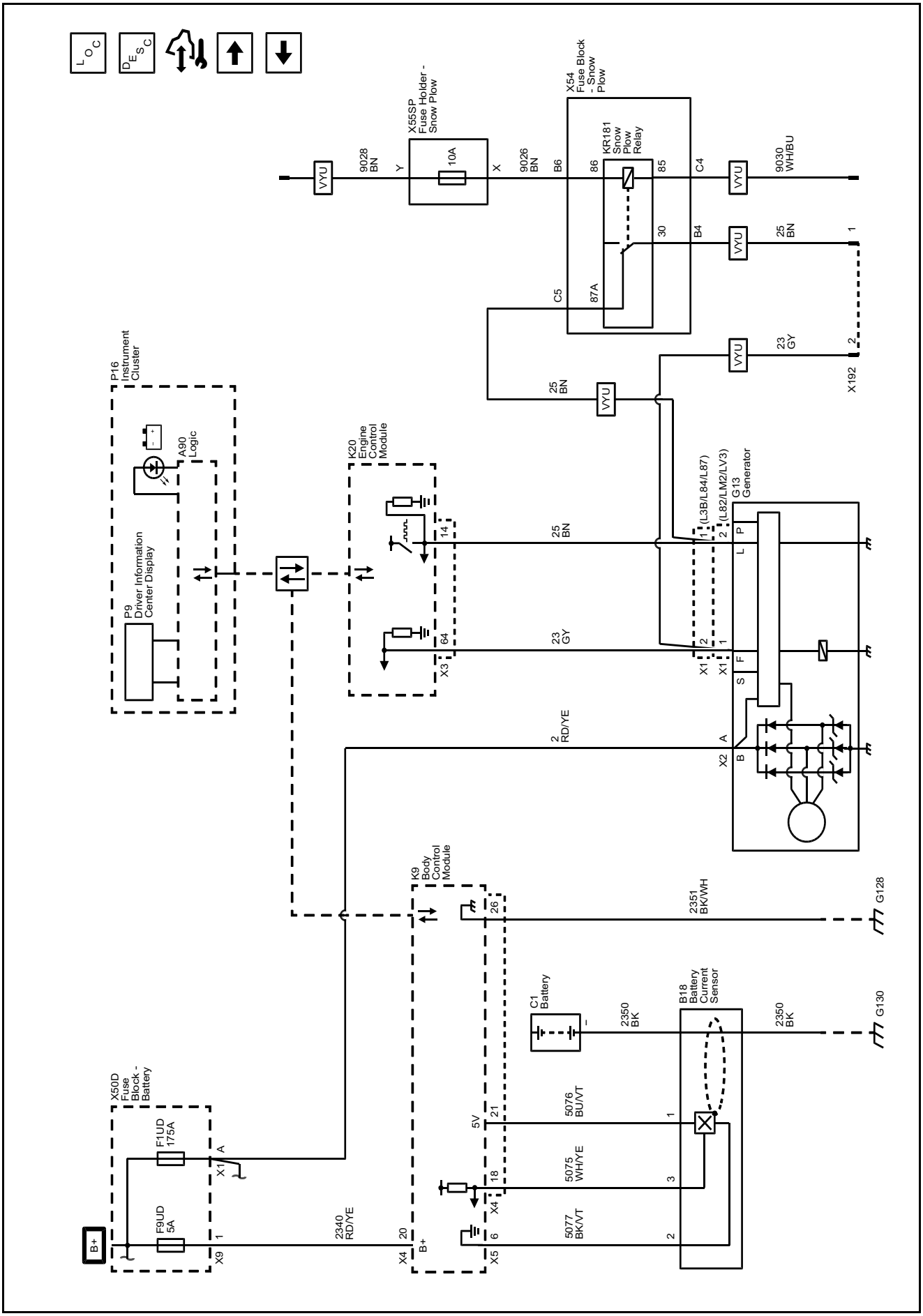
Starting and Charging Schematics (Starting (MYC))



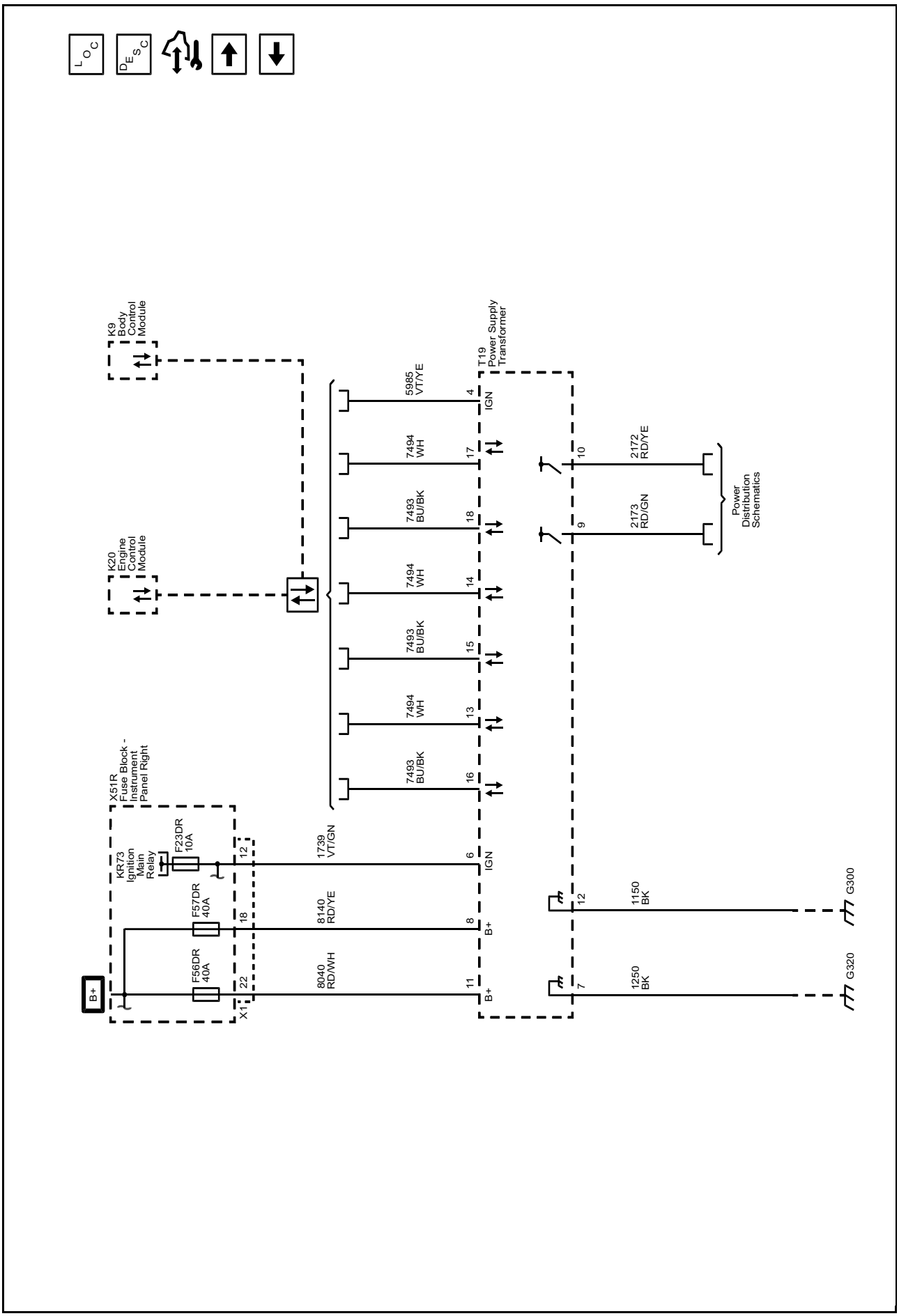
Starting and Charging Schematics (Charging (KL9))



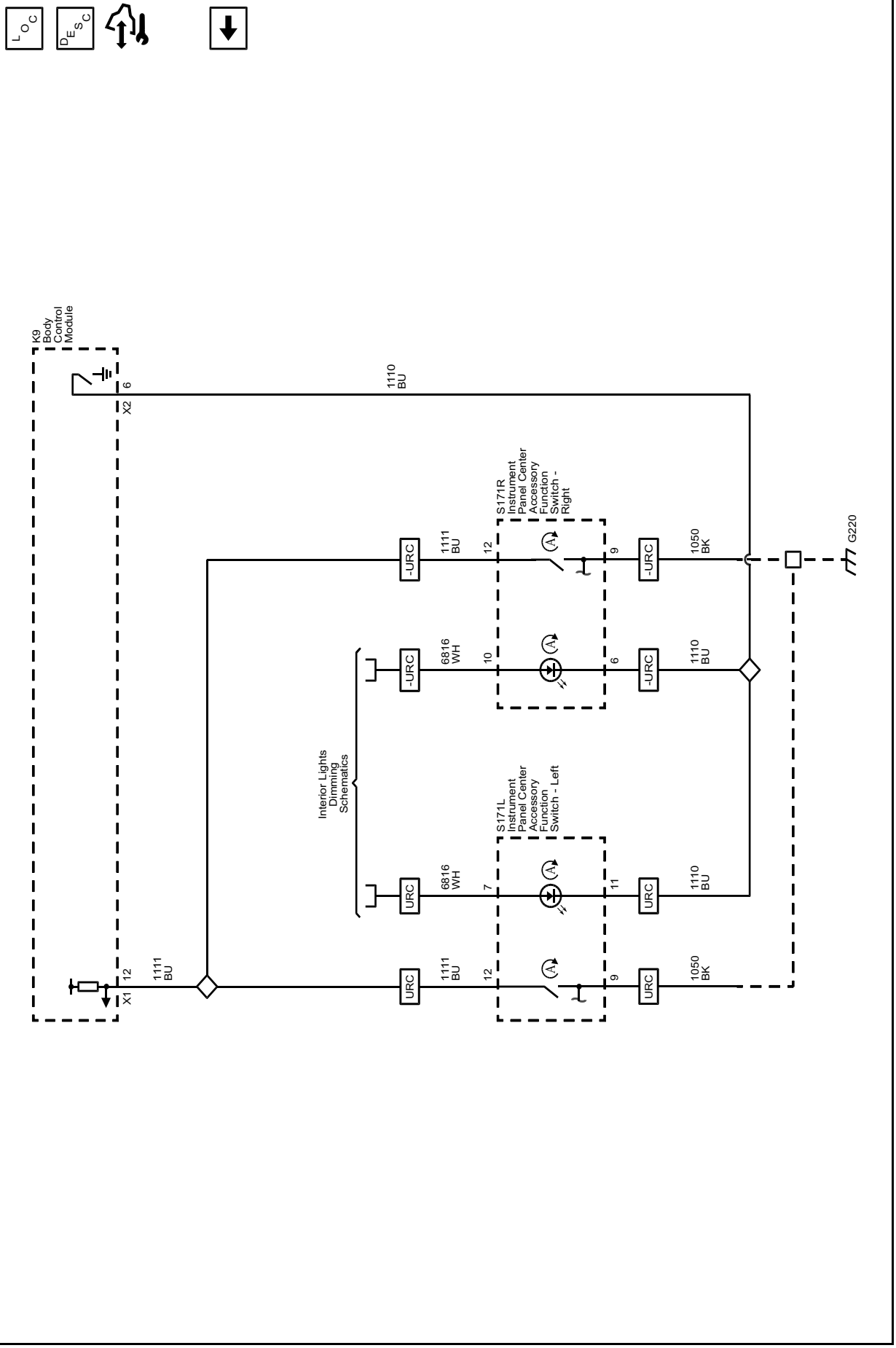
Starting and Charging Schematics (Charging (-KL9))



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

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

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.

Body Control Module (BCM)

The BCM communicates with the Engine Control Module (ECM) 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.

Battery Current Sensor (if applicable)

The Battery Current Sensor is a serviceable component that is connected to the negative battery cable at the battery. The battery current sensor is a 3-wire hall effect current sensor. The battery current sensor monitors the battery current. It directly inputs to the BCM. It creates a 5 volt Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. Between 0–5% and 95–100% are for diagnostic purposes.

Battery Sensor Module (if applicable)

The BCM monitors the Battery Sensor Module for battery state of current, state of health, and battery charge via serial data. If the battery is determined to be in poor state of health or having a low state of charge, the BCM will not allow the ECM to perform an auto-stop.

Engine Control Module (ECM)

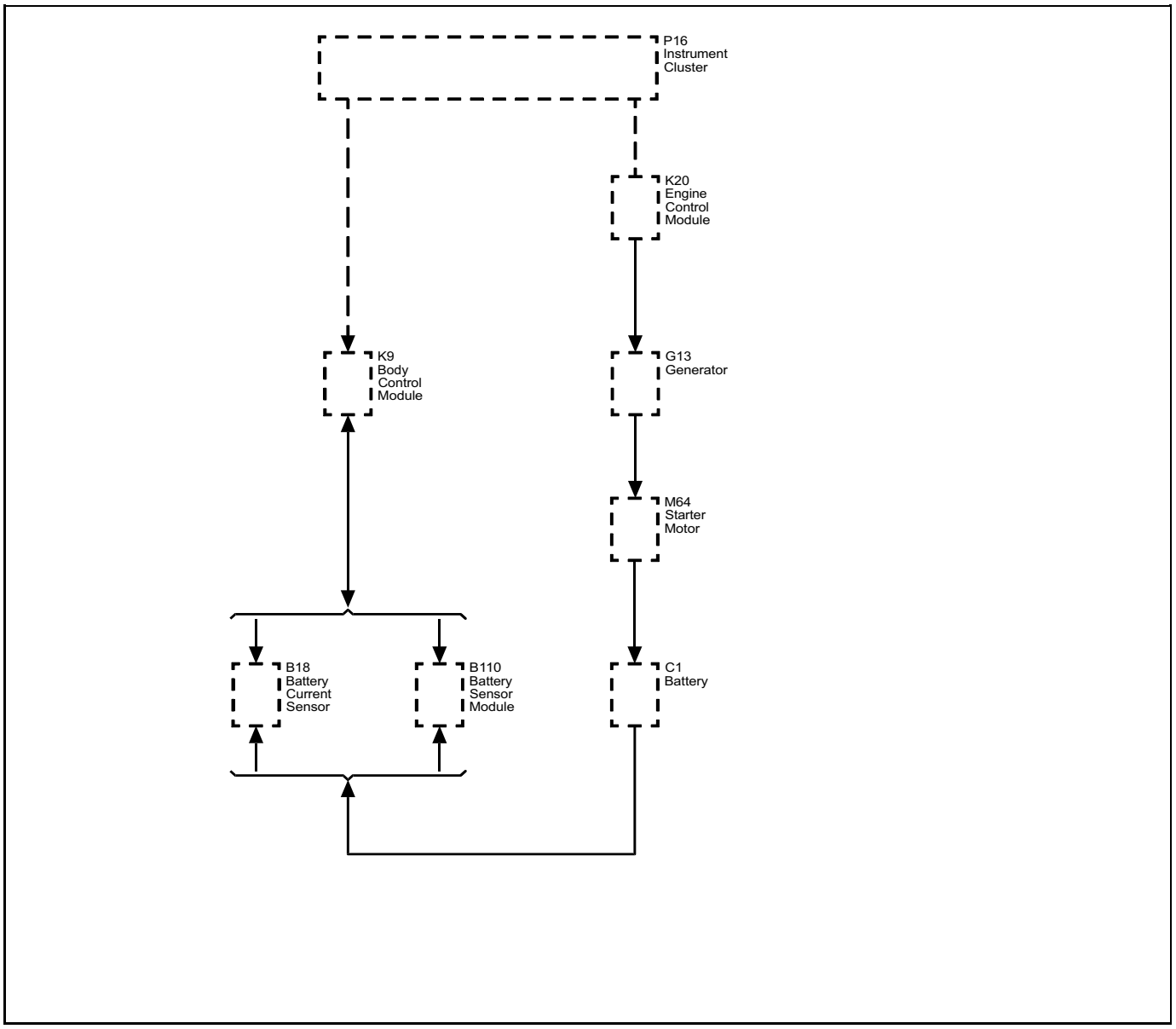
When the engine is running, the generator turn-on signal is sent to the generator from the ECM, turning on the regulator. The generator's voltage regulator controls current to the rotor, thereby controlling the output voltage. The rotor current is proportional to the electrical pulse width supplied by 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.

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 Block Diagram



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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
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

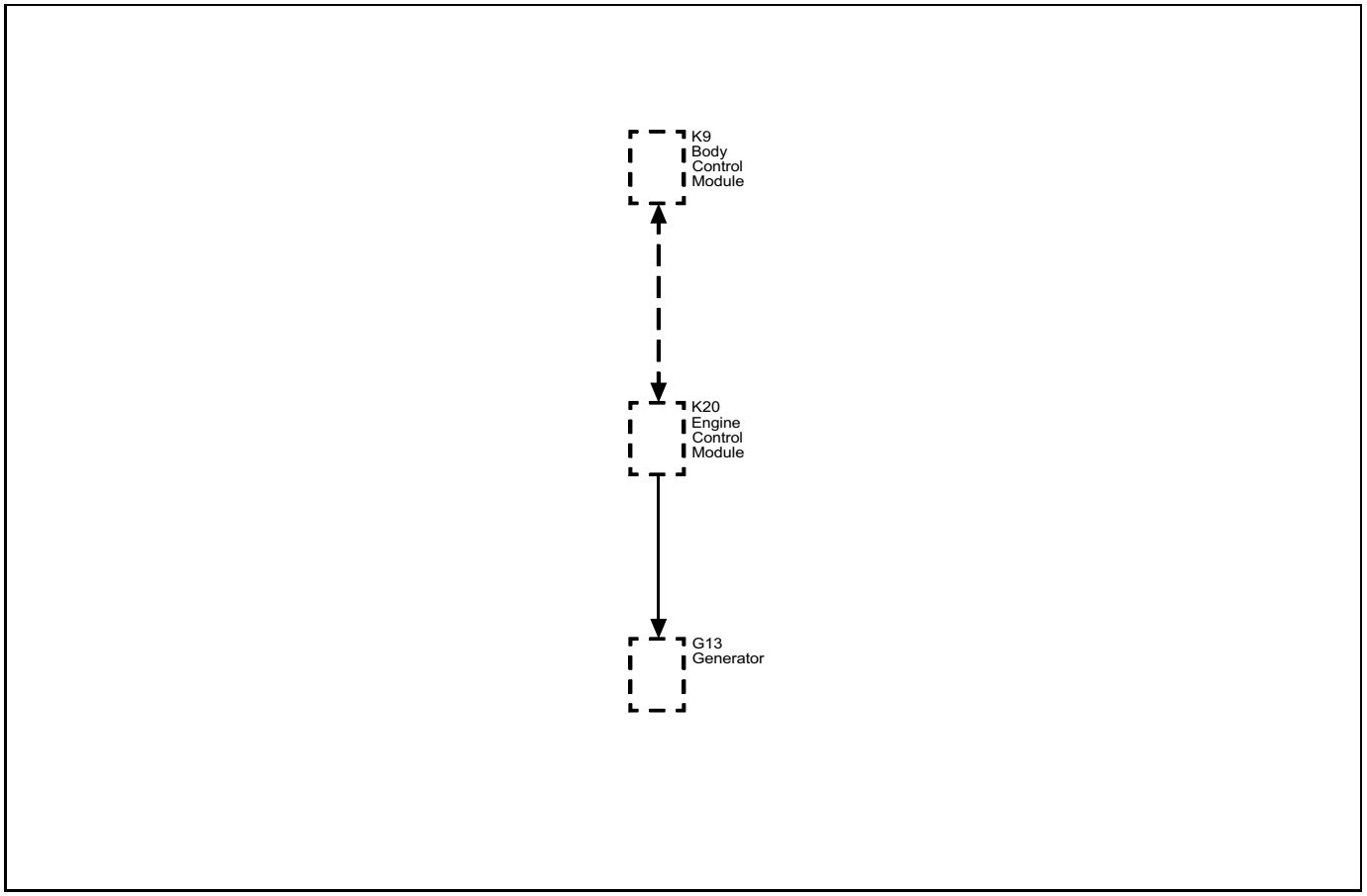
The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life,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

Electrical Power Management Block Diagram



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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 and Load Shed With Current Sensor (cont'd)

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
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
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

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

Function	Battery Temperature Calculation	Battery Voltage Calculation	Action Taken
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 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

Load Shed System 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 discrete. No two functions are active at the same time. Idle boost is activated in incremental steps, 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:

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 10.9 V	—	First level Idle boost requested

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats 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 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 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
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 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
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 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 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 15 AH	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

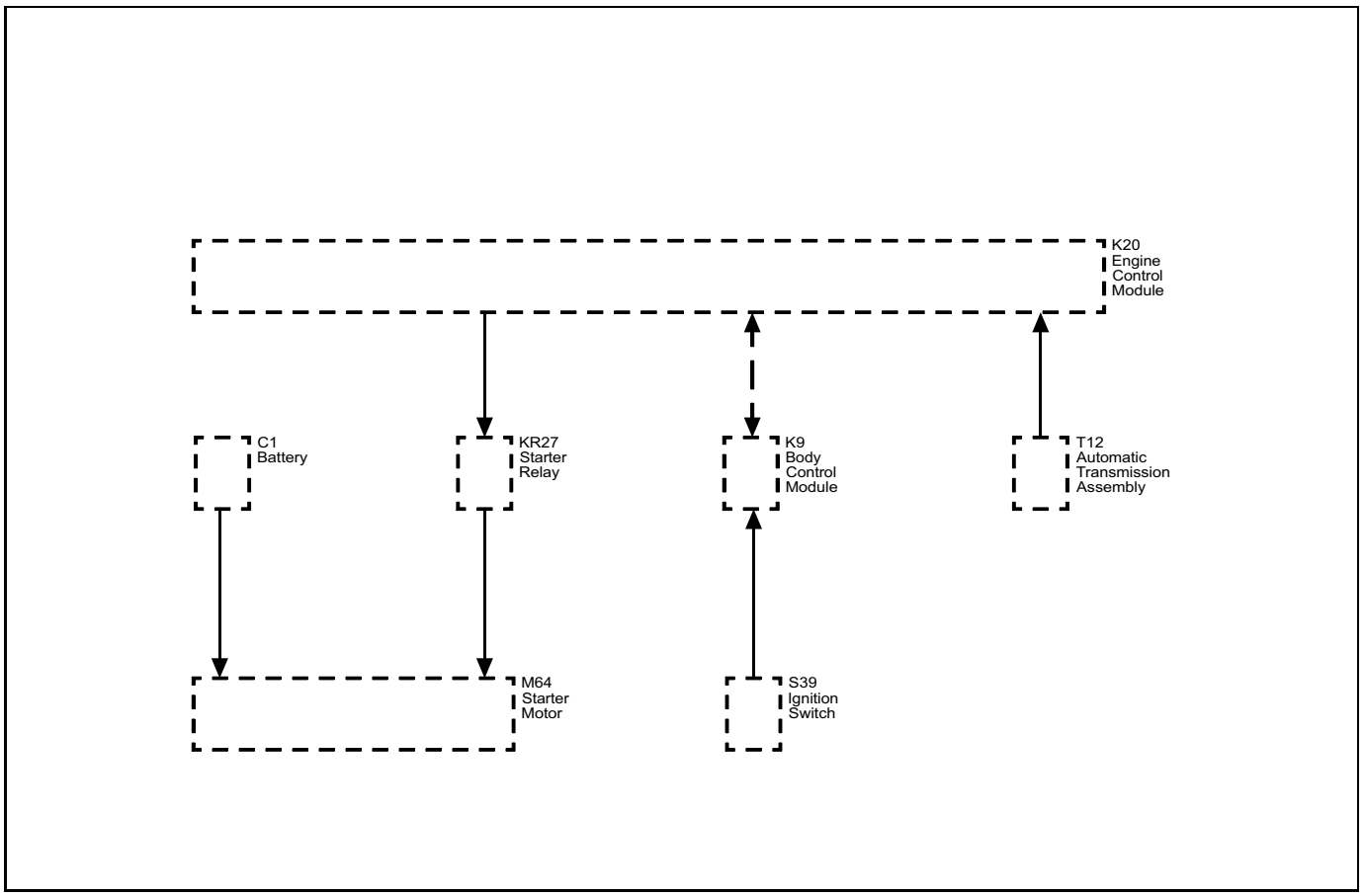
Keyless Start

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 clutch is fully depressed or the 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.

Starting System Block Diagram



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Stop/Start System Description and Operation (with KL9)

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 an intelligent battery sensor connected to the battery which continually monitors the battery charge and healthy state. The engine control module (ECM) uses this information from the intelligent battery sensor 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 (CO_2) 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
- The learn procedure needs to be completed on the Battery Sensor Module

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, although there is an ECO Switch on the instrument panel to disable the system, if the driver so desires.

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.

- Economy mode turned ON
- 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

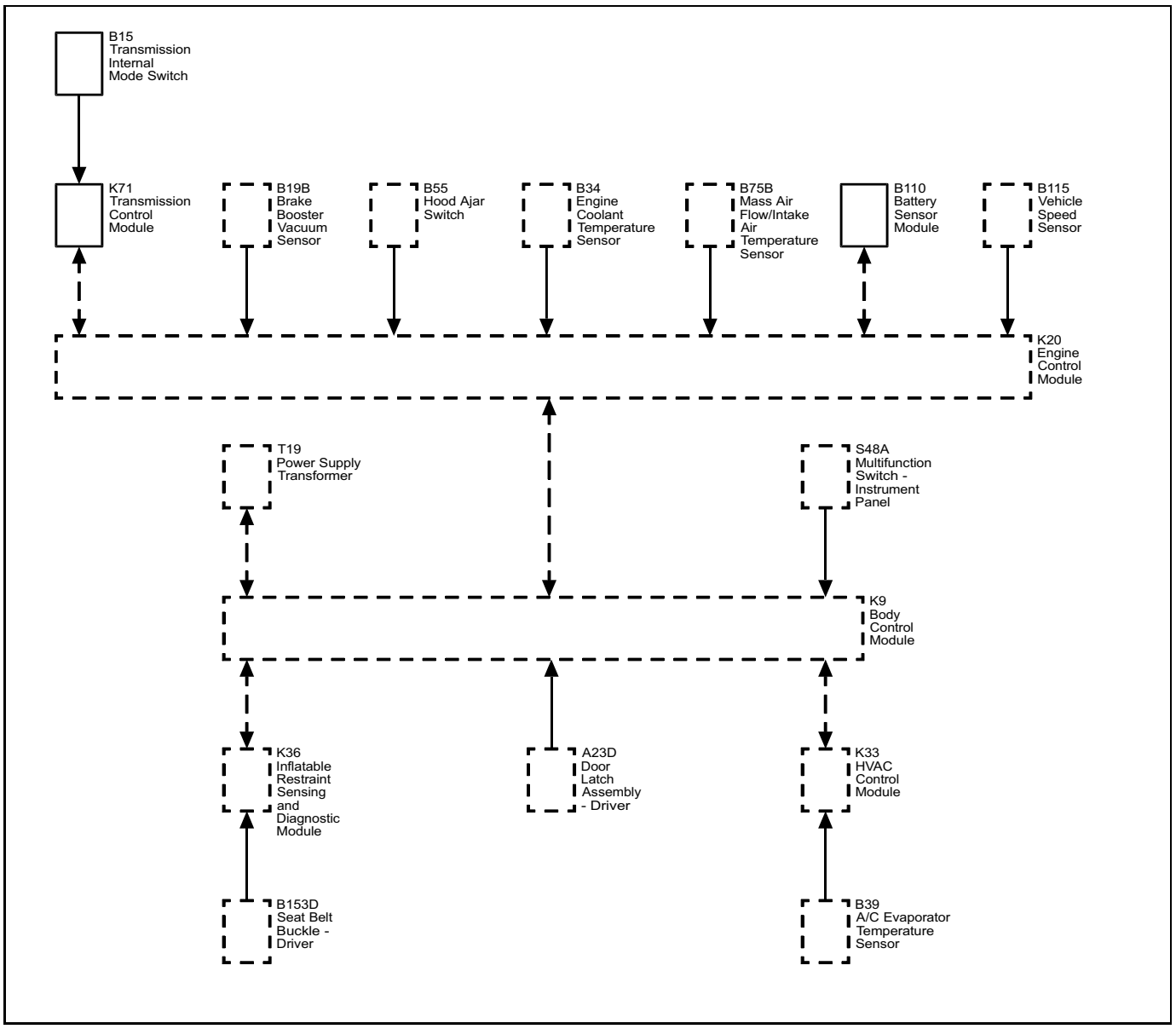
System Enabled Conditions that will engage Autostart

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

- Economy mode turned OFF
- Brake booster vacuum is less than 40 kPa (6 PSI)
- HVAC inside air temperature changes than 3°C (5°F) (with HVAC Automatic)
- 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.

Start Stop Block Diagram



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System Components

Engine Control Module (ECM)

The engine control module (ECM) monitors the inputs from the engine coolant temperature (ECT) sensor, vehicle speed sensor (VSS), hood ajar switch, brake booster vacuum sensor, the clutch pedal position sensor, the manual transmission neutral position switch and engine speed to determine Autostart and Autostop conditions. The ECM also controls the auxiliary coolant pump motor.

Transmission Control Module (TCM)

The transmission control module 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

The ECT sensor is used to determine engine operating temperature.

Intake Air Temperature Sensor

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 & Accelerator Pedal Position Sensor

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 also maintain 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 ECO switch in order to enable or disable the system. It is also the master of the low speed communication bus and transfers the appropriate messages to the instrument cluster and the HVAC.

Intelligent Battery Sensor

The ECM monitors the intelligent battery sensor for battery state of current, state of health, and battery charge via the data communication bus. If the battery is determined to be in poor state of health or having a low charge, the ECM will not allow Autostop to occur.

ECO Switch

The ECO switch can disable the Autostart system if desired.

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.

Driver Door Switch

The BCM monitors the driver door switch at all times. The BCM will not allow Autostop if the door is ajar and will Autostart if the driver door is opened and the seat belt unbuckled during Autostop.

Driver Seat Belt Switch

The BCM monitors the driver seat belt switch at all times. The BCM will Autostart if the seat belt is unbuckled and the driver door opened during Autostop.

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 5

HVAC

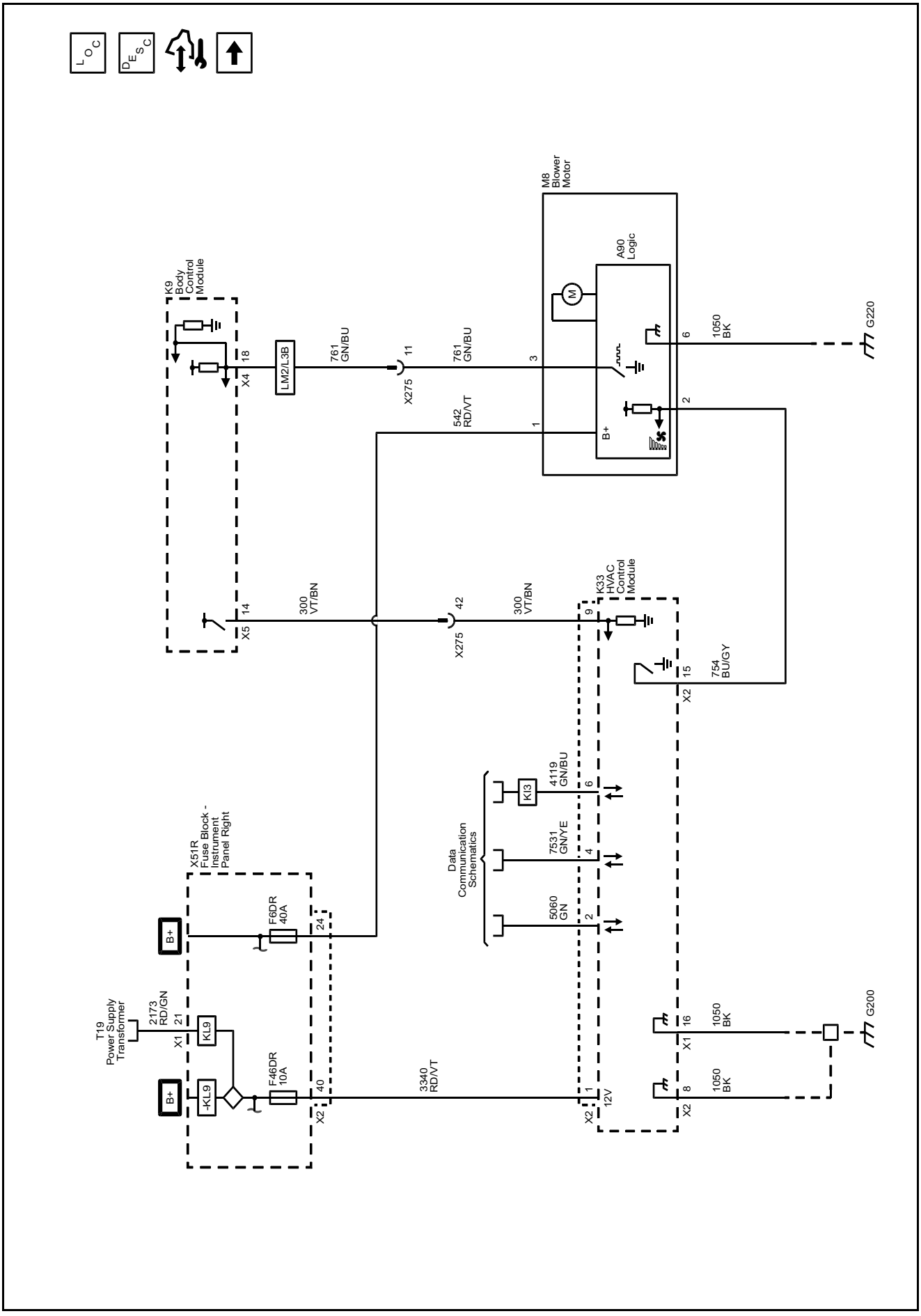
HVAC - Automatic 5-3
Schematic and Routing Diagrams 5-3
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Description and Operation 5-11
Automatic HVAC Description and Operation 5-11
HVAC - Manual 5-15
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Manual HVAC Description and Operation 5-23

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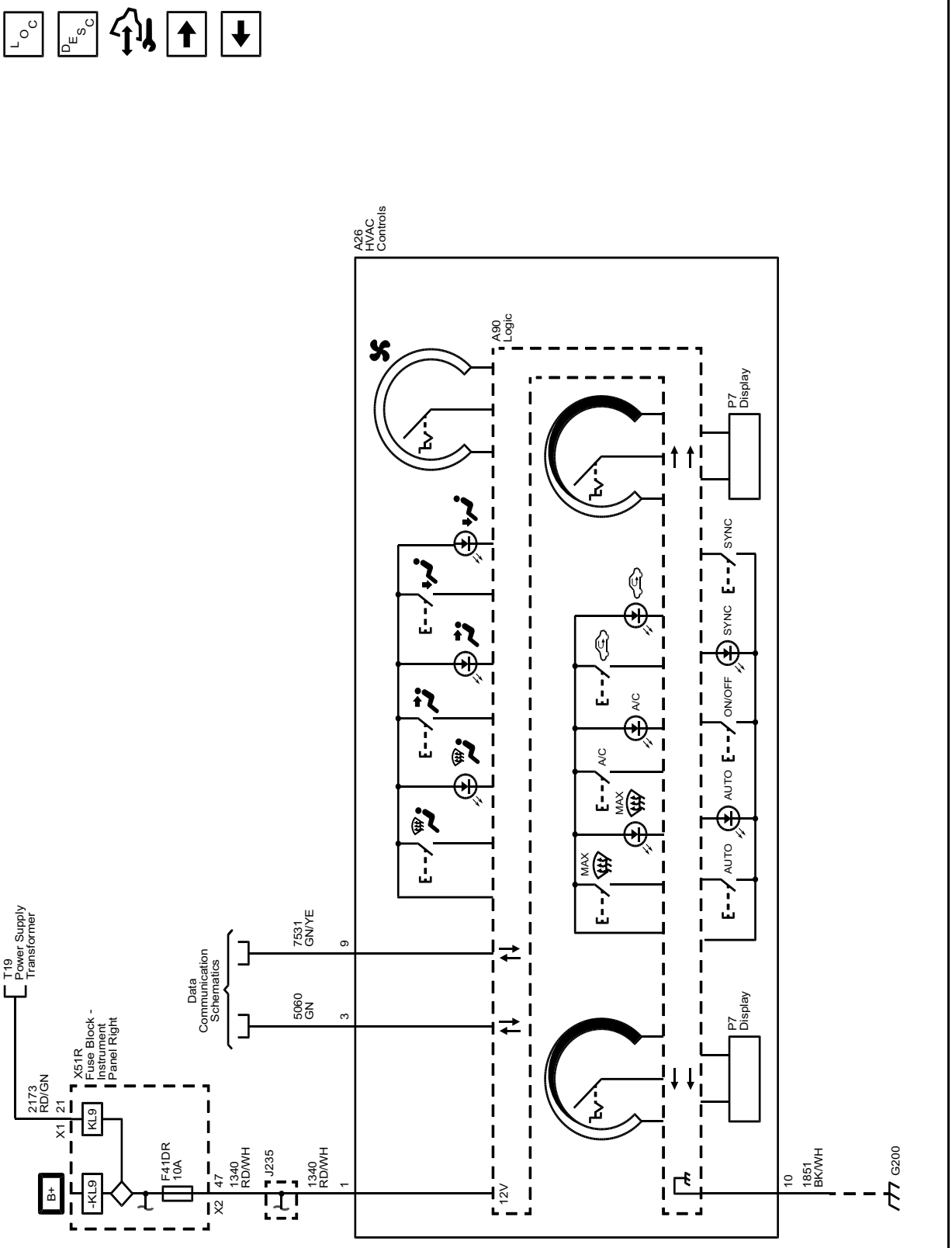
HVAC - Automatic

Schematic and Routing Diagrams

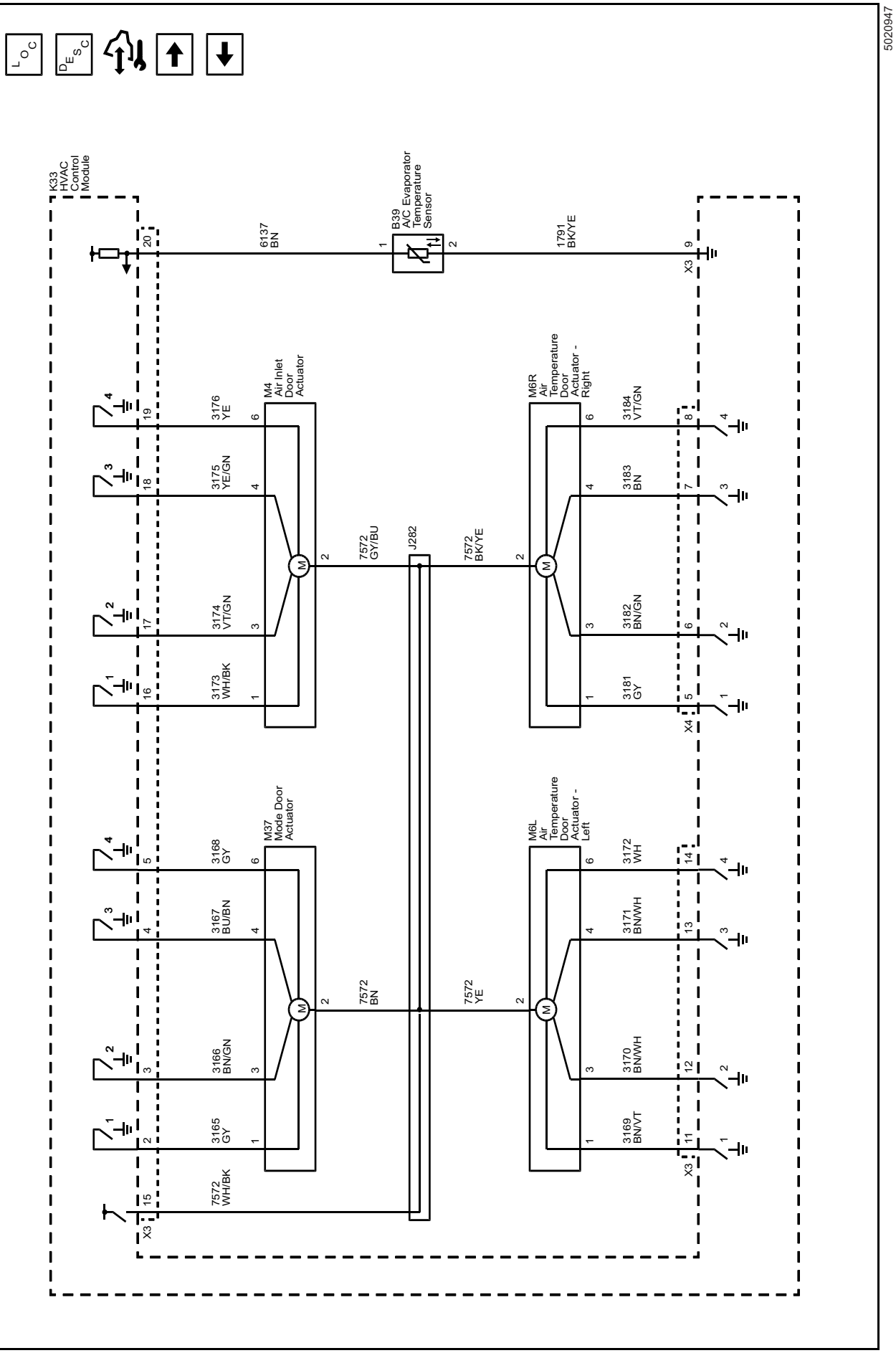
HVAC Schematics (CJ2) (HVAC Module Power, Ground, Serial Data, and Blower Motor)



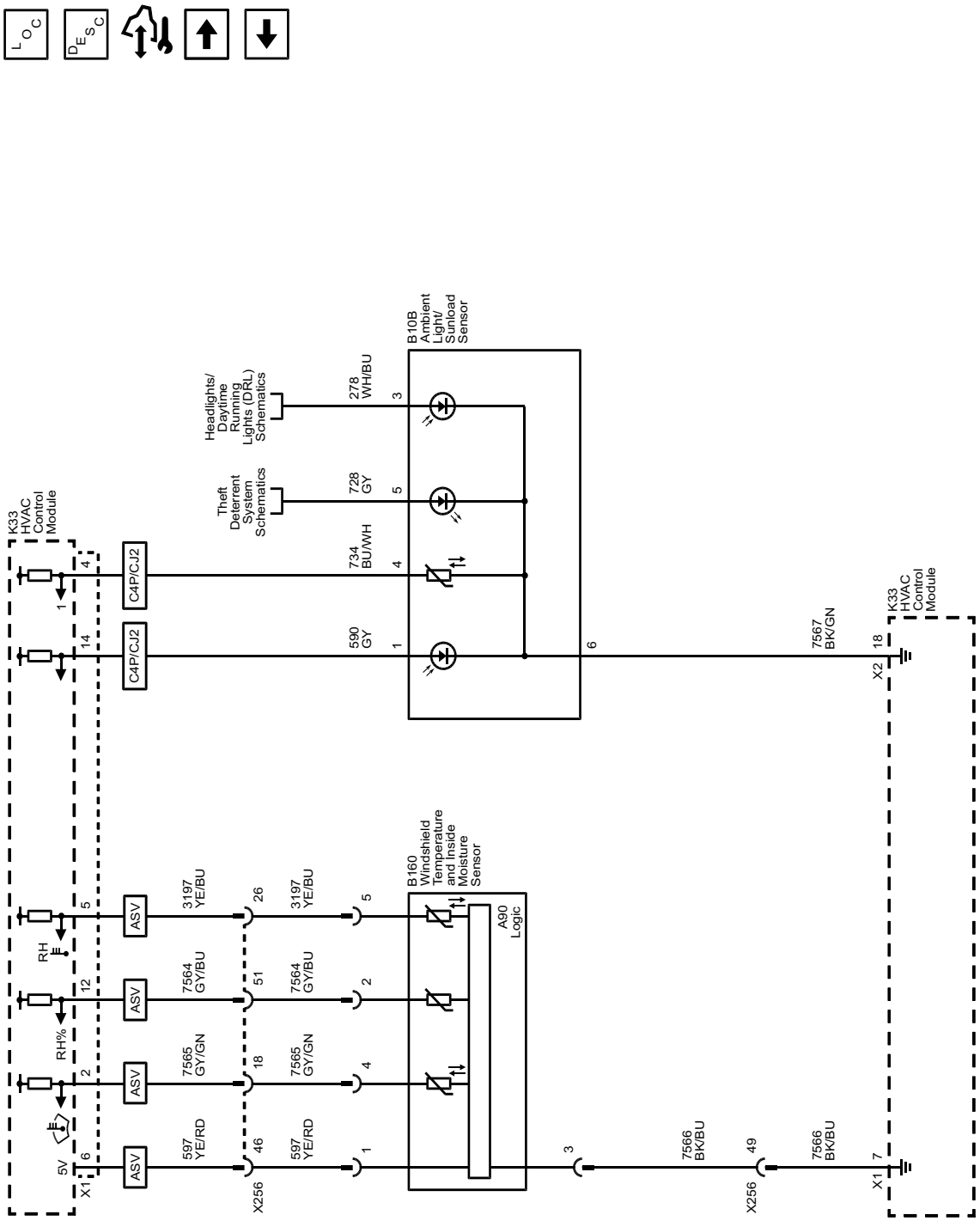
HVAC Schematics (CJ2) (HVAC Controls)



HVAC Schematics (CJ2) (Temperature and Mode)

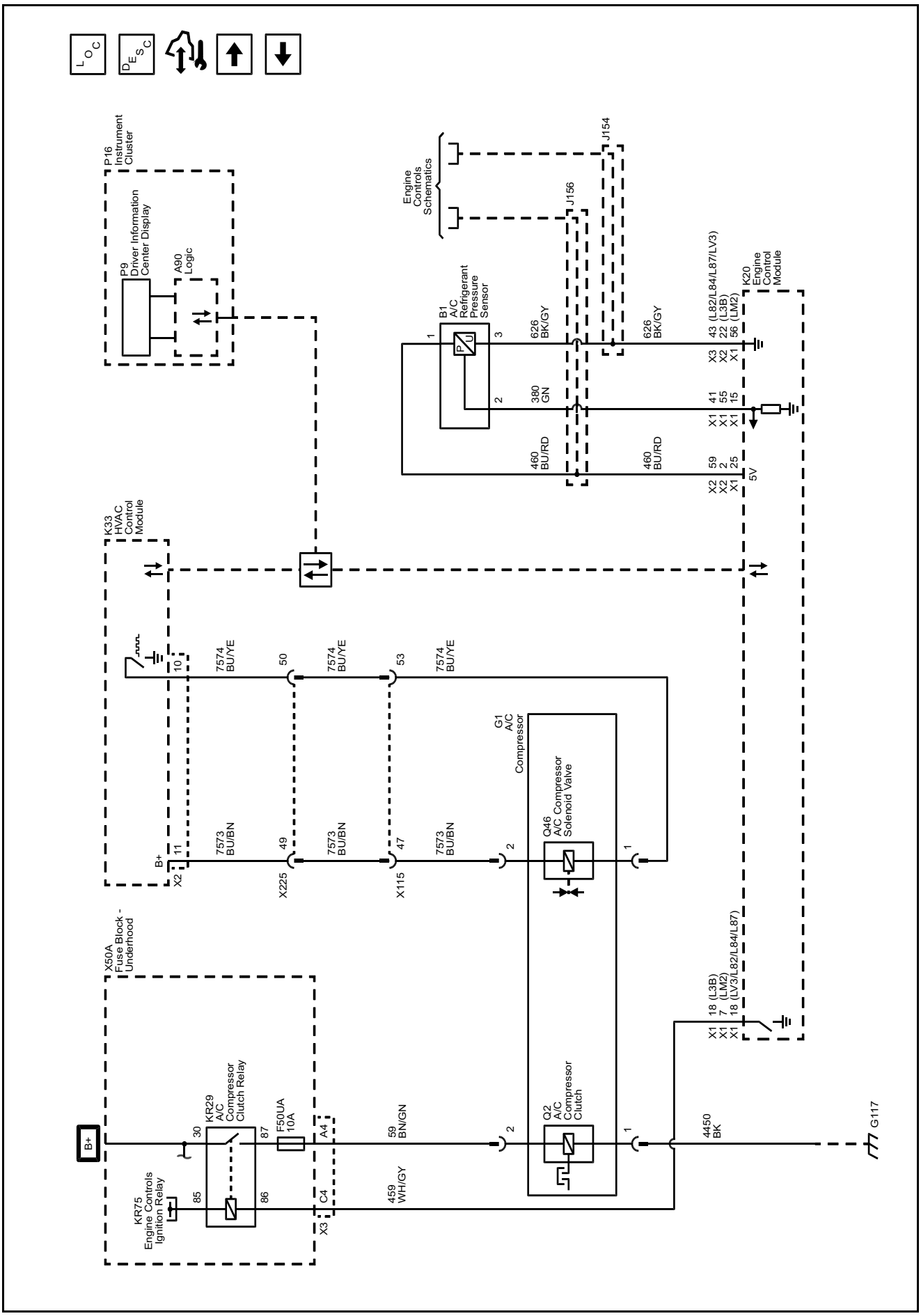


HVAC Schematics (CJ2) (Windshield and Sunload Sensors (ASV/C4P/CJ2))

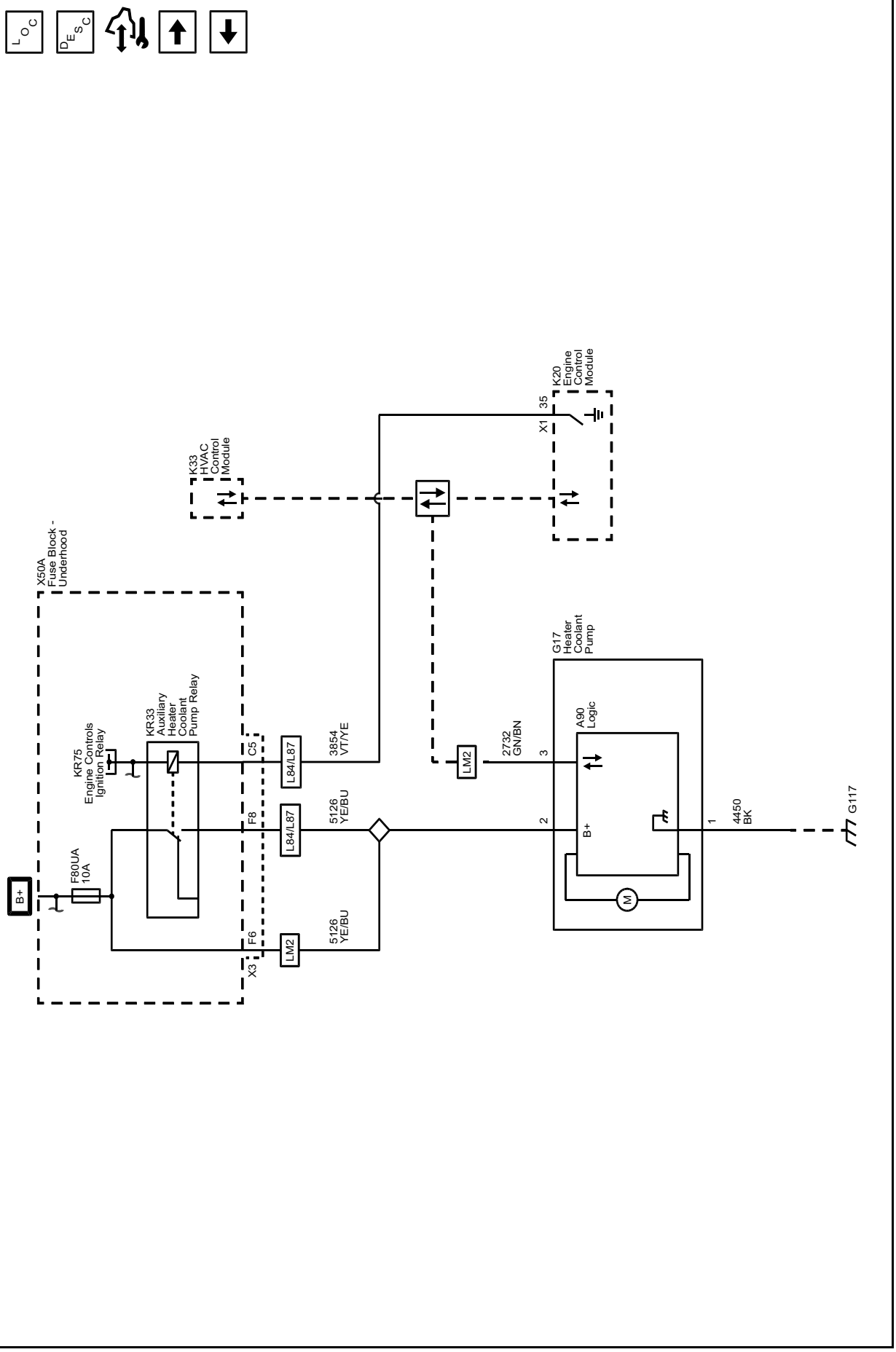


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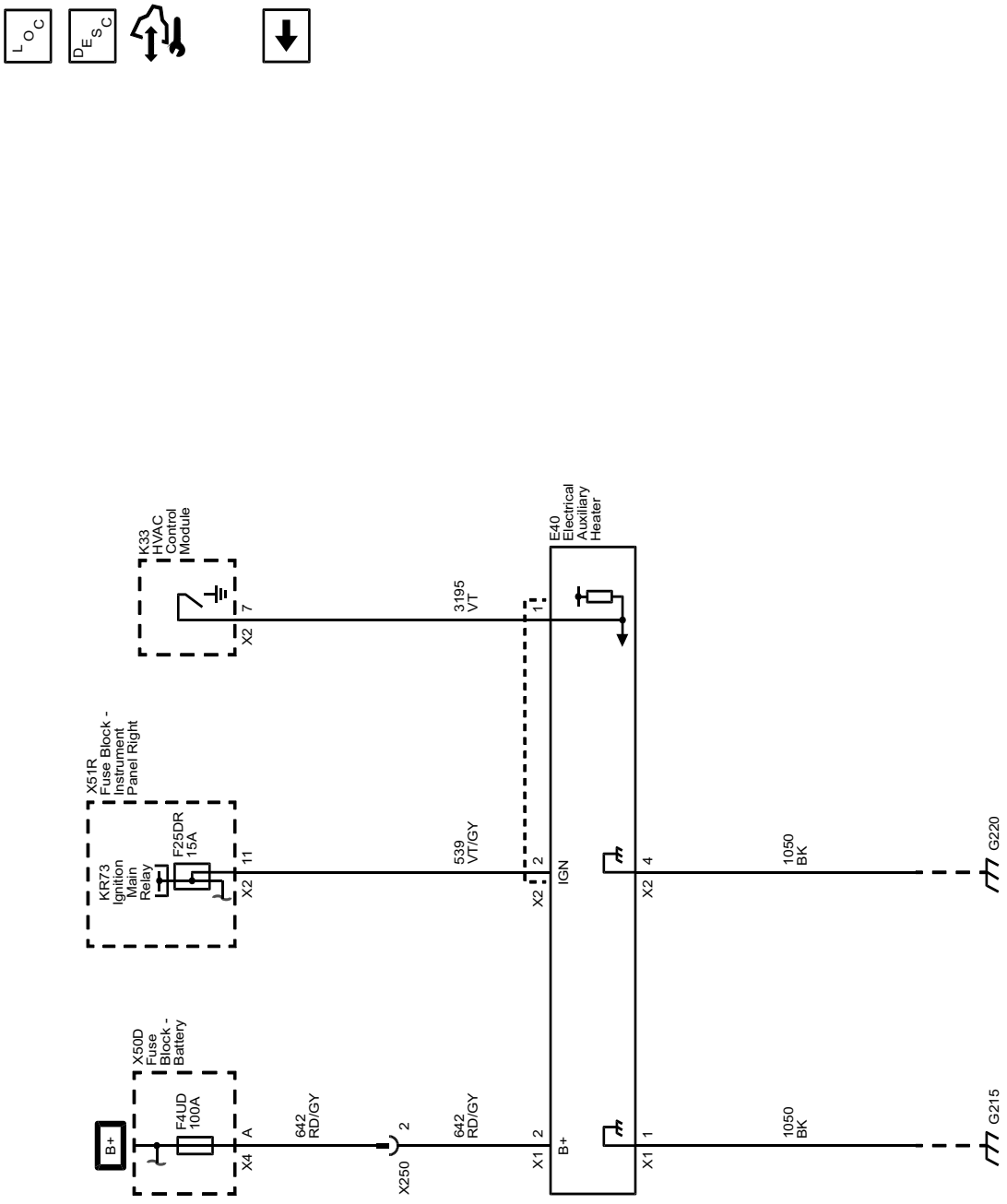
HVAC Schematics (CJ2) (A/C Compressor Controls)



HVAC Schematics (CJ2) (Heater Coolant Pump (KL9))



HVAC Schematics (CJ2) (Auxiliary Heater (C32))



Description and Operation

Automatic HVAC Description and Operation

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

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

HVAC Control Components

HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

The HVAC control module supports the following features:

Feature	Availability
Afterblow	Available if reprogrammed by the technician
Purge	Yes
Personalization	Yes
Actuator Calibration	Yes

Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module 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, right temperature (CJ2), and recirculation.

Each actuator used in the system is a 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

Blower Motor Assembly

The blower motor speed control signal from the HVAC Control Module, battery positive and ground circuits enable the blower motor to operate. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor 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, and the value is sent to the ECM via serial data. The ECM 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. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature co-efficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed at the evaporator and measures its temperature. If the temperature drops under 3°C (38°F), the compressor will be switched off in order to prevent evaporator icing.

A/C 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.

A/C 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 HVAC control module 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 HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is

pressed, the HVAC control module 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.

Ambient Light/Sunload Sensor

The sunload sensor is connected to ground and to a 12 V clocked power supply through the HVAC control module. This clocked power supply is to power the sensor electronics and to work as a clock generator to the sunload sensor micro controller. The sensor uses a pulse signal for data identification and transferring the sun intensity measurement. At each positive transition from the clocked supply input, the sunload sensor micro controller will shift channels enabling new intensity measurement on the signal output to the HVAC control module. The signal voltage varies between 0–4 V.

The passenger compartment temperature sensor is a negative temperature co-efficient thermistor. A signal and low reference circuit enables the sensor to operate. As the air temperature increases, the sensor resistance decreases. The sensor signal varies between 0–5 V.

Bright or high intensity light causes the vehicles interior temperature to increase. The HVAC system compensates for the increased temperature by diverting additional cool air into the vehicle.

Windshield Temperature and Inside Moisture Sensor

The windshield temperature and inside moisture sensor includes the relative humidity sensor, windshield temperature sensor and humidity sensing element temperature sensor all in one assembly.

This sensor assembly provides information about:

- Relative humidity level at the windshield inside the vehicle
- Temperature of the windshield inside the vehicle
- Temperature of the humidity sensor element

Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF. This reduces the amount of microbial growth that can create undesirable odors. The vehicle does not come equipped with the afterblow feature turned ON. If the afterblow feature is required due to an odor concern, it must be enabled using the scan tool Afterblow configuration function.

After the HVAC control module has been programmed for afterblow, the following conditions must be met for afterblow to operate:

- The engine has been turned OFF for at least 30 minutes.
- The ambient air temperature is at least 21°C (70°F).
- The A/C compressor operated for more than 2 minutes before shut down.
- The system voltage is at least 12 volts.

Once the above conditions have been met, the blower motor will perform the following sequence up to 5 times. This could last up to an hour:

1. The blower motor will be OFF for 7–11 minutes.
2. The blower motor will RUN for 25–30 seconds.

Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode door actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

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 HVAC control module via LIN-Bus. The HVAC control module controls the mode door actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC 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 can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module 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 HVAC control module. The ECM will

provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

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.

Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module 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 HVAC control module to calculate the fog risk on passenger compartment side of the windshield. The A/C compressor and the defrost mode may activated to prevent or remove fog on the passenger compartment side of the windshield.

Automatic Operation

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

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 HVAC control module performs the following functions to maintain the desired air temperature:

- Monitors the following sensors:
  - Ambient air temperature sensor
  - Ambient light/sunload sensor
  - Windshield temperature and inside moisture sensor
- Regulate the blower motor speed
- Position the air temperature actuators
- Position the mode door actuator
- Position the recirculation actuator
- Request A/C operation
- Control of the A/C compressor

When the warmest position is selected in automatic operation the blower speed will increase gradually until the vehicle reaches normal operating temperature. When normal operating temperature is reached the blower stays on high speed and the air temperature actuators stays in the full heat position.

When the coldest position is selected in automatic operation the blower stays on high and the air temperature actuators stay in full cold position. The mode actuator remains in the panel position and the recirculation actuator will remain in 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.

Electric Auxiliary 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 heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it 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.

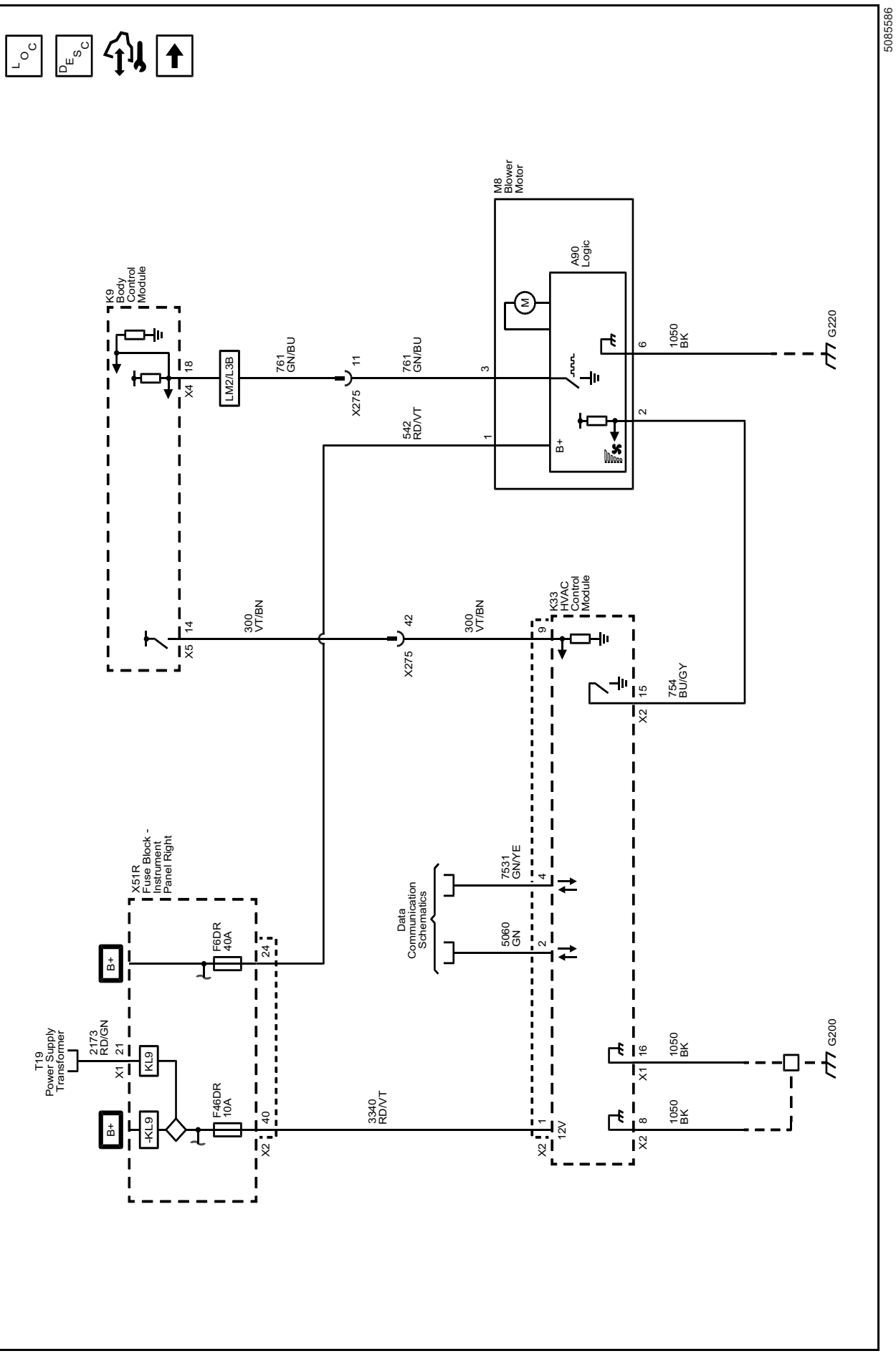
Engine Coolant and A/C System Refrigerant

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.

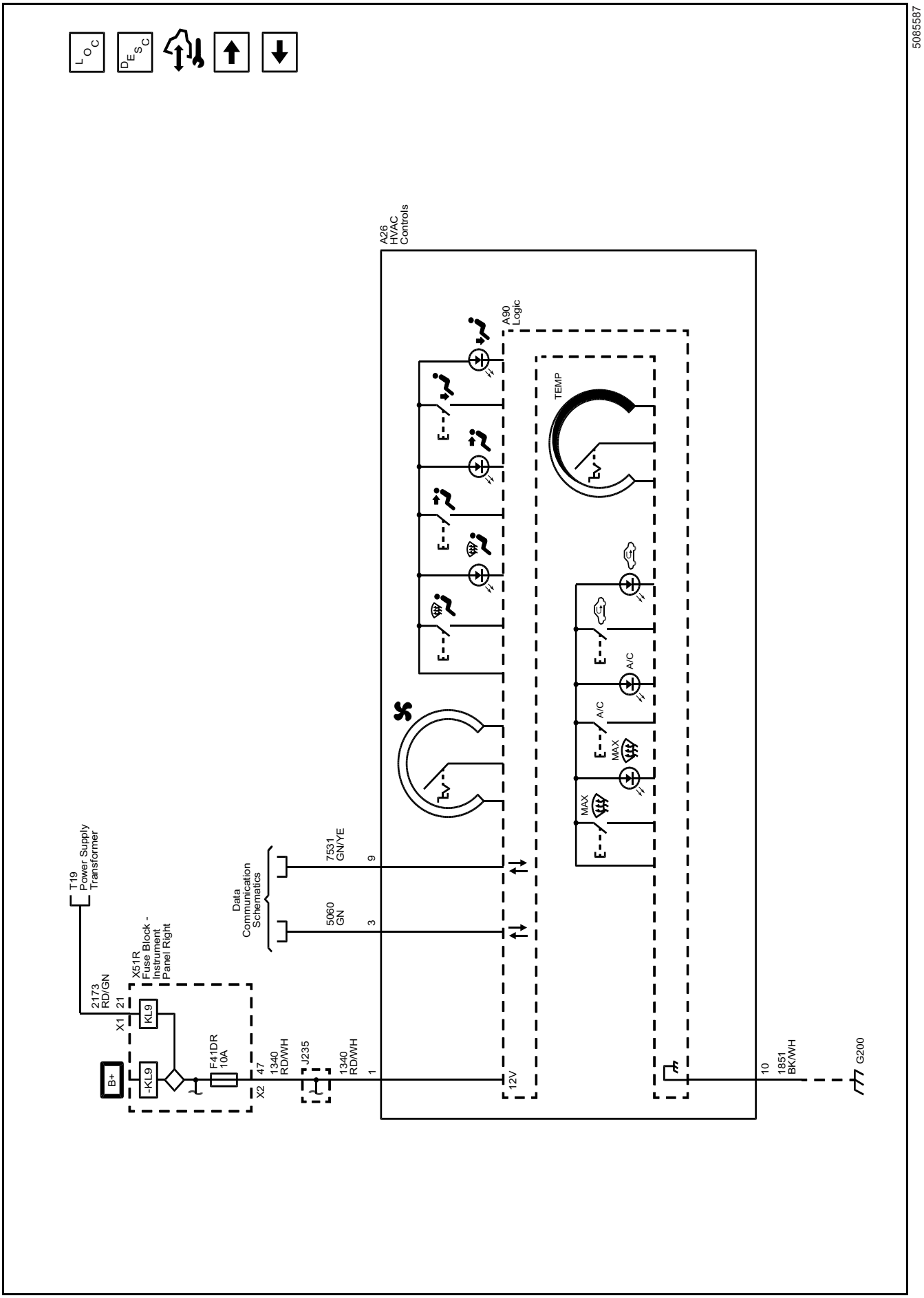
HVAC - Manual

Schematic and Routing Diagrams

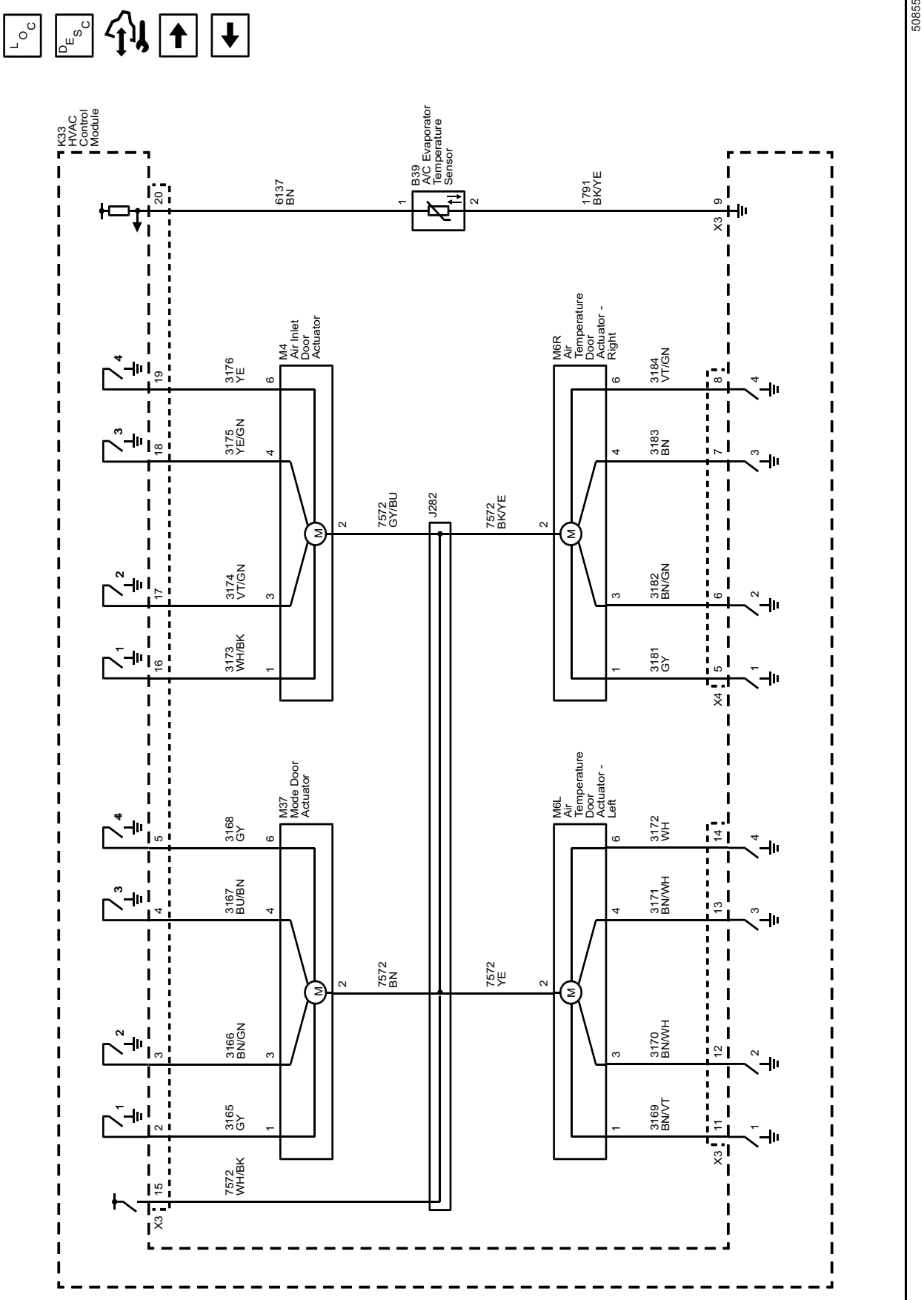
HVAC Schematics (C4P/C67) (HVAC Module Power, Ground, Serial Data, and Blower Motor)



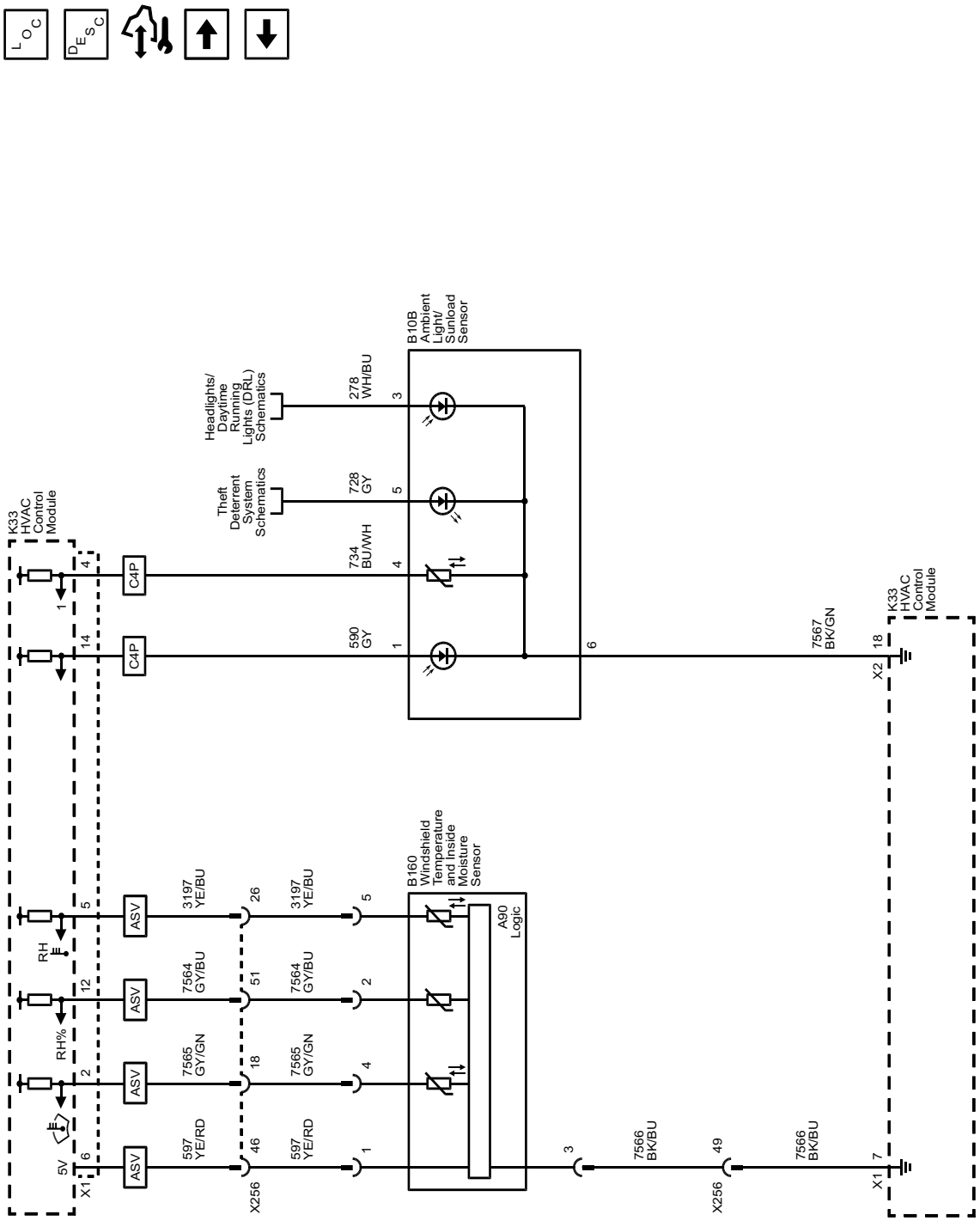
HVAC Schematics (C4P/C67) (HVAC Controls)



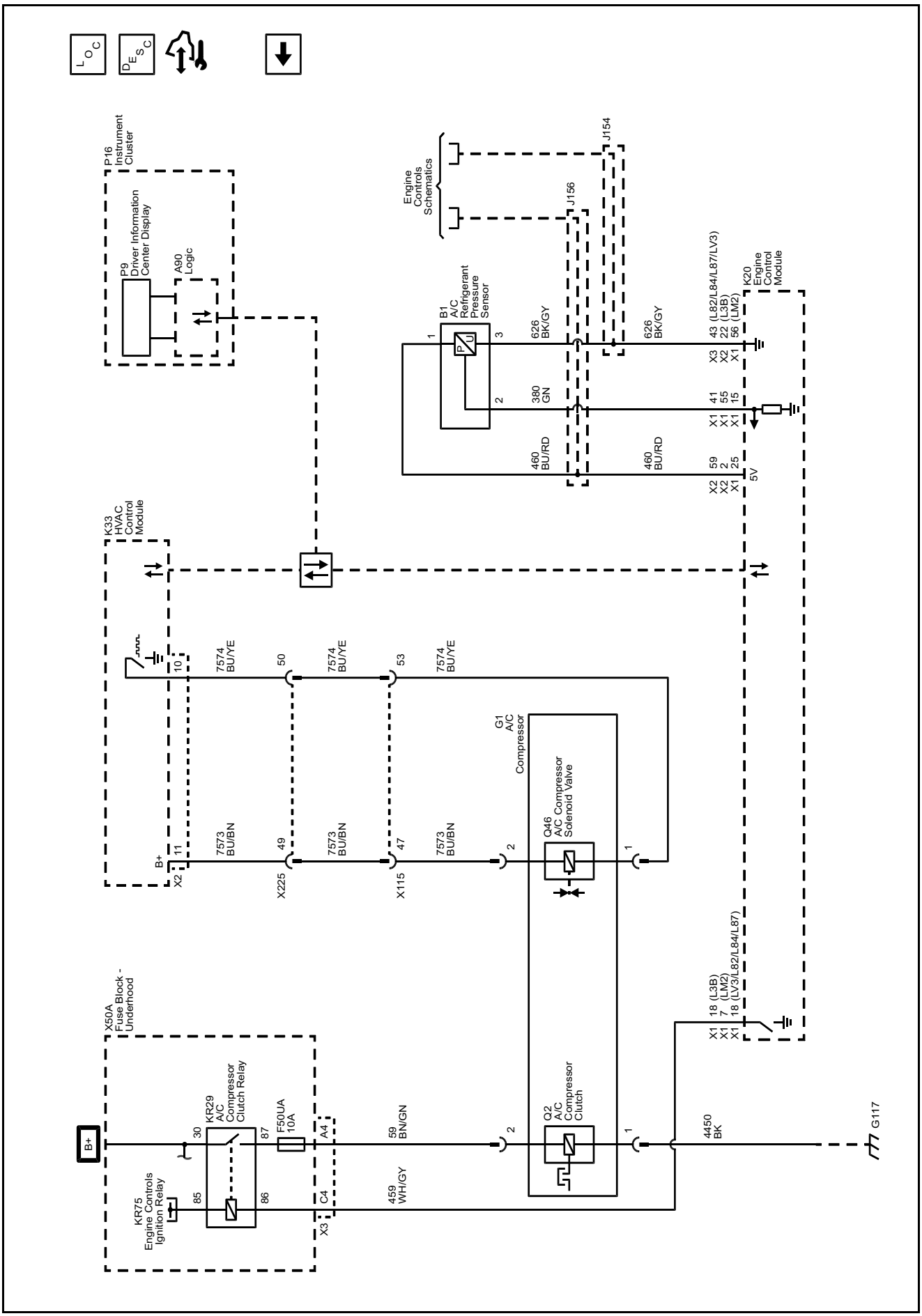
HVAC Schematics (C4P/C67) (Temperature and Mode)



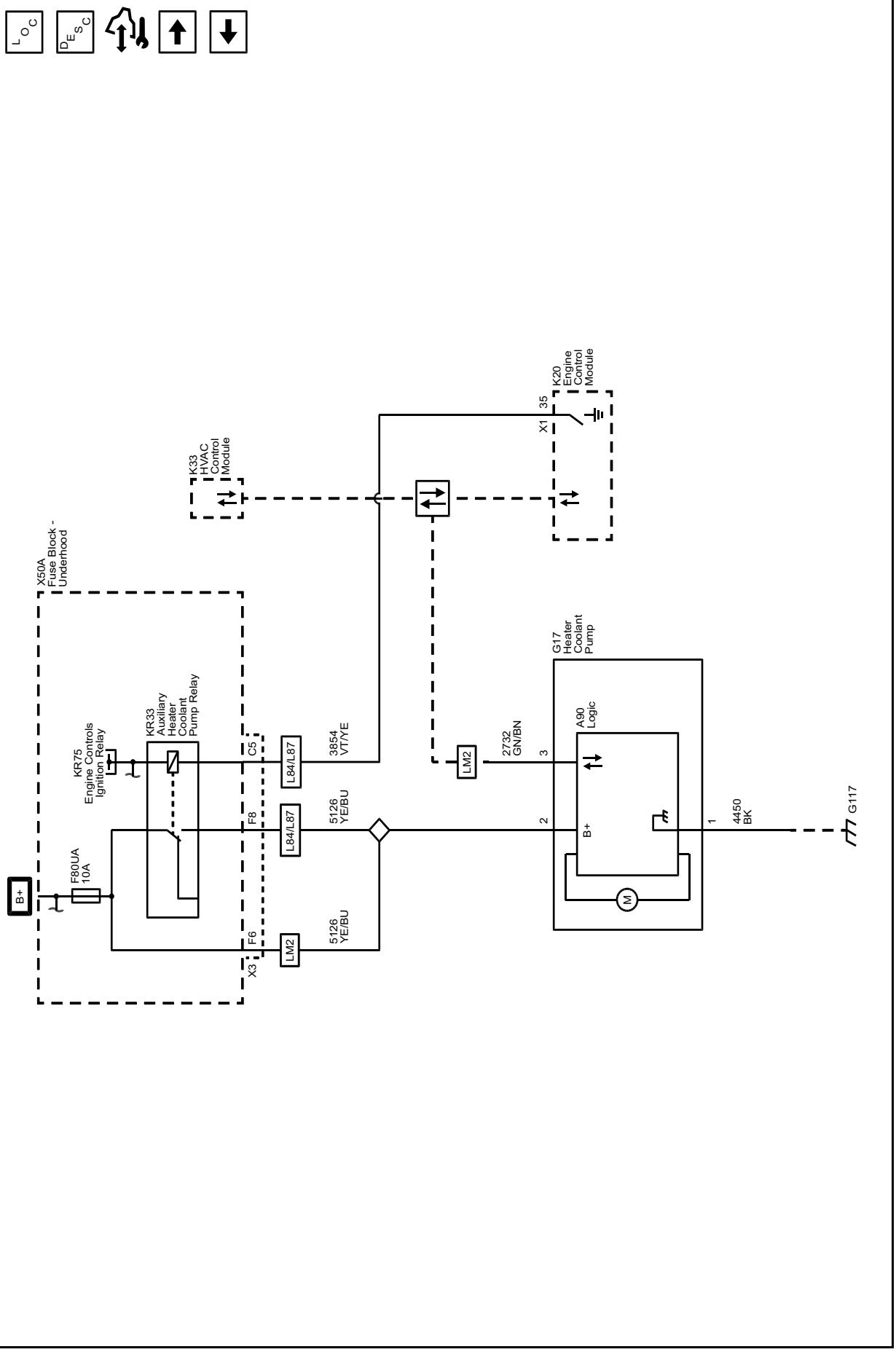
HVAC Schematics (C4P/C67) (Windshield and Sunload Sensors (ASV/C4P))



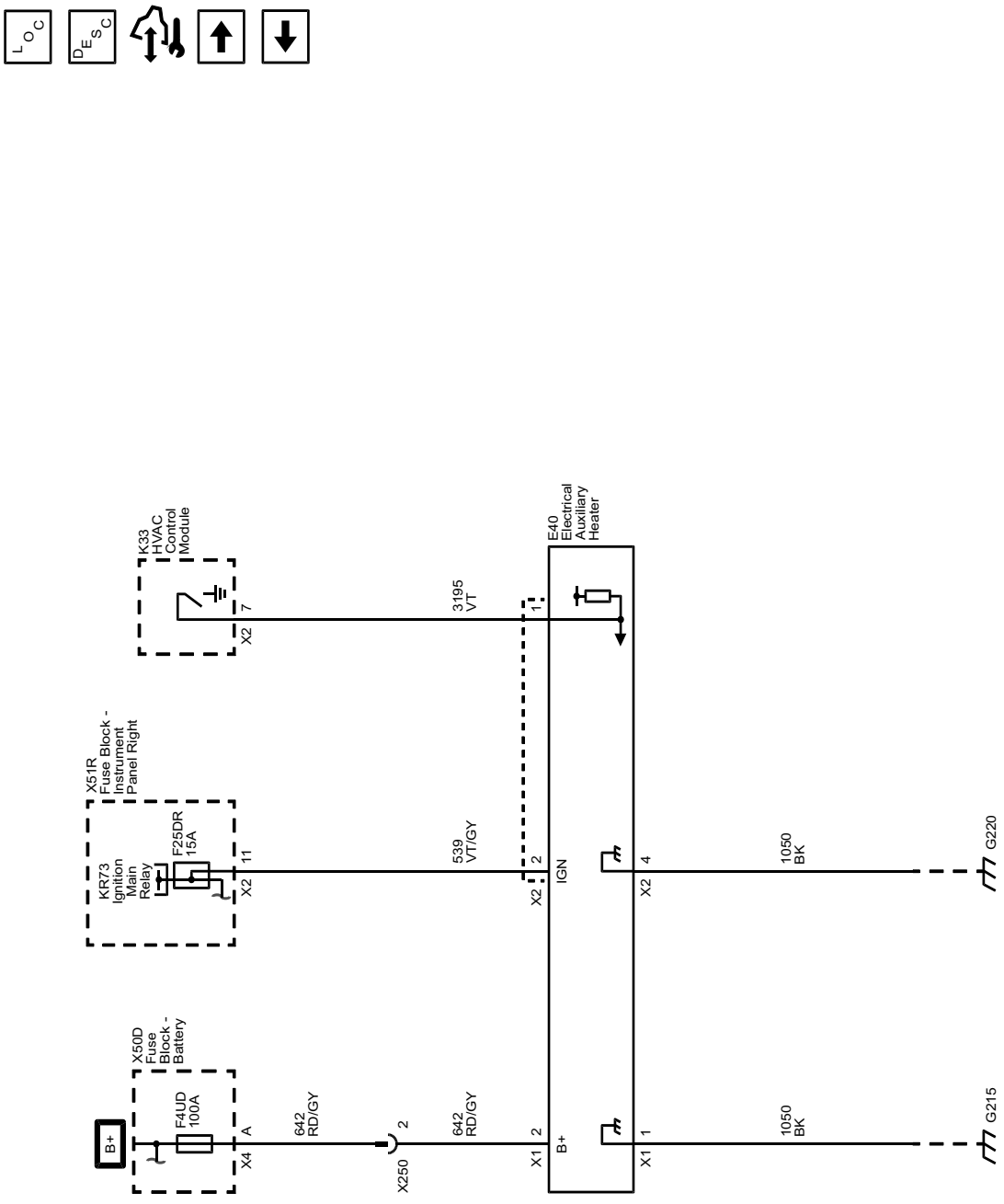
HVAC Schematics (C4P/C67) (A/C Compressor Controls)



HVAC Schematics (C4P/C67) (Heater Coolant Pump (KL9))



HVAC Schematics (C4P/C67) (Auxiliary Heater (C32))



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Description and Operation

Manual HVAC Description and Operation

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

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

HVAC Control Components

HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

The HVAC control module supports the following features:

Feature	Availability
Afterblow	Yes
Personalization	Yes
Actuator Calibration	Yes

Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module 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 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

Blower Motor Assembly

The blower motor speed control signal from the HVAC Control Module, battery positive and ground circuits enable the blower motor to operate. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor 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, and the value is sent to the ECM via serial data. The ECM 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. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature co-efficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed at the evaporator and measures its temperature. If the temperature drops under 3°C (38°F), the compressor will be switched off in order to prevent evaporator icing.

A/C 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.

A/C 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 HVAC control module 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 HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module 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.

Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF. This reduces the amount of microbial growth that can create undesirable odors. The vehicle does not come equipped with the afterblow feature turned ON. If the afterblow feature is required due to an odor concern, it must be enabled using the scan tool Afterblow configuration function.

After the HVAC control module has been programmed for afterblow, the following conditions must be met for afterblow to operate:

- The engine has been turned OFF for at least 30 minutes.
- The ambient air temperature is at least 21°C (70°F).
- The A/C compressor operated for more than 2 minutes before shut down.
- The system voltage is at least 12 volts.

Once the above conditions have been met, the blower motor will perform the following sequence up to 5 times. This could last up to an hour:

1. The blower motor will be OFF for 7–11 minutes.
2. The blower motor will RUN for 25–30 seconds.

Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC controls. The HVAC controls delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the air distribution actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC 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 can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module 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 HVAC control module. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

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 induce 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.

Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module 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.

Electric Auxiliary Heater

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 heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it 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.

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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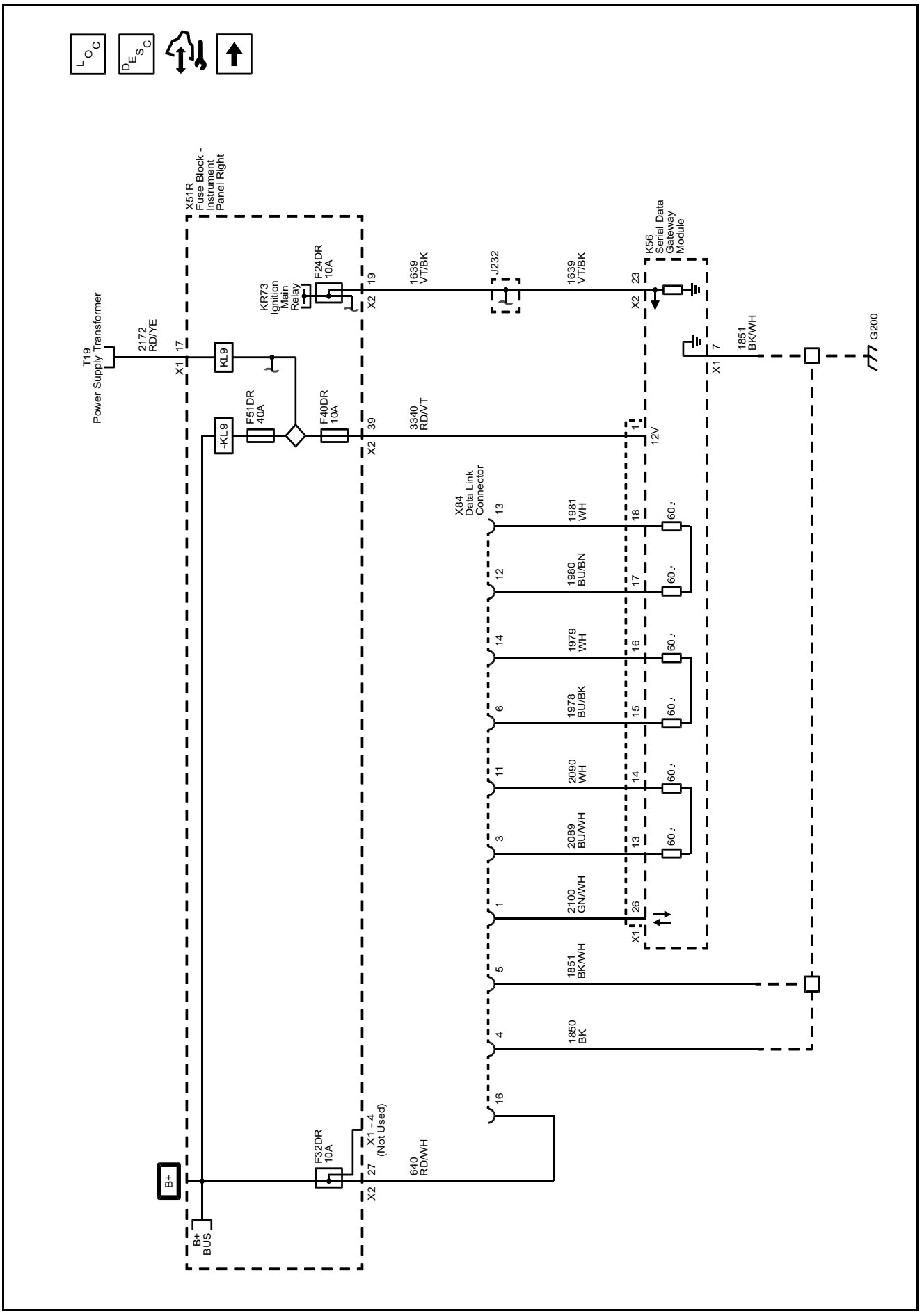
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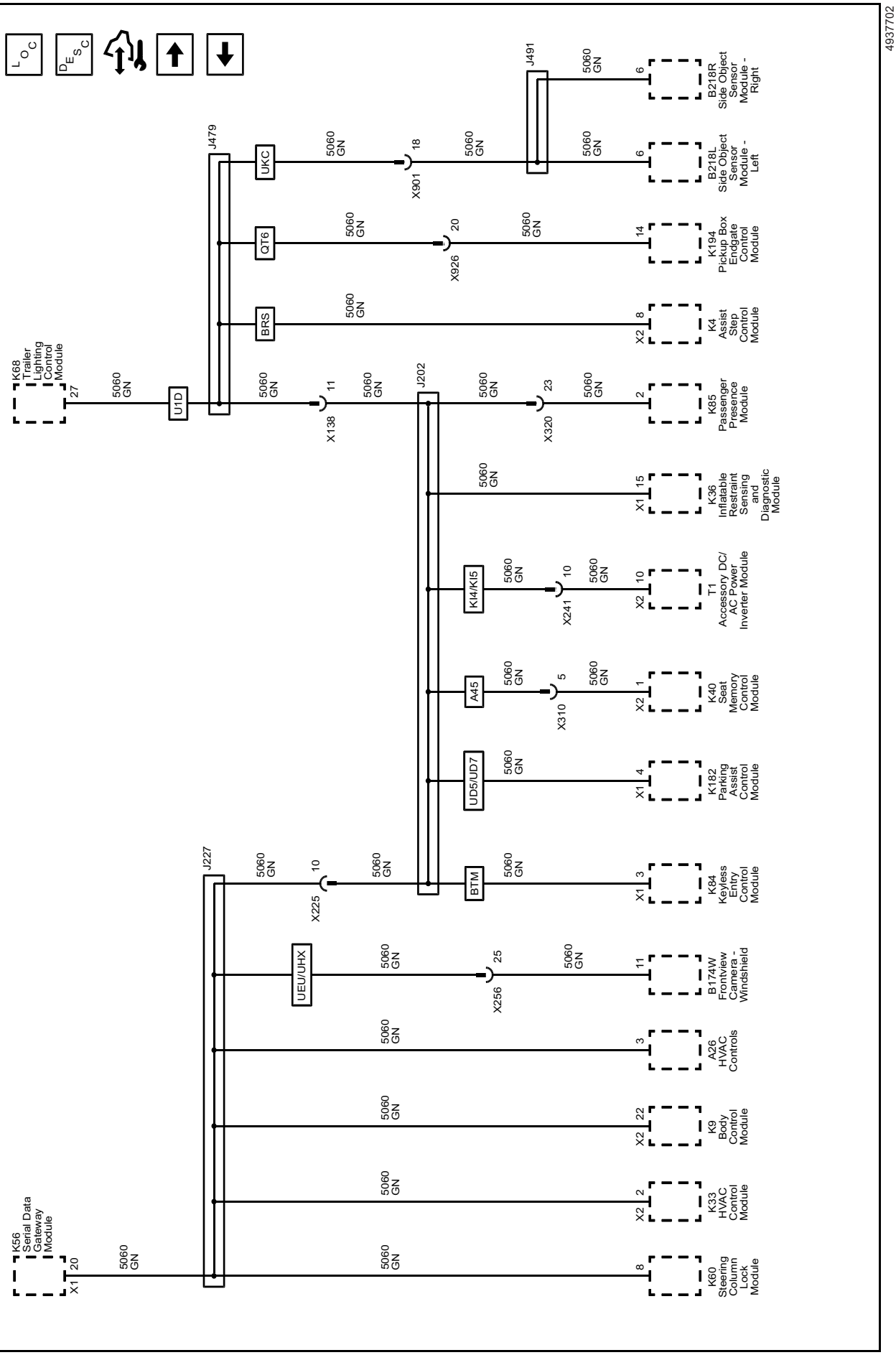
Data Communications

Schematic and Routing Diagrams

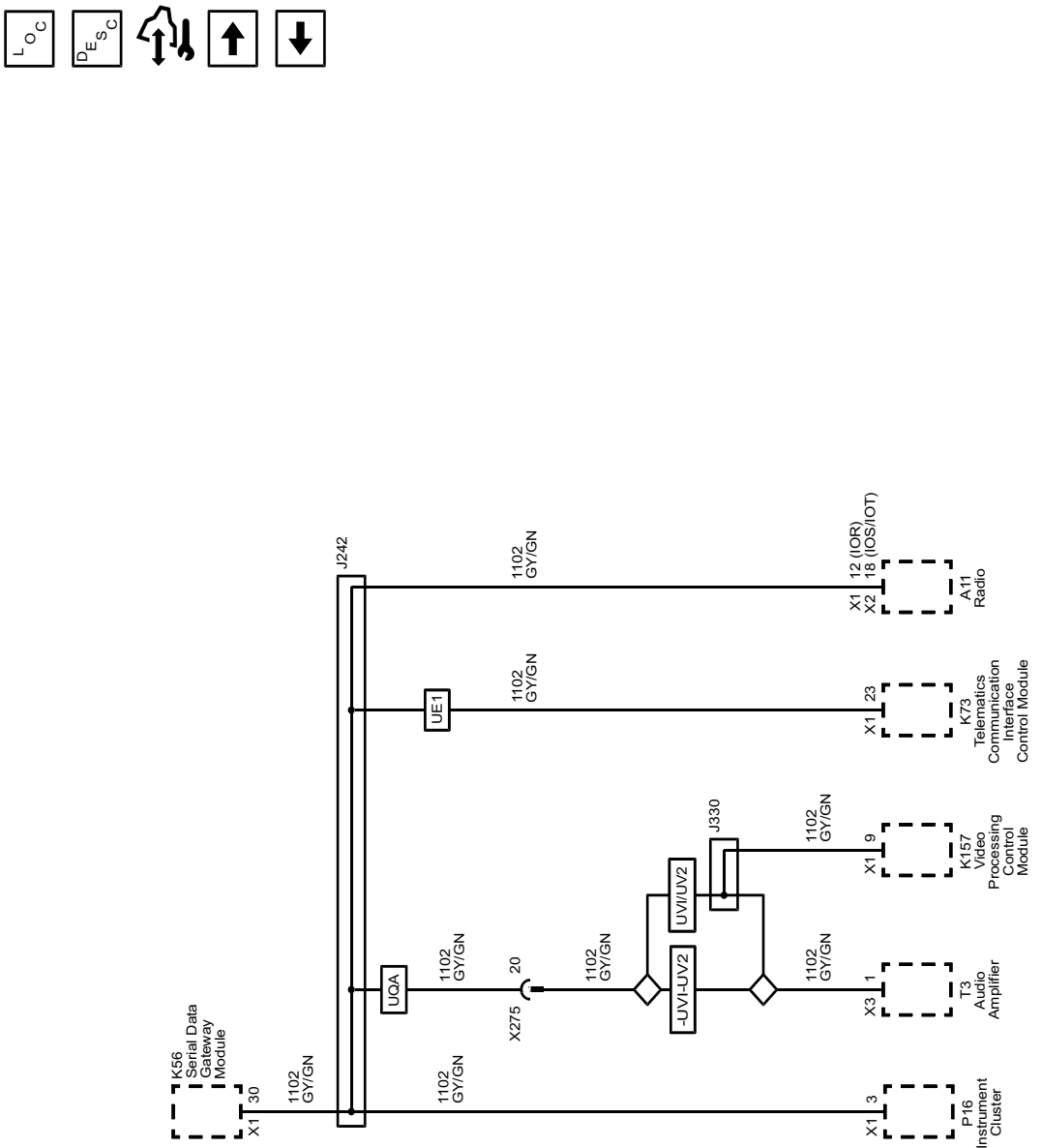
Data Communication Schematics (Data Link Connector and Serial Data Gateway Module Power and Ground)



Data Communication Schematics (Low Speed GMLAN)

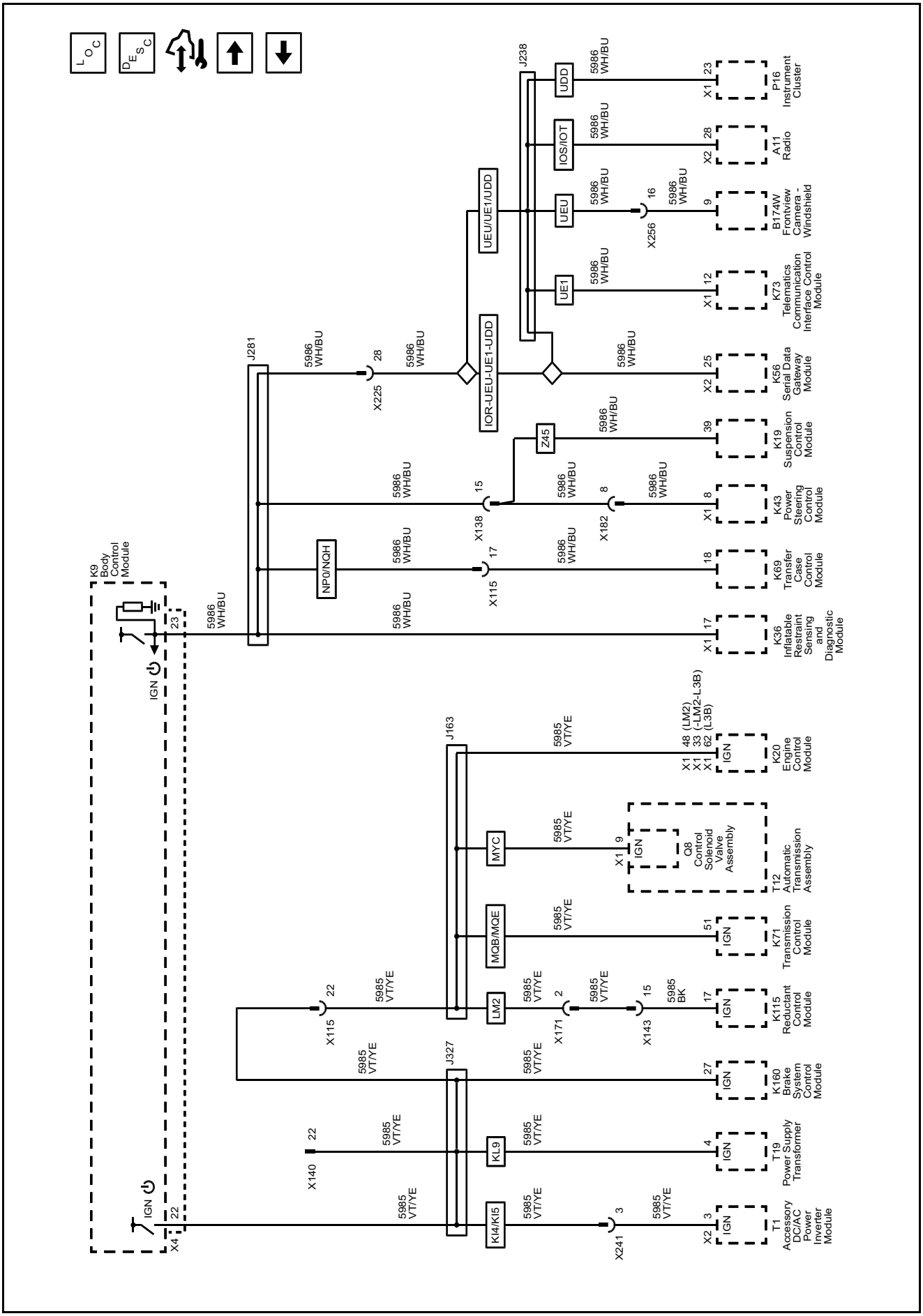


Data Communication Schematics (Gateway Isolated Low Speed GMLAN)

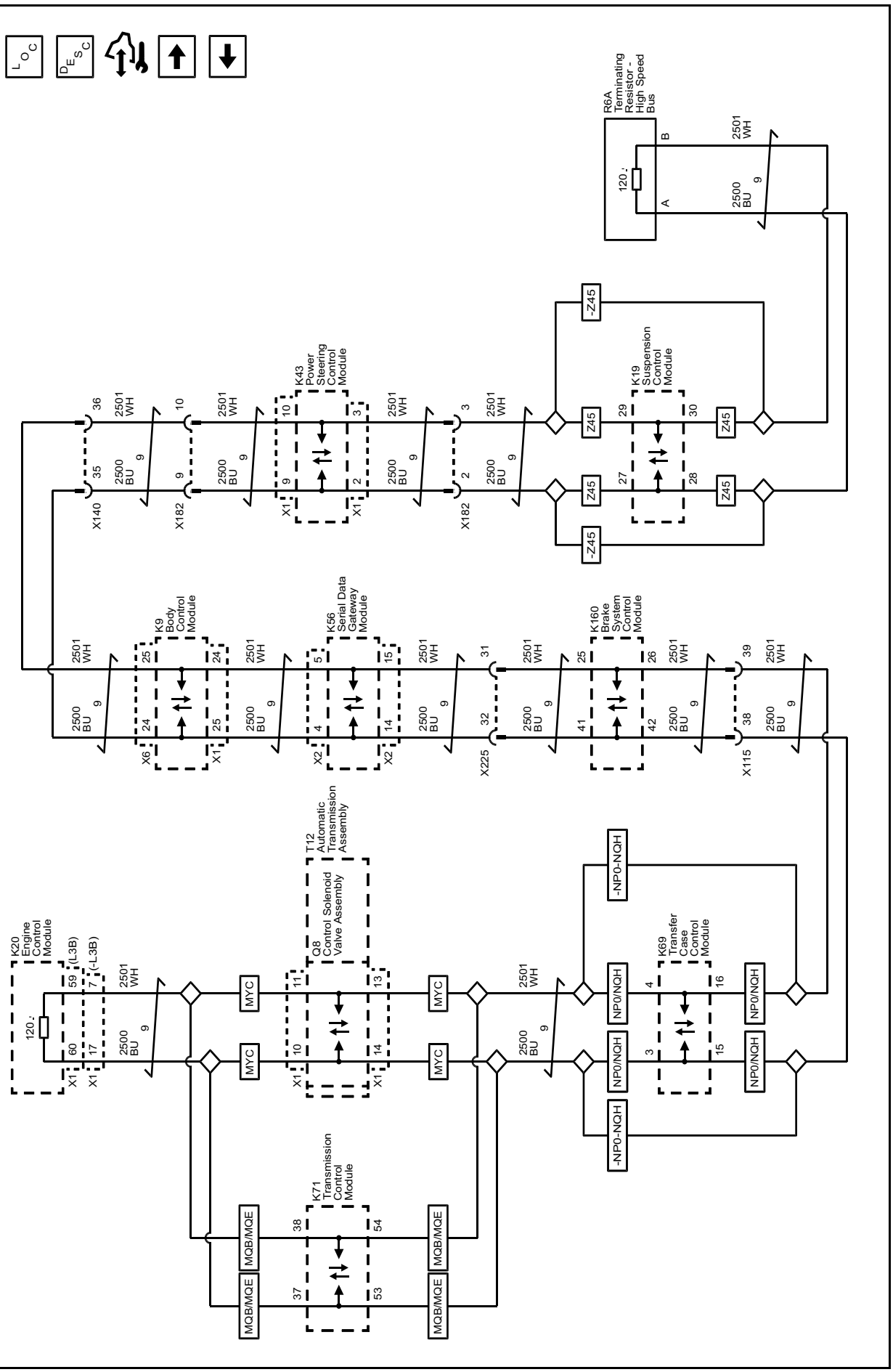


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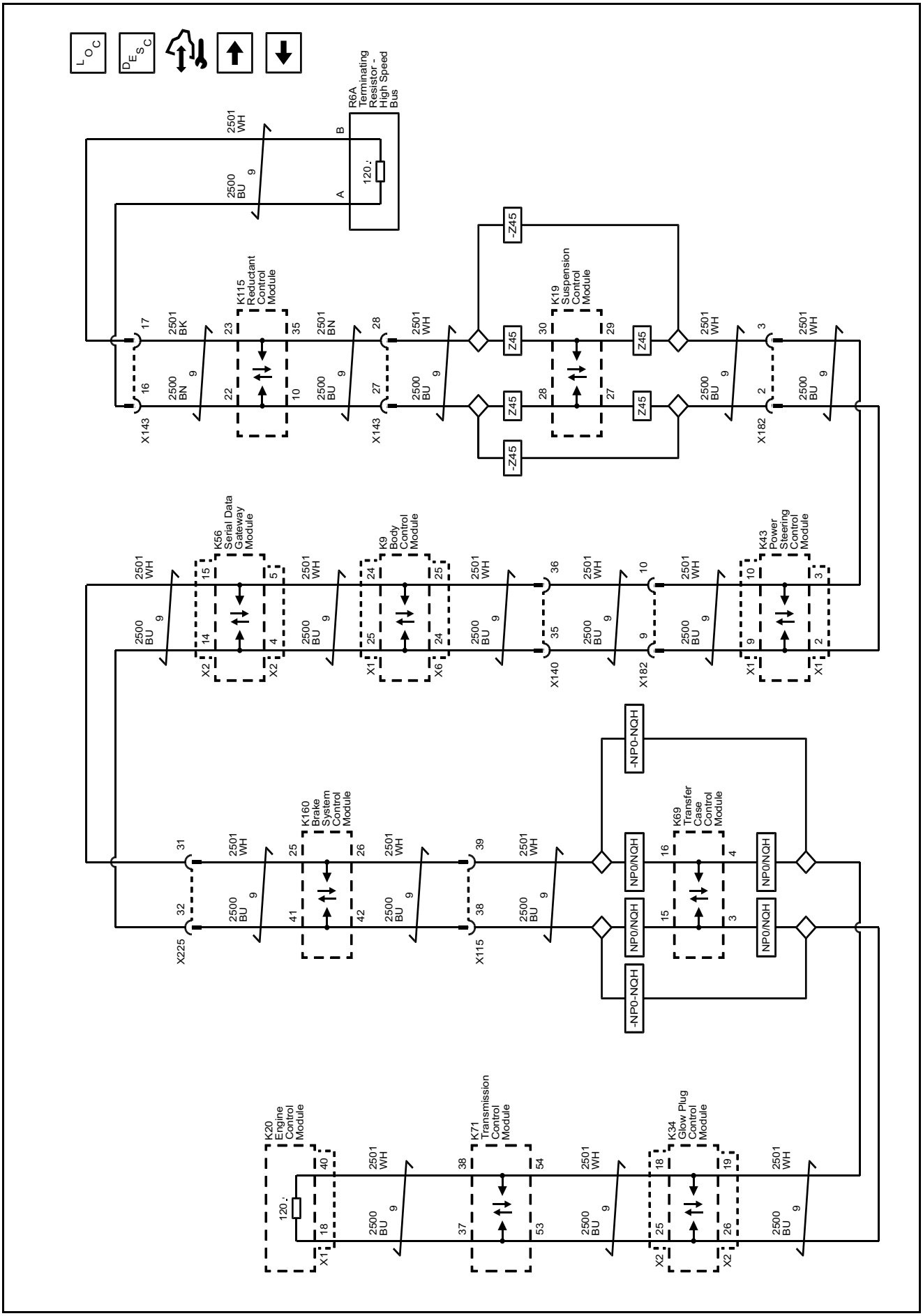
Data Communication Schematics (Communications Enable - High Speed GMLAN)



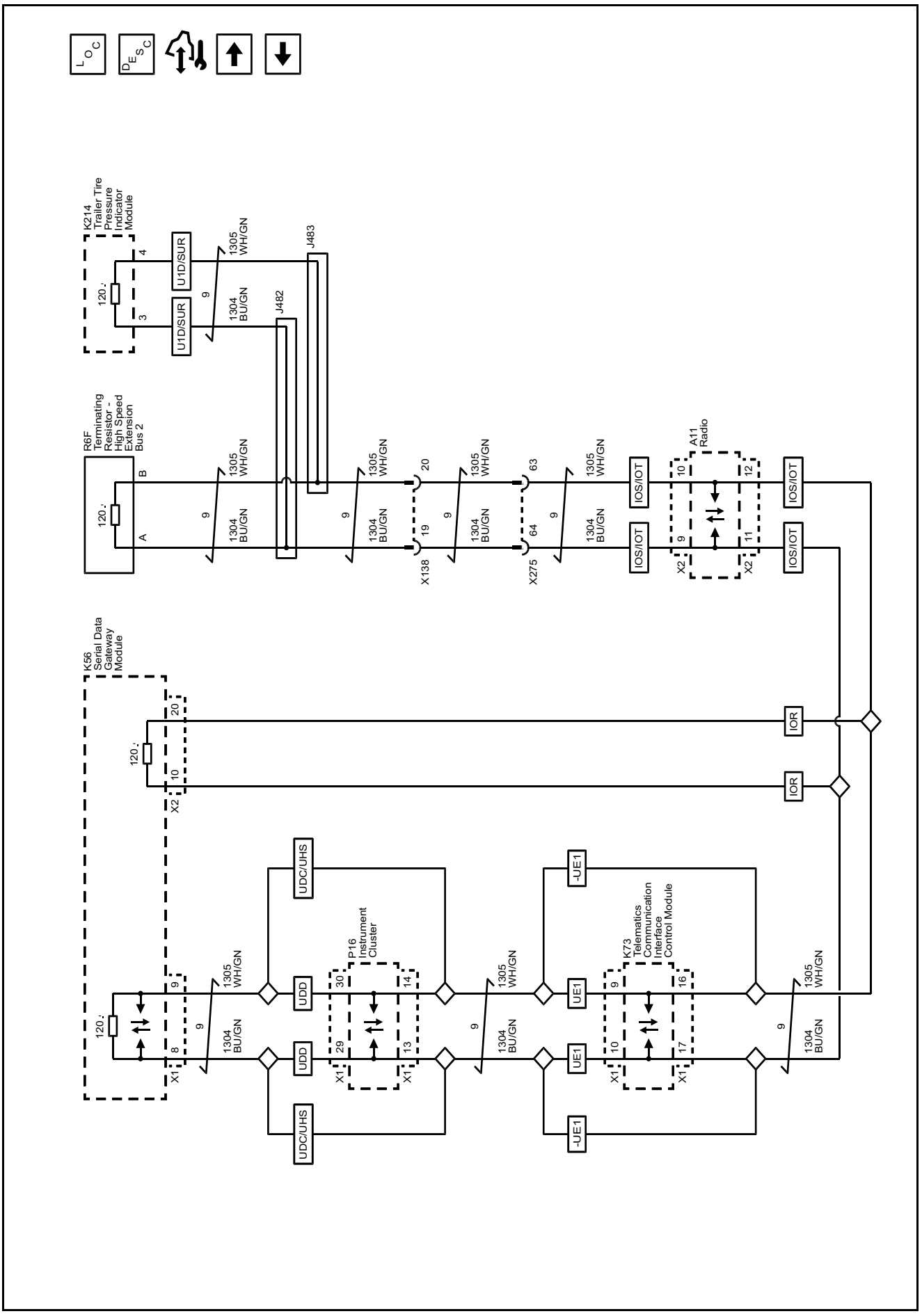
Data Communication Schematics (High Speed GMLAN (-LM2))



Data Communication Schematics (High Speed GMLAN (LM2))

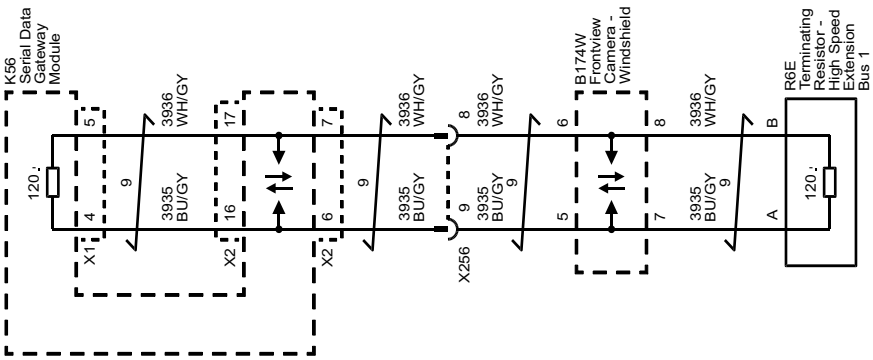


Data Communication Schematics (Gateway Isolated High Speed GMLAN)



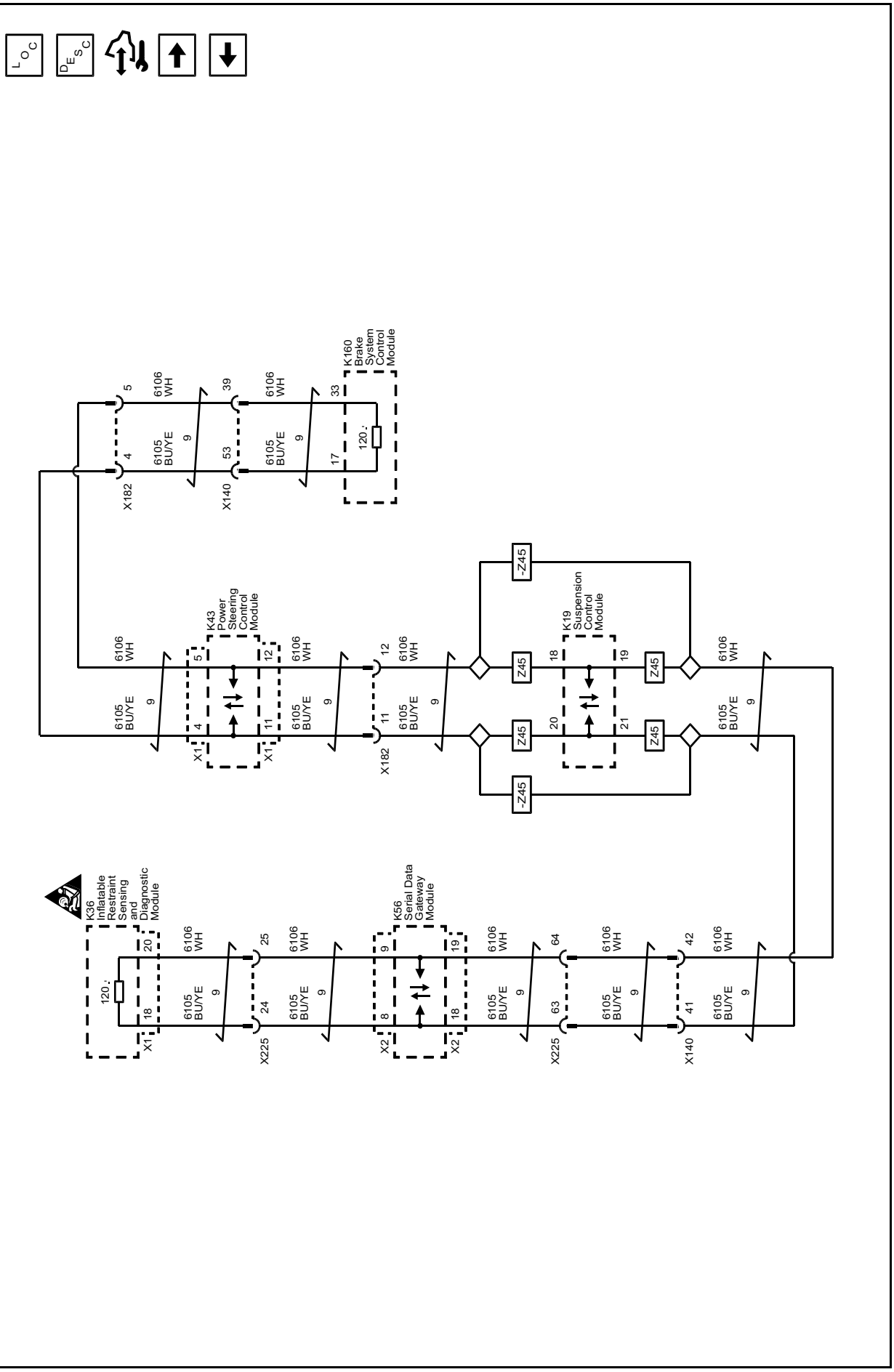
Data Communication Schematics (Gateway Expansion High Speed GMLAN (UEU/UHX))



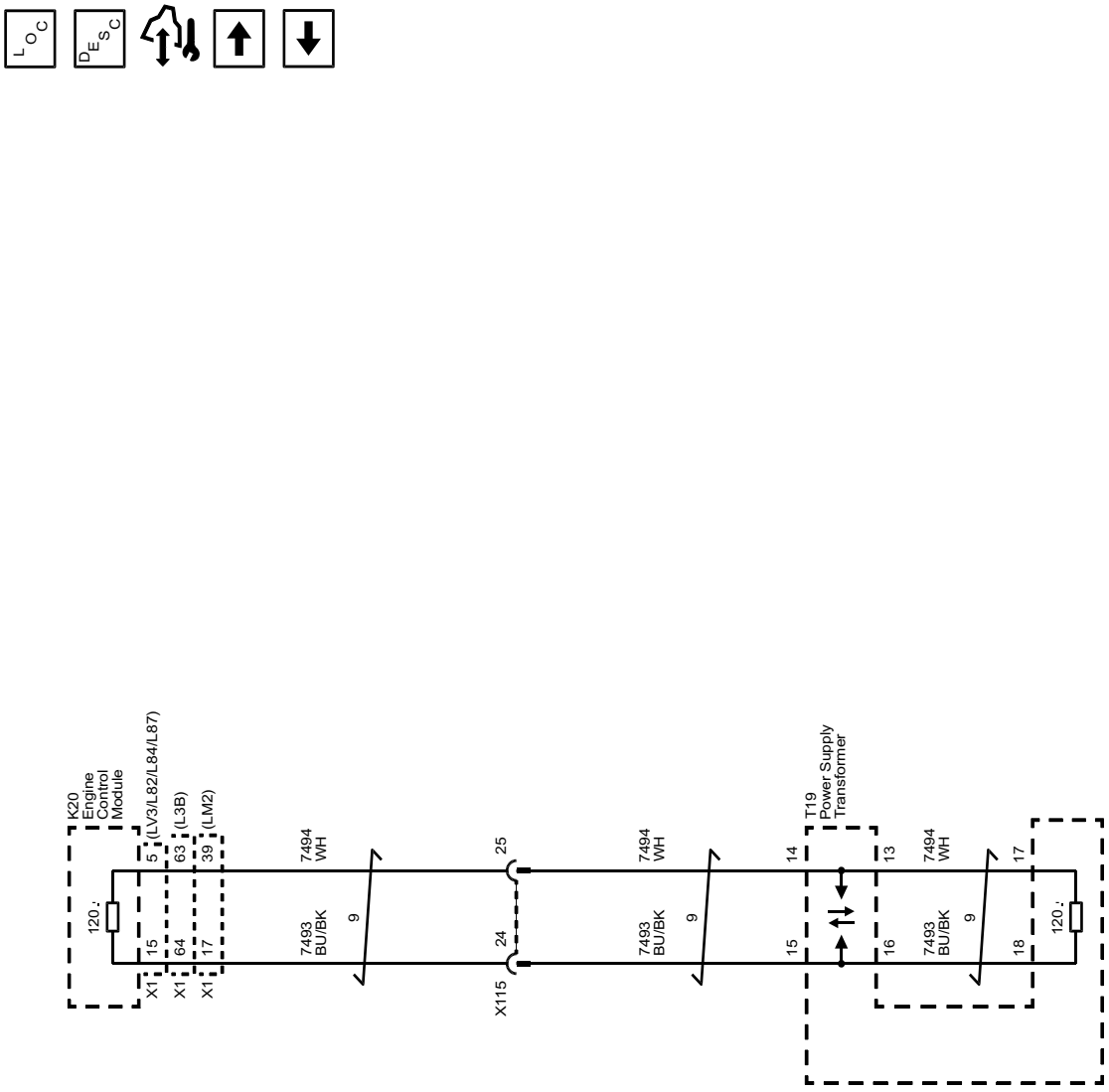


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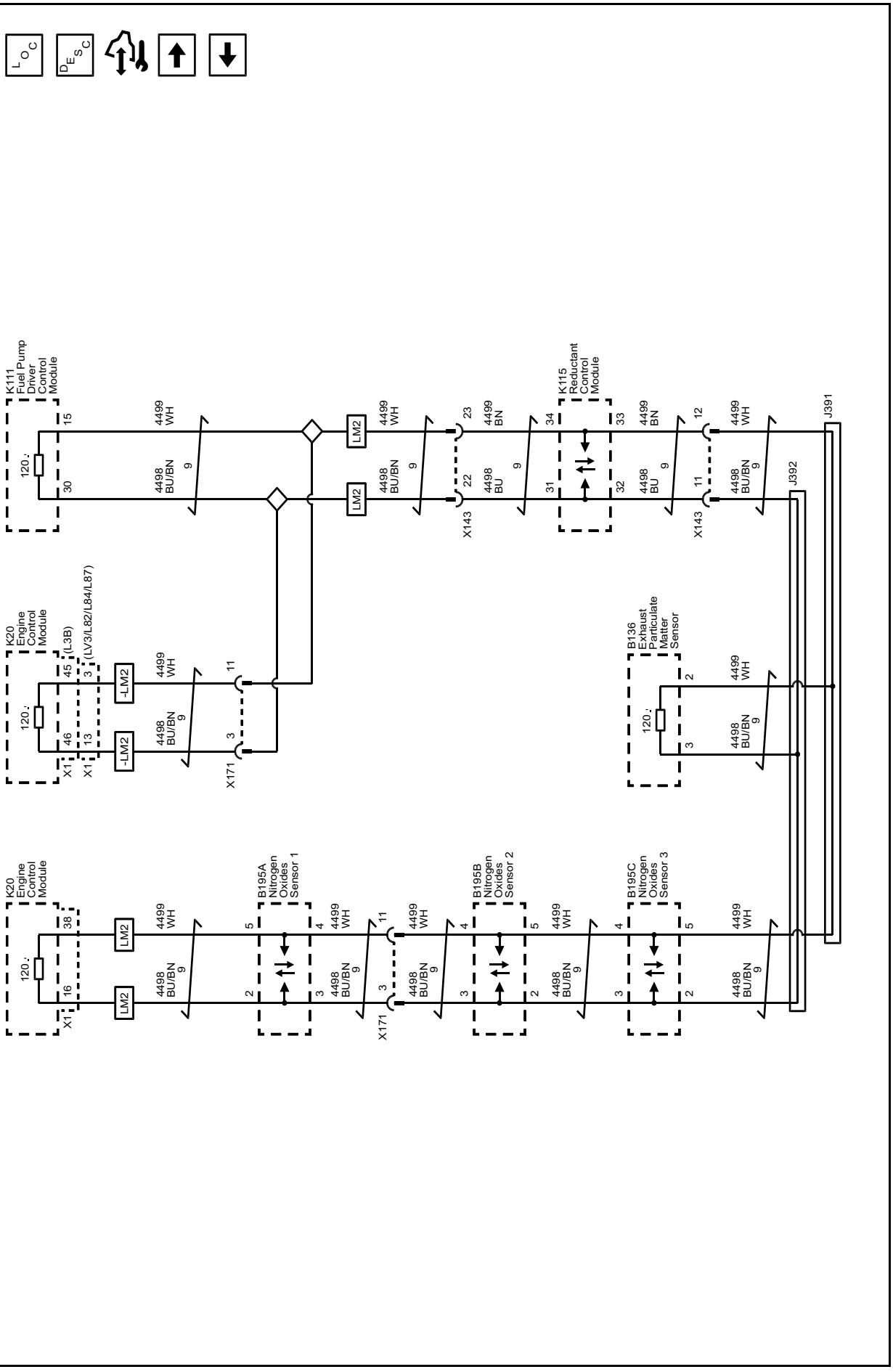
Data Communication Schematics (Chassis High Speed GMLAN)



Data Communication Schematics (Powertrain High Speed GMLAN (KL9))

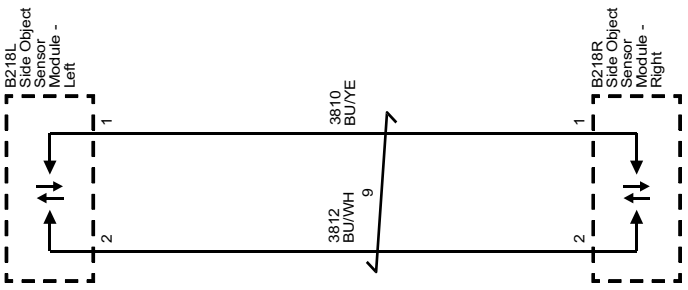


Data Communication Schematics (Powertrain Sensor High Speed GMLAN)



Data Communication Schematics (Object High Speed GMLAN (UKC))

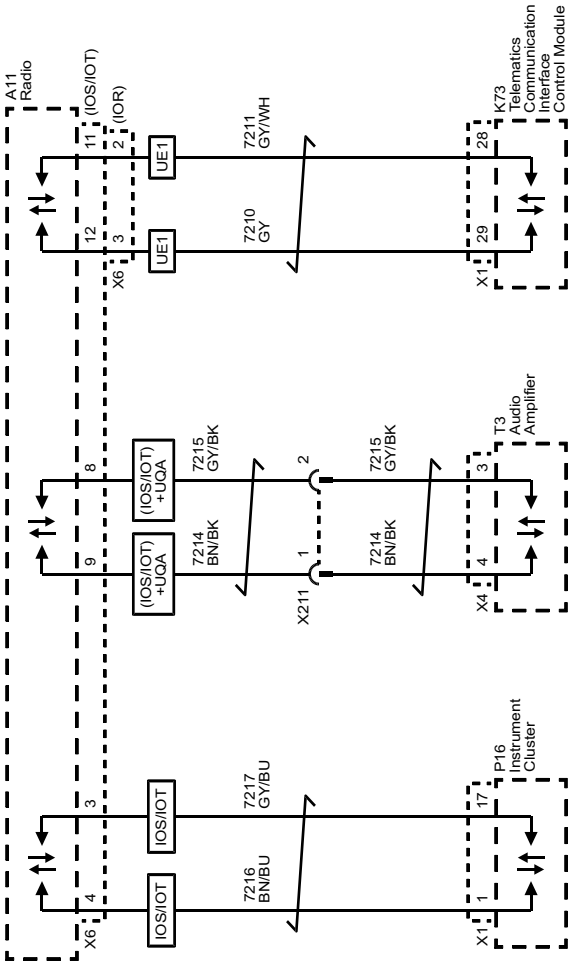




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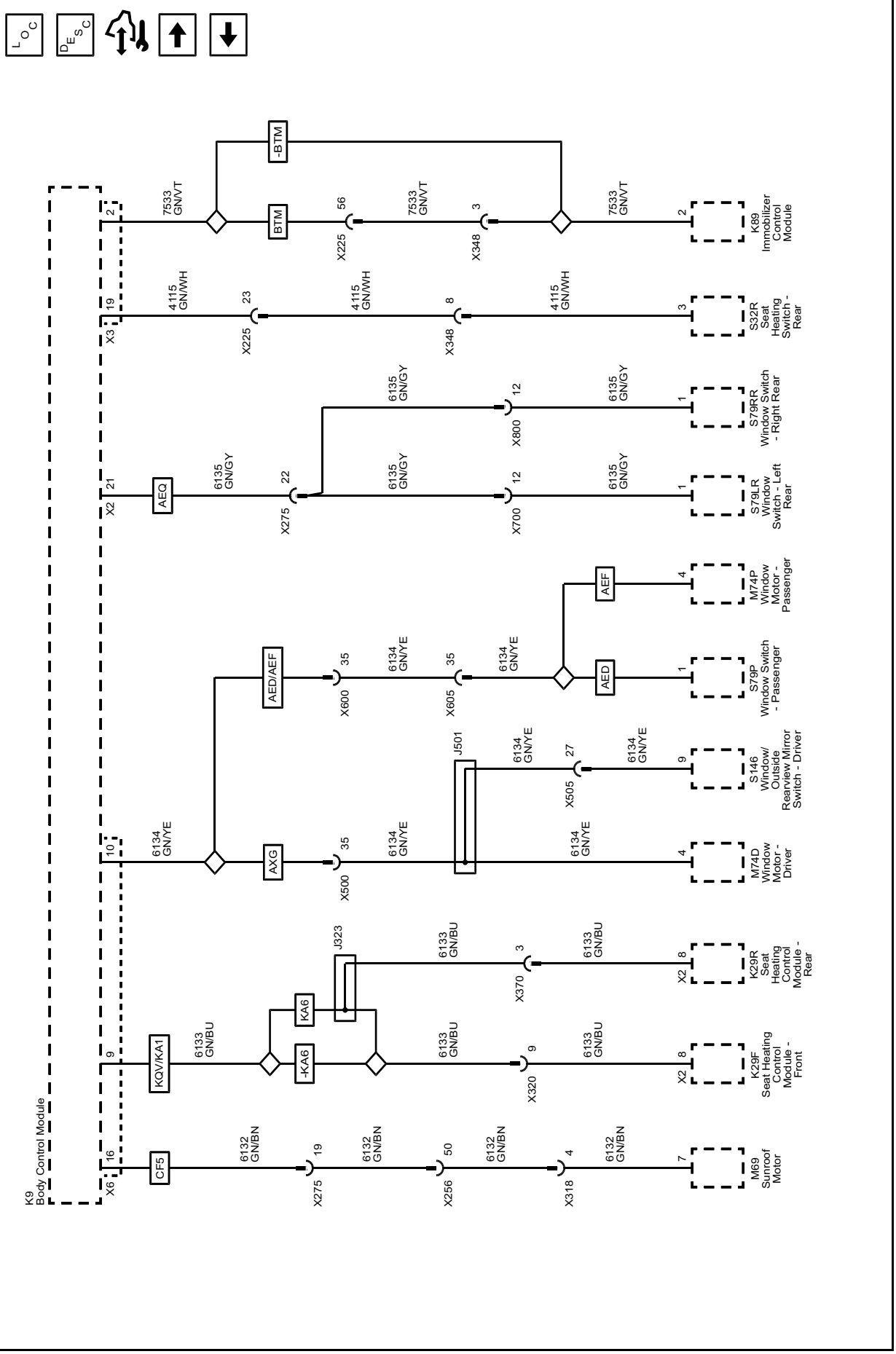
Data Communication Schematics (Ethernet Bus)



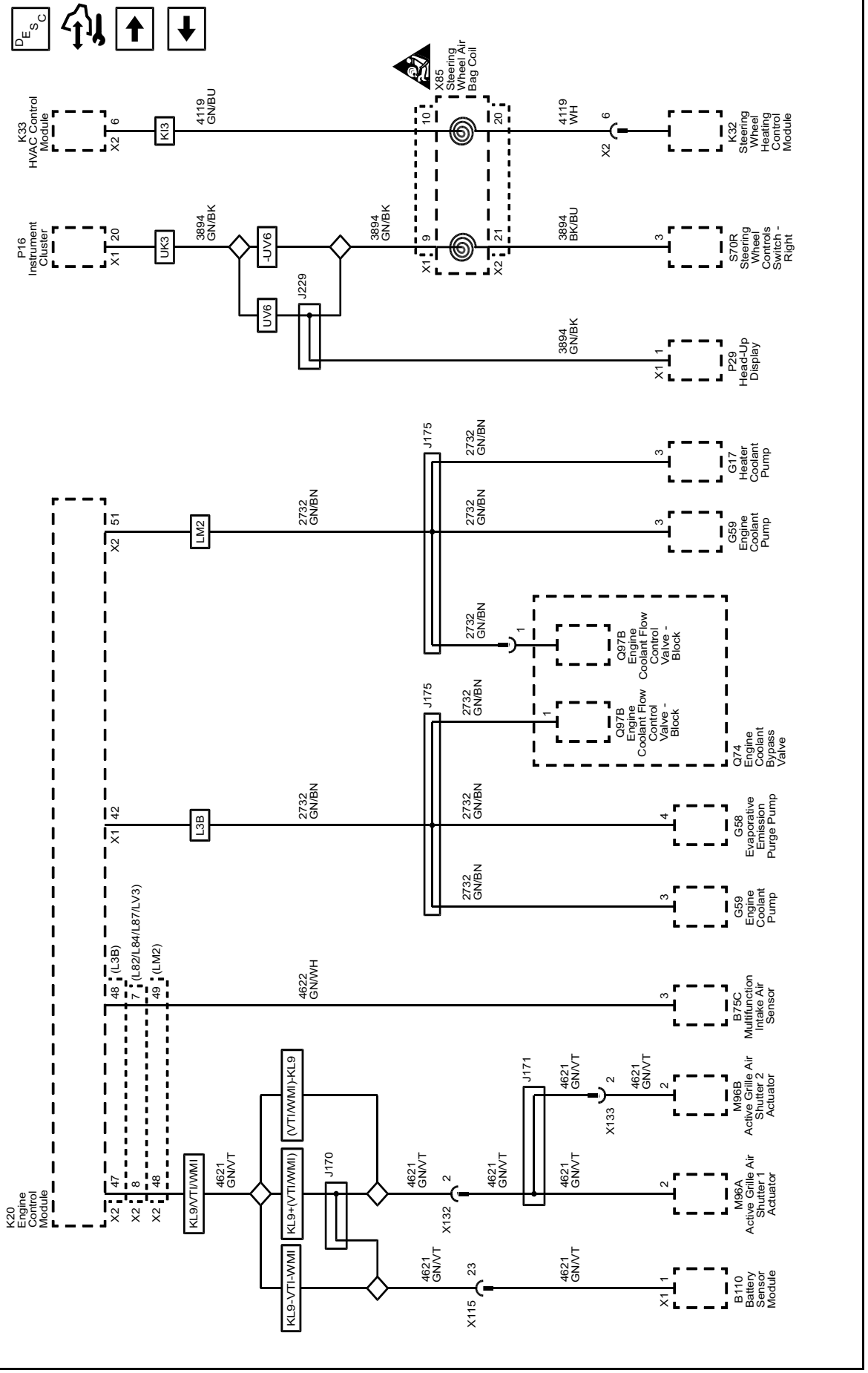


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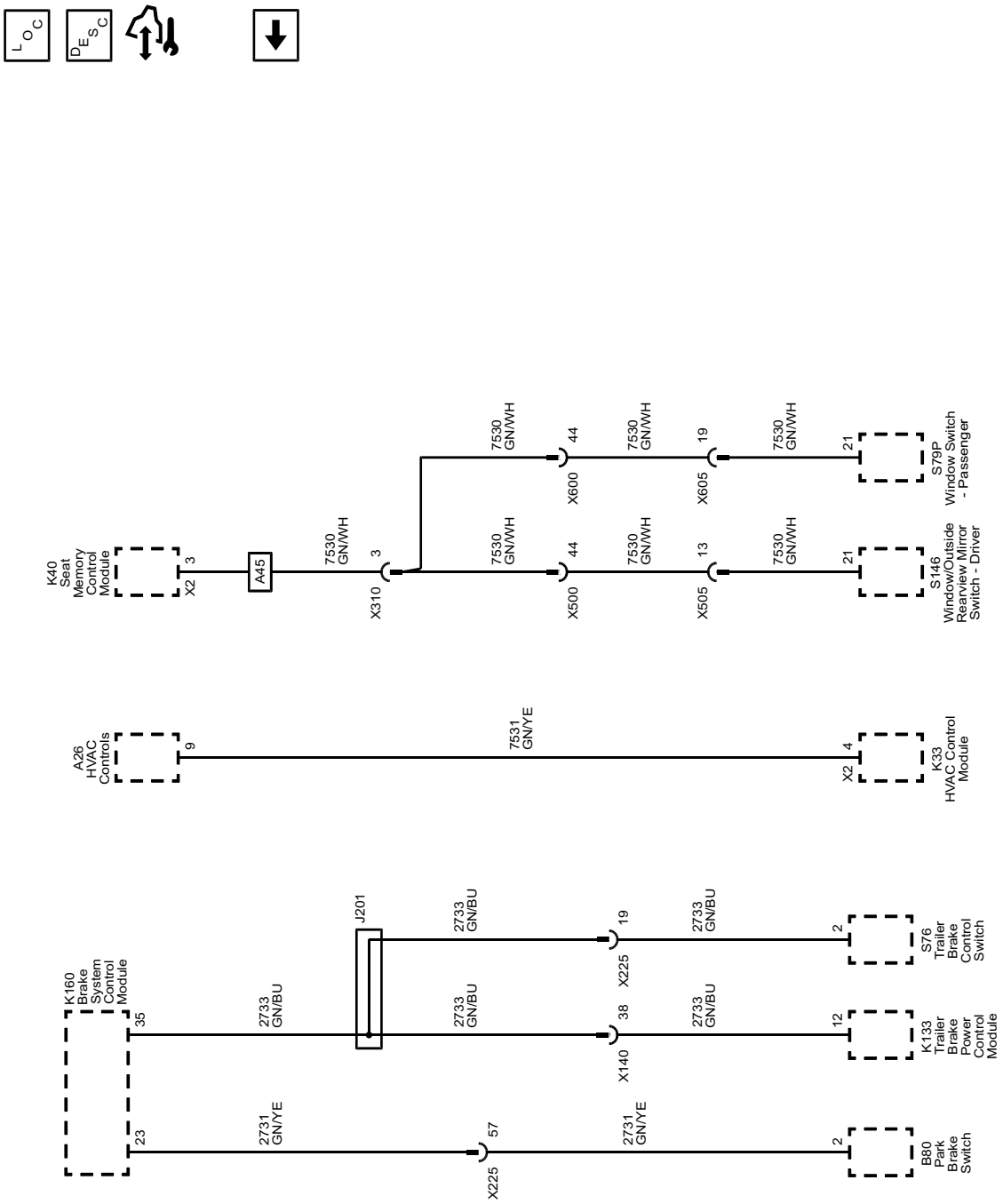
Data Communication Schematics (Local Interconnect Network (1 of 3))



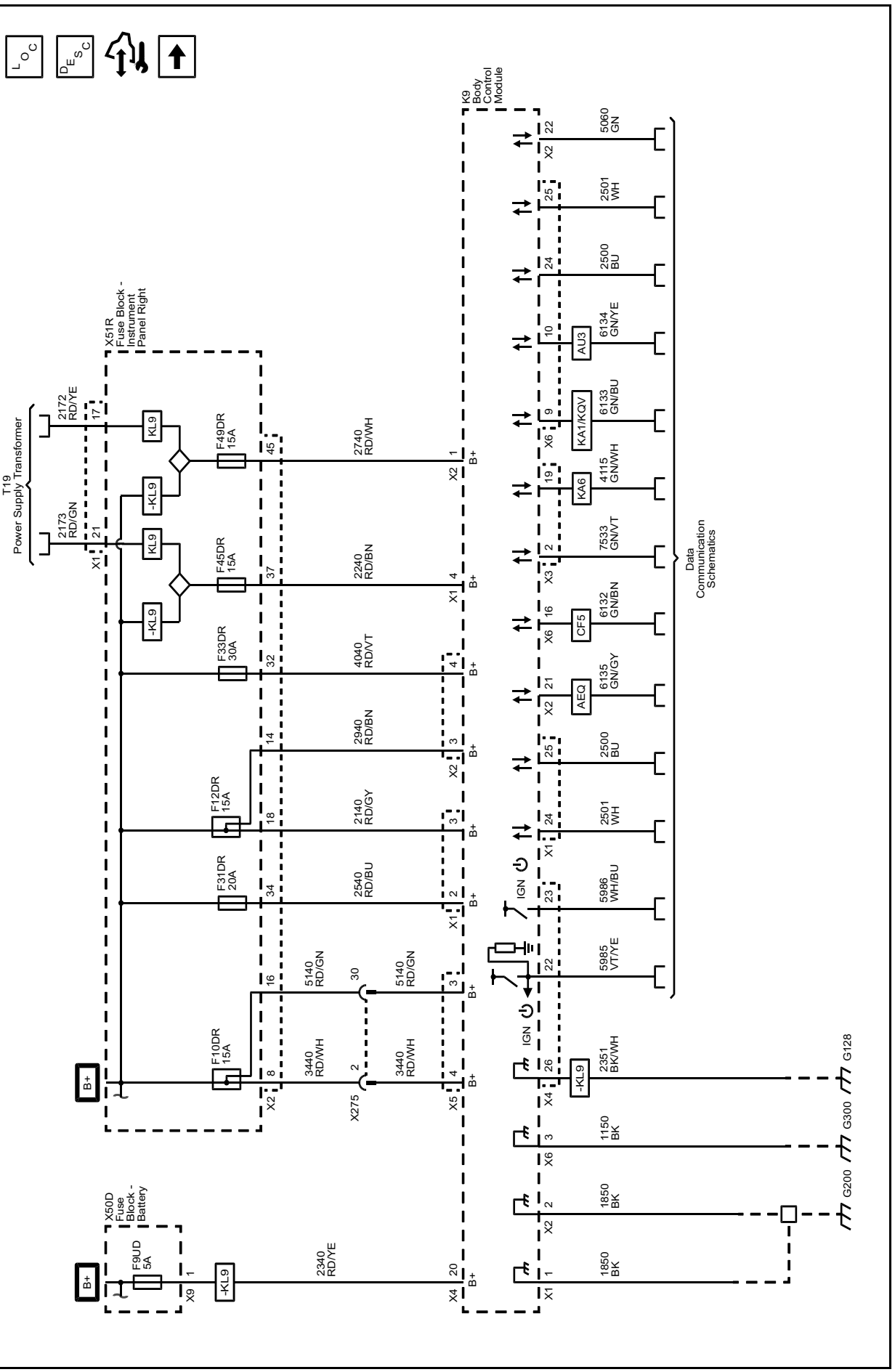
Data Communication Schematics (Local Interconnect Network (2 of 3))



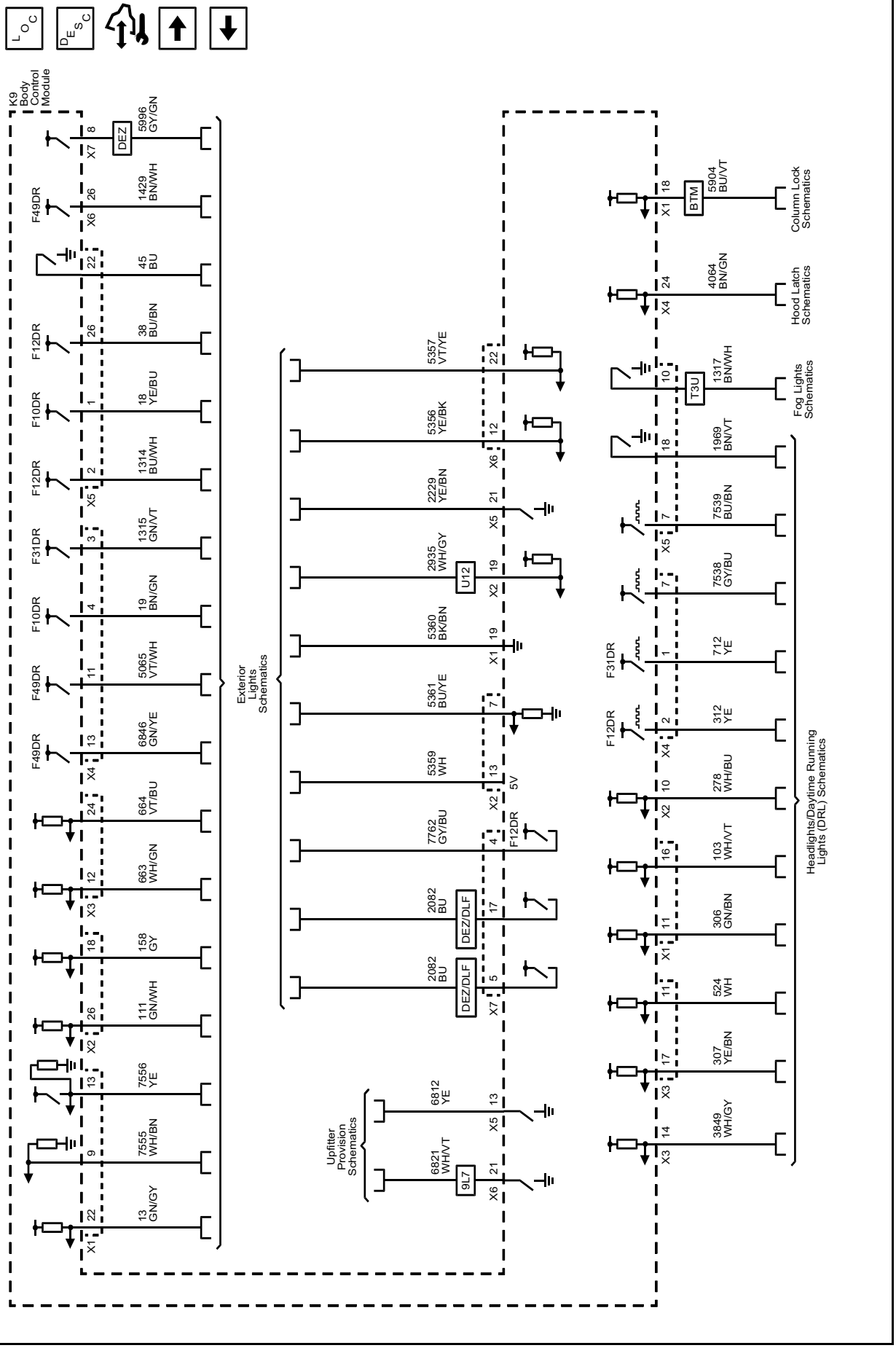
Data Communication Schematics (Local Interconnect Network (3 of 3))

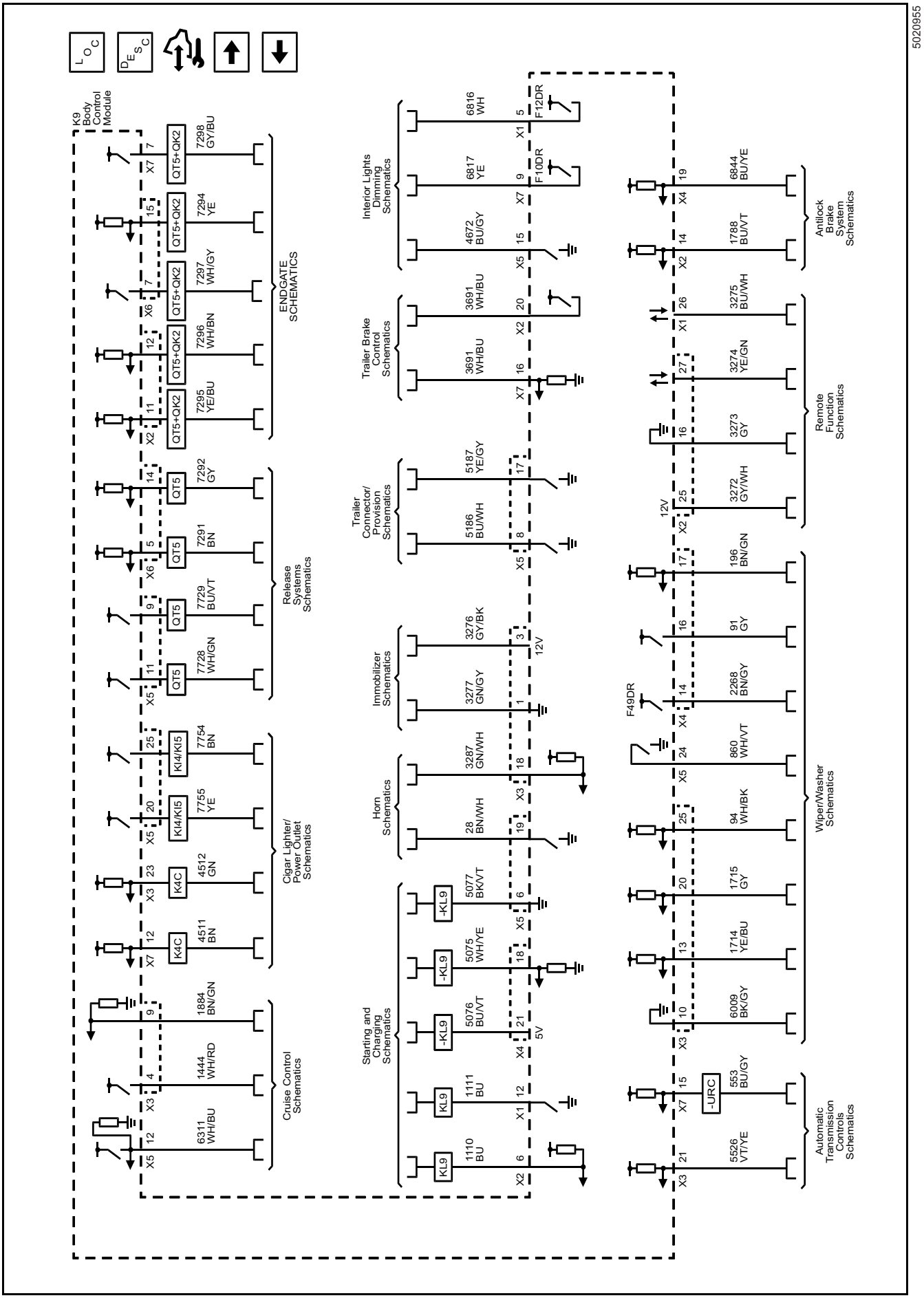


Body Control System Schematics (Module Power, Ground and Serial Data)

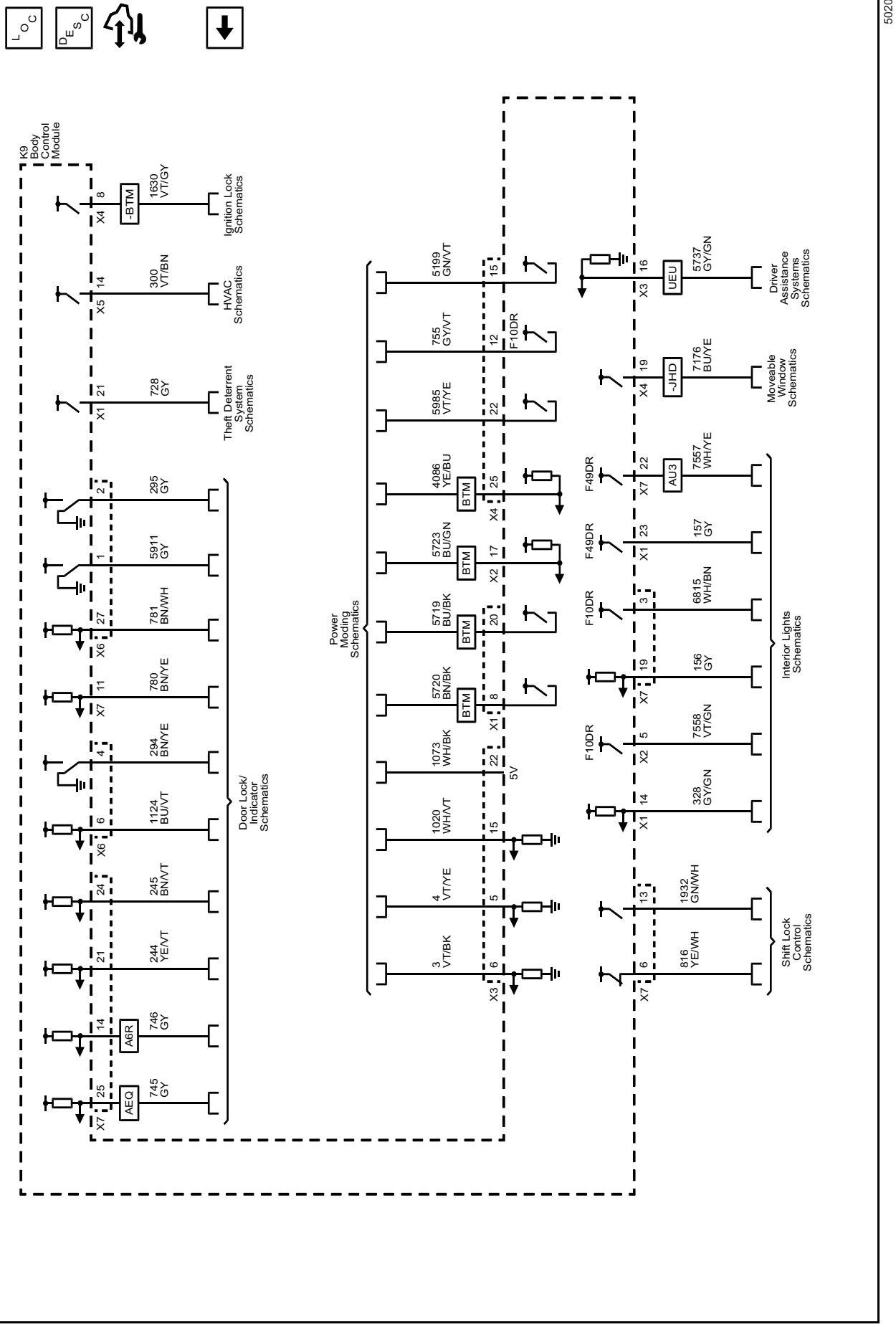


Body Control System Schematics (Subsystem References (1 of 3))




Body Control System Schematics (Subsystem References (2 of 3))
K9
Body
Control
Module
Cruise Control
Schematics
Cigar Lighter/
Power Outlet
Schematics
Release
Systems
Schematics
ENDGATE
SCHEMATICS
Starting and
Charging
Schematics
Horn
Schematics
Immobilizer
Schematics
Trailer
Connector/
Provision
Schematics
Trailer Brake
Control
Schematics
Interior Lights
Dimming
Schematics
Wiper/Washer
Schematics
Remote
Function
Schematics
Antilock
Brake
System
Schematics
Automatic
Transmission
Controls
Schematics
5020955

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



Description and Operation

Body Control System Description and Operation

The body control system consists of the body control module (BCM), communications, and various input and outputs. Some inputs, outputs and messages require other modules to interact with the BCM. The BCM also has discrete input and output terminals to control the vehicle's body functions. The BCM is wired to the high speed GMLAN serial data bus, low speed GMLAN serial data bus and Multiple LIN buses and acts as a gateway between them.

Power Mode Master

This vehicle body control module (BCM) functions as the power mode master (PMM). The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determining the power mode that will be sent over the serial data circuits to the other modules that need this information; the PMM will activate relays and other direct outputs of the PMM as needed. Refer to *Power Mode Description and Operation on page 6-1038* for a complete description of power mode functions.

Gateway

The body control module (BCM) in this vehicle functions as a gateway or translator. The purpose of the gateway is to translate serial data messages between the GMLAN high speed bus and the GMLAN low speed bus for communication between the various modules. The gateway will interact with each network according to that network's transmission protocol.

All communication between the BCM and a scan tool is on the high speed GMLAN serial data circuits. A lost communication DTC typically is set in modules other than the module with a communication failure.

Body Control

The various body control module (BCM) input and output circuits are illustrated in the corresponding functional areas on the BCM electrical schematics. Refer to the *Body Control System Schematics on page 6-20* for more detailed information.

Data Link Communications Description and Operation

Note: This is an overview of different serial data buses used by GM devices to communicate with each others. Use *Data Communication Schematics on page 6-4* to find out which serial data buses are configured for a specific vehicle.

Circuit Description

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.

GM uses a number of different communication buses to insure the timely and efficient exchange of information between devices. When compared to each other, some of these buses are different in nature as far as speed, signal characteristics, and behavior. An example of this is the High Speed GMLAN and Low Speed GMLAN buses.

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 High Speed GMLAN, Powertrain Expansion, and Chassis Expansion 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 devices 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.

GMLAN provides the capability for a receiving device to monitor message transmissions from other devices 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 device may set a Diagnostic Trouble Code to indicate that the device it is expecting information from is no longer communicating.

High Speed GMLAN Circuit Description

A High Speed GMLAN Bus is 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.

The High Speed GMLAN serial data network consists of two twisted wires. One signal circuit is identified as GMLAN-High and the other signal circuit is identified as GMLAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the GMLAN-High and GMLAN-Low circuits.

Data symbols (1’s and 0’s) are transmitted sequentially at a rate of 500 Kbit/s. The data to be transmitted over the bus is represented by the voltage difference between the GMLAN-High signal voltage and the GMLAN-Low signal voltage.

When the two wire bus is at rest the GMLAN-High and GMLAN-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 GMLAN-High signal circuit is driven higher to about 3.5 V and the GMLAN-Low circuit is driven lower to about 1.5 V. The differential voltage becomes approximately 2.0 (+/- 0.5) V.

Chassis High Speed GMLAN Circuit Description

The GMLAN Chassis Expansion Bus is basically a copy of the High Speed GMLAN Bus except that its use is reserved for chassis components. This implementation splits message congestion between two parallel buses helping to insure timely message transmission and reception. Sometimes communication is required between the Chassis Expansion Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K17 Electronic Brake Control Module (EBCM) as the Gateway module. Since the High Speed GMLAN Chassis Expansion Bus and primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

Powertrain High Speed GMLAN Circuit Description

The GMLAN Powertrain Expansion Bus is basically a copy of the High Speed GMLAN Bus except that its use is reserved for Powertrain components. The bus is optional based upon feature content. Sometimes communication is required between the Powertrain Expansion Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K20 Engine Control Module (ECM) as the Gateway module. Since the High Speed GMLAN Powertrain Expansion Bus and the primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

Media Oriented Systems Transport (MOST) Circuit Description

The MOST Infotainment network is a dedicated high speed multimedia streaming data bus independent from GMLAN. The MOST bus will be configured in a physical hardwired loop with each device within the bus sends and receives data on an assigned MOST addresses in a set order. Each device on the MOST bus will be required to have twisted pair copper wires (2 transmit TX, 2 receive RX, and 1 electronic control line which is a 12 V wakeup signal line). The A11 Radio is the MOST Master and will monitor the bus for vehicle configuration, Infotainment data messages and errors on the bus. The MOST initialization consists of a short 100 ms low voltage pulse on the electronic control line (or MOST control line) connected to all devices contained on the MOST ring. This wakeup message once received by each device, will first respond with a generic device response. Once these initial responses on the MOST bus are reported successfully without error to the A11 Radio, the second data request will record the MOST device addresses, their functionality requirements and capabilities within. The A11 Radio will learn this information and also record the address node sequence on the MOST bus at this point. This node address list will now be stored within the A11 Radio as the MOST bus configuration (called “Last Working MOST ID of Node 1 – 9” on scan tool data display).

When MOST receive, transmit, or control line faults are detected, transmit/receive messages will not received as expected from the wakeup request. The A11 Radio and the K74 Human Machine Interface Control Module will then perform diagnostics to isolate these MOST faults. If the MOST control line is shorted low to 0 V for excess amount of time, the A11 Radio will set a U2098 DTC and K74 Human Machine Interface Control Module will set a U0029 02 DTC. At this point the MOST bus will be unable to communicate until the shorted MOST control line is repaired.

Once the shorted MOST control line diagnostics pass, the A11 Radio will attempt to resend the initial short pulse attempts up to 3 times on the MOST control line. If the expected responses are not received, the A11 Radio continues into a failure mode setting a U0028 DTC and will continue on to send one 300 ms long pulse, which will enable the furthest upstream transmitting device to become the surrogate MOST Master in this MOST fault/diagnostic mode. When the A11 Radio receives this new MOST Master identity, the surrogate MOST master device can be identified based on scan tool data parameter “Surrogate MOST Master Node Upstream Position”. The scan tool should be used to determine the MOST bus configuration and direction by utilizing the “Last Working MOST ID of Node 1 – 9” parameters from the A11 Radio data display. When a fault is present, it will indicate the newly enabled “Surrogate MOST Master Node Upstream Position” from the A11 Radio. This will assist in determining where the MOST bus/control is at fault. The MOST device upstream from the surrogate MOST master device, transmit, receive, or control lines will be the suspect areas for diagnostics at this point. These faults can be associated with any of the MOST transmit, receive, or control line twisted copper wires or possibly an internal device fault.

The K74 Human Machine Interface Control Module will set a U0029 00 DTC when it diagnoses a MOST bus not communicating properly after one attempt. When the DTC U0029 00 is set by the K74 Human Machine Interface Control Module without the corresponding DTC U0028 from the A11 Radio, it will be an indication of an intermittent wiring/device condition.

Low Speed GMLAN Circuit Description

Low Speed GMLAN Bus is used in applications where a high data rate is not required which allows for the use of less complex components. It is typically used for operator controlled functions where the response time requirements are slower than those required for dynamic vehicle control.

The Low Speed GMLAN Serial Data Network consists of a single wire, ground referenced bus with high side voltage drive. During on road vehicle operation data symbols (1’s and 0’s) are transmitted sequentially at the normal rate of 33.3 Kbit/s. For component programming only, a special high speed data mode of 83.3 Kbit/s may be used.

Unlike the high speed dual wire networks, the single wire low speed network does not use terminating resistors at either end of the network.

The data symbols to be transmitted over the bus are represented by different voltage signals on the bus. When the Low Speed GMLAN Bus is at rest and is not being driven, there is a low signal voltage of approximately 0.2 V. This represents a logic “1”. When a logic “0” is to be transmitted, the signal voltage is driven higher to around 4.0 V or higher.

Local Interconnect Network (LIN) Circuit Description

The Local Interconnect Network (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 either a High Speed GMLAN Bus or Low Speed GMLAN 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).

Communication Enable Circuit Description

Devices on High Speed GMLAN Bus enable or disable communication based on the voltage level of the communication enable circuit. When the circuit voltage is high (around 12 V), communications are enabled. When the circuit is low, communications are disabled.

Data Link Connector (DLC)

The X84 Data Link Connector (DLC) 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 Low speed GMLAN communications terminal
- Terminal 4 Scan tool power ground terminal
- Terminal 5 Common signal ground terminal
- Terminal 6 High speed GMLAN serial data bus (+) terminal
- Terminal 12 Chassis high speed GMLAN serial bus (+) terminal
- Terminal 13 Chassis high speed GMLAN serial bus (-) terminal
- Terminal 14 High speed GMLAN serial data bus (-) terminal
- Terminal 16 Scan tool power, battery positive voltage terminal

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 device that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Comm (or Not Connected) for that optional device. In order to avert misdiagnoses of No Communication with a specific device, refer to Data Link References for a list of devices and the buses they communicate with. Use schematics and specific vehicle build RPO codes to determine optional devices.

Serial Data Gateway Module Description and Operation

The K56 Serial Data Gateway Module is used to handle communications between multiple GMLAN busses and functions as a gateway to isolate the secure networks from the unsecured networks. It was created to mitigate bus loading to support cyber security and new active/advanced safety features like Limited Ability Autonomous Driving and Enhanced Collision Avoidance (if equipped). The K56 Serial Data Gateway Module is used as a frame-to-frame gateway for all functional messages.

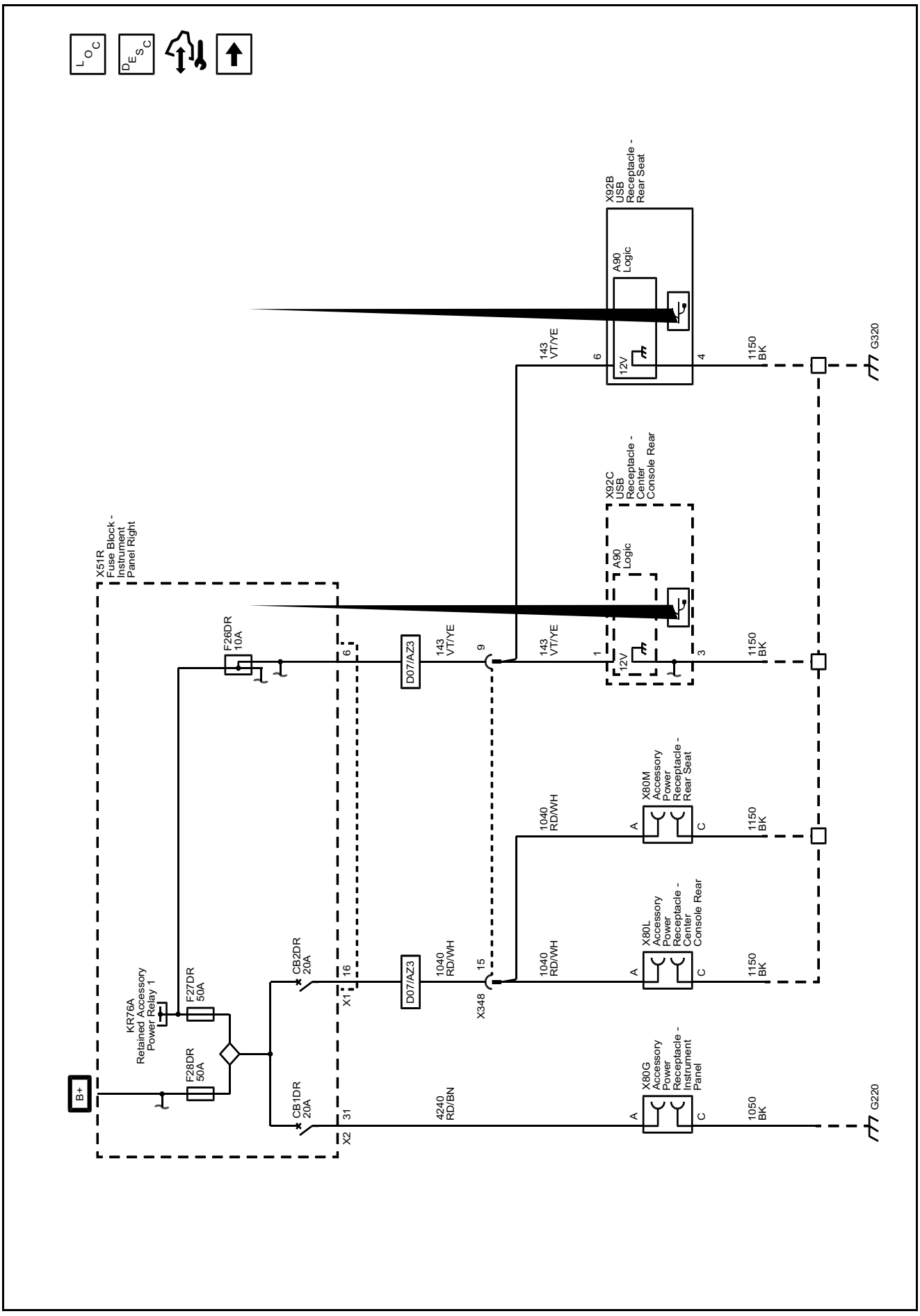
Depending on the vehicle contents, the K56 Serial Data Gateway Module is gating between primary High Speed GMLAN Bus, Gateway Expansion High Speed GMLAN Bus, Gateway Isolated High Speed GMLAN Bus, and Chassis High Speed GMLAN Bus. The K56 Serial Data Gateway Module is also gating between primary Low Speed GMLAN Bus and Gateway Isolated Low Speed GMLAN Bus.

Communication between the K56 Serial Data Gateway Module and a scan tool is done through the primary High Speed GMLAN Bus.

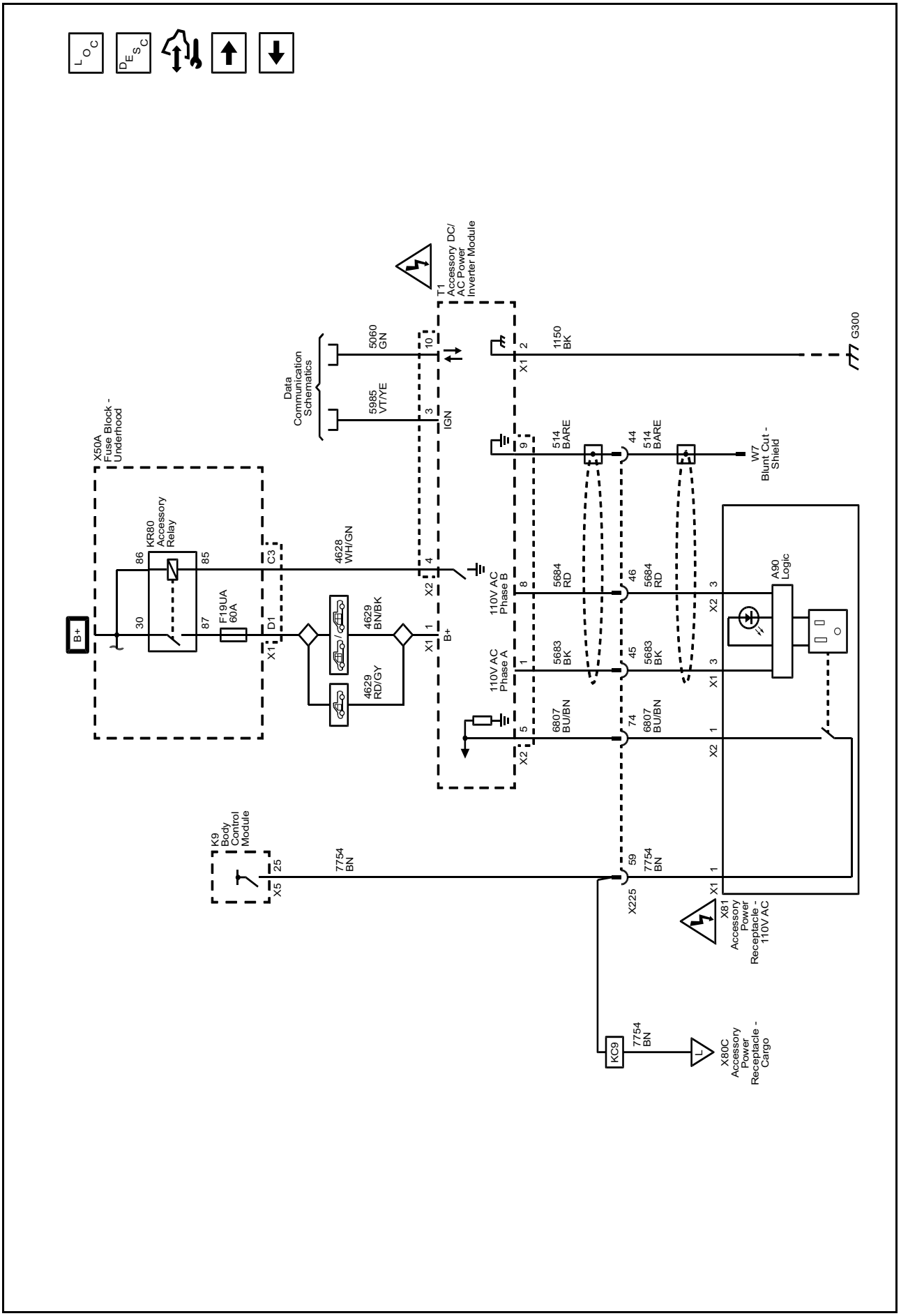
Power Outlets

Schematic and Routing Diagrams

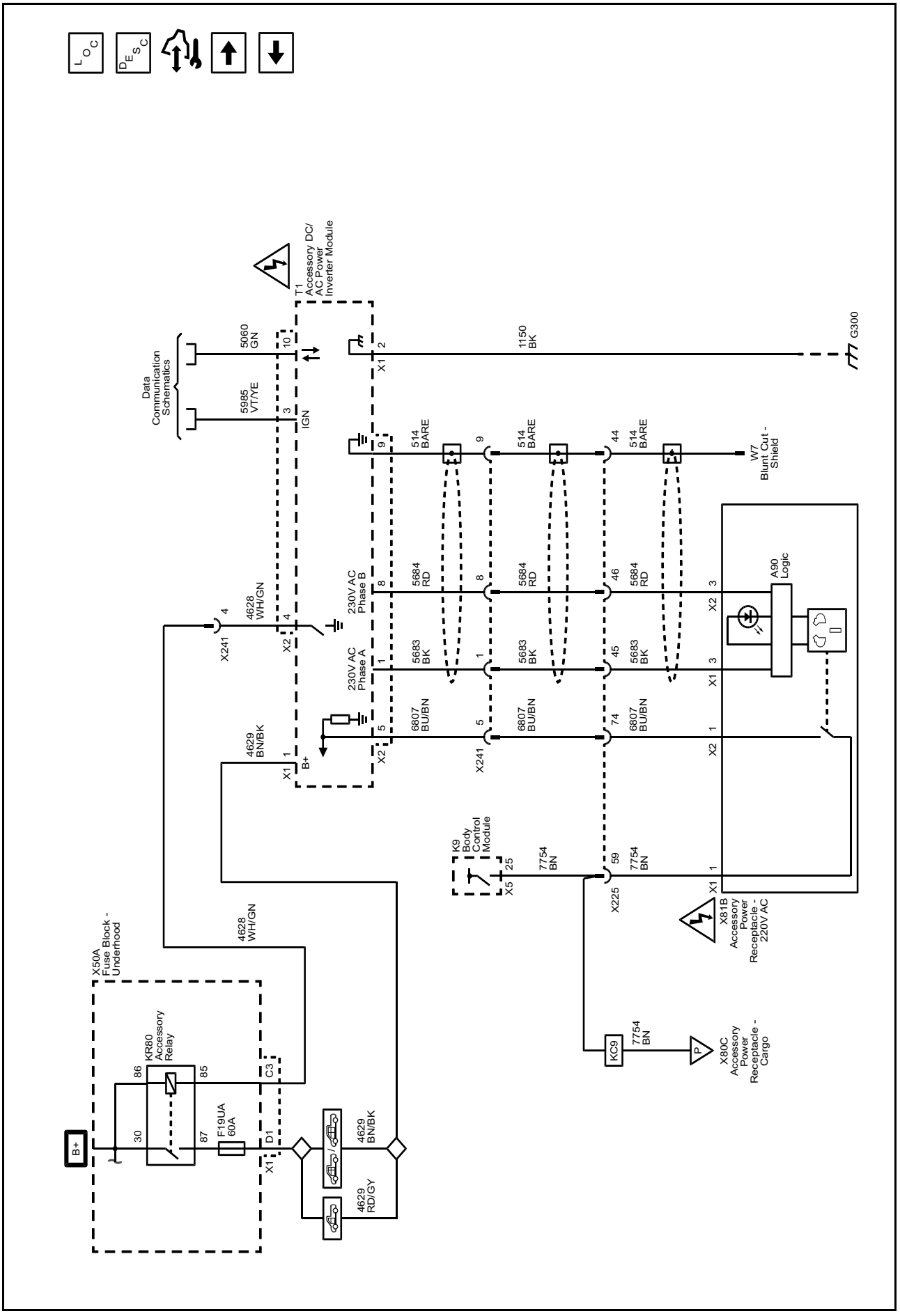
Cigar Lighter/Power Outlet Schematics (12V DC Power Outlets and USB Receptacles)



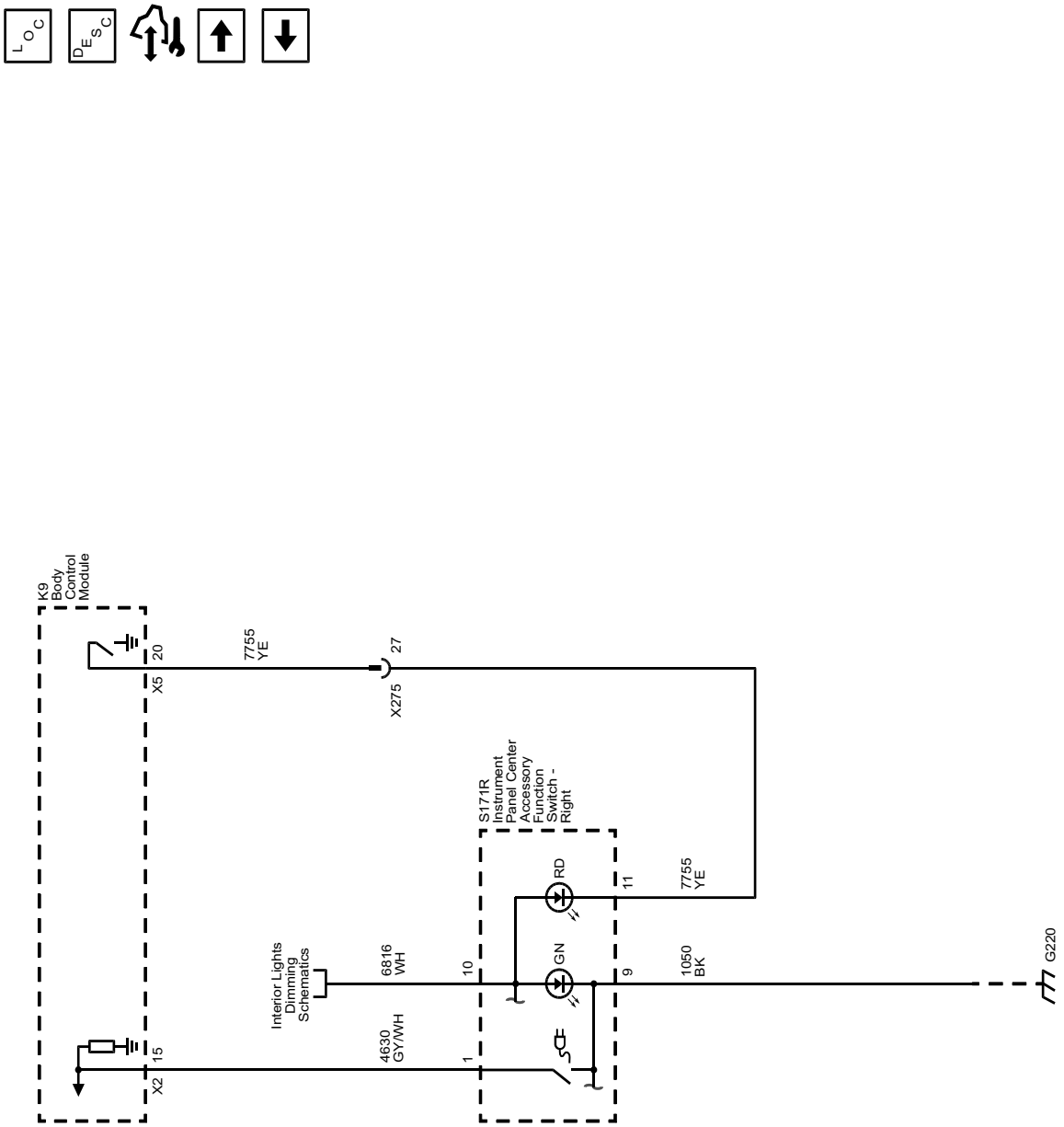
Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 110V AC (KI4))



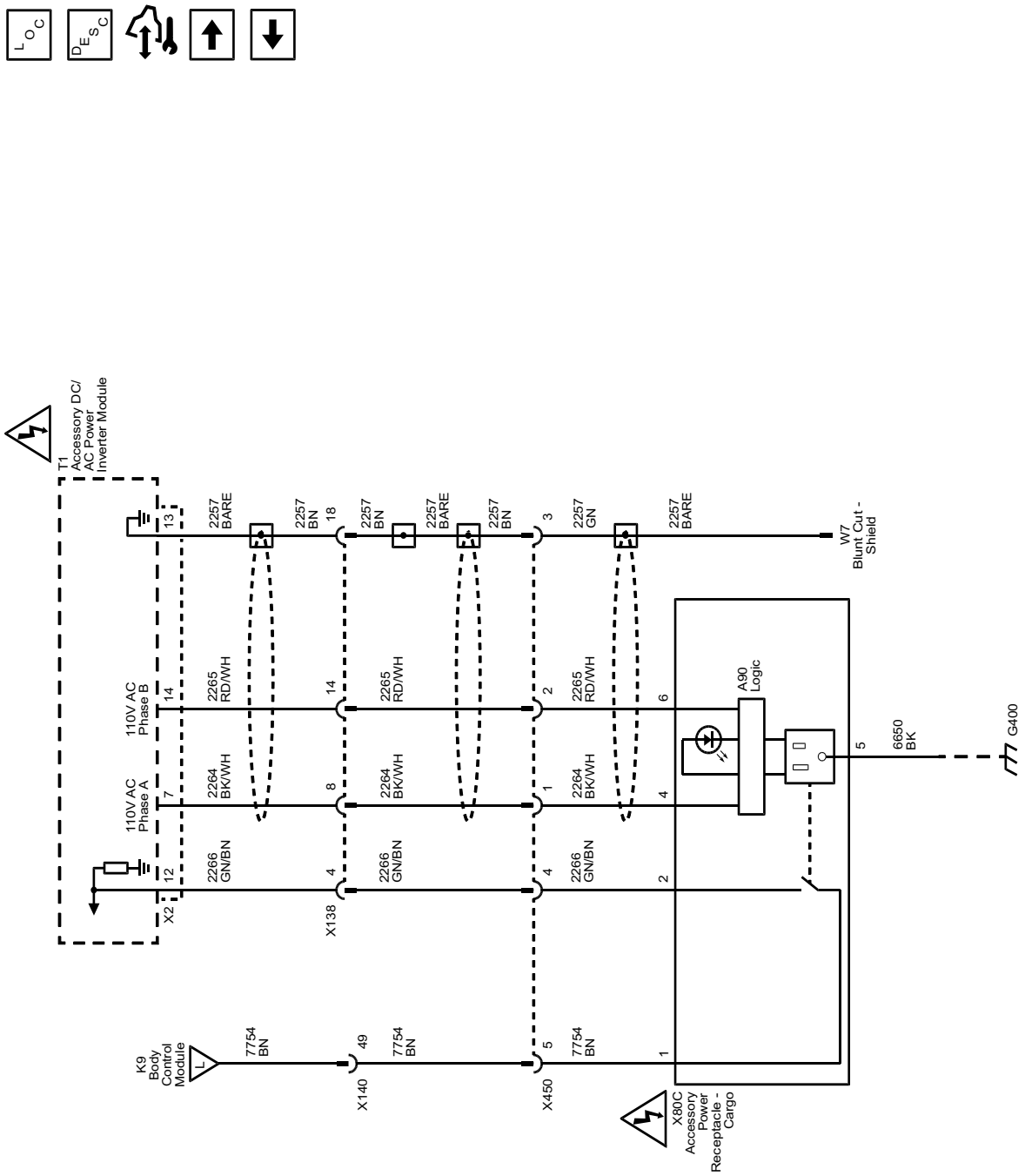
Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 230V AC (KI5))



Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle Controls and Indicators (KC9/KCA))

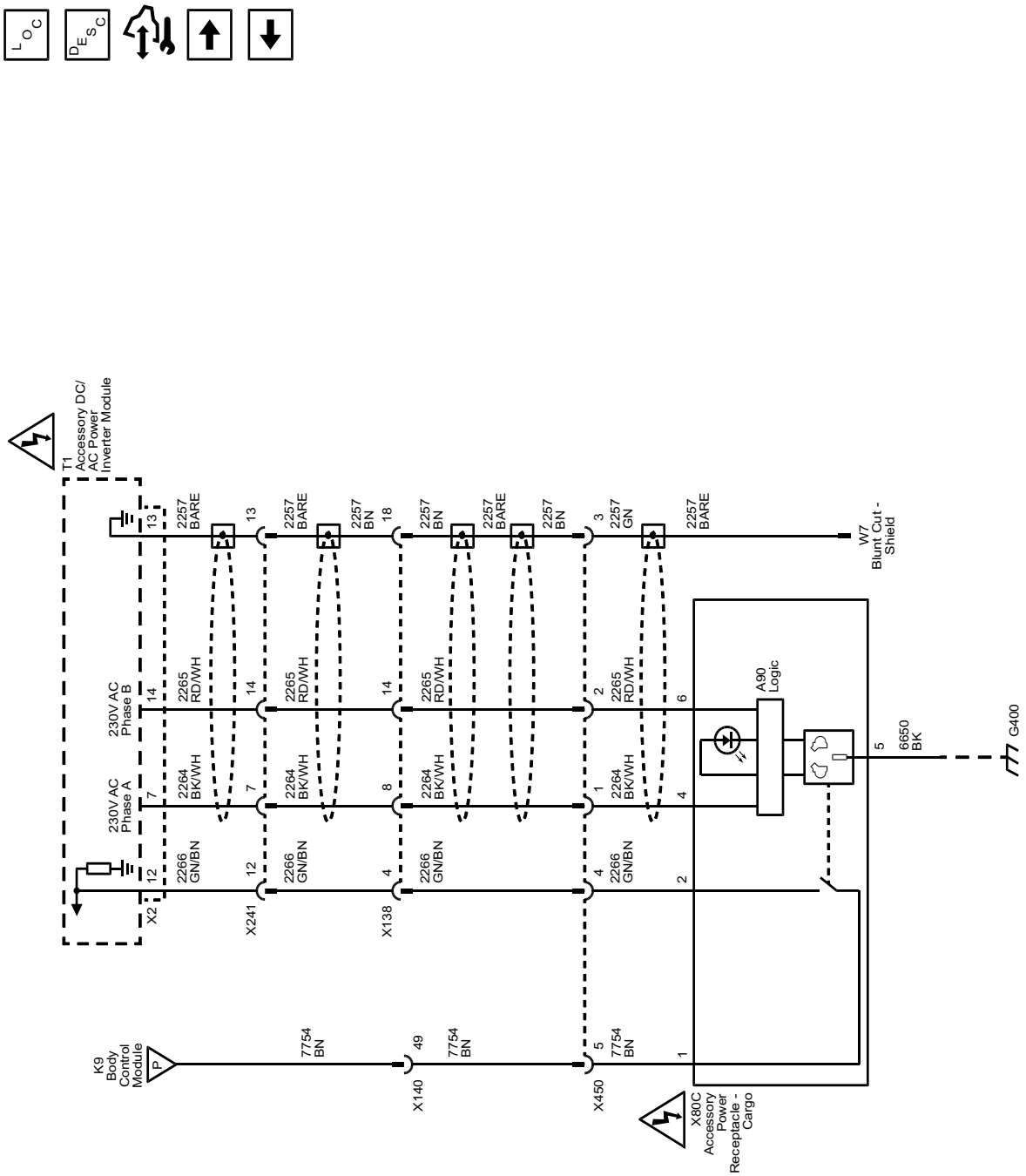


Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 110V AC (KC9))



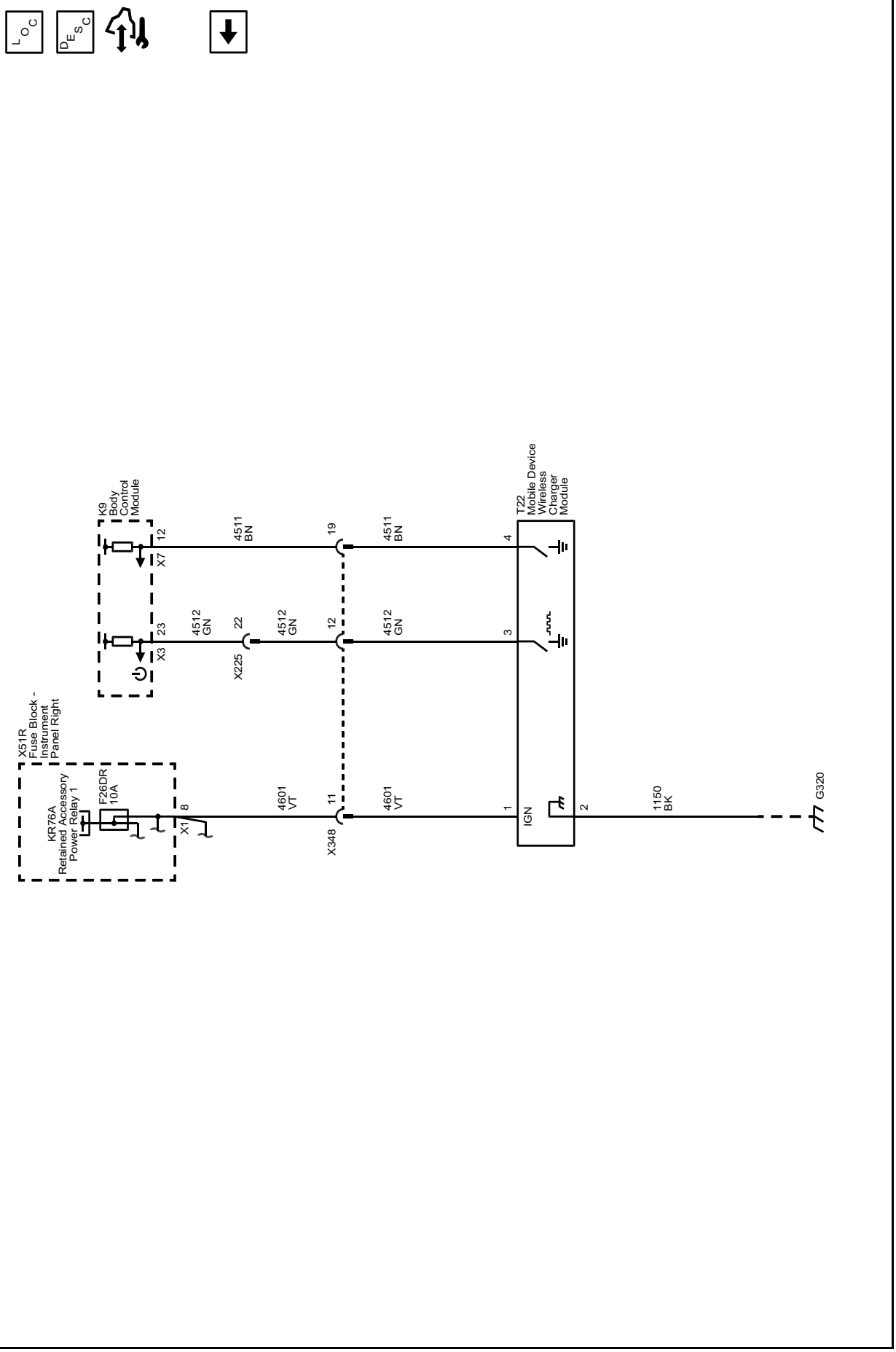
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Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 230V AC (KCA))



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Cigar Lighter/Power Outlet Schematics (Wireless Charging (K4C))



Description and Operation

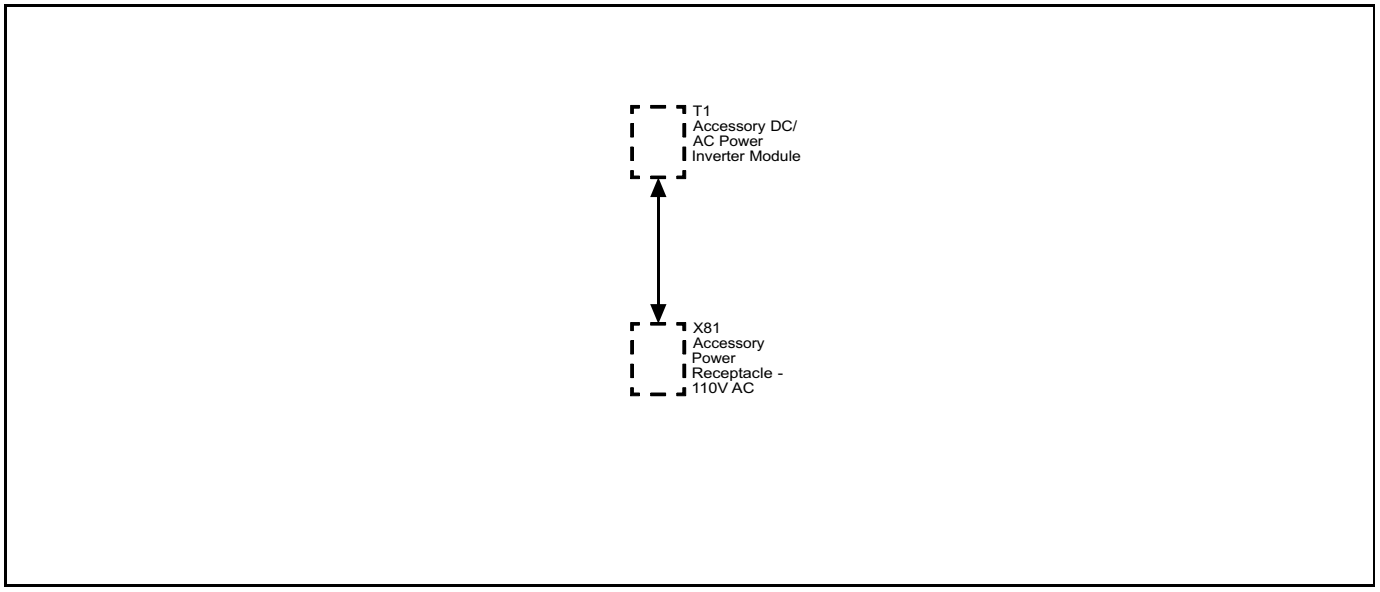
Power Outlets Description and Operation

12 Volt Power Outlet Receptacle Description and Operation

The vehicle is fitted with a 12 V accessory power receptacle. The accessory power receptacles are controlled by an ignition operated relay. The accessory power receptacles are operational when the ignition is turned to either the On or the Accessories positions. The X80J and X80K accessory power receptacles may be configured to be operational when the ignition is Off by changing the position of the 50A fuse from the F10DL position to the F11DL position in the left instrument panel fuse block.

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

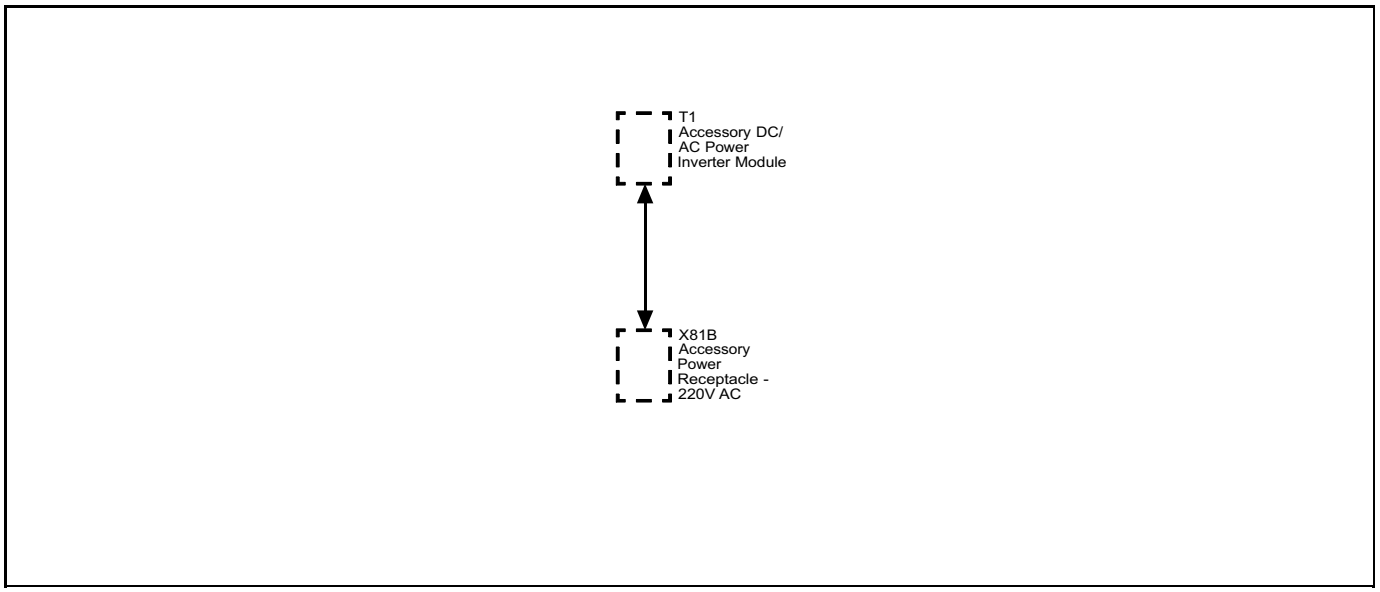
The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 s , or 2.5 A for 10 s . The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

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.

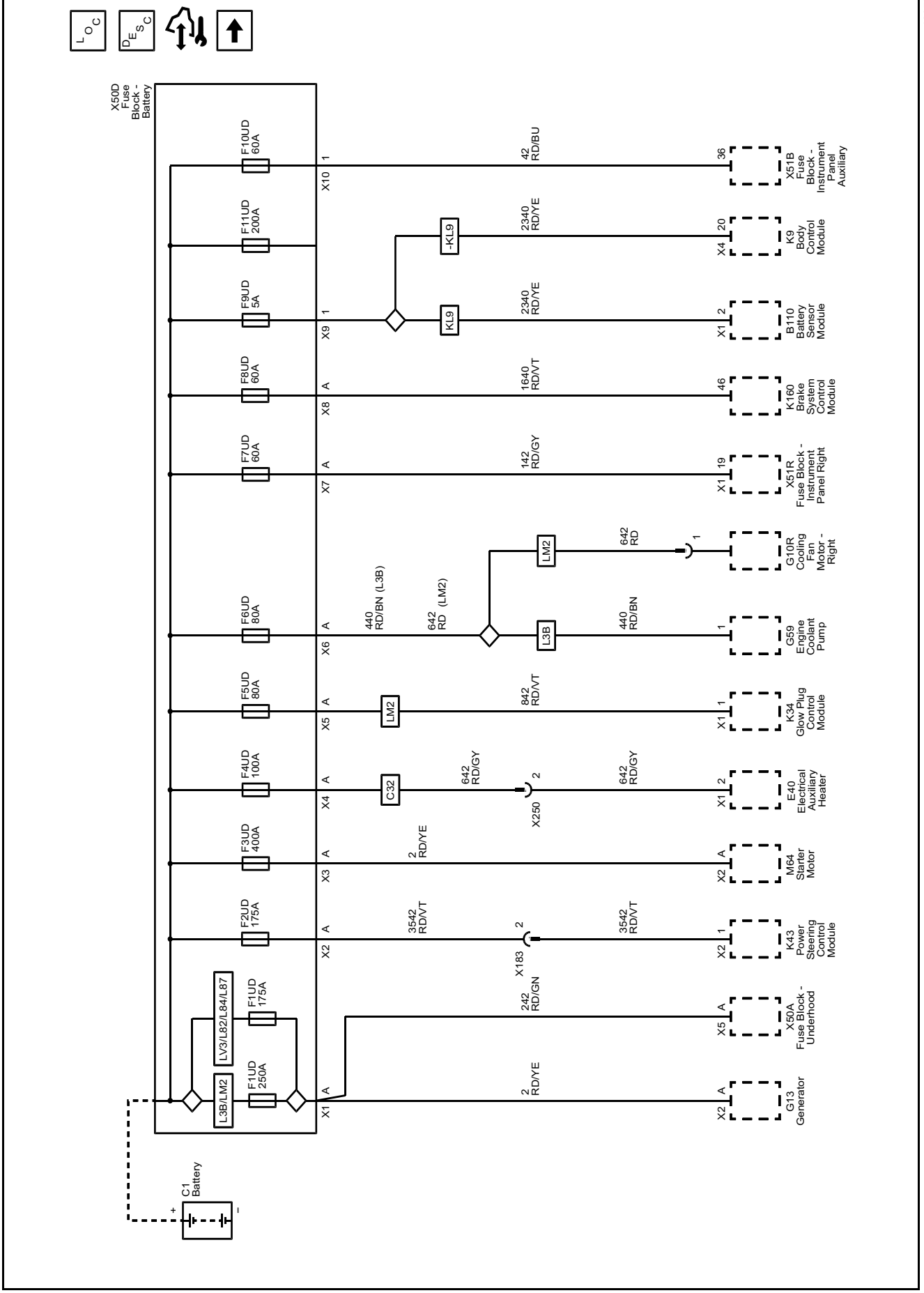
230 Volt Power Outlet Receptacle Internal Shutdown

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.

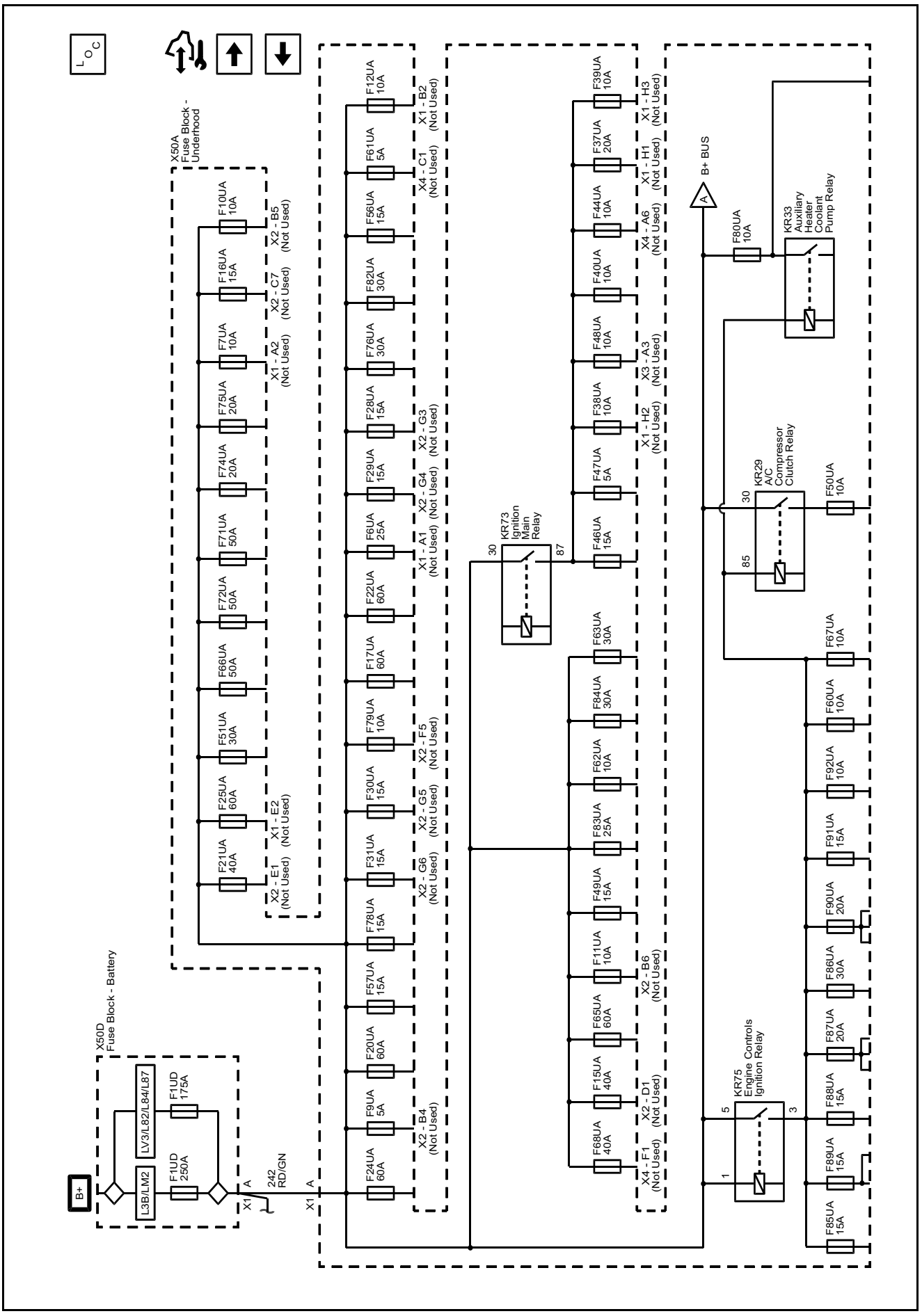
Wiring Systems and Power Management

Schematic and Routing Diagrams

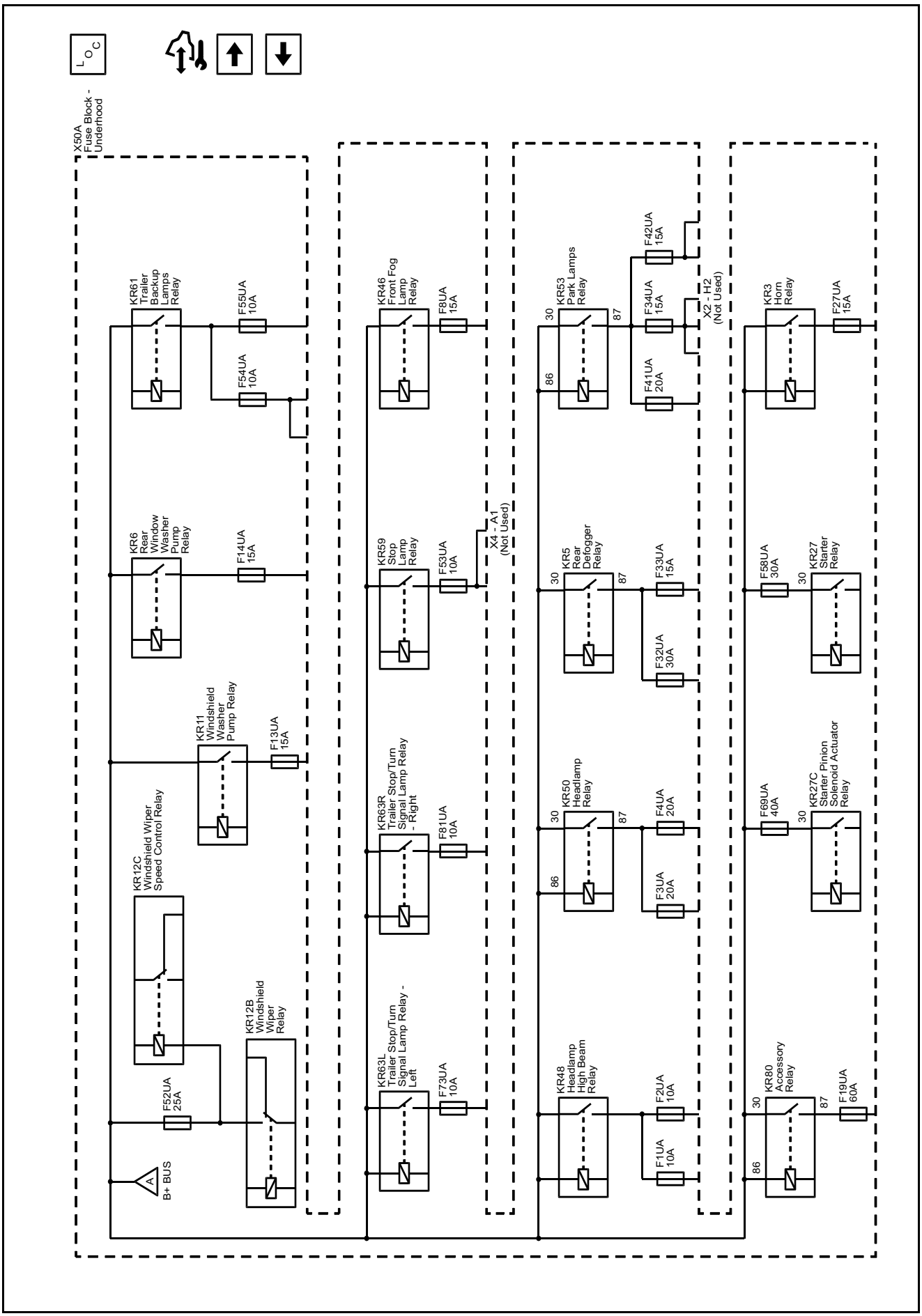
Power Distribution Schematics (X50D Battery Fuse Block)



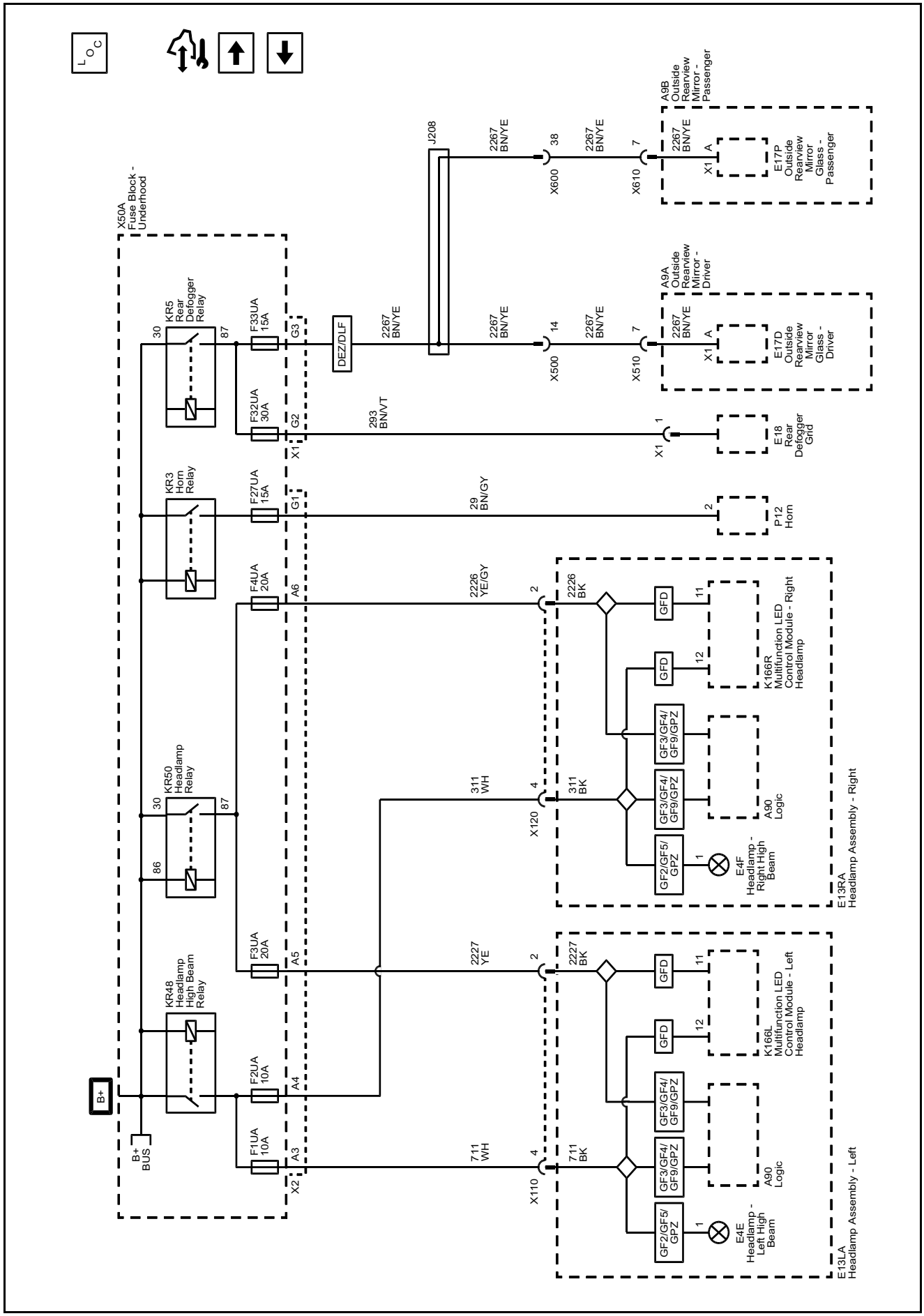
Power Distribution Schematics (X50A Underhood Fuse Block Bussing (1 of 2))



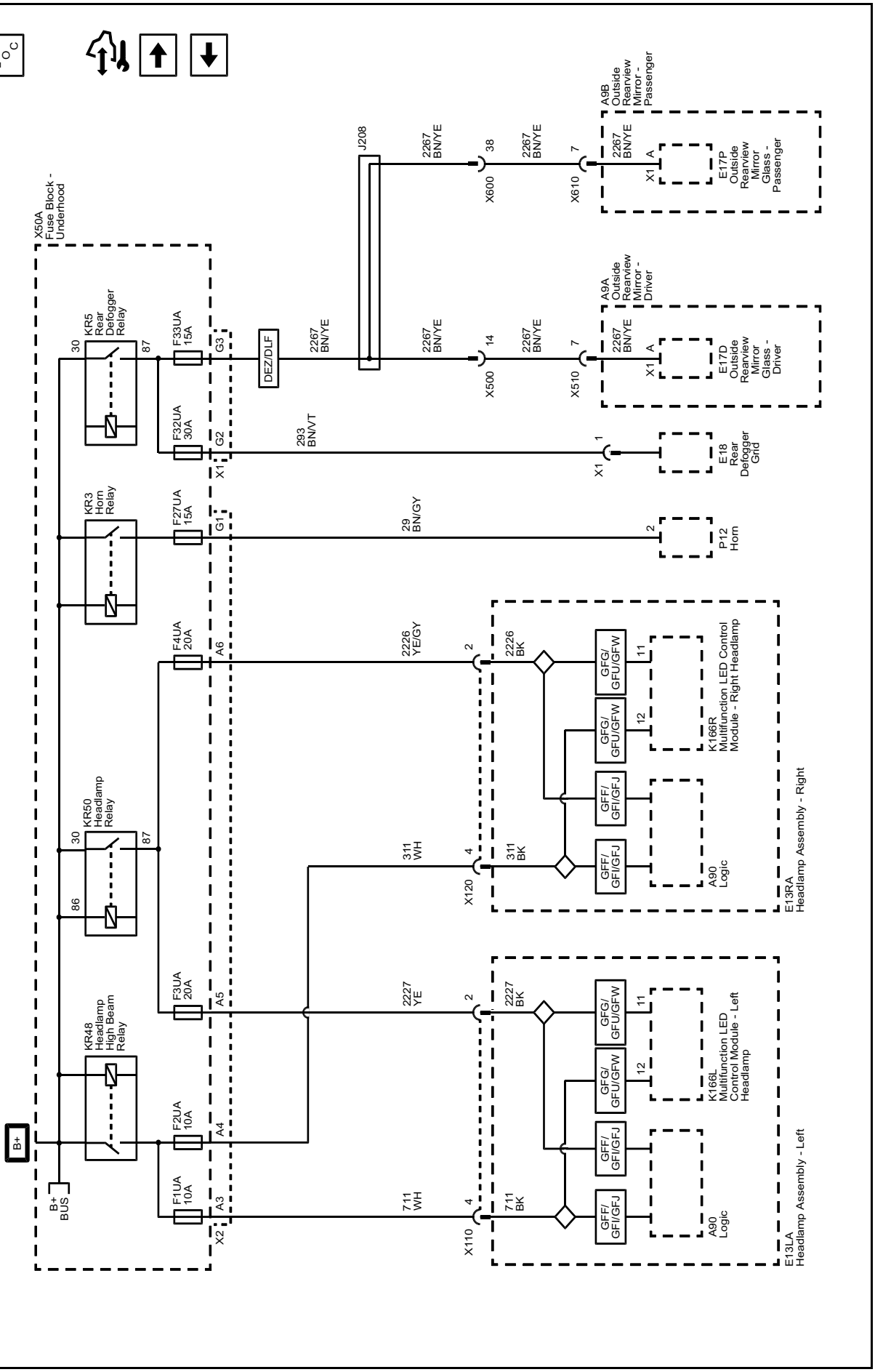
Power Distribution Schematics (X50A Underhood Fuse Block Bussing (2 of 2))



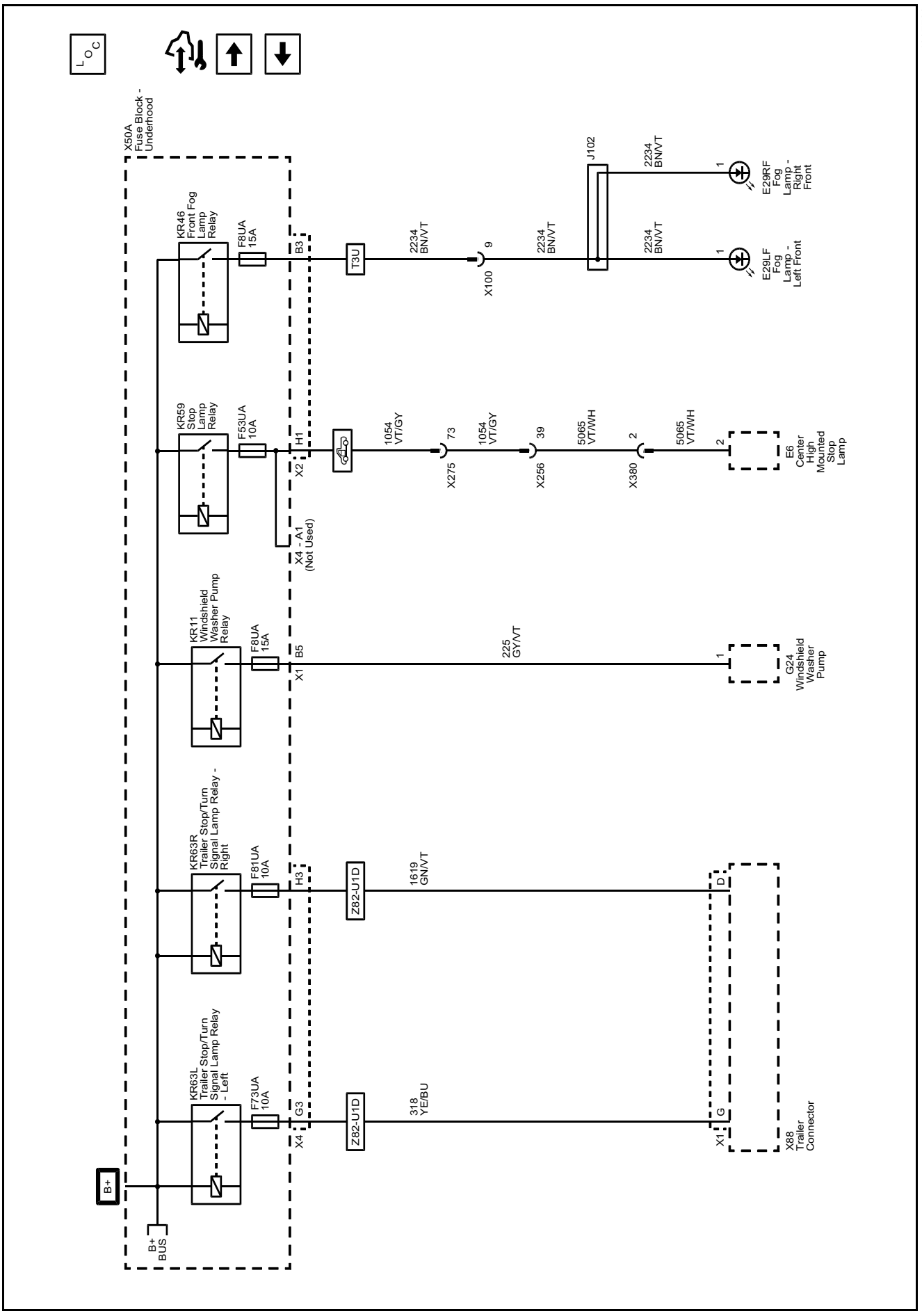
Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (X88))



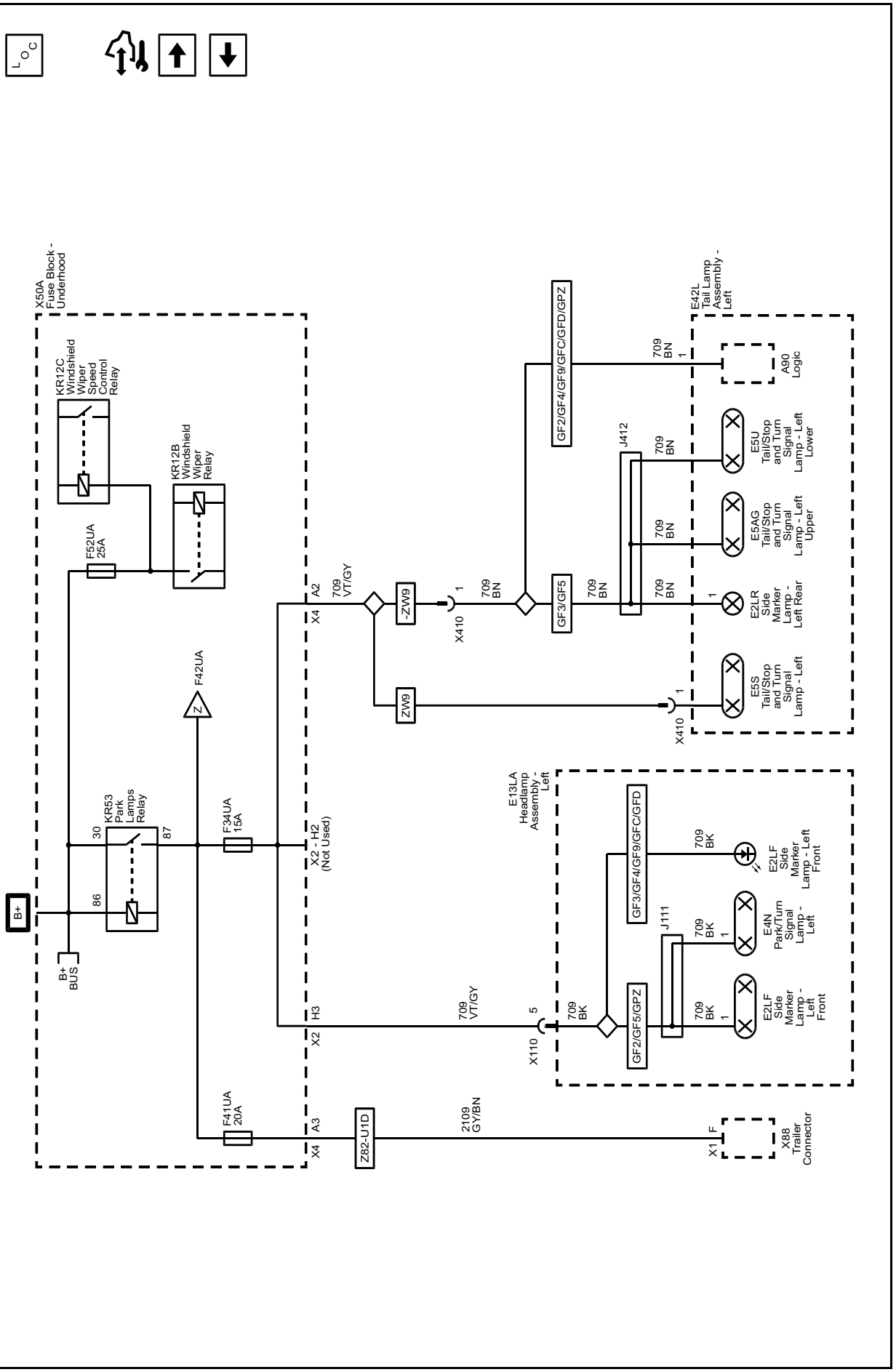
Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (Z88))



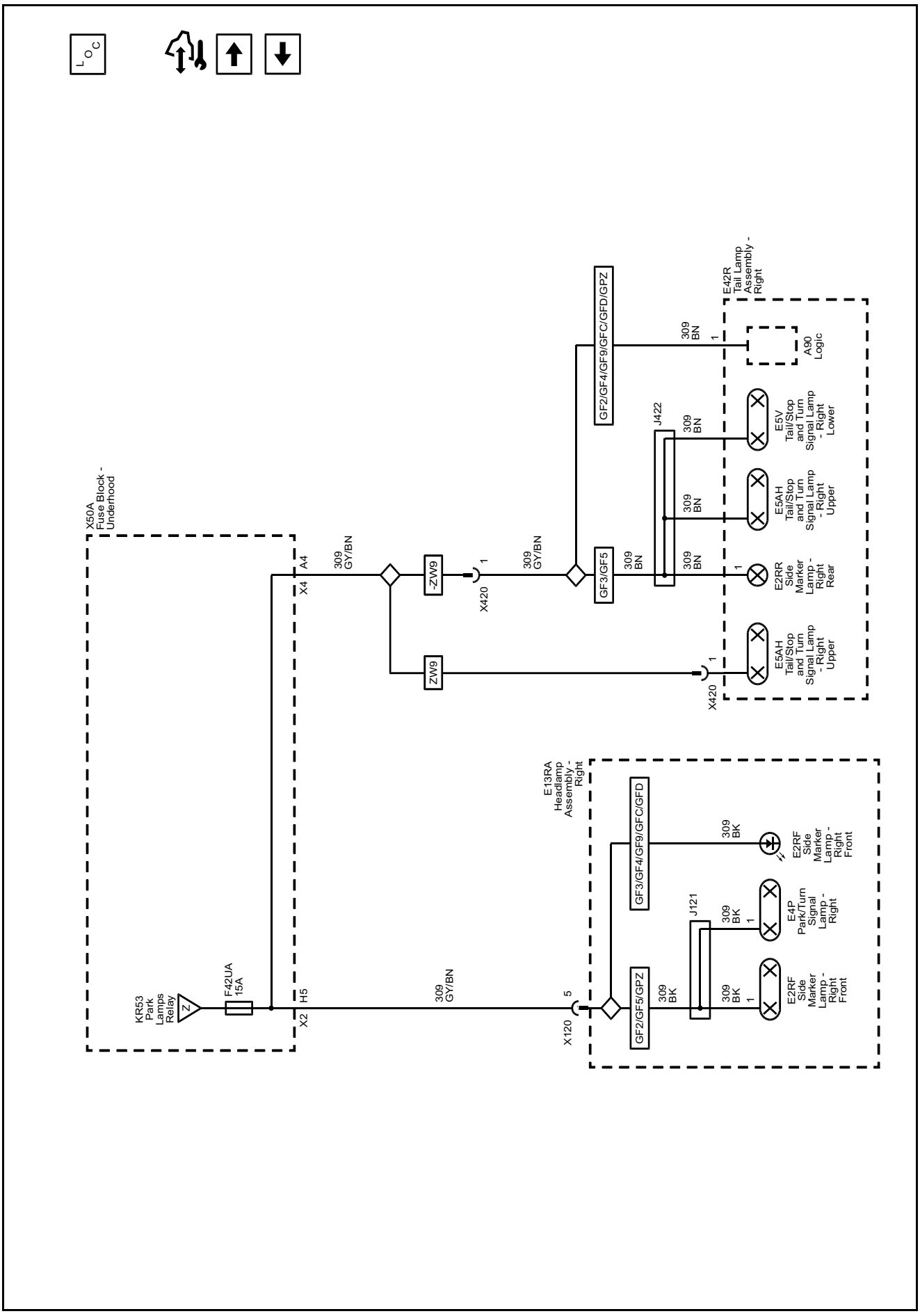
Power Distribution Schematics (F8UA, F13UA, F53UA, F73UA, and F81UA Fuses)



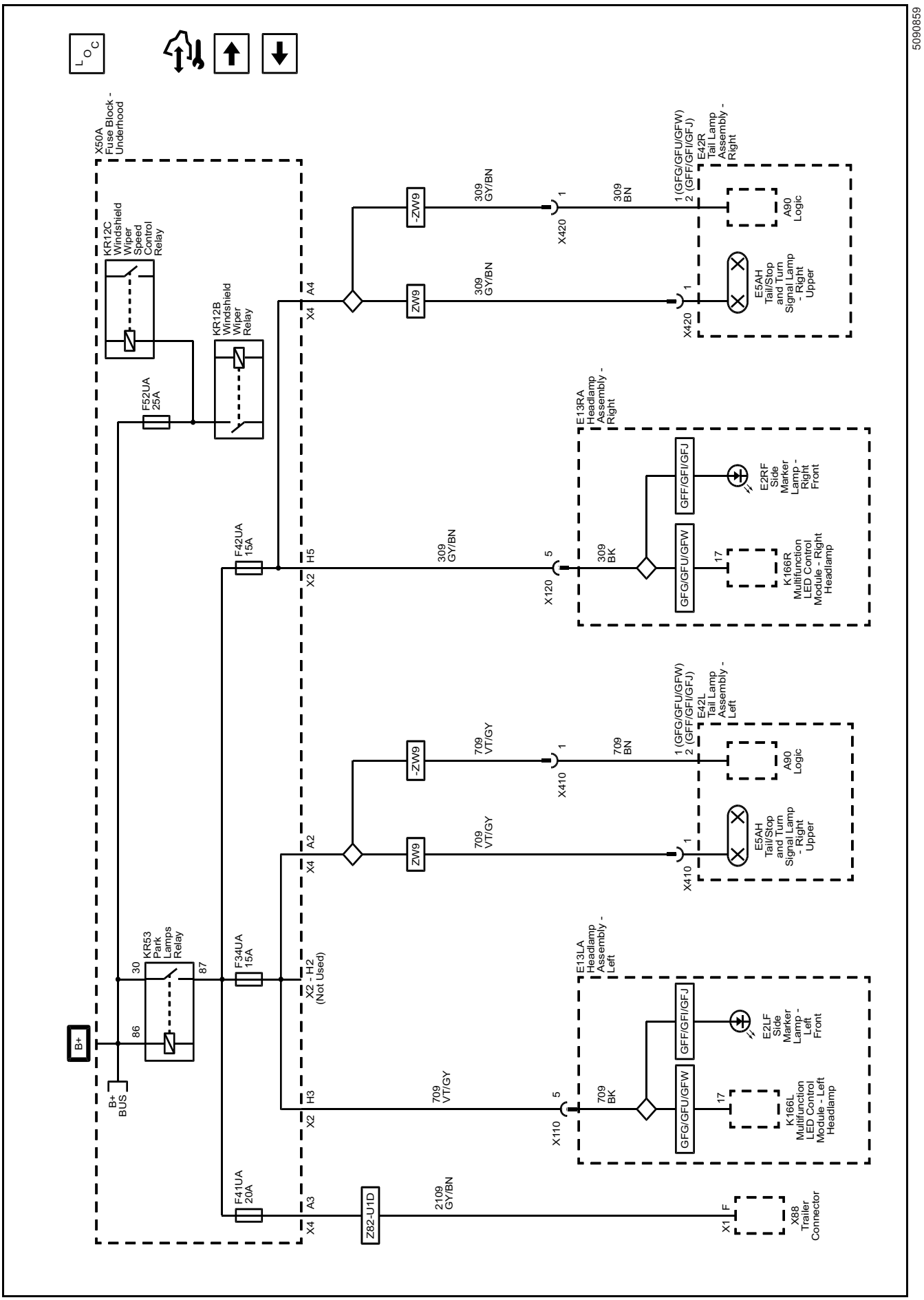
Power Distribution Schematics (F34UA, F41UA, and F52UA Fuses (X88))



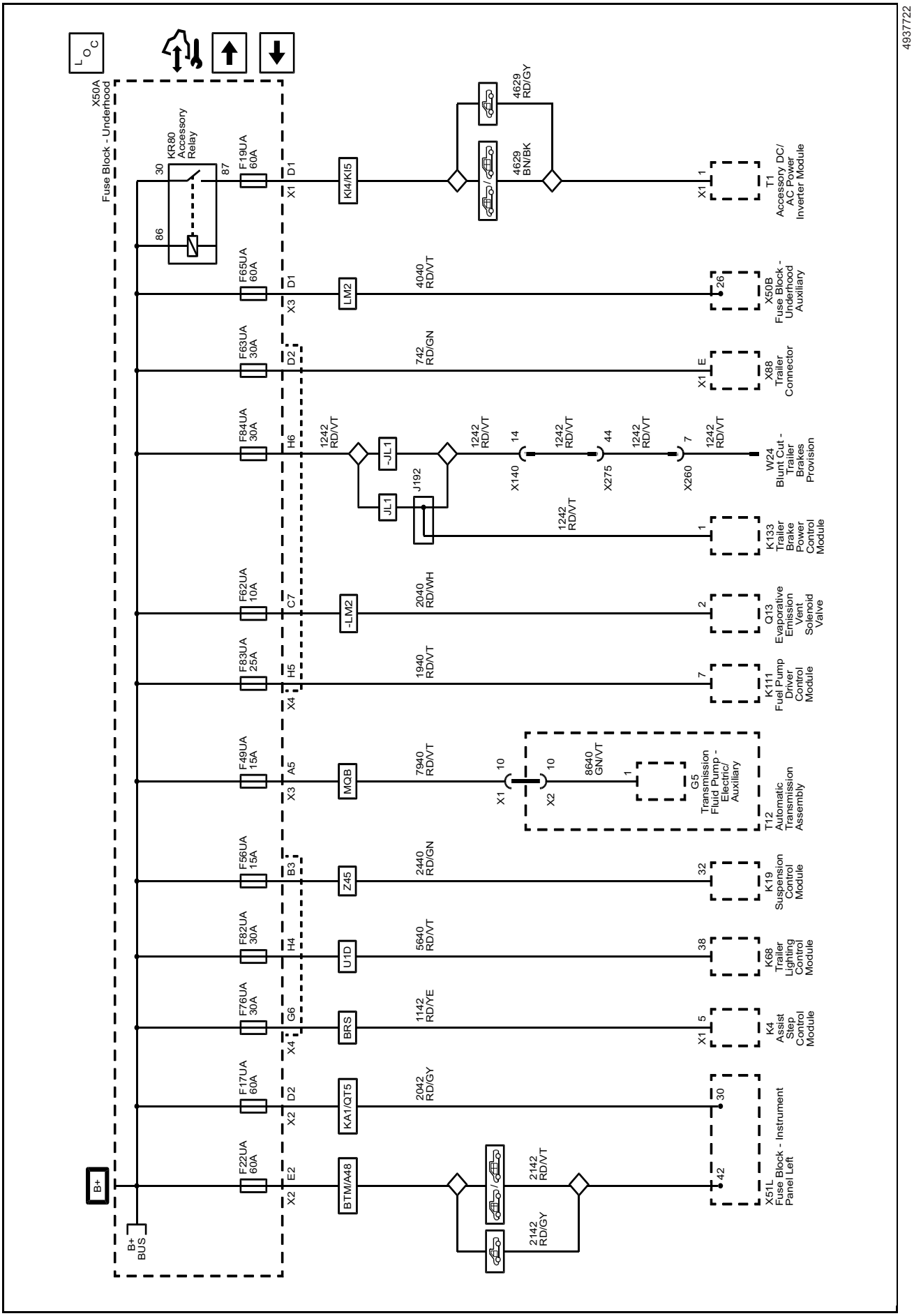
Power Distribution Schematics (F42UA Fuse (X88))



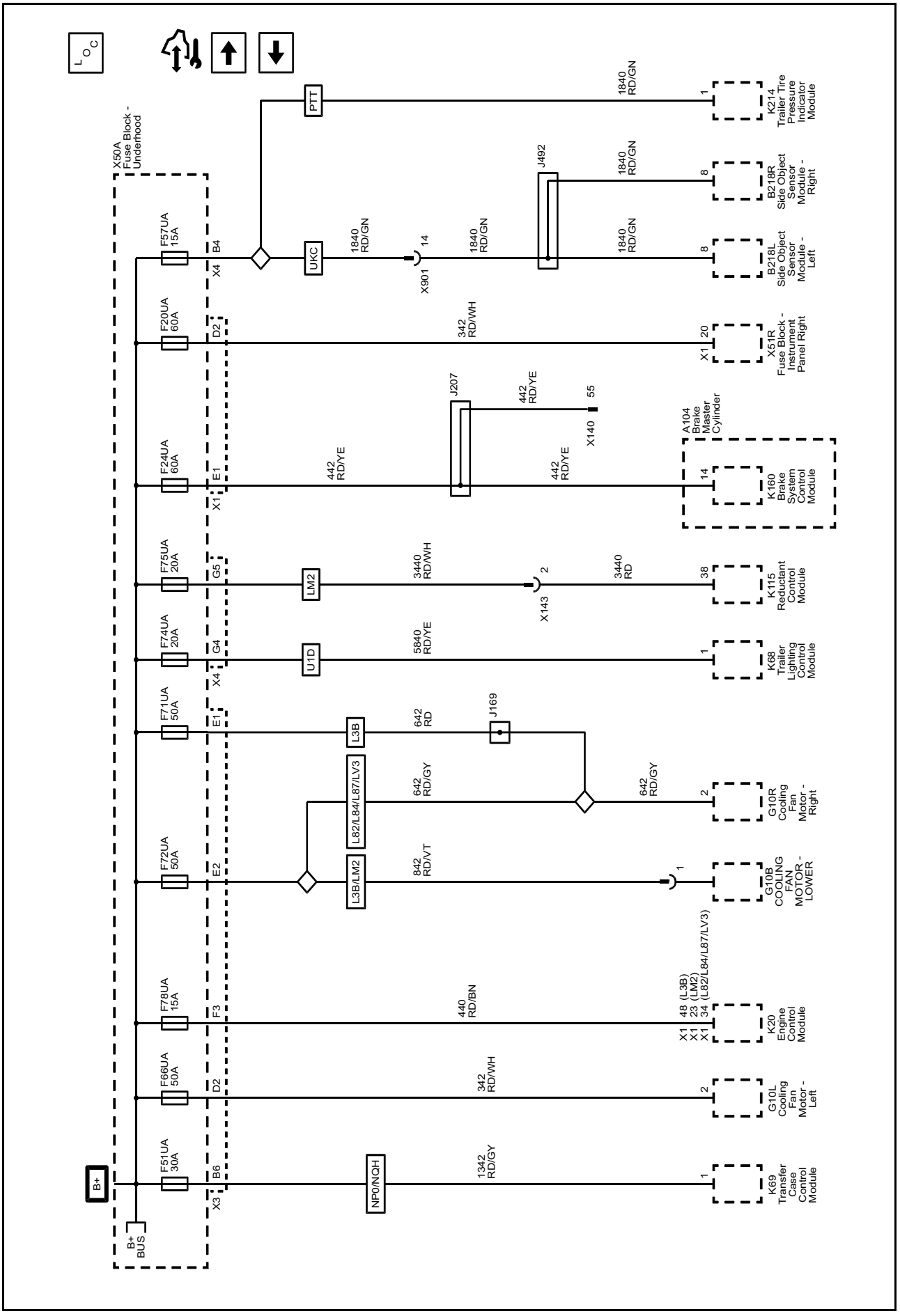
Power Distribution Schematics (F34UA, F41UA, F42UA, and F52UA Fuses (Z88))



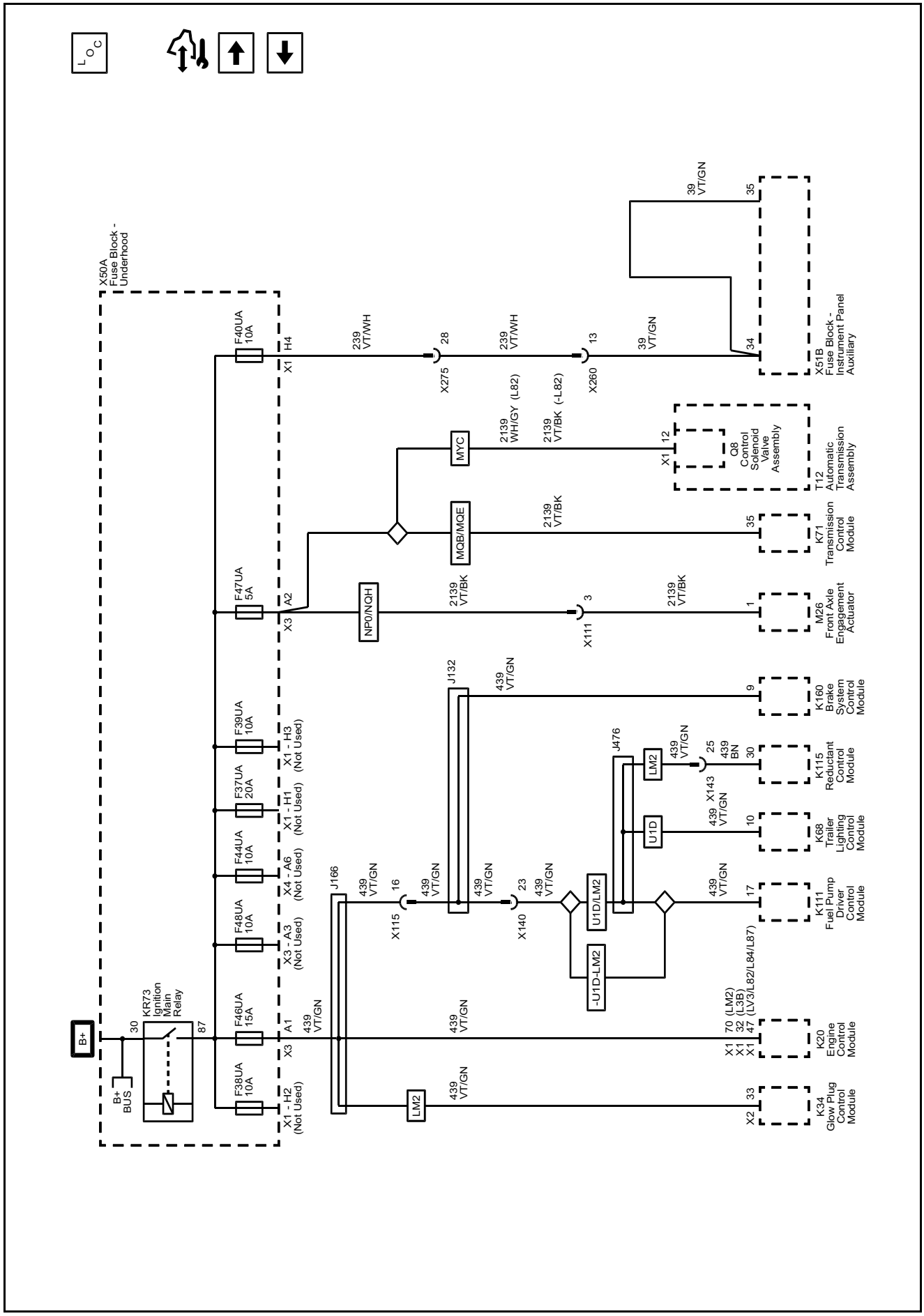
Power Distribution Schematics (F17UA, F19UA, F22UA, F49UA, F56UA, F62UA, F63UA, F65UA, F76UA, F82UA, F83UA, and F84UA Fuses)



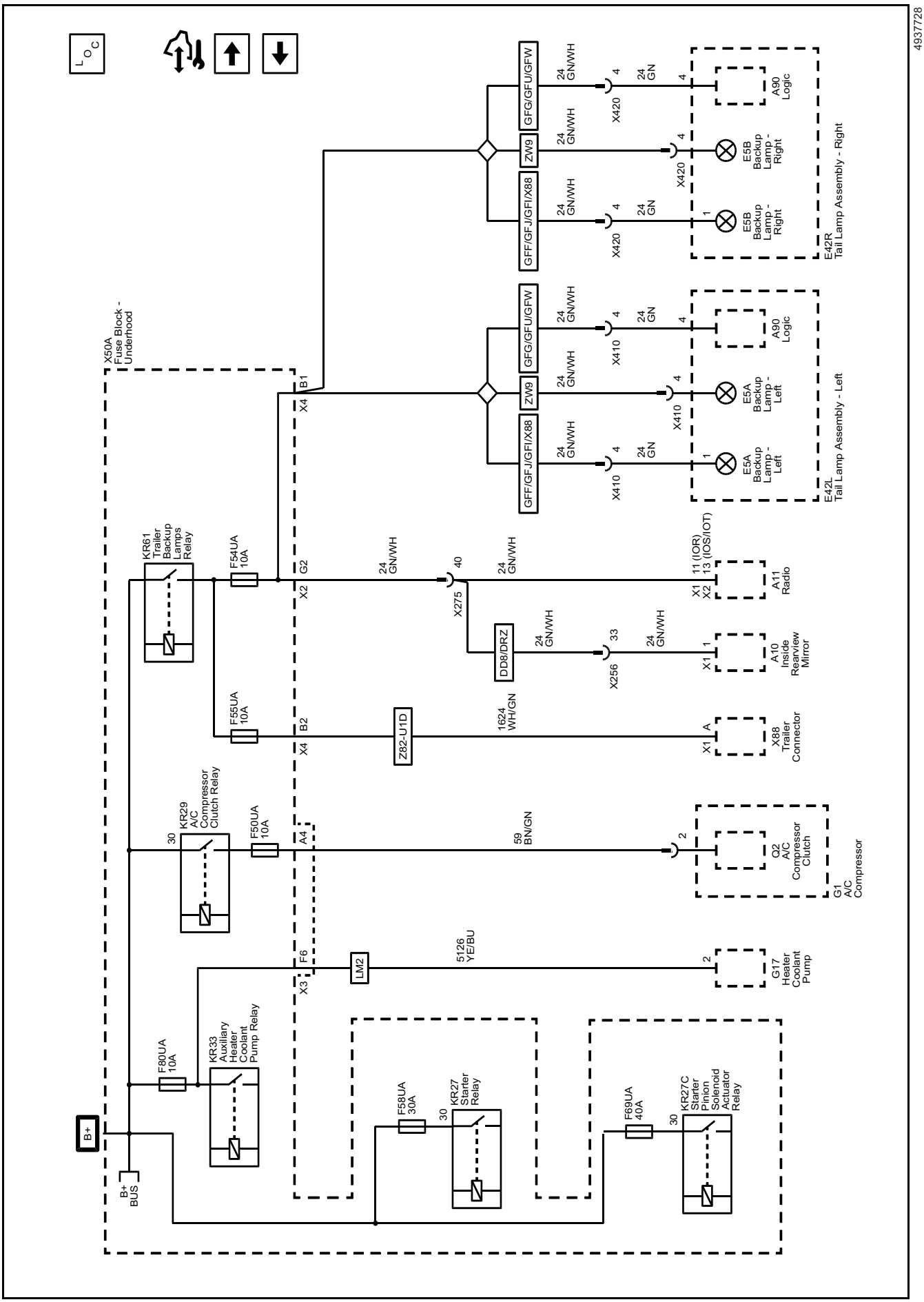
Power Distribution Schematics (F20UA, F24UA, F51UA, F57UA, F66UA, F71UA, F72UA, F74UA, F75UA, and F78UA Fuses)



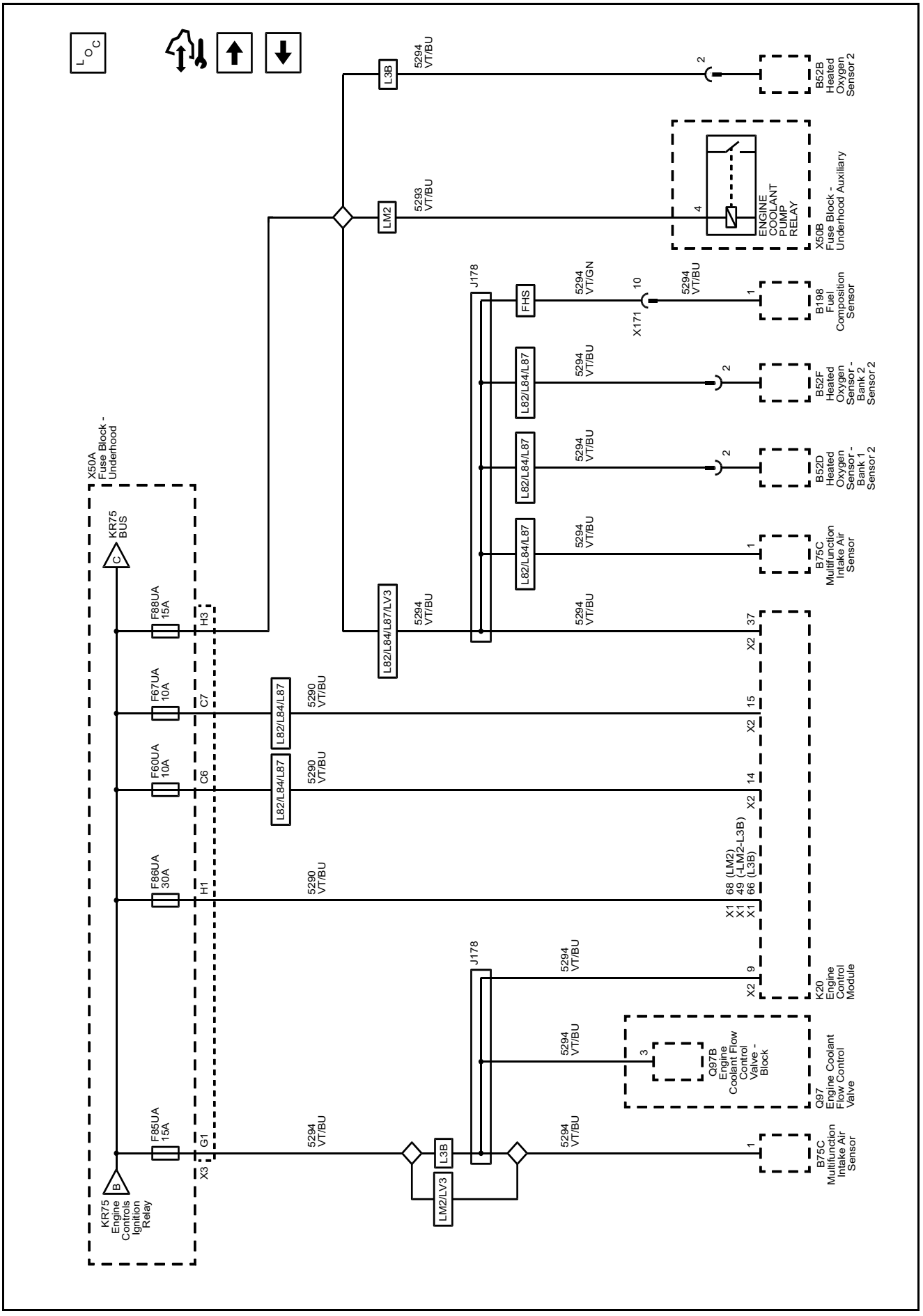
Power Distribution Schematics (F37UA, F38UA, F39UA, F40UA, F44UA, F46UA, F47UA, and F48UA Fuses)



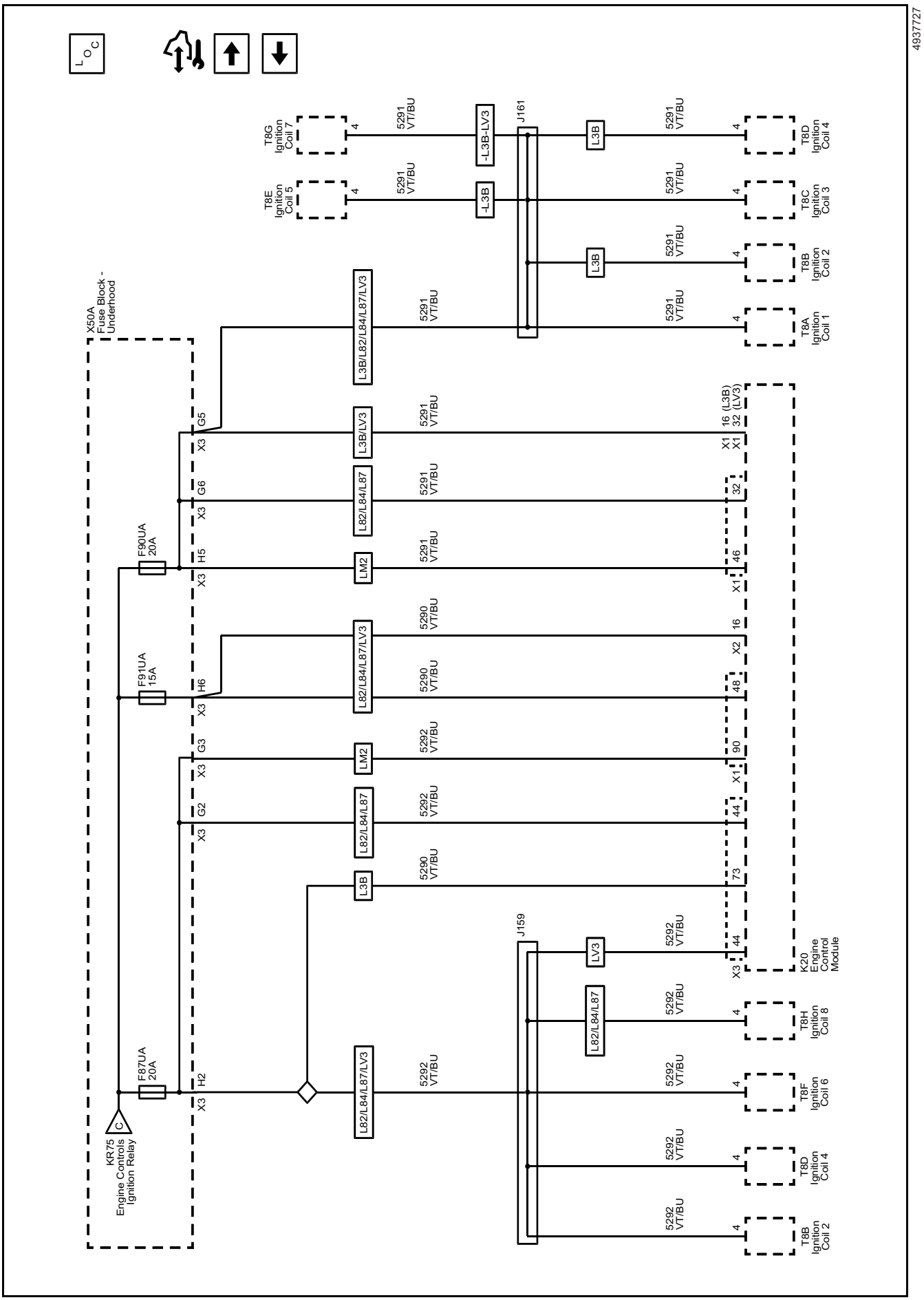
Power Distribution Schematics (F50UA, F54UA, F55UA, F58UA, F69UA, and F80UA Fuses)



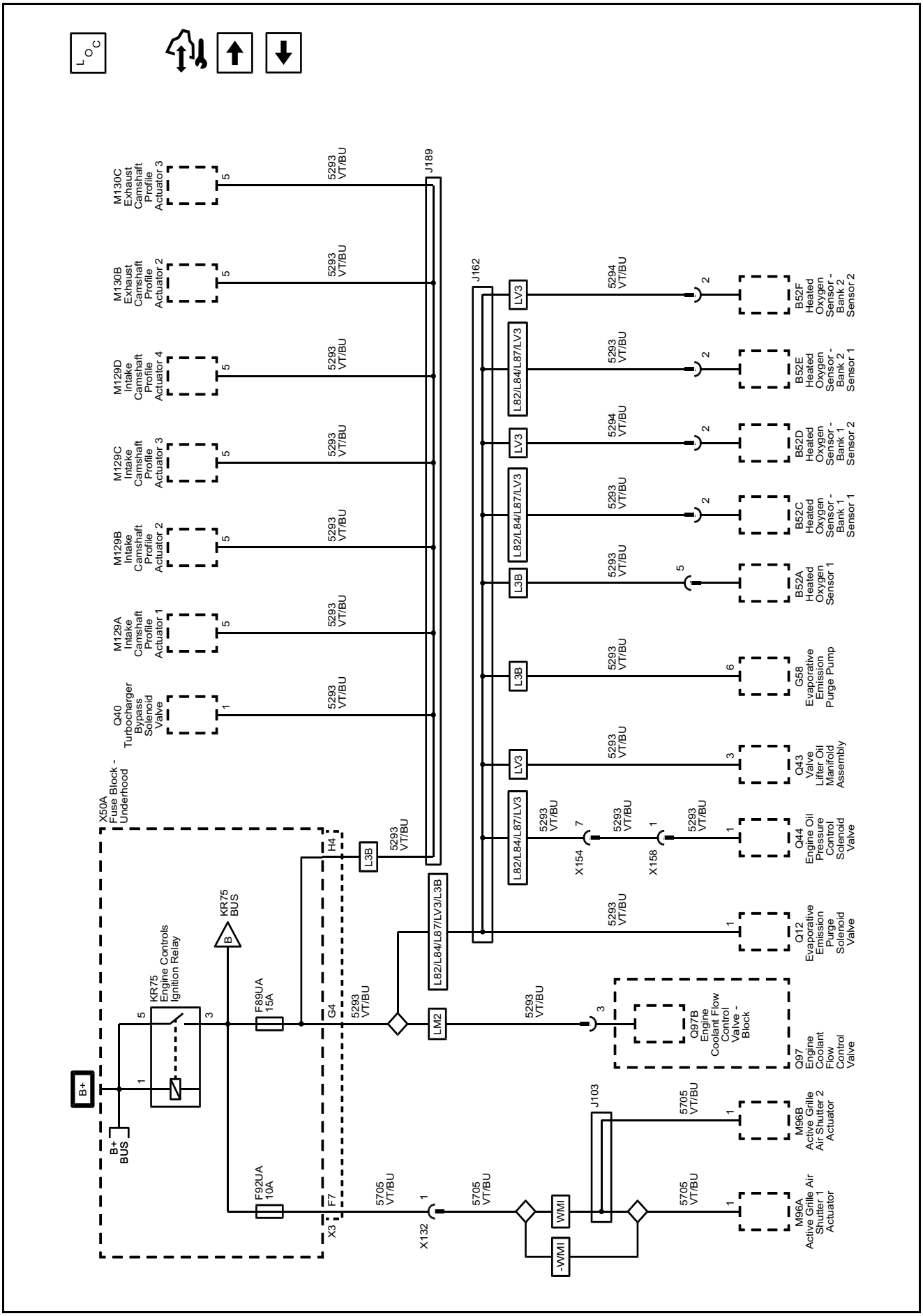
Power Distribution Schematics (F60UA, F67UA, F85UA, F86UA, and F88UA Fuses)



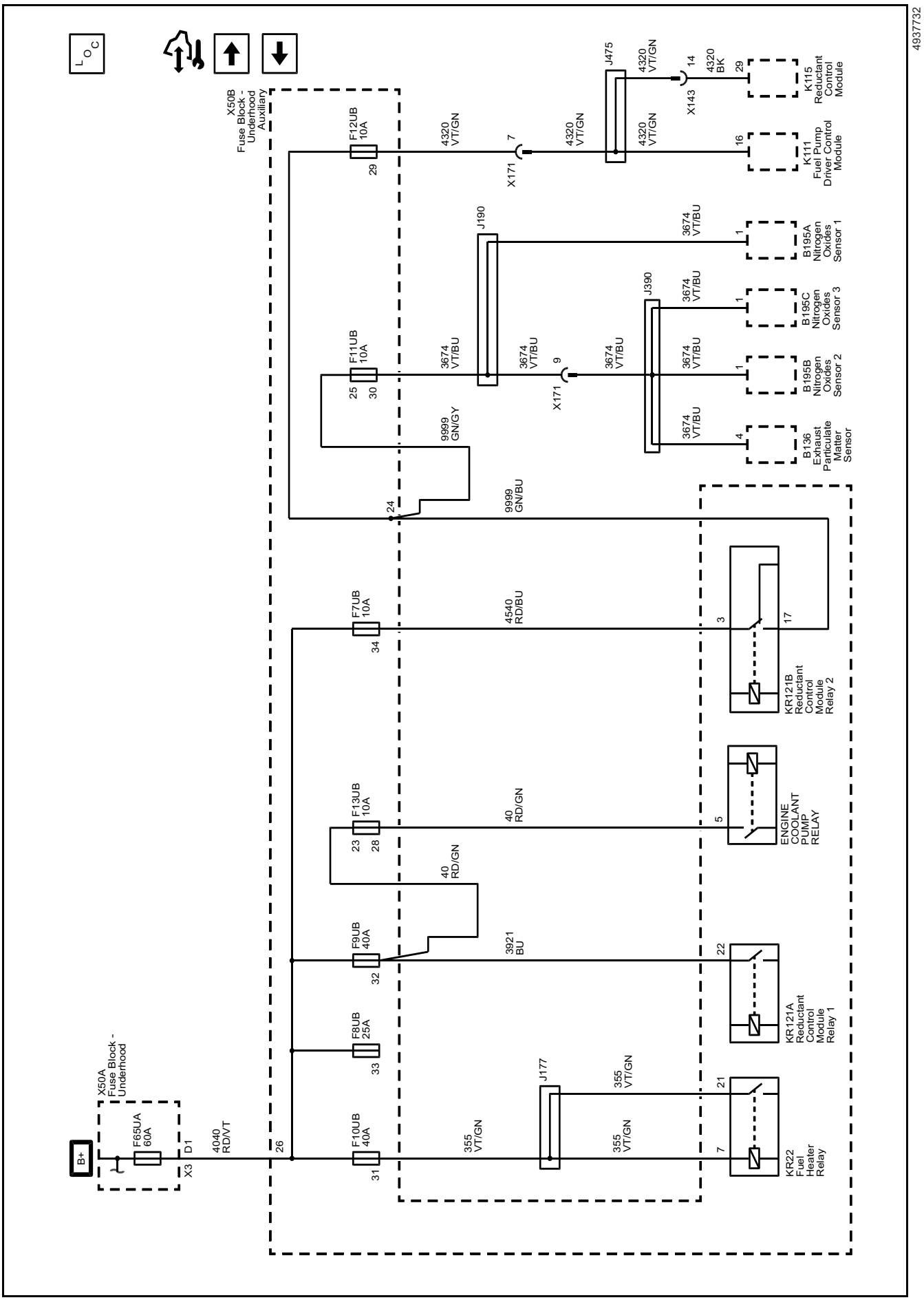
Power Distribution Schematics (F87UA, F90UA, and F91UA Fuses)



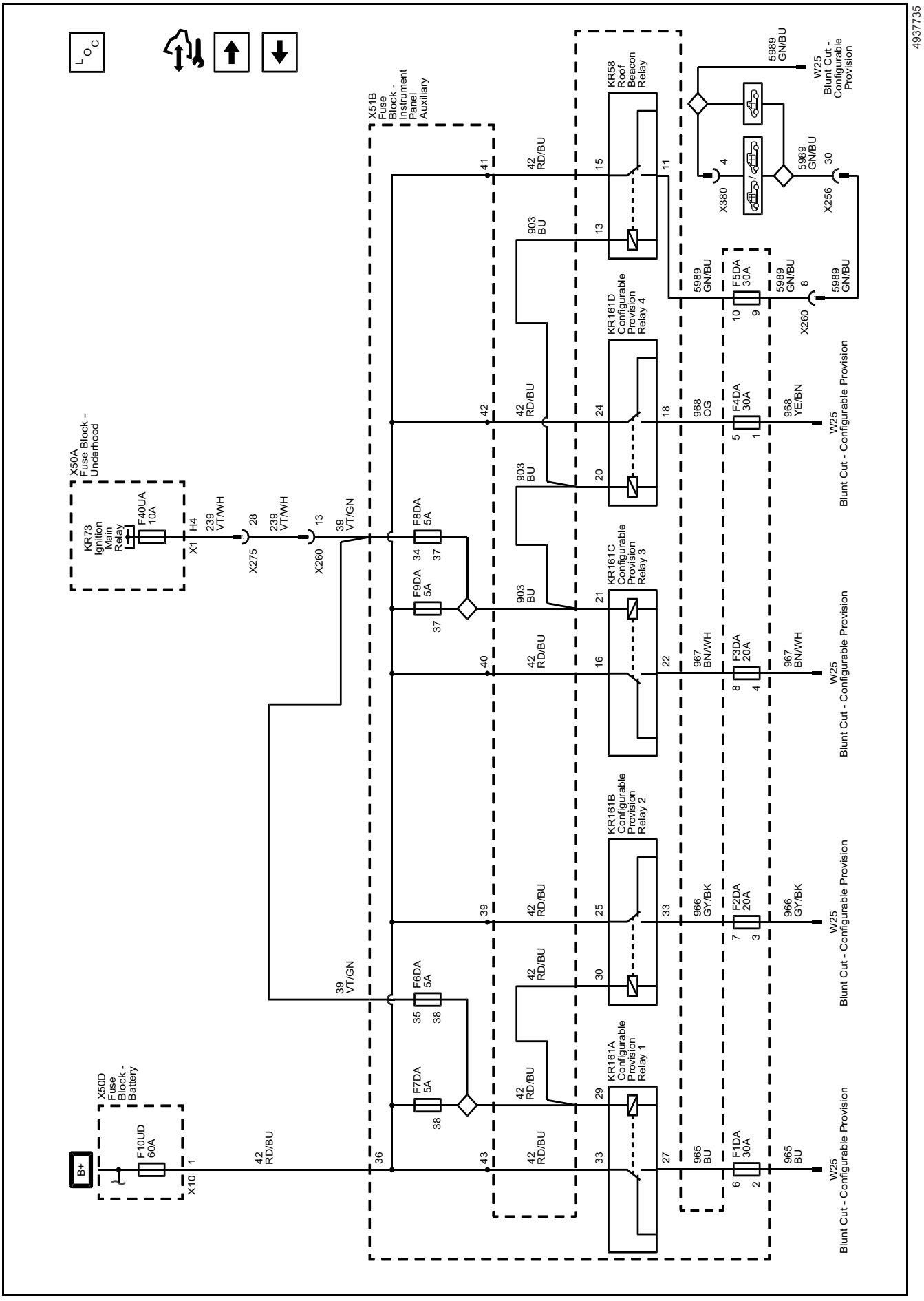
Power Distribution Schematics (F89UA and F92UA Fuses)



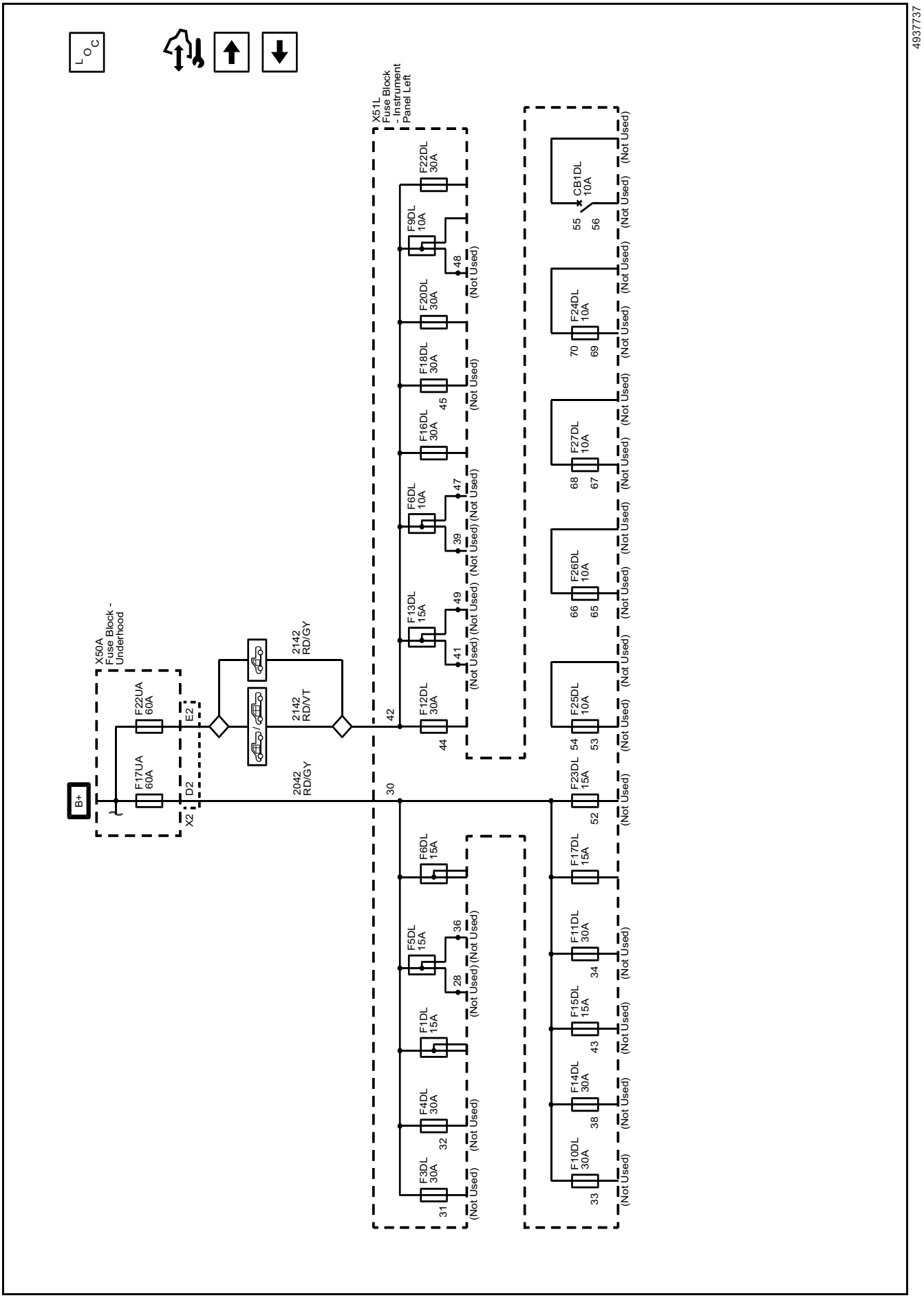
Power Distribution Schematics (Auxiliary Underhood Fuse Block (LM2))



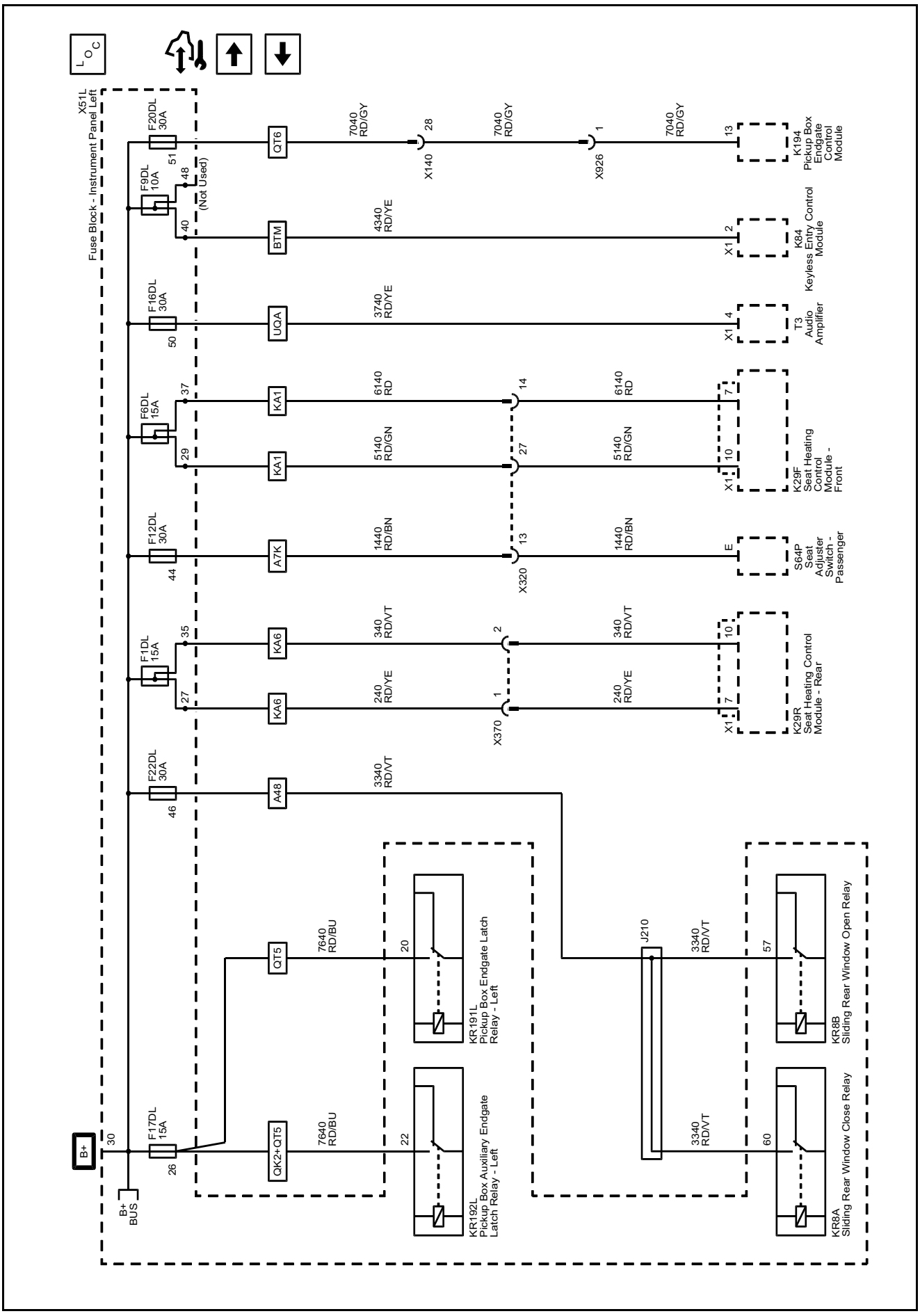
Power Distribution Schematics (Auxiliary Instrument Panel Fuse Block (9L7))



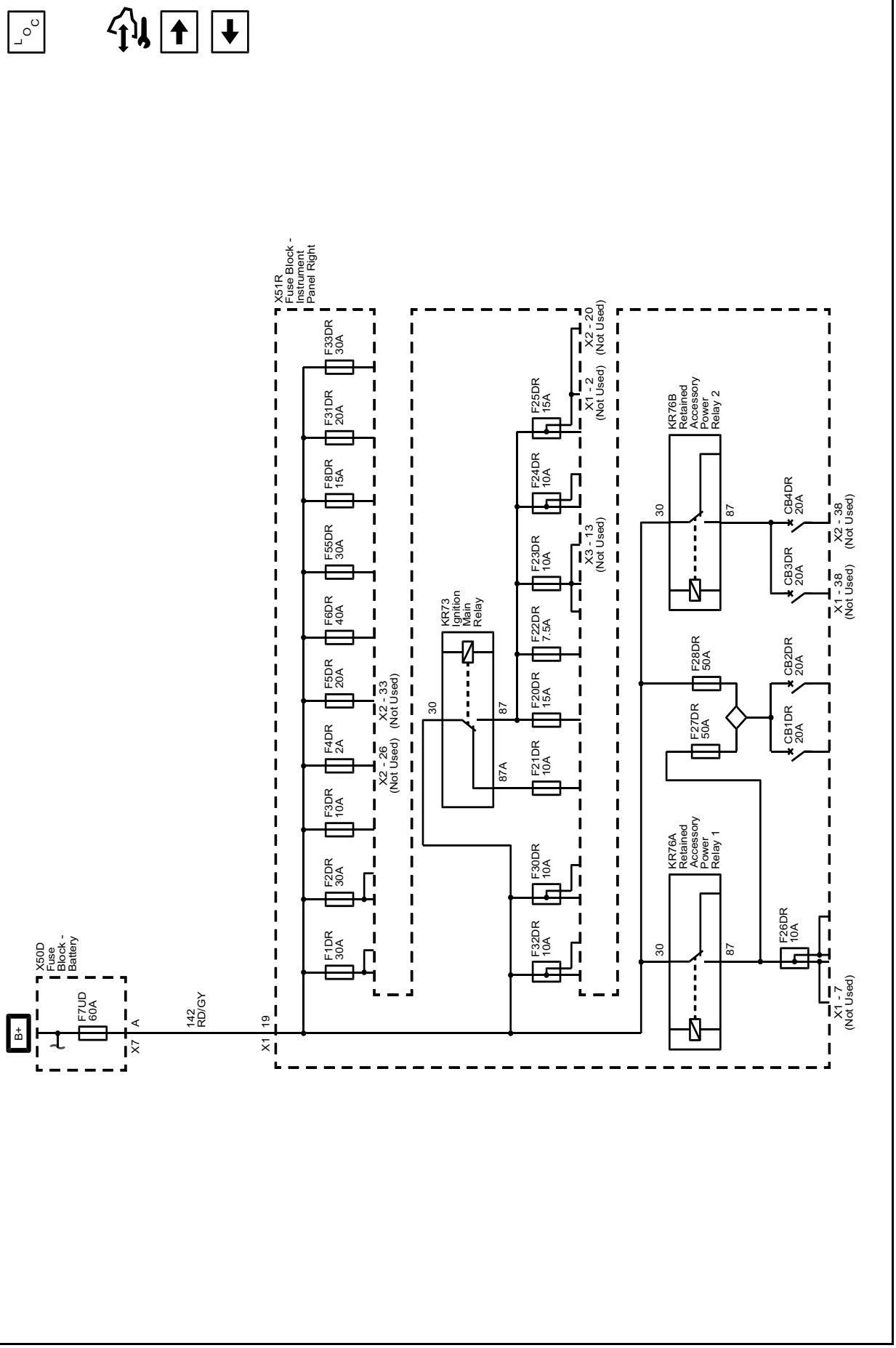
Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Left)



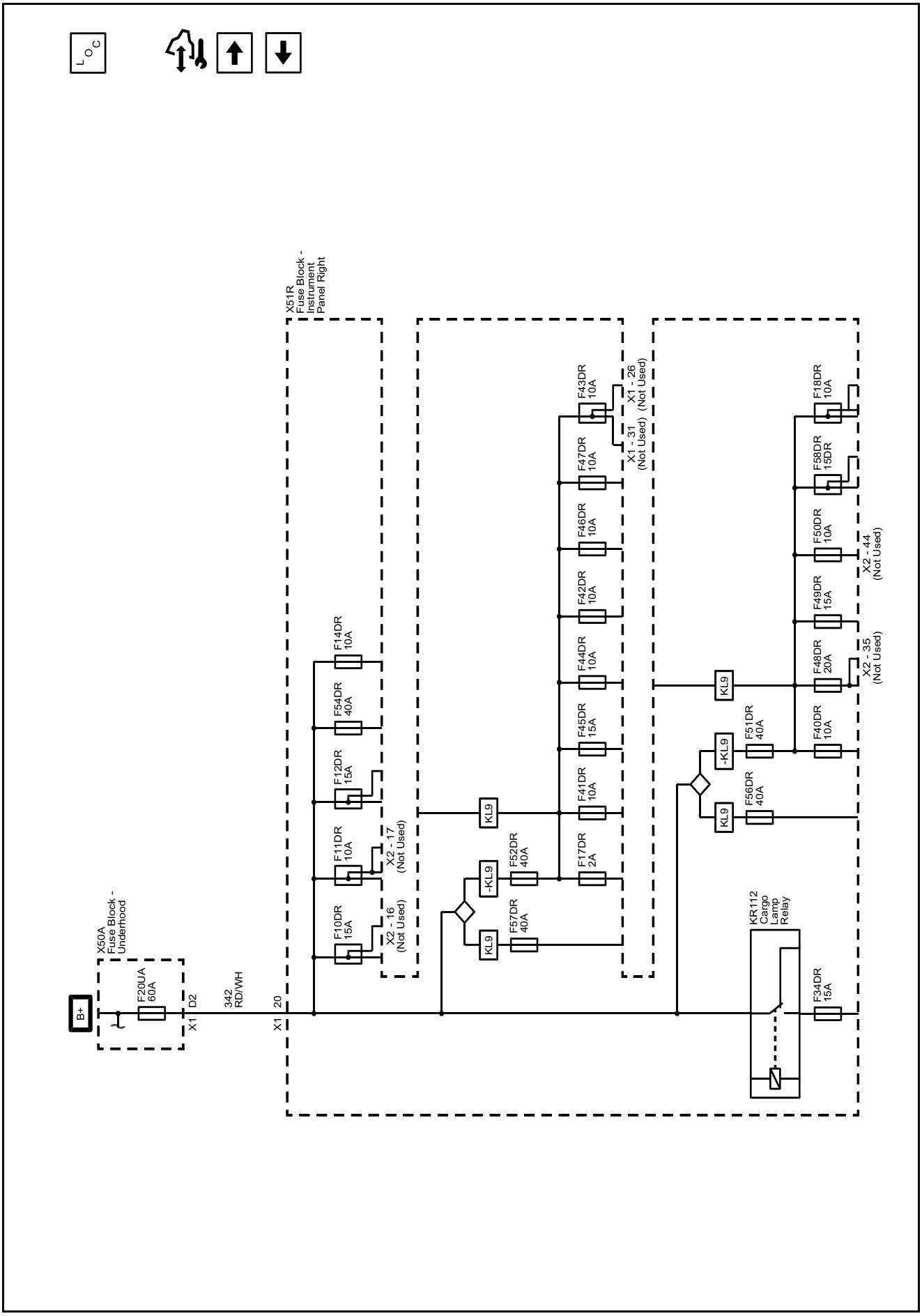
Power Distribution Schematics (F1DL, F8DL, F9DL, F12DL, F16DL, F17DL, F20DL, and F22DL Fuses)



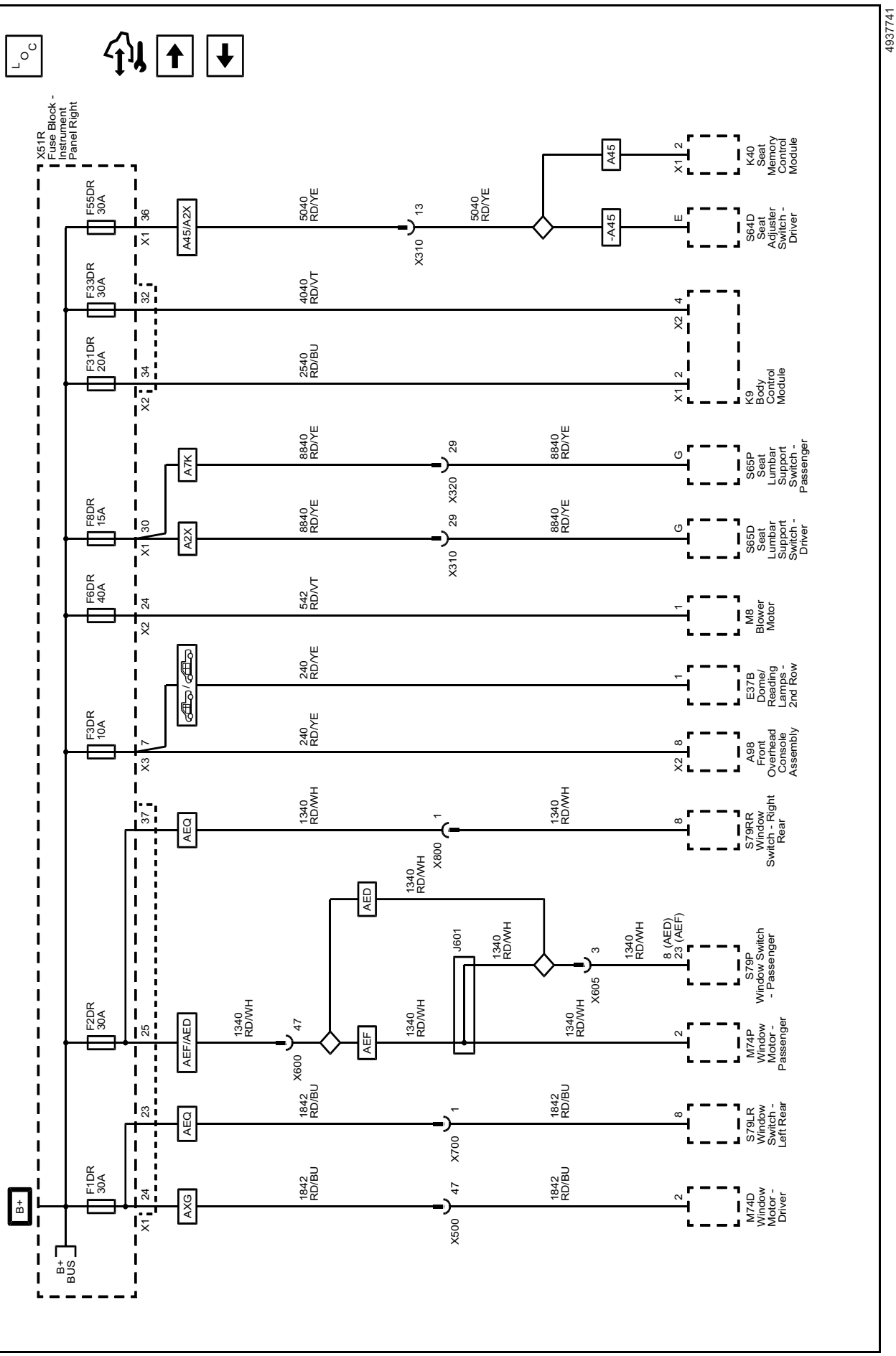
Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (1 of 2))



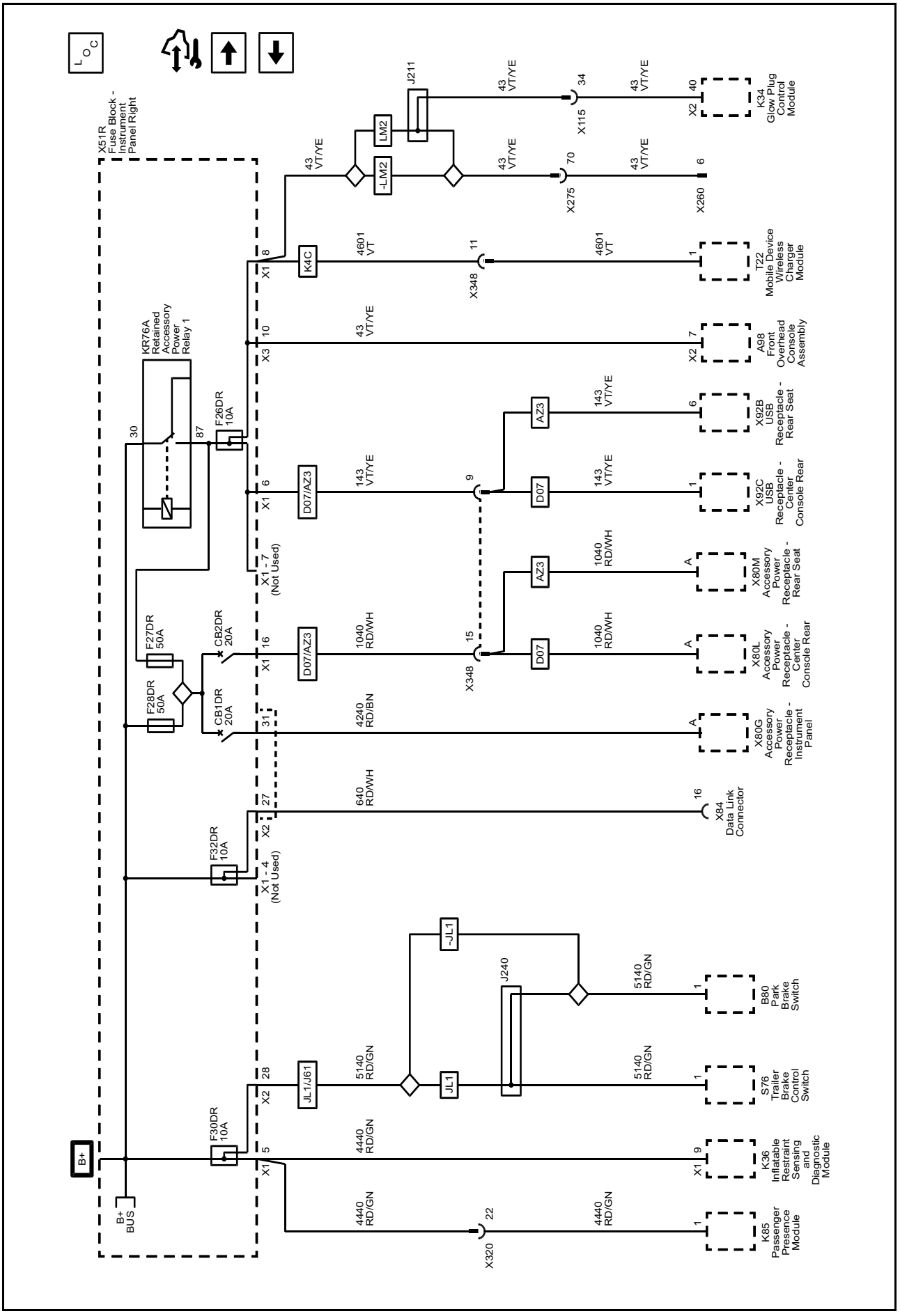
Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (2 of 2))



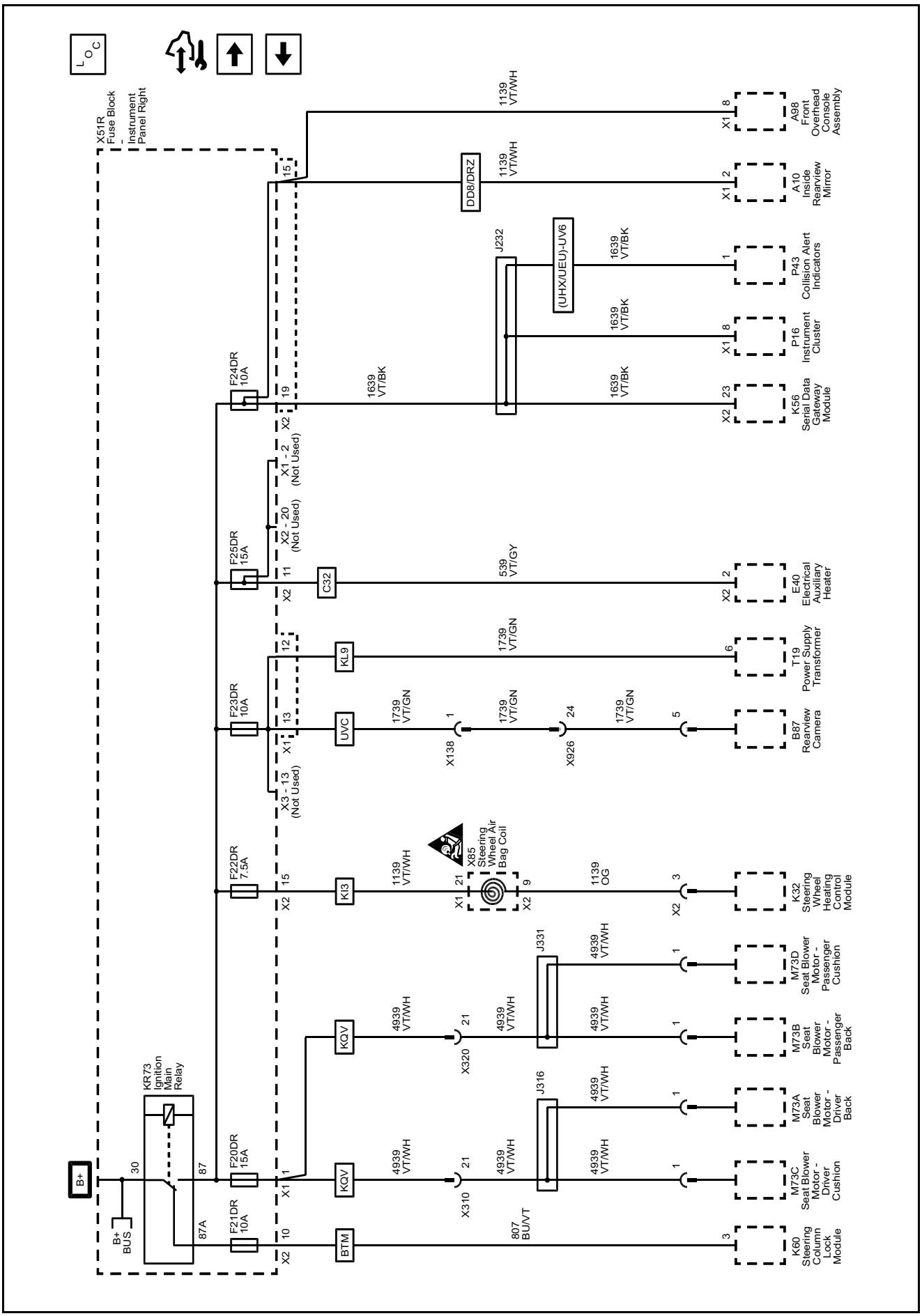
Power Distribution Schematics (F1DR, F2DR, F3DR, F6DR, F8DR, F31DR, F33DR, and F55DR Fuses)



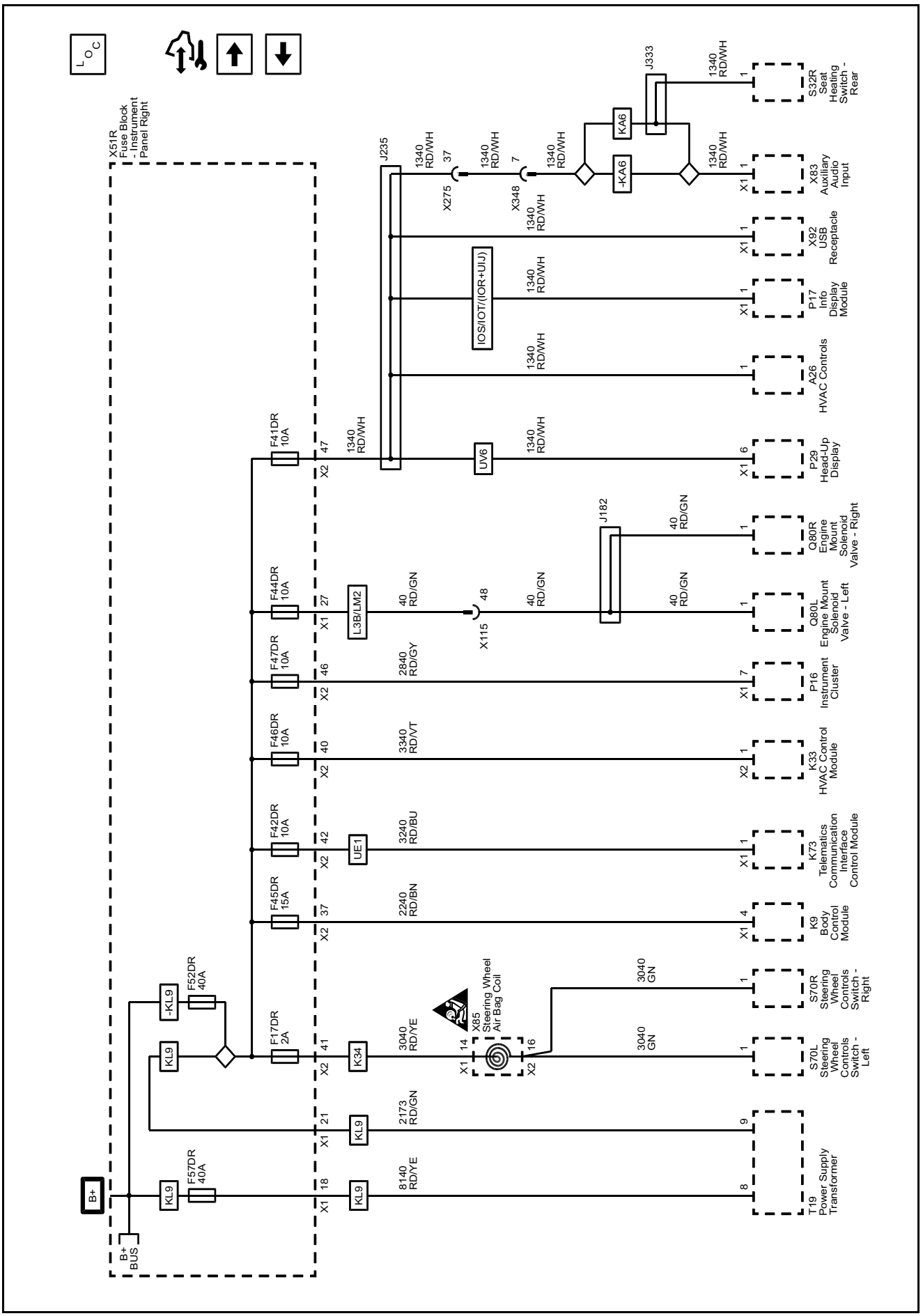
Power Distribution Schematics (CB1DR and CB2DR Circuit Breakers, F26DR, F27DR, F28DR, 30DR. and F32DR Fuses)



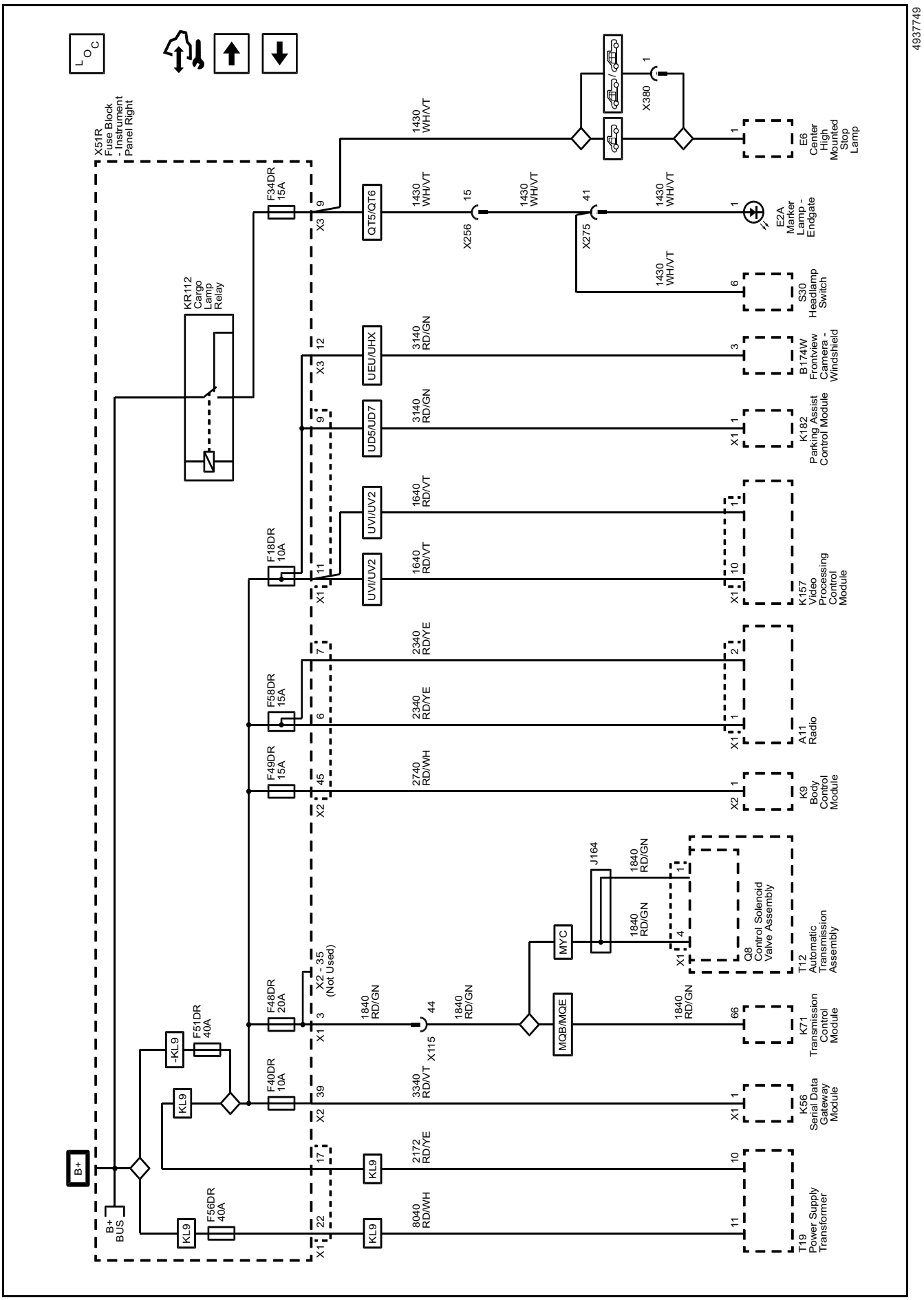
Power Distribution Schematics (F20DR, F21DR, F22DR, F23DR, F24DR, and F25DR Fuses)



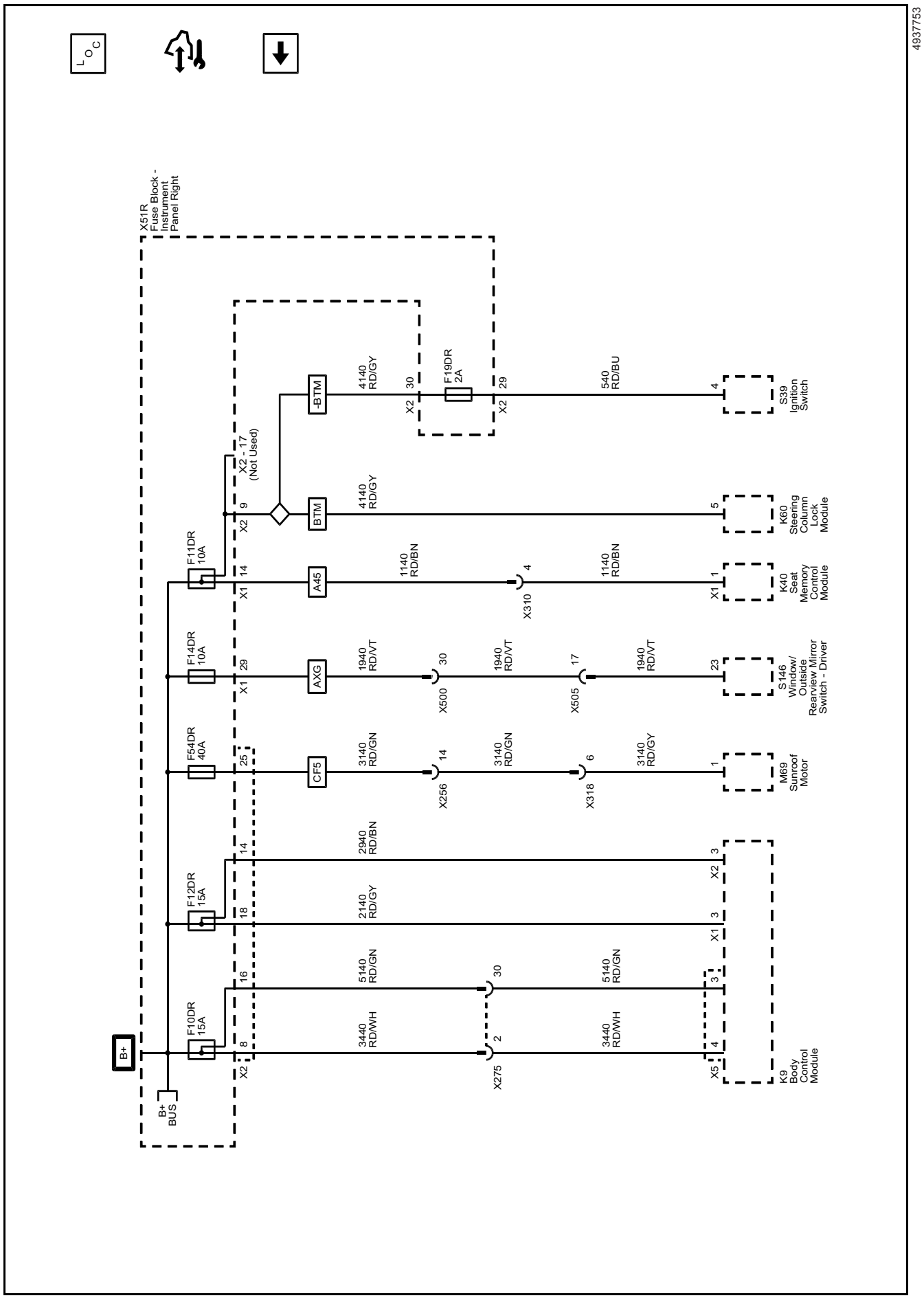
Power Distribution Schematics (F17DR, F41DR, F42DR, F44DR, F45DR, F46DR, F47DR, F52DR, and F57DR Fuses)



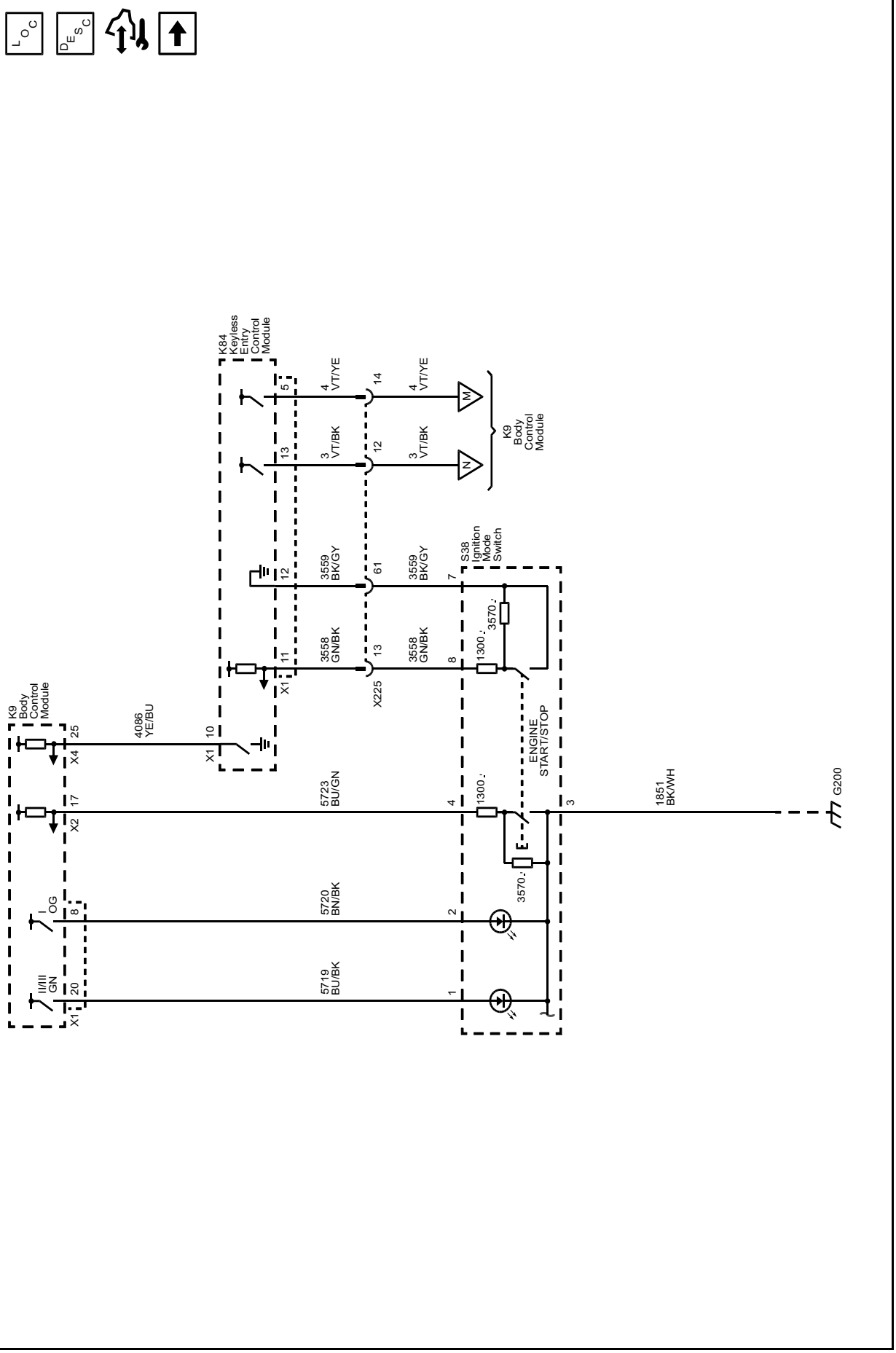
Power Distribution Schematics (F18DR, F34DR, F40DR, F48DR, F49DR, F51DR, F56DR, and F58DR Fuses)



Power Distribution Schematics (F10DR, F11DR, F12DR, F14DR, F19DR, and F54DR Fuses)

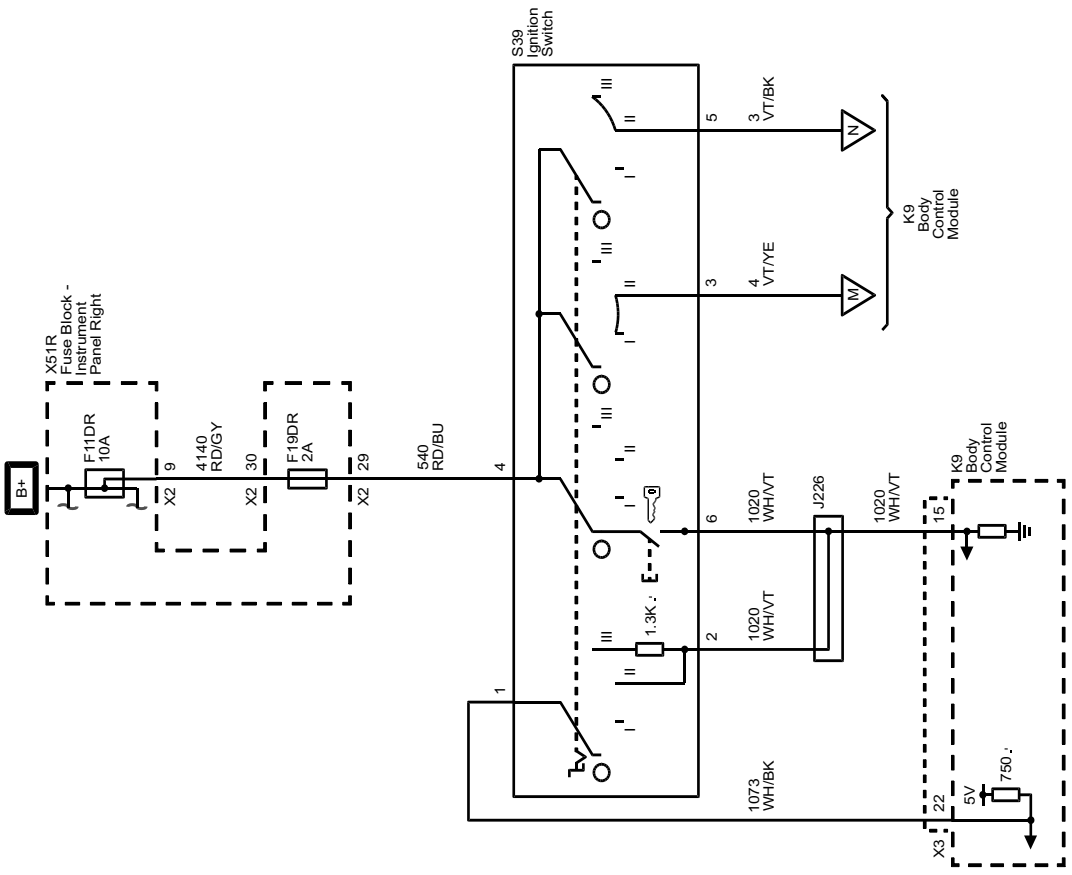


Power Moding Schematics (Ignition Mode Switch (BTM))



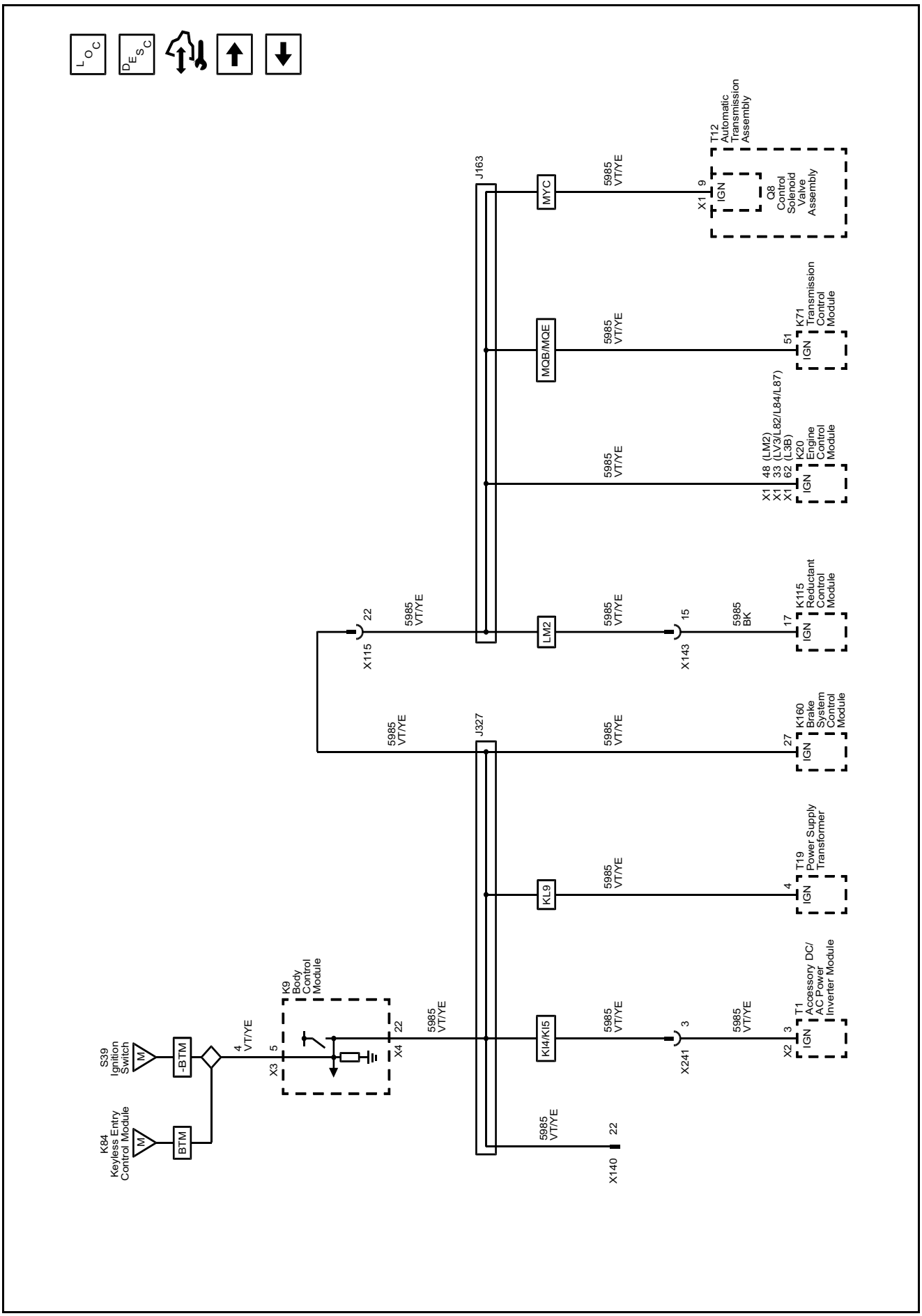
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Power Moding Schematics (Ignition Switch (without BTM))

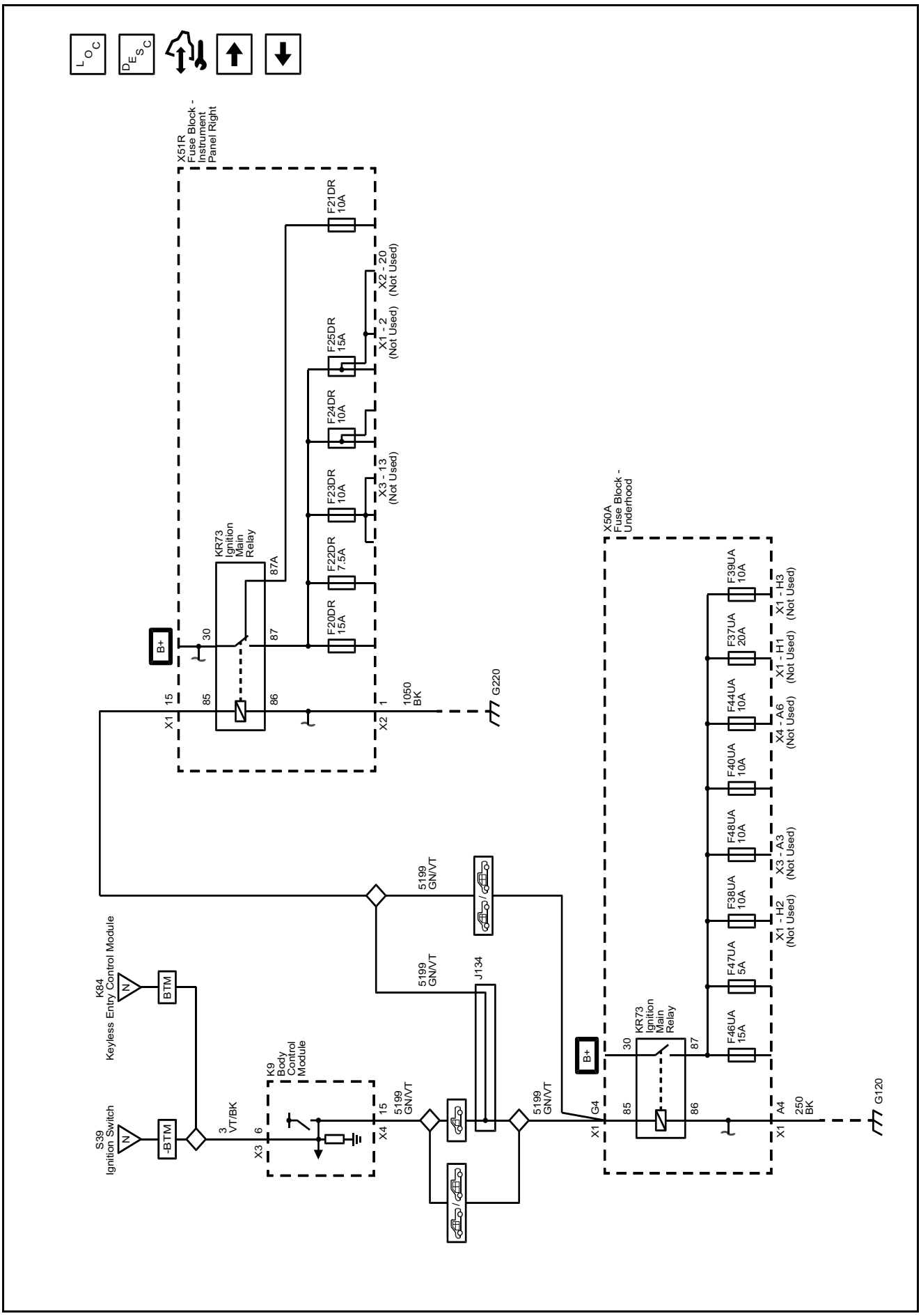


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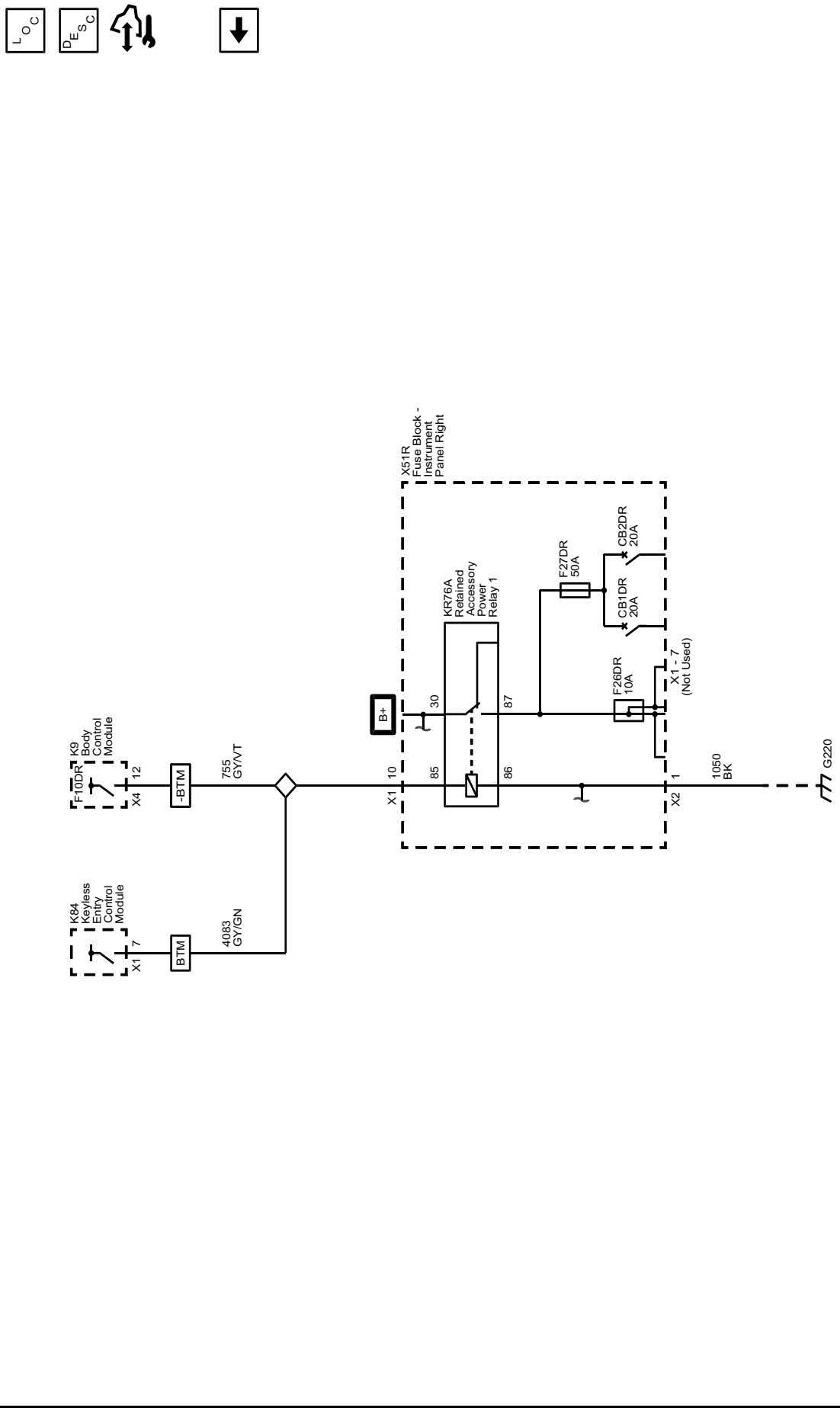
Power Moding Schematics (Accessory Wakeup)



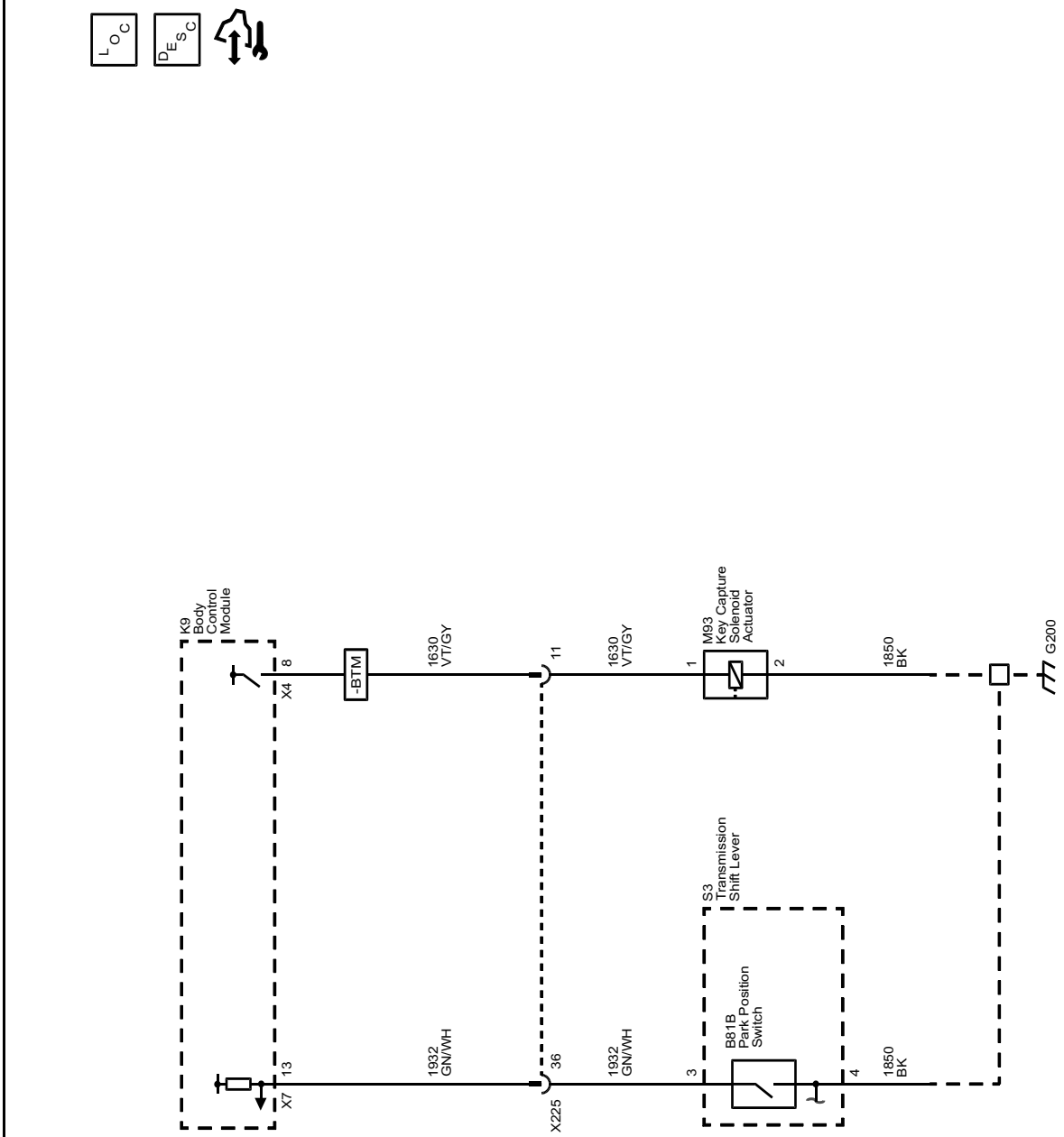
Power Moding Schematics (Ignition Main Relays)



Power Moding Schematics (Retained Accessory Power Relays)

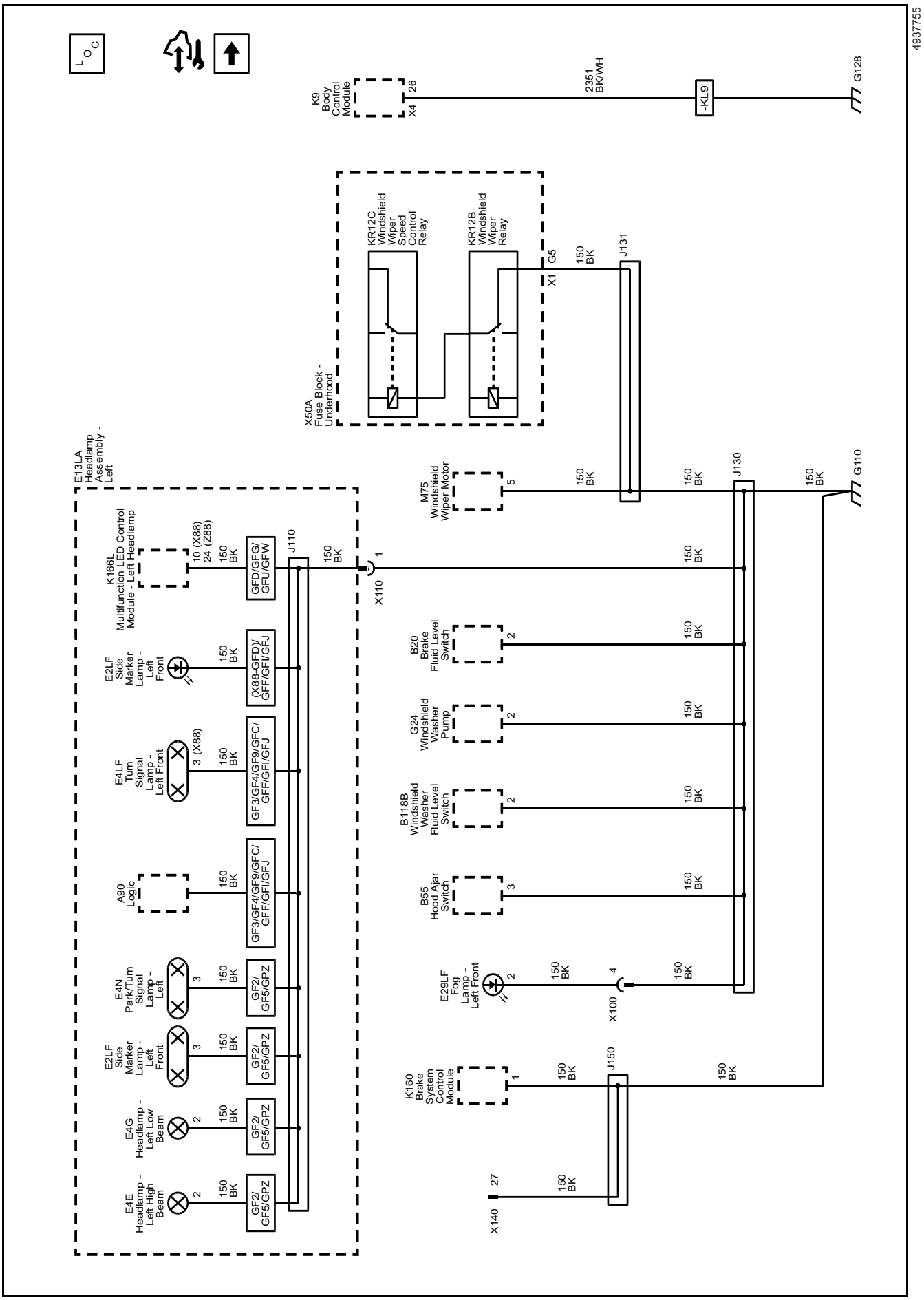


Ignition Lock Schematics (Ignition Lock)

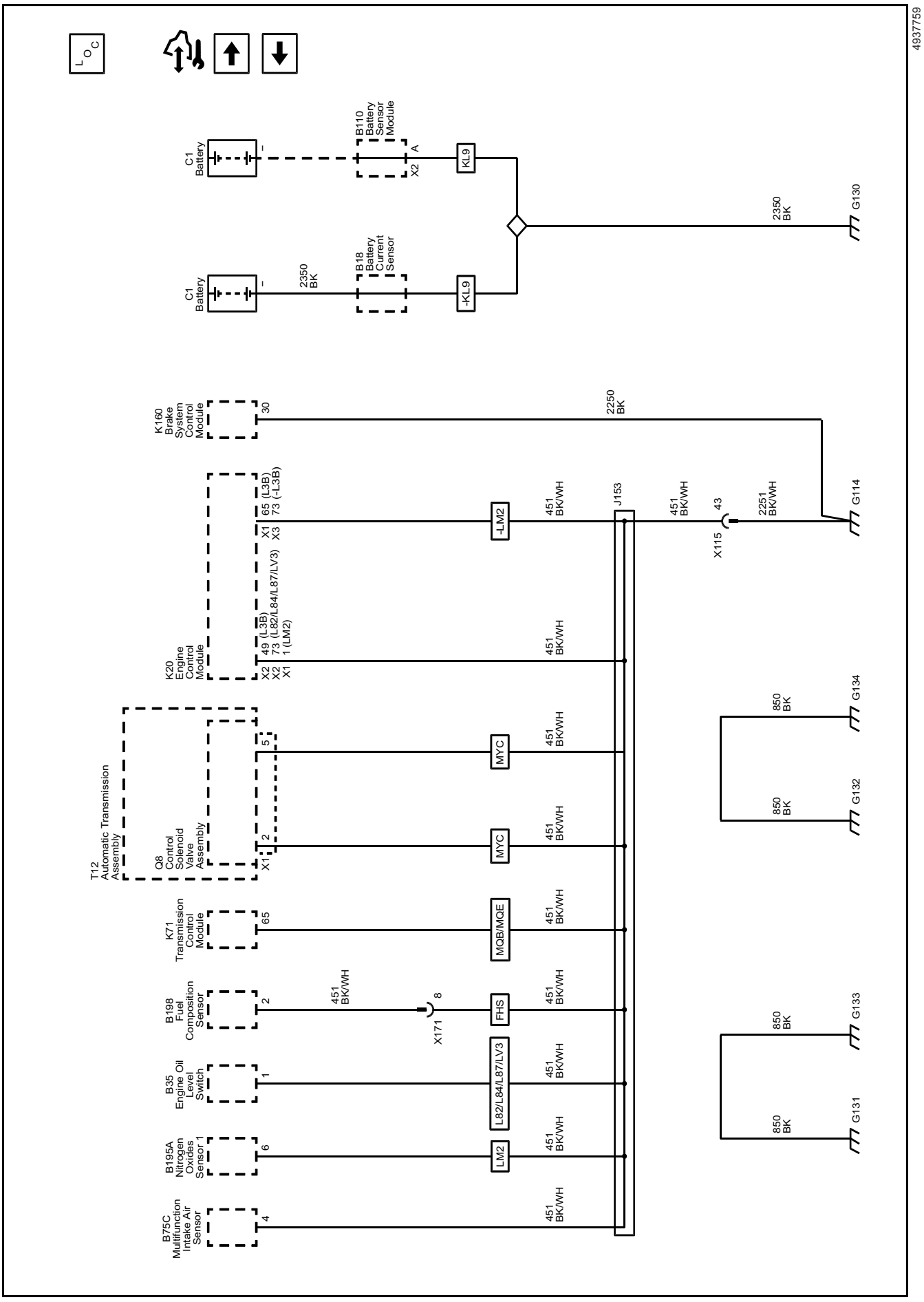


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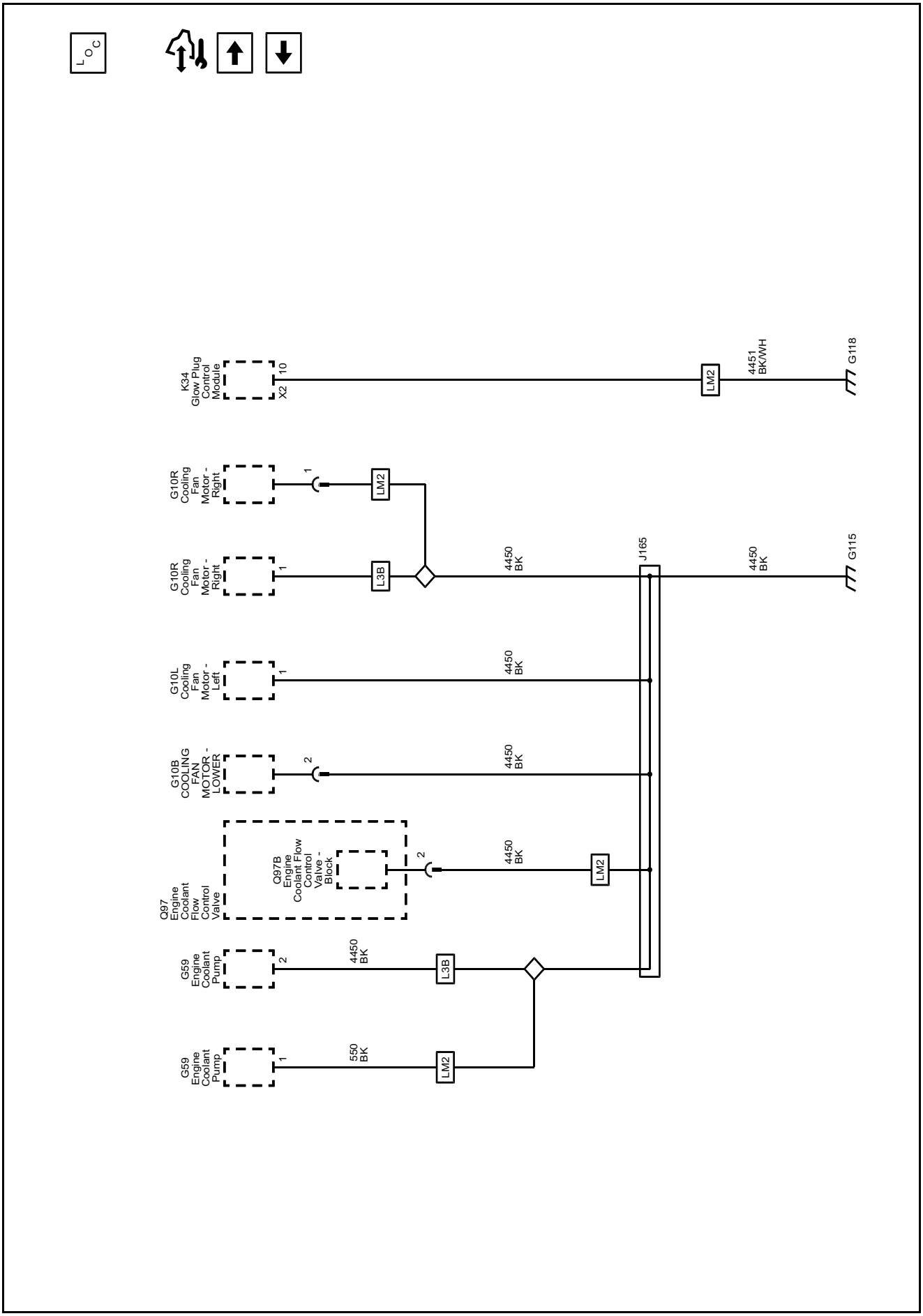
Ground Distribution Schematics (G110 and G128)



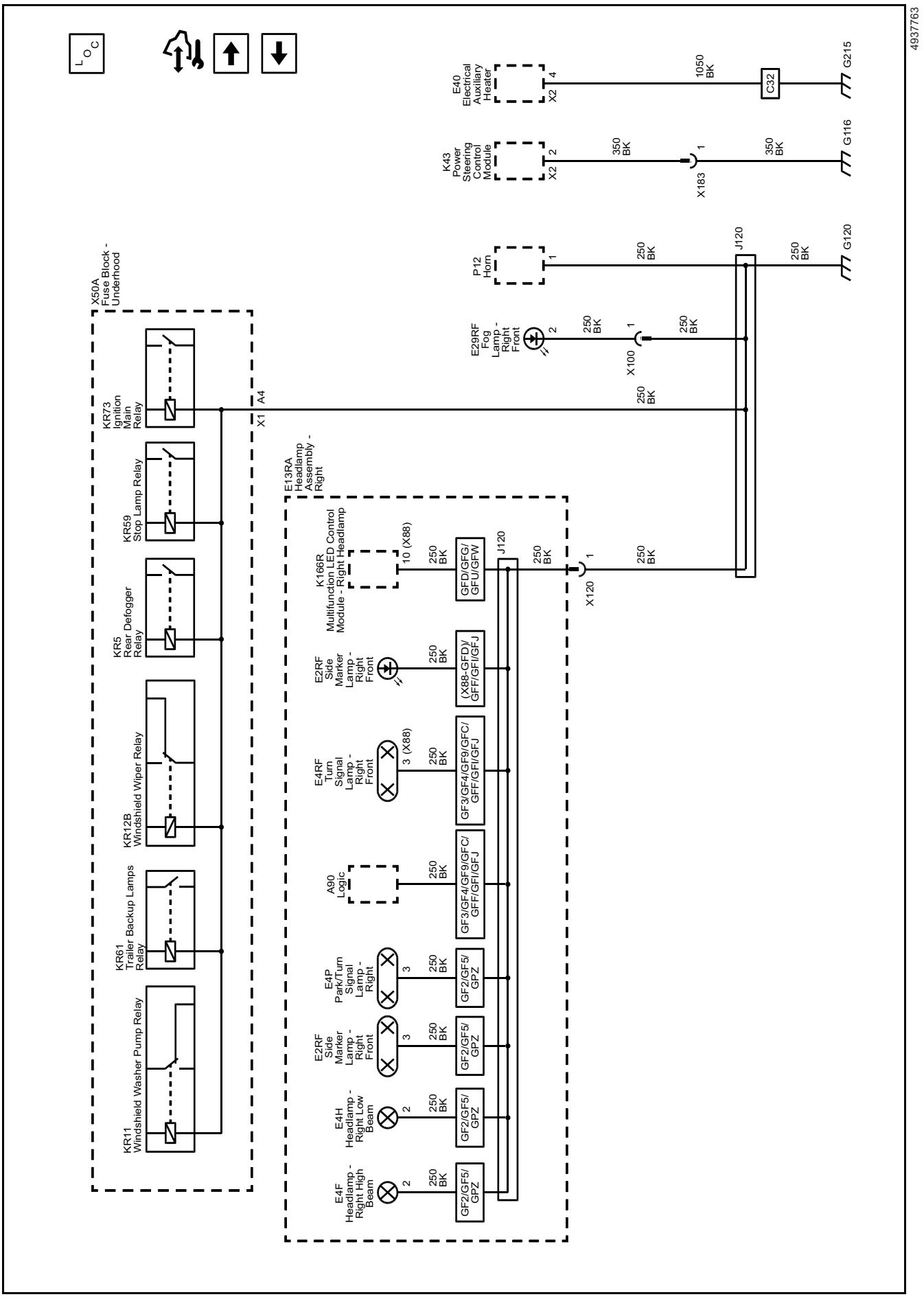
Ground Distribution Schematics (G114, G130, G131, G132, G133, and G134)



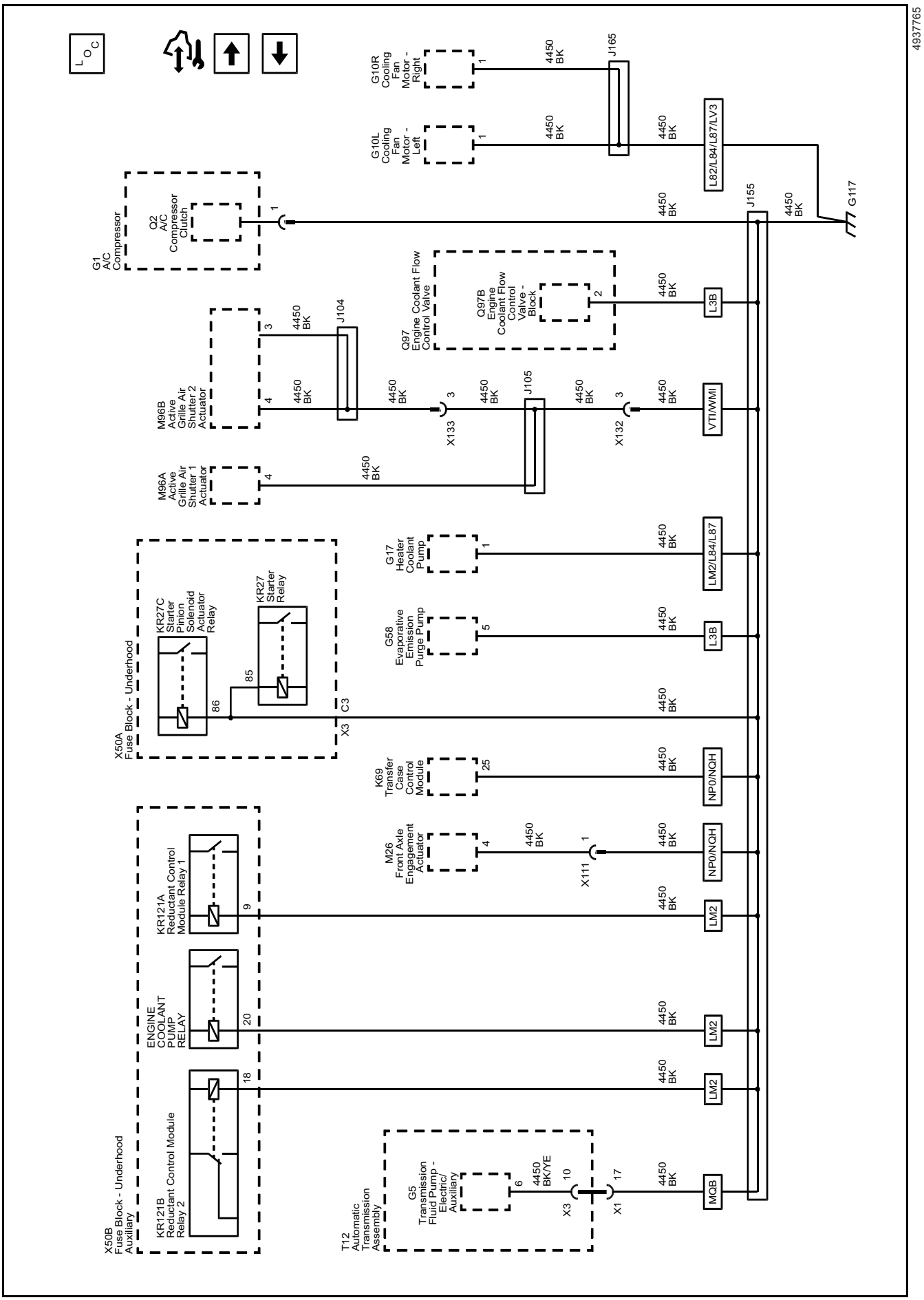
Ground Distribution Schematics (G115 and G118 (L3B/LM2))



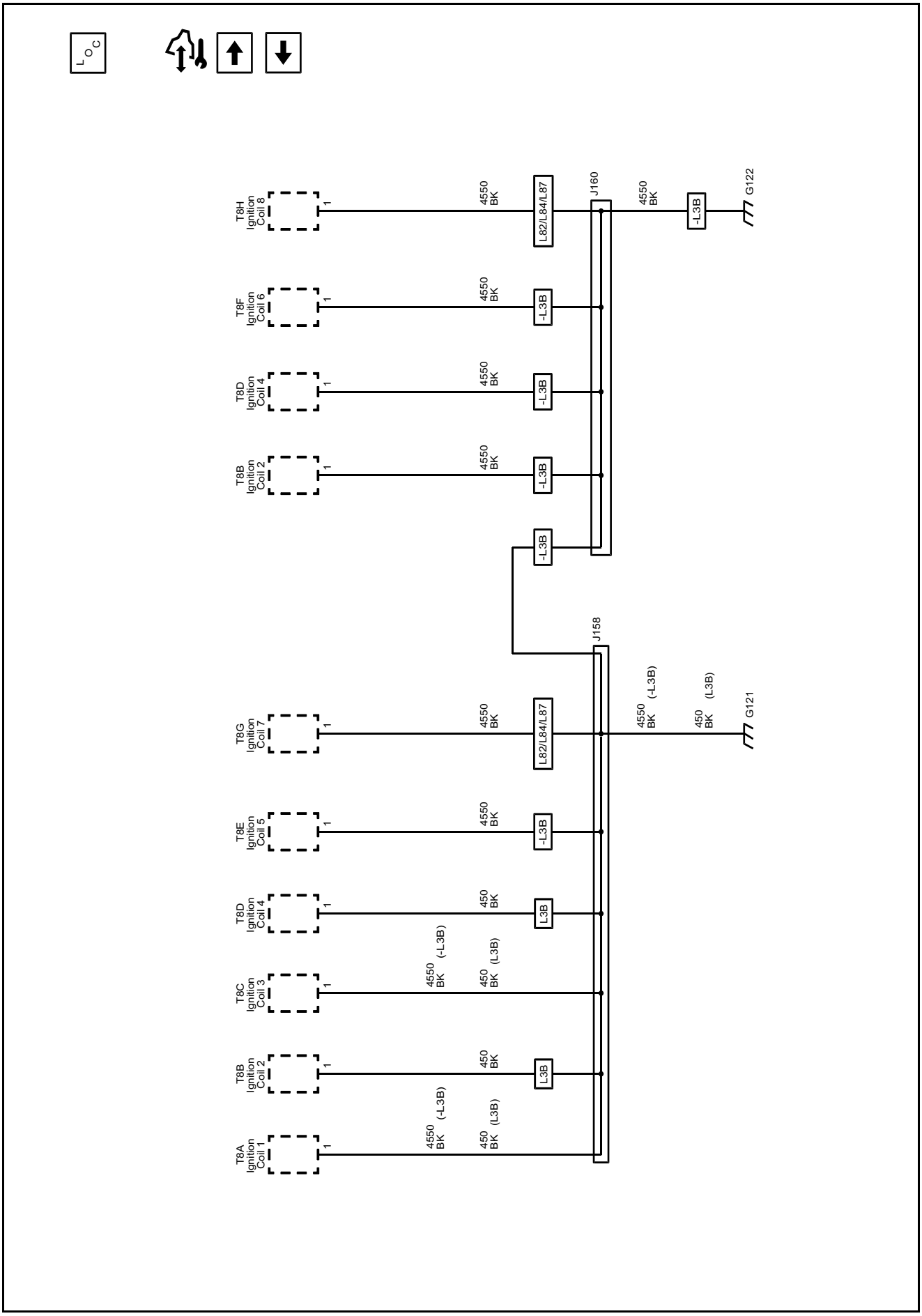
Ground Distribution Schematics (G116, G120, and G215)



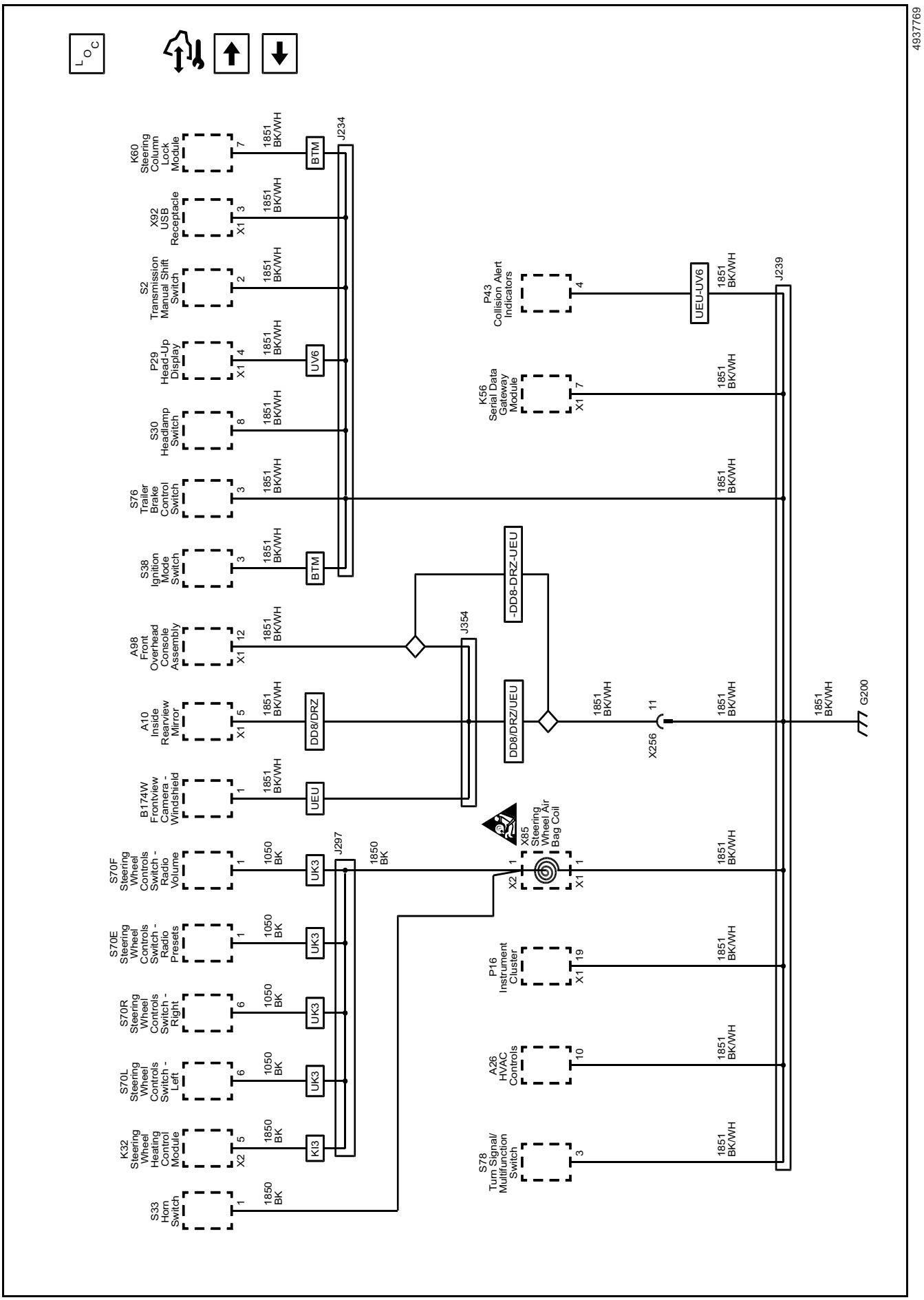
Ground Distribution Schematics (G117)



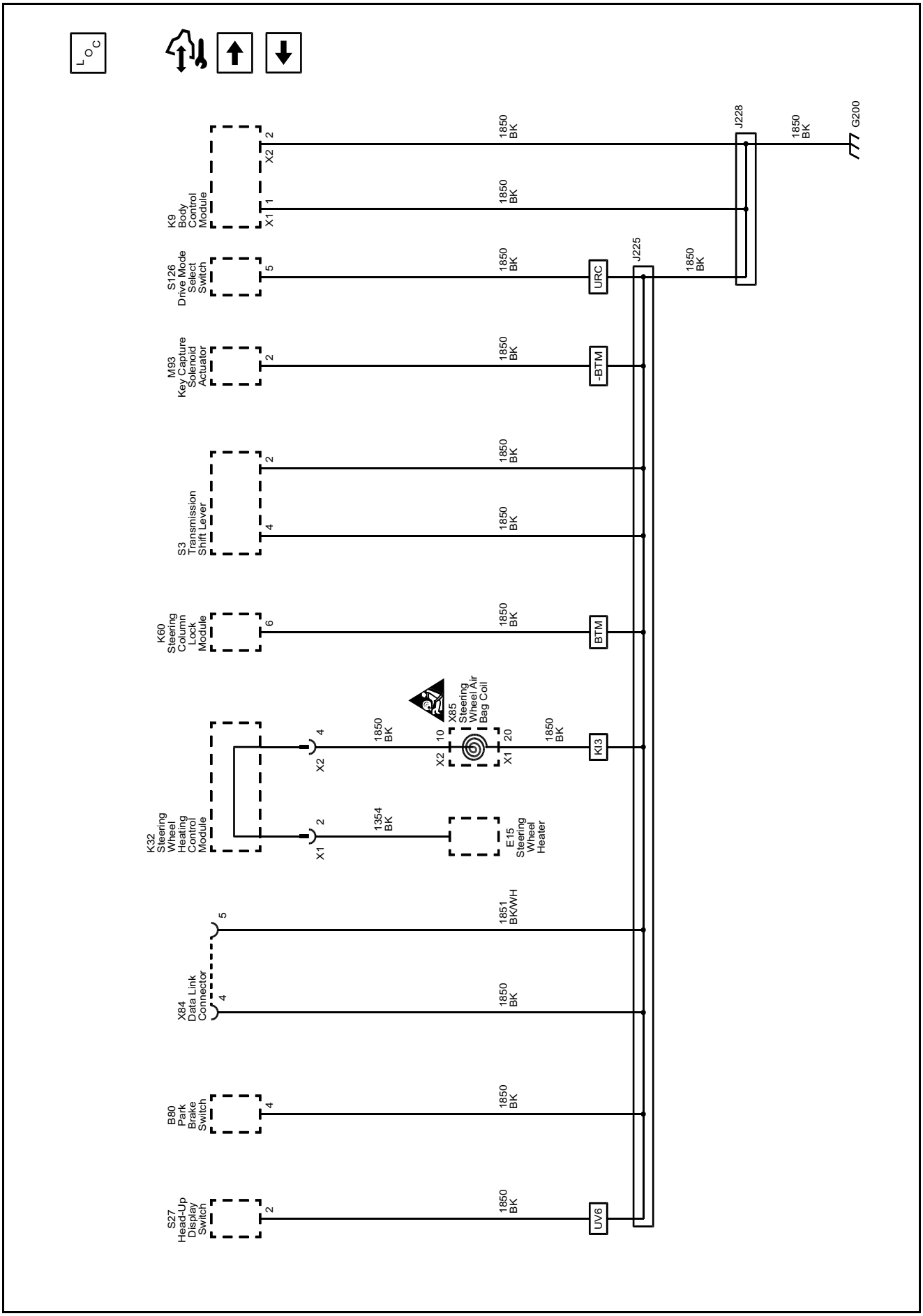
Ground Distribution Schematics (G121 and G122 (-LM2))



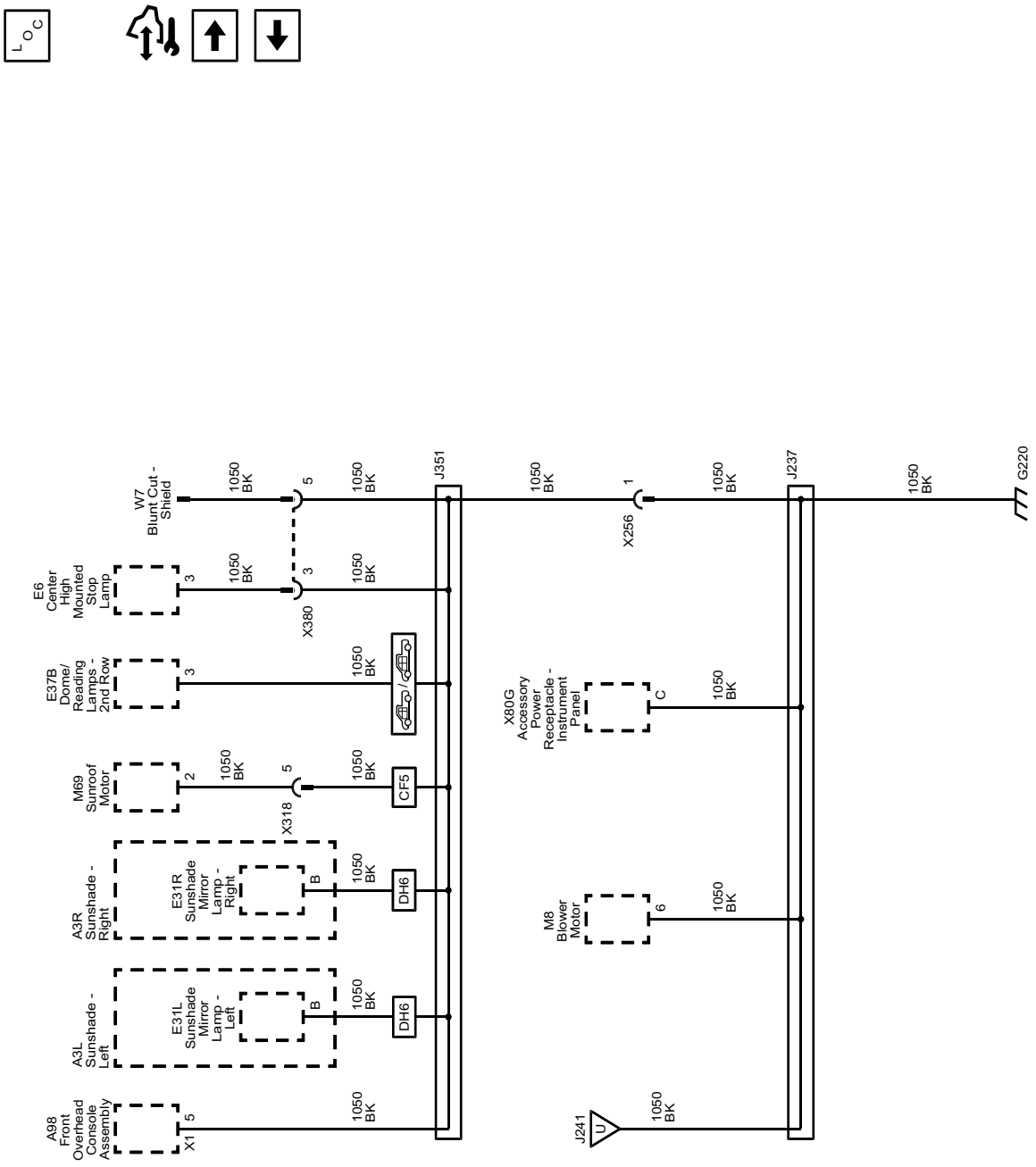
Ground Distribution Schematics (G200 (1 of 2))



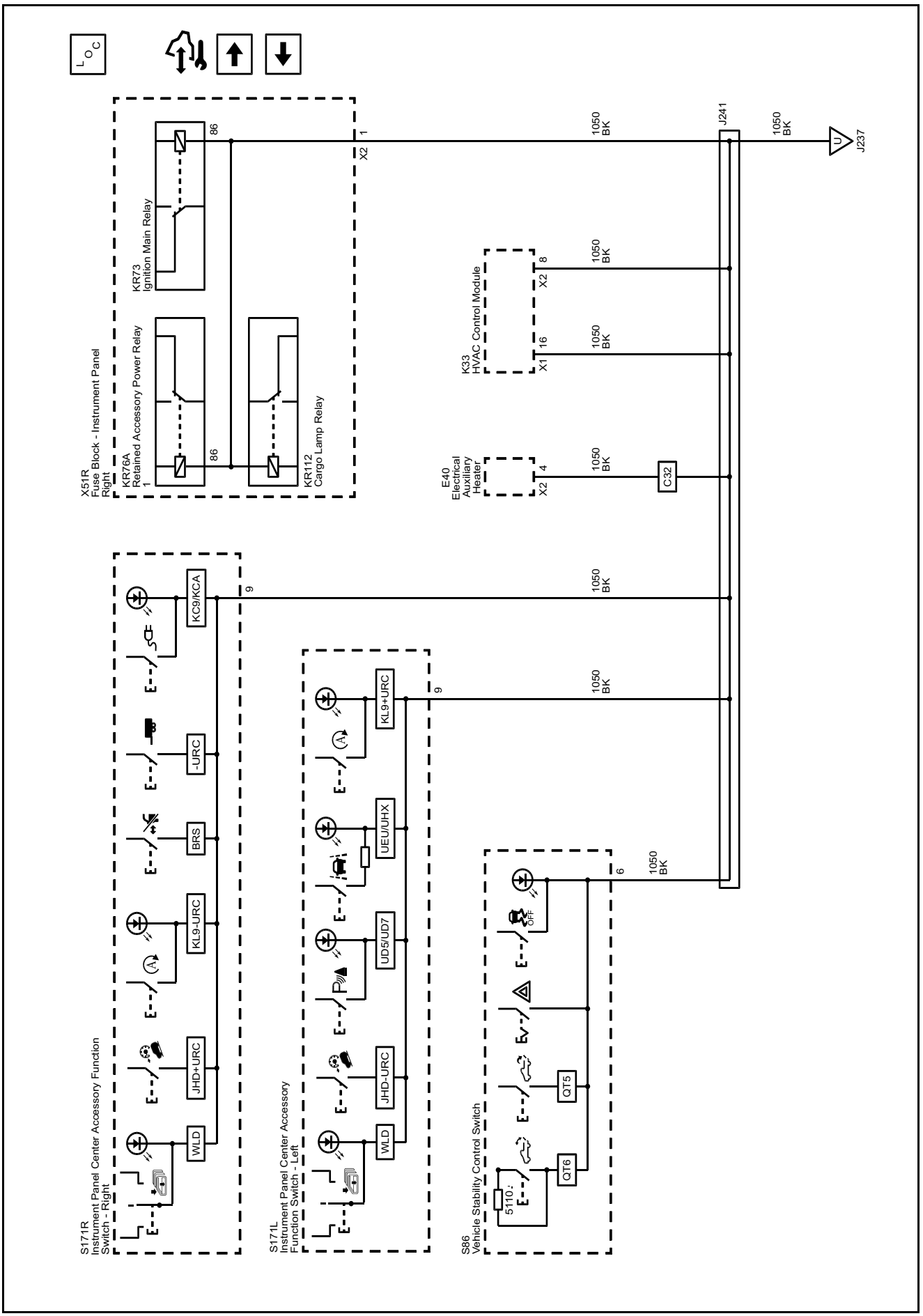
Ground Distribution Schematics (G200 (2 of 2))



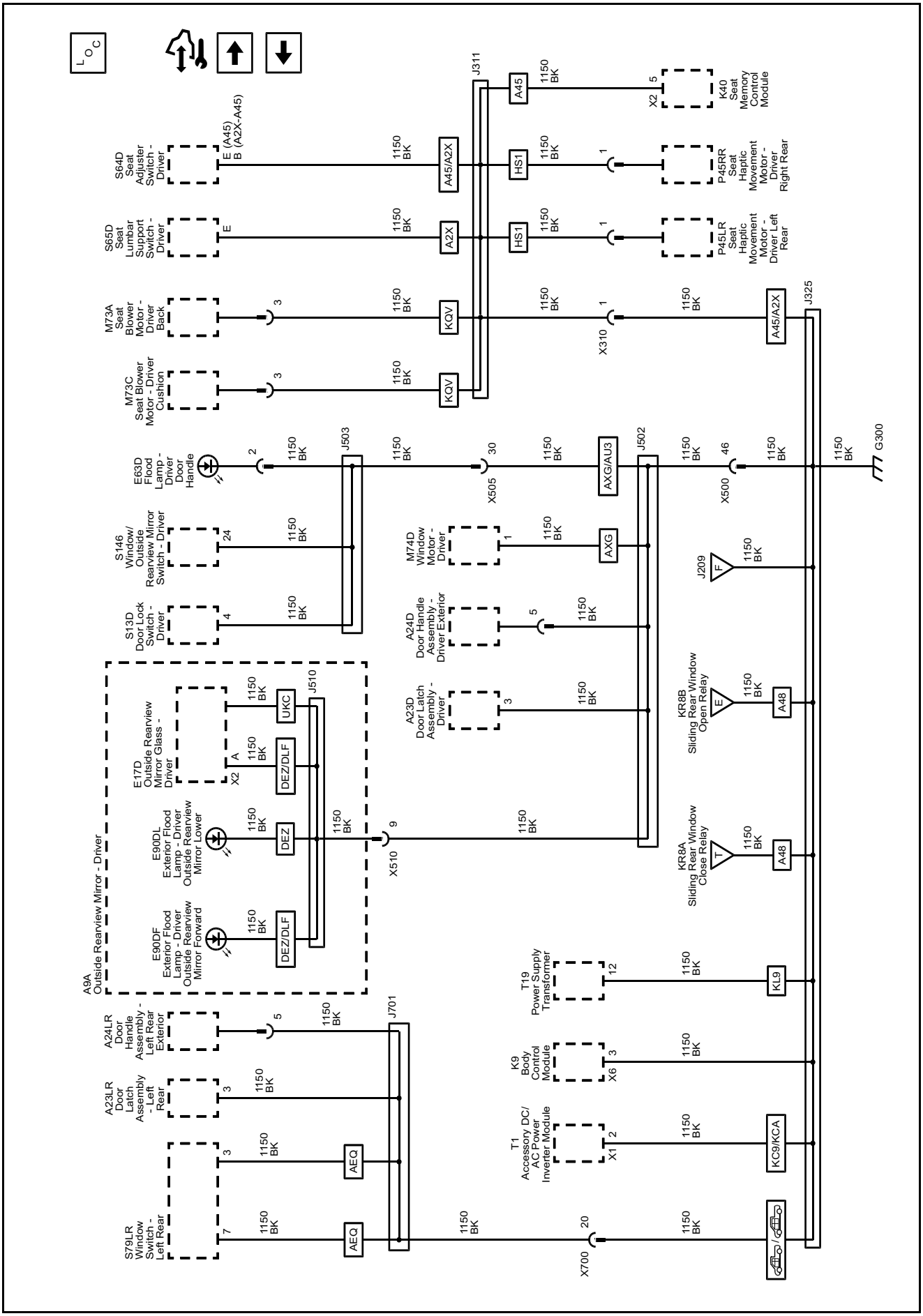
Ground Distribution Schematics (G220 (1 of 2))



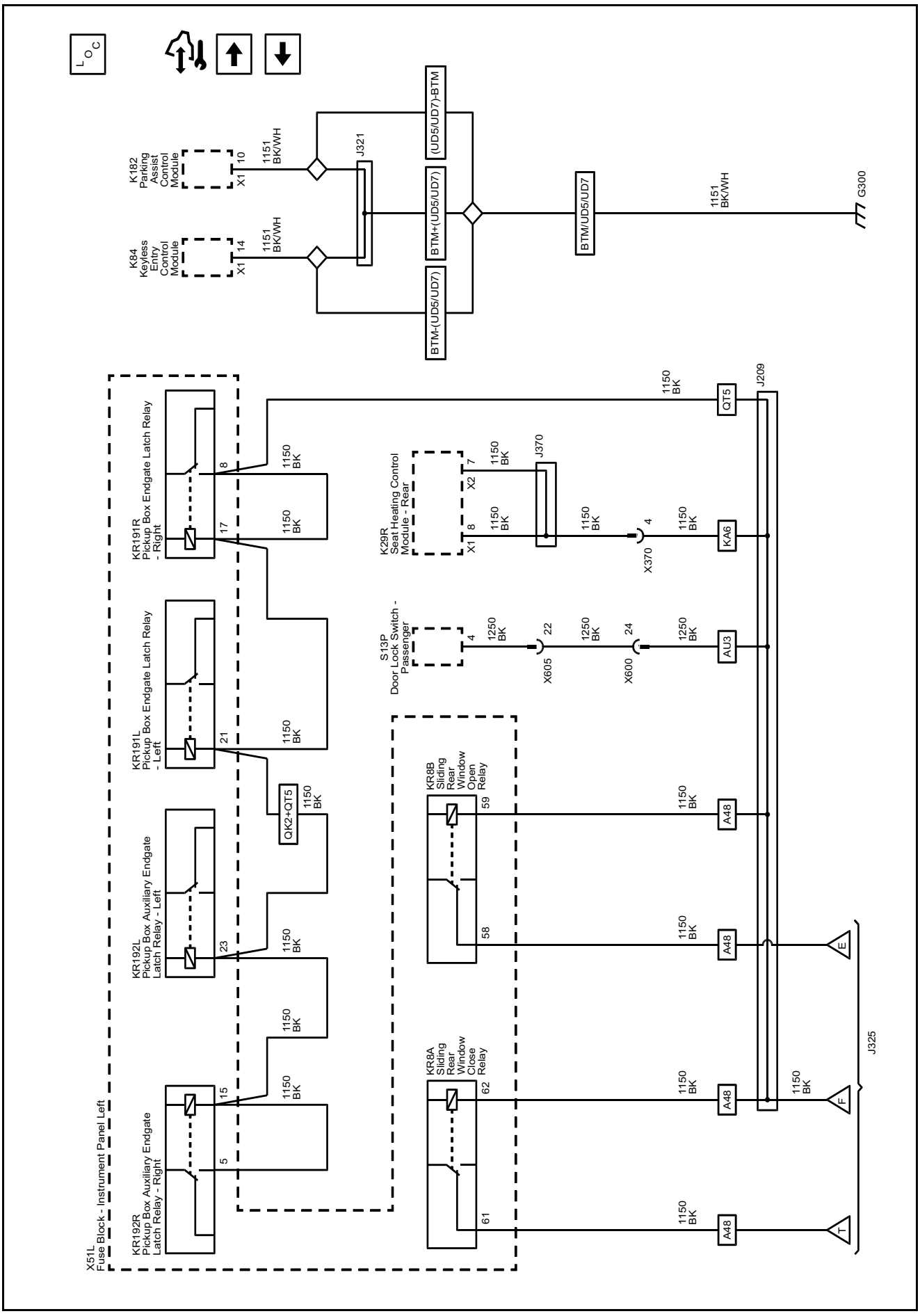
Ground Distribution Schematics (G220 (2 of 2))



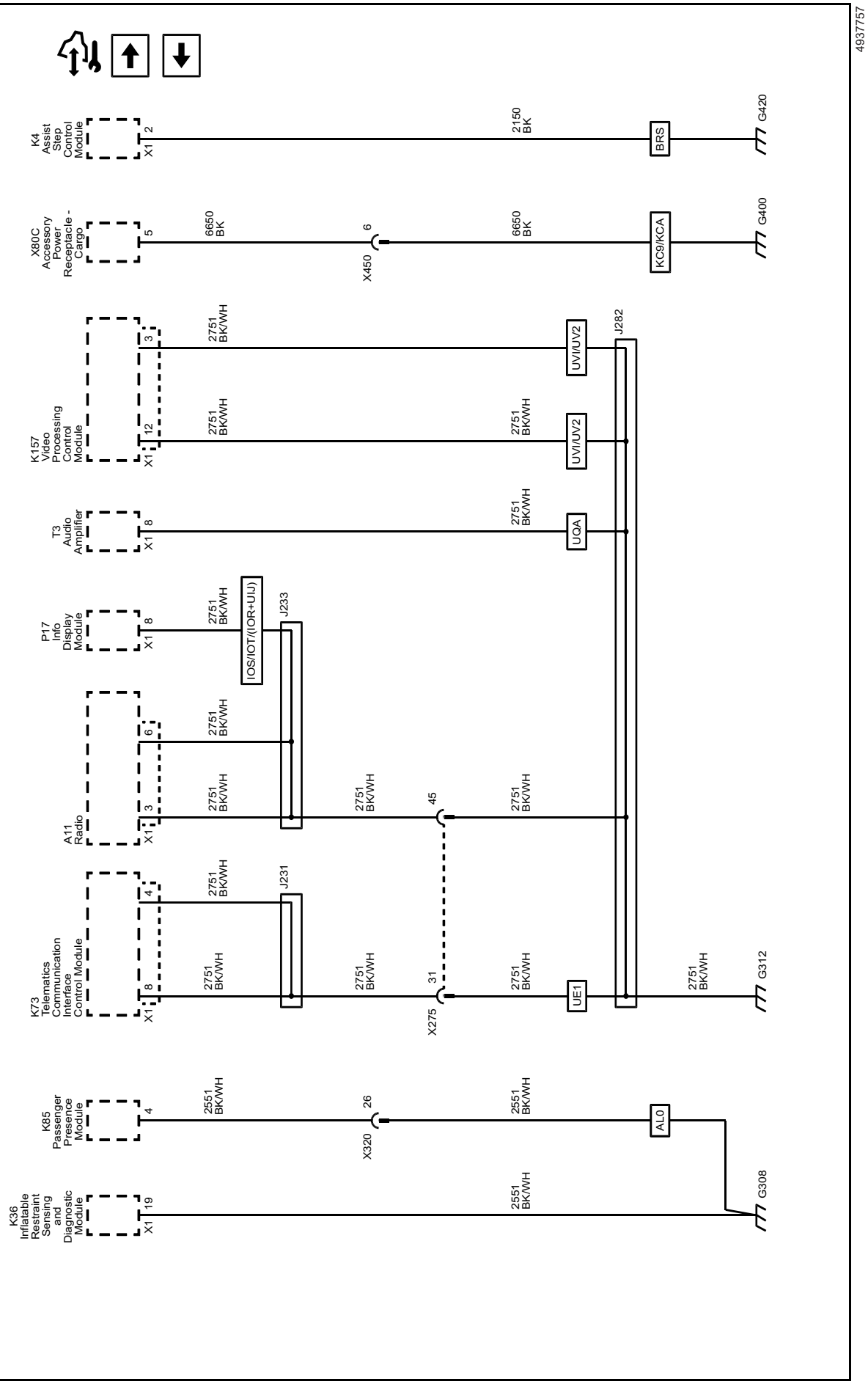
Ground Distribution Schematics (G300 (1 of 2))



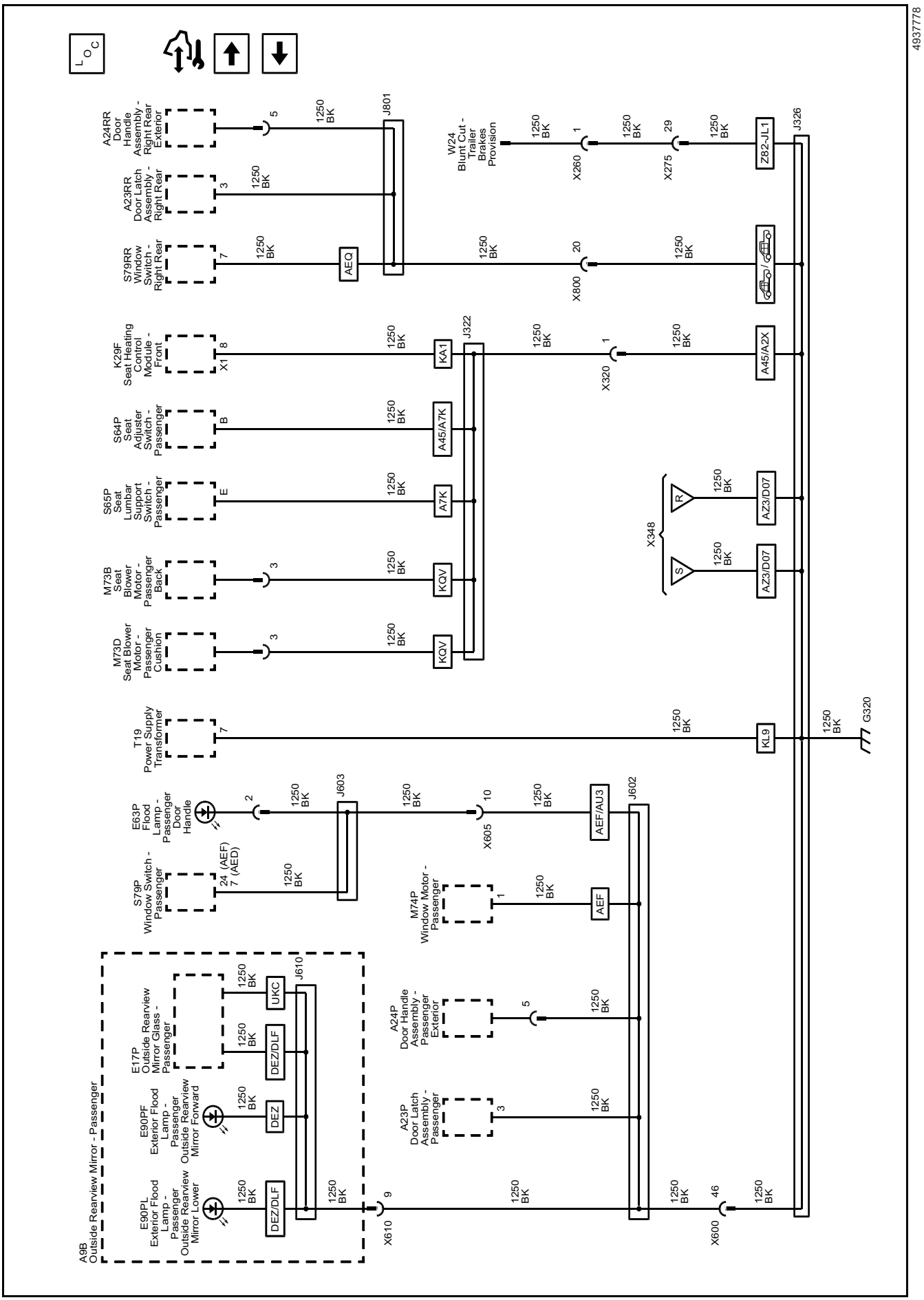
Ground Distribution Schematics (G300 (2 of 2))



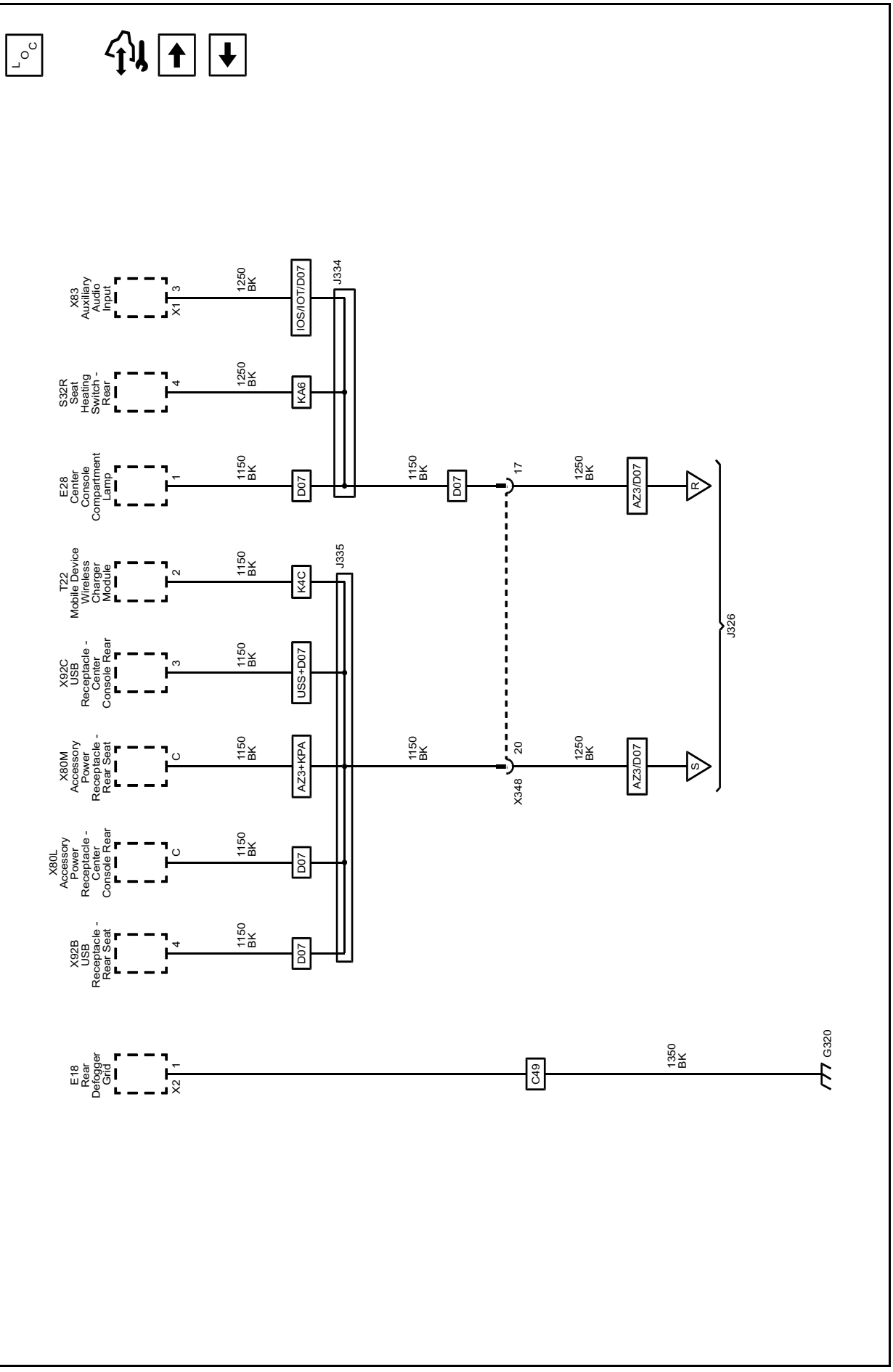
Ground Distribution Schematics (G308, G312, G400, and G420)



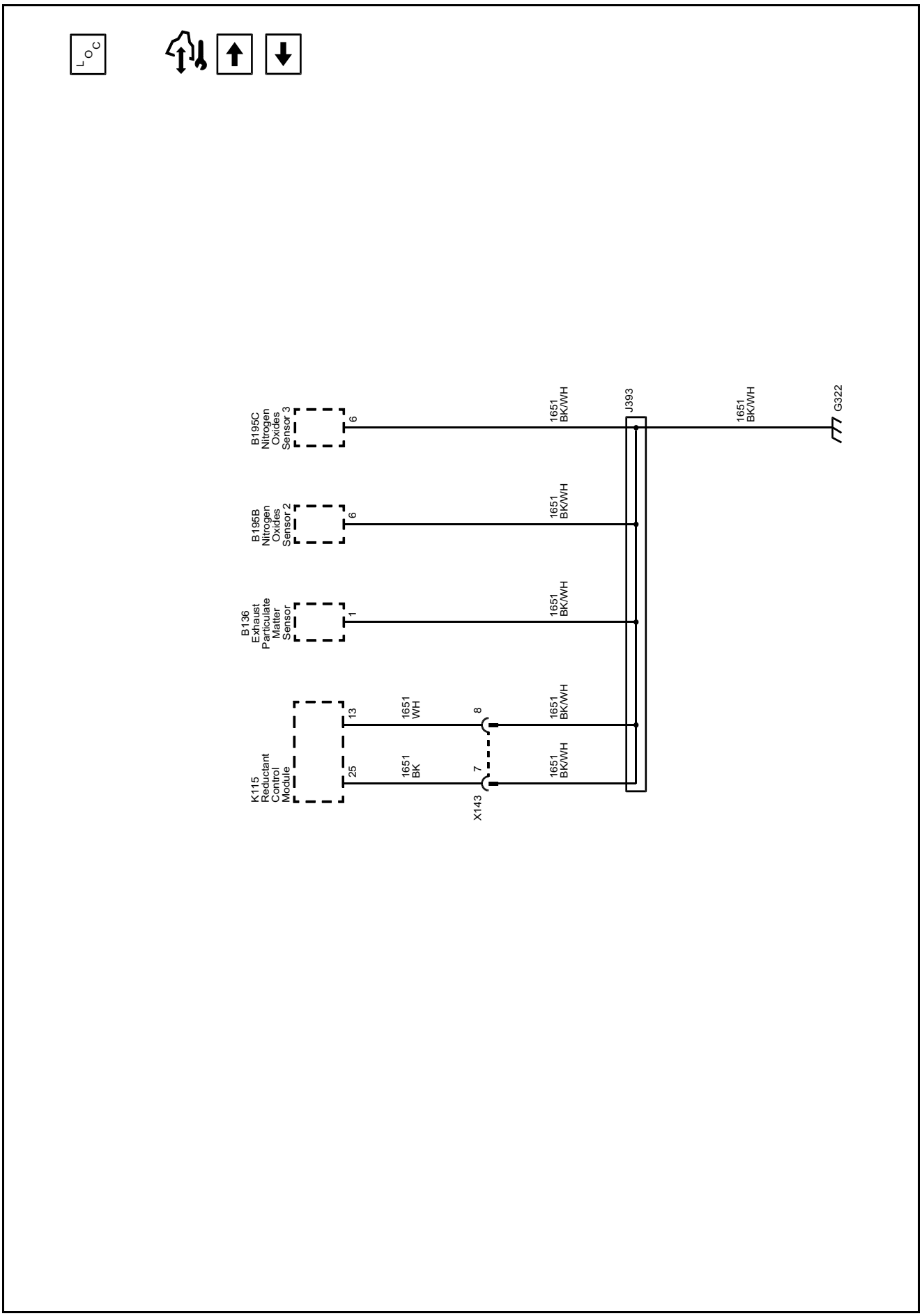
Ground Distribution Schematics (G320 (1 of 2))



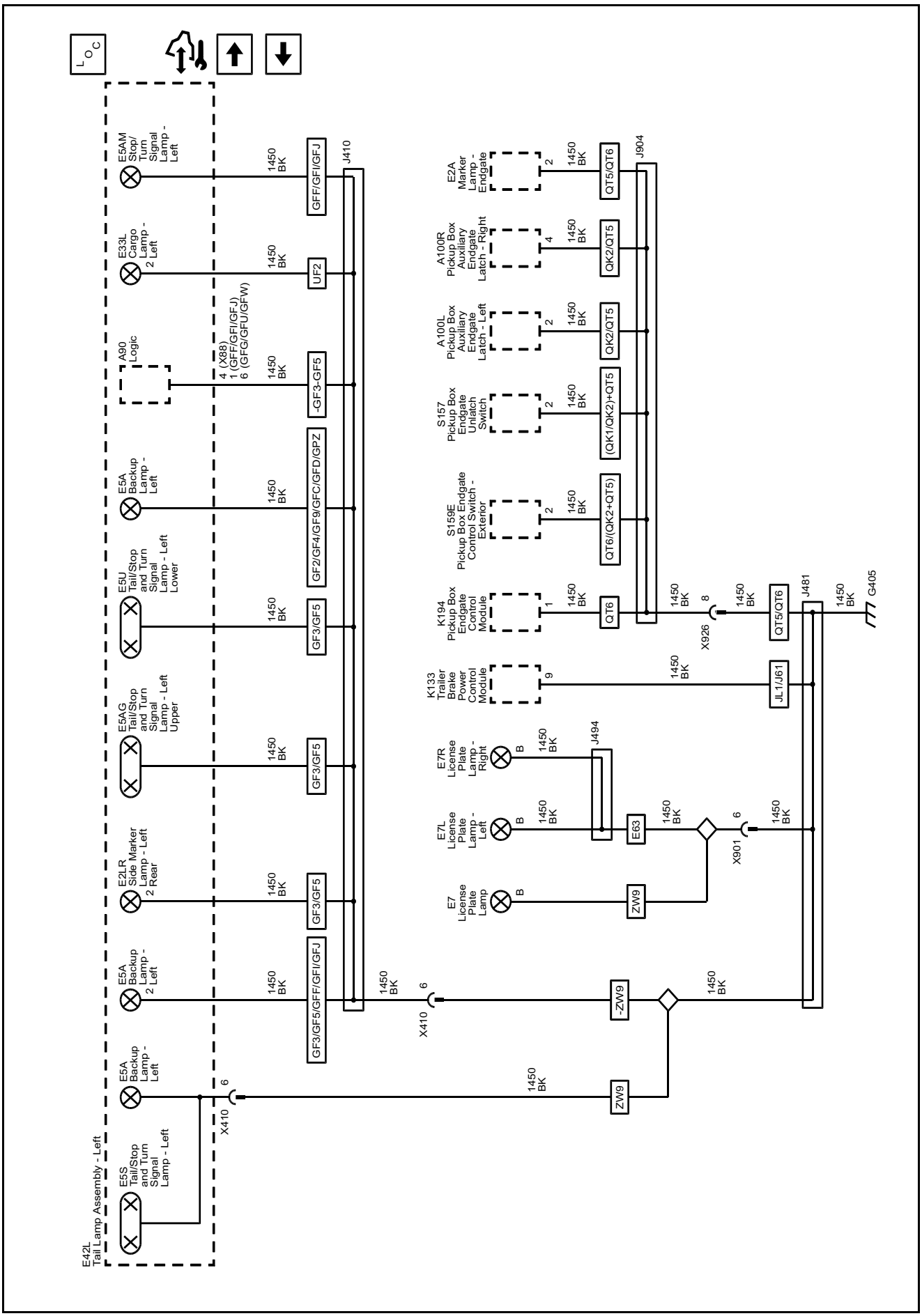
Ground Distribution Schematics (G320 (2 of 2))



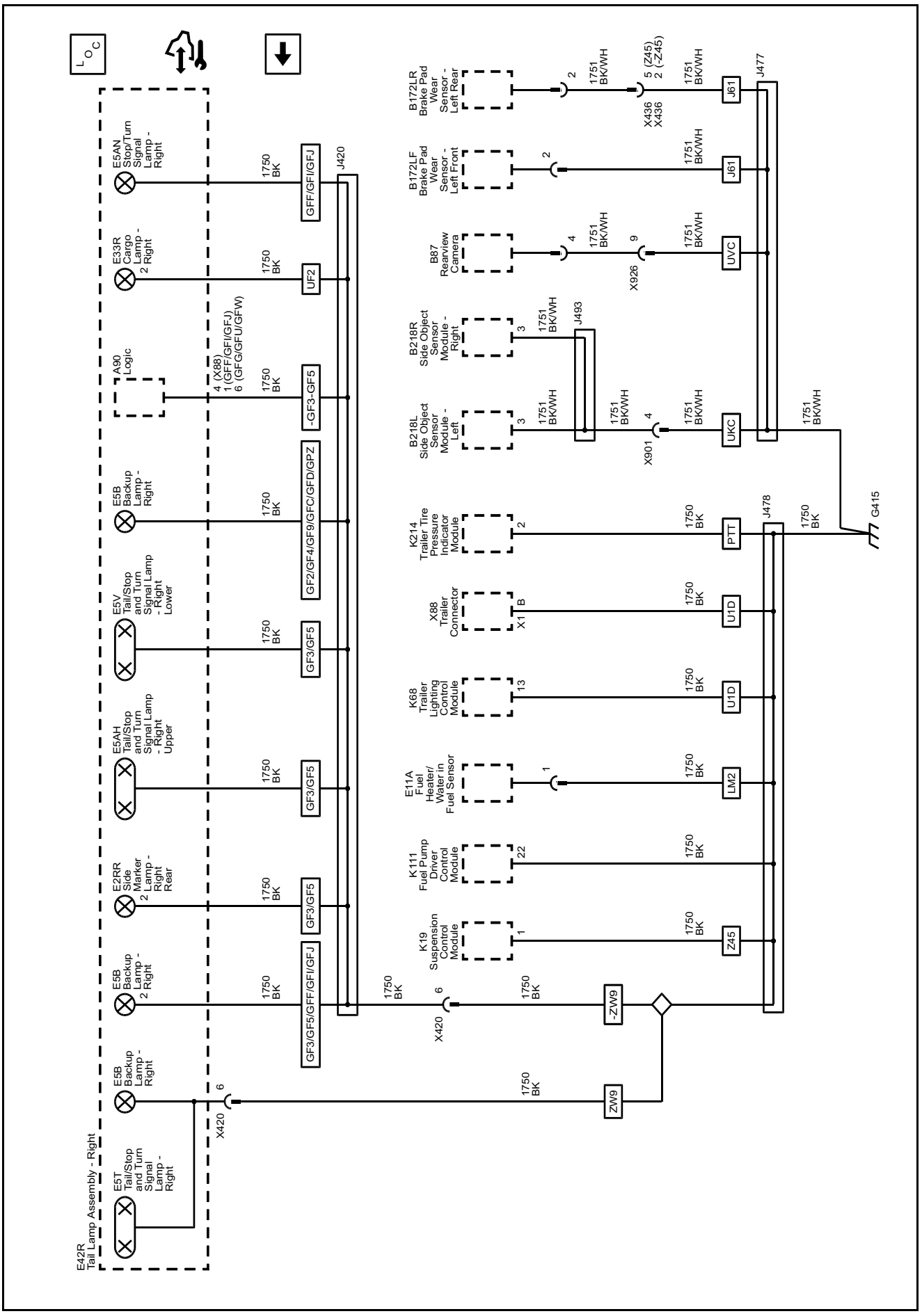
Ground Distribution Schematics (G322 (LM2))



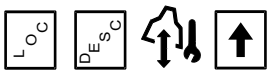
Ground Distribution Schematics (G405)

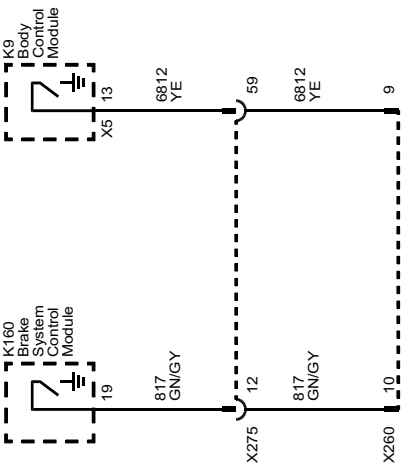


Ground Distribution Schematics (G415)



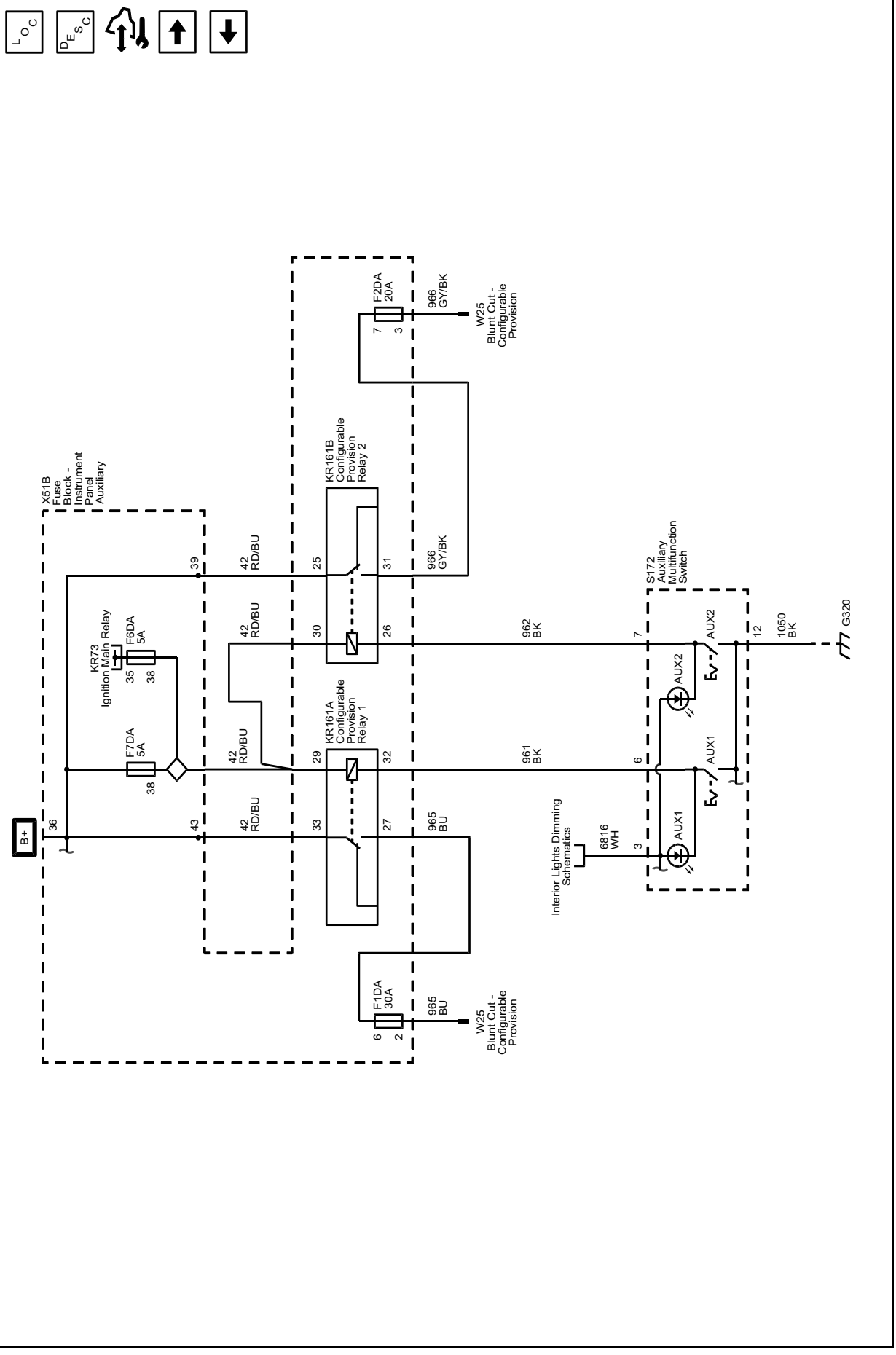
Upfitter Provision Schematics (Upfitter Provisions - Signals)



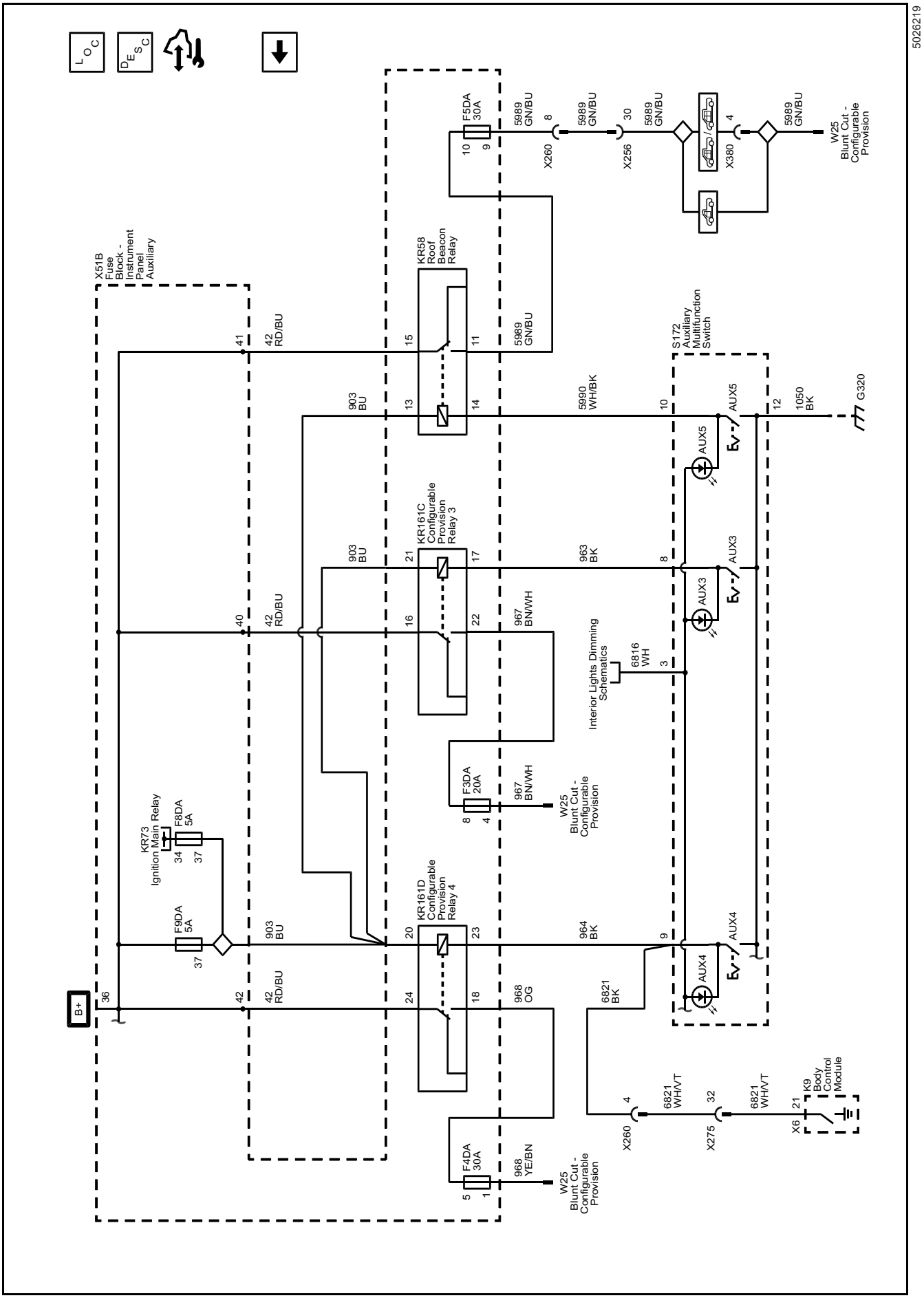


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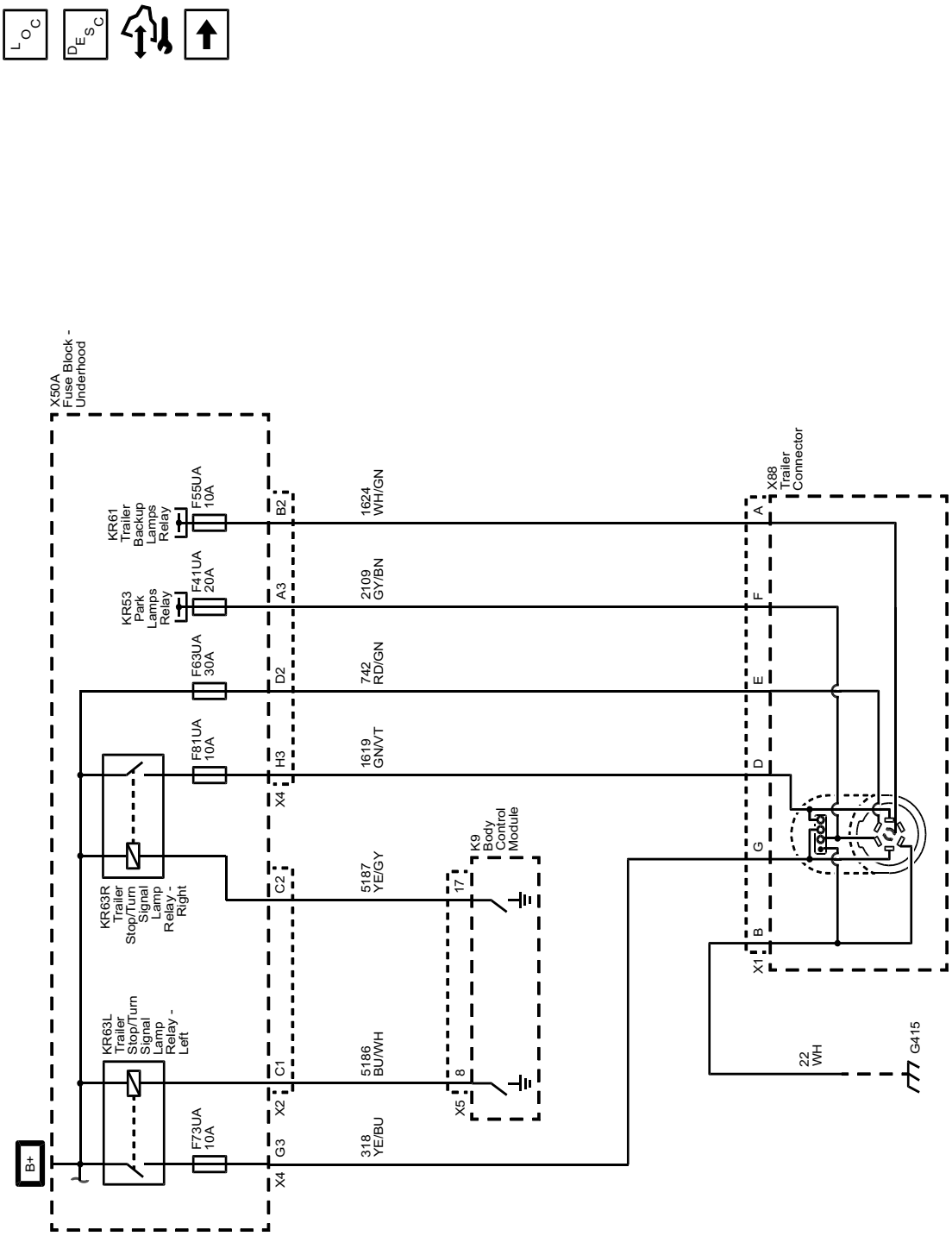
Upfitter Provision Schematics (Upfitter Provisions - 1 of 2 (9L7))



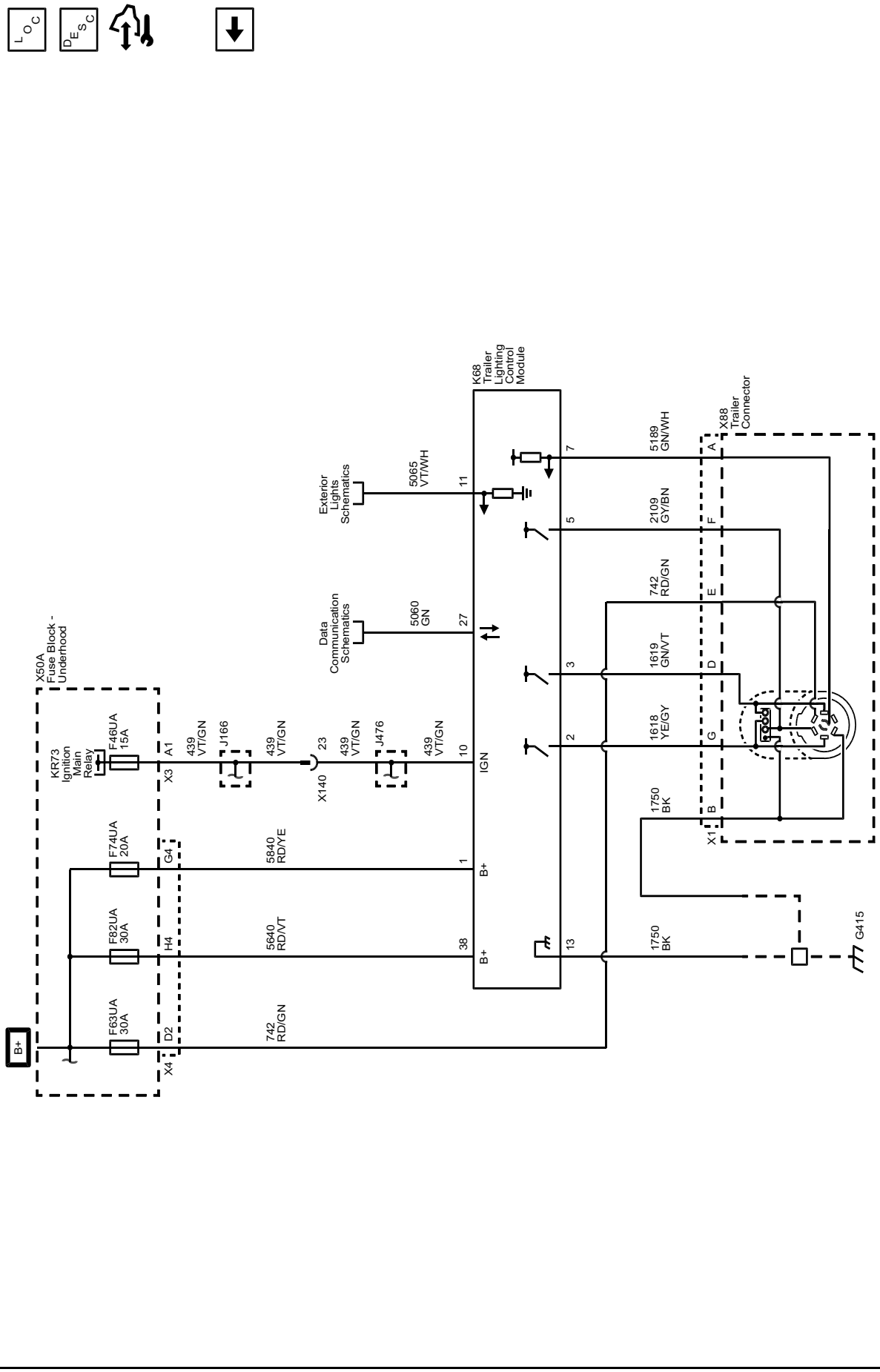
Upfitter Provision Schematics (Upfitter Provisions - 2 of 2 (9L7))



Trailer Connector/Provision Schematics (Trailer Connector Pins: A, B, D, E, F, G (Z82-U1D))



Trailer Connector/Provision Schematics (Trailer Connector Pins: A, B, D, E, F, G (U1D))



Component Locator

Master Electrical Component List

Code	Name	Option	Location	Locator View	Connector End View
A3L	Sunshade - Left	—	In the passenger compartment, at the front of the headliner	*Headliner Components*	—
A3R	Sunshade - Right	—	In the passenger compartment, at the front of the headliner	*Headliner Components*	—
A7	Fuel Pump and Level Sensor Assembly	—	Under the vehicle, mounted in the fuel tank	—	—
A9A	Outside Rearview Mirror - Driver	—	Outside the vehicle, at the front of the driver door	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	—
A9B	Outside Rearview Mirror - Passenger	—	Outside the vehicle, at the front of the passenger door	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	—
A10	Inside Rearview Mirror	—	In the passenger compartment, at the top center of the windshield	*Headliner Components*	• *A10 Inside Rearview Mirror X1 (DD8/DRZ)* • *A10 Inside Rearview Mirror X2 (DRZ)*
A11	Radio	—	In the passenger compartment, right front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *A11 Radio X1 (IOR)* • *A11 Radio X1 (IOS/IOT)* • *A11 Radio X2 (IOR)* • *A11 Radio X2 (IOS/IOT)* • *A11 Radio X3 (IOR)* • *A11 Radio X3 (IOS/IOT)* • *A11 Radio X4 ((IOS/IOT)+D07)* • *A11 Radio X4 (IOR+(UIR/UIJ))* • *A11 Radio X5 (UVB/UVI/UV2)* • *A11 Radio X6 (IOR)* • *A11 Radio X6 (IOS/IOT)* • *A11 Radio X7 (IOS/IOT)* • *A11 Radio X8 ((IOS/IOT)-UE1)* • *A11 Radio X8 (IOR+U2K)* • *A11 Radio X9 ((IOS/IOT)+U2K)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
A14D	Seat Lumbar Support Pump - Driver	A2X	In the passenger compartment, left front, within driver seat	—	*A14D Seat Lumbar Support Pump - Driver (A2X-A45)*
A14P	Seat Lumbar Support Pump - Passenger	A7K	In the passenger compartment, right front, within passenger seat	—	*A14P Seat Lumbar Support Pump - Passenger (A7K)*
A16	Transfer Case Motor	NP0/NQH	Under the vehicle, mounted to the rear of the transfer case	—	*A16 Transfer Case Motor (NP0/NQH)*
A22	Radio Controls	UIR	In the passenger compartment, at the center of the Instrument Panel, part of the Info Display Module	*Instrument Panel - Front*	*A22 Radio Controls (IOR)*
A23D	Door Latch Assembly - Driver	—	In the driver door, at the rear center	*Driver Door Components*	*A23D Door Latch Assembly - Driver*
A23LR	Door Latch Assembly - Left Rear	Extended Cab/ Crew Cab	In the left rear door, at the rear center	*Right Rear Door Components (Extended Cab/Crew Cab)*	*A23LR Door Latch Assembly - Left Rear (AU3)*
A23P	Door Latch Assembly - Passenger	—	In the passenger door, at the rear center	*Passenger Door Components*	*A23P Door Latch Assembly - Passenger (AU3)*
A23RR	Door Latch Assembly - Right Rear	Extended Cab/ Crew Cab	In the right rear door, at the rear center	*Left Rear Door Components (Extended Cab/Crew Cab)*	*A23RR Door Latch Assembly - Right Rear*
A24D	Door Handle Assembly - Driver Exterior	—	Outside of the vehicle, at the rear of the driver door	—	*A24D Door Handle Assembly - Driver Exterior*
A24LR	Door Handle Assembly - Left Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the left rear door	*Right Rear Door Components (Extended Cab/Crew Cab)*	*A24LR Door Handle Assembly - Left Rear Exterior (BTM)*
A24P	Door Handle Assembly - Passenger Exterior	—	Outside of the vehicle, at the rear of the passenger door	—	*A24P Door Handle Assembly - Passenger Exterior*
A24RR	Door Handle Assembly - Right Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the right rear door	*Left Rear Door Components (Extended Cab/Crew Cab)*	*A24RR Door Handle Assembly - Right Rear Exterior (BTM)*
A26	HVAC Controls	IOR	In the passenger compartment, at the center of the instrument panel, beneath P17 Info Display Module	*Instrument Panel - Front*	*A26 HVAC Controls*
A38	Reductant Pump and Sensor Assembly	LM2	Under the vehicle, mounted to the outboard side of the frame, below the passenger side of the cab	—	*A38 Reductant Pump and Sensor Assembly (LM2)*
A98	Front Overhead Console Assembly	—	In the passenger compartment, front center, mounted to headliner	*Headliner Components*	• *A98 Front Overhead Console Assembly X1* • *A98 Front Overhead Console Assembly X2*
A99L	Pickup Box Endgate Latch - Left	QK2/QT6	At the rear of the vehicle, within endgate, on the left side	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *A99L Pickup Box Endgate Latch - Left (QK2)* • *A99L Pickup Box Endgate Latch - Left (QT6)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
A99R	Pickup Box Endgate Latch - Right	QK2/QT6	At the rear of the vehicle, within endgate, on the right side	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *A99R Pickup Box Endgate Latch - Right (QK2)* • *A99R Pickup Box Endgate Latch - Right (QT6)*
A100L	Pickup Box Auxiliary Endgate Latch - Left	QK2	At the rear of the vehicle, within endgate, on the left side	*Endgate Components (QK2)*	*A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)*
A100R	Pickup Box Auxiliary Endgate Latch - Right	QK2	At the rear of the vehicle, within endgate, on the right side	*Endgate Components (QK2)*	*A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)*
B1	A/C Refrigerant Pressure Sensor	—	• (L3B) In the engine compartment, left front, mounted to A/C high pressure line, near G1 A/C Compressor • (LV3) In the engine compartment, right front, attached to AC line, near right side of condenser	• *Engine Components - Left Rear (L3B)* • *Radiator Support Components (LV3)*	*B1 A/C Refrigerant Pressure Sensor*
B5LF	Wheel Speed Sensor - Left Front	—	Outside the vehicle, part of the left front wheel hub assembly	—	*B5LF Wheel Speed Sensor - Left Front*
B5LR	Wheel Speed Sensor - Left Rear	—	Outside the vehicle, mounted to the outboard end of the left axle tube	*Brake and Suspension Components*	*B5LR Wheel Speed Sensor - Left Rear*
B5RF	Wheel Speed Sensor - Right Front	—	Outside the vehicle, part of the right front wheel hub assembly	—	*B5RF Wheel Speed Sensor - Right Front*
B5RR	Wheel Speed Sensor - Right Rear	—	Outside the vehicle, mounted to the outboard end of the right axle tube	*Brake and Suspension Components*	*B5RR Wheel Speed Sensor - Right Rear*
B9	Ambient Air Temperature Sensor	—	Outside the vehicle, behind the right side of the grill	*Passenger Door Components*	*B9 Ambient Air Temperature Sensor*
B10B	Ambient Light/ Sunload Sensor	—	In the passenger compartment, at the top middle of the instrument panel	*Instrument Panel - Front*	*B10B Ambient Light/ Sunload Sensor*
B12A	Transmission Fluid Pressure Switch	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
B13	Transmission Fluid Temperature Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	*B13 Transmission Fluid Temperature Sensor (MQB)*
B14A	Transmission Output Shaft Speed Sensor	—	Under the vehicle, mounted in the transmission tailshaft housing	—	*B14A Transmission Output Shaft Speed Sensor (MQB)*
B14C	Transmission Input Shaft Speed Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	*B14C Transmission Input Shaft Speed Sensor (MQB)*
B14D	Transmission Intermediate Shaft Speed Sensor	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
B14DA	Transmission Intermediate Speed Sensor 1	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	*B14DA Transmission Intermediate Speed Sensor 1 (MQB)*
B14DB	Transmission Intermediate Speed Sensor 2	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	*B14DB Transmission Intermediate Speed Sensor 2 (MQB)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B15	Transmission Internal Mode Switch	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	*B15 Transmission Internal Mode Switch (MQE)*
B18	Battery Current Sensor	-KL9	In the engine compartment, right rear, near negative battery cable at bulkhead	*Engine Compartment Components*	*B18 Battery Current Sensor (-KL9)*
B20	Brake Fluid Level Switch	—	In the engine compartment, mounted in the brake fluid reservoir	—	*B20 Brake Fluid Level Switch*
B22	Brake Pedal Position Sensor	—	In the passenger compartment, in the driver side footwell, under the instrument panel	*Behind Instrument Panel - Left*	*B22 Brake Pedal Position Sensor*
B23	Camshaft Position Sensor	L82/L84/L87/ LM2/LV3	• (L82/L84/L87) In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer • (LM2) In the engine compartment, rear center, mounted to the right rear side of the engine block, above transmission bellhousing	• *Engine Components - Left Front (L82/L84/L87)* • *Engine Components - Right Rear (LM2)*	• *B23 Camshaft Position Sensor (L82/L84/L87)* • *B23 Camshaft Position Sensor (LM2)*
B23E	Camshaft Position Sensor - Exhaust	L3B	In the engine compartment, at the rear of the engine, mounted to the right rear of the camshaft carrier	*Engine Components - Right Rear (L3B)*	*B23E Camshaft Position Sensor - Exhaust (L3B)*
B23F	Camshaft Position Sensor - Intake	L3B	In the engine compartment, at the rear of the engine, mounted to the left rear of the camshaft carrier	*Engine Components - Right Rear (L3B)*	*B23F Camshaft Position Sensor - Intake (L3B)*
B24LF	Mobile Telephone Microphone - Left Front	—	In the passenger compartment, left front, attached to the headliner	*Headliner Components*	*B24LF Mobile Telephone Microphone - Left Front*
B24RF	Mobile Telephone Microphone - Right Front	IOS/IOT	In the passenger compartment, right front, attached to the headliner	*Headliner Components*	*B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)*
B26	Crankshaft Position Sensor	—	• (L3B) In the engine compartment, left rear, mounted to rear of engine block. Below M64 Starter Motor • (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor	• *Engine Components - Left Front (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *B26 Crankshaft Position Sensor (L3B)* • *B26 Crankshaft Position Sensor (L82/L84/L87/ LV3)* • *B26 Crankshaft Position Sensor (LM2)*
B27D	Door Handle Switch - Driver Exterior	—	Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior	—	—
B27LR	Door Handle Switch - Left Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the left rear door, within A24LR Door Handle Assembly - Left Rear Exterior	*Right Rear Door Components (Extended Cab/Crew Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B27P	Door Handle Switch - Passenger Exterior	—	Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior	—	—
B27RR	Door Handle Switch - Right Rear Exterior	Extended Cab/ Crew Cab	Outside of the vehicle, at the rear of the right rear door, within A24RR Door Handle Assembly - Right Rear Exterior	*Left Rear Door Components (Extended Cab/Crew Cab)*	—
B34	Engine Coolant Temperature Sensor	—	(LV3) In the engine compartment, front center, mounted to water pump	*Engine Components - Right (LV3)*	• *B34 Engine Coolant Temperature Sensor (L82/L84/ L87)* • *B34 Engine Coolant Temperature Sensor (LV3)*
B34A	Engine Coolant Temperature Sensor 1	L3B/LM2	• (L3B) In the engine compartment, left side of engine block, beneath intake manifold, behind G13 Generator	*Engine Components - Left Front (L3B)*	• *B34A Engine Coolant Temperature Sensor 1 (L3B)* • *B34A Engine Coolant Temperature Sensor 1 (LM2)*
B34B	Engine Coolant Temperature Sensor 2	L3B/LM2	(L3B) In the engine compartment, right rear, mounted to coolant line, behind the exhaust turbofold	• *Engine Components - Right Front (L3B)* • *Engine Components - Right Rear (L3B)*	• *B34B Engine Coolant Temperature Sensor 2 (L3B)* • *B34B Engine Coolant Temperature Sensor 2 (LM2)*
B34C	Engine Coolant Temperature Sensor 3	L3B/LM2	• (L3B) In the engine compartment, right side, mounted above exhaust manifold, to the right off the camshaft carrier	—	*B34C Engine Coolant Temperature Sensor 3 (L3B)*
B34D	Engine Coolant Temperature Sensor 4	L3B/LM2	• (LM2) In the engine compartment, left rear, at the left rear of the engine, behind Q74 Engine Coolant Bypass Valve • (L3B) In the engine compartment, right rear, near bulkhead	*Engine Components - Left Rear (LM2)*	*B34D Engine Coolant Temperature Sensor 4 (LM2)*
B34E	Engine Coolant Temperature Sensor 5	L3B/LM2	• (L3B) In the engine compartment, right side, mounted above exhaust manifold, to the right off the camshaft carrier • (LM2) In the engine compartment, left rear, mounted to engine block, below intake manifold	• *Engine Components - Left Rear (LM2)* • *Engine Components - Right Front (L3B)*	• *B34E Engine Coolant Temperature Sensor 5 (L3B)* • *B34E Engine Coolant Temperature Sensor 5 (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B34F	Engine Coolant Temperature Sensor 6	L3B/LM2	(L3B) In the engine compartment, left side of engine, in front of thermostat housing	*Engine Components - Left Rear (L3B)*	• *B34F Engine Coolant Temperature Sensor 6 (L3B)* • *B34F Engine Coolant Temperature Sensor 6 (LM2)*
B35	Engine Oil Level Switch	L82/L84/L87/LV3	In the engine compartment, mounted to the right side of the engine oil pan	• *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*B35 Engine Oil Level Switch (L82/L84/L87/LV3)*
B36	Engine Oil Temperature Sensor	L3B	In the engine compartment, left side, mounted to the engine oil filter housing	*Engine Components - Right Front (L3B)*	*B36 Engine Oil Temperature Sensor (L3B/LM2)*
B37B	Engine Oil Pressure Sensor	—	• (L3B) In the engine compartment, front center, mounted to the right side of the engine block, near the accessory belt drive • (L82/L84/L87) In the engine compartment, left side of engine, mounted above the engine oil filter • (LV3) In the engine compartment, front center, beneath Q38 Throttle Body	• *Engine Components - Left (LV3)* • *Engine Components - Left Front (L82/L84/L87)* • *Engine Components - Right Front (L3B)*	• *B37B Engine Oil Pressure Sensor (L82/L84/L87)* • *B37B Engine Oil Pressure Sensor (LM2)* • *B37B Engine Oil Pressure Sensor (LV3/L3B)*
B39	A/C Evaporator Temperature Sensor	—	In the passenger compartment, behind the instrument panel, mounted in the HVAC housing	—	*B39 A/C Evaporator Temperature Sensor*
B46	Fuel Level Sensor	—	Under the vehicle, inside the fuel tank, part of the fuel pump and level sensor assembly	—	—
B47	Fuel Pressure Sensor	—	On the vehicle underbody, on the fuel line, near the transmission crossmember mount	—	• *B47 Fuel Pressure Sensor (LM2)* • *B47 Fuel Pressure Sensor (-LM2)*
B47B	Fuel Rail Pressure Sensor	LM2	In the engine compartment, at the top of the engine, mounted to the fuel rail	—	*B47B Fuel Rail Pressure Sensor (LM2)*
B52A	Heated Oxygen Sensor 1	L3B	In the engine compartment, right rear, mounted in exhaust, behind turbocharger	—	*B52A Heated Oxygen Sensor 1 (L3B)*
B52B	Heated Oxygen Sensor 2	L3B	In the engine compartment, right rear, mounted in catalytic converter	• *Engine Components - Right Rear (L3B)* • *Engine Components - Right Rear (L3B)*	*B52B Heated Oxygen Sensor 2 (L3B)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B52C	Heated Oxygen Sensor - Bank 1 Sensor 1	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 1 exhaust, upstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	• *B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)* • *B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)*
B52D	Heated Oxygen Sensor - Bank 1 Sensor 2	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 1 exhaust, downstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	• *B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)* • *B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)*
B52E	Heated Oxygen Sensor - Bank 2 Sensor 1	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 2 exhaust, upstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	• *B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)* • *B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)*
B52F	Heated Oxygen Sensor - Bank 2 Sensor 2	L82/L84/L87/ LV3	Under the vehicle, mounted in the bank 2 exhaust, downstream of the catalytic converter	• *Engine Components - Oxygen Sensors (LV3)* • *Engine Components - Top (L82/ L84/L87)*	• *B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)* • *B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)*
B55	Engine Hood Switch	—	Outside the vehicle, at the front center of the hood, part of the hood latch assembly	*Engine Compartment Components*	*B55 Engine Hood Switch*
B59L	Front Impact Sensor - Left	—	In the engine compartment, left front, at the bottom of the radiator core support	*Engine Compartment Components*	*B59L Front Impact Sensor - Left*
B59R	Front Impact Sensor - Right	—	In the engine compartment, right front, at the bottom of the radiator core support	*Engine Compartment Components*	*B59R Front Impact Sensor - Right*
B61P	Seat Belt Tension Sensor - Passenger	—	In the passenger compartment, at the base of the B-pillar, part of the passenger seat belt retractor pretensioner	*Passenger Compartment - Right Rear (Regular Cab)*	*B61P Seat Belt Tension Sensor - Passenger (AL0)*
B63LF	Side Impact Sensor - Left Front	—	At the left front of the passenger compartment, mounted inside the left front door, at the bottom	*Driver Door Components*	*B63LF Side Impact Sensor - Left Front*
B63LR	Side Impact Sensor - Left Rear	Extended Cab/ Crew Cab	At the left rear of the passenger compartment, mounted inside the left rear door, at the bottom	*Right Rear Door Components (Extended Cab/Crew Cab)*	*B63LR Side Impact Sensor - Left Rear*
B63RF	Side Impact Sensor - Right Front	—	At the right front of the passenger compartment, mounted inside the right front door, at the bottom	*Passenger Door Components*	*B63RF Side Impact Sensor - Right Front*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B63RR	Side Impact Sensor - Right Rear	Extended Cab/ Crew Cab	At the right rear of the passenger compartment, mounted inside the right rear door, at the bottom	*Left Rear Door Components (Extended Cab/Crew Cab)*	*B63RR Side Impact Sensor - Right Rear*
B65	Intake Manifold Pressure and Air Temperature Sensor	LM2	In the engine compartment, left side of engine, mounted to the intake manifold, near Q18A Fuel Pressure Regulator 1	• *Engine Components - Left Rear (LM2)* • *Engine Components - Left Front (L3B)*	• *B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)* • *B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)*
B68A	Knock Sensor 1	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, left side of engine, mounted to the front of the engine block, below Q17A Fuel Injector 1 and Q17B Fuel Injector 2 • (L82/L84/L87) In the engine compartment, left side of engine, mounted to the rear of the engine block, below exhaust manifold	• *Engine Components - Left (LV3)* • *Engine Components - Left Front (L82/L84/L87)* • *Engine Components - Left Rear (L3B)*	• *B68A Knock Sensor 1 (L3B)* • *B68A Knock Sensor 1 (-LM2)*
B68B	Knock Sensor 2	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, left side of engine, mounted to the front of the block, below Q17C Fuel Injector 3and Q17D Fuel Injector 4 • (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor	• *Engine Components - Left Rear (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *B68B Knock Sensor 2 (L3B)* • *B68B Knock Sensor 2 (-LM2)*
B74	Manifold Absolute Pressure Sensor	L3B/L82/L84/ L87/LV3	(L82/L84/L87/LV3) In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body	• *Engine Components - Left (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *B74 Manifold Absolute Pressure Sensor (L82/L84/ L87)* • *B74 Manifold Absolute Pressure Sensor (LV3)*
B75C	Multifunction Intake Air Sensor	—	Right front of the engine compartment, mounted in the air cleaner assembly	• *Engine Components - Left (LV3)* • *Engine Components - Left Front (L82/L84/L87)* • *Engine Components - Right Rear (LM2)*	*B75C Multifunction Intake Air Sensor*
B80	Park Brake Switch	—	In the passenger compartment, at the left lower side of the instrument panel	*Instrument Panel - Front*	*B80 Park Brake Switch*
B81B	Park Position Switch	—	In the passenger compartment, left front, inside of S3 Transmission Shift Lever	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B87	Rearview Camera	UVB/UVC/UV2/UVI	Outside the vehicle, at the top middle of the tailgate, mounted in the tailgate handle	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *B87 Rearview Camera (UVB)* • *B87 Rearview Camera (UVC)* • *B87 Rearview Camera (UVI/UV2)*
B88D	Seat Belt Switch - Driver	—	In the passenger compartment, at the inboard side of the driver seat, part of the seat belt buckle	*Driver Seat Components*	• *B88D Seat Belt Switch - Driver (A2S)* • *B88D Seat Belt Switch - Driver (A2X)*
B88P	Seat Belt Switch - Passenger	—	In the passenger compartment, at the inboard side of the passenger seat, part of the seat belt buckle	*Passenger Seat Components*	• *B88P Seat Belt Switch - Passenger (A7E)* • *B88P Seat Belt Switch - Passenger (A7K)*
B96	Cylinder Head Temperature Sensor	LM2	In the engine compartment, center, near inline connector X160 Engine Harness to Fuel Injector Harness	—	*B96 Cylinder Head Temperature Sensor (LM2)*
B107	Accelerator Pedal Position Sensor	—	In the passenger compartment, in the driver side footwell, under the instrument panel	*Behind Instrument Panel - Left*	*B107 Accelerator Pedal Position Sensor*
B110	Battery Sensor Module	KL9	In the engine compartment, right side, near C1 Battery negative cable	*Engine Compartment Components*	• *B110 Battery Sensor Module X1 (Crew Cab/Extended Cab)* • *B110 Battery Sensor Module X1 (Regular Cab)* • *B110 Battery Sensor Module X2 (KL9)*
B111B	Turbocharger Boost/Intake Air Temperature Sensor	L3B/LM2	In the engine compartment, behind the grille, attached to the upper left corner of the charge air cooler	—	—
B118B	Windshield Washer Fluid Level Switch	—	In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left	*Engine Compartment Components*	*B118B Windshield Washer Fluid Level Switch*
B130A	Exhaust Gas Recirculation Temperature Sensor 1	LM2	In the engine compartment, right front, mounted in exhaust, in front of B154 Diesel Particulate Filter Exhaust Differenatial Pressure Sensor	*Engine Components - Right Rear (LM2)*	*B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)*
B130AH	Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure	LM2	In the engine compartment, right side, beneath M103 Turbocharger Vane Position Actuator	—	*B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)*
B130B	Exhaust Gas Recirculation Temperature Sensor 2	LM2	In the engine compartment, right front, mounted in exhaust, near Q61 Reductant Injector	*Engine Components - Right Rear (LM2)*	*B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B130BH	Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure	LM2	In the engine compartment, left rear side of engine	—	*B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)*
B130C	Exhaust Gas Recirculation Temperature Sensor 3	LM2	In the engine compartment, mounted in exhaust, near M64 Starter Motor	—	*B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)*
B136	Exhaust Particulate Matter Sensor	LM2	On the underbody, mounted to the inboard side of the right frame rail, forward of the right rear shock	—	*B136 Exhaust Particulate Matter Sensor (LM2)*
B137B	Power Steering Shaft Torque/Position Sensor	—	Under the vehicle, part of the steering gear assembly	—	—
B139	Transfer Case 2WD/4WD Actuator Position Sensor	NP0/NQH	Under the vehicle, mounted to the transfer case	—	*B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)*
B150	Fuel Tank Pressure Sensor	L3B/L82/L84/L87/LV3	Under the vehicle, at the top of the fuel tank	—	*B150 Fuel Tank Pressure Sensor (-LM2)*
B152LF	Suspension Position Sensor - Left Front	Z45	Under the vehicle, at the left front corner of the frame	—	*B152LF Suspension Position Sensor - Left Front (Z45)*
B152R	Suspension Position Sensor - Rear	Z45	Under the vehicle, at the rear of the vehicle	—	*B152R Suspension Position Sensor - Rear (Z45)*
B152RF	Suspension Position Sensor - Right Front	Z45	Under the vehicle, at the right front corner of the frame	—	*B152RF Suspension Position Sensor - Right Front (Z45)*
B153D	Seat Belt Buckle - Driver	—	In the passenger compartment, at the inboard side of the drive seat	—	—
B153P	Seat Belt Buckle - Passenger	—	In the passenger compartment, at the inboard side of the passenger seat	—	—
B154	Diesel Particulate Filter Exhaust Differential Pressure Sensor	LM2	In the engine compartment, right side, mounted in the exhaust, in front of M103 Turborcharger Vane Position Actuator	*Engine Components - Right Rear (LM2)*	*B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)*
B160	Windshield Temperature and Inside Moisture Sensor	—	In the passenger compartment, front center, mounted to top of windshield	*Headliner Components*	*B160 Windshield Temperature and Inside Moisture Sensor (ASV)*
B172LF	Brake Pad Wear Sensor - Left Front	—	Under the vehicle, at left front caliper	—	*B172LF Brake Pad Wear Sensor - Left Front*
B172LR	Brake Pad Wear Sensor - Left Rear	—	Under the vehicle, at left rear caliper	*Brake and Suspension Components*	*B172LR Brake Pad Wear Sensor - Left Rear*
B174G	Frontview Camera - Grille	UV2	At the front of the vehicle, near the grille	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*B174G Frontview Camera - Grille (UV2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B174W	Frontview Camera - Windshield	ASV	In the passenger compartment, at the top middle of the windshield	*Headliner Components*	*B174W Frontview Camera - Windshield (UEU/UHX)*
B193A	Charge Air Cooler Inlet Temperature Sensor	LM2	In the engine compartment, mounted to the left side of the air charge cooler	*Engine Components - Right Rear (LM2)*	*B193A Charge Air Cooler Inlet Temperature Sensor (LM2)*
B193B	Charge Air Cooler Outlet Temperature Sensor	LM2	In the engine compartment, mounted to the front of the air charge cooler	*Engine Components - Right Rear (LM2)*	*B193B Charge Air Cooler Outlet Temperature Sensor (LM2)*
B195A	Nitrogen Oxides Sensor 1	LM2	In the engine compartment, attached to the exhaust pipe, on the top left rear side of the engine	*Engine Components - Right Rear (LM2)*	*B195A Nitrogen Oxides Sensor 1 (LM2)*
B195B	Nitrogen Oxides Sensor 2	LM2	Under the vehicle, attached to the exhaust pipe, at the middle of the diesel particulate filter	—	*B195B Nitrogen Oxides Sensor 2 (LM2)*
B195C	Nitrogen Oxides Sensor 3	LM2	Under the vehicle, attached to the exhaust pipe	—	*B195C Nitrogen Oxides Sensor 3 (LM2)*
B198	Fuel Composition Sensor	—	Under the vehicle, mounted to the left side of the frame	—	*B198 Fuel Composition Sensor (FHS)*
B203	Radiator Coolant Temperature Sensor	L3B/LM2	In the engine compartment, right front, attached to the right side of the radiator	*Radiator Support Components (LM2)*	*B203 Radiator Coolant Temperature Sensor (L3B/LM2)*
B212	Reductant Sensor Module	LM2	Under the vehicle, right side, attached to DEF tank	—	*B212 Reductant Sensor Module (LM2)*
B214	Reductant Temperature Sensor	LM2	Internal to the reductant pump and sensor assembly	—	—
B218L	Side Object Sensor Module - Left	UKC	Outside of the vehicle, left rear corner, mounted to the inside of the rear bumper	*Rear Bumper Components*	*B218L Side Object Sensor Module - Left (UKC)*
B218R	Side Object Sensor Module - Right	UKC	Outside of the vehicle, right rear corner, mounted to the inside of the rear bumper	*Rear Bumper Components*	*B218R Side Object Sensor Module - Right (UKC)*
B225L	Sideview Camera - Left	UVI/UV2	Outside of vehicle, left side, within A9A Outside Rearview Mirror - Driver	*Driver Door Components*	*B225L Sideview Camera - Left (UV2/UVI)*
B225R	Sideview Camera - Right	UVI/UV2	Outside of vehicle, right side, within A9B Outside Rearview Mirror - Passenger	*Passenger Door Components*	*B225R Sideview Camera - Right (UV2/UVI)*
B280	Automatic Transmission Accumulator Solenoid Valve	MQE	Under the vehicle, inside T12 Automatic Transmission Assembly	—	*B280 Automatic Transmission Accumulator Solenoid Valve (MQE)*
B303	Transmission Range Sensor	MQB	Under the vehicle, center, within T12 Automatic Transmission Assembly	—	*B303 Transmission Range Sensor (MQB)*
B306A	Parking Assist Sensor - Front Left Outer	UD5	At the front of the vehicle, left side, mounted in the front bumper	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*B306A Parking Assist Sensor - Front Left Outer (UD5)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B306B	Parking Assist Sensor - Front Left Middle	UD5	At the front of the vehicle, left of center, mounted in the front bumper	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*B306B Parking Assist Sensor - Front Left Middle (UD5)*
B306C	Parking Assist Sensor - Front Right Middle	UD5	At the front of the vehicle, right of center, mounted in the front bumper	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*B306C Parking Assist Sensor - Front Right Middle (UD5)*
B306D	Parking Assist Sensor - Front Right Outer	UD5	At the front of the vehicle, right side, mounted in the front bumper	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*B306D Parking Assist Sensor - Front Right Outer (UD5)*
B306E	Parking Assist Sensor - Rear Left Outer	UD5/UD7	At the rear of the vehicle, left side, mounted in the rear bumper	*Rear Bumper Components*	*B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)*
B306F	Parking Assist Sensor - Rear Left Middle	UD5/UD7	At the rear of the vehicle, left of center, mounted in the rear bumper	*Rear Bumper Components*	*B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)*
B306G	Parking Assist Sensor - Rear Right Middle	UD5/UD7	At the rear of the vehicle, right of middle, mounted in the rear bumper	*Rear Bumper Components*	*B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)*
B306H	Parking Assist Sensor - Rear Right Outer	UD5/UD7	At the rear of the vehicle, right side, in the rear bumper	*Rear Bumper Components*	*B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)*
B310	Fuel Pressure/ Temperature Sensor	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, center, under intake manifold, at the front of the fuel rail • (L82/L84/L87/LV3) In the engine compartment, rear center, under intake manifold, at the rear of the driver side fuel rail	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LV3)*	• *B310 Fuel Pressure/Temperature Sensor (L3B)* • *B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)*
B321	Crankcase Pressure Sensor	LM2	In the engine compartment, rear center, mounted to the right rear side of the valve cover	*Engine Components - Right Rear (LM2)*	*B321 Crankcase Pressure Sensor (LM2)*
B338A	Intake Camshaft Profile Actuator Position Sensor 1	L3B	In the engine compartment, center, mounted to camshaft carrier, left of M129A Intake Camshaft Profile Actuator 1	*Engine Components - Left Front (L3B)*	*B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)*
B338B	Intake Camshaft Profile Actuator Position Sensor 2	L3B	In the engine compartment, center, mounted to camshaft carrier, left of M129D Intake Camshaft Profile Actuator 4	—	*B338B Intake Camshaft Profile Actuator Position Sensor 2 (L3B)*
B339A	Exhaust Camshaft Profile Actuator Position Sensor 1	L3B	In the engine compartment, center, mounted to the right side of the camshaft carrier	—	*B339A Exhaust Camshaft Profile Actuator Position Sensor 1 (L3B)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B339B	Exhaust Camshaft Profile Actuator Position Sensor 2	L3B	In the engine compartment, center, mounted to the right side of the camshaft carrier	—	*B339B Exhaust Camshaft Profile Actuator Position Sensor 2 (L3B)*
B345R	Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation	LM2	Mounted to the exhaust	—	*B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)*
C1	Battery	—	In the engine compartment, on the right side	—	—
E2A	Marker Lamp - Endgate	QT5/QT6	Outside the vehicle, at the bottom middle of the tailgate	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	*E2A Marker Lamp - Endgate*
E2LF	Side Marker Lamp - Left Front	—	At the left front of vehicle, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (Chevrolet)* • *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	*E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)*
E2LR	Side Marker Lamp - Left Rear	—	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (GMC)*	*E2LR Side Marker Lamp - Left Rear (GF3/GF5)*
E2RF	Side Marker Lamp - Right Front	—	At the right front of vehicle, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (Chevrolet)* • *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	*E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)*
E2RR	Side Marker Lamp - Right Rear	—	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (GMC)*	*E2RR Side Marker Lamp - Right Rear (GF3/GF5)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E4C	Daytime Running Lamp - Left	—	At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	—
E4D	Daytime Running Lamp - Right	—	At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	—
E4E	Headlamp - Left High Beam	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (Chevrolet)*	*E4E Headlamp - Left High Beam (GF2/ GF5/GPZ)*
E4F	Headlamp - Right High Beam	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	*Headlamps - Base Level (Chevrolet)*	*E4F Headlamp - Right High Beam (GF2/GF5/GPZ)*
E4G	Headlamp - Left Low Beam	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (Chevrolet)*	*E4G Headlamp - Left Low Beam (GF2/ GF5/GPZ)*
E4H	Headlamp - Right Low Beam	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	*Headlamps - Base Level (Chevrolet)*	*E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)*
E4LF	Turn Signal Lamp - Left Front	—	At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	*E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)*
E4N	Park/Turn Signal Lamp - Left	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	*Headlamps - Base Level (Chevrolet)*	*E4N Park/Turn Signal Lamp - Left (GF2/ GF5/GPZ)*
E4P	Park/Turn Signal Lamp - Right	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	*Headlamps - Base Level (Chevrolet)*	*E4P Park/Turn Signal Lamp - Right (GF2/ GF5/GPZ)*
E4RF	Turn Signal Lamp - Right Front	—	At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	*E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E5A	Backup Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (GMC)*	*E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)*
E5AG	Tail/Stop and Turn Signal Lamp - Left Upper	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	*Tail Lamp Assemblies - Up Level (Chevrolet)*	—
E5AH	Tail/Stop and Turn Signal Lamp - Right Upper	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (Chevrolet)*	—
E5AM	Stop/Turn Signal Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left	• *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (GMC)*	—
E5AN	Stop/Turn Signal Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (GMC)*	—
E5AU	Stop/Turn Signal Lamp - Right Upper	X88+Up Level	At the rear of the vehicle, right rear, within E42R Tail Lamp Assembly - Right	—	—
E5B	Backup Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Base Level (GMC)* • *Tail Lamp Assemblies - Up Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (GMC)*	*E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)*
E5E	Tail Lamp - Left	—	At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left	*Tail Lamp Assemblies - Base Level (GMC)*	—
E5F	Tail Lamp - Right	—	At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right	*Tail Lamp Assemblies - Base Level (GMC)*	—
E5S	Tail/Stop and Turn Signal Lamp - Left	ZW9/Up	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
E5T	Tail/Stop and Turn Signal Lamp - Right	ZW9/Up	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E5U	Tail/Stop and Turn Signal Lamp - Left Lower	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (Chevrolet)*	—
E5V	Tail/Stop and Turn Signal Lamp - Right Lower	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	• *Tail Lamp Assemblies - Base Level (Chevrolet)* • *Tail Lamp Assemblies - Up Level (Chevrolet)*	—
E6	Center High Mounted Stop Lamp	—	Outside the vehicle, at the top center of the rear window bridge	*Rear of Vehicle Components*	• *E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)* • *E6 Center High Mounted Stop Lamp (Regular Cab)*
E7	License Plate Lamp	ZW9	At the rear of the vehicle, mounted in the middle of the rear bumper	—	*E7 License Plate Lamp (ZW9)*
E7L	License Plate Lamp - Left	E63	Outside the vehicle, mounted in the middle of the rear bumper	*Rear Bumper Components*	*E7L License Plate Lamp - Left (E63)*
E7R	License Plate Lamp - Right	E63	Outside the vehicle, mounted in the middle of the rear bumper	*Rear Bumper Components*	*E7R License Plate Lamp - Right (E63)*
E11A	Fuel Heater/Water in Fuel Sensor	—	Under the vehicle, mounted to the bracket above the spare tire	—	*E11A Fuel Heater/ Water in Fuel Sensor (LM2)*
E12A	Glow Plug 1	LM2	In the engine compartment, In the cylinder head at cylinder 1	—	*E12A Glow Plug 1 (LM2)*
E12B	Glow Plug 2	LM2	In the engine compartment, In the cylinder head at cylinder 2	—	*E12B Glow Plug 2 (LM2)*
E12C	Glow Plug 3	LM2	In the engine compartment, In the cylinder head at cylinder 3	—	*E12C Glow Plug 3 (LM2)*
E12D	Glow Plug 4	LM2	In the engine compartment, In the cylinder head at cylinder 4	—	*E12D Glow Plug 4 (LM2)*
E12E	Glow Plug 5	LM2	In the engine compartment, In the cylinder head at cylinder 5	—	*E12E Glow Plug 5 (LM2)*
E12F	Glow Plug 6	LM2	In the engine compartment, In the cylinder head at cylinder 6	—	*E12F Glow Plug 6 (LM2)*
E13L	Headlamp - Left	—	At the front of the vehicle, within E13LA Headlamp Assembly - Left	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E13LA	Headlamp Assembly - Left	—	Outside the vehicle, at the left front corner	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	—
E13R	Headlamp - Right	—	At the front of vehicle, within E13RA Headlamp Assembly - Right	• *Headlamps - Base Level (GMC)* • *Headlamps - Mid Level (Chevrolet)* • *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	—
E13RA	Headlamp Assembly - Right	—	Outside the vehicle, at the right front corner	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	—
E14A	Seat Heating Element - Driver Back	KA1	In the passenger compartment, in the driver seat back	—	*E14A Seat Heating Element - Driver Back (KA1)*
E14B	Seat Heating Element - Driver Cushion	KA1	In the passenger compartment, in the driver seat cushion	—	*E14B Seat Heating Element - Driver Cushion (KA1)*
E14C	Seat Heating Element - Passenger Back	KA1	In the passenger compartment, in the passenger seat back	—	*E14C Seat Heating Element - Passenger Back (KA1)*
E14D	Seat Heating Element - Passenger Cushion	KA1	In the passenger compartment, in the passenger seat cushion	—	*E14D Seat Heating Element - Passenger Cushion (KA1)*
E14F	Seat Heating Element - Left Rear Cushion	KA6	In the passenger compartment, in the left rear seat cushion	—	*E14F Seat Heating Element - Left Rear Cushion (KA6)*
E14H	Seat Heating Element - Right Rear Cushion	KA6	In the passenger compartment, in the right rear seat cushion	—	*E14H Seat Heating Element - Right Rear Cushion (KA6)*
E15	Steering Wheel Heater	KI3	In the passenger compartment, part of the steering wheel	—	—
E17D	Outside Rearview Mirror Glass - Driver	DEZ/DLF/UKC	Outside the vehicle, at the front of the driver door, part of A9A Outside Rearview Mirror - Driver	—	—
E17P	Outside Rearview Mirror Glass - Passenger	DEZ/DLF/UKC	Outside the vehicle, at the front of the passenger door, part of A9B Outside Rearview Mirror - Passenger	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E18	Rear Defogger Grid	—	At the rear of the passenger compartment, part of the rear window glass	• *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)* • *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Right Rear (Regular Cab)*	• *E18 Rear Defogger Grid X1* • *E18 Rear Defogger Grid X2*
E28	Center Console Compartment Lamp	D07	In the passenger compartment, between the front seats, inside the floor console storage bin	*Floor Console Components*	*E28 Center Console Compartment Lamp*
E29LF	Fog Lamp - Left Front	T3U	Outside the vehicle, at the left front corner, in the front bumper, below E13LA Headlight Assembly - Left	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*E29LF Fog Lamp - Left Front (T3U)*
E29RF	Fog Lamp - Right Front	T3U	Outside the vehicle, at the right front corner, in the front bumper, below E13RA Headlamp Assembly - Right	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*E29RF Fog Lamp - Right Front (T3U)*
E31L	Sunshade Mirror Lamp - Left	DH6	In the passenger compartment, at the left front of the headliner, part of A3L Sunshade - Left	—	*E31L Sunshade Mirror Lamp - Left (DH6)*
E31R	Sunshade Mirror Lamp - Right	DH6	In the passenger compartment, at the right front of the headliner, part of A3R Sunshade - Right	—	*E31R Sunshade Mirror Lamp - Right (DH6)*
E33L	Cargo Lamp - Left	—	Outside the vehicle, beneath the top of the left side of the bed	—	*E33L Cargo Lamp - Left (UF2)*
E33R	Cargo Lamp - Right	—	Outside the vehicle, beneath the top of the right side of the bed	—	*E33R Cargo Lamp - Right (UF2)*
E37B	Dome/Reading Lamps - 2nd Row	Extended Cab/ Crew Cab	In the passenger compartment, near the center of the headliner	*Headliner Components*	*E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)*
E40	Electrical Auxiliary Heater	C32	In the passenger compartment, at the top of the HVAC box	—	• *E40 Electrical Auxiliary Heater X1 (C32)* • *E40 Electrical Auxiliary Heater X2 (C32)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E42L	Tail Lamp Assembly - Left	—	Outside the vehicle, at the left rear corner of the vehicle	*Rear of Vehicle Components*	• *E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)* • *E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)* • *E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)*
E42R	Tail Lamp Assembly - Right	—	Outside the vehicle, at the right rear corner of the vehicle	*Rear of Vehicle Components*	• *E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)* • *E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)* • *E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)*
E52	Reductant Line Heater	LM2	Internal to the reductant pump and sensor assembly	—	*E52 Reductant Line Heater (LM2)*
E53	Reductant Tank Heater	LM2	Internal to the reductant pump and sensor assembly	—	—
E63D	Flood Lamp - Driver Door Handle	—	In the passenger compartment, in the driver door handle trim panel	*Driver Door Trim Components*	*E63D Flood Lamp - Driver Door Handle (AU3)*
E63P	Flood Lamp - Passenger Door Handle	—	In the passenger compartment, in the passenger door handle trim panel	*Passenger Door Trim Components*	*E63P Flood Lamp - Passenger Door Handle (AU3)*
E90DF	Exterior Flood Lamp - Driver Outside Rearview Mirror Forward	DEZ/DLF	Outside of the vehicle, at the front of A9A Outside Rearview Mirror - Driver	*Driver Door Components*	—
E90DL	Exterior Flood Lamp - Driver Outside Rearview Mirror Lower	DEZ	Outside of the vehicle, at the bottom of A9A Outside Rearview Mirror - Driver	*Driver Door Components*	—
E90PF	Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward	DEZ/DLF	Outside of the vehicle, at the front of A9B Outside Rearview Mirror - Passenger	*Passenger Door Components*	—
E90PL	Exterior Flood Lamp - Passenger Outside Rearvew Mirror Lower	DEZ	Outside of the vehicle, at the bottom of A9B Outside Rearview Mirror - Passenger	*Passenger Door Components*	—
F101	Passenger Instrument Panel Air Bag	—	In the passenger compartment, behind the instrument panel upper glove box	—	• *F101 Passenger Instrument Panel Air Bag X1* • *F101 Passenger Instrument Panel Air Bag X2*
F105L	Roof Rail Air Bag - Left	—	In the passenger compartment, along the left side of the headliner	• *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)*	• *F105L Roof Rail Air Bag - Left (Crew Cab)* • *F105L Roof Rail Air Bag - Left (Extended Cab)* • *F105L Roof Rail Air Bag - Left (Regular Cab)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
F105R	Roof Rail Air Bag - Right	—	In the passenger compartment, along the right side of the headliner	*Passenger Compartment - Right Rear (Regular Cab)*	• *F105R Roof Rail Air Bag - Right (Crew Cab)* • *F105R Roof Rail Air Bag - Right (Extended Cab)* • *F105R Roof Rail Air Bag - Right (Regular Cab)*
F106D	Seat Side Air Bag - Driver	—	In the passenger compartment, in the outboard side of the driver seat back	*Driver Seat Components*	*F106D Seat Side Air Bag - Driver*
F106P	Seat Side Air Bag - Passenger	—	In the passenger compartment, in the outboard side of the passenger seat back	*Passenger Seat Components*	*F106P Seat Side Air Bag - Passenger*
F107	Steering Wheel Air Bag	—	In the passenger compartment, mounted to the middle of the steeing wheel	—	• *F107 Steering Wheel Air Bag X1* • *F107 Steering Wheel Air Bag X2*
F112D	Seat Belt Retractor Pretensioner - Driver	—	In the passenger compartment, at the base of the driver side B-pillar	• *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)*	• *F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)* • *F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)*
F112P	Seat Belt Retractor Pretensioner - Passenger	—	In the passenger compartment, at the base of the passenger side B-pillar	*Passenger Compartment - Right Rear (Regular Cab)*	• *F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/ Extended Cab)* • *F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)*
F113D	Seat Belt Anchor Pretensioner - Driver	—	In the passenger compartment, mounted to the outboard driver seat track	• *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)*	*F113D Seat Belt Anchor Pretensioner - Driver*
F113P	Seat Belt Anchor Pretensioner - Passenger	—	In the passenger compartment, mounted to the outboard passenger seat track	*Passenger Compartment - Right Rear (Regular Cab)*	*F113P Seat Belt Anchor Pretensioner - Passenger*
G1	A/C Compressor	—	• (LM2) In the engine compartment, left front, mounted to the left lower side of the engine •	• *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	—
G5	Transmission Fluid Pump - Electric/ Auxiliary	MQB	Under the vehicle, within T12 Automatic Transmission Assembly	—	*G5 Transmission Fluid Pump - Electric/ Auxiliary (MQB)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G10B	Cooling Fan Motor - Lower	—	In the engine compartment, in the radiator shroud, lower	*Radiator Support Components (LM2)*	• *G10B Cooling Fan Motor - Lower (L3B)* • *G10B Cooling Fan Motor - Lower (LM2)*
G10L	Cooling Fan Motor - Left	—	In the engine compartment, in the radiator shroud, left side	• *Radiator Support Components (LM2)* • *Radiator Support Components (LV3)*	*G10L Cooling Fan Motor - Left*
G10R	Cooling Fan Motor - Right	—	In the engine compartment, in the radiator shroud, right side	• *Radiator Support Components (LM2)* • *Radiator Support Components (LV3)*	• *G10R Cooling Fan Motor - Right (LM2)* • *G10R Cooling Fan Motor - Right (-LM2)*
G12	Fuel Pump	—	Under the vehicle, within the fuel tank, part of A7 Fuel Pump and Level Sender Assembly	—	—
G13	Generator	—	• (LM2) In the engine compartment, left front, mounted to the left upper side of the engine	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)*	• *G13 Generator X1 (L3B)* • *G13 Generator X1 (L82/LM2)* • *G13 Generator X1 (L84/L87)* • *G13 Generator X1 (LV3)* • *G13 Generator X2*
G17	Heater Coolant Pump	L84/L87/LM2	In the engine compartment, front center, mounted to the front of the engine	*Engine Components - Right Front (L82/L84/L87)*	*G17 Heater Coolant Pump (L84/L87/LM2)*
G18	High Pressure Fuel Pump	—	• (L3B) In the engine compartment, rear center, mounted on top of the rear of the camshaft carrier • (L82/L84/L87/LV3) In the engine compartment, rear center, beneath the rear of the intake manifold • (LM2) In the engine compartment, left rear, mounted near the left side of the transmission bellhousing	• *Engine Components - Right Front (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LV3)*	• *G18 High Pressure Fuel Pump (L3B)* • *G18 High Pressure Fuel Pump (L82/L84/L87/LV3)*
G24	Windshield Washer Pump	—	In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left	*Engine Compartment Components*	*G24 Windshield Washer Pump*
G33	Reductant Pump	LM2	Internal to the reductant pump and sensor assembly	—	—
G58	Evaporative Emission Purge Pump	L3B	In the engine compartment, center, mounted above the intake manifold, to the left of the camshaft carrier	*Engine Components - Left Front (L3B)*	*G58 Evaporative Emission Purge Pump (L3B)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G59	Engine Coolant Pump	L3B/LM2	• (L3B) In the engine compartment, right front, beneath turbocharger	*Engine Components - Right Front (L3B)*	• *G59 Engine Coolant Pump (L3B)* • *G59 Engine Coolant Pump (LM2)*
K4	Assist Step Control Module	—	Underneath the vehicle, along the outside of the left frame rail, near the driver door	—	• *K4 Assist Step Control Module X1 (BRS)* • *K4 Assist Step Control Module X2 (BRS)*
K9	Body Control Module	—	In the passenger compartment, behind the driver side of the instrument panel, outboard of the steering column	• *Behind Instrument Panel - Left* • *Instrument Panel - Rear*	• *K9 Body Control Module X1* • *K9 Body Control Module X2* • *K9 Body Control Module X3* • *K9 Body Control Module X4* • *K9 Body Control Module X5* • *K9 Body Control Module X6* • *K9 Body Control Module X7*
K19	Suspension Control Module	—	Under the vehicle, mounted to the bracket above the spare tire	—	*K19 Suspension Control Module (Z45)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K20	Engine Control Module	—	In the engine compartment, left front, behind E13LA Headlamp Assembly - Left	*Engine Compartment Components*	• *K20 Engine Control Module X1 (L3B)* • *K20 Engine Control Module X1 (L82)* • *K20 Engine Control Module X1 (L84/L87)* • *K20 Engine Control Module X1 (LM2)* • *K20 Engine Control Module X1 (LV3)* • *K20 Engine Control Module X2 (L3B)* • *K20 Engine Control Module X2 (L82)* • *K20 Engine Control Module X2 (L84/L87)* • *K20 Engine Control Module X2 (LM2)* • *K20 Engine Control Module X2 (LV3)* • *K20 Engine Control Module X3 (L3B)* • *K20 Engine Control Module X3 (L82)* • *K20 Engine Control Module X3 (L84/L87)* • *K20 Engine Control Module X3 (LV3)*
K29F	Seat Heating Control Module - Front	KQV/KA1	In the passenger compartment, right front, under the front of the passenger seat	*Passenger Seat Components*	• *K29F Seat Heating Control Module - Front X1 (KA1)* • *K29F Seat Heating Control Module - Front X1 (KQV)* • *K29F Seat Heating Control Module - Front X2 (KA1)* • *K29F Seat Heating Control Module - Front X2 (KQV)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K29R	Seat Heating Control Module - Rear	KA6	In the passenger compartment, rear center, underneath the front of the rear seat cushion	*Rear Seat Components*	• *K29R Seat Heating Control Module - Rear X1 (KA6)* • *K29R Seat Heating Control Module - Rear X2 (KA6)*
K32	Steering Wheel Heating Control Module	KI3	In the passenger compartment, in the steering wheel, behind the driver air bag	—	• *K32 Steering Wheel Heating Control Module X1 (UVD)* • *K32 Steering Wheel Heating Control Module X2 (UVD)*
K33	HVAC Control Module	—	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *K33 HVAC Control Module X1* • *K33 HVAC Control Module X2* • *K33 HVAC Control Module X3* • *K33 HVAC Control Module X4*
K34	Glow Plug Control Module	LM2	In the engine compartment, mounted to the top of the engine	—	• *K34 Glow Plug Control Module X1 (LM2)* • *K34 Glow Plug Control Module X2 (LM2)*
K36	Inflatable Restraint Sensing and Diagnostic Module	—	In the passenger compartment, bolted to the floor between the front seats or under console if equipped	• *Passenger Compartment - Left Front (Extended Cab/Crew Cab)* • *Passenger Compartment - Right Rear (Regular Cab)*	• *K36 Inflatable Restraint Sensing and Diagnostic Module X1* • *K36 Inflatable Restraint Sensing and Diagnostic Module X2*
K40	Seat Memory Control Module	A45	In the passenger compartment, under the driver seat	*Driver Seat Components*	• *K40 Seat Memory Control Module X1 (A45)* • *K40 Seat Memory Control Module X2 (A45)* • *K40 Seat Memory Control Module X3 (A45)* • *K40 Seat Memory Control Module X5 (A45)* • *K40 Seat Memory Control Module X6 (A45)*
K43	Power Steering Control Module	—	Under the vehicle, part of the steering gear assembly	—	• *K43 Power Steering Control Module X1* • *K43 Power Steering Control Module X2*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K56	Serial Data Gateway Module	—	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *K56 Serial Data Gateway Module X1* • *K56 Serial Data Gateway Module X2*
K60	Steering Column Lock Module	BTM	In the passenger compartment, left front, mounted on top of the steering column, underneath instrument panel	*Steering Column Components*	*K60 Steering Column Lock Module (BTM)*
K68	Trailer Lighting Control Module	—	Under the rear of the vehicle, near spare tire	—	*K68 Trailer Lighting Control Module (U1D)*
K69	Transfer Case Control Module	NP0/NQH	In the engine compartment, left rear, left of K160 Brake System Control Module	*Engine Compartment Components*	*K69 Transfer Case Control Module (NP0/NQH)*
K71	Transmission Control Module	—	• (MQB/MQE) In the engine compartment, left front, behind left corner of the radiator • (MYC) In the engine compartment, inside the T12 Automatic Transmission Assembly, part of the control solenoid valve	—	• *K71 Transmission Control Module (MQB)* • *K71 Transmission Control Module (MQE)*
K73	Telematics Communication Interface Control Module	UE1	In the passenger compartment, left front, between the instrument panel and bulkhead	*Instrument Panel - Rear*	• *K73 Telematics Communication Interface Control Module X1 (UE1)* • *K73 Telematics Communication Interface Control Module X5 (UE1)* • *K73 Telematics Communication Interface Control Module X7 (UE1)*
K77	Remote Control Door Lock Receiver	—	In the passenger compartment, right rear corner, below headliner	• *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Right Rear (Regular Cab)*	*K77 Remote Control Door Lock Receiver*
K84	Keyless Entry Control Module	BTM	In the passenger compartment, left front, between the instrument panel and bulkhead	*Behind Instrument Panel - Left*	• *K84 Keyless Entry Control Module X1 (BTM)* • *K84 Keyless Entry Control Module X2 (BTM)*
K85	Passenger Presence Module	—	In the passenger compartment, in the passenger seat cushion	*Passenger Seat Components*	*K85 Passenger Presence Module*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K89	Immobilizer Control Module	—	In the passenger compartment, on the left side of the steering column, below S78 Turn Signal/Multifunction Switch	• *Floor Console Components* • *Steering Column Components*	• *K89 Immobilizer Control Module (-BTM)* • *K89 Immobilizer Control Module (BTM+D07)* • *K89 Immobilizer Control Module (BTM-D07)*
K111	Fuel Pump Driver Control Module	—	Under the vehicle, mounted to the bracket above the spare tire	—	*K111 Fuel Pump Driver Control Module*
K115	Reductant Control Module	LM2	Under the vehicle, mounted to the outboard side of the frame, below the passenger side of the cab	—	*K115 Reductant Control Module (LM2)*
K133	Trailer Brake Power Control Module	JL1	Under the vehicle, mounted to the bracket above the spare tire	—	*K133 Trailer Brake Power Control Module (JL1)*
K157	Video Processing Control Module	UVI/UV2	In the passenger compartment, right rear, mounted behind the rear seat, below the rear window	*Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*	• *K157 Video Processing Control Module X1 (UVI/UV2)* • *K157 Video Processing Control Module X3 (UVI/UV2)* • *K157 Video Processing Control Module X4 (UVI/UV2)* • *K157 Video Processing Control Module X5 (UVI/UV2)*
K160	Brake System Control Module	—	In the engine comparment, left rear corner, near brake master cylinder	*Engine Compartment Components*	*K160 Brake System Control Module*
K166L	Multifunction LED Control Module - Left Headlamp	—	At the left front of vehicle, within E13LA Headlamp Assembly - Left	• *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	• *K166L Multifunction LED Control Module - Left Headlamp (GFD)* • *K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)*
K166R	Multifunction LED Control Module - Right Headlamp	—	At the right front of vehicle, within E13RA Headlamp Assembly - Right	• *Headlamps - Up Level (Chevrolet)* • *Headlamps - Up Level (GMC)*	• *K166R Multifunction LED Control Module - Right Headlamp (GFD)* • *K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K182	Parking Assist Control Module	UD5/UD7	In the passenger compartment, mounted to the driver side of the rear wall	• *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)*	• *K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))* • *K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)* • *K182 Parking Assist Control Module X2 (UD5/UD7)* • *K182 Parking Assist Control Module X3 (UD5/UD7)*
K194	Pickup Box Endgate Control Module	QT6	At the rear of the vehicle, inside of the endgate, behind trim panel, lower left side	*Endgate Components (QT6)*	*K194 Pickup Box Endgate Control Module*
K214	Trailer Tire Pressure Indicator Module	PTT	At the rear of the vehicle, mounted to the center of the rear bumper, near X88 Trailer Connector	—	*K214 Trailer Tire Pressure Indicator Module*
M4	Air Inlet Door Actuator	—	In the passenger compartment, behind the instrument panel glove box	—	*M4 Air Inlet Door Actuator*
M6L	Air Temperature Door Actuator - Left	—	In the passenger compartment, part of HVAC module, behind the instrument panel	—	*M6L Air Temperature Door Actuator - Left*
M6R	Air Temperature Door Actuator - Right	—	In the passenger compartment, part of HVAC module, behind the instrument panel	—	*M6R Air Temperature Door Actuator - Right (CJ2)*
M7	Transmission Shift Lock Control Solenoid Actuator	—	In the passenger compartment, right side of the steering wheel, attached to transmission shift lever	—	—
M8	Blower Motor	—	In the passenger compartment, under the right side of the instrument panel, above the hush panel	—	*M8 Blower Motor*
M26	Front Axle Engagement Actuator	—	Under the vehicle, mounted to the front axle	—	*M26 Front Axle Engagement Actuator (NP0/NQH)*
M37	Mode Door Actuator	—	In the passenger compartment, right front, within instrument panel, attached to HVAC assembly	—	*M37 Mode Door Actuator*
M38	Power Steering Motor	—	Under the vehicle, part of the steering gear assembly	—	—
M50D	Seat Front Vertical Motor - Driver	—	In the passenger compartment, under the driver seat	*Driver Seat Components*	*M50D Seat Front Vertical Motor - Driver*
M50P	Seat Front Vertical Motor - Passenger	—	In the passenger compartment, under the passenger seat	*Passenger Seat Components*	*M50P Seat Front Vertical Motor - Passenger (A7K)*
M51D	Seat Horizontal Motor - Driver	—	In the passenger compartment, under the driver seat	*Driver Seat Components*	*M51D Seat Horizontal Motor - Driver*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M51P	Seat Horizontal Motor - Passenger	—	In the passenger compartment, under the passenger seat	*Passenger Seat Components*	*M51P Seat Horizontal Motor - Passenger (A7K)*
M55D	Seat Rear Vertical Motor - Driver	—	In the passenger compartment, under the driver seat	—	*M55D Seat Rear Vertical Motor - Driver*
M55P	Seat Rear Vertical Motor - Passenger	—	In the passenger compartment, under the passenger seat	*Passenger Seat Components*	*M55P Seat Rear Vertical Motor - Passenger (A7K)*
M56D	Seat Recline Motor - Driver	—	In the passenger compartment, in the driver seat back	• *Driver Seat Components* • *Driver Seat Components*	*M56D Seat Recline Motor - Driver*
M56P	Seat Recline Motor - Passenger	—	In the passenger compartment, in the passenger seat back	*Passenger Seat Components*	*M56P Seat Recline Motor - Passenger (A7K)*
M63	Sliding Rear Window Motor	A48	In the passenger compartment, mounted to the passenger side of the rear wall, behind the rear seat	*Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*	*M63 Sliding Rear Window Motor (A48)*
M64	Starter Motor	—	• (L3B) In the engine compartment, left rear, mounted to rear of engine block	• *Engine Components - Left Front (L3B)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *M64 Starter Motor X1 (L3B)* • *M64 Starter Motor X1 (L84/L87)* • *M64 Starter Motor X1 (LM2/LV3/L82)* • *M64 Starter Motor X2*
M69	Sunroof Motor	CF5	In the passenger compartment, at the front of the roof, above the headliner	*Headliner Components*	*M69 Sunroof Motor (CF5)*
M73A	Seat Blower Motor - Driver Back	KQV	In the passenger compartment, in the driver seat back	*Driver Seat Components*	*M73A Seat Blower Motor - Driver Back (KQV)*
M73B	Seat Blower Motor - Passenger Back	KQV	In the passenger compartment, in the passenger seat cback	—	*M73B Seat Blower Motor - Passenger Back (KQV)*
M73C	Seat Blower Motor - Driver Cushion	KQV	In the passenger compartment, in the driver seat cushion	*Driver Seat Components*	*M73C Seat Blower Motor - Driver Cushion (KQV)*
M73D	Seat Blower Motor - Passenger Cushion	KQV	In the passenger compartment, in the passenger seat cushion	—	*M73D Seat Blower Motor - Passenger Cushion (KQV)*
M74D	Window Motor - Driver	—	In the passenger compartment, in the driver door	*Driver Door Components*	*M74D Window Motor - Driver (AXG)*
M74LR	Window Motor - Left Rear	Extended Cab/ Crew Cab	In the passenger compartment, in the left rear door	—	*M74LR Window Motor - Left Rear (AEQ)*
M74P	Window Motor - Passenger	—	In the passenger compartment, in the passenger door	*Passenger Door Components*	• *M74P Window Motor - Passenger (AED)* • *M74P Window Motor - Passenger (AEF)*
M74RR	Window Motor - Right Rear	Extended Cab/ Crew Cab	In the passenger compartment, in the right rear door	*Left Rear Door Components (Extended Cab/Crew Cab)*	*M74RR Window Motor - Right Rear (AEQ)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M75	Windshield Wiper Motor	—	Outside the vehicle, at the left rear of the engine compartment, below the left lower corner of the windshield	*Engine Compartment Components*	*M75 Windshield Wiper Motor*
M77D	Outside Rearview Mirror Motor - Driver	—	Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver	—	—
M77P	Outside Rearview Mirror Motor - Passenger	—	Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger	—	—
M78D	Outside Rearview Mirror Folding Motor - Driver	A45	Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver	—	—
M78P	Outside Rearview Mirror Folding Motor - Passenger	A45	Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger	—	—
M93	Key Capture Solenoid Actuator	-BTM	In the passenger compartment, left front, on the right side of the steering column, below the transmission shift lever	*Steering Column Components*	*M93 Key Capture Solenoid Actuator (-BTM)*
M95L	Assist Step - Left	BRS	Under the vehicle, along the left frame rail, under the driver door	—	*M95L Assist Step - Left (BRS)*
M95R	Assist Step - Right	BRS	Under the vehicle, along the right frame rail, under the passenger door	—	*M95R Assist Step - Right (BRS)*
M96A	Active Grille Air Shutter 1 Actuator	VTI/WMI	At the front of the vehicle, center, attached to the inside of the front grille	—	*M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)*
M96B	Active Grille Air Shutter 2 Actuator	WMI	At the front of the vehicle, center, attached to the inside of the front grille	—	*M96B Active Grille Air Shutter 2 Actuator (WMI)*
M103	Turbocharger Vane Position Actuator	LM2	In the engine compartment, right side, mounted to turbocharger	*Engine Components - Right Rear (LM2)*	*M103 Turbocharger Vane Position Actuator (LM2)*
M104L	Park Brake Actuator - Left	—	Under the vehicle, left rear, attached to the left rear brake caliper	*Brake and Suspension Components*	*M104L Park Brake Actuator - Left*
M104R	Park Brake Actuator - Right	—	Under the vehicle, right rear, attached to the right rear brake caliper	*Brake and Suspension Components*	*M104R Park Brake Actuator - Right*
M106	Exhaust Flow Control Valve Actuator	LM2	In the engine compartment, left side, attached to the left side of the engine block, beneath the intake manifold	*Engine Components - Left Rear (LM2)*	*M106 Exhaust Flow Control Valve Actuator (LM2)*
M125	Pickup Box Endgate Power Assist Actuator	QT6	Outside of the vehicle, within the endgate, lower right corner	*Endgate Components (QT6)*	*M125 Pickup Box Endgate Power Assist Actuator*
M129A	Intake Camshaft Profile Actuator 1	L3B	In the engine compartment, center, left of T8A Ignition Coil 1	—	*M129A Intake Camshaft Profile Actuator 1 (L3B)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M129B	Intake Camshaft Profile Actuator 2	L3B	In the engine compartment, center, left of T8B Ignition Coil 2	• *Engine Components - Top (L3B)* • *Engine Components - Top (L3B)*	*M129B Intake Camshaft Profile Actuator 2 (L3B)*
M129C	Intake Camshaft Profile Actuator 3	L3B	In the engine compartment, center, left of T8C Ignition Coil 3	*Engine Components - Top (L3B)*	*M129C Intake Camshaft Profile Actuator 3 (L3B)*
M129D	Intake Camshaft Profile Actuator 4	L3B	In the engine compartment, center, left of T8D Ignition Coil 4	*Engine Components - Top (L3B)*	*M129D Intake Camshaft Profile Actuator 4 (L3B)*
M130A	Exhaust Camshaft Profile Actuator 1	L3B	In the engine compartment, center, right of T8B Ignition Coil 2 and T8C Ignition Coil 3	*Engine Components - Top (L3B)*	—
M130B	Exhaust Camshaft Profile Actuator 2	L3B	In the engine compartment, center, right of T8A Ignition Coil 1 and T8B Ignition Coil 2	*Engine Components - Top (L3B)*	*M130B Exhaust Camshaft Profile Actuator 2 (L3B)*
P12	Horn	—	In the engine compartment, right front, at the bottom of the radiator core support	*Engine Compartment Components*	*P12 Horn*
P16	Instrument Cluster	—	In the passenger compartment, in the driver side of the instrument panel	*Instrument Panel - Front*	• *P16 Instrument Cluster X1* • *P16 Instrument Cluster X2 (UV6)*
P17	Info Display Module	—	In the passenger compartment, at the center of the instrument panel	*Instrument Panel - Front*	• *P17 Info Display Module X1 (UIR)* • *P17 Info Display Module X1 (UIJ/UIK)* • *P17 Info Display Module X2*
P19AC	Speaker - Subwoofer	UQA	In the passenger compartment, under the instrument panel, at the front of the center console	—	*P19AC Speaker - Subwoofer (UQA)*
P19AG	Speaker - Left Front Door	—	In the passenger compartment, in the driver door	*Driver Door Components*	*P19AG Speaker - Left Front Door*
P19AH	Speaker - Right Front Door	—	In the passenger compartment, in the passenger door	*Passenger Door Components*	*P19AH Speaker - Right Front Door (U95/UQF/UQA)*
P19AL	Speaker - Left Rear Door	—	In the passenger compartment, in the left rear door	*Right Rear Door Components (Extended Cab/Crew Cab)*	*P19AL Speaker - Left Rear Door (UQA/UQF)*
P19AM	Speaker - Right Rear Door	—	In the passenger compartment, in the right rear door	*Left Rear Door Components (Extended Cab/Crew Cab)*	*P19AM Speaker - Right Rear Door (UQA/UQF)*
P19J	Speaker - Left Instrument Panel	—	In the passenger compartment, in the top of the left side of the instrument panel	*Instrument Panel - Rear*	• *P19J Speaker - Left Instrument Panel (UQA)* • *P19J Speaker - Left Instrument Panel (UQF/U95)*
P19W	Speaker - Right Instrument Panel	—	In the passenger compartment, in the top of the right side of the instrument panel	*Instrument Panel - Rear*	• *P19W Speaker - Right Instrument Panel (UQA)* • *P19W Speaker - Right Instrument Panel (UQF/U95)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
P29	Head-Up Display	UV6	In the passenger compartment, at the left side of the instrument panel, near the windshield	*Instrument Panel - Front*	• *P29 Head-Up Display X1 (UV6)* • *P29 Head-Up Display X2 (UV6)*
P34D	Side Object Detection Indicator - Driver	UKC	Outside of the vehicle, left side, part of E17D Outside Rearview Mirror Glass - Driver, within A9A Outside Rearview Mirror - Driver	—	—
P34P	Side Object Detection Indicator - Passenger	UKC	Outside of the vehicle, left side, part of E17P Outside Rearview Mirror Glass - Passenger, within A9B Outside Rearview Mirror - Passenger	—	—
P43	Collision Alert Indicators	(UHX/UEU)-UV6	In the passenger compartment, in the top of the instrument panel, near the windshield, in front of the driver	*Instrument Panel - Rear*	*P43 Collision Alert Indicators ((UEU/UHX)-UV6)*
P45LR	Seat Haptic Movement Motor - Driver Left Rear	HS1	In the passenger compartment, in the left side of the driver seat cushion	—	*P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)*
P45RR	Seat Haptic Movement Motor - Driver Right Rear	HS1	In the passenger compartment, in the right side of the driver seat cushion	—	*P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)*
Q2	A/C Compressor Clutch	—	In the engine compartment, left front, part of G1 A/C Compressor	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	• *Q2 A/C Compressor Clutch (L3B/L3V)* • *Q2 A/C Compressor Clutch (L82)* • *Q2 A/C Compressor Clutch (LM2/L84/L87)*
Q5	Brake Pressure Modulator	—	In the engine compartment, left rear, part of K160 Brake System Control Module	—	—
Q6	Camshaft Position Actuator Solenoid Valve	L82/L84/L87/LV3	(L82/L84/L87) In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer	*Engine Components - Left Front (L82/L84/L87)*	*Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)*
Q6E	Camshaft Position Actuator Solenoid Valve - Exhaust	L3B	In the engine compartment, front center, in front of exhaust camshaft	*Engine Components - Left Front (L3B)*	*Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)*
Q6F	Camshaft Position Actuator Solenoid Valve - Intake	L3B	In the engine compartment, front center, in front of intake camshaft	*Engine Components - Left Front (L3B)*	*Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)*
Q8	Control Solenoid Valve Assembly	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q8 Control Solenoid Valve Assembly X1 (MYC)* • *Q8 Control Solenoid Valve Assembly X2 (MYC)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q12	Evaporative Emission Purge Solenoid Valve	L3B/L82/L84/L87/LV3	(L82/L84/L87/LV3) In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body	• *Engine Components - Left (LV3)* • *Engine Components - Right Front (L82/L84/L87)*	*Q12 Evaporative Emission Purge Solenoid Valve (-LM2)*
Q13	Evaporative Emission Vent Solenoid Valve	—	On the underbody, at the top left side of the fuel tank	—	*Q13 Evaporative Emission Vent Solenoid Valve (-LM2)*
Q14A	Exhaust Gas Recirculation Valve 1	LM2	In the engine compartment, right rear, mounted to the exhaust, near the top right side of the engine	*Engine Components - Right Rear (LM2)*	*Q14A Exhaust Gas Recirculation Valve 1 (LM2)*
Q14B	Exhaust Gas Recirculation Valve 2	LM2	In the engine compartment, right rear, mounted to the exhaust, near the lower right side of the transmission bellhousing	*Engine Components - Right Rear (LM2)*	*Q14B Exhaust Gas Recirculation Valve 2 (LM2)*
Q17A	Fuel Injector 1	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 1 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 1 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 1	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17A Fuel Injector 1 (L3B)* • *Q17A Fuel Injector 1 (L82/L84/L87/LV3)* • *Q17A Fuel Injector 1 (LM2)*
Q17B	Fuel Injector 2	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 2 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 2 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 2	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17B Fuel Injector 2 (L3B)* • *Q17B Fuel Injector 2 (L82/L84/L87/LV3)* • *Q17B Fuel Injector 2 (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17C	Fuel Injector 3	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 3 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 3 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 3	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17C Fuel Injector 3 (L3B)* • *Q17C Fuel Injector 3 (L82/L84/L87/LV3)* • *Q17C Fuel Injector 3 (LM2)*
Q17D	Fuel Injector 4	—	• (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 4 • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 4 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 4	• *Engine Components - Left Rear (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17D Fuel Injector 4 (L3B)* • *Q17D Fuel Injector 4 (L82/L84/L87/LV3)* • *Q17D Fuel Injector 4 (LM2)*
Q17E	Fuel Injector 5	L82/L84/L87/LM2/LV3	• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 5 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 5	• *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17E Fuel Injector 5 (L82/L84/L87/LV3)* • *Q17E Fuel Injector 5 (LM2)*
Q17F	Fuel Injector 6	L82/L84/L87/LM2/LV3	• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 6 intake port on the cylinder head • (LM2) In the engine compartment, center, mounted to valve cover above cylinder 6	• *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LM2)* • *Engine Components - Top (LV3)*	• *Q17F Fuel Injector 6 (L82/L84/L87/LV3)* • *Q17F Fuel Injector 6 (LM2)*
Q17G	Fuel Injector 7	L82/L84/L87	• In the engine compartment, underneath intake manifold, next to cylinder 7 intake port on the cylinder head	*Engine Components - Top (L82/L84/L87)*	*Q17G Fuel Injector 7 (L82/L84/L87)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17H	Fuel Injector 8	L82/L84/L87	• In the engine compartment, underneath intake manifold, next to cylinder 8 intake port on the cylinder head	*Engine Components - Top (L82/L84/L87)*	*Q17H Fuel Injector 8 (L82/L84/L87)*
Q18A	Fuel Pressure Regulator 1	LM2	In the engine compartment, left rear side of engine, below Q18C Fuel Pressure Regulator 3	*Engine Components - Left Rear (LM2)*	*Q18A Fuel Pressure Regulator 1 (LM2)*
Q18B	Fuel Pressure Regulator 2	LM2	In the engine compartment, left side of engine, mounted to the left rear side of the valve cover	*Engine Components - Left Rear (LM2)*	*Q18B Fuel Pressure Regulator 2 (LM2)*
Q18C	Fuel Pressure Regulator 3	LM2	In the engine compartment, left rear side of engine, above Q18A Fuel Pressure Regulator 1	*Engine Components - Left Rear (LM2)*	*Q18C Fuel Pressure Regulator 3 (LM2)*
Q22	Intake Manifold Tuning Solenoid Valve	LM2	In the engine compartment, front center, attached to the front of the intake manifold	—	*Q22 Intake Manifold Tuning Solenoid Valve (LM2)*
Q27A	Pressure Control Solenoid Valve 1	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27B	Pressure Control Solenoid Valve 2	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27C	Pressure Control Solenoid Valve 3	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27D	Pressure Control Solenoid Valve 4	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q27E	Pressure Control Solenoid Valve 5	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q32A	Shift Solenoid Valve 1	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q32B	Shift Solenoid Valve 2	MYC	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q37LF	Shock Absorber Actuator - Left Front	Z45	Under the vehicle, left front, part of the left front shock absorber	*Brake and Suspension Components*	*Q37LF Shock Absorber Actuator - Left Front (Z45)*
Q37LR	Shock Absorber Actuator - Left Rear	Z45	Under the vehicle, left rear, part of the left rear shock absorber	*Brake and Suspension Components*	*Q37LR Shock Absorber Actuator - Left Rear (Z45)*
Q37RF	Shock Absorber Actuator - Right Front	Z45	Under the vehicle, right front, part of the right front shock absorber	*Brake and Suspension Components*	*Q37RF Shock Absorber Actuator - Right Front (Z45)*
Q37RR	Shock Absorber Actuator - Right Rear	Z45	Under the vehicle, right rear, part of the right rear shock absorber	*Brake and Suspension Components*	*Q37RR Shock Absorber Actuator - Right Rear (Z45)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q38	Throttle Body	—	• (L3B/L82/L84/L87) In the engine compartment, at the front of the engine, mounted to the intake manifold inlet • (LM2) In the engine compartment, left front, to the left of the valve cover	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)* • *Engine Components - Right Front (L82/L84/L87)* • *Engine Components - Right Rear (LM2)*	*Q38 Throttle Body*
Q39A	Torque Converter Clutch Pressure Control Solenoid Valve	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	—
Q40	Turbocharger Bypass Solenoid Valve	L3B	In the engine compartment, right side, mounted to the turbocharger compressor, beneath turbocharger compressor inlet	*Engine Components - Right Front (L3B)*	*Q40 Turbocharger Bypass Solenoid Valve (L3B)*
Q42	Turbocharger Wastegate Solenoid Valve	L3B	In the engine compartment, right side, mounted to the top of the turobcharger compressor	*Engine Components - Right Front (L3B)*	—
Q43	Valve Lifter Oil Manifold Assembly	LV3	In the engine compartment, front center, mounted in engine valley, below Q38 Throttle Body	*Engine Components - Left (LV3)*	*Q43 Valve Lifter Oil Manifold Assembly (LV3)*
Q44	Engine Oil Pressure Control Solenoid Valve	—	In the engine compartment, at the front of the engine, behind the front cover	—	• *Q44 Engine Oil Pressure Control Solenoid Valve (L3B)* • *Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)* • *Q44 Engine Oil Pressure Control Solenoid Valve (LM2)*
Q46	A/C Compressor Solenoid Valve	—	In the engine compartment, left front, part of G1 A/C Compressor	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)* • *Engine Components - Right (LV3)*	• *Q46 A/C Compressor Solenoid Valve (L3B/LV3)* • *Q46 A/C Compressor Solenoid Valve (L82)* • *Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)*
Q61	Reductant Injector	LM2	In the engine compartment, right front, mounted to the exhaust, in front of diesel particulate filter	*Engine Components - Right Rear (LM2)*	*Q61 Reductant Injector (LM2)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q74	Engine Coolant Bypass Valve	L3B/LM2	In the engine compartment, left rear, attached to the bottom rear of the Integrated Exhaust Manfiold	• *Engine Components - Left Front (L3B)* • *Engine Components - Left Rear (LM2)*	• *Q74 Engine Coolant Bypass Valve (L3B)* • *Q74 Engine Coolant Bypass Valve (LM2)*
Q77A	Transmission Control Solenoid Valve 1	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77A Transmission Control Solenoid Valve 1 (MQB)* • *Q77A Transmission Control Solenoid Valve 1 (MQE)*
Q77B	Transmission Control Solenoid Valve 2	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77B Transmission Control Solenoid Valve 2 (MQB)* • *Q77B Transmission Control Solenoid Valve 2 (MQE)*
Q77C	Transmission Control Solenoid Valve 3	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77C Transmission Control Solenoid Valve 3 (MQB)* • *Q77C Transmission Control Solenoid Valve 3 (MQE)*
Q77D	Transmission Control Solenoid Valve 4	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77D Transmission Control Solenoid Valve 4 (MQB)* • *Q77D Transmission Control Solenoid Valve 4 (MQE)*
Q77E	Transmission Control Solenoid Valve 5	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77E Transmission Control Solenoid Valve 5 (MQB)* • *Q77E Transmission Control Solenoid Valve 5 (MQE)*
Q77F	Transmission Control Solenoid Valve 6	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77F Transmission Control Solenoid Valve 6 (MQB)* • *Q77F Transmission Control Solenoid Valve 6 (MQE)*
Q77G	Transmission Control Solenoid Valve 7	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77G Transmission Control Solenoid Valve 7 (MQB)* • *Q77G Transmission Control Solenoid Valve 7 (MQE)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q77H	Transmission Control Solenoid Valve 8	MQB/MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77H Transmission Control Solenoid Valve 8 (MQB)* • *Q77H Transmission Control Solenoid Valve 8 (MQE)*
Q77J	Transmission Control Solenoid Valve 9	MQE	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *Q77J Transmission Control Solenoid Valve 9 (MQB)* • *Q77J Transmission Control Solenoid Valve 9 (MQE)*
Q80L	Engine Mount Solenoid Valve - Left	L3B/LM2	(L3B) In the engine compartment, front center, mounted to left side of the upper oil pan	*Engine Components - Left Front (L3B)*	• *Q80L Engine Mount Solenoid Valve - Left (L3B)* • *Q80L Engine Mount Solenoid Valve - Left (LM2)*
Q80R	Engine Mount Solenoid Valve - Right	L3B/LM2	(L3B) In the engine compartment, front center, mounted to right side of the upper oil pan	*Engine Components - Right Rear (L3B)*	• *Q80R Engine Mount Solenoid Valve - Right (L3B)* • *Q80R Engine Mount Solenoid Valve - Right (LM2)*
Q83AA	Valve Lifter Oil Solenoid Valve - Cylinder 1	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 1	—	*Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)*
Q83AB	Valve Lifter Oil Solenoid Valve - Cylinder 2	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 2	—	*Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)*
Q83AC	Valve Lifter Oil Solenoid Valve - Cylinder 3	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 3	—	*Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)*
Q83AD	Valve Lifter Oil Solenoid Valve - Cylinder 4	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 4	—	*Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)*
Q83AE	Valve Lifter Oil Solenoid Valve - Cylinder 5	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 5	—	*Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)*
Q83AF	Valve Lifter Oil Solenoid Valve - Cylinder 6	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 6	—	*Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)*
Q83AG	Valve Lifter Oil Solenoid Valve - Cylinder 7	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 7	—	*Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)*
Q83AH	Valve Lifter Oil Solenoid Valve - Cylinder 8	L82/L84/L87	In the engine compartment, beneath cylinder head, next to cylinder 8	—	*Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)*
Q97	Engine Coolant Flow Control Valve	L3B	In the engine compartment, left, attached to the front of the Integrated Exhaust Manifold	*Engine Components - Left Front (L3B)*	*Q97 Engine Coolant Flow Control Valve (L3B)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q97B	Engine Coolant Flow Control Valve - Block	LM2	In the engine compartment, left front, attached the front of the Integrated Exhaust Manifold, at the top	*Engine Components - Left Rear (LM2)*	*Q97B Engine Coolant Flow Control Valve - Block (LM2)*
Q97M	Engine Coolant Flow Control Valve - Main	LM2	In the engine compartment, left front, attached to the front of the Integrated Exhaust Manifold, behind the G13 Generator	*Engine Components - Left Rear (LM2)*	*Q97M Engine Coolant Flow Control Valve - Main (LM2)*
R6A	Terminating Resistor - High Speed Bus	—	Under the vehicle, near the left frame rail, above the spare tire, taped in the chassis harness	—	*R6A Terminating Resistor - High Speed Bus (IOS/IOT)*
R6E	Terminating Resistor - High Speed Extension Bus 1	UEU/UHX	In the passenger compartment, right front, above headliner, near A9B Outside Rearview Mirror - Passenger	*Headliner Components*	*R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)*
R6F	Terminating Resistor - High Speed Extension Bus 2	—	In the passenger compartment, in the top of the right side of the instrument panel	—	*R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)*
S2	Transmission Manual Shift Switch	—	In the passenger compartment, part of the transmission shift lever	*Steering Column Components*	*S2 Transmission Manual Shift Switch*
S3	Transmission Shift Lever	—	In the passenger compartment, mounted to the steering column	—	*S3 Transmission Shift Lever*
S13D	Door Lock Switch - Driver	—	In the passenger compartment, in the driver door handle trim panel	*Driver Door Trim Components*	*S13D Door Lock Switch - Driver*
S13P	Door Lock Switch - Passenger	—	In the passenger compartment, in the passenger door handle trim panel	*Passenger Door Trim Components*	*S13P Door Lock Switch - Passenger (AU3)*
S27	Head-Up Display Switch	UV6	In the passenger compartment, left front, left of the steering column, in the instrument panel	*Instrument Panel - Front*	*S27 Head-Up Display Switch (UV6)*
S30	Headlamp Switch	—	In the passenger compartment, left of the steering column, in the instrument panel	*Instrument Panel - Front*	*S30 Headlamp Switch*
S32R	Seat Heating Control Switch - Rear	KA6	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*S32R Seat Heating Switch - Rear (D07 +KA6)*
S33	Horn Switch	—	In the passenger compartment, in the center of the steering wheel, behind the driver side air bag	—	*S33 Horn Switch*
S38	Ignition Mode Switch	BTM	In the passneger compartment, right of the steering column, in the instrument panel	*Instrument Panel - Front*	*S38 Ignition Mode Switch (BTM)*
S39	Ignition Switch	-BTM	In the passenger compartment, behind the steering wheel, on the right side of the steering column	*Steering Column Components*	*S39 Ignition Switch (-BTM)*
S47D	Seat Memory Switch - Driver	—	In the passenger compartment, on the driver door panel above the driver door switch assembly	*Driver Door Trim Components*	*S47D Seat Memory Switch - Driver (A45)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S51	Telematics Button Assembly	UE1	In the passenger compartment, part of the inside rearview mirror	—	—
S52	Outside Rearview Mirror Switch	—	In the passenger compartment, on the driver door trim panel	—	—
S64D	Seat Adjuster Switch - Driver	—	In the passenger compartment, mounted to the outboard side of the driver seat cushion	*Driver Seat Components*	*S64D Seat Adjuster Switch - Driver*
S64P	Seat Adjuster Switch - Passenger	—	In the passenger compartment, mounted to the outboard side of the passenger seat cushion	*Passenger Seat Components*	*S64P Seat Adjuster Switch - Passenger*
S65D	Seat Lumbar Support Switch - Driver	A2X	In the passenger compartment, mounted to the outboard side of the driver seat cushion	*Driver Seat Components*	*S65D Seat Lumbar Support Switch - Driver (A2X-A45)*
S65P	Seat Lumbar Support Switch - Passenger	A7K	In the passenger compartment, mounted to the outboard side of the passenger seat cushion	*Passenger Seat Components*	*S65P Seat Lumbar Support Switch - Passenger (A7K)*
S70E	Steering Wheel Controls Switch - Radio Presets	—	In the passenger compartment, on the left rear side of the steering wheel	—	*S70E Steering Wheel Controls Switch - Radio Presets (UK3)*
S70F	Steering Wheel Controls Switch - Radio Volume	—	In the passenger compartment, on the right rear side of the steering wheel	—	*S70F Steering Wheel Controls Switch - Radio Volume (UK3)*
S70L	Steering Wheel Controls Switch - Left	—	In the passenger compartment, on the left side of the steering wheel	—	*S70L Steering Wheel Controls Switch - Left*
S70R	Steering Wheel Controls Switch - Right	—	In the passenger compartment, on the right side of the steering wheel	—	*S70R Steering Wheel Controls Switch - Right*
S76	Trailer Brake Control Switch	—	In the passenger compartment, center of the instrument panel, below S48C Multifunction Switch 1 - Instrument Panel	*Instrument Panel - Front*	*S76 Trailer Brake Control Switch (JL1)*
S78	Turn Signal/Multifunction Switch	—	In the passenger compartment, on the left side of the steering column	*Steering Column Components*	*S78 Turn Signal/Multifunction Switch*
S79D	Window Switch - Driver	—	In the passenger compartment, behind the driver door trim panel, center of the door	—	—
S79LR	Window Switch - Left Rear	—	In the passenger compartment, at the center of the left rear door, on the door trim panel	• *Rear Door Trim Components (Extended Cab/Crew Cab)* • *Right Rear Door Components (Extended Cab/Crew Cab)*	*S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)*
S79P	Window Switch - Passenger	—	In the passenger compartment, on the passenger door trim panel, center of the door	*Passenger Door Trim Components*	• *S79P Window Switch - Passenger (AED)* • *S79P Window Switch - Passenger (AEF)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S79RR	Window Switch - Right Rear	—	In the passenger compartment, on the right rear door trim panel, center of the door	*Rear Door Trim Components (Extended Cab/Crew Cab)*	*S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)*
S86	Vehicle Stability Control Switch	—	In the passenger compartment, front center, attached to instrument panel, between S171L Instrument Panel Center Accessory Function Switch - Left and S171R Instrument Panel Center Accessory Function Switch - Right	*Instrument Panel - Front*	*S86 Vehicle Stability Control Switch*
S126	Drive Mode Select Switch	URC	In the passenger compartment, left front, left side of the instrument panel, above S30 Headlamp Switch	*Instrument Panel - Front*	*S126 Drive Mode Select Switch (URC)*
S146	Window/Outside Rearview Mirror Switch - Driver	—	In the passenger compartment, left front, attached to driver door trim	*Driver Door Trim Components*	*S146 Window/Outside Rearview Mirror Switch - Driver*
S148L	Assist Step Kick Switch - Left	BRS	Under the vehicle, along the left frame rail, under the driver door part of the power assist step	—	*S148L Assist Step Kick Switch - Left (BRS)*
S148R	Assist Step Kick Switch - Right	BRS	Under the vehicle, along the right frame rail, under the passenger door part of the power assist step	—	*S148R Assist Step Kick Switch - Right (BRS)*
S157	Pickup Box Endgate Unlatch Switch	QT5	Outside of the vehicle, at the rear of the vehicle, on the endgate	*Endgate Components (QK2)*	*S157 Pickup Box Endgate Unlatch Switch*
S159E	Pickup Box Endgate Control Switch - Exterior	QT6/QK2	Outside of the vehicle, at the rear of the vehicle, on the endgate	• *Endgate Components (QK2)* • *Endgate Components (QT6)*	• *S159E Pickup Box Endgate Control Switch - Exterior (QK1)* • *S159E Pickup Box Endgate Control Switch - Exterior (QK2)*
S171L	Instrument Panel Center Accessory Function Switch - Left	—	In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, left switch bank	*Instrument Panel - Front*	*S171L Instrument Panel Center Accessory Function Switch - Left*
S171R	Instrument Panel Center Accessory Function Switch - Right	—	In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, right switch bank	*Instrument Panel - Front*	*S171R Instrument Panel Center Accessory Function Switch - Right*
S172	Auxiliary Multifunction Switch	9L7	In the passenger compartment, mounted to the instrument panel	—	*S172 Auxiliary Multifunction Switch (9L7)*
T1	Accessory DC/AC Power Inverter Module	KI4/KI5	In the passenger compartment, rear center, mounted ot the rear wall	• *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)* • *Passenger Compartment - Left Rear (Regular Cab)*	• *T1 Accessory DC/AC Power Inverter Module X1 (KI4/KI5)* • *T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T2	Antenna	—	In the passenger compartment, on the steering column side, internal to the Immobilizer Control Module	—	—
T3	Audio Amplifier	UQA	In the rear passenger compartment, mounted behind the rear seat, below the rear window	*Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*	• *T3 Audio Amplifier X1 (UQA)* • *T3 Audio Amplifier X2 (UQA)* • *T3 Audio Amplifier X3 (UQA)* • *T3 Audio Amplifier X4 (UQA)*
T4G	Cellular Phone, Navigation, and Digital Radio Antenna	—	Outside the vehicle, at the front left of the roof	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	• *T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)* • *T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)*
T4M	Radio Antenna	—	Outside the vehicle, at the right rear of the hood	• *Front of Vehicle Components (Chevrolet)* • *Front of Vehicle Components (GMC)*	*T4M Radio Antenna*
T4P	Navigation Antenna	(IOS/IOT)-UE1	Outside of the vehicle	—	*T4P Navigation Antenna ((IOS/IOT)-UE1)*
T4S	Wireless Communication Antenna - Bluetooth	—	Outside the vehicle, at the rear of the right front fender	—	—
T8A	Ignition Coil 1	L3B/L82/L84/L87/LV3	In the engine compartment, at the top of the engine, above cylinder 1	• *Engine Components - Top (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LV3)*	• *T8A Ignition Coil 1 (L3B)* • *T8A Ignition Coil 1 (L82/L84/L87/LV3)*
T8B	Ignition Coil 2	L3B/L82/L84/L87/LV3	In the engine compartment, at the top of the engine, above cylinder 2	• *Engine Components - Top (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LV3)*	• *T8B Ignition Coil 2 (L3B)* • *T8B Ignition Coil 2 (L82/L84/L87/LV3)*
T8C	Ignition Coil 3	L3B/L82/L84/L87/LV3	In the engine compartment, at the top of the engine, above cylinder 3	• *Engine Components - Top (L3B)* • *Engine Components - Top (L82/L84/L87)* • *Engine Components - Top (LV3)*	• *T8C Ignition Coil 3 (L3B)* • *T8C Ignition Coil 3 (L82/L84/L87/LV3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T8D	Ignition Coil 4	L3B/L82/L84/ L87/LV3	In the engine compartment, at the top of the engine, above cylinder 4	• *Engine Components - Top (L3B)* • *Engine Components - Top (L82/ L84/L87)* • *Engine Components - Top (LV3)*	• *T8D Ignition Coil 4 (L3B)* • *T8D Ignition Coil 4 (L82/L84/L87/ LV3)*
T8E	Ignition Coil 5	L82/L84/L87/ LV3	In the engine compartment, at the top of the engine, above cylinder 5	• *Engine Components - Top (L82/ L84/L87)* • *Engine Components - Top (LV3)*	*T8E Ignition Coil 5 (L82/L84/L87/LV3)*
T8F	Ignition Coil 6	L82/L84/L87/ LV3	In the engine compartment, at the top of the engine, above cylinder 6	• *Engine Components - Top (L82/ L84/L87)* • *Engine Components - Top (LV3)*	*T8F Ignition Coil 6 (L82/L84/L87/LV3)*
T8G	Ignition Coil 7	L82/L84/L87	In the engine compartment, at the top of the engine, above cylinder 7	*Engine Components - Top (L82/L84/L87)*	*T8G Ignition Coil 7 (L82/L84/L87)*
T8H	Ignition Coil 8	L82/L84/L87	In the engine compartment, at the top of the engine, above cylinder 8	*Engine Components - Top (L82/L84/L87)*	*T8H Ignition Coil 8 (L82/L84/L87)*
T10B	Keyless Entry Antenna - Instrument Panel Compartment	BTM	In the passenger compartment, front center, within instrument panel, in front of P17 Info Display Module	*Instrument Panel - Rear*	*T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)*
T10C	Keyless Entry Antenna - Left Front Door Handle	—	Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior	—	—
T10D	Keyless Entry Antenna - Right Front Door Handle	—	Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior	—	—
T10E	Keyless Entry Antenna - Rear Compartment	BTM	At the rear of the vehicle, in front of the center of the rear bumper	*Rear of Vehicle Components*	*T10E Keyless Entry Antenna - Rear Compartment (BTM)*
T10J	Keyless Entry Antenna - Center Console Front	—	In the passenger compartment, front center, beneath floor console or center seat.	—	*T10J Keyless Entry Antenna - Center Console Front (BTM +D07)*
T10V	Keyless Entry Antenna - Front Middle Seat	-D07	In the passenger compartment, front center, beneath the front middle seat	—	*T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)*
T12	Automatic Transmission Assembly	—	Under the vehicle, mounted to the rear of the engine	—	• *T12 Automatic Transmission Assembly X1 (MQB)* • *T12 Automatic Transmission Assembly X2 (MQB)* • *T12 Automatic Transmission Assembly X3 (MQB)*
T19	Power Supply Transformer	KL9	In the passenger compartment, right front, between the instrument panel and bulkhead	*Behind Instrument Panel - Right*	*T19 Power Supply Transformer (KL9)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T22	Mobile Device Wireless Charger Module	K4C	In the passenger compartment, forward of center, in the floor console bin lid.	*Floor Console Components*	*T22 Mobile Device Wireless Charger Module (K4C)*
W24	Blunt Cut - Trailer Brakes Provision	Z82-JL1	In the passenger compartment, under left side of the instrument panel	—	—
W25	Blunt Cut - Configurable Provision	9L7	In the passenger compartment, under the instrument panel, left of the brake pedal	—	—
X50A	Fuse Block - Underhood	—	In the engine compartment, right front, in front of C1 Battery	*Engine Compartment Components*	*Electrical Center Identification Views on page 6-188*
X50B	Fuse Block - Underhood Auxiliary	LM2	In the engine compartment	—	*Electrical Center Identification Views on page 6-188*
X50D	Fuse Block - Battery	—	In the engine compartment, right front, on top of C1 Battery	*Engine Compartment Components*	*Electrical Center Identification Views on page 6-188*
X51B	Fuse Block - Instrument Panel Auxiliary	9L7	In the passenger compartment	—	*Electrical Center Identification Views on page 6-188*
X51L	Fuse Block - Instrument Panel Left	—	In the passenger compartment, left side of the instrument panel, behind side trim panel	—	*Electrical Center Identification Views on page 6-188*
X51R	Fuse Block - Instrument Panel Right	—	In the passenger compartment, right side of the instrument panel, behind side trim panel	—	*Electrical Center Identification Views on page 6-188*
X54	Fuse Block - Snow Plow	—	In the engine compartment	—	*Electrical Center Identification Views on page 6-188*
X55SP	Fuse Holder - Snow Plow	—	In the engine compartment	—	*Electrical Center Identification Views on page 6-188*
X80C	Accessory Power Receptacle - Cargo	KC9/KCA	Outside of the vehicle, right rear corner of the truck bed	—	*X80C Accessory Power Receptacle - Cargo (KC9/KCA)*
X80G	Accessory Power Receptacle - Instrument Panel	—	In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls	*Instrument Panel - Front*	*X80G Accessory Power Receptacle - Instrument Panel*
X80L	Accessory Power Receptacle - Center Console Rear	D07/AZ3	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*X80L Accessory Power Receptacle - Center Console Rear (A50/D07)*
X80M	Accessory Power Receptacle - Rear Seat	—	In the passenger compartment, center, on the rear of the floor console	—	*X80M Accessory Power Receptacle - Rear Seat (KPA +(AE7/AZ3))*
X81	Accessory Power Receptacle - 110V AC	KI4	In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel	*Instrument Panel - Front*	• *X81 Accessory Power Receptacle - 110V AC X1 (KI4)* • *X81 Accessory Power Receptacle - 110V AC X2 (KI4)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X81B	Accessory Power Receptacle - 220V AC	KI5	In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel	*Instrument Panel - Front*	• *X81B Accessory Power Receptacle - 220V AC X1 (KI5)* • *X81B Accessory Power Receptacle - 220V AC X2 (KI5)*
X83	Auxiliary Audio Input	—	In the passenger compartment, in the center console storage compartment	*Floor Console Components*	• *X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)* • *X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)*
X84	Data Link Connector	—	In the passenger compartment, at the bottom of the driver side of the instrument panel	*Instrument Panel - Front*	*X84 Data Link Connector*
X85	Steering Wheel Air Bag Coil	—	In the passenger compartment, behind the steering wheel	*Steering Column Components*	• *X85 Steering Wheel Air Bag Coil X1* • *X85 Steering Wheel Air Bag Coil X2*
X88	Trailer Connector	—	On the vehicle exterior, at the rear of the vehicle, left of the license plate	*Rear of Vehicle Components*	• *X88 Trailer Connector X1 (Z82-U1D)* • *X88 Trailer Connector X2 (UVI)*
X92	USB Receptacle	—	In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls	*Instrument Panel - Front*	• *X92 USB Receptacle X1* • *X92 USB Receptacle X2* • *X92 USB Receptacle X3 (D07 +(IOS/IOT))*
X92B	USB Receptacle - Rear Seat	D07/AZ3	In the passenger compartment, center, on the rear of the floor console	—	*X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)*
X92C	USB Receptacle - Center Console Rear	D07/AZ3	In the passenger compartment, center, on the rear of the floor console	*Floor Console Components*	*X92C USB Receptacle - Center Console Rear ((IOS/IOT) +(A50/D07))*
X100	Front Fascia Harness to Body Harness	T3U/UD5	In the engine compartment, near the center of the lower radiator support	*Front Bumper Harness Routing*	*X100 Front Fascia Harness to Body Harness (T3U/UD5)*
X109	Chassis Harness to Body Harness	UVB	Under the vehicle, in right front wheel well, near frame rail	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X109 Chassis Harness to Body Harness (UVB)*
X110	Body Harness to Left Headlamp Harness	—	In the engine compartment, at the rear of the left headlamp assembly	—	*X110 Body Harness to Left Headlamp Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X111	Transfer Case Harness to Engine Harness	NP0/NQH	Under the vehicle, near the front axle	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	• *X111 Transfer Case Harness to Engine Harness ((NP0/NQH) +LM2)* • *X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)*
X115	Engine Harness to Body Harness	—	In the front of the engine compartment, near the upper left of the radiator support	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	*X115 Engine Harness to Body Harness*
X120	Body Harness to Right Headlamp Harness	—	In the engine compartment, at the rear of the right headlamp assembly	—	*X120 Body Harness to Right Headlamp Harness*
X127	Grille Frontview Camera Harness to Body Harness	—	• (UV2) At the front of the vehicle • (UVI) At the front of the vehicle	—	*X127 Grille Frontview Camera Harness to Body Harness (UV2)*
X132	Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness	VTI/WMI	At the front of the vehicle, at center, behind upper grille at hood latch	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)*	*X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)*
X133	Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness	WMI	Under the vehicle, clipped to the steering gear	—	*X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)*
X136	Chassis Harness to Electronic Suspension Strut Extension Harness	Z45	In the engine compartment, left side, attached to the left frame rail, behind the left strut tower	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Electronic Suspension Strut Extension Harness Routing*	*X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)*
X137	Chassis Harness to Electronic Suspension Strut Extension Harness	Z45	In the engine compartment, right side, attached to the right frame rail, behind the right strut tower	*Electronic Suspension Strut Extension Harness Routing*	*X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X138	Body Harness to Chassis Harness	—	In the rear of the engine compartment, near the rear of the under hood fuse block	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X138 Body Harness to Chassis Harness*
X140	Chassis Harness to Body Harness	—	In the engine compartment, left side	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X140 Chassis Harness to Body Harness*
X143	DEF Jumper Harness to Chassis Harness	LM2	At the right rear of the engine compartment, near the frame	—	*X143 DEF Jumper Harness to Chassis Harness (LM2)*
X153	Engine Harness to Coolant Temperature Jumper Harness	LM2	In the engine compartment, near coolant temperature sensor	—	*X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)*
X154	Engine Harness to Camshaft Position Sensor Jumper Harness	L82/L84/L87/ LV3	In the engine compartment, near the fuel rail	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L82)*	• *X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)* • *X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)*
X155	Engine Harness to Active Fuel Management Solenoid Jumper Harness	L82/L84/L87	In the engine compartment, at the intake manifold	—	*X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)*
X156	Engine Harness to Active Fuel Management Solenoid Jumper Harness	L82/L84/L87	In the engine compartment, at the intake manifold	*Engine Harness Routing - Left Front (L82)*	*X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87)*
X157	Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness	L82/L84/L87	In the engine compartment, at the intake manifold	—	*X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)*
X158	Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness	L82/L84/L87/ LV3	At the left front of the engine compartment	—	• *X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)* • *X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L87)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X160	Engine Harness to Fuel Rail Harness	L3B	In the engine compartment, rear of the engine near the top center	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)* • *Engine Harness Routing - Top (LV3)*	• *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)* • *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)* • *X160 Engine Harness to Fuel Injector Harness (LM2)* • *X160 Engine Harness to Fuel Rail Harness (L3B)*
X160	Engine Harness to Bank 1 Fuel Rail Harness	L82/L84/L87/ LV3	In the engine compartment, rear of the engine near the top center	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)* • *Engine Harness Routing - Top (LV3)*	• *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)* • *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)* • *X160 Engine Harness to Fuel Injector Harness (LM2)* • *X160 Engine Harness to Fuel Rail Harness (L3B)*
X160	Engine Harness to Fuel Injector Harness	LM2	In the engine compartment, rear of the engine near the top center	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)* • *Engine Harness Routing - Top (LV3)*	• *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)* • *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)* • *X160 Engine Harness to Fuel Injector Harness (LM2)* • *X160 Engine Harness to Fuel Rail Harness (L3B)*
X161	Engine Harness to Bank 2 Fuel Rail Harness	L82/L84/L87/ LV3	In the engine compartment, rear of the engine near the top right	• *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)* • *Engine Harness Routing - Top (LV3)*	• *X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)* • *X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X171	Engine Harness to Chassis Harness	—	On the engine, near the even ignition coils	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)* • *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Left Front (LM2)*	*X171 Engine Harness to Chassis Harness*
X172	Engine Harness to Glow Plug Jumper Harness	LM2	In the engine compartment, left front, above the G13 Generator	—	*X172 Engine Harness to Glow Plug Jumper Harness (LM2)*
X175	Engine Harness to Transmission Harness	MQE	Under the vehicle, at the rear of the T12 Automatic Transmission Assembly	*Engine Harness Routing - Right Rear (L3B)*	*X175 Engine Harness to Transmission Harness (MQE)*
X176	Transmission Case Harness to Transmission Control Harness	—	Under the vehicle, inside the T12 Automatic Transmission Assembly	—	• *X176 Transmission Case Harness to Transmission Control Harness (MQB)* • *X176 Transmission Case Harness to Transmission Control Harness (MQE)*
X177	Transmission Case Harness to Speed Sensor Assembly Harness	MQB	In the engine compartment, at the right front of the engine compartment, near the mass airflow sensor	—	• *X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQB)* • *X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)*
X182	Chassis Harness to Power Steering Harness	Z45	In the engine compartment, near cylinder 2 fuel injector	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X182 Chassis Harness to Power Steering Harness (Z45)*
X183	Power Steering Harness to Power Steering Jumper Harness	—	In the engine compartment, near cylinder 3 fuel injector	—	*X183 Power Steering Harness to Power Steering Jumper Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X205	Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness	—	In the passenger compartment, behind the right side of the instrument panel near the center	—	*X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness*
X209	Instrument Panel Harness to Body Harness	UVB	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)* • *Instrument Panel Harness Routing*	*X209 Instrument Panel Harness to Body Harness (UVB)*
X211	Instrument Panel Harness to Body Harness	—	In the passenger compartment, at the top right of the instrument panel, under the defroster duct trim	• *Body Harness Routing - Right Front (Extended Cab)* • *Instrument Panel Harness Routing*	*X211 Instrument Panel Harness to Body Harness*
X225	Instrument Panel Harness to Body Harness	—	In the passenger compartment, behind the lower left side of the instrument panel	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)* • *Instrument Panel Harness Routing*	*X225 Instrument Panel Harness to Body Harness*
X241	Body Harness to Power Inverter Module Jumper Harness	KI4/KI5	In the passenger compartment, behind the middle of the instrument panel	• *Body Harness Routing - Left Rear (Extended Cab/Crew Cab)* • *Body Harness Routing - Left Rear (Regular Cab)*	*X241 Body Harness to Power Inverter Module Jumper Harness (KI5)*
X250	Auxiliary Heater Jumper Harness to Body Harness	C32	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)*	*X250 Auxiliary Heater Jumper Harness to Body Harness (C32)*
X255	USB Receptacle Jumper Harness to Floor Console Harness	D07+(IOS/IOT)	In the passenger compartment, center, underneath the front of the floor console	*Floor Console Harness Routing*	*X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X256	Headliner Harness to Instrument Panel Harness	—	In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel	• *Headliner Harness Routing* • *Headliner Harness Routing (Extended Cab)* • *Instrument Panel Harness Routing*	*X256 Headliner Harness to Instrument Panel Harness*
X260	Auxiliary Instrument Panel Harness to Instrument Panel Harness	9L7	In the passenger compartment, left front, within instrument panel, above X84 Data Link Connector	*Instrument Panel Harness Routing*	*X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness*
X275	Instrument Panel Harness to Body Harness	—	In the passenger compartment, behind the lower right side of the instrument panel	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)* • *Instrument Panel Harness Routing*	*X275 Instrument Panel Harness to Body Harness*
X310	Driver Seat Harness to Body Harness	—	In the passenger compartment, under the passenger seat	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	*X310 Driver Seat Harness to Body Harness*
X318	Sunroof Jumper Harness to Headliner Harness	CF5	In the passenger compartment, in the headliner, between near the A-pillar	*Headliner Harness Routing (Extended Cab)*	*X318 Sunroof Jumper Harness to Headliner Harness*
X320	Passenger Seat Harness to Body Harness	—	In the passenger compartment, under the passenger seat	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)*	*X320 Passenger Seat Harness to Body Harness*
X348	Body Harness to Floor Console Harness	D07	In the passenger compartment, center, underneath the rear of the floor console	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)* • *Floor Console Harness Routing*	• *X348 Body Harness to Floor Console Harness (D07)* • *X348 Body Harness to Front Center Seat Harness (AZ3)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X350	Chassis Harness to Fuel Tank Harness	—	Under the vehicle, at the top of the fuel tank, near the fuel pump and level sensor assembly	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X350 Chassis Harness to Fuel Tank Harness*
X370	Body Harness to Rear Seat Harness	KA6	In the passenger compartment, left rear, at the rear wall, behind the rear seat	• *Body Harness Routing - Left Rear (Extended Cab/Crew Cab)* • *Rear Seat Harness Routing (Extended Cab/Crew Cab)*	*X370 Body Harness to Rear Seat Harness (KA6)*
X379	Headliner Harness to Inside Rearview Mirror Jumper Harness	DRZ	In the passenger compartment, at the rear of the headliner	—	*X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)*
X380	Center High Mounted Stop Lamp Jumper Harness to Headliner Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the left C-pillar, near the headliner	*Headliner Harness Routing (Extended Cab)*	*X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)*
X381	Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness	DRZ	In the passenger compartment, at the rear of the headliner	—	*X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)*
X408	Left Assist Step Jumper Harness to Chassis Harness	BRS	Underneath the vehicle	—	*X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)*
X410	Tail Lamp - Left Harness to Chassis Harness	—	At the rear of the vehicle, left corner, underneath, on left frame rail	*Chassis Harness Routing (Extended Cab/Crew Cab)*	*X410 Tail Lamp - Left Harness to Chassis Harness*
X415	Chassis Rear Extension Harness to Chassis Harness	—	Underneath the bed, attached to frame cross rail near the front of the truck bed	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)* • *Rear Chassis Extension Harness Routing*	*X415 Chassis Rear Extension Harness to Chassis Harness*
X418	Right Assist Step Jumper Harness to Chassis Harness	BRS	Underneath the vehicle, along the outside of the right frame rail, beneath left rear door	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Extended Cab/Crew Cab)*	*X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)*
X420	Tail Lamp - Right Harness to Chassis Harness	—	At the rear of the vehicle, right corner, underneath, on right frame rail	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X420 Tail Lamp - Right Harness to Chassis Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X427	Body Harness to Chassis Harness	UVI	Under the vehicle, in right front wheel well, near frame rail	*Chassis Harness Routing (Extended Cab/Crew Cab)*	*X427 Body Harness to Chassis Harness (UVI)*
X428	Chassis Harness to Body Harness	UV2/UVI	Under the rear of the vehicle, to the left of the spare tire	—	*X428 Chassis Harness to Body Harness (UV2/UVI)*
X436	Chassis Harness to Rear Axle Harness	—	Underneath the bed, attached to frame cross rail near the front of the truck bed	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
X450	Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness	KC9/KCA	Underneath the rear of the vehicle, at the right rear corner	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	*X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)*
X500	Driver Door Harness to Body Harness	—	In the passenger compartment, behind the left side of the instrument panel	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)* • *Driver and Passenger Door Harnesses*	*X500 Driver Door Harness to Body Harness*
X505	Driver Door Harness to Driver Door Trim Harness	—	In the driver door, behind the driver door panel	• *Driver and Passenger Door Harnesses* • *Driver and Passenger Door Trim Harnessses*	*X505 Driver Door Harness to Driver Door Trim Harness*
X510	Driver Door Harness to Outside Rearview Mirror - Driver Harness	—	In the driver door, behind the driver door panel, near the A-pillar	*Driver and Passenger Door Harnesses*	*X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness*
X600	Passenger Door Harness to Body Harness	—	In the passenger compartment, behind the right side of the instrument panel	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)* • *Driver and Passenger Door Harnesses*	*X600 Passenger Door Harness to Body Harness*
X605	Passenger Door Harness to Passenger Door Trim Harness	—	In the passenger door, behind the passenger door panel	• *Driver and Passenger Door Harnesses* • *Driver and Passenger Door Trim Harnessses*	*X605 Passenger Door Harness to Passenger Door Trim Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X610	Passenger Door Harness to Passenger Outside Rearview Mirror Harness	—	In the passenger door, behind the passenger door panel, near the A-pillar	*Driver and Passenger Door Harnesses*	*X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness*
X700	Left Rear Door Harness to Body Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the left B-pillar, near the middle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Left Rear and Right Rear Door Harnesses (Extended Cab)*	*X700 Left Rear Door Harness to Body Harness*
X800	Right Rear Door Harness to Body Harness	Extended Cab/ Crew Cab	In the passenger compartment, behind the right B-pillar, near the middle	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Left Rear and Right Rear Door Harnesses (Extended Cab)*	*X800 Right Rear Door Harness to Body Harness*
X901	Rear Fascia Harness to Chassis Harness	—	On the vehicle underbody, behind rear bumper, near the left frame rail	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)* • *Rear Bumper Harness Routing*	*X901 Rear Fascia Harness to Chassis Harness*
X904	Chassis Harness to Rear Chassis Extension Harness	Z45	Under the vehicle, rear center, above the rear differential	*Rear Chassis Extension Harness Routing*	• *X904 Chassis Harness to Rear Chassis Extension Harness (Z45)* • *X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)*
X904	Rear Chassis Extension Harness to Chassis Harness	-Z45	Under the vehicle, rear center, above the rear differential	*Rear Chassis Extension Harness Routing*	• *X904 Chassis Harness to Rear Chassis Extension Harness (Z45)* • *X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X909	Endgate Coax Harness to Chassis Coax Harness	UVB	Under the vehicle, near the left lower side of the endgate	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)* • *Endgate Harness Routing (QK2)*	*X909 Endgate Harness to Chassis Harness (UVB)*
X926	Endgate Harness to Chassis Harness	QK2/QT5	Under the vehicle, near the left lower side of the endgate	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)* • *Endgate Harness Routing (QK2)*	*X926 Endgate Harness to Chassis Harness (QK2/QT5)*
X929	Endgate Harness to Chassis Harness	UV2/UVI	under the vehicle, in the endgate, near B87 Rearview Camera	—	*X929 Endgate Harness to Chassis Harness (UV2/UVI)*
G110	Body Harness	—	In the engine compartment, left side, attached to body	*G110, G114, G120, and G128*	—
G114	Engine Harness	—	In the engine compartment, left side, attached to body	*G110, G114, G120, and G128*	—
G115	Engine Harness	—	• (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger • (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above the engine oil filter housing	• *G115 and G121 (L3B)* • *G115, G117, and G118 (LM2)* • *G117, G121, and G122 (LV3)*	—
G116	Power Steering Harness	—	In the engine compartment, center	—	—
G117	Engine Harness	—	• (L3B) In the engine compartment, rear center, attached to the back of the right side of the cylinder head • (L82/L84/L87/LV3) In the engine compartment, attached to the left side of the engine block, below the exhaust manifold • (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above engine oil filter housing	• *G115, G117, and G118 (LM2)* • *G117 (L3B)* • *G117 (L82/L84/L87)*	—
G118	Engine Harness	LM2	In the engine compartment, left rear, attached to left rear side of engine block, near bellhousing	*G115, G117, and G118 (LM2)*	—
G120	Body Harness	—	In the engine compartment, right side, right of C1 Battery	*G110, G114, G120, and G128*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G121	Engine Harness	—	• (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger • (L82/L84/L87/LV3) In the engine compartment, left rear, attached to the rear of the left cylinder head	• *G115 and G121 (L3B)* • *G117, G121, and G122 (LV3)* • *G121 and G122 (L82/L84/L87)*	—
G122	Engine Harness	—	(L82/L84/L87/LV3) In the engine compartment, right rear, attached to right rear cylinder head	• *G117, G121, and G122 (LV3)* • *G121 and G122 (L82/L84/L87)*	—
G128	Body Harness	—	In the engine compartment, right rear, attached to bulkhead, near grommet for body harness	*G110, G114, G120, and G128*	—
G130	Negative Battery Cable Harness	—	In the engine compartment, right rear corner	—	—
G131	Frame Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm	*G131, G132, G133, and G134*	—
G132	Engine Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm	*G131, G132, G133, and G134*	—
G133	Frame Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm	*G131, G132, G133, and G134*	—
G134	Engine Ground Strap	—	Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm	*G131, G132, G133, and G134*	—
G200	Instrument Panel Harness	—	In the passenger compartment, left front, below A-pillar, behind driver side kick panel	*G200*	—
G215	Electrical Auxiliary Heater Jumper Harness	—	In the passenger compartment, right front, within the instrument panel	—	—
G220	Instrument Panel Harness	—	In the passenger compartment, right front, below A-pillar, behind passenger side kick panel	*G220*	—
G300	Body Harness	—	In the passenger compartment, left side, at the bottom of the B-pillar	*G300 and G308*	—
G308	Body Harness	—	In the passenger compartment, left side, beneath the driver seat	*G300 and G308*	—
G312	Body Harness	—	In the passenger compartment, right side, beneath the passenger seat	*G312 and G320*	—
G320	Body Harness	—	In the passenger compartment, right side, at the bottom of the B-pillar	*G312 and G320*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G322	Chassis Harness	—	Under the vehicle, right side, within chassis harness, near the front hanger for the right rear leaf spring	*G322, G400, G405, and G415*	—
G400	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the right side of the frame	*G322, G400, G405, and G415*	—
G405	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the center of the frame	*G322, G400, G405, and G415*	—
G415	Chassis Harness	—	Under the rear of the vehicle, in front of the tow hitch, mounted to the left side of the frame	*G322, G400, G405, and G415*	—
G420	Chassis Harness	—	At the rear of the vehicle, right side, in the rear bumper	—	—
J100	Front Bumper Harness	UD5	Front of vehicle, left of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	*Front Bumper Harness Routing*	—
J101	Front Bumper Harness	UD5	Front of vehicle, center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	*Front Bumper Harness Routing*	—
J102	Front Bumper Harness	T3U	Front of vehicle, right of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle	*Front Bumper Harness Routing*	—
J103	Active Grille Air Shutter Jumper 1 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness	—	—
J104	Active Grille Air Shutter Jumper 2 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 2 Harness	—	—
J105	Active Grille Air Shutter Jumper 1 Harness	—	At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness	—	—
J110	Left Headlamp Assembly Harness	—	Outside of the vehicle, left front corner, within E13LA Headlamp Assembly - Left	—	—
J111	Left Headlamp Harness	X88+Base	At the left front of vehicle, within E13LA Headlamp Assembly - Left	—	—
J112	Left Headlamp Harness	(X88-Base)/ (Z88)	At the left front of vehicle, within E13LA Headlamp Assembly - Left	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J120	Right Headlamp Assembly Harness	—	Outside of the vehicle, right front corner, within E13RA Headlamp Assembly - Right	—	—
J121	Right Headlamp Harness	X88+Base	At the right front of vehicle, within E13RA Headlamp Assembly - Right	—	—
J122	Right Headlamp Harness	(X88-Base)/ (Z88)	At the right front of vehicle, within E13RA Headlamp Assembly - Right	—	—
J130	Body Harness	—	• In the engine compartment, left front, approximately 14 cm (5.5 in) from breakout to G24 Windshield Washer Pump and B118B Windshield Washer Fluid Level Switch •	—	—
J131	Body Harness	—	Outside of the vehicle, left front, under air inlet grille panel, in breakout to M75 Windshield Wiper Motor	—	—
J132	Body Harness	—	• (Regular Cab) In the engine compartment, left rear, approximately 23 cm (9.1 in) from breakout to M75 Windhsield Wiper and B20 Brake Fluid Level Switch • (Extended Cab/Crew Cab) In the engine compartment, left rear, approximately 10 cm (3.9 in) from breakout to K160 Brake System Control Module, towards the rear of the vehicle	—	—
J133	Body Harness	—	In the engine compartment, right front, approximately 14 cm (5.5 in) from breakout to X50A Fuse Block - Underhood	—	—
J134	Body Harness	Regular Cab	In the engine compartment, right side, approximately 14 cm (5.5 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J150	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to Q38 Throttle Body • (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout to B74 Mnaifold absolute Pressure Sensor • (LM2) In the engine compartment, approximately 8 cm (3.1 in) from breakout to B75C Multifunction Intake Air Sensor • (LV3) In engine compartment, left front, near breakout to K20 Engine Control Module	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—
J151	Engine Harness	—	• (L3B) In the engine compartment, approximately 22 cm (8.7 in) from breakout to B75C Multifunction Intake Air Sensor • (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, approximately 4 cm (1.6 in) from breakout to K69 Transfer Case Control Module • (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J152	Engine Harness	—	• (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 10 cm (3.9 in) from breakout towards ground G122 • (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J153	Engine Harness	—	• (L3B) In the engine compartment, approximately 21 cm (8.3 in) from breakout to K69 Transfer Case Control Module • (L82/L84/L87) In the engine compartment, approximately 4 cm (1.6 in) from breakout to inline connector X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, approximately 3 cm (1.2 in) from breakout to B47B Fuel Rail Pressure Sensor • (LV3) In engine compartment, left front, near breakout to K69 Transfer Case Control Module	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J154	Engine Harness	—	• (L3B) In the engine compartment, approximately 15 cm (5.9 in) from breakout to B75C Multifunction Intake Air Sensor • (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, approximately 9 cm (3.5 in) from breakout towards G18 High Pressure Fuel Pump • (LV3) In engine compartment, left front, between breakout to B75C Multifunction Intake Air Sensor and breakout to K69 Transfer Case Control Module	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—
J155	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to inline connect X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (L82/L84/L87) In the engine compartment, approximately 19 cm (7.5 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LV3) In engine compartment, center front, between breakout to G1 A/C Compressor and breakout to X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (LM2) In the engine compartment, approximately 8 cm (3.1 in) from breakout to inline connector X171 Engine Harness to Chassis Harness	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Right Rear (L3B)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J156	Engine Harness	—	• (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout to ground G117 • (LM2) In the engine compartment, right side, approximately 12 cm (4.7 in) from breakout to exhaust system sensor components • (LV3) In engine compartment, center front, between breakout to Q38 Throttle Body and breakout to B34 Coolant Temperature Sensor	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—
J157	Engine Harness	—	• (L3B) In the engine compartment, approximately 14 cm (5.5 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 18 cm (7.1 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (LM2) In the engine compartment, approximately 18 cm (7.1 in) from breakout to K69 Transfer Case Control Module • (LV3) In the engine compartment, left side, top of engine, between breakout to T8A ignition Coil 1 and breakout to T8C Ignition Coil 3	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J158	Engine Harness	L82/L84/L87/ LV3	• (L3B) In the engine compartment, approximately 4 cm (1.6 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 10 cm (3.9 in) from breakout to ground G121 • (LV3) In the engine compartment, left side, top of engine, between breakout to T8C Ignition Coil 3 and breakout to T8E Ignition Coil 5	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J159	Engine Harness	L82/L84/L87/ LV3	• (L82/L84/L87) In the engine compartment, approximately 6 cm (2.4 in) (LV3) In the engine compartment, center rear, at back of intake manifold, in breakout towards bank 2 ignition coils • (LV3) In the engine compartment, rear center, behind intake manifold, approximately 17 cm (6.7 in) from breakout to T8F Ignition Coil 6	• *Engine Harness Routing - Rear (LV3)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J160	Engine Harness	L82/L84/L87/ LV3	• (LV3) In the engine compartment, right rear, between breakout to ground G122 and breakout to T8D Ignition Coil 4 • (L82/L84/L87) In the engine compartment, approximately 14 cm (5.5 in) from breakout towards ground G122	• *Engine Harness Routing - Rear (LV3)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J161	Engine Harness	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body • (LV3) In the engine compartment, right rear, in breakout to Ground G121 on rear of bank 2 cylinder head	• *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Rear (LV3)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J162	Engine Harness	L3B/L82/L84/ L87/LV3	• (L3B) In the engine compartment, right front, approximately 4 cm (1.6 in) from breakout to X50D Fuse Block - Battery • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor • (LV3) Under vehicle, left side of transmission, behind breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52D Heated Oxygen Sensor Bank 1 Sensor 2	• *Engine Harness Routing - Rear (LV3)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J163	Engine Harness	—	• (L3B) In the engine compartment, approximately 13 cm (5.1 in) from breakout to K69 Transfer Case Control Module • (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor • (LM2) In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary • (LV3) Under vehicle, left side of transmission, behind breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52D Heated Oxygen Sensor Bank 1 Sensor 2	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Rear (LV3)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J164	Engine Harness	MYC	• (L82) In the engine compartment, left front, approximately 8 cm (3.1 in) from breakout to B75C Multifunction Intake Air Sensor • (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2	• *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Rear (LV3)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J165	Engine Harness	—	• (L3B) In the engine compartment, right front, approximately 3 cm (1.2 in) from breakout to B34B Engine Coolant Temperature Sensor 2 • (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, approximately 14 cm (5.5 in) from breakout to B271 Engine Block Temperature Sensor • (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2	• *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)* • *Engine Harness Routing - Rear (LV3)* • *Engine Harness Routing - Right Rear (L3B)*	—
J166	Engine Harness	—	• (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, in breakout to B68A Knock Sensor 1 and B37B Engine Oil Pressure Sensor • (LM2) In the engine compartment, approximately 15 cm (5.9 in) from breakout towards G18 High Pressure Fuel Pump • (LV3) In the engine compartment, left front, approximately 7 cm (2.8 in) from breakout to T10L Cooling Fan Motor - Left	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—
J167	Engine Harness	MQE	• (L3B) In the engine compartment, approximately 57 cm (22.4 in) from breakout to B26 Crankshaft Position Sensor • (L84) In the engine compartment, approximately 9 cm (3.5 in) from breakout to K71 Transmission Control Module	*Engine Harness Routing - Left Front (L3B)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J168	Transmission Case Harness	MQE	Under the vehicle, within T12 Automatic Transmission Assembly	—	—
J170	Engine Harness	VTI/WMI	• (L3B) In the engine compartment, approximately 7 cm (2.4 in) from breakout to B75C Multifunction Intake Air Sensor • (L82/L84/L87) In the engine compartment, approximately 15 cm (5.9 in) from breakout to inline connector X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness • (LM2) In the engine compartment, approximately 12 cm (4.7 in) from breakout to G13 Generator	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)*	—
J172	Engine Harness	LM2	In the engine compartment, above the engine, approximately 4 cm (1.6 in) from breakout to B195A Nitrogen Oxides Sensor 1, towards the right side of the vehicle	—	—
J173	Engine Harness	—	• (L3B) In the engine compartment, approximately 17 cm (6.7 in) from breakout to K69 Transfer Case Control Module • (L82/L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body • (LM2) In the engine compartment, approximately 14 cm (5.5 in) from breakout to B271 Engine Block Temperature Sensor • (LV3) In the engine compartment, right front, in breakout to G10R Cooling Fan Motor - Right	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)* • *Engine Harness Routing - Left Front (LM2)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J174	Engine Harness	MQB/MQE	• (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout to B75C Multifunction Intake Air Sensor • (L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body • (LM2) In the engine compartment, approximately 23 cm (9.1 in) from breakout to B271 Engine Block Temperature Sensor	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)*	—
J175	Engine Harness	L3B/LM2	• (L3B) In the engine compartment, approximately 25 cm (9.8 in) from breakout to K69 Transfer Case Control Module • (LM2) In the engine compartment, left side, approximately 4 cm (1.6 in) from breakout towards X115 Engine Harness to Body Harness and X50B Fuse Block - Underhood Auxiliary	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)*	—
J176	Engine Harness	LM2	In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary	*Engine Harness Routing - Left Front (LM2)*	—
J177	Engine Harness	LM2	In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary	*Engine Harness Routing - Left Front (LM2)*	—
J178	Engine Harness	L3B/LV3/L82/ L84/L87	• (L3B) In the engine compartment, approximately 6 cm (2.4 in) from breakout towards ignition coils and camshaft sensors/ actuators • (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness • (LM2) In the engine compartment, approximately 4 cm (1.6 in) from breakout to B35 Engine Oil Level Switch, towards the rear of the vehicle	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (L82)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J179	Engine Harness	LV3/L82/L84/ L87	• (L82/L84/L87) In the engine compartment, approximately 18 cm (7.1 in) from breakout to ground G121 • (LV3) In the engine compartment, front center, in engine harness, below the crankshaft balancer	• *Engine Harness Routing - Left (LV3)* • *Engine Harness Routing - Right Rear (L82)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J180	Engine Harness	MQE	• (L3B) In the engine compartment, approximately 35 cm (13.8 in) from breakout to B26 Crankshaft Position Sensor • (L84) In the engine compartment, approximately 22 cm (8.7 in) from breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J181	Engine Harness	MQE	• (L3B) In the engine compartment, approximately 45 cm (17.7 in) from breakout to B26 Crankshaft Position Sensor • (L84) In the engine compartment, approximately 27 cm (10.6 in) from breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Right Rear (L84/L87)*	—
J182	Engine Harness	L3B/LM2	• (L3B) In the engine compartment, approximately 19 cm (7.5 in) from breakout to B75C Multifunction Intake Air Sensor • (LM2) In the engine compartment, approximately 10 cm (3.9 in) from breakout to K69 Transfer Case Control Module	• *Engine Harness Routing - Left Front (L3B)* • *Engine Harness Routing - Left Front (LM2)*	—
J183	Transmission Control Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly	—	—
J186	Transmission Case Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly	—	—
J187	Transmission Control Harness	—	Under the vehicle, within T12 Automatic Transmission Assembly	—	—
J189	Engine Harness	L3B	In the engine compartment, right side, approximately 4 cm (1.6 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness	*Engine Harness Routing - Right Rear (L3B)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J192	Chassis Harness	JL1	In the engine compartment, right side, approximately 8 cm (3.1 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J200	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 12 cm (4.7 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—
J201	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 16 cm (6.3 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—
J202	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 20 cm (7.9 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Regular Cab)* • *Body Harness Routing - Right Front (Extended Cab)*	—
J203	Body Harness	—	In the passenger compartment, front center, forward of instrument panel, approximately 24 cm (9.4 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Regular Cab)* • *Body Harness Routing - Right Front (Extended Cab)*	—
J206	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 52 cm (20.5 in) from breakout to bulkhead grommet, towards center of vehicle	*Body Harness Routing - Right Front (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J207	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 47 cm (18.5 in) from breakout to bulkhead grommet, towards center of vehicle	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)*	—
J208	Body Harness	—	In the passenger compartment, right front, forward of instrument panel, approximately 5 cm (2 in) from breakout to bulkhead grommet, towards center of vehicle	*Body Harness Routing - Right Front (Regular Cab)*	—
J209	Body Harness	—	In the passenger compartment, left front, behind left front kick panel, approximately 19 cm (7.5 in) from breakout to X51L Fuse Block - Instrument Panel Left, towards the rear of the vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)*	—
J210	Body Harness	A48	In the passenger compartment, left front, behind left front kick panel, in breakout to X51L Fuse Block - Instrument Panel Left	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)*	—
J211	Body Harness	LM2	In the body harness	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)*	—
J225	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, behind S30 Headlamp Switch	*Instrument Panel Harness Routing*	—
J226	Instrument Panel Harness	-BTM	In the passenger compartment, left front, within instrument panel, approximately 13 cm (5.1 in) from breakout to P16 Instrument Cluster, towards the left side of the vehicle	*Instrument Panel Harness Routing*	—
J227	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 3 cm (1.2 in) from breakout to P16 Instrument Cluster, towards the left side of the vehicle	*Instrument Panel Harness Routing*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J228	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 8 cm (3.1 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J229	Instrument Panel Harness	UV6	In the passenger compartment, left front, within instrument panel, approximately 8 cm (3.1 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J230	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel, approximately 24 cm (9.4 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J231	Instrument Panel Harness	UE1	In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module	*Instrument Panel Harness Routing*	—
J232	Instrument Panel Harness	—	In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module	*Instrument Panel Harness Routing*	—
J233	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 4 cm (1.6 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J234	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 14 cm (5.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle	*Instrument Panel Harness Routing*	—
J235	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 9 cm (3.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle	*Instrument Panel Harness Routing*	—
J236	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 24 cm (9.4 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J237	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J238	Instrument Panel Harness	UEU/UE1/UDD	In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J239	Instrument Panel Harness	—	In the passenger compartment, front center, within instrument panel, approximately 23 cm (9.1 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J240	Instrument Panel Harness	JL1	In the passenger compartment, front center, within instrument panel, approximately 23 cm (9.1 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle	*Instrument Panel Harness Routing*	—
J241	Instrument Panel Harness	—	In the passenger compartment, front, within instrument panel, on the left side of the instrument panel, in breakout going towards the floor	*Instrument Panel Harness Routing*	—
J242	Instrument Panel Harness	—	In the passenger compartment, right front, within instrument, in front of the left side of the glove box	*Instrument Panel Harness Routing*	—
J271	Steering Wheel Harness	KI3	In the passenger compartment, within the steering wheel	—	—
J281	Body Harness	—	In the passenger compartment, left front, below driver A-pillar, between breakout to B22 Brake Pedal Position Sensor and breakout to inline connector X500 Driver Door Harness to Body Harness	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J282	Body Harness	—	In the passenger compartment, right front, behind passenger side kick panel, approximately 5 cm (4.3 in) from breakout to X51R Fuse Block - Instrument Panel Right, towards rear of vehicle	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)*	—
J297	Steering Wheel Harness	—	In the passenger compartment, left front, within steering wheel	—	—
J310	Driver Seat Harness	A45	In the passenger compartment, left front, within driver seat	—	—
J311	Driver Seat Harness	A45/A2X	In the passenger compartment, left front, within driver seat	—	—
J314	Driver Seat Harness	—	In the passenger compartment, left front, within driver seat	—	—
J316	Driver Seat Harness	KQV	In the passenger compartment, left front, within driver seat	—	—
J317	Driver Seat Harness	KQV	In the passenger compartment, left front, within driver seat	—	—
J319	Driver Seat Harness	KA1	In the passenger compartment, left front, within driver seat	—	—
J321	Body Harness	BTM+(UD5/UD7)	In the passenger compartment, left rear, underneath driver seat, approximately 10 cm (3.9 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards left side of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—
J322	Passenger Seat Harness	—	In the passenger compartment, right front, within passenger seat	—	—
J323	Body Harness	—	In the passenger compartment, left rear, underneath driver seat, approximately 15 cm (5.9 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle	• *Body Harness Routing - Left Front (Regular Cab)* • *Body Harness Routing - Right Front (Crew Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J325	Body Harness	—	In the passenger compartment, left rear, underneath driver seat, approximately 25 cm (9.8 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—
J326	Body Harness	—	In the passenger compartment, right rear, underneath passenger seat, between breakout to ground G312 and breakout to inline connector X348 Front Center Seat Harness to Body Harness	• *Body Harness Routing - Right Front (Crew Cab)* • *Body Harness Routing - Right Front (Extended Cab)* • *Body Harness Routing - Right Front (Regular Cab)*	—
J327	Instrument Panel Harness	—	In the passenger compartment, left rear, underneath driver seat, approximately 38 cm (15 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle	• *Body Harness Routing - Left Front (Crew Cab)* • *Body Harness Routing - Left Front (Extended Cab)* • *Body Harness Routing - Left Front (Regular Cab)*	—
J329	Body Harness	KA1	In the passenger compartment, right front, within passenger seat back	—	—
J330	Body Harness	UVI/UV2	In the passenger compartment, in the body harness	—	—
J333	Floor Console Harness	KA6	In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment	*Floor Console Harness Routing*	—
J334	Floor Console Harness	AZ3/D07	In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment	*Floor Console Harness Routing*	—
J335	Floor Console Harness	AZ3/D07	In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment	*Floor Console Harness Routing*	—
J336	Floor Console Harness	IOS/IOT	In the passenger compartment, beneath floor console, in the breakout to X83 Auxiliary Audio Input	*Floor Console Harness Routing*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J351	Headliner Harness	—	• (Regular Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel • (Extended Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel • (Crew Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel	• *Headliner Harness Routing* • *Headliner Harness Routing (Extended Cab)*	—
J353	Headliner Harness	DH6	In passenger compartment, right front, above headliner, right of breakout to A3R Sunshade - Right	• *Headliner Harness Routing* • *Headliner Harness Routing (Extended Cab)*	—
J354	Headliner Harness	DD8/DRZ/UEU	In passenger compartment, front, above headliner, between breakout to R6E Terminating Resistor - High Speed Extension Bus 1 and breakout to A98 Front Overhead Console Assembly	*Headliner Harness Routing (Extended Cab)*	—
J355	Headliner Harness	Extended Cab/ Crew Cab	In the passenger compartment, right front, above headliner, near passenger A-pillar, in breakout towards rear of vehicle	*Headliner Harness Routing (Extended Cab)*	—
J370	Rear Seat Harness	KA6	In the passenger compartment, rear, within rear seat	—	—
J390	Chassis Harness	LM2	Under the vehicle, inside of the right frame rail, near the rear of the transmission crossmember	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
J391	Chassis Harness	LM2	Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
J392	Chassis Harness	LM2	Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
J393	Chassis Harness	LM2	Outside of the vehicle, below right rear door, outside of the frame rail, forward of breakout to B136 Exhaust Particulate Matter Sensor	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
J394	Chassis Harness	BRS	Outside of the vehicle, below right rear door, outside of the frame rail, approximately 21 cm (8.3 in) from breakout to K4 Assist Step Control Module, towards the front of the vehicle	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J410	Left Tail Lamp Harness	—	Outside of the vehicle, left rear corner, within E42L Tail Lamp Assembly - Left	—	—
J411	Left Tail Lamp Harness	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
J412	Left Tail Lamp Harness	X88+Base	At the left rear of vehicle, within E42L Tail Lamp Assembly - Left	—	—
J420	Right Tail Lamp Harness	—	Outside of the vehicle, right rear corner, within E42R Tail Lamp Assembly - Right	—	—
J421	Right Tail Lamp Harness	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—
J422	Right Tail Lamp Harness	X88+Base	At the right rear of vehicle, within E42R Tail Lamp Assembly - Right	—	—
J475	Chassis Harness	LM2	Under the vehicle, right rear corner, inside of the right frame rail, approximately 21 cm (8.3 in) from breakout towards fuel tank, towards the front of the vehicle	*Chassis Harness Routing (Extended Cab/Crew Cab)*	—
J476	Chassis Harness	—	• (Regular Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 5 cm (2 in) from breakout towards fuel tank, towards the front of the vehicle • (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 11 cm (4.3 in) from breakout towards fuel tank, towards the front of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J477	Chassis Harness	—	• (Regular Cab) Under the vehicle, at the right rear corner, approximately 17 cm (6.7 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle • (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 45 cm (17.8 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J478	Chassis Harness	—	• (Regular Cab) Under the vehicle, at the right rear corner, inside of right side frame rail, approximately 33 cm (13 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle • (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 10 cm (3.9 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J479	Chassis Harness	U1D	Under the vehicle, right rear corner, inside of right side frame rail, approximately 5 cm (2 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J480	Chassis Harness	—	Under the vehicle, at the right rear corner, approximately 28 cm (11 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J481	Chassis Harness	—	At the rear of the vehicle, in front of the rear bumper, approximately 5 cm (2 in) from breakout to ground G400, towards the left side of the vehicle	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J482	Chassis Harness	IOS/IOT	At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—
J483	Chassis Harness	IOS/IOT	• (Regular Cab) At the rear of the vehicle, in front of the rear bumper, in breakout to X88 Trailer Connector • (Extended Cab/Crew Cab) At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment	• *Chassis Harness Routing (Extended Cab/Crew Cab)* • *Chassis Harness Routing (Regular Cab)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J490	Rear Bumper Harness	UD5/UD7	At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	*Rear Bumper Harness Routing*	—
J491	Rear Bumper Harness	UKC	At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	*Rear Bumper Harness Routing*	—
J492	Rear Bumper Harness	UKC	At the rear of the vehicle, center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	*Rear Bumper Harness Routing*	—
J493	Rear Bumper Harness	UKC	At the rear of the vehicle, right of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right	*Rear Bumper Harness Routing*	—
J494	Rear Bumper Harness	E63	At the rear of the vehicle, right of center, approximately 5 cm (2 in) from breakout to inline connector X901 Rear Bumper Harness to Chassis Harness	*Rear Bumper Harness Routing*	—
J495	Rear Bumper Harness	UD5/UD7	At the rear of the vehicle, within the rear bumper harness, in breakout to B306F Parking Assist Sensor - Rear Left Middle	*Rear Bumper Harness Routing*	—
J496	Rear Bumper Harness	E63	At the rear of the vehicle, within the rear bumper harness, in breakout to E7L License Plate Lamp - Left	*Rear Bumper Harness Routing*	—
J501	Driver Door Harness	AXG	In driver door, between breakout to P19AG Speaker - Left Front Door and breakout to B63LF Side Impact Sensor - Left Front	—	—
J502	Driver Door Harness	—	• (Regular Cab) In driver door, between breakout to P19AG Speaker - Left Front Door and breakout to B63LF Side Impact Sensor - Left Front • (Extended Cab/Crew Cab) In driver door, between breakout to B63LF Side Impact Sensor - Left Front and breakout to A24D Door Handle Assembly - Driver Exterior	*Driver and Passenger Door Harnesses*	—
J503	Driver Door Harness	AU3/AXG	Attached to driver door trim, between breakout to S146 Window/Outside Rearview Mirror Switch and breakout to E63D Flood Lamp - Driver Door Handle	*Driver and Passenger Door Trim Harnessses*	—
J510	Driver OSRVM Harness	—	Outside of the vehicle, left side, inside of A9A Outside Rearview Mirror - Driver	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J601	Passenger Door Harness	AEF	In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front	*Driver and Passenger Door Harnesses*	—
J602	Passenger Door Harness	—	• (Regular Cab) In passenger door, between breakout to B63RF Side Impact Sensor - Right Front and breakout to A24P Door Handle Assembly - Passenger Exterior • (Extended Cab/Crew Cab) In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front	*Driver and Passenger Door Harnesses*	—
J603	Passenger Door Harness	—	Attached to passenger door trim, between breakout to S79P Window Switch - Passenger and breakout to E63P Flood Lamp - Passenger Door Handle	*Driver and Passenger Door Trim Harnessses*	—
J610	Passenger OSRVM Harness	—	Outside of the vehicle, right side, inside of A9B Outside Rearview Mirror - Passenger	—	—
J701	Left Rear Door Harness	Extended Cab/ Crew Cab	• (Extended Cab) In left rear door, in the left rear door harness, approximately 13 cm (5.1 in) from breakout to B63LR Side Impact Sensor - Left Rear, towards the rear of the vehicle • (Crew Cab) In the left rear door, in the left rear door harness, approximately 12 cm (4.7 in) from breakout to M74LR Window Motor - Left Rear, towards the rear of the vehicle	• *Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Left Rear and Right Rear Door Harnesses (Extended Cab)*	—
J801	Right Rear Door Harness	Extended Cab/ Crew Cab	• (Extended Cab) In the right rear door, in the right rear door harness, approximately 5 cm (2 in) from breakout to P19AM Speaker - Right Rear Door, towards the rear of the vehicle • (Crew Cab) In the right rear door, in the right rear door harness, approximately 12 cm (4.7 in) from breakout to M74RR Window Motor - Right Rear, towards the rear of the vehicle	• *Left Rear and Right Rear Door Harnesses (Crew Cab)* • *Left Rear and Right Rear Door Harnesses (Extended Cab)*	—

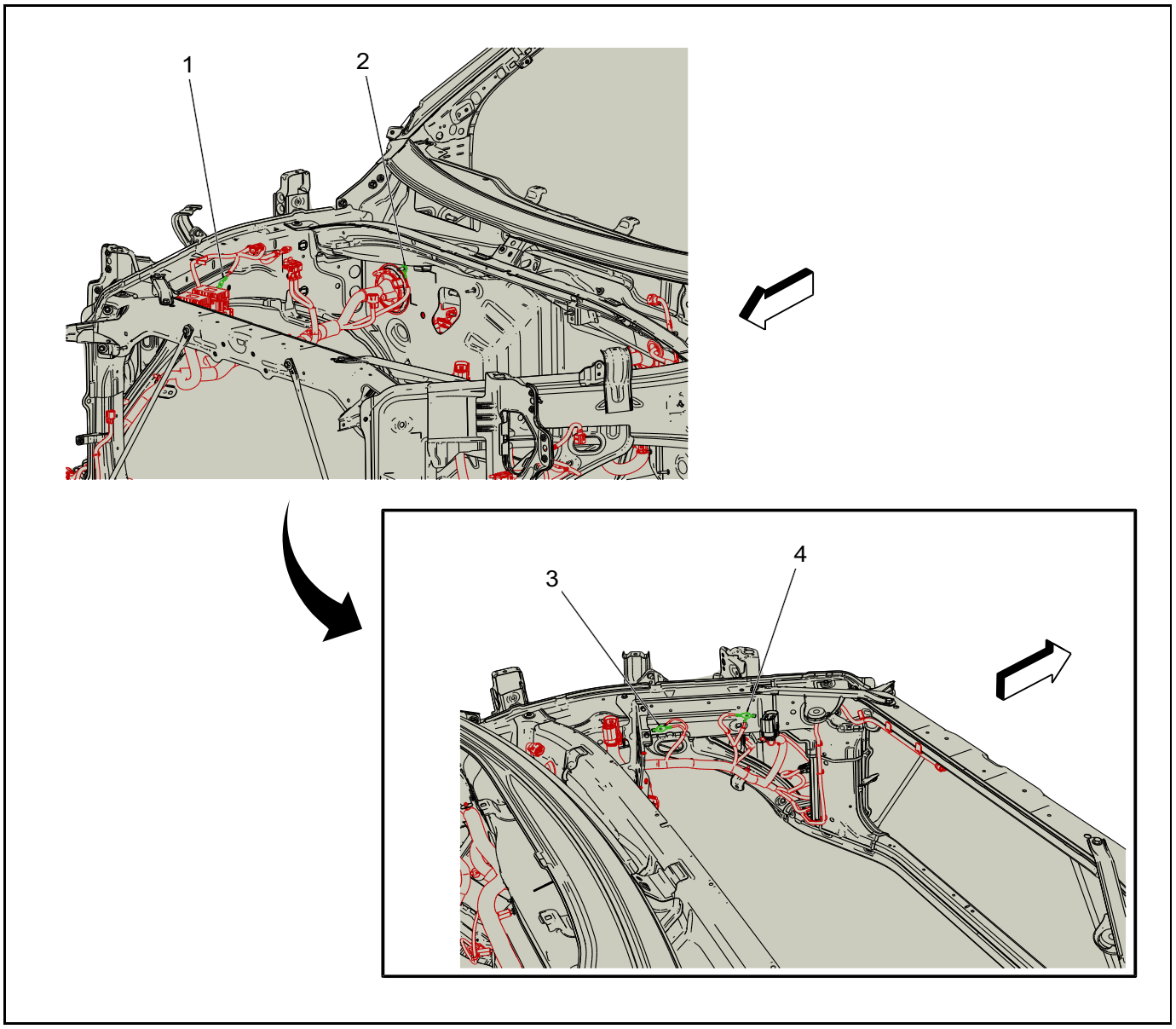
Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J900	Endgate Harness	QT5	Outside of the vehicle, within the endgate, approximately 16 cm (6.3 in) from breakout to inline connector X926, twoards left side of vehicle	*Endgate Harness Routing (QK2)*	—
J901	Endgate Harness	QT5	Outside of the vehicle, within the endgate, approximately 28 cm (11 in) from breakout to inline connector X926, twoards left side of vehicle	*Endgate Harness Routing (QK2)*	—
J902	Endgate Harness	QK2	Outside of the vehicle, within the endgate, approximately 38 cm (15 in) from breakout to inline connector X926, twoards left side of vehicle	*Endgate Harness Routing (QK2)*	—
J903	Endgate Harness	QK2	Outside of the vehicle, within the endgate, approximately 51 cm (20 in) from breakout to inline connector X926, twoards left side of vehicle	*Endgate Harness Routing (QK2)*	—
J904	Endgate Harness	QT5/QT6	Outside of the vehicle, within the endgate, approximately 22 cm (8.7 in) from breakout to E2A Marker Lamp - Endgate, towards the right side of the vehicle	*Endgate Harness Routing (QK2)*	—

Wiring Systems and Power Management

Ground Views

G110, G114, G120, and G128

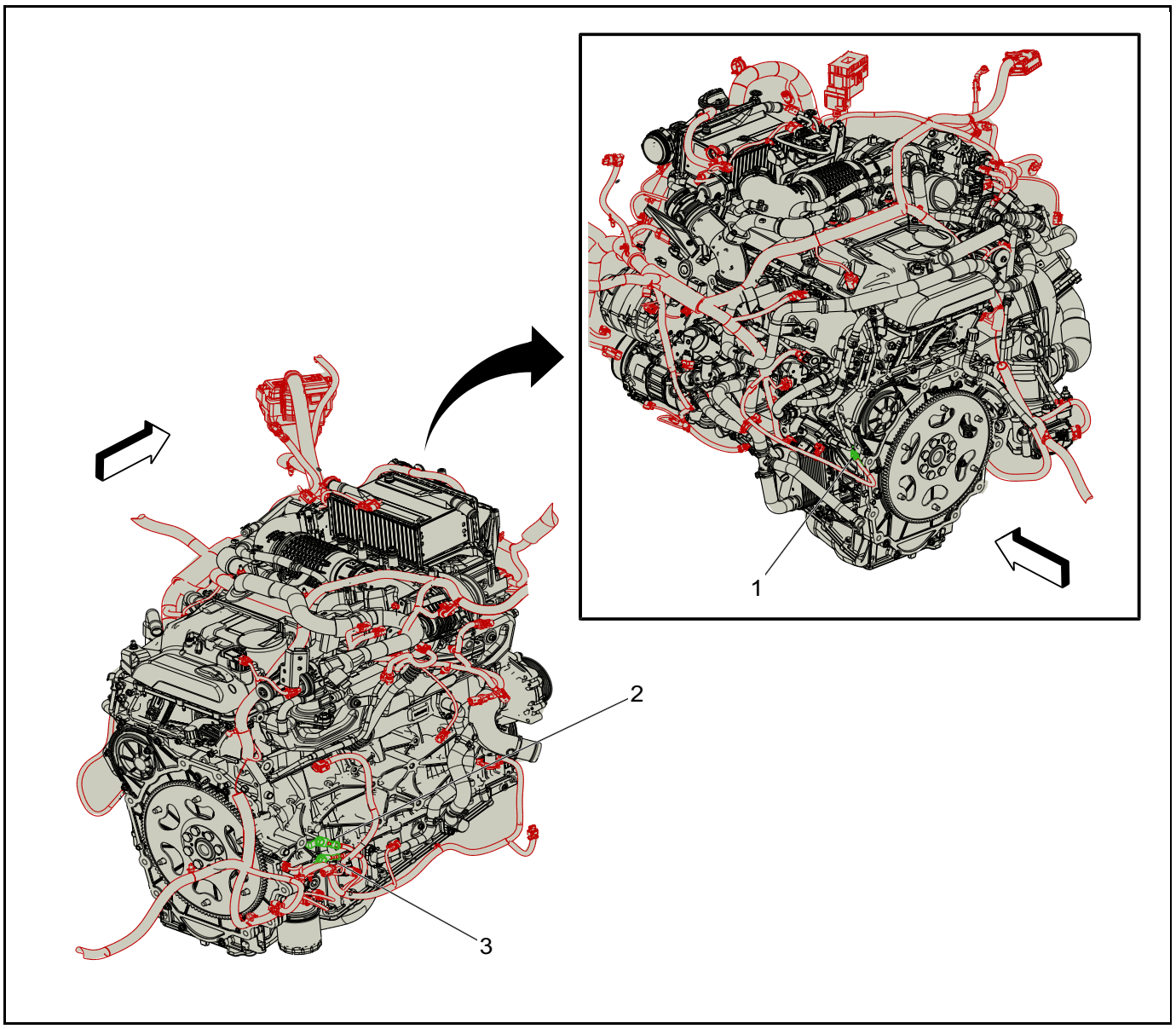


5023373

Items

(1) G120 Body Harness
(2) G128 Body Harness
(3) G110 Body Harness
(4) G114 Engine Harness

G115, G117, and G118 (LM2)

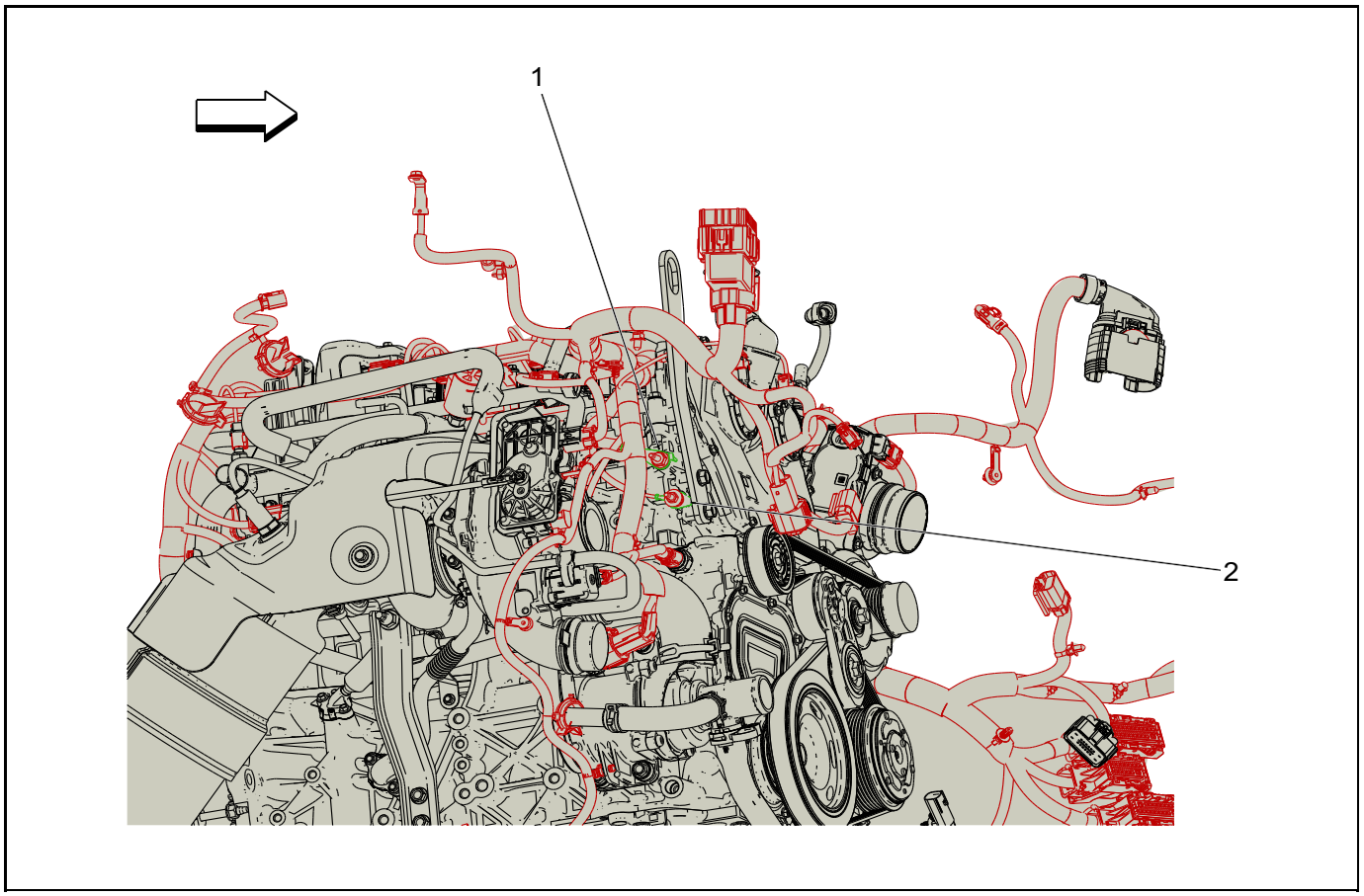


5034219

Items

(1) G118 Engine Harness (LM2)
(2) G117 Engine Harness
(3) G115 Engine Harness

G115 and G121 (L3B)



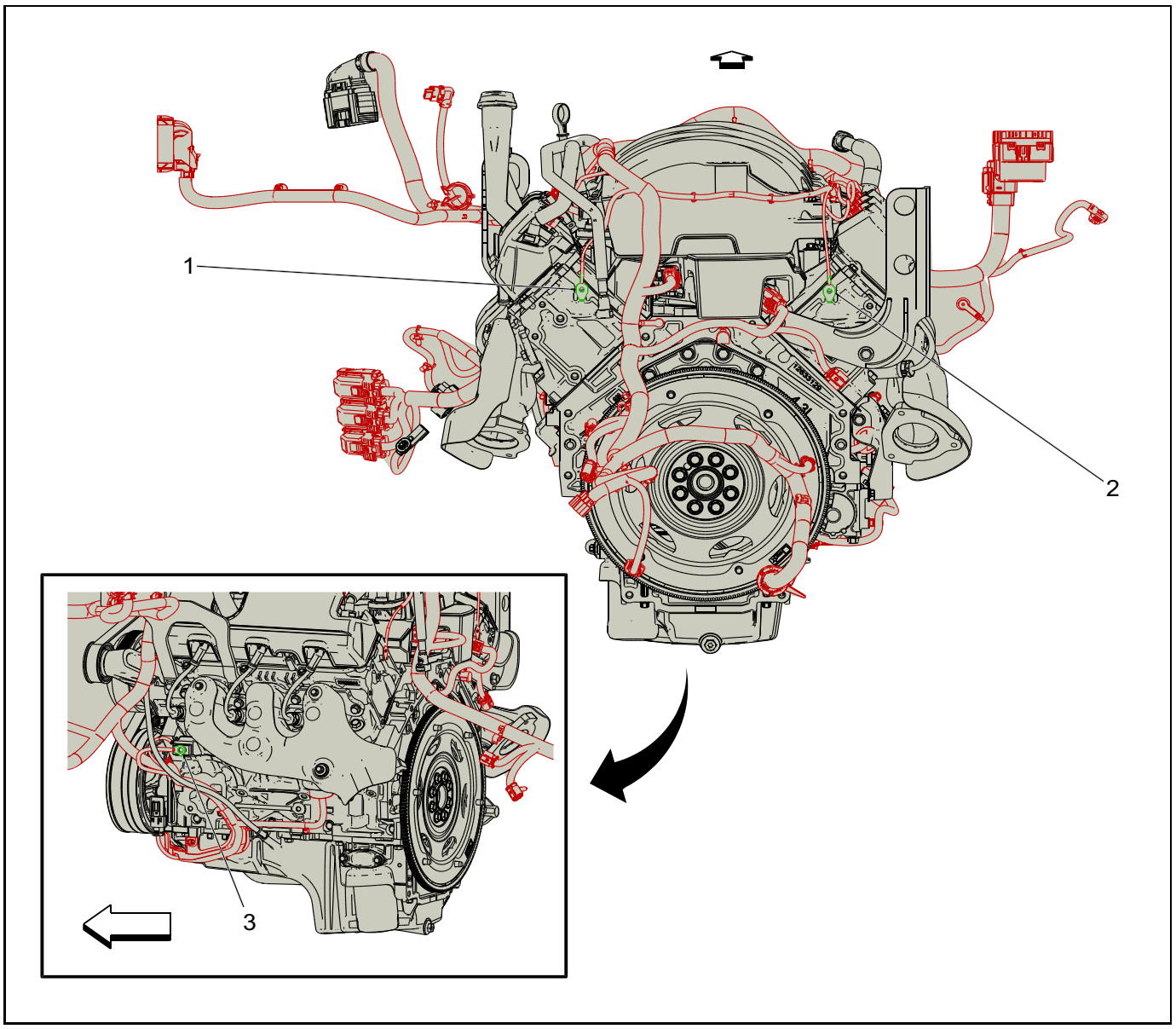
5034755

Items

(1) G115 Engine Harness

(2) G121 Engine Harness

G117, G121, and G122 (LV3)

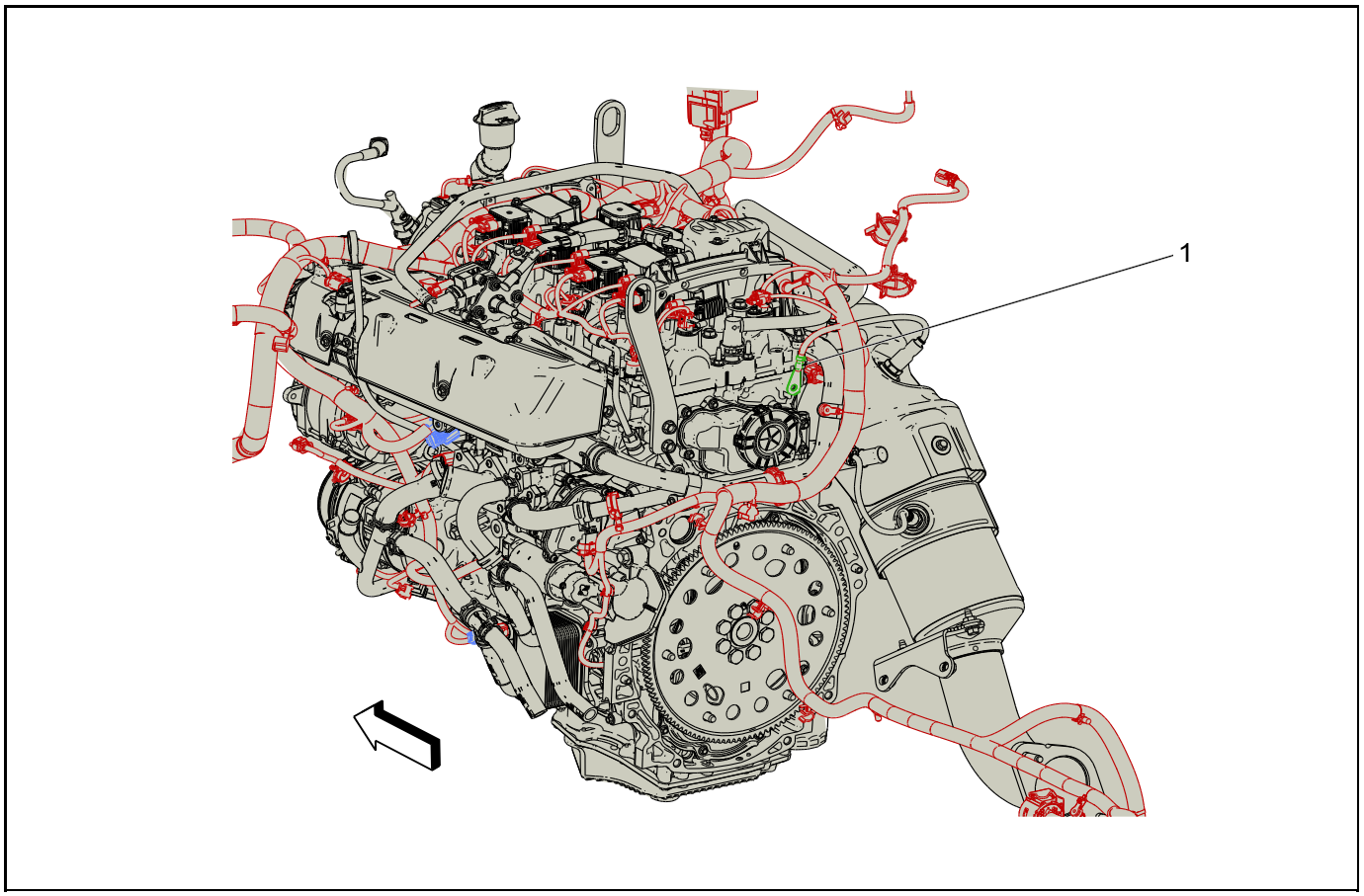


5002861

Items

(1) G121 Engine Harness
(2) G122 Engine Harness
(3) G117 Engine Harness

G117 (L3B)

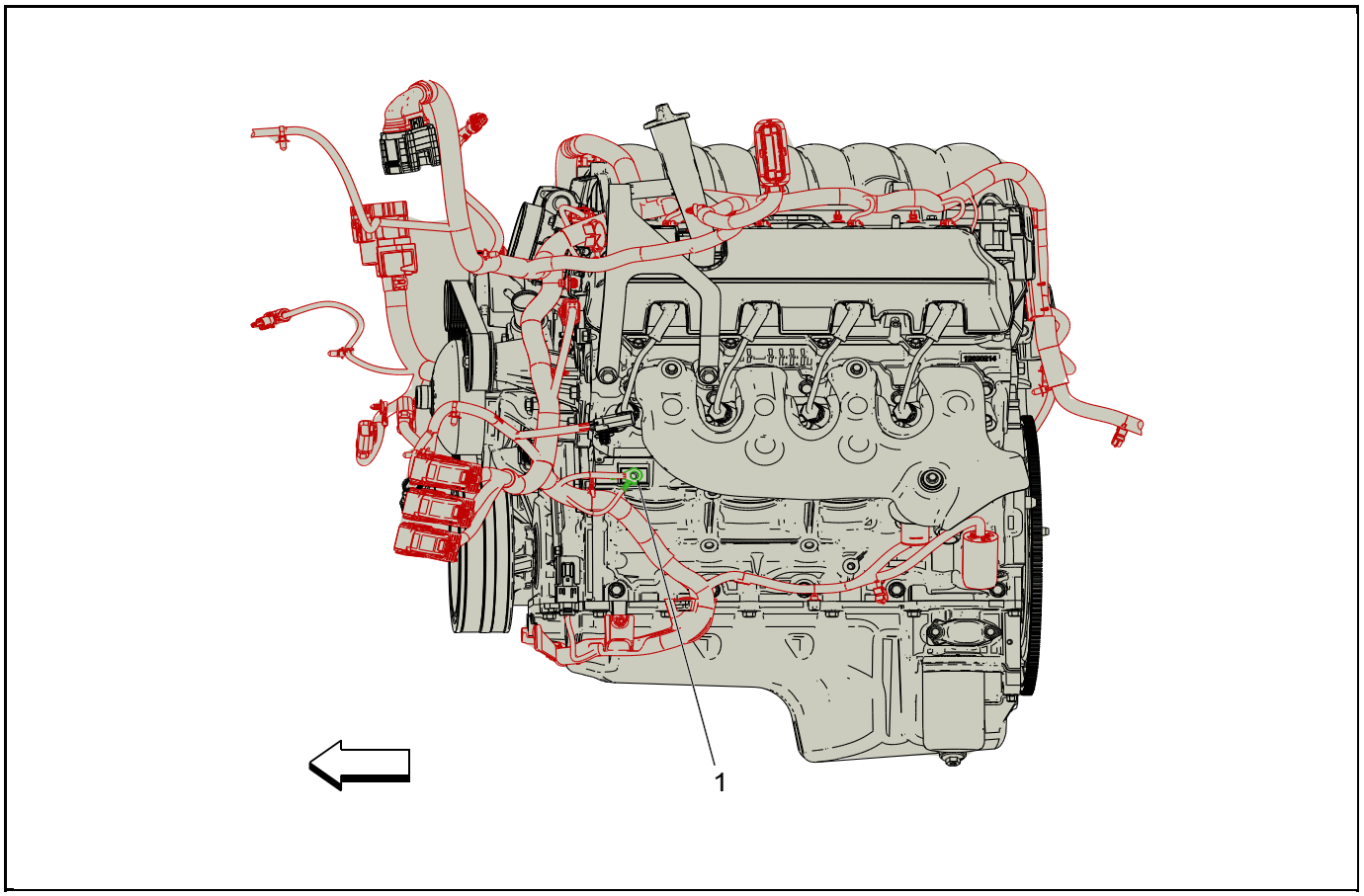


5034756

Items

(1) G117 Engine Harness

G117 (L82/L84/L87)

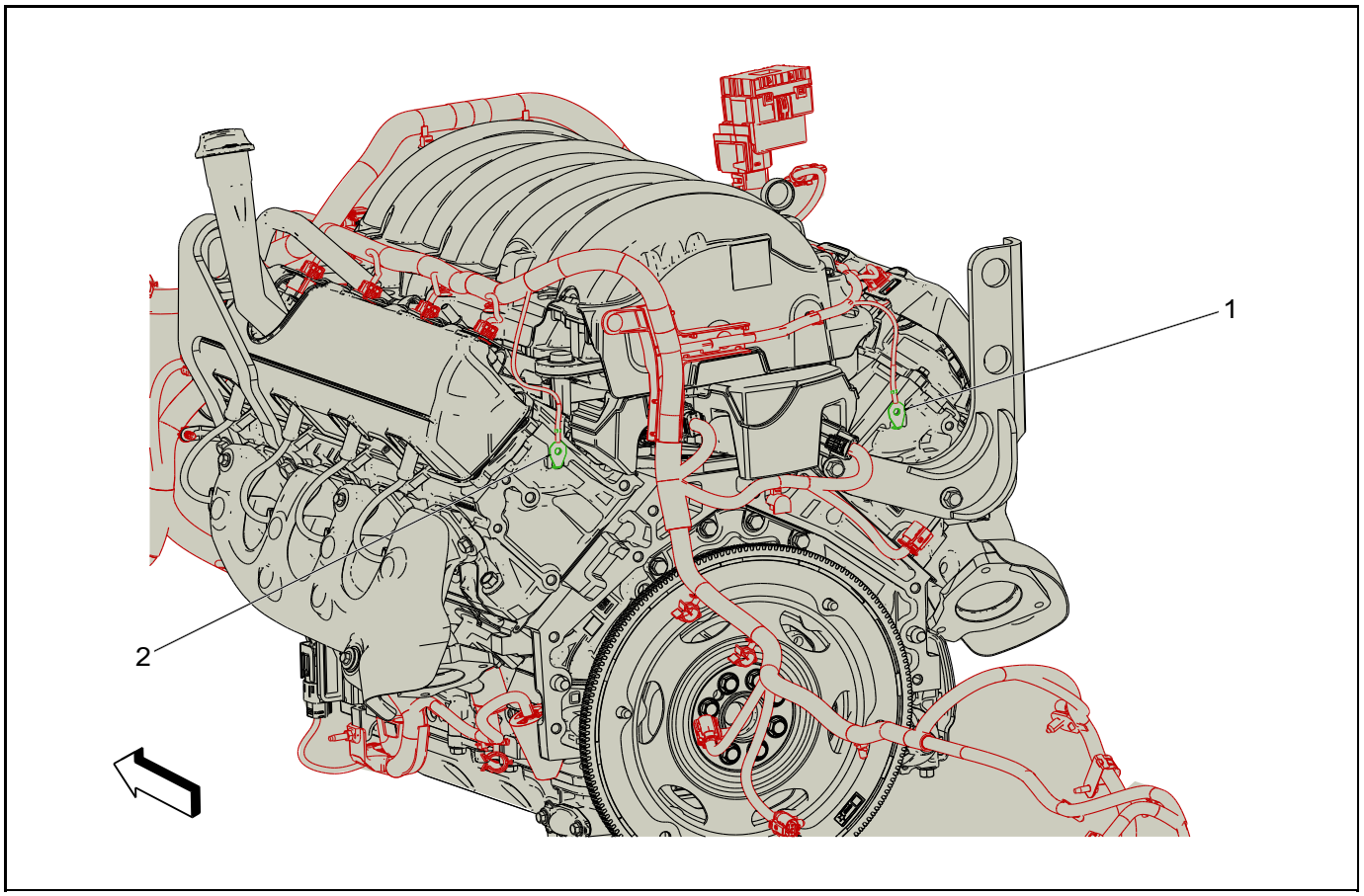


5034757

Items

(1) G117 Engine Harness

G121 and G122 (L82/L84/L87)



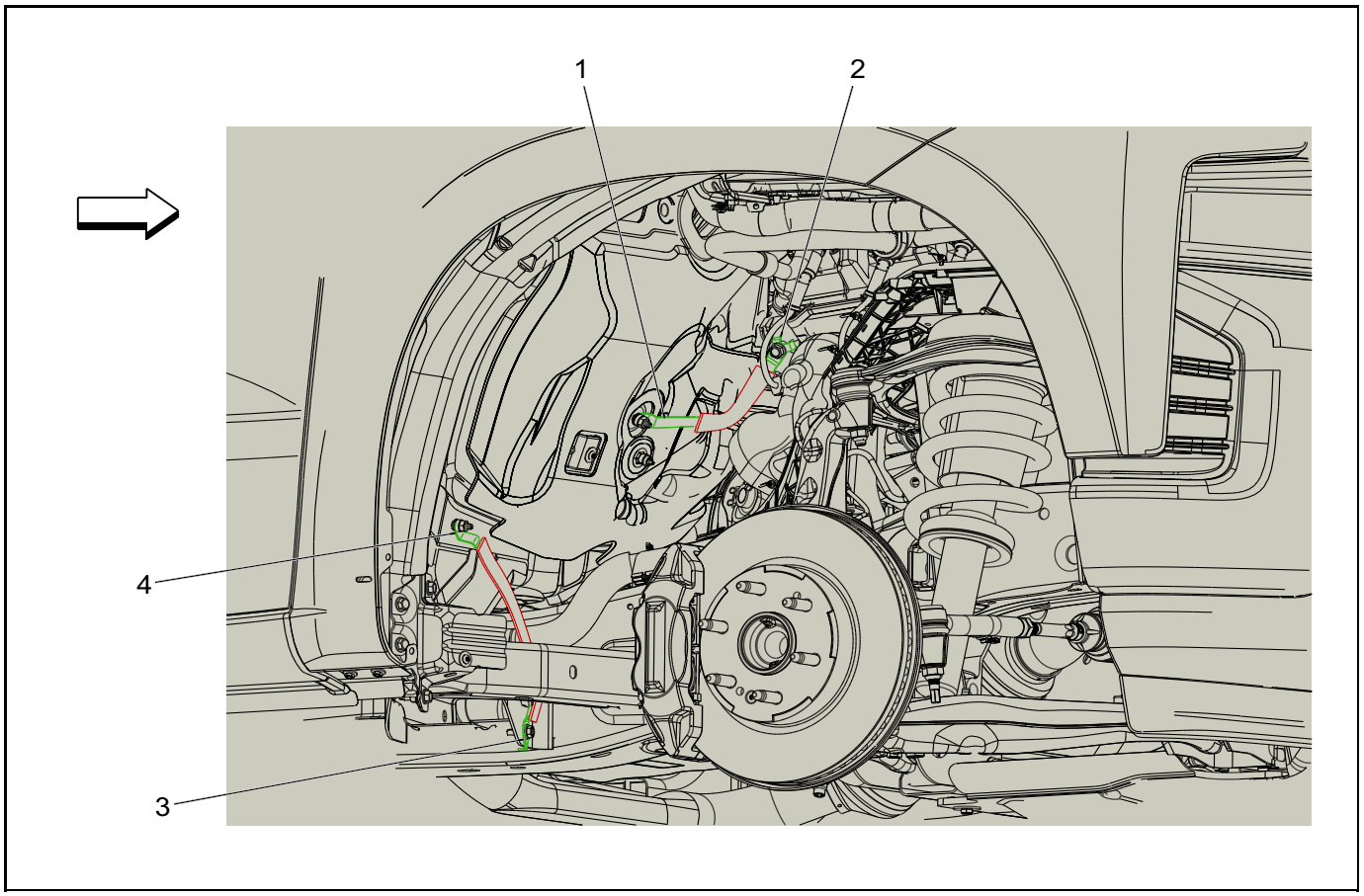
5034758

Items

(1) G122 Engine Harness

(2) G121 Engine Harness

G131, G132, G133, and G134

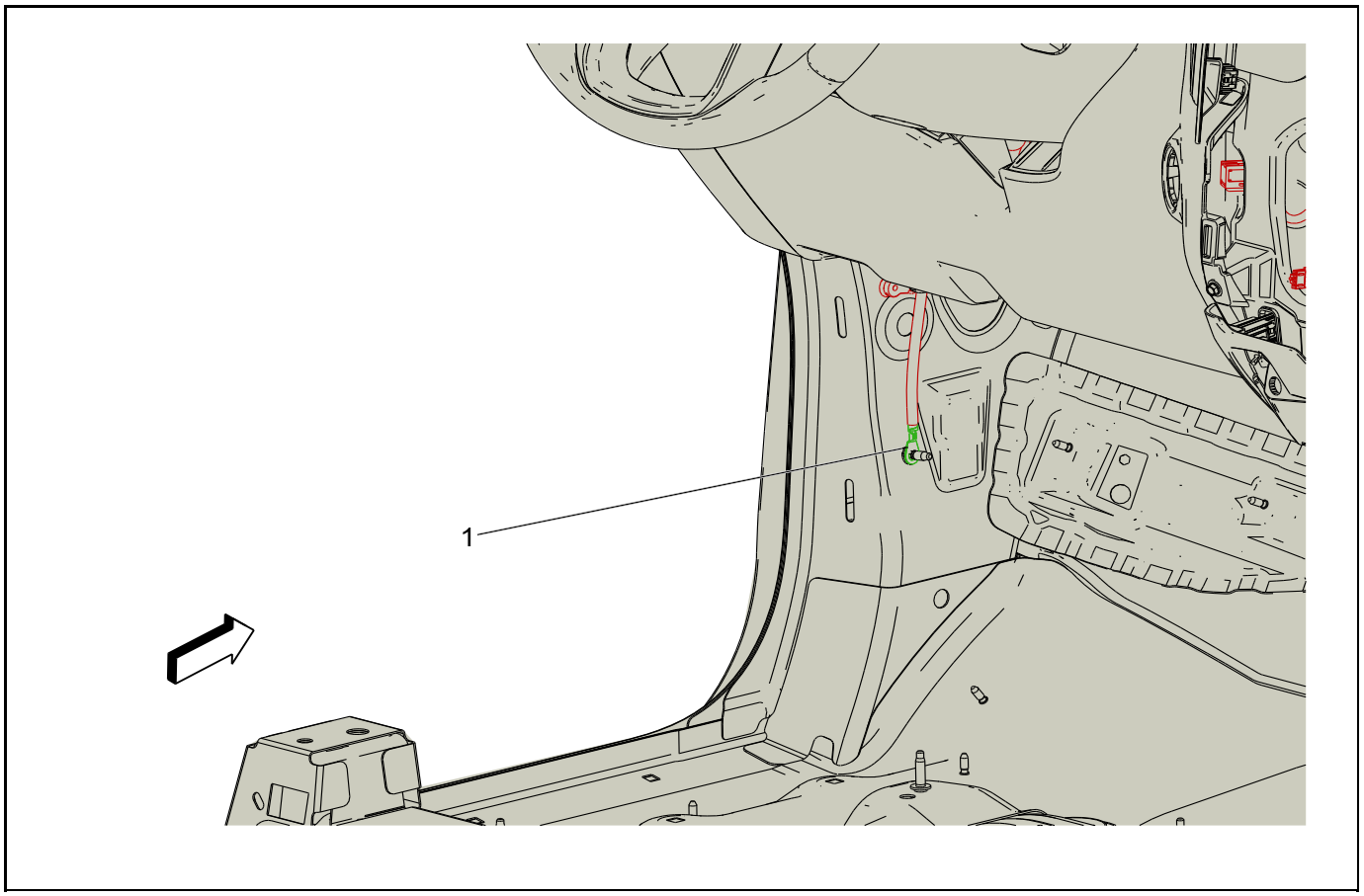


5182364

Items

(1) G132 Engine Ground Strap
(2) G134 Engine Ground Strap
(3) G131 Frame Ground Strap
(4) G133 Frame Ground Strap

G200

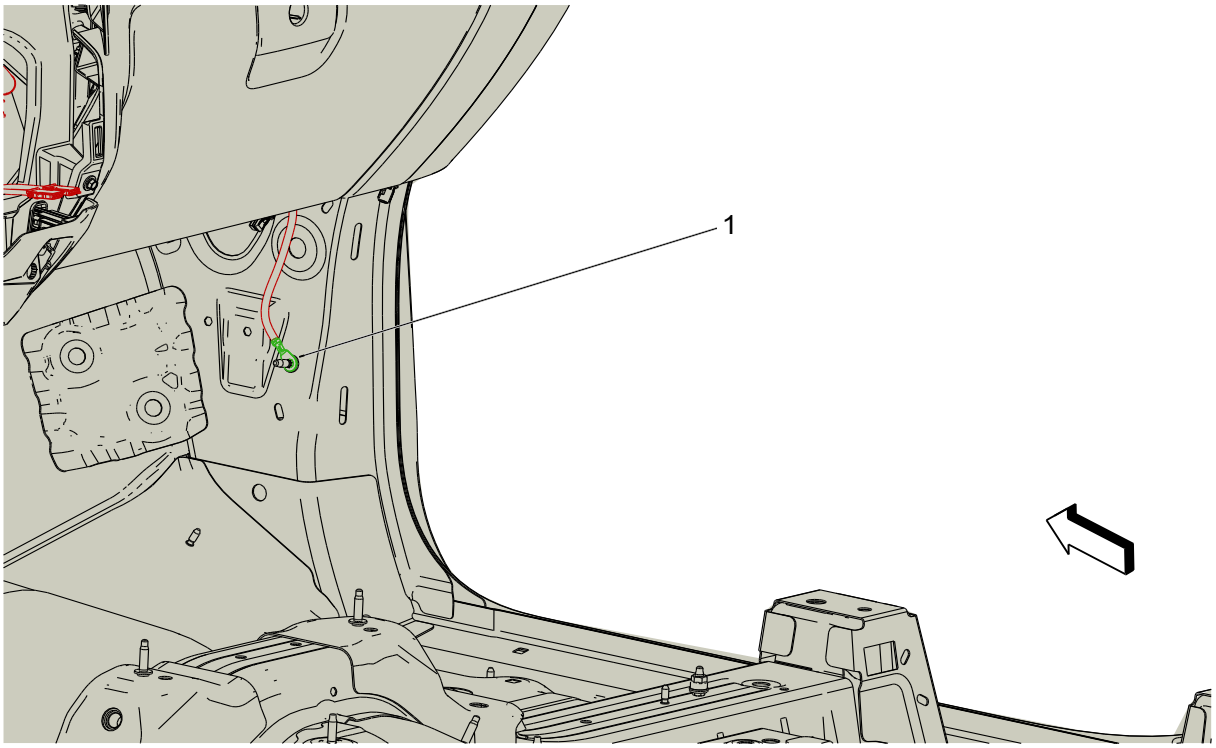


5034759

Items

(1) G200 Instrument Panel Harness

G220

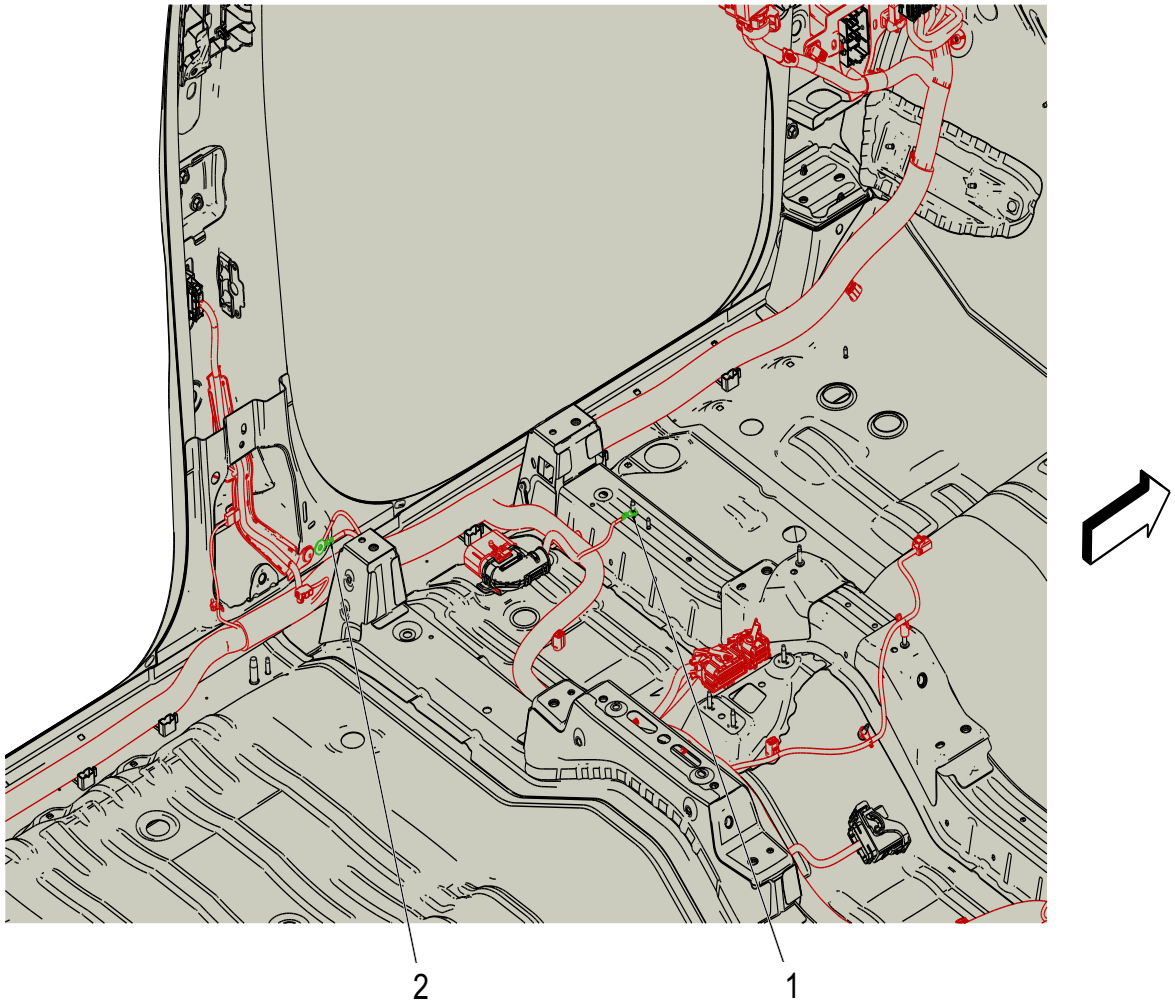


5034760

Items

(1) G220 Instrument Panel Harness

G300 and G308



5023374

Items

(1) G308 Body Harness

(2) G300 Body Harness

G312 and G320



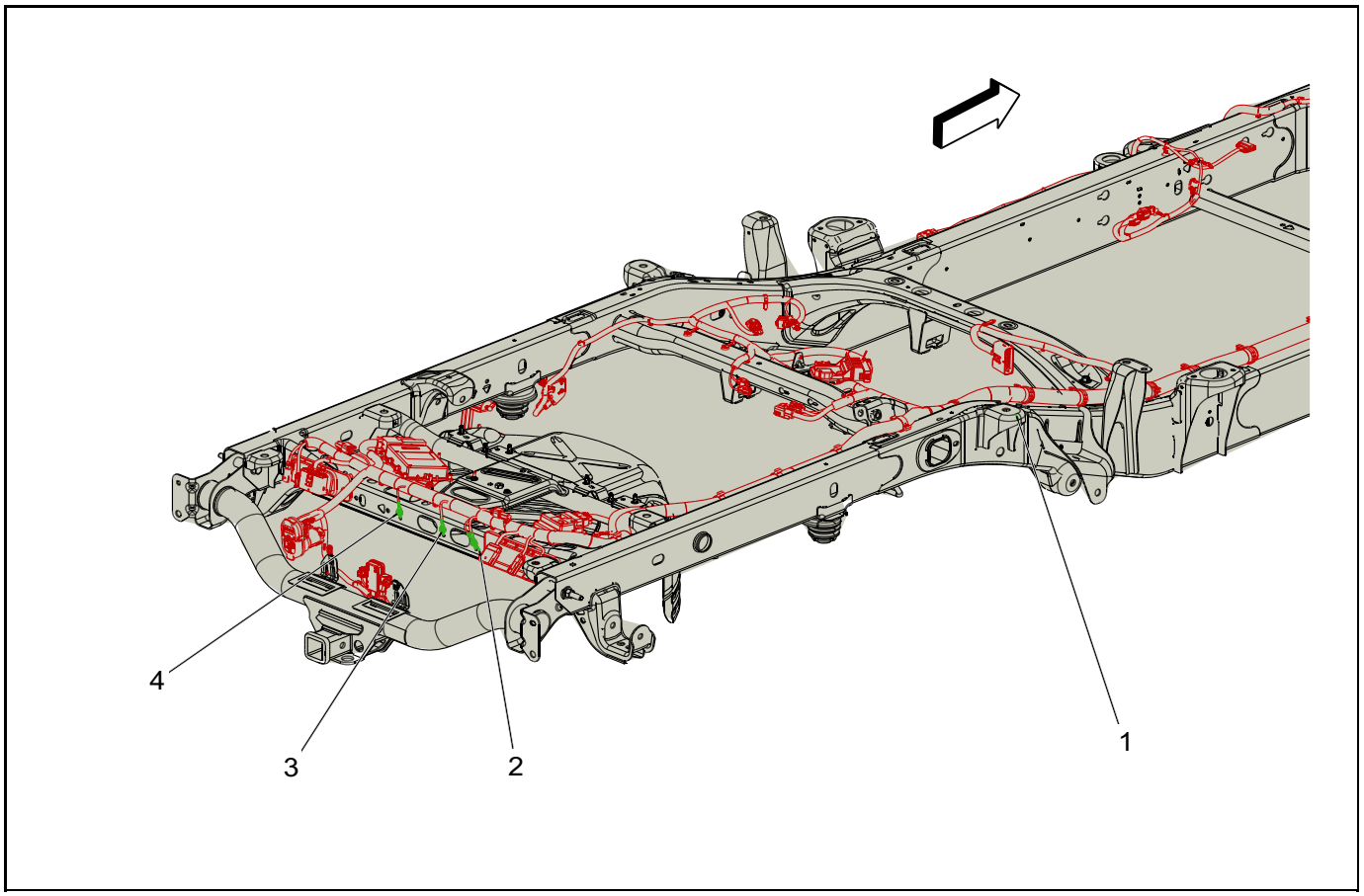
5023375

Items

(1) G312 Body Harness

(2) G320 Body Harness

G322, G400, G405, and G415



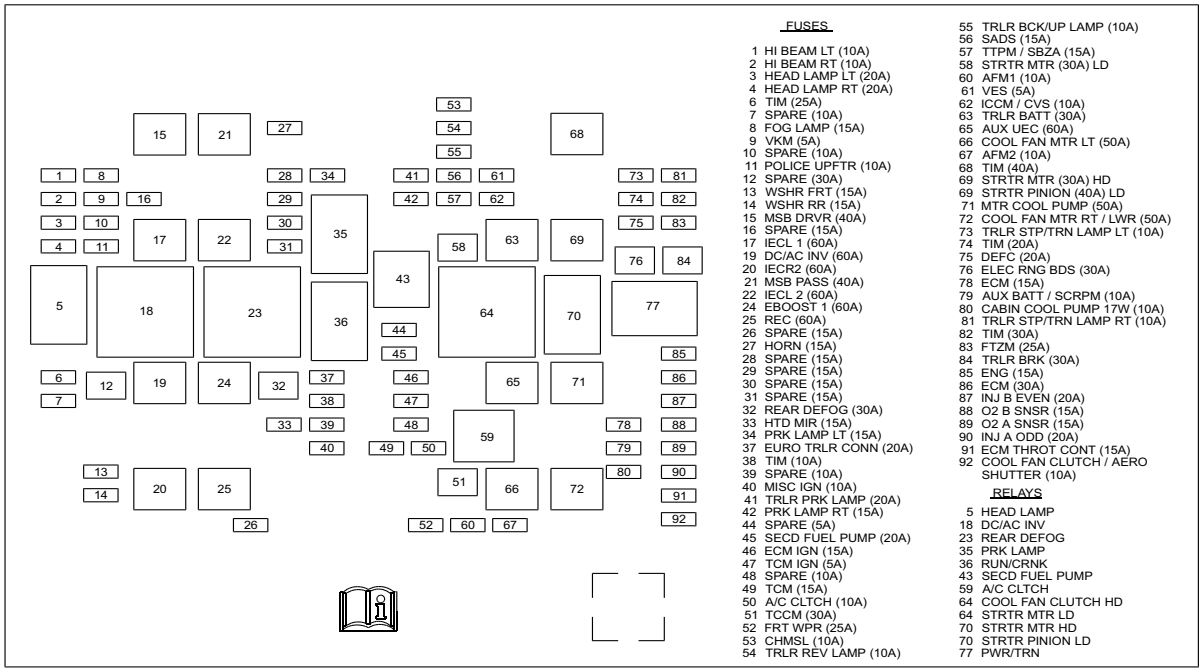
5002862

Items

(1) G322 Chassis Harness
(2) G400 Chassis Harness
(3) G405 Chassis Harness
(4) G415 Chassis Harness

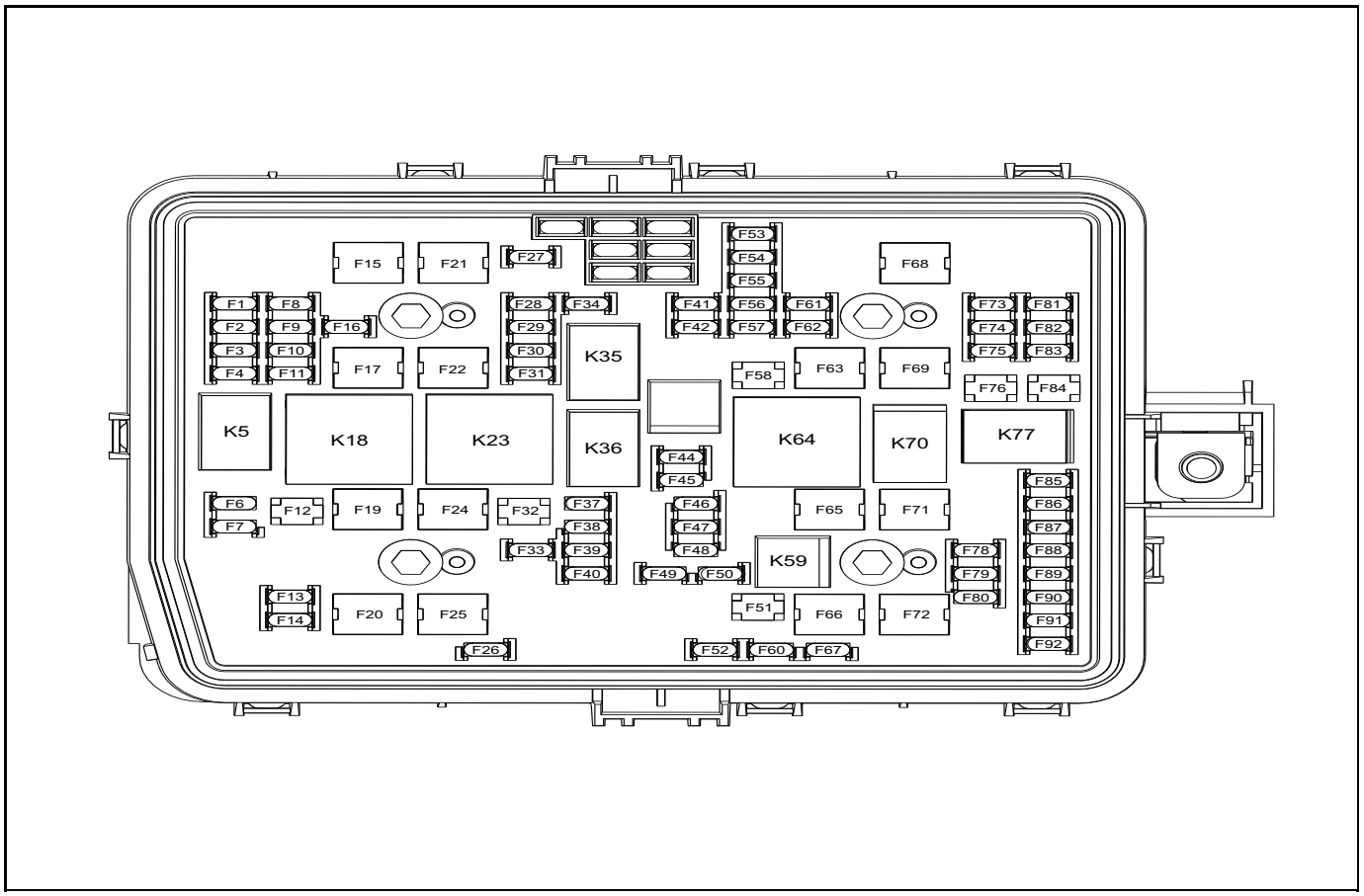
Electrical Center Identification Views

X50A Fuse Block - Underhood Label



5044140

X50A Fuse Block - Underhood Top View



5041384

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	HI BEAM LT	F1UA	10A	• E13LA Headlamp Assembly - Left
F2	HI BEAM RT	F2UA	10A	• E13RA Headlamp Assembly - Right
F3	HEAD LAMP LT	F3UA	20A	• E13LA Headlamp Assembly - Left
F4	HEAD LAMP RT	F4UA	20A	• E13RA Headlamp Assembly - Right
F6	TIM	F6UA	25A	—
F7	SPARE	F7UA	10A	—
F8	FOG LAMP	F8UA	15A	• E29LF Fog Lamp - Left Front (T3U) • E29RF Fog Lamp - Right Front (T3U)
F9	VKM	F9UA	5A	—
F10	SPARE	F10UA	10A	—
F11	POLICE UPFTR	F11UA	10A	—
F12	SPARE	F12UA	30A	—
F13	WSHR FRT	F13UA	15A	• G24 Windshield Washer Pump
F14	WSHR RR	F14UA	15A	—
F15	MSB DRVR	F15UA	40A	—
F16	SPARE	F16UA	15A	—
F17	IECL 1	F17UA	60A	• X51L Fuse Block - Instrument Panel Left (KA1/QT5)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F19	DC/AC INV	F19UA	60A	• T1 Accessory DC/AC Power Inverter Module (KI4/KI5)
F20	IECR2	F20UA	60A	• X51R Fuse Block - Instrument Panel Right
F21	MSB PASS	F21UA	40A	—
F22	IECL 2	F22UA	60A	• X51L Fuse Block - Instrument Panel Left (BTM/A48)
F24	EBOOST 1	F24UA	60A	• K17 Electronic Brake Control Module • X140
F25	REC	F25UA	60A	—
F26	SPARE	F26UA	15A	—
F27	HORN	F27UA	15A	• P12 Horn
F28	SPARE	F28UA	15A	—
F29	SPARE	F29UA	15A	—
F30	SPARE	F30UA	15A	—
F31	SPARE	F31UA	15A	—
F32	REAR DEFOG	F32UA	30A	• E18 Rear Defogger Grid
F33	HTD MIR	F33UA	15A	• E17D Outside Rearview Mirror Glass - Driver (DLF/DEZ) • E17P Outisde Rearview Mirror Glass - Passenger (DLF/DEZ)
F34	PRK LAMP LT	F34UA	15A	• E13LA Headlamp Assembly - Left • E42L Tail Lamp Assembly - Left
F37	EURO TRLR CONN	F37UA	20A	—
F38	TIM	F38UA	10A	—
F39	SPARE	F39UA	10A	—
F40	MISC IGN	F40UA	10A	• X51B Fuse Block - Instrument Panel Auxiliary
F41	TRLR PRK LAMP	F41UA	20A	• X88 Trailer Connector (Z82-U1D)
F42	PRK LAMP RT	F42UA	15A	• E13RA Headlamp Assembly - Right • E42R Tail Lamp Assembly - Right
F44	SPARE	F44UA	5A	—
F45	SECO FUEL PUMP	F45UA	20A	—
F46	ECM IGN	F46UA	15A	• K20 Engine Control Module • K34 Glow Plug Control Module (LM2) • K68 Trailer Lighting Control Module (U1D) • K111 Fuel Pump Driver Control Module • K115 Reductant Control Module (LM2) • K160 Brake System Control Module
F47	TCM IGN	F47UA	5A	• M26 Front Axle Engagement Actuator (NP0/NQH) • K71 Transmission Control Module (MQB/MQE) • Q8 Control Solenoid Valve Assembly (MYC)
F48	SPARE	F48UA	10A	—
F49	TCM IGN	F49UA	15A	• T12 Automatic Transmission Assembly (MQB)
F50	A/C CLTCH	F50UA	10A	• Q2 A/C Compressor Clutch
F51	TCCM	F51UA	30A	• K69 Transfer Case Control Module (NP0/NQH)
F52	FRT WPR	F52UA	25A	• KR12B Windshield Wiper Relay • KR12C Windshield Wiper Speed Control Relay
F53	CHMSL	F53UA	10A	• E6 Center High Mounted Stop Lamp

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F54	TRLR REV LAMP	F54UA	10A	• A10 Inside Rearview Mirror (DD8/DRZ) • A11 Radio • E42L Tail Lamp Assembly - Left • E42R Tail Lamp Assembly - Right
F55	TRLR BCK/UP LAMP	F55UA	10A	• X88 Trailer Connector (Z82-U1D)
F56	SADS	F56UA	15A	• K19 Suspension Control Module (Z45)
F57	TTPM/SBZA	F57UA	15A	• B218L Side Object Sensor Module - Left (UKC) • B218R Side Object Sensor Module - Right (UKC) • K214 Trailer Tire Pressure Indicator Module (PTT)
F58	STRTR MTR	F58UA	30A	• KR27 Starter Relay
F60	AFM1	F60UA	10A	• K20 Engine Control Module (L82/L84/L87)
F61	VES	F61UA	5A	—
F62	ICCM/CVS	F62UA	10A	• Q13 Evaporative Emission Vent Solenoid Valve (-LM2)
F63	TRLR BATT	F63UA	30A	• X88 Trailer Connector
F65	AUX UEC	F65UA	60A	• X50B Fuse Block - Underhood Auxiliary (LM2)
F66	COOL FAN MTR LT	F66UA	50A	• G10L Cooling Fan Motor - Left
F67	AFM2	F67UA	10A	• K20 Engine Control Module (L82/L84/L87)
F68	TIM	F68UA	40A	—
F69	STRTR PINION	F69UA	40A	• KR27C Starter Pinion Solenoid Actuator Relay
F71	MTR COOL PUMP	F71UA	50A	• G10R Cooling Fan Motor - Right (L3B)
F72	COOL FAN MTR RT/LWR	F72UA	50A	• G10R Cooling Fan Motor - Right (L92/L84/L87/LV3) • G10B Cooling Fan Motor - Lower (L3B/LM2)
F73	TRLR STP/TRN LAMP LT	F73UA	10A	• X88 Trailer Connector (Z82-U1D)
F74	TIM	F74UA	20A	• K101 Trailer Interface Control Module (LM2)
F75	DEFC	F75UA	20A	• K115 Reductant Control Module (LM2)
F76	ELEC RNG BOS	F76UA	30A	• K4 Assist Step Control Module (BRS)
F78	ECM	F78UA	15A	• K20 Engine Control Module
F79	AUX BATT/ SCRPM	F79UA	10A	—
F80	CABIN COOL PUMP 17W	F80UA	10A	• G17 Heater Coolant Pump (LM2) • KR33 Auxiliary Heater Coolant Pump Relay (L84/L87)
F81	TRLR STP/TRN LAMP RT	F81UA	10A	• X88 Trailer Connector (Z82-U1D)
F82	TIM	F82UA	30A	• K68 Trailer Lighting Control Module (U1D)
F83	FTZM	F83UA	25A	• K111 Fuel Pump Driver Control Module
F84	TRLR BRK	F84UA	30A	• K133 Trailer Brake Power Control Module (JL1) • W24 Blunt Cut - Trailer Brakes Provision
F85	ENG	F85UA	15A	• B75C Multifunction Intake Air Sensor (L3B/LM2/LV3) • K20 Engine Control Module (L3B) • Q97 Engine Coolant Flow Control Valve (L3B)
F86	ECM	F86UA	30A	• K20 Engine Control Module

Usage Table (cont'd)

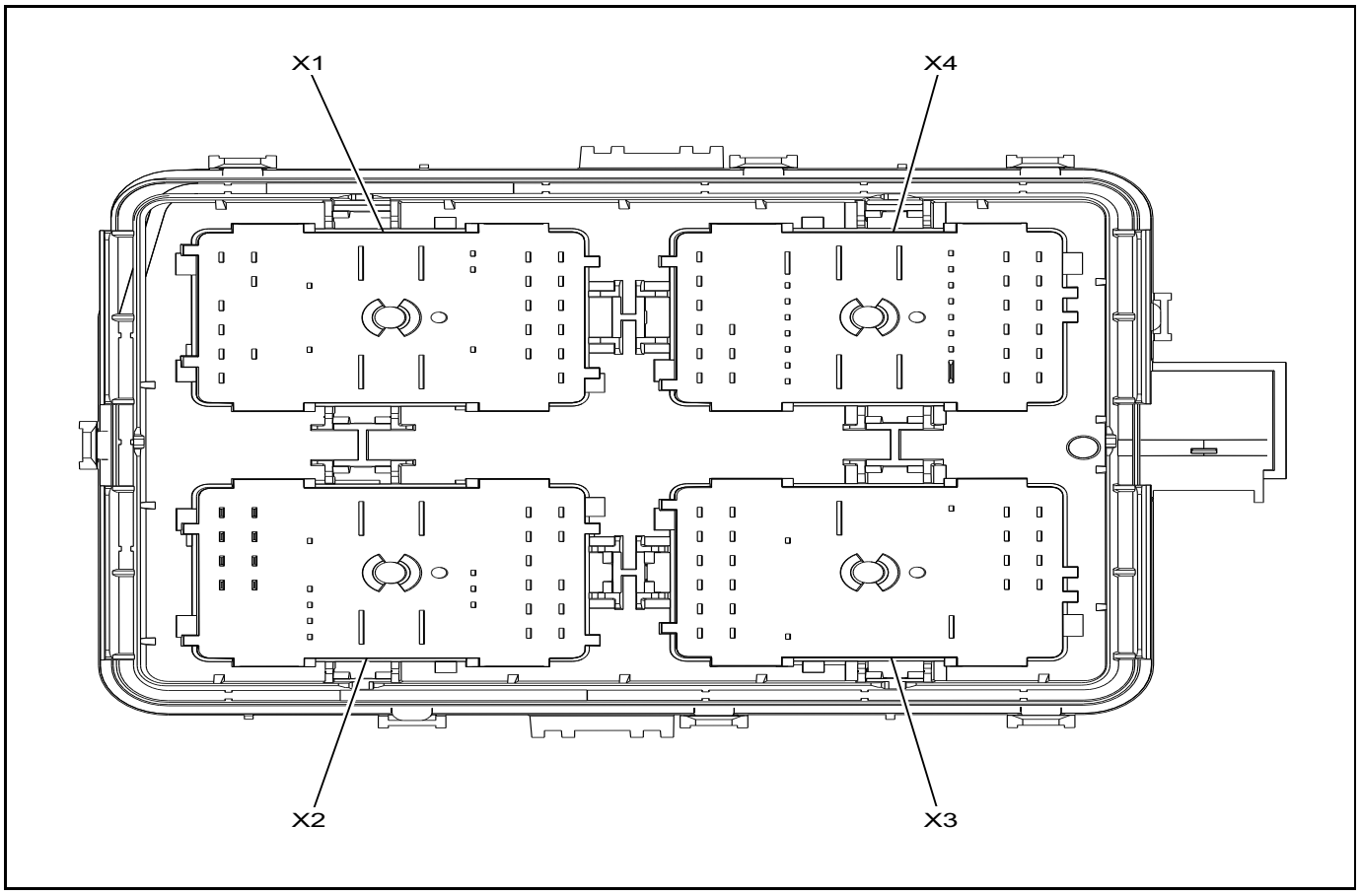
No.	Device Label Name	Device Assigned Name	Rating	Description
F87	INJ B EVEN	F87UA	20A	• K20 Engine Control Module • T8B Ignition Coil 2 (L82/L84/L87/LV3) • T8D Ignition Coil 4 (L82/L84/L87/LV3) • T8F Ignition Coil 6 (L82/L84/L87/LV3) • T8H Ignition Coil 8 (L82/L84/L87)
F88	O2 B SNSR	F88UA	15A	• B52B Heated Oxygen Sensor 2 (L3B) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87) • B75C Multifunction Intake Air Sensor (L82/L84/L87) • B198 Fuel Composition Sensor (FHS) • K20 Engine Control Module (L82/L84/L87/LV3) • Engine Coolant Pump Relay (LM2)
F89	O2 A SNSR	F89UA	15A	• B52A Heated Oxygen Sensor 1 (L3B) • B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3) • B52F Heated Oxygen Sensor Bank 2 Sensor 2 (LV3) • G58 Evaporative Emission Purge Pump (L3B) • M129A Intake Camshaft Porfile Actuator 1 (L3B) • M129B Intake Camshaft Profile Actuator 2 (L3B) • M129C Intake Camshaft Profile Actuator 3 (L3B) • M129D Intake Camshaft Profile Actuator 4 (L3B) • M130A Exhaust Camshaft Profile Actuator 1 (L3B) • M130B Exhaust Camshaft Profile Actuator 2 (L3B) • Q12 Evaporative Emission Purge Solenoid Valve (-LM2) • Q40 Turbocharger Bypass Solenoid Valve (L3B) • Q43 Valve Lifter Oil Manifold Assembly (LV3) • Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3) • Q97B Engine Coolant Flow Control Valve - Block (LM2)
F90	INJ A ODD	F90UA	20A	• K20 Engine Control Module • T8A Ignition Coil 1 • T8B Ignition Coil 2 (L3B) • T8C Ignition Coil 3 • T8D Ignition Coil 4 (L3B) • T8E Ignition Coil 5 (-L3B) • T8G Ignition Coil 7 (-L3B-LV3)
F91	ECM THROT CONT	F91UA	15A	• K20 Engine Control Module (L82/L84/L87/LV3)
F92	COOL FAN CLUTCH/AERO SHUTTER	F92UA	10A	• M96A Active Grille Air Shutter 1 Actuator • M96B Active Grille Air Shutter 2 Actuator (WMI)
Relays				
K5	HEAD LAMP	KR50 Headlamp Relay	—	• F3UA • F4UA
K18	DC/AC INV	KR80 Accessory Relay	—	• F19UA (KI4/KI5)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
K23	REAR DEFOG	KR5 Rear Defogger Relay	—	• F32UA • F33UA
K35	PRK LAMP	KR53 Park Lamps Relay	—	• F34UA • F41UA • F42UA
K36	RUN/CRNK	KR73 Ignition Main Relay	—	• F37UA • F38UA • F39UA • F40UA • F44UA • F46UA • F47UA • F48UA
K43	SECD FUEL PUMP	—	—	—
K59	A/C CLTCH	KR29 A/C Compressor Clutch Relay	—	• F50UA
K64	STRTR MTR LD	KR27 Starter Motor	—	• M64 Starter Motor
K70	STRTR PINION LD	KR27C Starter Pinion Solenoid Actuator Relay	—	• M64 Starter Motor (KL9)
K77	PWR/TRN	KR75 Engine Controls Ignition Relay	—	• F60UA • F67UA • F85UA • F86UA • F87UA • F88UA • F89UA • F90UA • F91UA • F92UA • KR29 A/C Compressor Clutch Relay • KR33 Auxiliary Heater Coolant Pump Relay
Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
—	—	KR3 Horn Relay	—	• F27UA
—	—	KR6 Rear Window Washer Pump Relay	—	• F14UA
—	—	KR11 Windshield Washer Pump Relay	—	• F13UA
—	—	KR12B Windshield Wiper Relay	—	• M75 Windshield Wiper Motor
—	—	KR12C Windshield Wiper Speed Control Relay	—	• M75 Windshield Wiper Motor
—	—	KR33 Auxiliary Heater Coolant Pump	—	• G17 Heater Coolant Pump (KL9)
—	—	KR46 Front Fog Lamp Relay	—	• F8UA
—	—	KR48 Headlamp High Beam Relay	—	• F1UA • F2UA

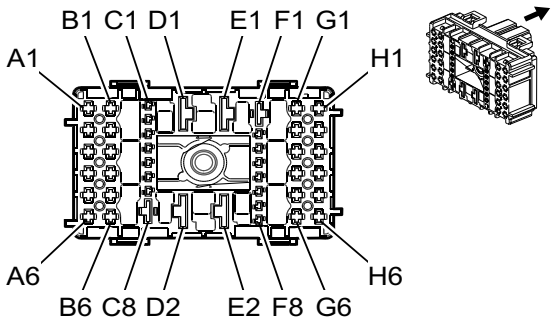
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
—	—	KR53 Park Lamps Relay	—	• F34UA • F41UA • F42UA
—	—	KR59 Stop Lamp Relay	—	• F53UA
—	—	KR61 Trailer Back-up Lamps Relay	—	• F54UA • F55UA
—	—	KR63L Trailer Stop/Turn Signal Lamp Relay - Left	—	• F73UA
—	—	KR63R Trailer Stop/Turn Signal Lamp Relay - Right	—	• F81UA



5041382

X50A Fuse Block - Underhood X1 (Regular Cab)



4994109

Connector Part Information

Harness Type: Body
OEM Connector: 33295853
Service Connector: 19371175
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
II	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

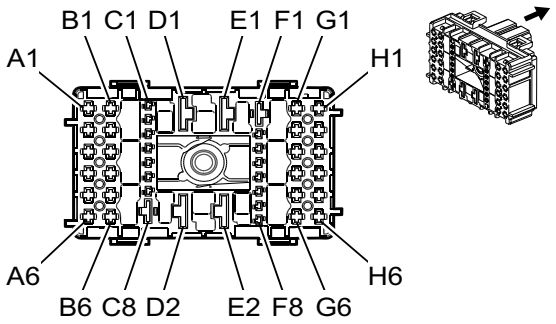
X50A Fuse Block - Underhood X1 (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.5	YE/BN	2229	Left Headlamp Relay Control	III	—
A4	0.5	BK	250	Ground	III	—
A5 - B4	—	—	—	Not Occupied	—	—
B5	0.5	GY/VT	228	Windshield Washer Pump Control	III	—
B6 - C2	—	—	—	Not Occupied	—	—
C3	0.35	WH/GN	4628	DC/AC Inverter Relay Control	II	—
C4 - C6	—	—	—	Not Occupied	—	—
C7	0.35	BN/GY	2268	Windshield Washer Relay Control	II	—
C8	—	—	—	Not Occupied	—	—
D1	10	RD/GY	4629	DC/AC Inverter Control	IV	—
D2	6	RD/WH	342	Battery Positive Voltage	IV	—
E1 - F1	—	—	—	Not Occupied	—	—
F2	0.5	BN/VT	193	Rear Defog Relay Control	II	—
F3 - F5	—	—	—	Not Occupied	—	—
F6	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	II	—

X50A Fuse Block - Underhood X1 (Regular Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F7 - G1	—	—	—	Not Occupied	—	—
G2	2.5	BN/VT	293	Rear Defog Element Control	III	—
G3	0.5	BN/YE	2267	Mirror Heating Element Control	III	—
G4	0.35	GN/VT	5199	Run/Crank Relay Coil Control	III	—
G5	2	BK	150	Ground	I	—
G6	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	III	—
H1 - H3	—	—	—	Not Occupied	—	—
H4	0.35	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 Fuse Block - Underhood X1 (Crew Cab/Extended Cab)



4994109

Connector Part Information

Harness Type: Body
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

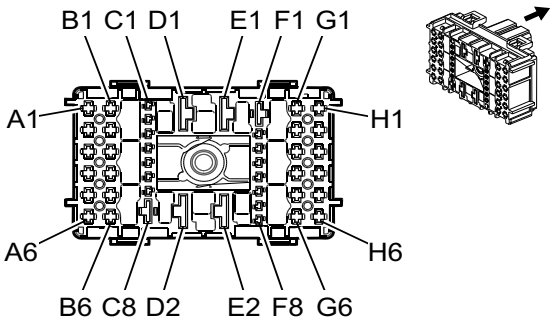
X50A Fuse Block - Underhood X1 (Crew Cab/Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.5	YE/BN	2229	Left Headlamp Relay Control	II	—
A4	0.5	BK	250	Ground	II	—
A5 - B4	—	—	—	Not Occupied	—	—
B5	0.5	GY/VT	228	Windshield Washer Pump Control	II	—
B6 - C2	—	—	—	Not Occupied	—	—
C3	0.35	WH/GN	4628	DC/AC Inverter Relay Control	I	—
C4 - C6	—	—	—	Not Occupied	—	—
C7	0.35	BN/GY	2268	Windshield Washer Relay Control	I	—
C8	—	—	—	Not Occupied	—	—
D1	10	BN/BK	4629	DC/AC Inverter Control	III	—
D2	10 6	RD/WH RD/WH	342 342	Battery Positive Voltage Battery Positive Voltage	III III	CREW CAB EXTENDED CAB
E1	10	RD/YE	442	Battery Positive Voltage	III	—
E2 - F1	—	—	—	Not Occupied	—	—
F2	0.5	BN/VT	193	Rear Defog Relay Control	I	—
F3 - F5	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X1 (Crew Cab/Extended Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F6	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	I	—
F7 - G1	—	—	—	Not Occupied	—	—
G2	2.5	BN/VT	293	Rear Defog Element Control	II	—
G3	0.5	BN/YE	2267	Mirror Heating Element Control	II	—
G4	0.35	GN/VT	5199	Run/Crank Relay Coil Control	II	—
G5	2	BK	150	Ground	II	—
G6	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	II	—
H1 - H3	—	—	—	Not Occupied	—	—
H4	0.35	VT/WH	239	Run/Crank Ignition 1 Voltage	II	—
H5	2	WH	92	Windshield Wiper Motor High Speed Control	II	—
H6	2	YE/BN	95	Windshield Wiper Motor Low Speed Control	II	—

X50A Fuse Block - Underhood X2 (Regular Cab)



4994132

Connector Part Information

Harness Type: Body
OEM Connector: 33295854
Service Connector: 19371174
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

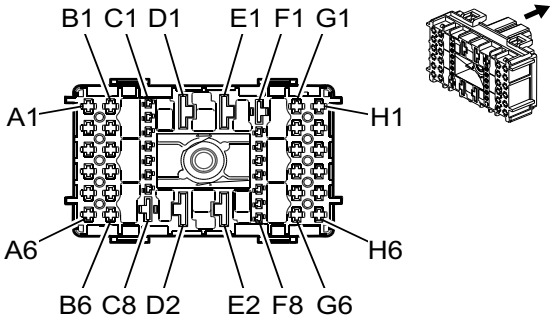
X50A Fuse Block - Underhood X2 (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.75	WH	711	Left Headlamp High Beam Control	II	—
A4	0.75	WH	311	Right Headlamp High Beam Control	II	—
A5	0.75	YE	2227	Left Headlamp Control	II	—
A6	0.75	YE/GY	2226	Right Headlamp Control	II	—
B1 - B2	—	—	—	Not Occupied	—	—
B3	0.5	BN/VT	2234	Front Fog Lamp Control	II	—
B4 - B6	—	—	—	Not Occupied	—	—
C1	0.5	BU/WH	5186	Left Trailer Turn Signal Lamp Control	I	—
C2	0.5	YE/GY	5187	Right Trailer Turn Signal Lamp Control	I	—
C3	0.5	BN/WH	1317	Fog Lamp Relay Control	I	—
C4	0.35	BN/VT	1969	Headlamp High Beam Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/GY	2042	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD/GY	2142	Battery Positive Voltage	III	—
F1	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X2 (Regular Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F2	0.35	VT/WH	5065	Stop Lamp Relay Coil Control	I	REGULAR CAB
	0.35	VT/WH	5065	Stop Lamp Relay Coil Control	I	U1D
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	0.35	GN/WH	24	Backup Lamp Control	II	—
G3 - G6	—	—	—	Not Occupied	—	—
H1	0.35	VT/GY	1054	Stop Lamp Control	II	—
H2	—	—	—	Not Occupied	—	—
H3	0.5	VT/GY	709	Left Park Lamp Control	II	—
H4	—	—	—	Not Occupied	—	—
H5	0.5	GY/BN	309	Right Park Lamp Control	II	—
H6	0.35	BU	45	Park Lamp Relay Control	II	—

X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab)



4994132

Connector Part Information

Harness Type: Body
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

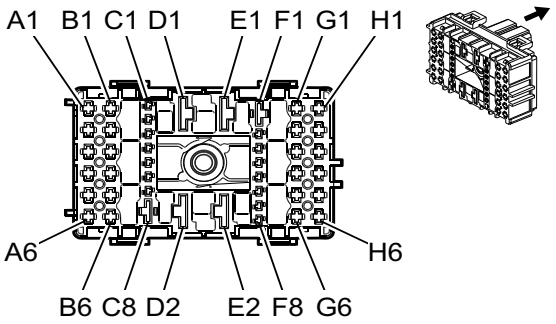
X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.75	WH	711	Left Headlamp High Beam Control	II	—
A4	0.75	WH	311	Right Headlamp High Beam Control	II	—
A5	0.75	YE	2227	Left Headlamp Control	II	—
A6	0.75	YE/GY	2226	Right Headlamp Control	II	—
B1 - B2	—	—	—	Not Occupied	—	—
B3	0.5	BN/VT	2234	Front Fog Lamp Control	II	—
B4 - B6	—	—	—	Not Occupied	—	—
C1	0.5	BU/WH	5186	Left Trailer Turn Signal Lamp Control	I	—
C2	0.5	YE/GY	5187	Right Trailer Turn Signal Lamp Control	I	—
C3	0.5	BN/WH	1317	Fog Lamp Relay Control	I	—
C4	0.35	BN/VT	1969	Headlamp High Beam Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/GY	2042	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD/VT	2142	Battery Positive Voltage	III	—
F1	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F2	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	III	U1D
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	0.35	GN/WH	24	Backup Lamp Control	II	—
G3 - H2	—	—	—	Not Occupied	—	—
H3	0.5	VT/GY	709	Left Park Lamp Control	II	—
H4	—	—	—	Not Occupied	—	—
H5	0.5	GY/BN	309	Right Park Lamp Control	II	—
H6	0.35	BU	45	Park Lamp Relay Control	II	—

X50A Fuse Block - Underhood X3 (L3B)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579915	J-35616-40 (BU)	J-38125-556	Not Available	Not Available	Not Available	Not Available
II	13582285	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	2	4
III	13582285	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	E	C
IV	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
V	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

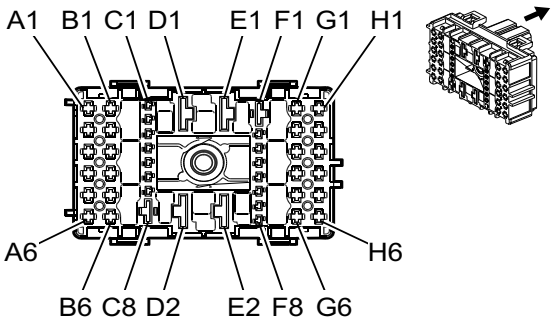
X50A Fuse Block - Underhood X3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5 0.5	VT/BK VT/BK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	III	— NP0/NQH
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN/GN	59	A/C Compressor Clutch Control	III	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	IV	—
B2	0.5	YE/BK	625	Starter Enable Relay Control	III	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD/GY	1342	Battery Positive Voltage	IV	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	4450	Ground	V	—
C4	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	V	—

X50A Fuse Block - Underhood X3 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/WH	342	Battery Positive Voltage	VI	—
E1	10	RD	642	Battery Positive Voltage	VI	—
E2	10	RD/VT	842	Battery Positive Voltage	VI	—
F1	2.5	YE/GN	4358	Starter Pinion Solenoid Voltage	I	—
F2	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	V	—
F3	0.5	RD/BN	440	Battery Positive Voltage	V	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	V	—
F5 - F6	—	—	—	Not Occupied	—	—
F7	0.5	VT/BU	5705	Powertrain Main Relay Fused Control 6	V	—
F8	—	—	—	Not Occupied	—	—
G1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	III	—
G2 - G3	—	—	—	Not Occupied	—	—
G4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	III	—
G5	1	VT/BU	5291	Powertrain Main Relay Fused Supply 2	II	—
G6	—	—	—	Not Occupied	—	—
H1	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	IV	—
H2	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	IV	—
H3	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	III	—
H4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	III	—
H5 - H6	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X3 (L82)



4992608

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
II	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

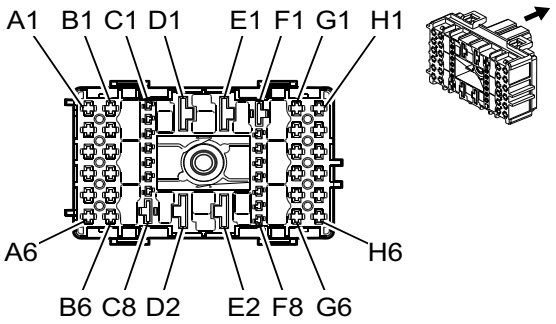
X50A Fuse Block - Underhood X3 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	III	MQB/MQE
	0.5	WH/GY	2139	Run/Crank Ignition 1 Voltage		MYC
	0.5	WH/GY	2139	Run/Crank Ignition 1 Voltage		NP0/NQH
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN/GN	59	A/C Compressor Clutch Control	III	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—
B2	0.5	YE/BK	625	Starter Enable Relay Control	III	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD/GY	1342	Battery Positive Voltage	I	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	4450	Ground	II	—
C4	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	—
C5	0.5	VT/YE	3854	Cabin Heater Coolant Motor Control	II	—
C6	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—

X50A Fuse Block - Underhood X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C7	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	5	RD/WH	342	Battery Positive Voltage	IV	—
E1	—	—	—	Not Occupied	—	—
E2	5	RD/GY	642	Battery Positive Voltage	IV	—
F1	—	—	—	Not Occupied	—	—
F2	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	II	—
F3	0.5	RD/BN	440	Battery Positive Voltage	II	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	II	—
F5 - G1	—	—	—	Not Occupied	—	—
G2	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	III	—
G3	—	—	—	Not Occupied	—	—
G4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	III	—
G5	1	VT/BU	5291	Powertrain Main Relay Fused Supply 2	III	—
G6	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	III	—
H1	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—
H2	1	VT/BU	5292	Powertrain Main Relay Fused Supply 3	III	—
H3	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	III	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	III	—

X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87)



4992608

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579915	J-35616-40 (BU)	J-38125-556	Not Available	Not Available	Not Available	Not Available
II	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
III	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

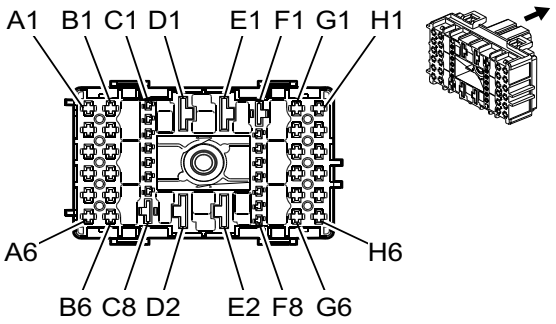
X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	IV	—
A2	0.5 0.5	VT/BK VT/BK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV	— NP0/NQH
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN/GN	59	A/C Compressor Clutch Control	IV	—
A5	0.75	RD/VT	7940	Battery Positive Voltage	IV	—
A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	II	—
B2	0.5	YE/BK	625	Starter Enable Relay Control	IV	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD/GY	1342	Battery Positive Voltage	II	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	1	BK	4450	Ground	III	—
C4	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	III	—

X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C5	0.5	VT/YE	3854	Cabin Heater Coolant Motor Control	III	—
C6	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	III	—
C7	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	III	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/WH	342	Battery Positive Voltage	V	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD/GY	642	Battery Positive Voltage	V	—
F1	2.5	YE/GN	4358	Starter Pinion Solenoid Voltage	I	—
F2	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	III	—
F3	0.5	RD/BN	440	Battery Positive Voltage	III	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	III	—
F5 - F6	—	—	—	Not Occupied	—	—
F7	0.5	VT/BU	5705	Powertrain Main Relay Fused Control 6	III	—
F8	0.5	YE/BU	5126	After Boil Heater Pump Control	III	—
G1	—	—	—	Not Occupied	—	—
G2	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	IV	—
G3	—	—	—	Not Occupied	—	—
G4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	IV	—
G5	1	VT/BU	5291	Powertrain Main Relay Fused Supply 2	IV	—
G6	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	IV	—
H1	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
H2	1	VT/BU	5292	Powertrain Main Relay Fused Supply 3	IV	—
H3	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	IV	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	IV	—

X50A Fuse Block - Underhood X3 (LM2/LV3)



4992608

Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582285	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	13582285	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	E	C
III	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
IV	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

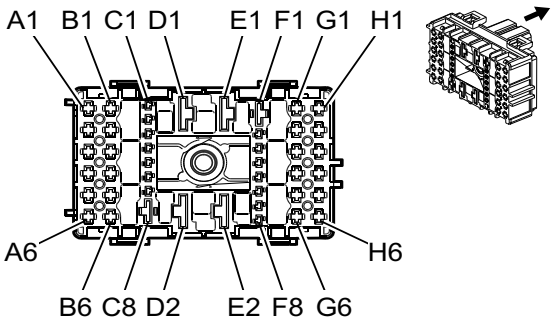
X50A Fuse Block - Underhood X3 (LM2/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
A2	0.5 0.5	VT/BK VT/BK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	V	— NP0/NQH
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN/GN	59	A/C Compressor Clutch Control	II	—
A5	0.75	RD/VT	7940	Battery Positive Voltage	II	—
A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
B2	0.5	YE/BK	625	Starter Enable Relay Control	II	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD/GY	1342	Battery Positive Voltage	III	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	4450	Ground	IV	—

X50A Fuse Block - Underhood X3 (LM2/LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C4	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	IV	—
C5 - C8	—	—	—	Not Occupied	—	—
D1	5	RD/VT	4040	Battery Positive Voltage	VI	—
D2	10	RD/WH	342	Battery Positive Voltage	VI	—
E1 - F2	—	—	—	Not Occupied	—	—
F3	0.75	RD/BN	440	Battery Positive Voltage	IV	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	IV	—
F5	—	—	—	Not Occupied	—	—
F6	0.5	YE/BU	5126	After Boil Heater Pump Control	IV	—
F7	0.5	VT/BU	5705	Powertrain Main Relay Fused Control 6	IV	—
F8	—	—	—	Not Occupied	—	—
G1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
G2	—	—	—	Not Occupied	—	—
G3	2.5	VT/BU	5292	Powertrain Main Relay Fused Supply 3	III	—
G4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	II	—
G5 - G6	—	—	—	Not Occupied	—	—
H1	2.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	III	—
H2 - H4	—	—	—	Not Occupied	—	—
H5	4	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—
H6	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X3 (LV3)



4992608

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582285	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	2	4
II	13582285	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	E	C
III	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	C	A
IV	13582286	J-35616-35 (VT)	J-38125-557	1241390-1	Lear 17	F	D
V	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

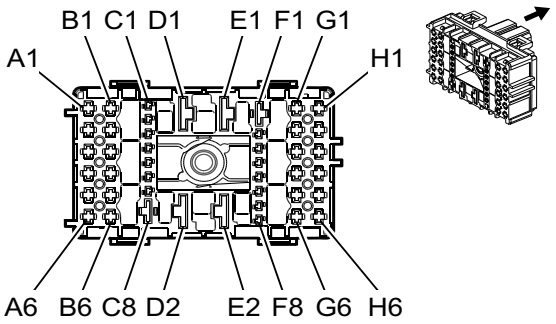
X50A Fuse Block - Underhood X3 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
A2	0.5 0.5	VT/BK VT/BK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	VI	— NP0/NQH
A3	—	—	—	Not Occupied	—	—
A4	0.5	BN/GN	59	A/C Compressor Clutch Control	II	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	IV	—
B2	0.5	YE/BK	625	Starter Enable Relay Control	II	—
B3 - B5	—	—	—	Not Occupied	—	—
B6	3	RD/GY	1342	Battery Positive Voltage	IV	—
C1 - C2	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C3	0.5	BK	4450	Ground	V	—
C4	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	V	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/WH	342	Battery Positive Voltage	VII	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD/GY	642	Battery Positive Voltage	VII	—
F1 - F3	—	—	—	Not Occupied	—	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	V	—
F5 - F8	—	—	—	Not Occupied	—	—
G1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
G2 - G3	—	—	—	Not Occupied	—	—
G4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	II	—
G5	1	VT/BU	5291	Powertrain Main Relay Fused Supply 2	III	—
G6 - H1	—	—	—	Not Occupied	—	—
H2	1	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	—
H3	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
H4 - H5	—	—	—	Not Occupied	—	—
H6	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	VI	—

X50A Fuse Block - Underhood X4



4993031

Connector Part Information

Harness Type: Chassis
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-22 (RD)	-	Not Available	Not Available	Not Available	Not Available

X50A Fuse Block - Underhood X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	—	—	—	Not Occupied	—	—
A2	0.75	VT/GY	709	Left Park Lamp Control	II	—
A3	1.5	GY/BN	2109	Trailer Park Lamp Control	II	—
A4	0.75	GY/BN	309	Right Park Lamp Control	II	—
A5 - A6	—	—	—	Not Occupied	—	—
B1	0.5	GN/WH	24	Backup Lamp Control	II	—
B2	0.75	WH/GN	1624	Trailer Backup Lamp Control	II	—
B3	1	RD/GN	2440	Battery Positive Voltage	II	—
B4	0.5	RD/GN	1840	Battery Positive Voltage	II	—
B5 - C6	—	—	—	Not Occupied	—	—
C7	0.5	RD/WH	2040	Battery Positive Voltage	I	—
C8 - D1	—	—	—	Not Occupied	—	—
D2	10	RD/GN	742	Battery Positive Voltage	III	—
E1 - G2	—	—	—	Not Occupied	—	—
G3	0.75	YE/BU	318	Left Rear Trailer Stop/Turn Lamp Control	II	—
G4	2	RD/YE	5840	Battery Positive Voltage	II	—
G5	1	RD/WH	3440	Battery Positive Voltage	II	—

X50A Fuse Block - Underhood X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G6	2.5	RD/YE	1142	Battery Positive Voltage	II	—
H1 - H2	—	—	—	Not Occupied	—	—
H3	0.75	GN/VT	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
H4	2	RD/VT	5640	Battery Positive Voltage	II	—
H5	2.5	RD/VT	1940	Battery Positive Voltage	II	—
H6	2.5	RD/VT	1242	Battery Positive Voltage	II	—

X50A Fuse Block - Underhood X5

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Connector Part Information

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

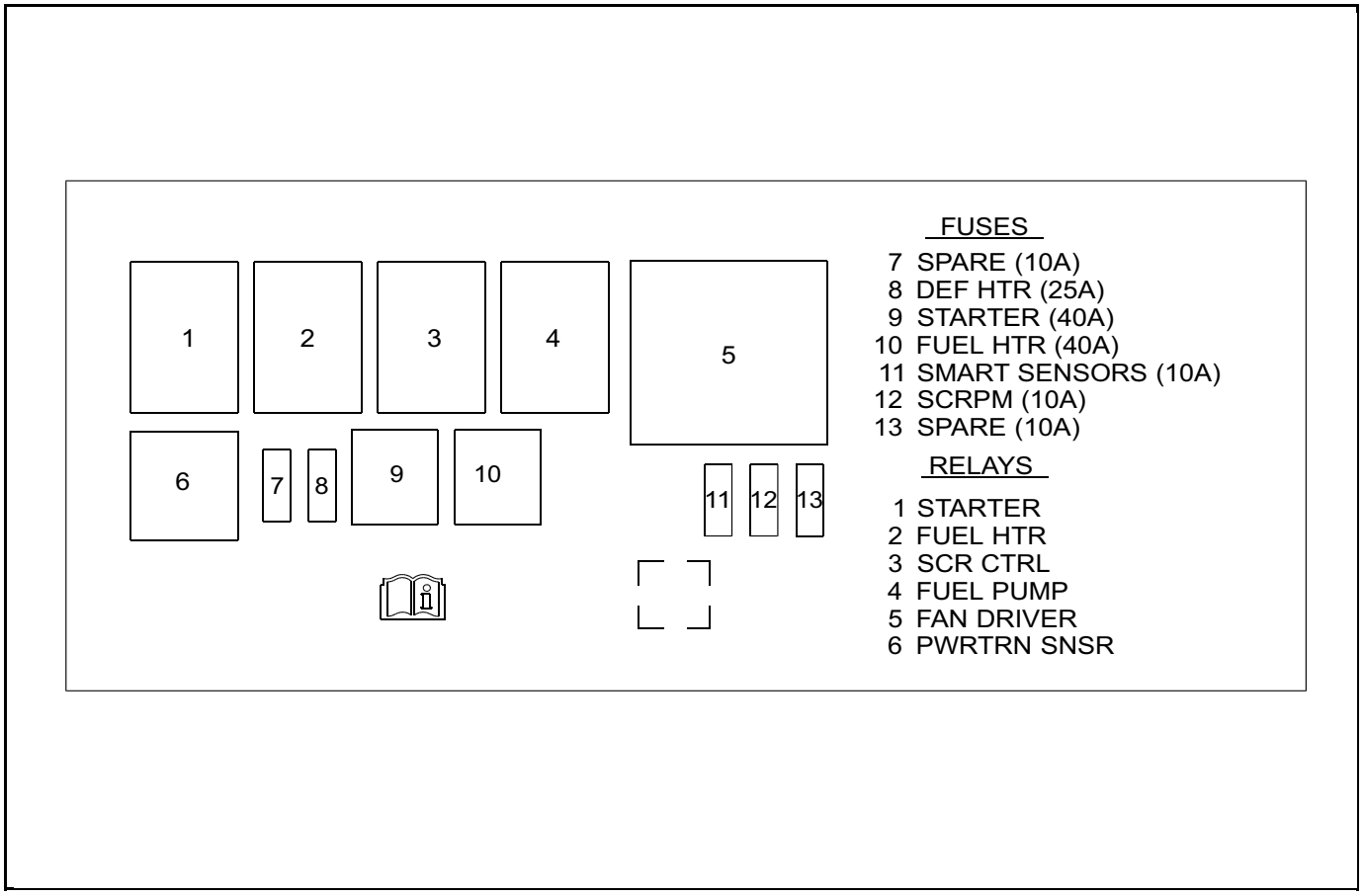
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50A Fuse Block - Underhood X5

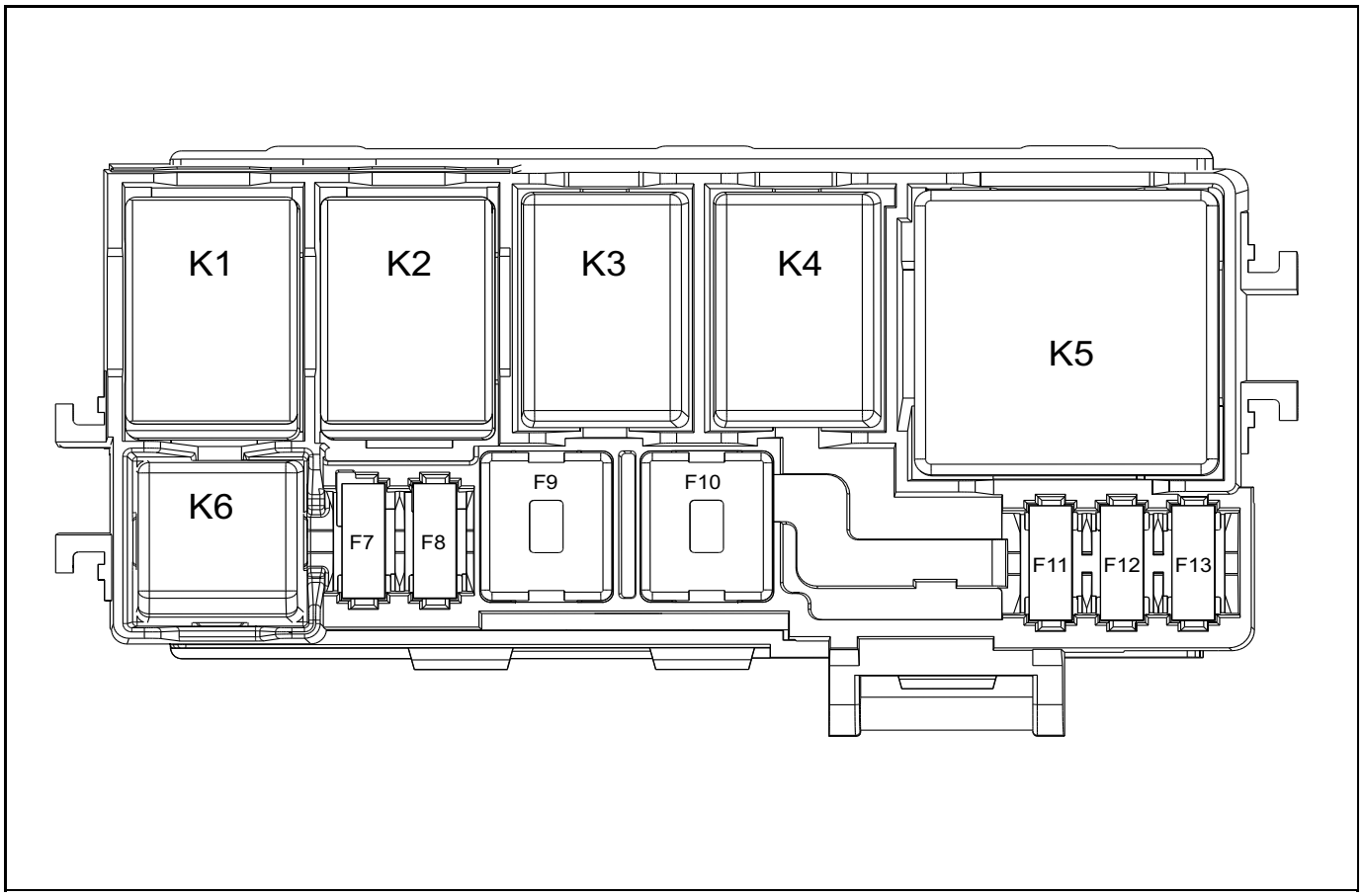
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	RD/GN	242	Battery Positive Voltage	I	—

X50B Fuse Block - Underhood Auxiliary Label (LM2)



5118008

X50B Fuse Block - Underhood Auxiliary Top View (LM2)



5118010

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
7	SPARE	F7UB	—	• KR121B Reductant Control Module Relay 2
8	DEF HTR	F8UB	25A	• Not Used
9	STARTER	F9UB	40A	• KR121A Reductant Control Module Relay 1 • F13UB
10	FUEL HTR	F10UB	40A	• KR22 Fuel Heater Relay
11	SMART SENSORS	F11UB	10A	• B136 Exhaust Particulate Sensor • B195A Nitrogen Oxides Sensor 1 • B195B Nitrogen Oxides Sensor 2 • B195C Nitrogen Oxides Sensor 3
12	SCRPM	F12UB	10A	• K111 Fuel Pump Driver Control Module • K115 Reductant Control Module
13	SPARE	F13UB	—	• Engine Coolant Pump Relay
Relays				
1	STARTER	KR121A Reductant Control Module Relay 1	—	• K115 Reductant Control Module
2	FUEL HTR	KR22 Fuel Heater Relay	—	• E11A Fuel Heater/Water in Fuel Sensor
3	SCR CTRL	Engine Coolant Pump Relay	—	• G59 Engine Coolant Pump

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
4	FUEL PUMP	KR121B Reductant Control Module Relay 2	—	• F11UB • F12UB
5	FAN DRIVER	—	—	—
6	PWRTRN SNSR	—	—	—

X50B Fuse Block - Underhood Auxiliary

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Connector Part Information

Harness Type: Engine
OEM Connector: 35096237
Service Connector: Service by Component Assembly - See Part Catalog
Description: -Way Wire Entry Fuse Block

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13327158	J-35616-42 (RD)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
II	13327178	J-35616-43 (RD)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
III	19119592	J-35616-4A (PU)	J-38125-557	Not Required	Not Required	Not Required	Not Required
IV	19332366	J-35616-35 (VT)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
V	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
VI	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

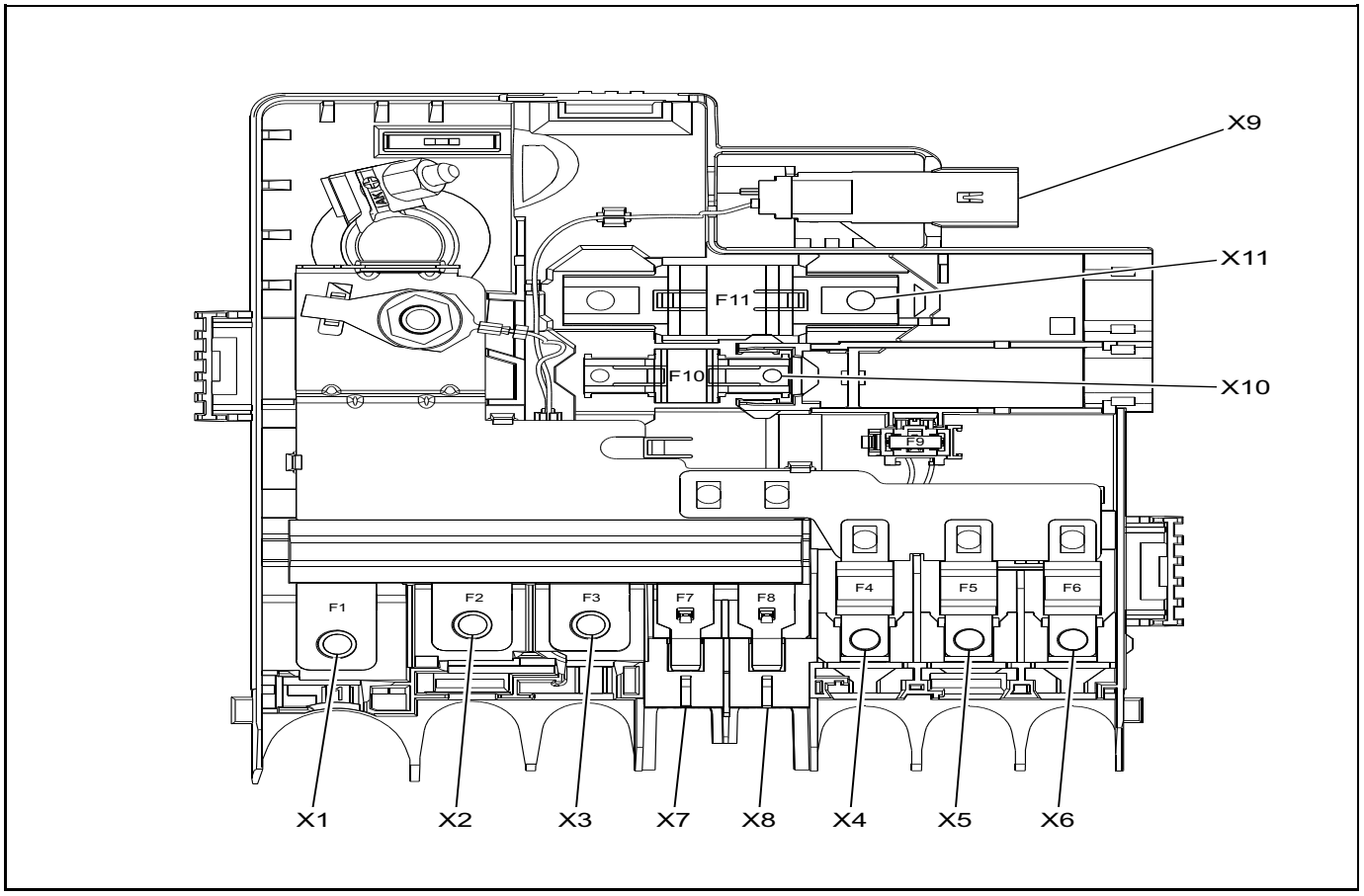
X50B Fuse Block - Underhood Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	0.5	GY/BN	7071	Heater Fuel Control	III	—
3	2.5	VT/GN	355	Fuel Filter Heater Voltage	III	—
4	0.5	BK	4450	Ground	III	—
5	2.5	BU	3921	DEF Heater Supply 1	III	—
6	0.5	GN/BU	3889	DEF Power Module Relay Control	I	—
7	0.5	RD/BU	4540	Battery Positive Voltage	I	—
8	0.5	BK	4450	Ground	I	—
9	1	RD/GN	40	Battery Positive Voltage	I	—
17	2.5	VT/GN	355	Fuel Filter Heater Voltage	III	—
18	2.5	VT/GN	355	Fuel Filter Heater Voltage	III	—
19	2.5	BU	3921	DEF Heater Supply 1	III	—
20	0.5	GN/BU	3889	DEF Power Module Relay Control	III	—
21	0.5	GN/BU	9999	DEF Heater Supply #2	I	—
22	0.5	BK	4450	Ground	I	—
23	1	VT/BU	5294	Powertrain Main Relay Fused Supply 5	III	—
24	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	III	—
25	1	RD/GN	40	Battery Positive Voltage	III	—
26	0.5	GN/BU	9999	DEF Heater Supply #2	IV	—
	1.5	GN/GY	9999	DEF Heater Supply #2	VI	—
27	1.5	GN/GY	9999	DEF Heater Supply #2	IV	—
28	10	RD/VT	4040	Battery Positive Voltage	V	—
29	2.5	RD/GN	40	Battery Positive Voltage	III	—

X50B Fuse Block - Underhood Auxiliary (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	III	—
31	2.5	VT/BU	3674	NOx Sensor 1 Control	II	—
32	2.5	VT/GN	355	Fuel Filter Heater Voltage	II	—
33	2.5	BU	3921	DEF Heater Supply 1	II	—
34	0.5	RD/BU	4540	Battery Positive Voltage	III	—

X50D Fuse Block - Battery Top View

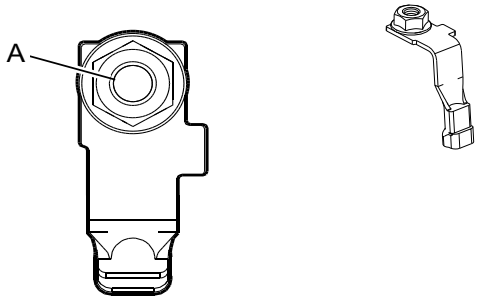


5070128

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	—	F1UD	175A (LV3/ L82/L84/ L87) 250A (L3B/ LM2)	• G13 Generator • X50A Fuse Block - Underhood
F2	—	F2UD	175A	• K43 Power Steering Control Module
F3	—	F3UD	400A	• M64 Starter Motor
F4	—	F4UD	100A	• E40 Electrical Auxiliary Heater (C32)
F5	—	F5UD	80A	• K34 Glow Plug Control Module (LM2)
F6	—	F6UD	80A	• G59 Engine Coolant Pump (L3B) • G10R Cooling Fan Motor - Right (LM2)
F7	—	F7UD	60A	• X51R Fuse Block - Instrument Panel Right
F8	—	F8UD	60A	• K160 Brake System Control Module
F9	—	F9UD	5A	• B110 Battery Sensor Module (KL9) • K9 Body Control Module (-KL9)
F10	—	F10UD	60A	• X51B Fuse Block - Instrument Panel Auxiliary (LM2)
F11	—	F11UD	—	—

X50D Fuse Block - Battery X1



4249176

Connector Part Information

Harness Type: Generator
OEM Connector: 84386516
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F

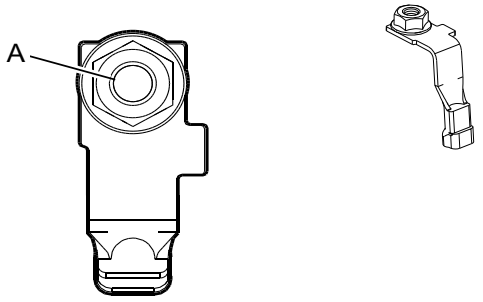
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	35	RD/YE	2	Battery Positive Voltage	I	—
	35	RD/GN	242	Battery Positive Voltage		—

X50D Fuse Block - Battery X2



4249176

Connector Part Information

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

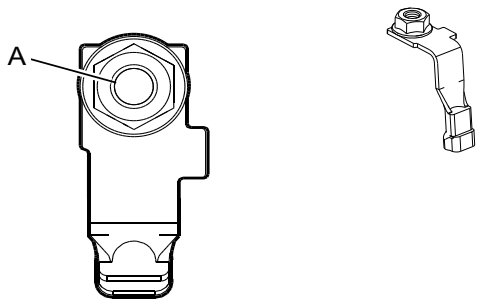
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X2

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

X50D Fuse Block - Battery X3



4249176

Connector Part Information

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

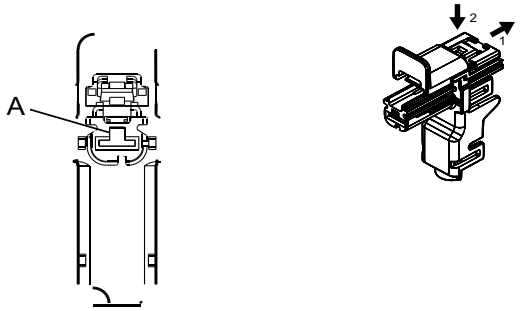
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X3

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

X50D Fuse Block - Battery X4 (C32)



4994183

Connector Part Information

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

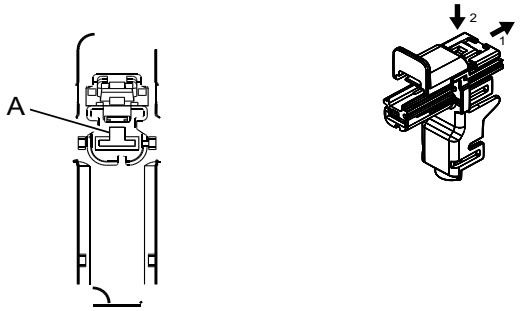
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X4 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	12	RD/GY	642	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X5 (LM2)



4994171

Connector Part Information

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

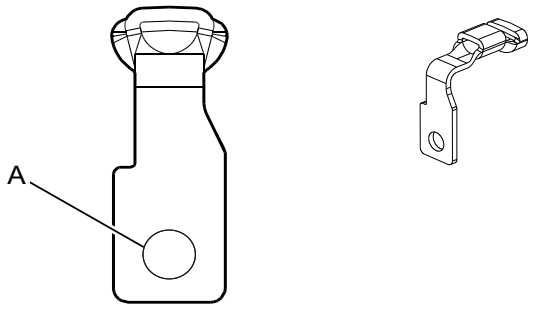
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	12	RD/VT	842	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X6 (L3B)



4994507

Connector Part Information

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

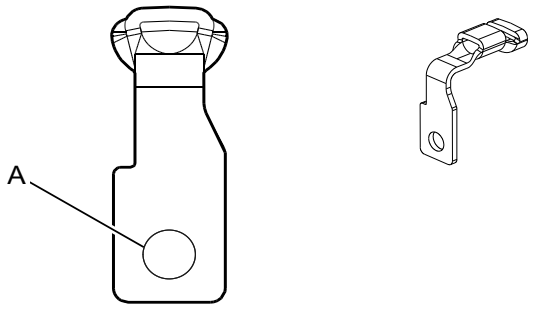
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X6 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	10	RD/BN	440	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X6 (LM2)



4994507

Connector Part Information

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

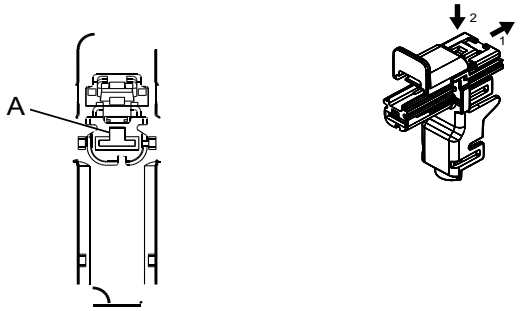
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	8	RD	642	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X7



4994183

Connector Part Information

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

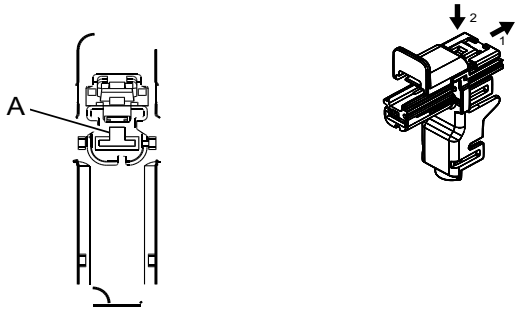
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD/GY	142	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X8



4994171

Connector Part Information

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

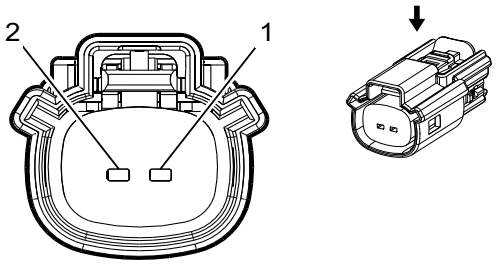
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	6	RD/VT	1640	Battery Positive Voltage	I	—

X50D Fuse Block - Battery X9



2474713

Connector Part Information

Harness Type: Body
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 150 MX Series, Sealed (BK)

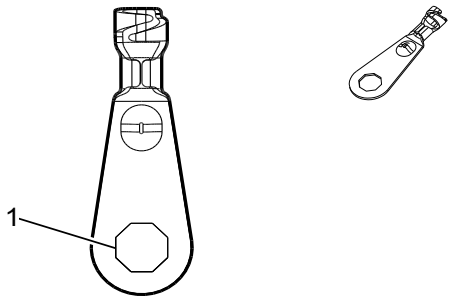
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X9

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

X50D Fuse Block - Battery X10



2239319

Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 13624366
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

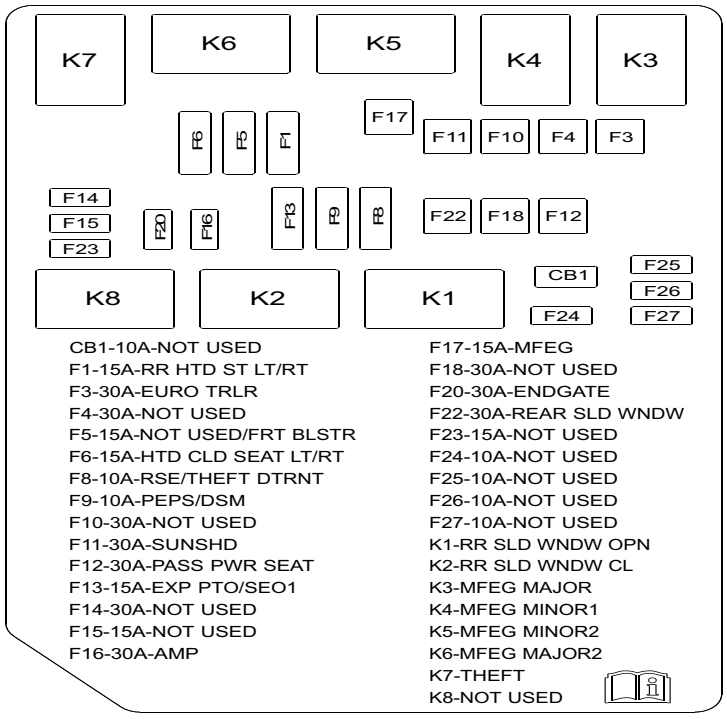
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X50D Fuse Block - Battery X10

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD/BU	42	Battery Positive Voltage	I	—

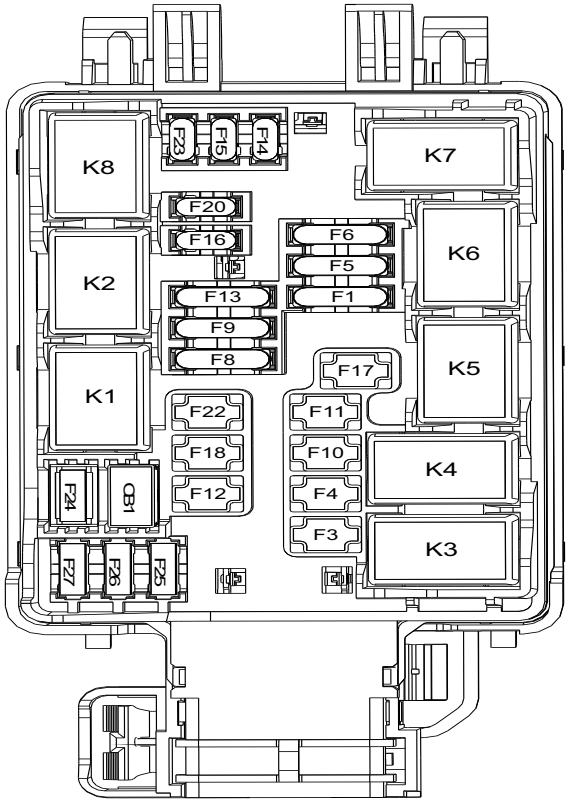
X51L Fuse Block - Instrument Panel Left Label



CB1-10A-NOT USED
F1-15A-RR HTD ST LT/RT
F3-30A-EURO TRLR
F4-30A-NOT USED
F5-15A-NOT USED/FRT BLSTR
F6-15A-HTD CLD SEAT LT/RT
F8-10A-RSE/THEFT DTRNT
F9-10A-PEPS/DSM
F10-30A-NOT USED
F11-30A-SUNSHD
F12-30A-PASS PWR SEAT
F13-15A-EXP PTO/SEO1
F14-30A-NOT USED
F15-15A-NOT USED
F16-30A-AMP
F17-15A-MFEG
F18-30A-NOT USED
F20-30A-ENDGATE
F22-30A-REAR SLD WNDW
F23-15A-NOT USED
F24-10A-NOT USED
F25-10A-NOT USED
F26-10A-NOT USED
F27-10A-NOT USED
K1-RR SLD WNDW OPN
K2-RR SLD WNDW CL
K3-MFEG MAJOR
K4-MFEG MINOR1
K5-MFEG MINOR2
K6-MFEG MAJOR2
K7-THEFT
K8-NOT USED

5085578

X51L Fuse Block - Instrument Panel Left Top View



5041380

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	Rear heated seats left/right	F1DL	15A	• K29R Seat Heating Control Module - Rear (KA6)
F3	Euro trailer	F3DL	30A	• Not Used
F4	—	F4DL	30A	• Not Used
F5	Front Bolster	F5DL	15A	• Not Used
F6	Heated and cooled seats left/right	F6DL	15A	• K29F Seat Heating Control Module - Front (KA1)
F8	Rear seat entertainment/Theft deterent	F8DL	—	—
F9	Passive entry/Passive start/Driver seat module	F9DL	10A	• K84 Keyless Entry Control Module (BTM)
F10	—	F10DL	30A	• Not Used
F11	Sunshade	F11DL	30A	• Not Used
F12	Passenger power seat	F12DL	30A	• Not Used
F13	Export power take off/Special equipment option 1	F13DL	15A	• Not Used
F14	—	F14DL	30A	• Not Used

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F15	—	F15DL	15A	• Not Used
F16	AMP	F16DL	30A	• T3 Audio Amplifier (UQA)
F17	MFEG	F17DL	15A	• KR191L Pickup Box Endgate Latch Relay - Left (QT5) • KR192L Pickup Box Auxiliary Endgate Latch Relay - Left (QK2+QT5)
F18	—	F18DL	30A	• Not Used
F20	Endgate	F20DL	30A	• K194 Pickup Box Endgate Control Module (QT6)
F22	Rear sliding window	F22DL	30A	• KR8A Sliding Rear Window Close Relay (A48) • KR8B Sliding Rear Window Open Relay (A48)
F23	—	F23DL	15A	• Not Used
F24	—	F24DL	10A	• Not Used
F25	—	F25DL	10A	• Not Used
F26	—	F26DL	10A	• Not Used
F27	—	F27DL	10A	• Not Used
Circuit Breakers				
CB1	—	CB1DL	10A	• Not Used
Relays				
K1	Rear sliding window open	KR8B	—	• M63 Sliding Rear Window Motor (A48)
K2	Rear sliding window close	KR8A	—	• M63 Sliding Rear Window Motor (A48)
K3	MFEG major 1	MFEG1A	—	• A99L Pickup Box Endgate Latch - Left (QK2) • A99R Pickup Box Endgate Latch - Right (QK2) • Pickup Box Endgate Latch (QK1)
K4	MFEG minor 1	MFEG1B	—	• A99L Pickup Box Endgate Latch - Left (QK2) • A99R Pickup Box Endgate Latch - Right (QK2) • Pickup Box Endgate Latch (QK1)
K5	MFEG minor 2	MFEG2B	—	• A100L Pickup Box Auxiliary Endgate Latch - Left (QK2) • A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)
K6	MFEG major 2	MFEG2A	—	• A100L Pickup Box Auxiliary Endgate Latch - Left (QK2) • A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)
K7	Anti-theft	—	—	—
K8	—	—	—	—

X51L Fuse Block - Instrument Panel Left Bottom View

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Connector Part Information

Harness Type: Body
OEM Connector: 33333390
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

Terminal Part Information

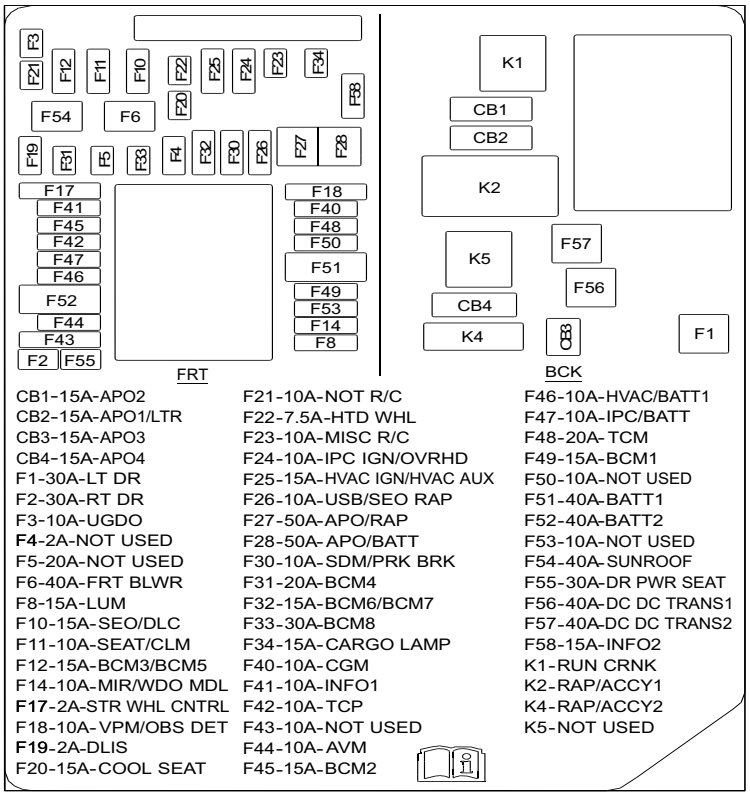
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575574	J-35616-5 (PU)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
II	13584548	J-35616-5 (PU)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
III	19332366	J-35616-35 (VT)	J-38125-215A	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

X51L Fuse Block - Instrument Panel Left Bottom View

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/GN	7728	Major Endgate High Relay Control	III	QT5
2	0.5	GN	1299	Major Endgate Motor Supply Voltage	III	QT5
3	0.35	WH/GY	7297	Minor Endgate High Relay Control	III	QK2
4	0.5	VT	7725	Minor Endgate Motor Supply Voltage	III	QK2
5	0.5	BK	1150	Ground	III	QK2+QT5
6	0.5	BN/YE	7727	Minor Endgate Motor Common	III	QK2
7	0.35	GY/BU	7298	Minor Endgate Low Relay Control	III	AK2
8	0.5 0.5	BK BK	1150 1150	Ground Ground	III	QT5 QT5
9	0.5	BN/VT	7731	Major Endgate Motor Common	III	QT5
10	0.35	BU/VT	7729	Major Endgate Low Relay Control	III	QT5
13	0.5	BN/VT	7731	Major Endgate Motor Common	III	QT5
14	0.5	BN/YE	7727	Minor Endgate Motor Common	III	QK2
15	0.5 0.5	BK BK	1150 1150	Ground Ground	III	QK2+QT5 QK2+QT5
16	0.5	BN/BK	7726	Minor Endgate Motor Return	III	QK2
17	0.5 0.5	BK BK	1150 1150	Ground Ground	III	QT5 QT5
18	0.5	YE/BK	7730	Major Endgate Motor Return	III	QT5
20	0.5	RD/BU	7640	Battery Positive Voltage	III	QT5
21	0.5	BK	1150	Ground	III	QT5
22	0.5	RD/BU	7640	Battery Positive Voltage	III	QT5+QK2
23	0.5 0.5	BK BK	1150 1150	Ground Ground	III	QT5+QK2 QT5+QK2
26	0.5 0.5	RD/BU RD/BU	7640 7640	Battery Positive Voltage Battery Positive Voltage	II	QK2+QT5 QT5

X51L Fuse Block - Instrument Panel Left Bottom View (cont'd)

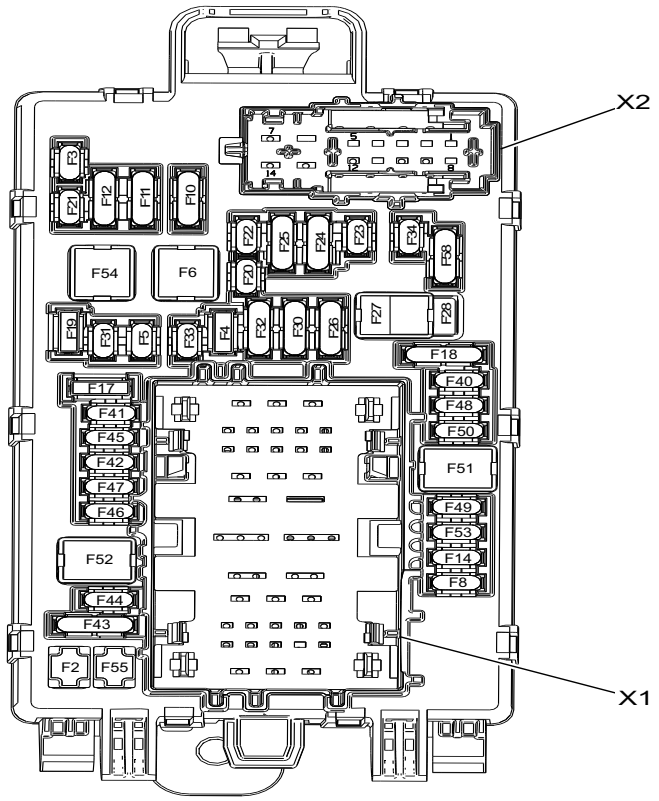
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.5	RD/YE	240	Battery Positive Voltage	III	KA6
29	0.5	RD/GN	5140	Battery Positive Voltage	III	KA1
30	10	RD/GY	2042	Battery Positive Voltage	IV	KA1/QT5
35	0.5	RD/VT	340	Battery Positive Voltage	III	KA6
37	0.5	RD	6140	Battery Positive Voltage	III	KA1
40	0.5	RD/YE	4340	Battery Positive Voltage	III	BTM
42	10	RD/VT	2142	Battery Positive Voltage	IV	BTM/A48
44	2.5	RD/BN	1440	Battery Positive Voltage	I	A7K
46	2.5	RD/VT	3340	Battery Positive Voltage	I	A48
50	2.5	RD/YE	3740	Battery Positive Voltage	III	UQA
51	2.5	RD/GY	7040	Battery Positive Voltage	III	QT6
57	2.5	RD/VT	3340	Battery Positive Voltage	III	A48
58	2.5	BK	1150	Ground	III	A48
59	0.5	BK	1150	Ground	III	A48
60	2.5	RD/VT	3340	Battery Positive Voltage	III	A48
61	2.5	BK	1150	Ground	III	A48
62	0.5	BK	1150	Ground	III	A48
71	0.35	YE/VT	6191	Power Sliding Window Switch Open Signal	III	A48
72	2.5	GY/GN	5441	Endgate Window Regulator Down Signal	III	A48
73	0.35	WH	6192	Power Sliding Window Switch Close Signal	III	A48
74	2.5	YE/BU	5442	Endgate Window Regulator Up Signal	III	A48



CB1-15A-APO2
CB2-15A-APO1/LTR
CB3-15A-APO3
CB4-15A-APO4
F1-30A-LT DR
F2-30A-RT DR
F3-10A-UGDO
F4-2A-NOT USED
F5-20A-NOT USED
F6-40A-FRT BLWR
F8-15A-LUM
F10-15A-SEO/DLC
F11-10A-SEAT/CLM
F12-15A-BCM3/BCM5
F14-10A-MIR/WDO MDL
F17-2A-STR WHL CNTRL
F18-10A-VPM/OBS DET
F19-2A-DLIS
F20-15A-COOL SEAT
F21-10A-NOT R/C
F22-7.5A-HTD WHL
F23-10A-MISC R/C
F24-10A-IPC IGN/OVRHD
F25-15A-HVAC IGN/HVAC AUX
F26-10A-USB/SEO RAP
F27-50A-APO/RAP
F28-50A-APO/BATT
F30-10A-SDM/PRK BRK
F31-20A-BCM4
F32-15A-BCM6/BCM7
F33-30A-BCM8
F34-15A-CARGO LAMP
F40-10A-CGM
F41-10A-INFO1
F42-10A-TCP
F43-10A-NOT USED
F44-10A-AVM
F45-15A-BCM2
F46-10A-HVAC/BATT1
F47-10A-IPC/BATT
F48-20A-TCM
F49-15A-BCM1
F50-10A-NOT USED
F51-40A-BATT1
F52-40A-BATT2
F53-10A-NOT USED
F54-40A-SUNROOF
F55-30A-DR PWR SEAT
F56-40A-DC DC TRANS1
F57-40A-DC DC TRANS2
F58-15A-INFO2
K1-RUN CRNK
K2-RAP/ACCY1
K4-RAP/ACCY2
K5-NOT USED

5041372

X51R Fuse Block - Instrument Panel Right Top View



5041376

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F2	RT DR	F2DR	30A	• M74P Window Motor - Passenger (AEF) • S79P Window Switch - Passenger (AED/AEF) • S79RR Window Switch - Right Rear (AEQ)
F3	UGDO	F3DR	10A	• A98 Front Overhead Console Assembly • E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)
F4	NOT USED	F4DR	2A	—
F5	NOT USED	F5DR	20A	—
F6	FRT BLWR	F6DR	40A	• M8 Blower Motor
F8	LUM	F8DR	15A	• S65D Seat Lumbar Support Switch - Driver (A2X) • S65P Seat Lumbar Support Switch - Passenger (A7K)
F10	SEO/DLC	F10DR	15A	• K9 Body Control Module
F11	SEAT/CLM	F11DR	10A	• F19DR (-BTM) • K40 Seat Memory Control Module (A45) • K60 Steering Column Lock Module (BTM)
F12	BCM3/BCM5	F12DR	15A	• K9 Body Control Module
F14	MIR/WDO MDL	F14DR	10A	• S146 Window/Outside Rearview Mirror Switch - Driver (AXG)
F17	STR WHL CNTRL	F17DR	2A	• S70L Steering Wheel Controls Switch - Left (K34) • S70R Steering Wheel Controls Switch - Right (K34)

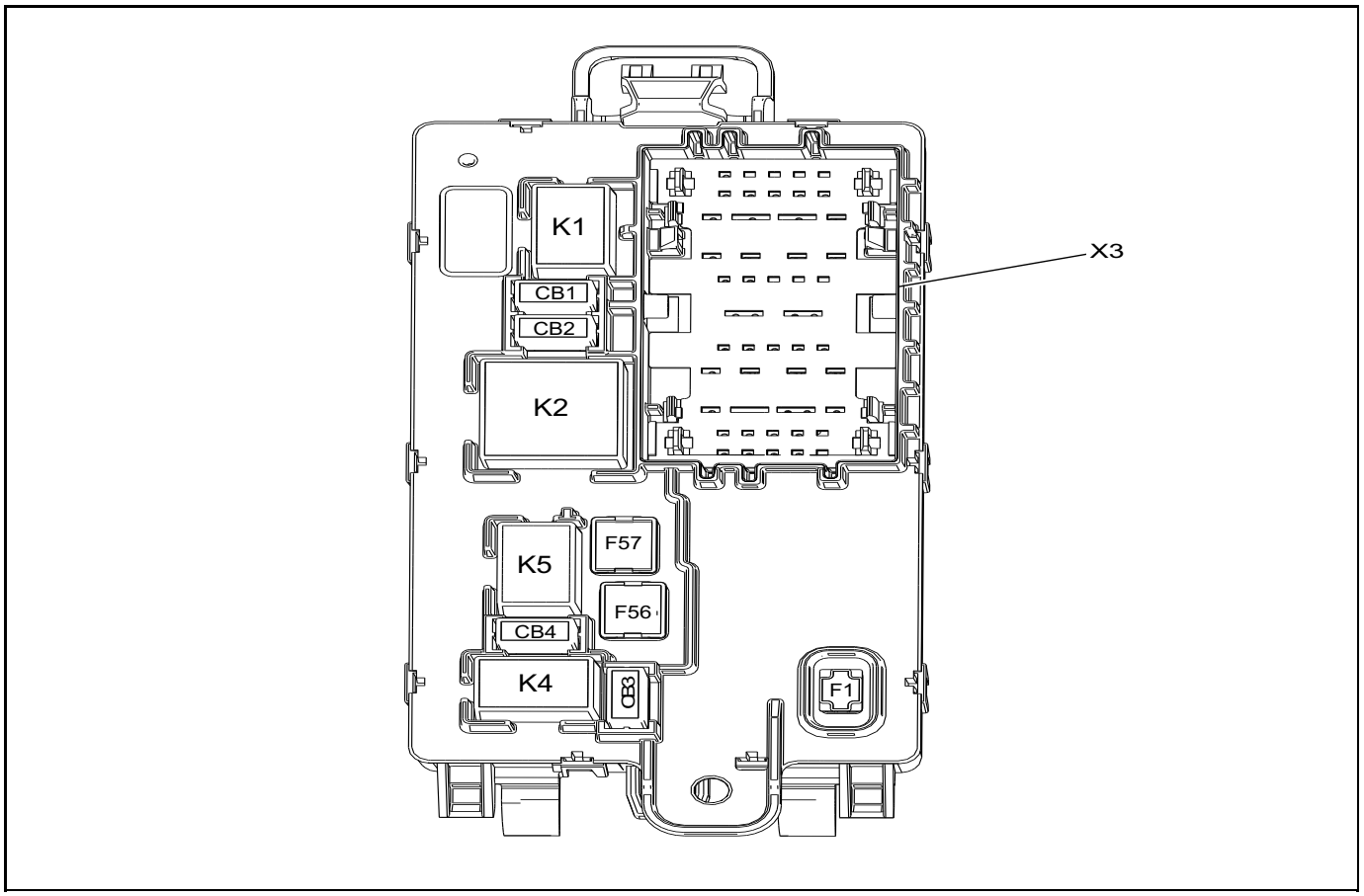
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F18	VPM/OBS DET	F18DR	10A	• B174W Frontview Camera - Windshield (UEU/UHX) • K157 Video Processing Control Module (UVI/UV2) • K182 Parking Assist Control Module (UD5/UD7)
F19	DLIS	F19DR	2A	• S39 Ignition Switch (-BTM)
F20	COOL SEAT	F20DR	15A	• M73A Seat Blower Motor - Driver Back (KQV) • M73B Seat Blower Motor - Passenger Back (KQV) • M73C Seat Blower Motor - Driver Cushion (KQV) • M73D Seat Blower Motor - Passenger Cushion (KQV)
F21	NOT R/C	F21DR	10A	• K60 Steering Colmn Lock Module (BTM)
F22	HTD WHL	F22DR	7.5A	• K32 Steering Wheel Heating Control Module (KI3)
F23	MISC R/C	F23DR	10A	• B87 Rearview Camera (UVC) • T19 Power Supply Transformer (KL9)
F24	IPC IGN/OVRHD	F24DR	10A	• A10 Inside Rearview Mirror (DD8/DRZ) • A98 Front Overhead Console Assembly • K56 Serial Data Gateway Module • P16 Instrument Cluster • P43 Collision Alert Indicators ((UHX/UEU)-UV6)
F25	HVAC IGN/HVAC AUX	F25DR	15A	• E40 Electrical Auxiliary Heater (C32)
F26	USB/SEO RAP	F26DR	10A	• A98 Front Overhead Console Assembly • K34 Glow Plug Control Module (LM2) • T22 Mobile Device Wireless Charger Module (K4C) • X92B USB Receptacle - Rear Seat (AZ3) • X92C USB Receptacle - Center Console Rear (D07) • X260
F27	APO/RAP	F27DR	50A	• CB1DR • CB2DR
F28	APO/BATT	F28DR	50A	• CB1DR • CB2DR
F30	SDM/PRK BRK	F30DR	10A	• B80 Park Brake Switch • K85 Passenger Presence Module • K36 Inflatable Restraint Sensing and Diagnostic Module • S76 Trailer Brake Control Switch (JL1)
F31	BCM4	F31DR	20A	• K9 Body Control Module
F32	BCM6/BCM7	F32DR	10A	• X84 Data Link Connector
F33	BCM8	F33DR	30A	• K9 Body Control Module
F34	CARGO LAMP	F34DR	15A	• E2A Marker Lamp - Endgate (QT5/QT6) • E6 Center High Mounted Stop Lamp • S30 Headlamp Switch (QT5/QT6)
F40	CGM	F40DR	10A	• K56 Serial Data Gateway Module
F41	INFO1	F41DR	10A	• A26 HVAC Controls • P17 Info Display Module (IOS/IOT/(IOR+UIJ)) • P29 Head-Up Display (UV6) • S32R Seat Heating Switch - Rear (KA6) • X83 Auxiliary Audio Input • X92 USB Receptacle
F42	TCP	F42DR	10A	• K73 Telematics Communication Interface Control Module (UE1)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F43	NOT USED	F43DR	10A	—
F44	AVM	F44DR	10A	• Q80L Engine Mount Solenoid Valve - Left (L3B/LM2) • Q80R Engine Mount Solenoid Valve - Right (L3B/LM2)
F45	BCM2	F45DR	15A	• K9 Body Control Module
F46	HVAC/BATT1	F46DR	10A	• K33 HVAC Control Module
F47	IPC/BATT	F47DR	10A	• P16 Instrument Cluster
F48	TCM	F48DR	20A	• K71 Transmission Control Module (MQB/MQE) • Q8 Control Solenoid Valve Assembly (MYC)
F49	BCM1	F49DR	15A	• K9 Body Control Module
F50	NOT USED	F50DR	10A	—
F51	BATT1	F51DR	40A	• F18DR (-KL9) • F40DR (-KL9) • F48DR (-KL9) • F49DR (-KL9) • F58DR (-KL9)
F52	BATT2	F52DR	40A	• F17DR (-KL9) • F41DR (-KL9) • F42DR (-KL9) • F44DR (-KL9) • F45DR (-KL9) • F46DR (-KL9) • F47DR (-KL9)
F53	NOT USED	F53DR	10A	—
F54	SUNROOF	F54DR	40A	• M69 Sunroof Motor (CF5)
F55	DR PWR SEAT	F55DR	30A	• S64D Seat Adjuster Switch - Driver (A2X-A45) • K40 Seat Memory Control Module (A45)
F58	INFO2	F58DR	15A	• A11 Radio

X51R Fuse Block - Instrument Panel Right Bottom View



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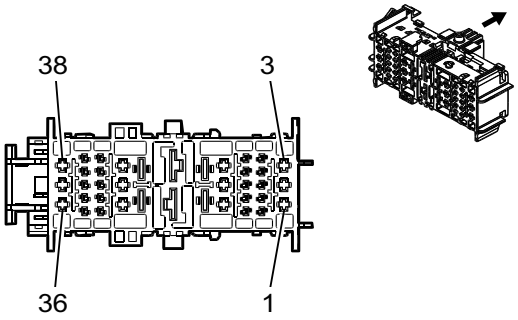
Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Circuit Breakers				
CB1	APO2	CB1DR	15A	• X80G Accessory Power Receptacle - Instrument Panel
CB2	APO1/LTR	CB2DR	15A	• X80L Accessory Power Receptacle - Center Console Rear (D07) • X80M Accessory Power Receptacle - Rear Seat (AZ3)
CB3	APO3	CB3DR	15A	—
CB4	APO4	CB4DR	15A	—
Fuses				
F1	LT DR	F1DR	30A	• M74D Window Motor - Driver (AXG) • S79LR Window Switch - Left Rear (AEQ)
F56	DC DC TRANS1	F56DR	40A	• T19 Power Supply Transformer (KL9)
F57	DC DC TRANS2	F57DR	40A	• T19 Power Supply Transformer (KL9)
Relays				
K1	RUN CRANK	KR73 Ignition Main Relay	—	• F20DR • F21DR • F22DR • F23DR • F24DR • F25DR

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
K2	RAP/ACCY1	KR76A Retained Accessory Power Relay 1	—	• F26DR • F27DR
K4	RAP/ACCY2	KR76B Retained Accessory Power Relay 2	—	• CB3DR • CB4DR
K5	NOT USED	—	—	—

X51R Fuse Block - Instrument Panel Right X1 (Regular Cab)



4994230

Connector Part Information

Harness Type: Body
OEM Connector: 33297514
Service Connector: 19371187
Description: 38-Way F 1.5, 2.8, 6.3 CTS Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19370816	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19371175	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
IV	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

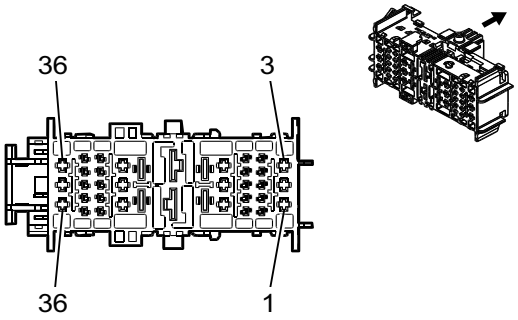
X51R Fuse Block - Instrument Panel Right X1 (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	1	RD/GN	1840	Battery Positive Voltage	I	—
4	0.5	RD/WH	3440	Battery Positive Voltage	III	—
5	0.5 0.5	RD/GN RD/GN	4440 4440	Battery Positive Voltage Battery Positive Voltage	III	— —
6	0.35	VT/YE	143	Accessory Ignition Voltage	III	—
7	—	—	—	Not Occupied	—	—
8	0.35 0.35 0.35	VT/YE VT VT/YE	43 4601 43	Accessory Ignition Voltage Retained Accessory Power Fused Control Accessory Ignition Voltage	III	K4C K4C -K4C
9	0.35	RD/GN	3140	Battery Positive Voltage	III	—
10	0.35 0.35	GY/GN GY/VT	4083 755	RAP Relay 2 Coil Control RAP Relay Coil Control	III III	BTM -BTM
11	—	—	—	Not Occupied	—	—
12	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	III	—
13	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	III	—

X51R Fuse Block - Instrument Panel Right X1 (Regular Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
14	0.35	RD/BN	1140	Battery Positive Voltage	I	—
15	0.35	GN/VT	5199	Run/Crank Relay Coil Control	I	—
16	1.5	RD/WH	1040	Battery Positive Voltage	I	—
17	2.5	RD/YE	2172	12V Regulated Supply Voltage 1	II	—
18	2.5	RD/YE	8140	Battery Positive Voltage	II	—
19	10	RD/GY	142	Battery Positive Voltage	IV	—
20	10	RD/WH	342	Battery Positive Voltage	IV	—
21	2.5	RD/GN	2173	12V Regulated Supply Voltage 2	II	—
22	2.5	RD/WH	8040	Battery Positive Voltage	II	—
23	—	—	—	Not Occupied	—	—
24	2.5	RD/BU	1842	Battery Positive Voltage	I	—
25	2.5	RD/WH	1340	Battery Positive Voltage	I	—
26	—	—	—	Not Occupied	—	—
27	0.35	RD/GN	40	Battery Positive Voltage	III	—
28	—	—	—	Not Occupied	—	—
29	0.35	RD/VT	1940	Battery Positive Voltage	III	—
30	0.75	RD/YE	8840	Battery Positive Voltage	III	—
31	—	—	—	Not Occupied	—	—
32	0.35	BN/WH	1429	Standing Lamp Relay Control	III	—
33 - 35	—	—	—	Not Occupied	—	—
36	2.5	RD/YE	5040	Battery Positive Voltage	I	—
37 - 38	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab)



4994712

Connector Part Information

Harness Type: Body
OEM Connector: 33371909
Service Connector: 19371181
Description: 38-Way F 1.5, 2.8, 6.3 CTS Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19370816	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19371175	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
V	Not Required	J-35616-22 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

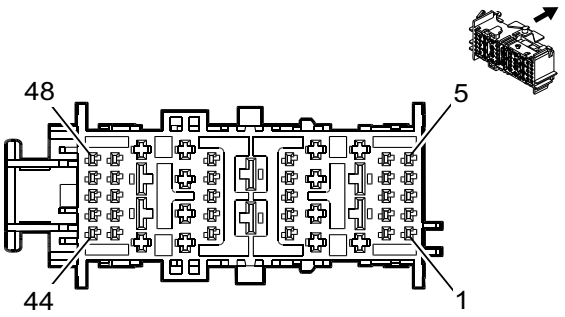
X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	4939	Run/Crank Ignition 1 Voltage	II	—
2	—	—	—	Not Occupied	—	—
3	1	RD/GN	1840	Battery Positive Voltage	II	—
4	0.5	RD/WH	3440	Battery Positive Voltage	IV	—
5	0.5 0.5	RD/GN RD/GN	4440 4440	Battery Positive Voltage Battery Positive Voltage	IV	— —
6	0.35	VT/YE	143	Accessory Ignition Voltage	I	—
7	—	—	—	Not Occupied	—	—
8	0.35 0.35 0.35	VT/YE VT VT/YE	43 4601 43	Accessory Ignition Voltage Retained Accessory Power Fused Control Accessory Ignition Voltage	IV I	K4C K4C -K4C
9	0.35	RD/GN	3140	Battery Positive Voltage	I	—
10	0.35 0.35	GY/GN GY/VT	4083 755	RAP Relay 2 Coil Control RAP Relay Coil Control	I I	CREW CAB EXTENDED CAB

X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
11	0.35	RD/VT	1640	Battery Positive Voltage	IV	—
12	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	IV	—
13	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	IV	—
14	0.35	RD/BN	1140	Battery Positive Voltage	II	—
15	0.35	GN/VT	5199	Run/Crank Relay Coil Control	II	—
16	1.5	RD/WH	1040	Battery Positive Voltage	II	—
17	2.5	RD/YE	2172	12V Regulated Supply Voltage 1	III	—
18	2.5	RD/YE	8140	Battery Positive Voltage	III	—
19	10	RD/GY	142	Battery Positive Voltage	V	—
20	10	RD/WH	342	Battery Positive Voltage	V	—
21	2.5	RD/GN	2173	12V Regulated Supply Voltage 2	III	—
22	2.5	RD/WH	8040	Battery Positive Voltage	III	—
23	2.5	RD/BU	1842	Battery Positive Voltage	II	—
24	2.5	RD/BU	1842	Battery Positive Voltage	II	—
25	2.5	RD/WH	1340	Battery Positive Voltage	II	—
26	—	—	—	Not Occupied	—	—
27	0.35	RD/GN	40	Battery Positive Voltage	I	—
28	—	—	—	Not Occupied	—	—
29	0.35	RD/VT	1940	Battery Positive Voltage	I	—
30	0.75	RD/YE	8840	Battery Positive Voltage	IV	—
31	—	—	—	Not Occupied	—	—
32	0.35	BN/WH	1429	Standing Lamp Relay Control	I	—
33 - 35	—	—	—	Not Occupied	—	—
36	2.5	RD/YE	5040	Battery Positive Voltage	II	—
37	2.5	RD/WH	1340	Battery Positive Voltage	II	—
38	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X2



4997272

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33371910
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579915	J-35616-40 (BU)	J-38125-556	Not Available	Not Available	Not Available	Not Available
II	13579921	J-35616-40 (BU)	J-38125-556	1241406-1	Lear 17	F	1
III	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19370816	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19371175	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

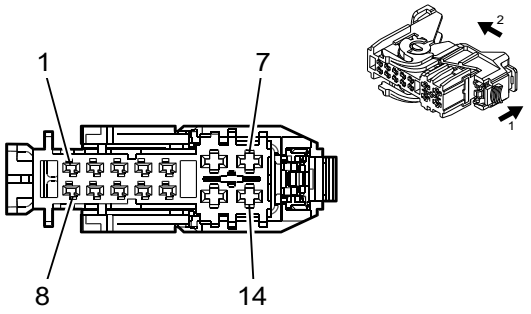
X51R Fuse Block - Instrument Panel Right X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1050	Ground	VI	—
2 - 5	—	—	—	Not Occupied	—	—
6	0.75	RD/YE	2340	Battery Positive Voltage	VI	—
7	0.75	RD/YE	2340	Battery Positive Voltage	VI	—
8	0.5	RD/WH	3440	Battery Positive Voltage	VI	—
9	0.5 0.35	RD/GY RD/GY	4140 4140	Battery Positive Voltage Battery Positive Voltage	VI III	BTM -BTM
10	0.35	BU/VT	807	OFF /Accessory Ignition Voltage	III	—
11	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	IV	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.5	RD/BN	2940	Battery Positive Voltage	IV	—
15	0.5 0.5	VT/WH VT/WH	1139 1139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV	— DD8/DRZ

X51R Fuse Block - Instrument Panel Right X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
16	0.5	RD/GN	5140	Battery Positive Voltage	IV	—
17	—	—	—	Not Occupied	—	—
18	0.5	RD/GY	2140	Battery Positive Voltage	IV	—
19	0.35	VT/BK	1639	Run/Crank Ignition 1 Voltage	III	—
20 - 23	—	—	—	Not Occupied	—	—
24	4	RD/VT	542	Battery Positive Voltage	II	—
25	2.5	RD/GN	3140	Battery Positive Voltage	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	RD/WH	640	Battery Positive Voltage	VI	—
28	0.35	RD/GN	5140	Battery Positive Voltage	III	—
29	0.35	RD/BU	540	Battery Positive Voltage	III	—
30	0.35	RD/GY	4140	Battery Positive Voltage	III	—
31	1.5	RD/BN	4240	Battery Positive Voltage	IV	—
32	2.5	RD/VT	4040	Battery Positive Voltage	IV	—
33	—	—	—	Not Occupied	—	—
34	1	RD/BU	2540	Battery Positive Voltage	IV	—
35 - 36	—	—	—	Not Occupied	—	—
37	0.75	RD/BN	2240	Battery Positive Voltage	V	—
38	—	—	—	Not Occupied	—	—
39	0.35	RD/VT	3340	Battery Positive Voltage	III	—
40	0.35	RD/VT	3340	Battery Positive Voltage	III	—
41	0.35	RD/YE	3040	Battery Positive Voltage	III	—
42	0.5	RD/BU	3240	Battery Positive Voltage	VI	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	RD/WH	2740	Battery Positive Voltage	VI	—
46	0.35	RD/GY	2840	Battery Positive Voltage	III	—
47	0.35	RD/WH	1340	Battery Positive Voltage	III	—
48	—	—	—	Not Occupied	—	—

X51R Fuse Block - Instrument Panel Right X3



4992260

Connector Part Information

Harness Type: Headliner
OEM Connector: 33297528
Service Connector: 13513732
Description: 14-Way F 150, 280 CTS Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19119592	J-35616-4A (PU)	J-38125-557	Not Available	Not Available	Not Available	Not Available
II	19332365	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19332366	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19371175	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

X51R Fuse Block - Instrument Panel Right X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	0.35	RD/YE	240	Battery Positive Voltage	I	—
8	—	—	—	Not Occupied	—	—
9	0.5 0.35	WH/VT WH/VT	1430 1430	Exterior Courtesy Lamp Control Exterior Courtesy Lamp Control	IV IV	QT5/QT6 -QT5-QT6
10	0.35	VT/YE	43	Accessory Ignition Voltage	II	—
11	—	—	—	Not Occupied	—	—
12	0.35	RD/GN	3140	Battery Positive Voltage	II	—
13	—	—	—	Not Occupied	—	—
14	0.35 0.35	VT/WH VT/WH	1139 1139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	III I	(DD8/DRZ) +UEU (DD8/DRZ)-UEU

X51B Fuse Block - Instrument Panel Auxiliary

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Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 33323307
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Block

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X51B Fuse Block - Instrument Panel Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE/BN	968	Auxiliary 4 Control	II	—
2	2.5	BU	965	Auxiliary 1 Control	II	—
3	2.5	GY/BK	966	Auxiliary 2 Control	II	—
4	2.5	BN/WH	967	Auxiliary 3 Control	II	—
5	2.5	OG/WH	968	Auxiliary 4 Control	II	—
6	2.5	BU	965	Auxiliary 1 Control	II	—
7	2.5	GY/BK	966	Auxiliary 2 Control	II	—
8	2.5	BN/WH	967	Auxiliary 3 Control	II	—
9	2.5	GN/BU	5989	Emergency Lamp Relay Contact Control	II	—
10	2.5	GN/BU	5989	Emergency Lamp Relay Contact Control	II	—
11	2.5	GN/BU	5989	Emergency Lamp Relay Contact Control	II	—
13	0.35	BU	903	Battery Positive Voltage	II	—
14	0.5	WH/BK	5990	Emergency Lamp Switch Signal	II	—
15	2.5	RD/BU	42	Battery Positive Voltage	II	—
16	2.5	RD/BU	42	Battery Positive Voltage	II	—
17	0.35	BK	963	Auxiliary 3 Switch Signal	II	—
18	2.5	OG/WH	968	Auxiliary 4 Control	II	—
20	0.35	BU	903	Battery Positive Voltage	II	—
21	0.35	BU	903	Battery Positive Voltage	II	—
22	2.5	BN/WH	967	Auxiliary 3 Control	II	—
23	0.35	BK	964	Auxiliary 4 Switch Signal	II	—
24	2.5	RD/BU	42	Battery Positive Voltage	II	—
25	2.5	RD/BU	42	Battery Positive Voltage	II	—
26	0.35	BK	962	Auxiliary 2 Switch Signal	II	—
27	2.5	BU	965	Auxiliary 1 Control	II	—
29	0.35	RD/BU	42	Battery Positive Voltage	II	—
30	0.35	RD/BU	42	Battery Positive Voltage	II	—
31	2.5	GY/BK	966	Auxiliary 2 Control	II	—
32	0.35	BK	961	Auxiliary 1 Switch Signal	II	—

X51B Fuse Block - Instrument Panel Auxiliary (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
33	2.5	RD/BU	42	Battery Positive Voltage	II	—
34	0.5	VT/GN	39	Run/Crank Ignition 1 Voltage	II	—
35	0.5	VT/GN	39	Run/Crank Ignition 1 Voltage	II	—
36	5	RD/BU	42	Battery Positive Voltage	I	—
37	0.35	BU	903	Battery Positive Voltage	II	—
38	0.35	RD/BU	42	Battery Positive Voltage	II	—
39	2.5	RD/BU	42	Battery Positive Voltage	II	—
40	2.5	RD/BU	42	Battery Positive Voltage	II	—
41	2.5	RD/BU	42	Battery Positive Voltage	II	—
42	2.5	RD/BU	42	Battery Positive Voltage	II	—
43	2.5	RD/BU	42	Battery Positive Voltage	II	—

X54 Fuse Block - Snow Plow (VYU)

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Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 33391084
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X54 Fuse Block - Snow Plow (VYU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
B4	—	BN	25	Charge Indicator Control	I	—
B6	—	BN	9026	—	I	—
C4	—	WH/BU	9030	—	I	—
C5	—	BN	25	Charge Indicator Control	I	—

X55SP Fuse Holder - Snow Plow (VYU)

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Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 84129890
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

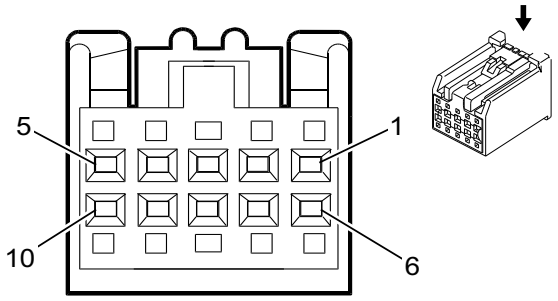
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X55SP Fuse Holder - Snow Plow (VYU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
X	—	BN	9026	—	I	—
Y	—	BN	9028	—	I	—

Component Connector End Views
A10 Inside Rearview Mirror X1 (DD8/DRZ)



2180211

Connector Part Information

Harness Type: Headliner
OEM Connector: 13815336
Service Connector: 13577390
Description: 10-Way F 0.64 Kaizen Series (BK)

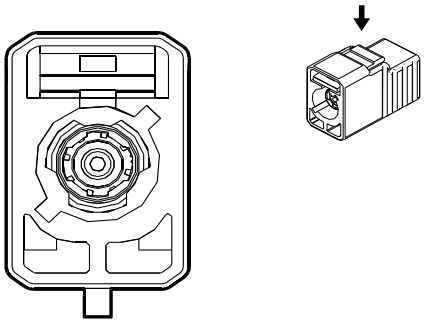
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575867	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

A10 Inside Rearview Mirror X1 (DD8/DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	24	Backup Lamp Control	I	—
2	0.35	VT/WH	1139	Run/Crank Ignition 1 Voltage	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	BK/WH	1851	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	Automatic Day/Night Mirror Signal	I	—
10	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror X2 (DRZ)



3293625

Connector Part Information

Harness Type: Headliner COAX
OEM Connector: 13594293
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way M Coax Type (BK)

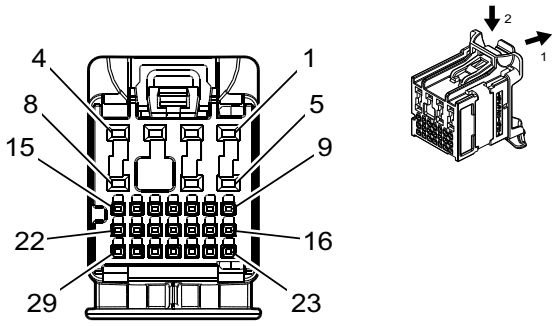
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A10 Inside Rearview Mirror X2 (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(ISRVM) Camera Video Signal	I	—

A11 Radio X1 (IOR)



4584346

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303653
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19354361	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

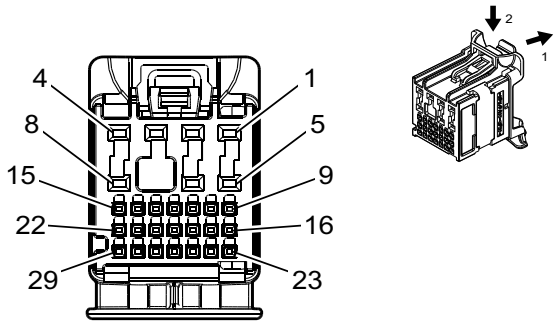
A11 Radio X1 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/YE	2340	Battery Positive Voltage	I	—
2	0.75	RD/YE	2340	Battery Positive Voltage	I	—
3	0.75	BK/WH	2751	Signal Ground	I	—
4	0.35	BU/RD	2807	Radio Keypad Voltage Reference	I	—
5	0.35	BK/GN	2804	Radio Display Backlight Low Reference	I	—
6	0.75	BK/WH	2751	Signal Ground	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN/BK	116	Left Rear Speaker Signal (-)	I	—
9	0.35	GY/BU	2803	Radio Display Touch Interrupt Request Signal	II	—
10	—	—	—	Not Occupied	—	—
11	0.35	GN/WH	24	Backup Lamp Control	II	—
12	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	II	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.35	BU/GY	2808	Radio Keypad Dimming Control	II	—
16 - 20	—	—	—	Not Occupied	—	—
21	0.35	GY/VT	3363	Navigation Display Dimming Control	II	—
22	0.35	BU/GN	2813	Radio Display Backlight Dimming Control	II	—
23	0.35	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
24	0.35	BN/WH	2809	Radio Keypad Power Signal	II	—

A11 Radio X1 (IOR) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.35	VT/WH	2810	Radio Keypad Button Signal	II	—
26	0.35	BU	4315	Radio Volume Up Signal	II	—
27	0.35	GY/BN	4314	Radio Volume Down Signal	II	—
28 - 29	—	—	—	Not Occupied	—	—

A11 Radio X1 (IOS/IOT)



4496253

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303954
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (BK)

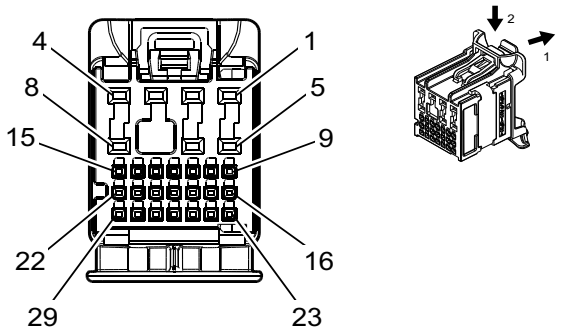
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19354361	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19370818	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A11 Radio X1 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/YE	2340	Battery Positive Voltage	I	—
2	0.75	RD/YE	2340	Battery Positive Voltage	I	—
3	1	BK/WH	2751	Signal Ground	III	—
4 - 5	—	—	—	Not Occupied	—	—
6	1	BK/WH	2751	Signal Ground	III	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN/BK	116	Left Rear Speaker Signal (-)	I	—
9	0.35 0.35	GY/YE BU	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	II II	(IOS/IOT)+UE1 (IOS/IOT)-UE1
10	0.35 0.35	BK/GY BK/BN	5152 654	Voice Recognition Audio Low Reference Cellular Telephone Microphone Low Reference	II II	(IOS/IOT)+UE1 (IOS/IOT)-UE1
11	0.35	VT/YE	7043	Microphone (+) Signal	II	—
12	0.35	BU/BK	7044	Microphone (-) Low Reference	II	—
13 - 29	—	—	—	Not Occupied	—	—

A11 Radio X2 (IOR)



4584398

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303654
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GY)

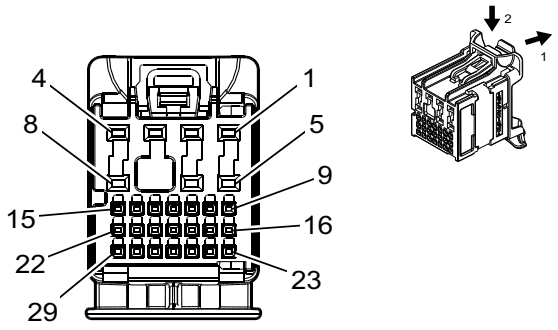
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19354361	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A11 Radio X2 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	199	Left Rear Speaker Control (+)	I	—
2	0.75	BU	201	Left Front Speaker Control (+) 1	I	—
3	0.75	YE	200	Right Front Speaker Control (+) 1	I	—
4	0.5	BU/BK	115	Right Rear Speaker Signal (-)	I	—
5	0.75	BN/BU	118	Left Front Speaker Signal (-) 1	I	—
6	0.75	YE/BK	117	Right Front Speaker Signal (-) 1	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	46	Right Rear Speaker Control (+)	I	—
9	0.35 0.35	BK/GY BK/BN	5152 654	Voice Recognition Audio Low Reference Cellular Telephone Microphone Low Reference	II II	IOR+UE1 IOR-UE1
10	0.35 0.35	GY/YE BU	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	II II	IOR+UE1 IOR-UE1
11	—	—	—	Not Occupied	—	—
12	0.35	GY/YE	6972	Camera Signal 2 +	II	—
13	0.35	WH/BU	6973	Camera Signal 2	II	—
14 - 29	—	—	—	Not Occupied	—	—

A11 Radio X2 (IOS/IOT)



4578560

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303967
Service Connector: 19355494
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GY)

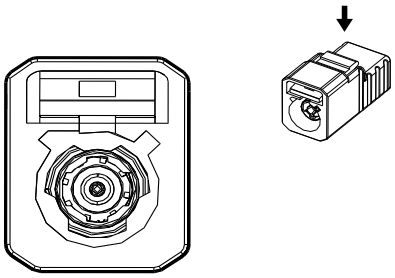
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19354361	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A11 Radio X2 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	199	Left Rear Speaker Control (+)	I	—
2	0.75	BU	201	Left Front Speaker Control (+) 1	I	—
3	0.75	YE/BK	117	Right Front Speaker Signal (-) 1	I	—
4	0.5	BU/BK	115	Right Rear Speaker Signal (-)	I	—
5	0.75	BN/BU	118	Left Front Speaker Signal (-) 1	I	—
6	0.75	YE	200	Right Front Speaker Control (+) 1	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	46	Right Rear Speaker Control (+)	I	—
9	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	II	—
10	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	II	—
11	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	II	—
12	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	II	—
13	0.35	GN/WH	24	Backup Lamp Control	II	—
14 - 17	—	—	—	Not Occupied	—	—
18	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	II	—
19 - 27	—	—	—	Not Occupied	—	—
28	0.35	WH/BU	5986	Serial Data Communication Enable	II	—
29	—	—	—	Not Occupied	—	—

A11 Radio X3 (IOR)



3420249

Connector Part Information

Harness Type: Antenna COAX
OEM Connector: 13581686
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

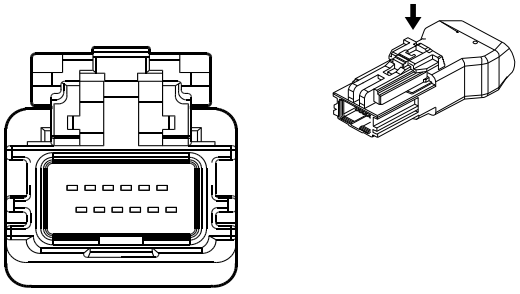
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X3 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(AM/FM) Antenna RF Signal	I	—

A11 Radio X3 (IOS/IOT)



4527210

Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 35148576
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M

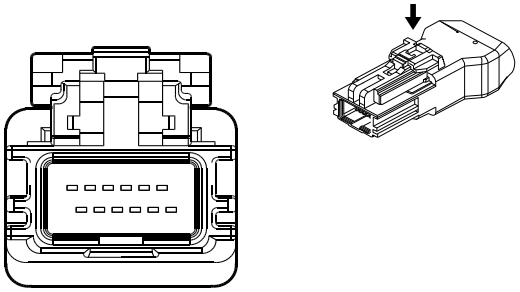
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X3 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	(Infotainment) Infotainment Display Signal	I	—

A11 Radio X4 ((IOS/IOT)+D07)



4527210

Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 35149509
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X4 ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	(Infotainment) Infotainment Display Signal	I	—

A11 Radio X4 (IOR+(UIR/UIJ))

—

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35149722
Service Connector: Not Available
Description: 1-Way

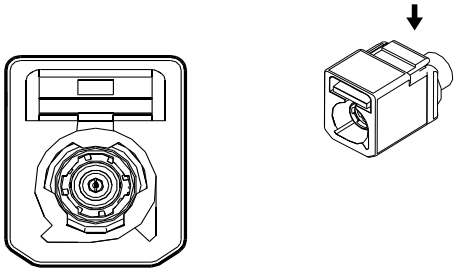
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X4 (IOR+(UIR/UIJ))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BK	—	—	LVDS	LVDS Cable	I	—

A11 Radio X5 (UVB/UVI/UV2)



4895598

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 35097347
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F

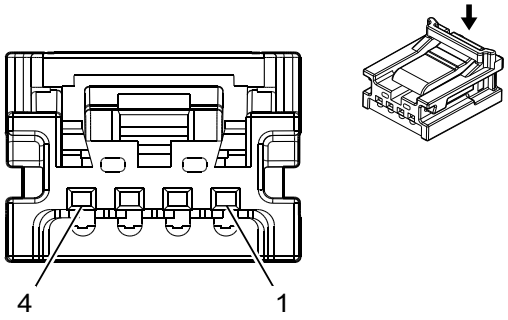
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X5 (UVB/UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Coaxial Camera Signal	I	—

A11 Radio X6 (IOR)



4215060

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33228283
Service Connector: 19354840
Description: 4-Way F Mini 50 Series (BK)

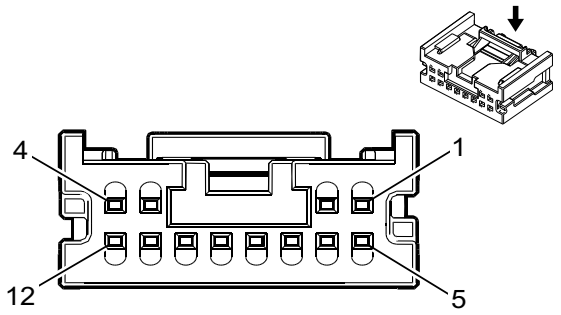
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	EL-35616-58 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X6 (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	GY/WH	7211	Ethernet Bus 4 (+)	I	—
3	0.35	GY	7210	Ethernet Bus 4 (-)	I	—
4	—	—	—	Not Occupied	—	—

A11 Radio X6 (IOS/IOT)



3824362

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33235297
Service Connector: 13507121
Description: 12-Way F Mini 50 Series (BK)

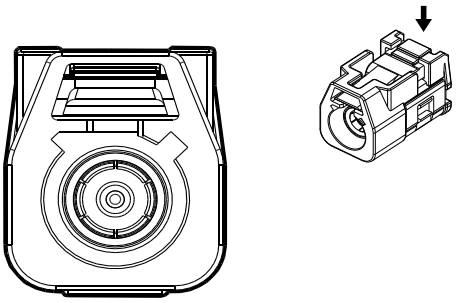
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19333221	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A11 Radio X6 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	GY/BU	7217	Ethernet Bus 7 (+)	I	—
4	0.35	BN/BU	7216	Ethernet Bus 7 (-)	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.35	GY/BK	7215	Ethernet Bus 6 (+)	I	—
9	0.35	BN/BK	7214	Ethernet Bus 6 (-)	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	GY/WH	7211	Ethernet Bus 4 (+)	I	—
12	0.35	GY	7210	Ethernet Bus 4 (-)	I	—

A11 Radio X7 (IOS/IOT)



3530700

Connector Part Information

Harness Type: Antenna COAX
OEM Connector: 13583834
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X7 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(AM/FM) Antenna RF Signal	I	—

A11 Radio X8 ((IOS/IOT)-UE1)

—

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

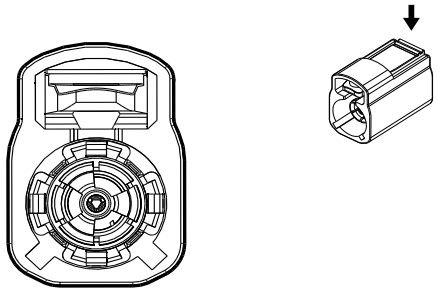
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X8 ((IOS/IOT)-UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(GPS only) Coaxial Antenna GPS Signal	I	—

A11 Radio X8 (IOR+U2K)



4044034

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 35150035
Service Connector: Service by Cable Assembly — See Part Catalog
Description: —

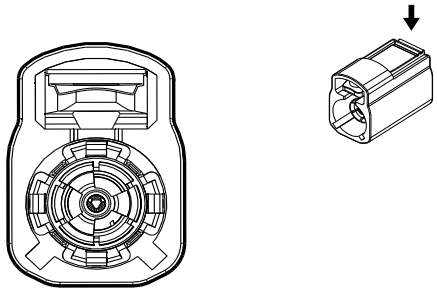
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X8 (IOR+U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

A11 Radio X9 ((IOS/IOT)+U2K)



4044034

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150036
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

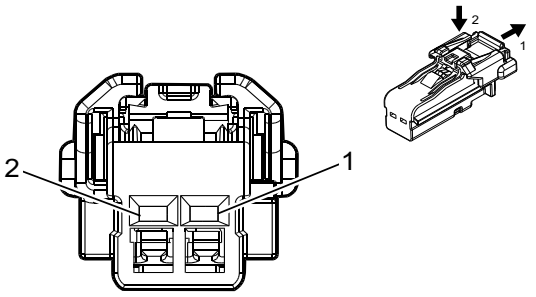
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

A11 Radio X9 ((IOS/IOT)+U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

A14D Seat Lumbar Support Pump - Driver (A2X-A45)



4115691

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

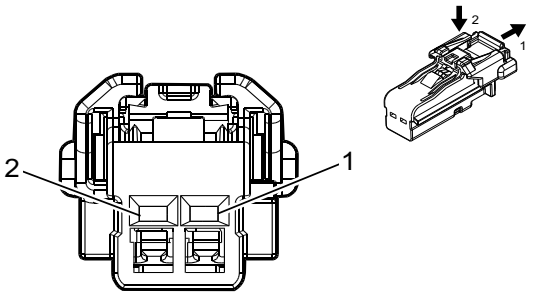
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A14D Seat Lumbar Support Pump - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	—
2	0.75	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	—

A14P Seat Lumbar Support Pump - Passenger (A7K)



4115691

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

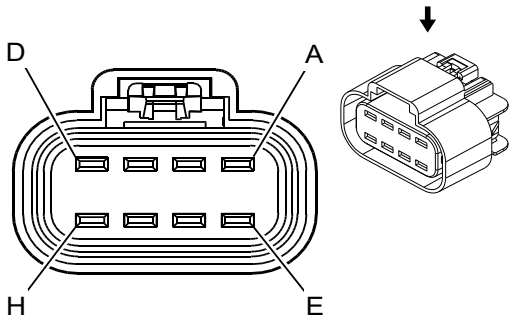
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A14P Seat Lumbar Support Pump - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	211	Passenger Power Seat Lumbar Motor Forward Control	I	—
2	0.75	VT	210	Passenger Power Seat Lumbar Motor Rearward Control	I	—

A16 Transfer Case Motor (NP0/NQH)



646372

Connector Part Information

Harness Type: Engine
OEM Connector: 13538370
Service Connector: 19329743
Description: 8-Way F 280 GT Series, Sealed (BK)

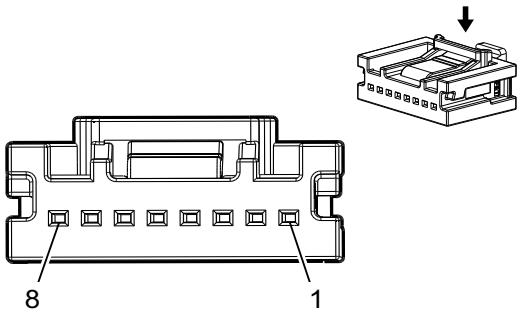
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A16 Transfer Case Motor (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	YE/GY	1552	Transfer Case Motor Clockwise Control	I	—
B	0.75	BK	952	Transfer Case Lock Solenoid 12V Reference	I	—
C	0.75	YE/BN	1569	Transfer Case Lock Solenoid Control	I	—
D	3	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 8V Reference	I	—
H	0.5	VT	7476	Incremental Encoder Sensor Low Reference	I	—

A22 Radio Controls (IOR)



4017639

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33227522
Service Connector: 19354223
Description: 8-Way F Mini 50 Series (BK)

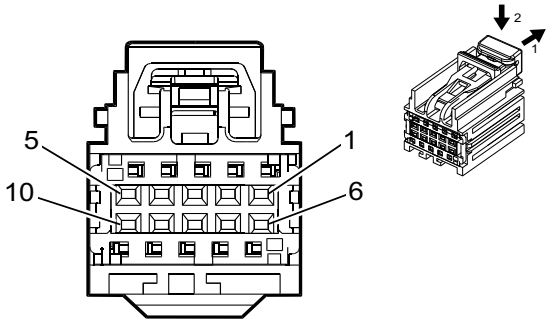
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	EL-35616-58 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A22 Radio Controls (IOR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/RD	2807	Radio Keypad Voltage Reference	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BN/WH	2809	Radio Keypad Power Signal	I	—
4	0.35	BK/YE	2806	Radio Keypad Low Reference	I	—
5	0.35	BU/GY	2808	Radio Keypad Dimming Control	I	—
6	0.35	VT/WH	2810	Radio Keypad Button Signal	I	—
7	0.35	BU	4315	Radio Volume Up Signal	I	—
8	0.35	GY/BN	4314	Radio Volume Down Signal	I	—

A23D Door Latch Assembly - Driver



4622549

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

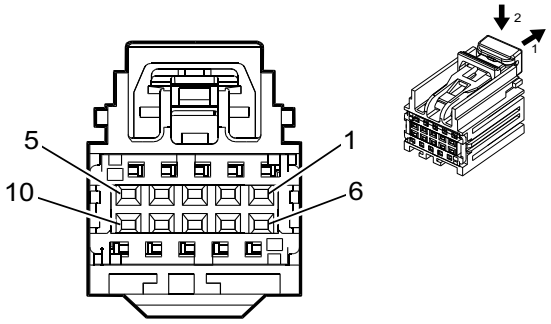
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A23D Door Latch Assembly - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	745	Left Front Door Ajar Switch Signal	I	A6Q
	0.5	PK	745	Left Front Door Ajar Switch Signal	I	AXG
2	0.5	WH/YE	3574	Driver Door Open Switch Signal	I	—
3	0.75	BK	1150	Ground	I	—
4	0.35	WH/VT	3270	Driver Door Lock Motor Status Signal	I	—
5	0.5	BU/VT	1124	Door Lock Key Switch Unlock Signal	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	—
9 - 10	—	—	—	Not Occupied	—	—

A23LR Door Latch Assembly - Left Rear (AU3)



4622549

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

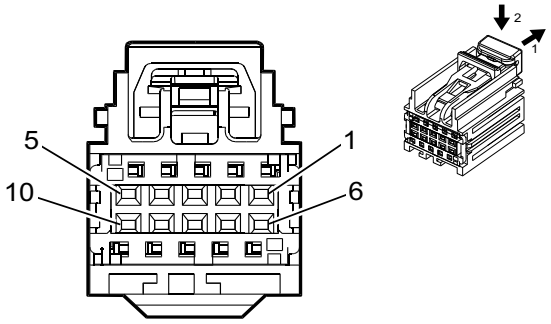
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A23LR Door Latch Assembly - Left Rear (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	747	Left Rear Door Ajar Switch Signal	I	AEQ
	0.5	GY	747	Left Rear Door Ajar Switch Signal	I	AU3
2	—	—	—	Not Occupied	—	—
3	0.75	BK	1150	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.75	GY	295	Door Lock Actuator Lock Control	I	—
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	—
9 - 10	—	—	—	Not Occupied	—	—

A23P Door Latch Assembly - Passenger (AU3)



4622549

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

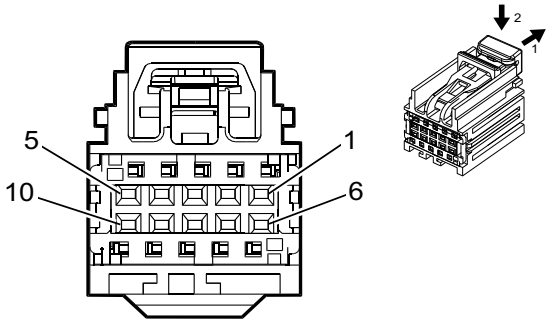
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A23P Door Latch Assembly - Passenger (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	GY	746	Right Front Door Ajar Switch Signal	I	AU3
6 - 7	—	—	—	Not Occupied	—	—
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	—
9	0.75	GY	295	Door Lock Actuator Lock Control	I	—
10	—	—	—	Not Occupied	—	—

A23RR Door Latch Assembly - Right Rear



4622549

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

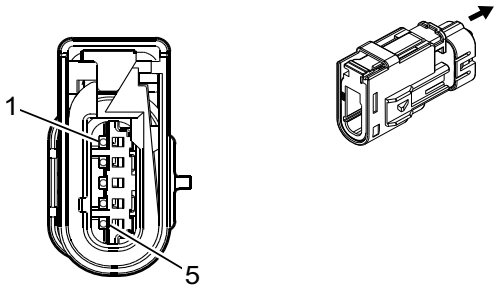
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A23RR Door Latch Assembly - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	GN	748	Right Rear Door Ajar Switch Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	—
9	0.75	GY	295	Door Lock Actuator Lock Control	I	—
10	—	—	—	Not Occupied	—	—

A24D Door Handle Assembly - Driver Exterior



4808321

Connector Part Information

Harness Type: Driver Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (NA)

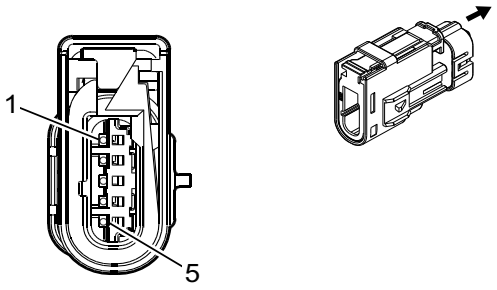
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A24D Door Handle Assembly - Driver Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/WH	3570	Driver Door Handle Switch Signal	I	—
2	0.5	VT	3560	Passive Entry Driver Door Antenna Signal Hi	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	VT/GY	3561	Passive Entry Driver Door Antenna Signal Lo	I	—
5	0.75	BK	1150	Ground	I	—

A24LR Door Handle Assembly - Left Rear Exterior (BTM)



4808325

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 35028907
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (BK)

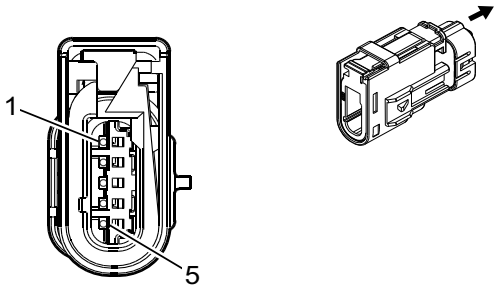
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A24LR Door Handle Assembly - Left Rear Exterior (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PK	6157	Left Rear Door Handle Switch Signal	I	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.75	BK	1150	Ground	I	—

A24P Door Handle Assembly - Passenger Exterior



4808321

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (NA)

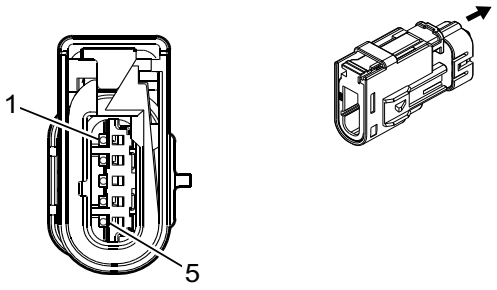
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A24P Door Handle Assembly - Passenger Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	3571	Passenger Door Handle Switch Signal	I	—
2	0.5	GN/YE	3562	Passive Entry Passenger Door Antenna Signal Hi	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GN/BK	3563	Passive Entry Passenger Door Antenna Signal Lo	I	—
5	0.75	BK	1250	Ground	I	—

A24RR Door Handle Assembly - Right Rear Exterior (BTM)



4808325

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 35028907
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (BK)

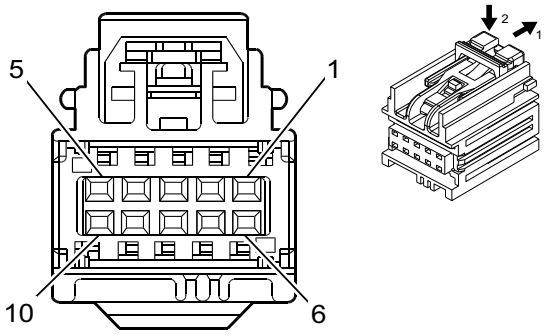
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A24RR Door Handle Assembly - Right Rear Exterior (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/GY	6158	Right Rear Door Handle Switch Signal	I	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.75	BK	1250	Ground	I	—

A26 HVAC Controls



4822741

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33353271
Service Connector: 13509648
Description: 10-Way F 0.64 YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575742	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P
II	13575867	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P
III	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A26 HVAC Controls

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	GN	5060	Low Speed GMLAN Serial Data	II	—
4 - 8	—	—	—	Not Occupied	—	—
9	0.35	GN/YE	7531	Local Interconnect Network Serial Data Bus 9	III	—
10	0.5	BK/WH	1851	Signal Ground	I	—

A38 Reductant Pump and Sensor Assembly (LM2)

—

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 33210848
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F

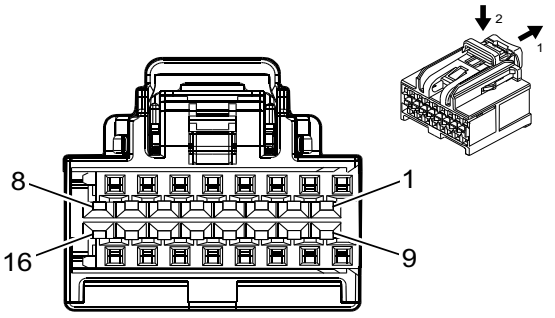
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

A38 Reductant Pump and Sensor Assembly (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	—	—	I	—
2	0.5	BN	—	—	I	—
3	0.5	BU	—	—	I	—
4	0.5	BU	—	—	I	—
5	0.5	BN	—	—	I	—
7	1.0	WH	—	—	I	—
8	1.0	BN	—	—	I	—
9	1.0	YE	—	—	I	—
10	0.5	BN	—	—	I	—
11	1.0	BU	—	—	I	—
14	1.0	BU	—	—	I	—
15	1.0	BN	—	—	I	—
16	1.0	YE	—	—	I	—

A98 Front Overhead Console Assembly X1



4873254

Connector Part Information

Harness Type: Headliner
OEM Connector: 35016344
Service Connector: 13519739
Description: 16-Way F 0.64 OCS Series (GY)

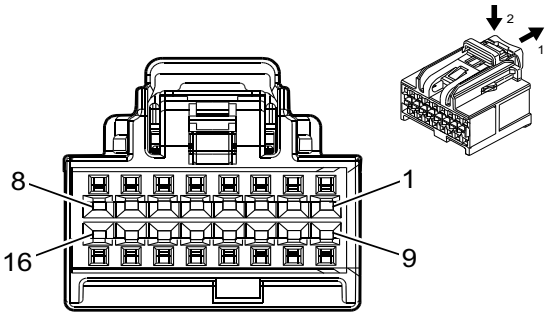
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A98 Front Overhead Console Assembly X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	157	Interior Lamp Control	I	—
2	0.5	WH/BN	6815	Inadvertent Power Control	I	—
3	0.35	WH	6816	Indicator Dimming Control	I	—
4	0.35	YE	6817	LED Backlight Dimming Control	I	—
5	0.35	BK	1050	Ground	I	—
6	0.35	BU	2307	Passenger Air Bag On Indicator Control	I	—
7	0.35	GN	2308	Passenger Air Bag Off Indicator Control	I	—
8	0.35	VT/WH	1139	Run/Crank Ignition 1 Voltage	I	—
9	0.35	VT/WH	5234	Passenger Seat Belt Indicator Control	I	—
10	0.35	GY	156	Courtesy Lamp Switch Signal	I	—
11	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	I	—
12	0.35	BK/WH	1851	Signal Ground	I	—
13	0.35	BU/GY	4672	Dome Lamp Off Indicator Control	I	—
14	0.35	VT/GN	7558	LED Ambient Lighting Control 2	I	—
15 - 16	—	—	—	Not Occupied	—	—

A98 Front Overhead Console Assembly X2



4873243

Connector Part Information

Harness Type: Headliner
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series (BK)

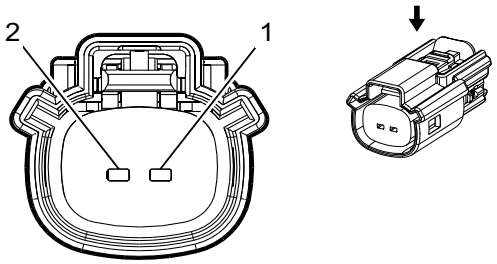
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

A98 Front Overhead Console Assembly X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/VT	2516	Keypad Green LED Control	I	—
2	0.35	BN/WH	2517	Keypad Red LED Control	I	—
3	0.35	GN/WH	2514	Keypad Signal	I	—
4	0.35	GN/BK	2515	Keypad Control	I	—
5	0.35	YE/VT	6191	Power Sliding Window Switch Open Signal	I	—
6	0.35	WH	6192	Power Sliding Window Switch Close Signal	I	—
7	0.35	VT/YE	43	Accessory Ignition Voltage	I	—
8	0.35	RD/YE	240	Battery Positive Voltage	I	—
9	0.35	BU/VT	5027	Sunroof Switch Data 1 Signal	I	—
10	0.35	WH/GN	3031	Sunroof Vent Switch Signal	I	—
11	0.35	BK/GY	128	Sunroof Switch Low Reference	I	—
12 - 16	—	—	—	Not Occupied	—	—

A99L Pickup Box Endgate Latch - Left (QK2)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

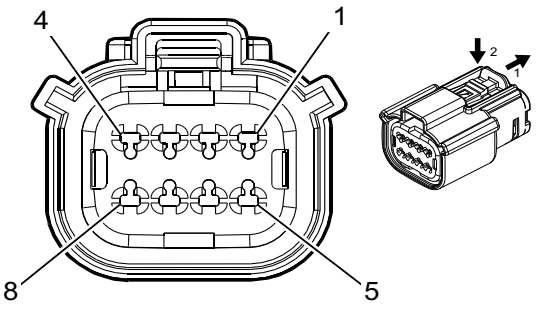
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A99L Pickup Box Endgate Latch - Left (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	1299	Major Endgate Motor Supply Voltage	I	—
2	0.5	YE/BK	7730	Major Endgate Motor Return	I	—

A99L Pickup Box Endgate Latch - Left (QT6)



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

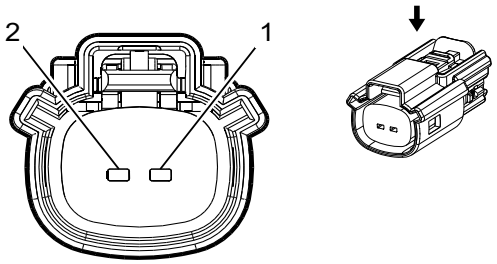
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A99L Pickup Box Endgate Latch - Left (QT6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	GY/VT	4678	Rear Closure Ajar Switch Signal 1	I	—
3	0.35	BU/BK	4665	Rear Closure Ajar Switch Signal 2	I	—
4	0.5	BK/VT	4656	Rear Closure Object Sensor Low Reference	I	—
5	1	BN	4681	Rear Closure Cinch Latch Motor Open Control	I	—
6	1	BU/GY	4682	Rear Closure Cinch Latch Motor Close Control	I	—
7	0.35	GN/BK	4659	Rear Closure Open	I	—
8	0.5	PK/BK	4668	Rear Closure Ajar Switch Signal 3	I	—

A99R Pickup Box Endgate Latch - Right (QK2)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

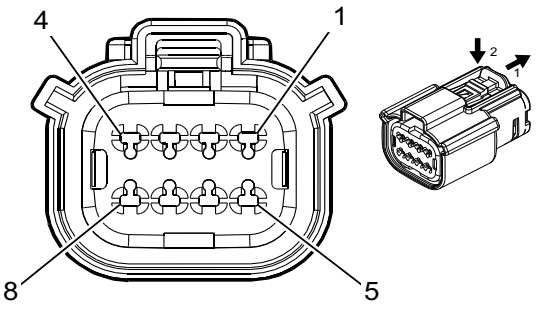
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A99R Pickup Box Endgate Latch - Right (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	1299	Major Endgate Motor Supply Voltage	I	—
2	0.5	YE/BK	7730	Major Endgate Motor Return	I	—

A99R Pickup Box Endgate Latch - Right (QT6)



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

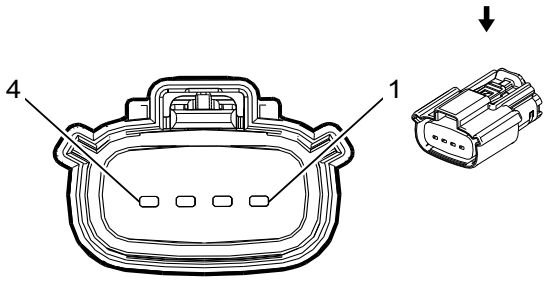
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A99R Pickup Box Endgate Latch - 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	0.35	YE/RD	7734	Rear Closure Latch 2 Rachet Status	I	—
3	0.5	VT	7736	Rear Closure Latch 2 Unlatch Status	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7735	Rear Closure Latch 2 Pawl Status	I	—
6	0.35	OG	7733	Rear Closure Latch 2 Sector Status	I	—
7	1	PK	1499	Rear Closure Cinch Latch Motor 2 Cinch Control	I	—
8	1	BU	1509	Rear Closure Cinch Latch Motor 2 Release Control	I	—

A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)



2474747

Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

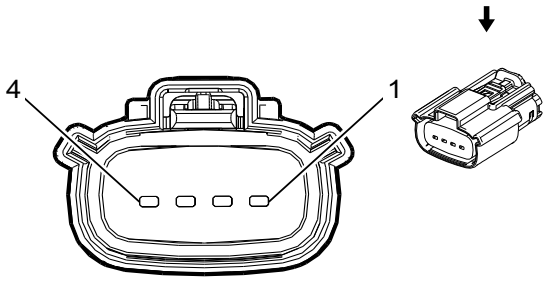
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BU	7295	Left Minor Endgate Ajar Signal	I	—
2	0.75	BK	1450	Ground	I	—
3	0.5	BN/BK	7726	Minor Endgate Motor Return	I	—
4	0.5	VT	7725	Minor Endgate Motor Supply Voltage	I	—

A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)



2474747

Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

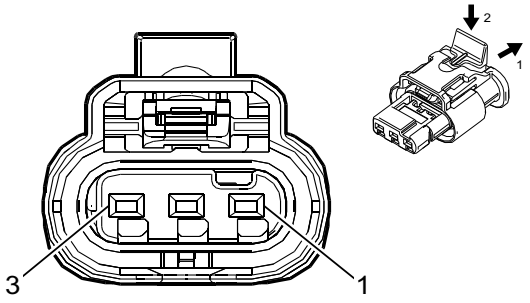
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BK	7726	Minor Endgate Motor Return	I	—
2	0.5	VT	7725	Minor Endgate Motor Supply Voltage	I	—
3	0.35	WH/BN	7296	Right Minor Endgate Ajar Signal	I	—
4	0.75	BK	1450	Ground	I	—

B1 A/C Refrigerant Pressure Sensor



4249125

Connector Part Information

Harness Type: Engine
OEM Connector: 33176362
Service Connector: 19352065
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

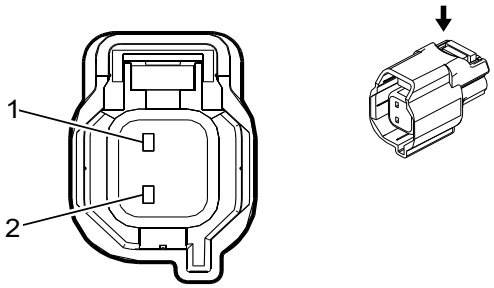
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B1 A/C Refrigerant Pressure Sensor

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	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	—

B5LF Wheel Speed Sensor - Left Front



2900396

Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

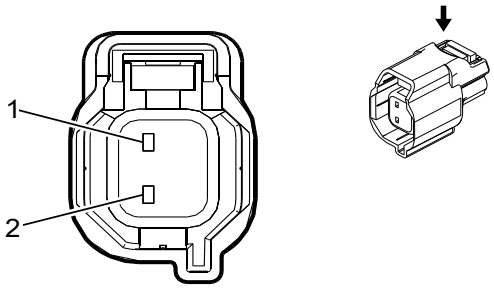
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B5LF Wheel Speed Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	I	—
2	0.5	GY	830	Wheel Speed Sensor Signal Left Front	I	—

B5LR Wheel Speed Sensor - Left Rear



2900396

Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

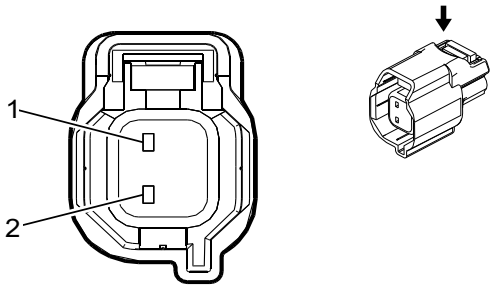
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B5LR Wheel Speed Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	I	—
2	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	I	—

B5RF Wheel Speed Sensor - Right Front



2900396

Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

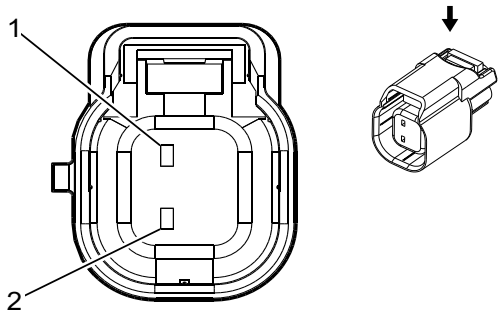
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B5RF Wheel Speed Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	I	—
2	0.5	YE	872	Wheel Speed Sensor Signal Right Front	I	—

B5RR Wheel Speed Sensor - Right Rear



4115616

Connector Part Information

Harness Type: Chassis
OEM Connector: 33122852
Service Connector: 19366860
Description: 2-Way F 1.5 Series, Sealed (BK)

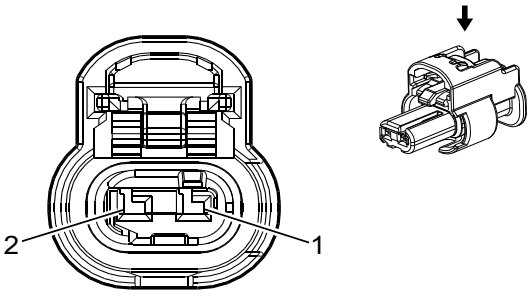
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B5RR Wheel Speed Sensor - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	I	—
2	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	I	—

B9 Ambient Air Temperature Sensor



4649903

Connector Part Information

Harness Type: Passenger Outside Rearview Mirror
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

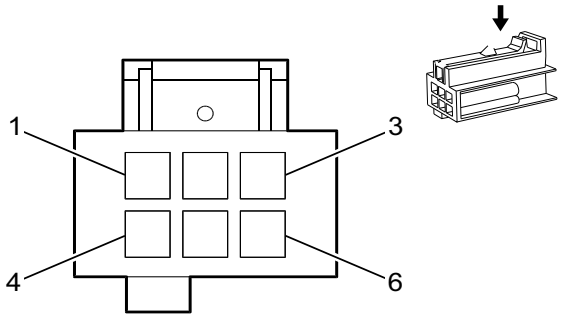
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B9 Ambient Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	—
2	—	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

B10B Ambient Light/Sunload Sensor



2282896

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15338980
Service Connector: 19333315
Description: 6-Way F 0.64 Micro-Quadlock Series (BK)

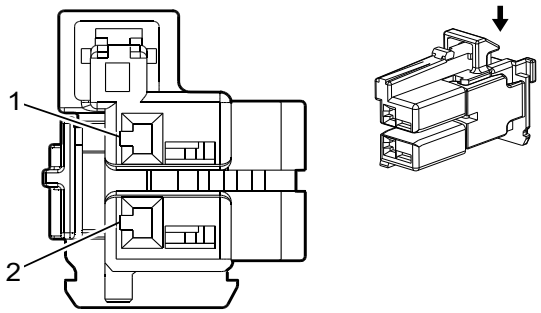
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B10B Ambient Light/Sunload Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	590	Solar Sensor Driver 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/GN	7567	Solar Sensor Low Reference	I	—

B13 Transmission Fluid Temperature Sensor (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

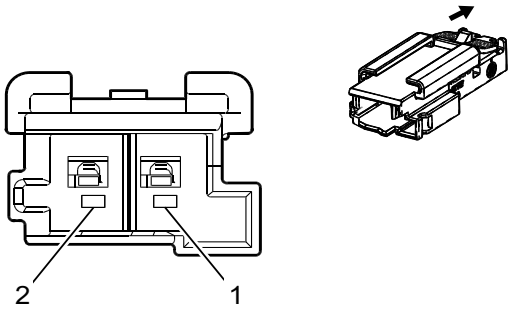
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B13 Transmission Fluid Temperature Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/BN	586	Transmission Oil Temperature Sensor Low Reference	I	—
2	0.5	BN/YE	585	Transmission Oil Temperature Sensor Signal	I	—

B14A Transmission Output Shaft Speed Sensor (MQB)



4672593

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (BU)

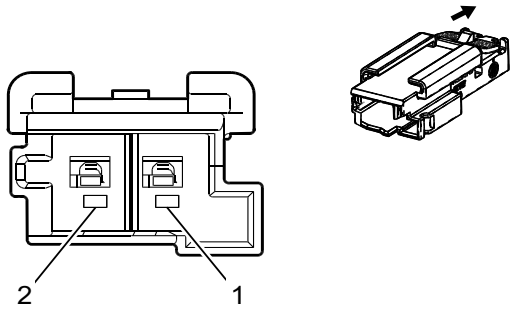
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B14A Transmission Output Shaft Speed Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/OG	6358	Output Speed Signal	I	—
	0.5	YE/OG	6358	Output Speed Signal	II	—
2	0.5	GN	4170	Transmission Position Sensor B 9V Reference	I	—
	0.5	GN	4170	Transmission Position Sensor B 9V Reference	II	—

B14C Transmission Input Shaft Speed Sensor (MQB)



4672611

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GN)

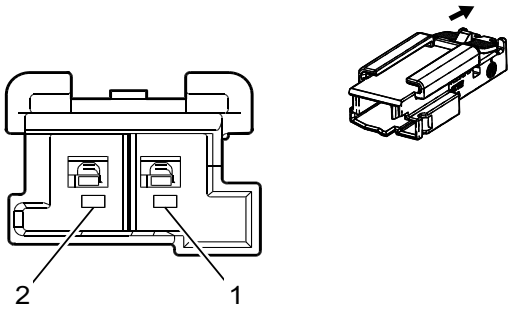
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B14C Transmission Input Shaft Speed Sensor (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 Position Sensor A 9V Reference	I	—

B14DA Transmission Intermediate Speed Sensor 1 (MQB)



4663490

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (NA)

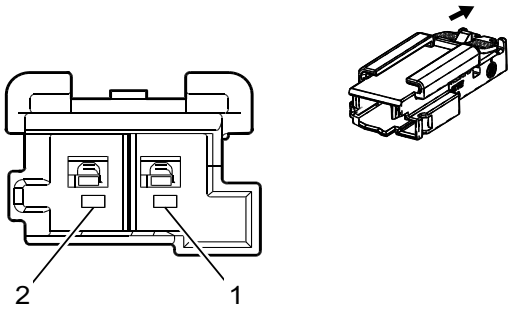
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B14DA Transmission Intermediate Speed Sensor 1 (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 Position Sensor B 9V Reference	I	—

B14DB Transmission Intermediate Speed Sensor 2 (MQB)



4672593

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (BU)

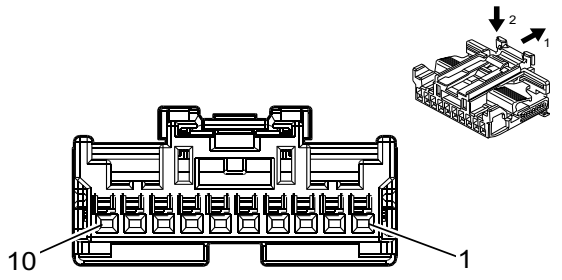
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B14DB Transmission Intermediate Speed Sensor 2 (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 Position Sensor A 9V Reference	I	—

B15 Transmission Internal Mode Switch (MQE)



4051038

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2138504-1
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Generation Y Series (BN)

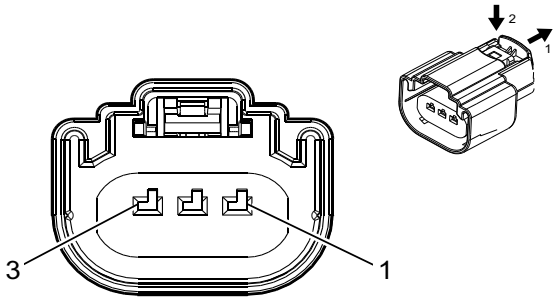
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B15 Transmission Internal Mode Switch (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	I	—
2	0.5	BK/GY	3927	IMS Mode Switch Low Reference	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	YE/BU	4171	Transmission Position Sensor A 9V Reference	I	—
5	0.5	VT/WH	5981	PRNDL A Signal	I	—
6	0.5	WH/BK	5983	PRNDL C Signal	I	—
7	0.5	GY/YE	4169	PRNDL S Signal	I	—
8	0.5	GY/BN	5982	PRNDL B Signal	I	—
9	0.5	GY/WH	4168	PRNDL P Signal	I	—
10	0.5	YE/GN	4170	Transmission Position Sensor B 9V Reference	I	—

B18 Battery Current Sensor (-KL9)



4569745

Connector Part Information

Harness Type: Body
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 150 MX Series, Sealed (BK)

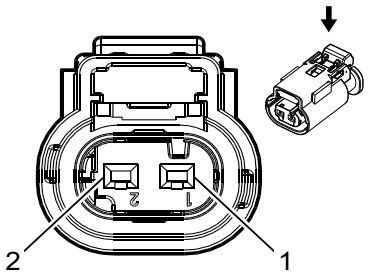
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B18 Battery Current Sensor (-KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/VT	5076	Current Sensor Control	I	—
2	0.35	BK/VT	5077	Current Sensor Low Reference	I	—
3	0.35	WH/YE	5075	Current Sensor Signal	I	—

B20 Brake Fluid Level Switch



2717066

Connector Part Information

Harness Type: Body
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

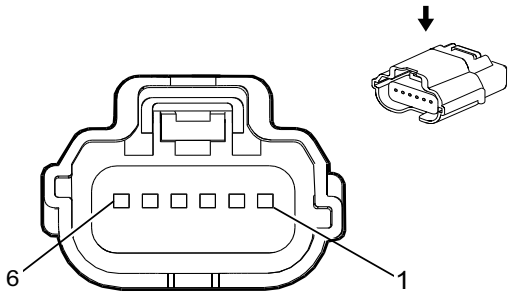
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B20 Brake Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	333	Brake Fluid Level Sensor Signal	I	—
2	0.75	BK	150	Ground	I	J61

B22 Brake Pedal Position Sensor



3270302

Connector Part Information

Harness Type: Body
OEM Connector: 13893502
Service Connector: 19304011
Description: 6-Way F 64 Series, Sealed (NA)

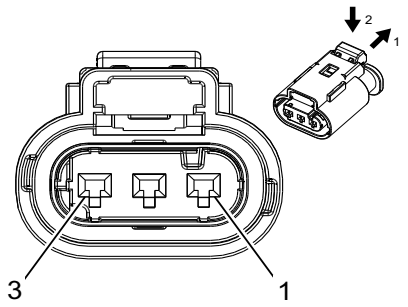
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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/YE	5382	Brake Position Sensor Low Reference	I	—
6	0.35	WH/RD	5381	Brake Position Sensor 5V Reference	I	—

B23 Camshaft Position Sensor (L82/L84/L87)



2717069

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13763990
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

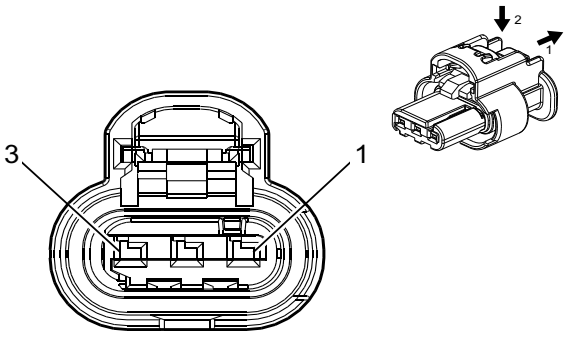
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B23 Camshaft Position Sensor (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	I	—
2	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	I	—
3	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	I	—

B23 Camshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

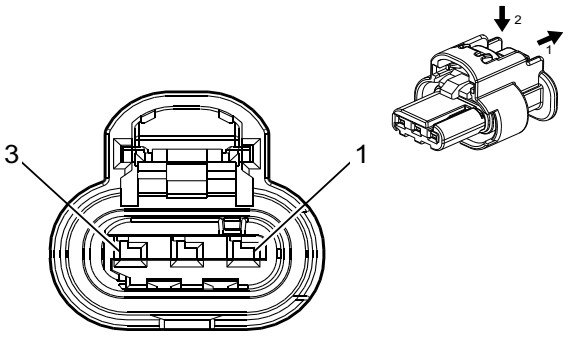
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B23 Camshaft Position Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	I	—
2	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	I	—
3	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	I	—

B23E Camshaft Position Sensor - Exhaust (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

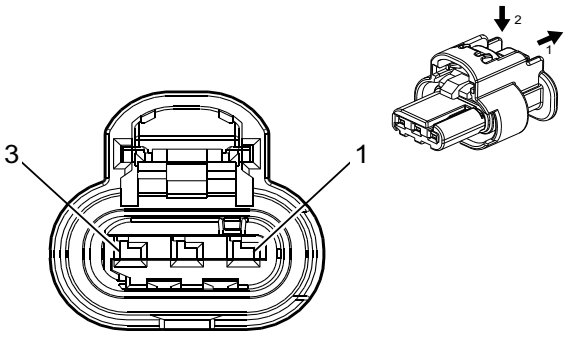
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B23E Camshaft Position Sensor - Exhaust (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	I	—
2	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	I	—
3	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	I	—

B23F Camshaft Position Sensor - Intake (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

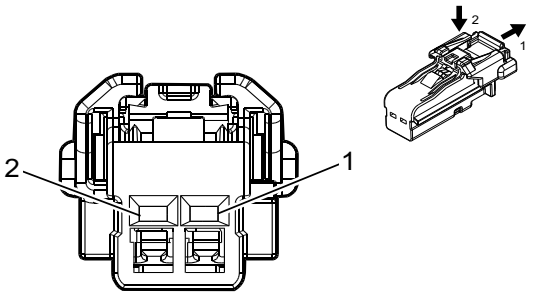
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B23F Camshaft Position Sensor - Intake (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	I	—
2	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	I	—
3	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	I	—

B24LF Mobile Telephone Microphone - Left Front



4115691

Connector Part Information

Harness Type: Headliner
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

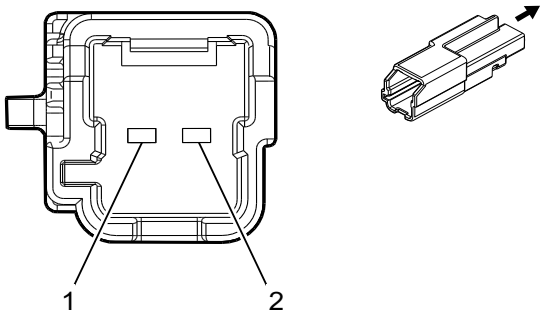
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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 (IOS/IOT)



4116495

Connector Part Information

Harness Type: Headliner
OEM Connector: 33251047
Service Connector: 19332377
Description: 2-Way M 1.2 Series (GY)

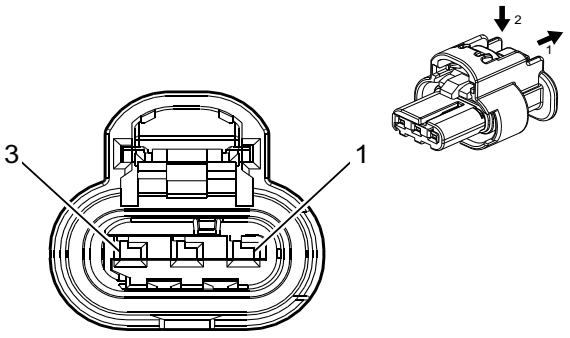
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/BK	7044	Microphone (-) Low Reference	I	EXTENDED CAB
	0.35	BU/BK	7044	Microphone (-) Low Reference	II	REGULAR CAB
2	0.35	VT/YE	7043	Microphone (+) Signal	I	EXTENDED CAB
	0.35	VT/YE	7043	Microphone (+) Signal	II	REGULAR CAB

B26 Crankshaft Position Sensor (L3B)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

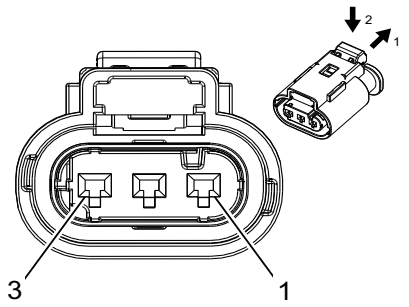
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B26 Crankshaft Position Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	I	—
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
3	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	—

B26 Crankshaft Position Sensor (L82/L84/L87/LV3)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

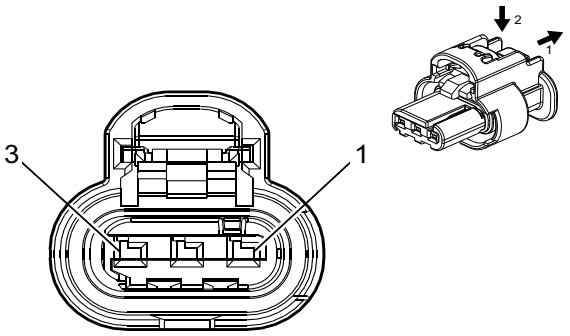
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B26 Crankshaft Position Sensor (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	—
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
3	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	I	—

B26 Crankshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

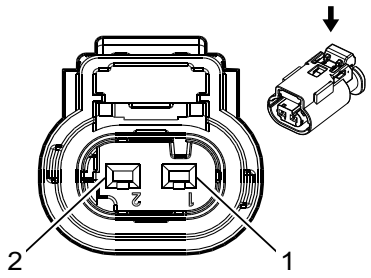
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B26 Crankshaft Position Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	I	—
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
3	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	—

B34 Engine Coolant Temperature Sensor (L82/L84/L87)



2717066

Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13503566
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

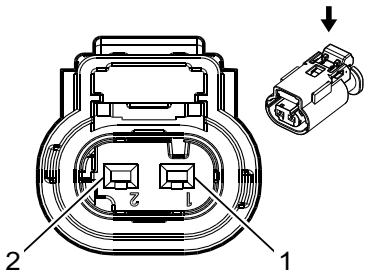
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34 Engine Coolant Temperature Sensor (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	—
2	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	—

B34 Engine Coolant Temperature Sensor (LV3)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

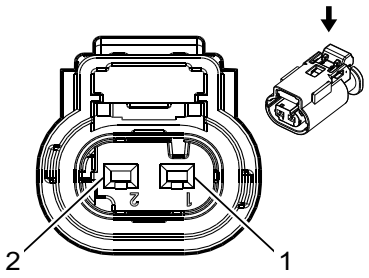
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34 Engine Coolant Temperature Sensor (LV3)

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	410	Engine Coolant Temperature Sensor Signal	I	—

B34A Engine Coolant Temperature Sensor 1 (L3B)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

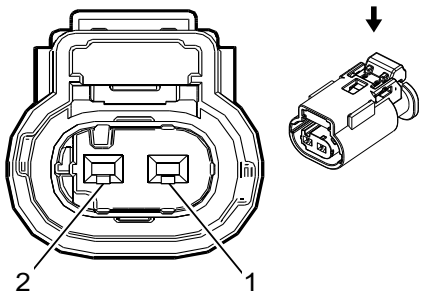
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

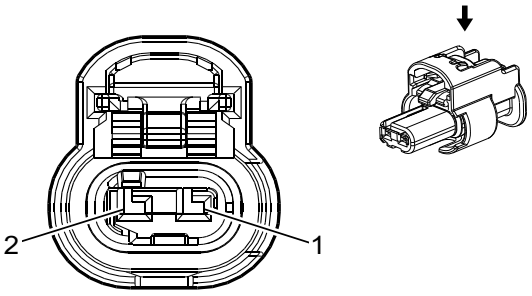
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34A Engine Coolant Temperature Sensor 1 (LM2)

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/GN	580	Engine Control Sensors Low Reference (2)	I	—

B34B Engine Coolant Temperature Sensor 2 (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33299487
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

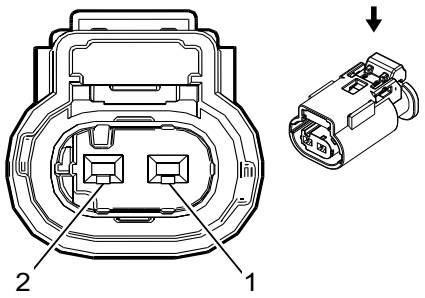
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Sensors Low Reference (3)	I	—

B34B Engine Coolant Temperature Sensor 2 (LM2)



2830969

Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

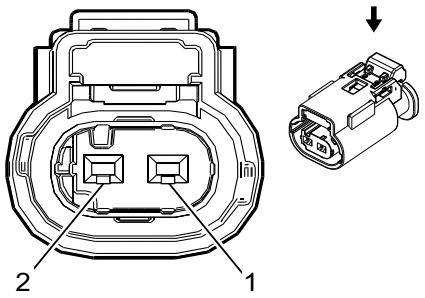
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34B Engine Coolant Temperature Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	I	—
2	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

B34C Engine Coolant Temperature Sensor 3 (L3B)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

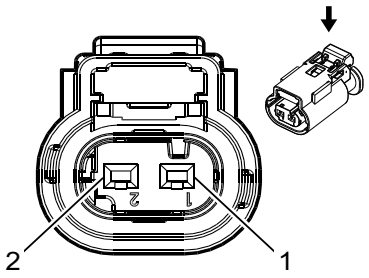
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34C Engine Coolant Temperature Sensor 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/GY	4644	Heater Core Inlet Temperature Signal	I	—
2	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	—

B34D Engine Coolant Temperature Sensor 4 (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

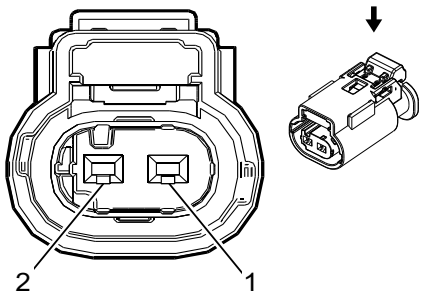
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34D Engine Coolant Temperature Sensor 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	4645	Heater Core Outlet Temperature Signal	I	—
2	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	L3B
	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	LM2

B34E Engine Coolant Temperature Sensor 5 (L3B)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

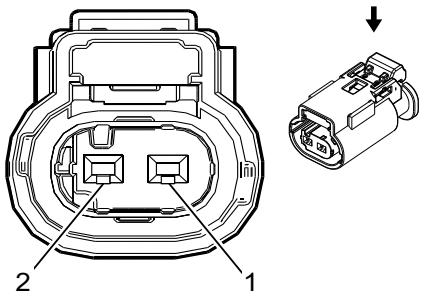
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34E Engine Coolant Temperature Sensor 5 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	906	Engine Coolant Temperature Signal	I	—
2	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	I	—

B34E Engine Coolant Temperature Sensor 5 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

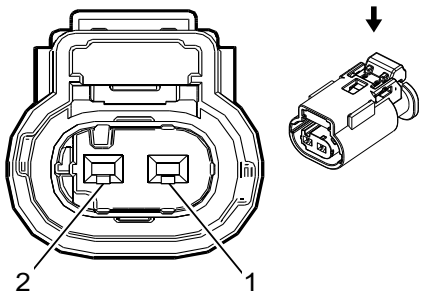
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34E Engine Coolant Temperature Sensor 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/GN	1417	Low Pressure Exhaust Gas Recirculation Actuator 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
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

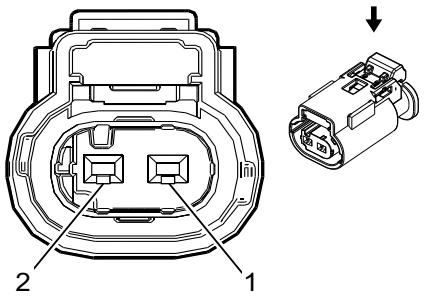
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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	—

B34F Engine Coolant Temperature Sensor 6 (LM2)



2830969

Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

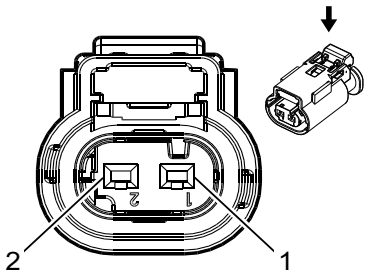
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B34F Engine Coolant Temperature Sensor 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	2404	Engine Block Coolant Temperature Signal	I	—
2	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

B35 Engine Oil Level Switch (L82/L84/L87/LV3)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

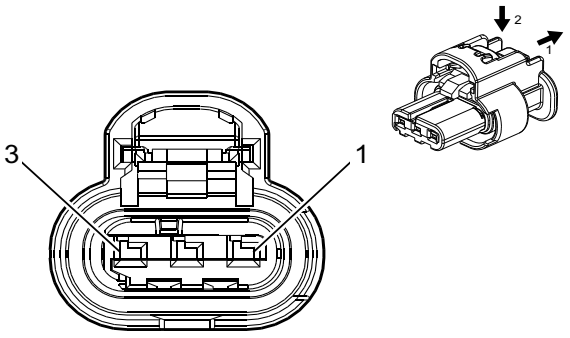
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B35 Engine Oil Level Switch (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	451	Signal Ground	I	—
2	0.5	BN/GN	1174	Oil Level Switch Signal	I	—

B36 Engine Oil Temperature Sensor (L3B/LM2)



4994602

Connector Part Information

Harness Type: Engine
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BN)

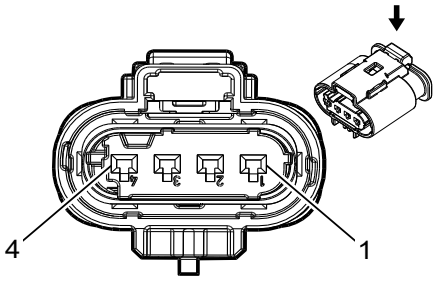
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B36 Engine Oil Temperature Sensor (L3B/LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	—
2	0.5	BN/BU	357	Oil Temperature Sensor Signal	I	—
3	0.5	VT	7485	Oil Temperature Sensor Signal	I	—

B37B Engine Oil Pressure Sensor (L82/L84/L87)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

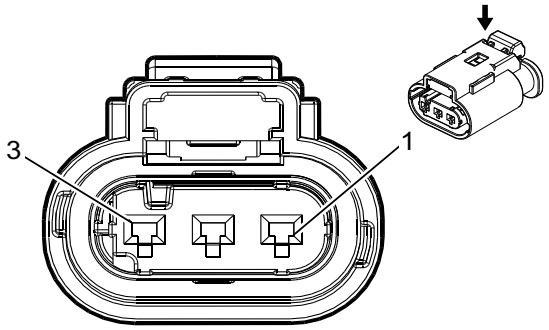
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B37B Engine Oil Pressure Sensor (L82/L84/L87)

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	YE/BN	331	Oil Pressure Sensor Signal	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
4	0.5	BN/BU	357	Oil Temperature Sensor Signal	I	—

B37B Engine Oil Pressure Sensor (LM2)



3240107

Connector Part Information

Harness Type: Engine
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

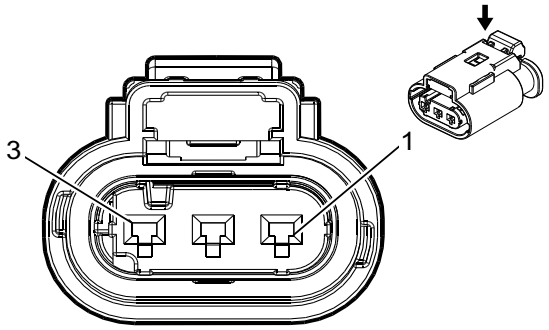
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B37B Engine Oil Pressure Sensor (LM2)

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 (LV3/L3B)



3240107

Connector Part Information

Harness Type: Engine
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

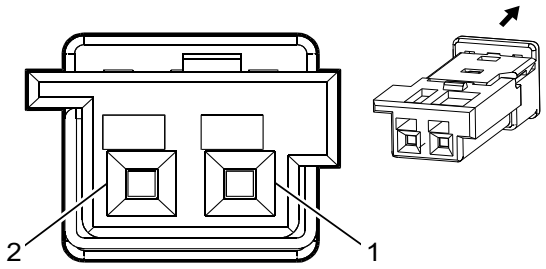
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B37B Engine Oil Pressure Sensor (LV3/L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
2	0.75	BK/YE	548	Engine Control Sensors Low Reference (1)	I	L3B
	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	I	LV3
3	0.75	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	L3B
	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	LV3

B39 A/C Evaporator Temperature Sensor



2335285

Connector Part Information

Harness Type: HVAC
OEM Connector: 13235945
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Micro-Quadlock Series (BK)

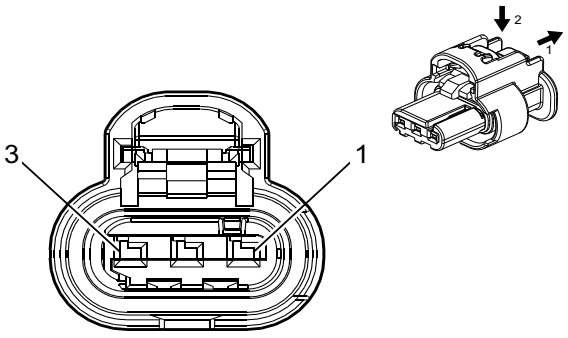
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B39 A/C Evaporator Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	6137	EVAP Core Temperature Sensor Signal	I	—
2	—	BK/YE	1791	Air Temperature Door Control Low Reference	I	—

B47 Fuel Pressure Sensor (LM2)



4581126

Connector Part Information

Harness Type: Chassis
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

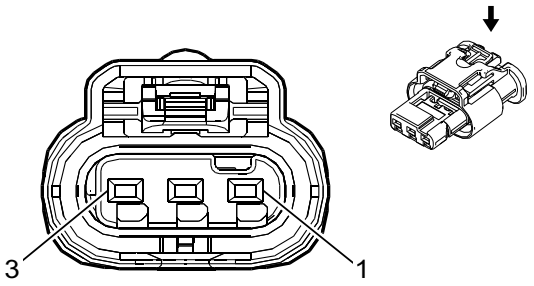
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B47 Fuel Pressure Sensor (LM2)

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 Line Pressure Sensor Low Reference	I	—
3	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	—

B47 Fuel Pressure Sensor (-LM2)



2889711

Connector Part Information

Harness Type: Chassis
OEM Connector: 13884759
Service Connector: 19330668
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

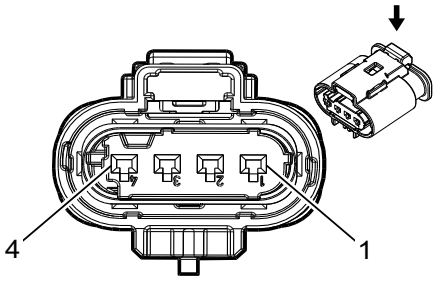
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B47 Fuel Pressure Sensor (-LM2)

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 Line Pressure Sensor Low Reference	I	—
3	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	—

B47B Fuel Rail Pressure Sensor (LM2)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

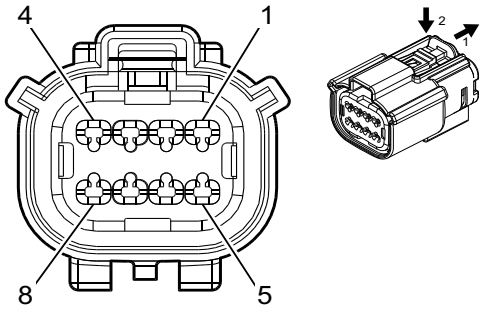
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B47B Fuel Rail Pressure Sensor (LM2)

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	—

B52A Heated Oxygen Sensor 1 (L3B)



4846403

Connector Part Information

Harness Type: Engine
OEM Connector: 35037828
Service Connector: 19369368
Description: 8-Way F 150 MX Series, Sealed (BK)

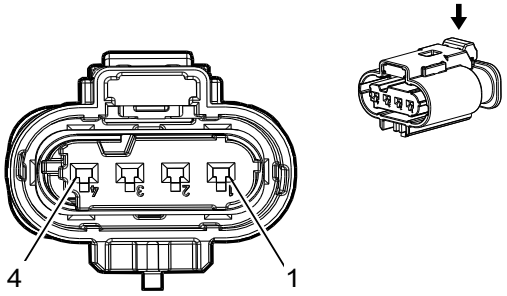
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52A Heated Oxygen Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	6934	Heated Oxygen Sensor Ground	I	—
2	0.75	YE/GY	6936	Heated Oxygen Sensor Collector Signal	I	—
3	0.75	BN/WH	6933	Heated Oxygen Sensor Current Pump Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
6	0.75	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	—
7	0.75	GN	6935	Heated Oxygen Sensor Current Adjust Signal	I	—
8	—	—	—	Not Occupied	—	—

B52B Heated Oxygen Sensor 2 (L3B)



4036496

Connector Part Information

Harness Type: Engine
OEM Connector: 15532689
Service Connector: 19330904
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

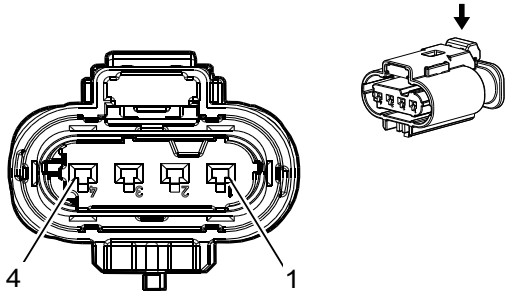
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52B Heated Oxygen Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	—
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
3	0.75	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	—
4	0.75	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)



4381050

Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

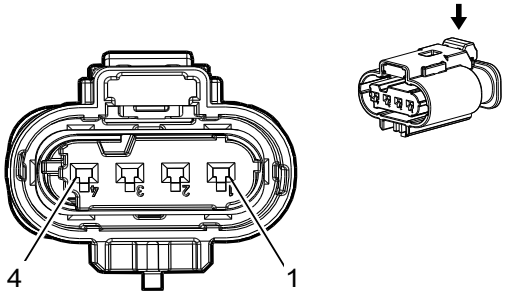
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	—
2	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
3	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	—
4	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)



4036496

Connector Part Information

Harness Type: Engine
OEM Connector: 15532689
Service Connector: 19330904
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

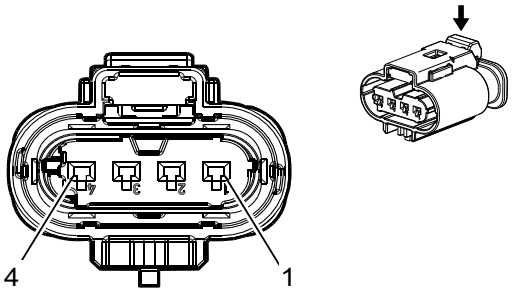
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	—
2	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
3	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	—
4	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

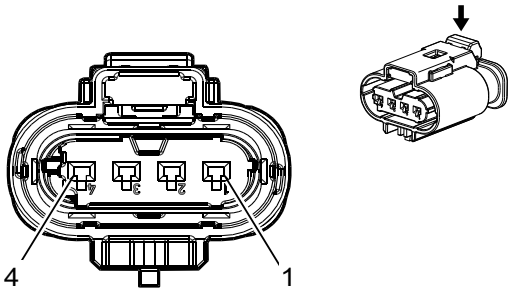
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	—
2	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
3	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

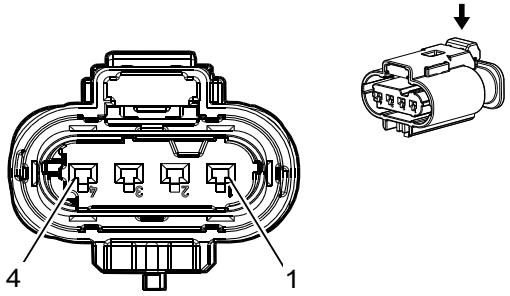
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	—
2	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
3	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)



4381050

Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

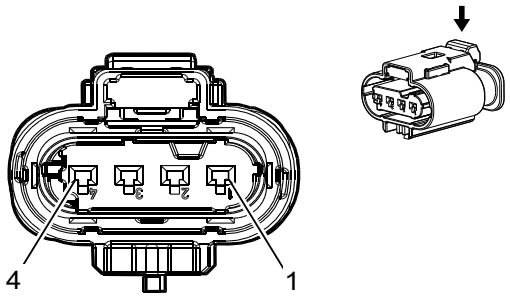
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	—
2	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
3	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	—
4	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)



4381050

Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

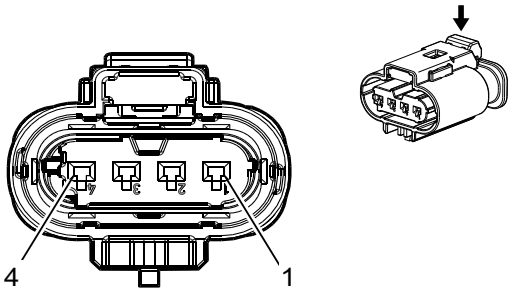
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	—
2	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
3	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	—
4	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

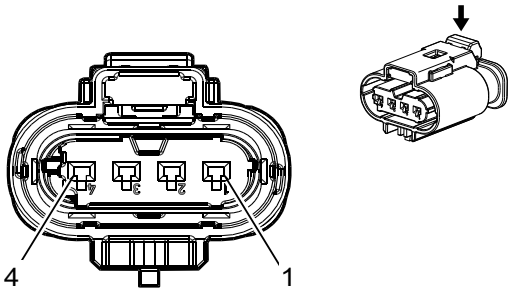
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	—
2	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
3	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)



4036370

Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

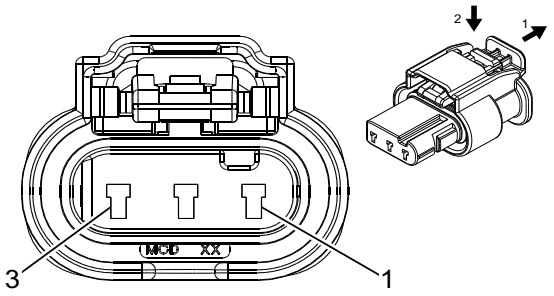
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	—
2	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
3	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	—

B55 Engine Hood Switch



4421568

Connector Part Information

Harness Type: Body
OEM Connector: 33320864
Service Connector: 19368220
Description: 3-Way F 1.2 MCON-LL Series, Sealed (BK)

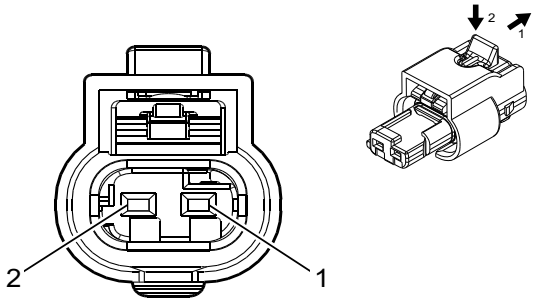
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B55 Engine Hood Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	4063	Hood Status A Signal	I	—
2	0.35	BN/GN	4064	Hood Status B Signal	I	—
3	0.75	BK	150	Ground	I	—

B59L Front Impact Sensor - Left



4975834

Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2-Way F 1.2 MCON-CB Series, Sealed (BK)

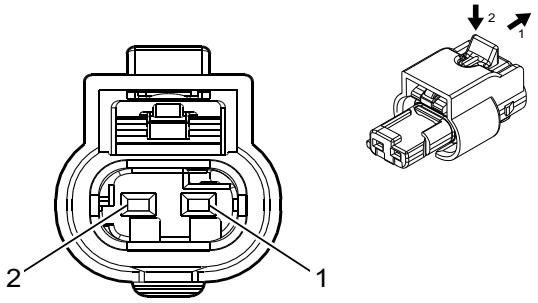
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B59L Front Impact Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/YE	354	Left Front Discriminating Sensor Signal	I	—
2	0.5	BK/OG	5045	Left Front Discriminating Sensor Low Reference	I	—

B59R Front Impact Sensor - Right



4975834

Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2-Way F 1.2 MCON-CB Series, Sealed (BK)

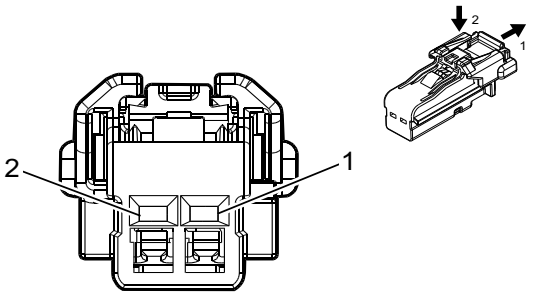
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B59R Front Impact Sensor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	1409	Right Front Discriminating Sensor Signal	I	—
2	0.5	BK/OG	5600	Right Front Discriminating Sensor Low Reference	I	—

B61P Seat Belt Tension Sensor - Passenger (AL0)



4115691

Connector Part Information

Harness Type: Body
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

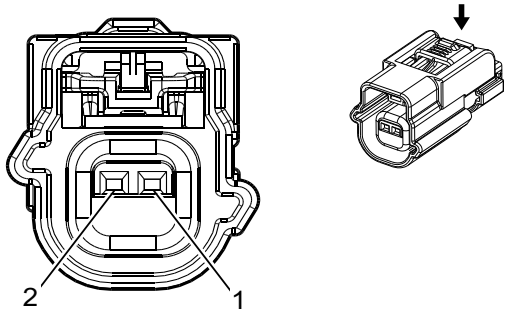
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B61P Seat Belt Tension Sensor - Passenger (AL0)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/OG	3946	Automatic Locking Retractor Switch Low Reference	I	—
2	0.5	OG/BN	3947	Automatic Locking Retractor Switch Signal	I	—

B63LF Side Impact Sensor - Left Front



3931604

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed

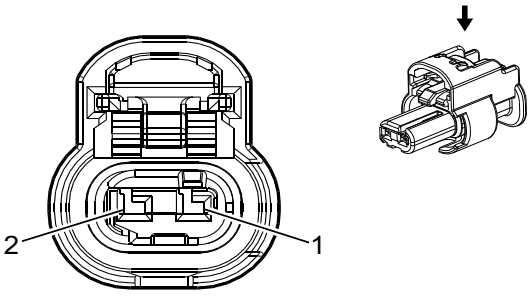
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B63LF Side Impact Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	OG/GN	2132	Left Front Side Impact Sensing Module Signal	I	—
2	0.75	BK/OG	6628	Left Front Side Impact Sensing Module Low Reference	I	—

B63LR Side Impact Sensor - Left Rear



4649903

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

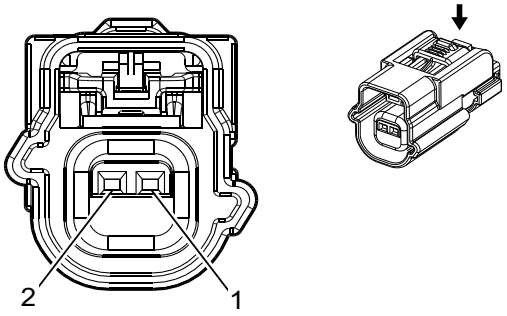
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B63LR Side Impact Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BU	6622	Left Rear Side Impact Sensing Module Signal	I	—
2	0.5	BK/OG	6623	Left Rear Side Impact Sensing Module Low Reference	I	—

B63RF Side Impact Sensor - Right Front



3931604

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed

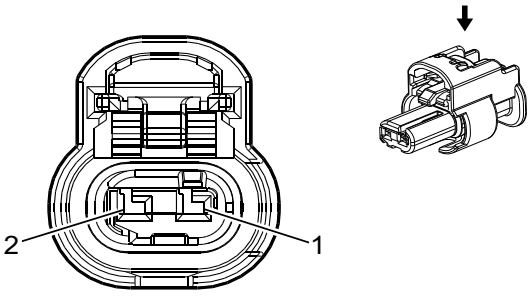
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B63RF Side Impact Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/OG	2134	Right Front Side Impact Sensing Module Signal	I	—
2	0.75	BK/OG	6629	Right Front Side Impact Sensing Module Low Reference	I	—

B63RR Side Impact Sensor - Right Rear



4649903

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

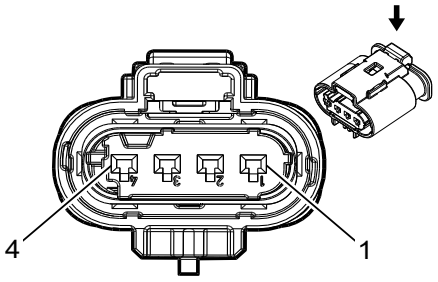
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B63RR Side Impact Sensor - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/VT	6626	Right Rear Side Impact Sensing Module Signal	I	—
2	0.5	BK/OG	6627	Right Rear Side Impact Sensing Module Low Reference	I	—

B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

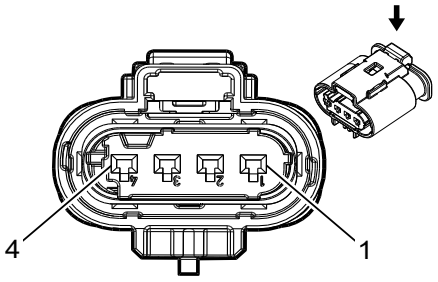
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	7348	Induction Air Temperature Sensor 2 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 Intake Manifold Pressure and Air Temperature Sensor (LM2)



2717079

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

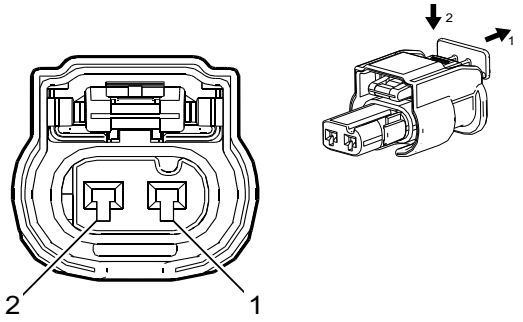
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	6118	Manifold Air Temperature Sensor Signal	I	—
2	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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 Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

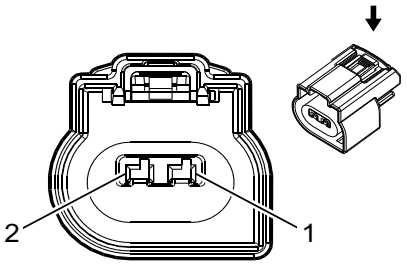
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B68A Knock Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GY	496	Knock Sensor Signal 1	I	—
2	0.5	BK/YE	1716	Knock Sensor Low Reference 1	I	—

B68A Knock Sensor 1 (-LM2)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

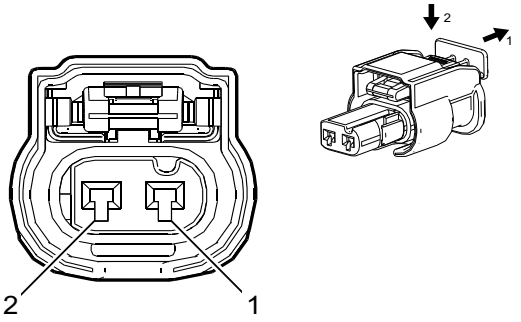
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B68A Knock Sensor 1 (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK/YE	1716	Knock Sensor Low Reference 1	I	L82/L84/L87
	0.75	VT/GY	496	Knock Sensor Signal 1	I	LV3/L3B
2	0.75	VT/GY	496	Knock Sensor Signal 1	I	L82/L84/L87
	0.75	BK/YE	1716	Knock Sensor Low Reference 1	I	LV3/L3B

B68B Knock Sensor 2 (L3B)



3960139

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

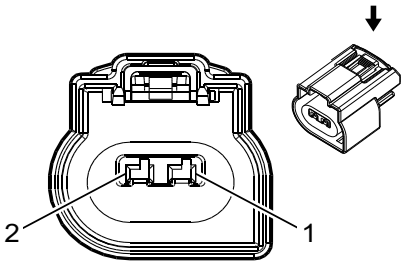
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B68B Knock Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GY	1876	Knock Sensor Signal 2	I	—
2	0.5	BK/GY	2303	Knock Sensor Low Reference 2	I	—

B68B Knock Sensor 2 (-LM2)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

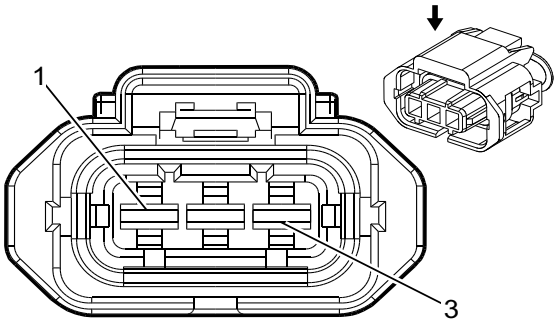
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B68B Knock Sensor 2 (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/GY	1876	Knock Sensor Signal 2	I	L3B/LV3
	0.75	BK/GY	2303	Knock Sensor Low Reference 2	I	L82/L84/L87
2	0.75	BK/GY	2303	Knock Sensor Low Reference 2	I	L3B/LV3
	0.75	WH/GY	1876	Knock Sensor Signal 2	I	L82/L84/L87

B74 Manifold Absolute Pressure Sensor (L82/L84/L87)



1914850

Connector Part Information

Harness Type: Engine
OEM Connector: 15397338
Service Connector: 13585845
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

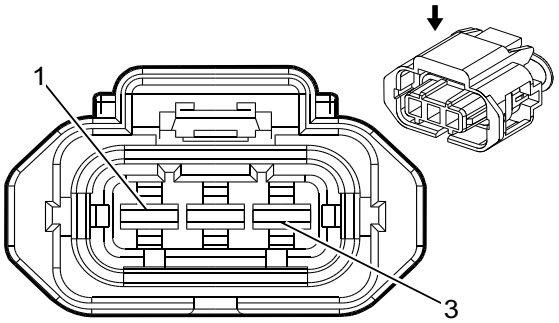
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B74 Manifold Absolute Pressure Sensor (L82/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	—

B74 Manifold Absolute Pressure Sensor (LV3)



1914850

Connector Part Information

Harness Type: Engine
OEM Connector: 15397338
Service Connector: 13585845
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

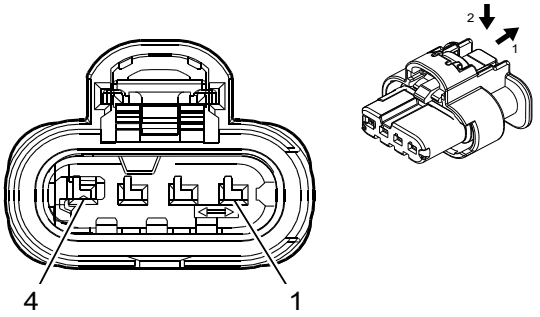
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B74 Manifold Absolute Pressure Sensor (LV3)

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	—

B75C Multifunction Intake Air Sensor



4934614

Connector Part Information

Harness Type: Engine
OEM Connector: 33367416
Service Connector: 19371196
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

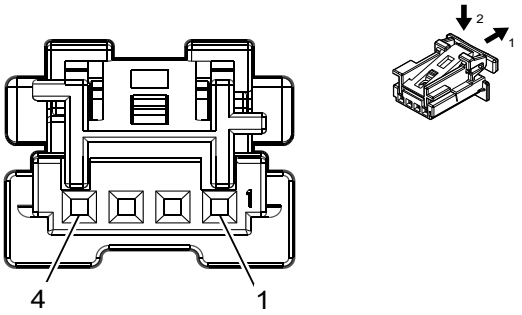
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B75C Multifunction Intake Air Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
2	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	—
3	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	I	—
4	0.5 0.75	BK/WH BK/WH	451 451	Signal Ground Signal Ground	I I	L3B/LM2/L82/ L84/L87 LV3

B80 Park Brake Switch



4997407

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35082250
Service Connector: 19371192
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

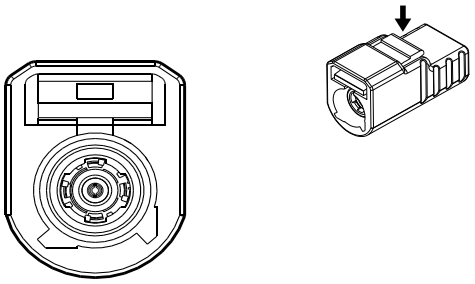
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B80 Park Brake Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/GN	5140	Battery Positive Voltage	I	—
2	0.35	GN/YE	2731	Local Interconnect Network Bus 31	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK	1850	Ground	I	—

B87 Rearview Camera (UVB)



4883511

Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514003
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (OG)

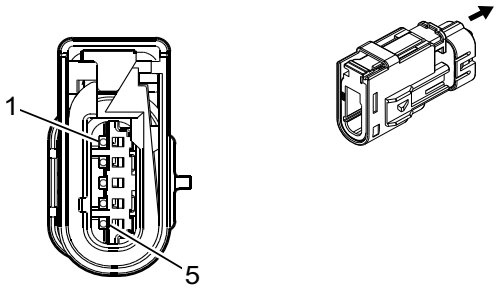
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

B87 Rearview Camera (UVB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Coaxial Camera Signal	I	—

B87 Rearview Camera (UVC)



4808321

Connector Part Information

Harness Type: Endgate
OEM Connector: 35028910
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (GY)

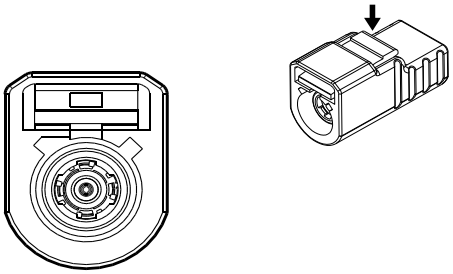
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B87 Rearview Camera (UVC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/YE	6972	Camera Signal 2 +	I	—
2	0.5	WH/BU	6973	Camera Signal 2	I	—
3	0.35	BU	6974	Camera Low Reference	I	—
4	0.5	BK/WH	1751	Signal Ground	I	—
5	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	I	—

B87 Rearview Camera (UVI/UV2)



4883521

Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

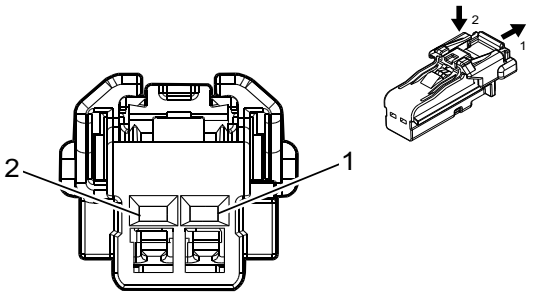
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

B87 Rearview Camera (UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Camera Signal	I	—

B88D Seat Belt Switch - Driver (A2S)



4115691

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7685
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

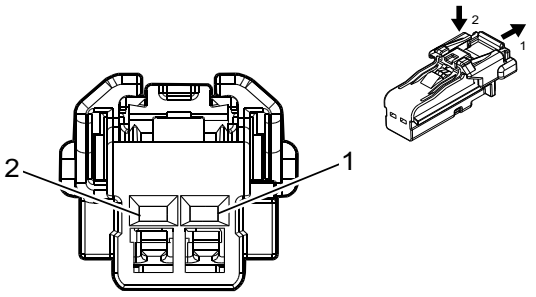
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B88D Seat Belt Switch - Driver (A2S)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	—

B88D Seat Belt Switch - Driver (A2X)



4115691

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

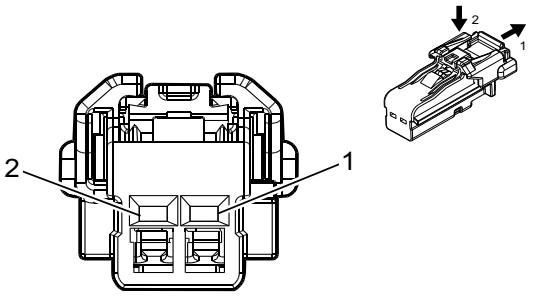
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B88D Seat Belt Switch - Driver (A2X)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	—

B88P Seat Belt Switch - Passenger (A7E)



4115691

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7685
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

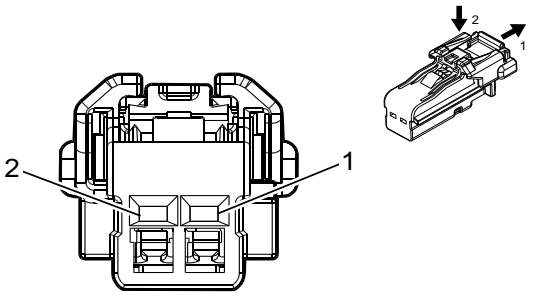
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B88P Seat Belt Switch - Passenger (A7E)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	—
2	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	—

B88P Seat Belt Switch - Passenger (A7K)



4115691

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

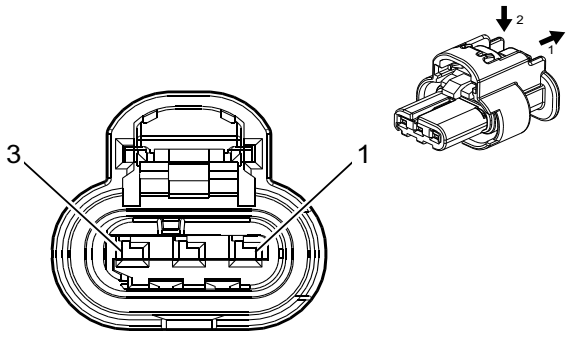
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B88P Seat Belt Switch - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	—
2	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	—

B96 Cylinder Head Temperature Sensor (LM2)



4994602

Connector Part Information

Harness Type: Engine
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BN)

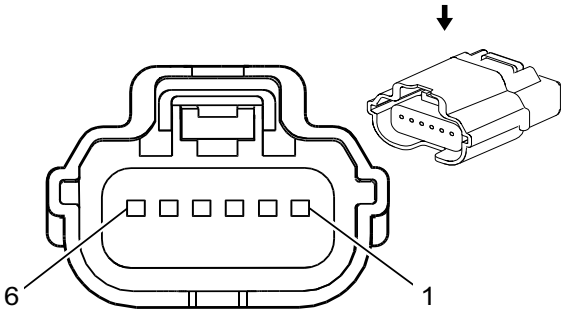
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B96 Cylinder Head Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	—
2	0.5	GN/YE	37	Engine Metal Temperature Sensor Signal	I	—
3	0.5	BN/YE	1372	Engine Metal Temperature Sensor Signal (2)	I	—

B107 Accelerator Pedal Position Sensor



1974974

Connector Part Information

Harness Type: Body
OEM Connector: 13835162
Service Connector: 19356496
Description: 6-Way F 0.64 Series, Sealed (BK)

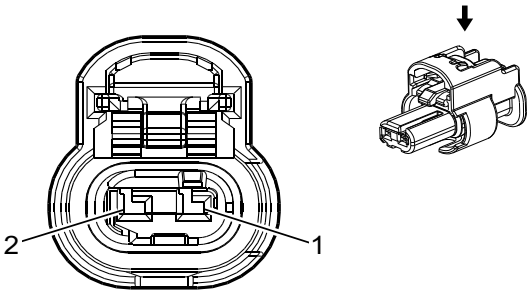
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Sensor Module X1 (Crew Cab/Extended Cab)



4649903

Connector Part Information

Harness Type: Body
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B110 Battery Sensor Module X1 (Crew Cab/Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	I	—
2	0.75	RD/YE	2340	Battery Positive Voltage	I	—

B110 Battery Sensor Module X2 (KL9)

—

Connector Part Information

Harness Type: Battery
OEM Connector: 13516387
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

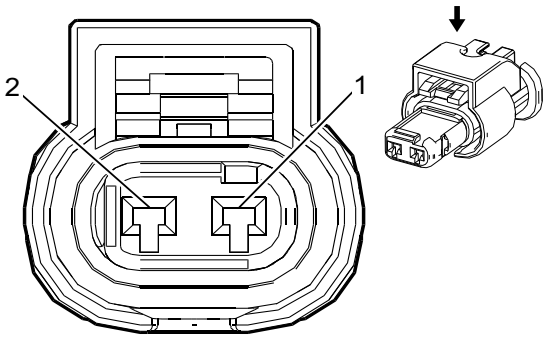
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B110 Battery Sensor Module X2 (KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	2350	Ground	I	—

B110 Battery Sensor Module X1 (Regular Cab)



2474752

Connector Part Information

Harness Type: Body
OEM Connector: 13761652
Service Connector: 13577519
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

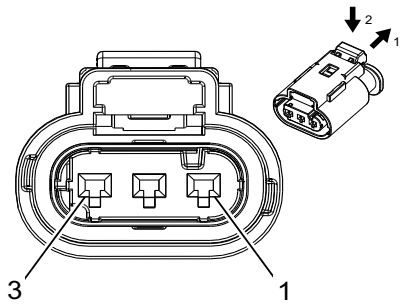
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B110 Battery Sensor Module X1 (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	I	—
2	0.75	RD/YE	2340	Battery Positive Voltage	I	—

B111 Turbocharger Boost Sensor (L3B)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

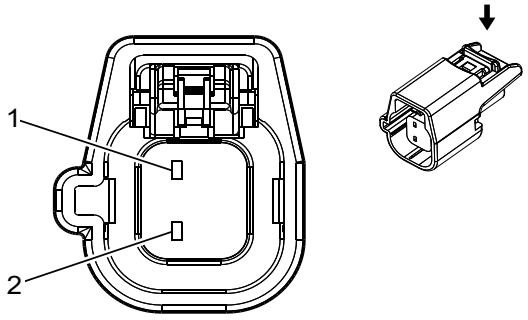
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B111 Turbocharger Boost 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	2596	Turbo Charger Inlet Absolute Pressure Sensor Signal	I	—

B118B Windshield Washer Fluid Level Switch



3958652

Connector Part Information

Harness Type: Body
OEM Connector: 33113086
Service Connector: 13593220
Description: 2-Way F 1.5 Series (L-GY)

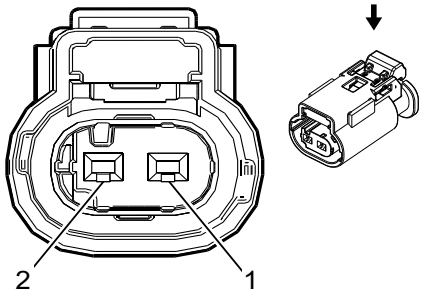
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B118B Windshield Washer Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
2	0.75	BK	150	Ground	I	—

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

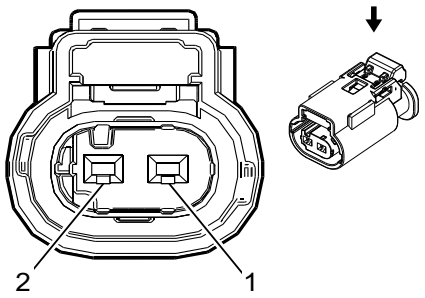
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	5277	Exhaust Gas Temperature Sensor 1	I	—
2	0.5	BK/BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—

B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

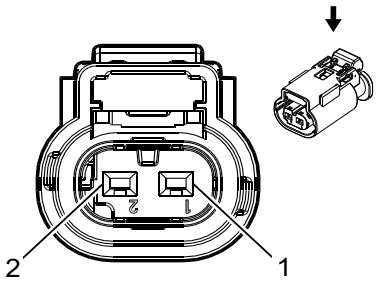
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	I	—
2	0.5	BK/YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	I	—

B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)



2717037

Connector Part Information

Harness Type: Engine
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed (L-GY)

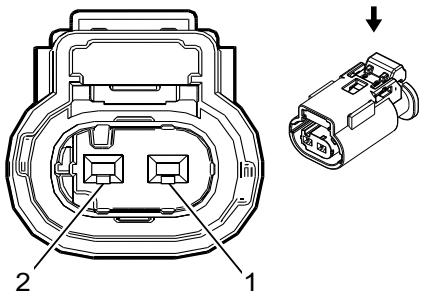
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/GN	5377	Exhaust Gas Temperature Sensor 2	I	—
2	0.5	BK/BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—

B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)



2830969

Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

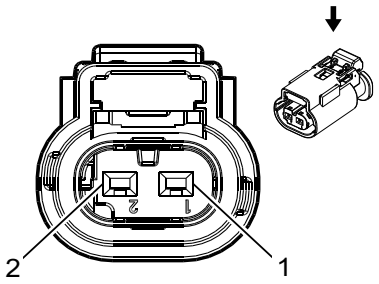
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GY	3234	Exhaust Gas Recirculation Temperature Sensor 3 Signal	I	—
2	0.5	BK/GN	3235	Exhaust Gas Recirculation Temperature Sensor 3 Low Reference	I	—

B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)



2717037

Connector Part Information

Harness Type: Engine
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed (L-GY)

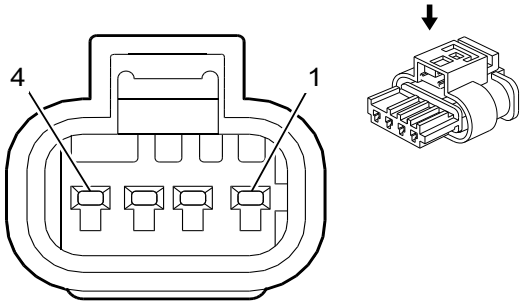
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/GN	5378	Exhaust Gas Temperature Sensor 3	I	—
2	0.5	BK/GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—

B136 Exhaust Particulate Matter Sensor (LM2)



2487928

Connector Part Information

Harness Type: Chassis
OEM Connector: 13781047
Service Connector: 13581092
Description: 4-Way F 1.2 Series, Sealed (BK)

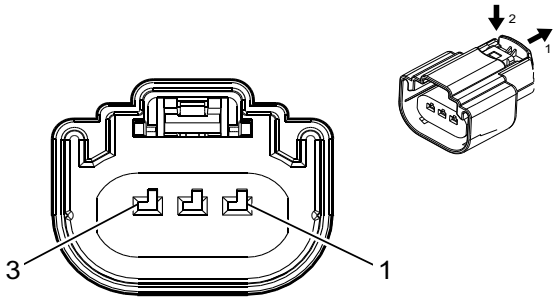
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B136 Exhaust Particulate Matter Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK/WH	1651	Signal Ground	I	—
2	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
3	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
4	0.75	VT/BU	3674	NOx Sensor 1 Control	I	—

B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)



4569745

Connector Part Information

Harness Type: Engine
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 150 MX Series, Sealed (BK)

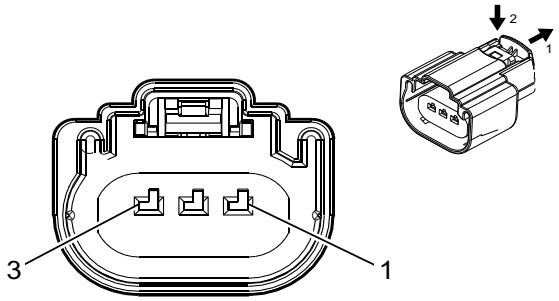
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	7477	Rotary Position Sensor 5V Reference	I	—
2	0.5	WH/GN	7479	Rotary Position Sensor Signal	I	—
3	0.5	YE/BK	7478	Rotary Position Sensor Low Reference	I	—

B150 Fuel Tank Pressure Sensor (-LM2)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

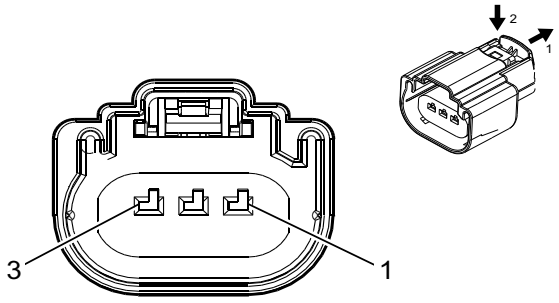
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B150 Fuel Tank Pressure Sensor (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	I	—
2	0.5	BK/BN	6284	Fuel Tank Vapor Pressure Sensor Low Reference	I	—
3	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—

B152LF Suspension Position Sensor - Left Front (Z45)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

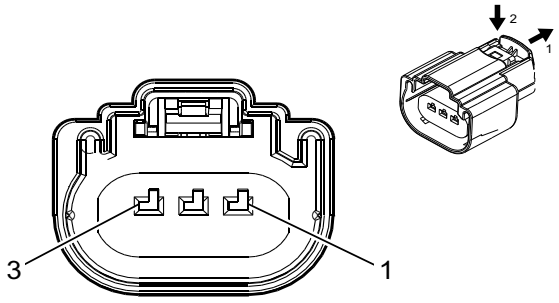
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B152LF Suspension Position Sensor - Left Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/RD	1205	Left Front Strut Position Sensor 5V Reference	I	—
2	0.5	BK/BU	1206	Left Front Strut Position Sensor Low Reference	I	—
3	0.5	BN/WH	1207	Left Front Strut Position Sensor Signal	I	—

B152R Suspension Position Sensor - Rear (Z45)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

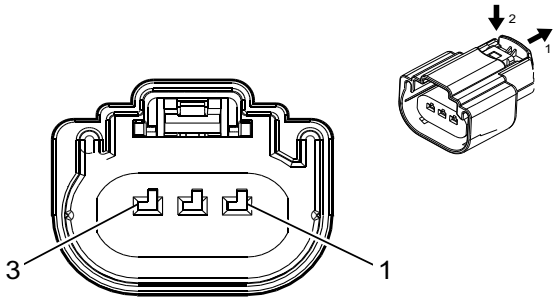
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B152R Suspension Position Sensor - Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/RD	1208	Left Rear Strut Position Sensor 5V Reference	I	—
2	0.5	BK/GN	1209	Left Rear Strut Position Sensor Low Reference	I	—
3	0.5	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	—

B152RF Suspension Position Sensor - Right Front (Z45)



4589538

Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

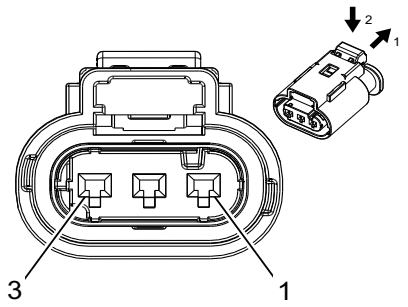
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B152RF Suspension Position Sensor - Right Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	1211	Right Front Strut Position Sensor 5V Reference	I	—
2	0.5	BK/GY	1212	Right Front Strut Position Sensor Low Reference	I	—
3	1	YE/WH	1213	Right Front Strut Position Sensor Signal	I	—

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)



2717069

Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

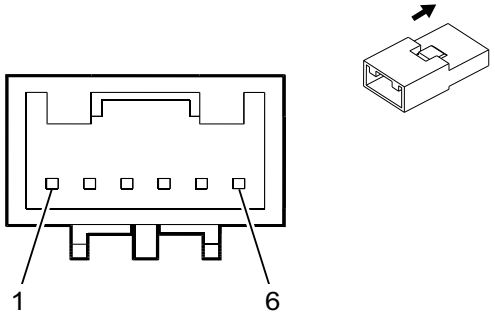
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
2	0.5	BU	6053	Exhaust Pressure Sensor Signal 1	I	—
3	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

B160 Windshield Temperature and Inside Moisture Sensor (ASV)



2839920

Connector Part Information

Harness Type: Headliner
OEM Connector: 13770074
Service Connector: 19299681
Description: 6-Way M 0.64 Kaizen Series (BK)

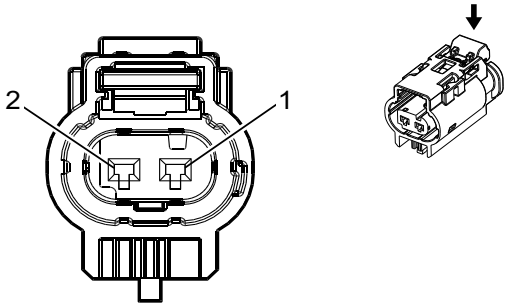
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B160 Windshield Temperature and Inside Moisture Sensor (ASV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/RD	597	5V Reference	I	—
2	0.35	GY/BU	7564	Humidity Sensor Signal	I	—
3	0.35	BK/BU	7566	Humidity/Windscreen Temp Sensor Low Reference	I	—
4	0.35	GY/GN	7565	Windscreen Temp Sensor Signal	I	—
5	0.35	YE/BU	3197	Humidity Temperature Sensor Signal	I	—
6	—	—	—	Not Occupied	—	—

B172LF Brake Pad Wear Sensor - Left Front



3747581

Connector Part Information

Harness Type: Chassis
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

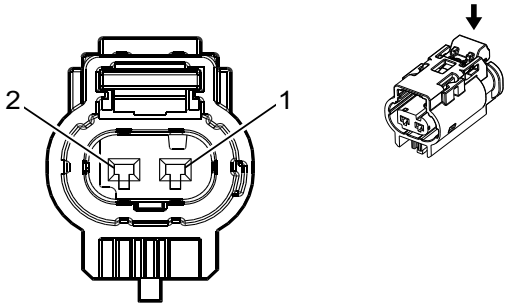
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B172LF Brake Pad Wear Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1612	Brake Lining Wear Sensor Signal Left Front	I	—
2	0.75	BK/WH	1751	Signal Ground	I	—

B172LR Brake Pad Wear Sensor - Left Rear



3747581

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13583195
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B172LR Brake Pad Wear Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN	1616	Brake Lining Wear Sensor Signal Rear	I	Z45
2	0.75	BK/WH	1751	Signal Ground	I	Z45

B174G Frontview Camera - Grille (UV2)

—

Connector Part Information

Harness Type: Frontview Camera Grille
OEM Connector: 13514000
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

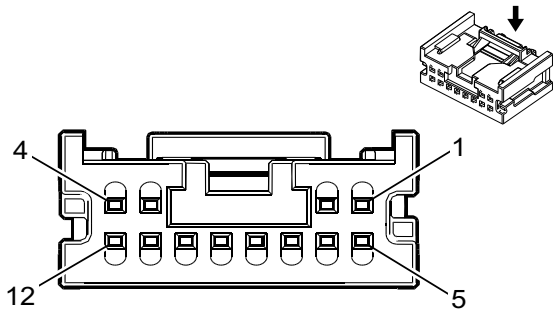
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B174G Frontview Camera - Grille (UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BK	—	—	COAX	Coax Cable	I	—

B174W Frontview Camera - Windshield (UEU/UHX)



3824362

Connector Part Information

Harness Type: Headliner
OEM Connector: 33235297
Service Connector: 13507121
Description: 12-Way F Mini 50 Series (BK)

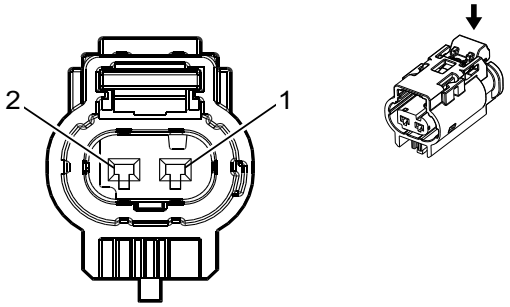
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19333221	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

B174W Frontview Camera - Windshield (UEU/UHX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/WH	1851	Signal Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	RD/GN	3140	Battery Positive Voltage	I	—
4	0.35	WH	3152	Lane Departure Warning Indicator Control	I	—
5	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
6	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—
7	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
8	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—
9	0.35	WH/BU	5986	Serial Data Communication Enable	I	—
10	0.35	GY/WH	3153	Lane Departure Warning Disable Switch Signal	I	—
11	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
12	—	—	—	Not Occupied	—	—

B193A Charge Air Cooler Inlet Temperature Sensor (LM2)



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

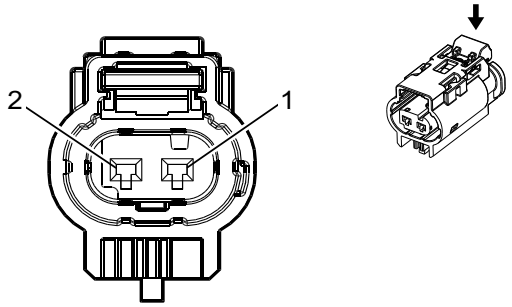
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B193A Charge Air Cooler Inlet Temperature Sensor (LM2)

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 Outlet Temperature Sensor (LM2)



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

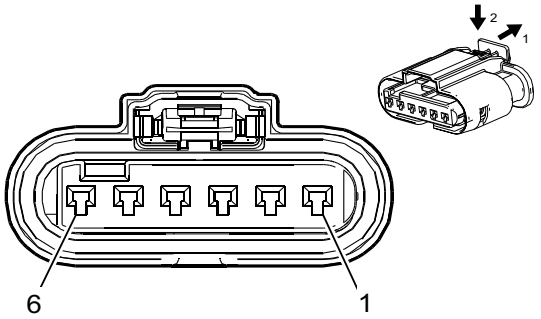
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B193B Charge Air Cooler Outlet Temperature Sensor (LM2)

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 (LM2)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

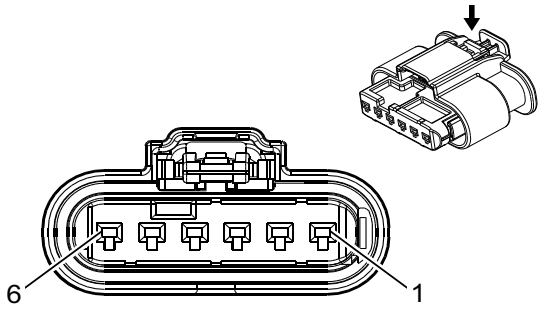
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B195A Nitrogen Oxides Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	3674	NOx Sensor 1 Control	I	—
2	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
3	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
6	0.5	BK/WH	451	Signal Ground	I	—

B195B Nitrogen Oxides Sensor 2 (LM2)



4455148

Connector Part Information

Harness Type: Chassis
OEM Connector: 33226735
Service Connector: 19353875
Description: 6-Way F 1.2 MCON-LL Series, Sealed (GY)

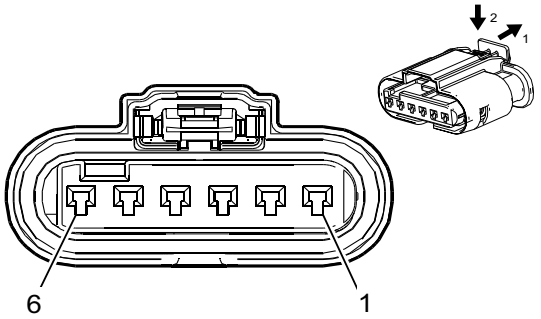
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B195B Nitrogen Oxides Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	3674	NOx Sensor 1 Control	I	—
2	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
3	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
6	0.5	BK/WH	1651	Signal Ground	I	—

B195C Nitrogen Oxides Sensor 3 (LM2)



3960142

Connector Part Information

Harness Type: Chassis
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

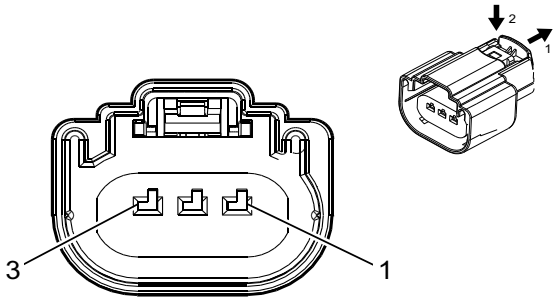
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B195C Nitrogen Oxides Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	3674	NOx Sensor 1 Control	I	—
2	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
3	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
4	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
5	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
6	0.5	BK/WH	1651	Signal Ground	I	—

B198 Fuel Composition Sensor (FHS)



4829227

Connector Part Information

Harness Type: Chassis
OEM Connector: 33362826
Service Connector: 19371197
Description: 3-Way F 150 MX Series, Sealed (GY)

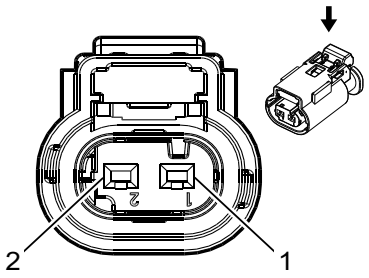
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B198 Fuel Composition Sensor (FHS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—
2	0.5	BK/WH	451	Signal Ground	I	—
3	0.5	WH	1579	Fuel Temperature/Composition Signal	I	—

B203 Radiator Coolant Temperature Sensor (L3B/LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

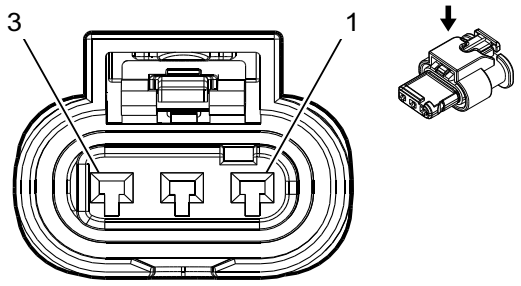
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B203 Radiator Coolant Temperature Sensor (L3B/LM2)

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	L3B
	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	LM2

B212 Reductant Sensor Module (LM2)



2750649

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13722729
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON Series, Sealed (BK)

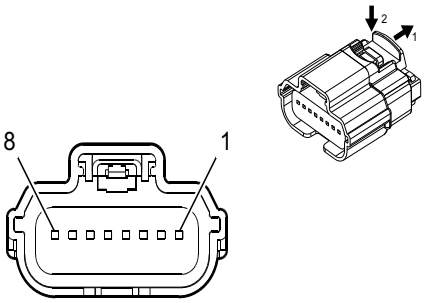
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B212 Reductant Sensor Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	—	—	I	—
2	0.5	BN	—	—	I	—
3	0.5	BK	—	—	I	—

B218L Side Object Sensor Module - Left (UKC)



4708234

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33204059
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed (BK)

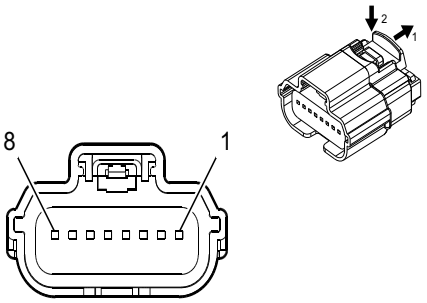
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B218L Side Object Sensor Module - Left (UKC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	3810	High Speed GMLAN Serial Data (-) 5	I	—
2	0.5	BU/WH	3812	High Speed GMLAN Serial Data (+) 5	I	—
3	0.5	BK/WH	1751	Signal Ground	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.35	GY/YE	1760	Left Side Object Detection LED Control	I	—
8	0.5	RD/GN	1840	Battery Positive Voltage	I	—

B218R Side Object Sensor Module - Right (UKC)



4708234

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33204059
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed (BK)

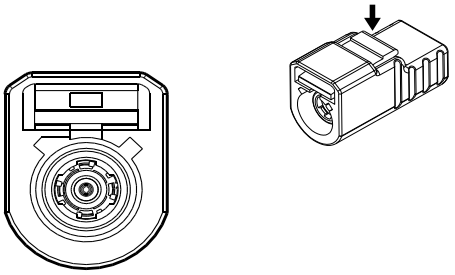
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B218R Side Object Sensor Module - Right (UKC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	3810	High Speed GMLAN Serial Data (-) 5	I	—
2	0.5	BU/WH	3812	High Speed GMLAN Serial Data (+) 5	I	—
3	0.5	BK/WH	1751	Signal Ground	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.35	GY	1761	Right Side Object Detection LED Control	I	—
8	0.5	RD/GN	1840	Battery Positive Voltage	I	—

B225L Sideview Camera - Left (UV2/UVI)



4883521

Connector Part Information

Harness Type: Driver Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

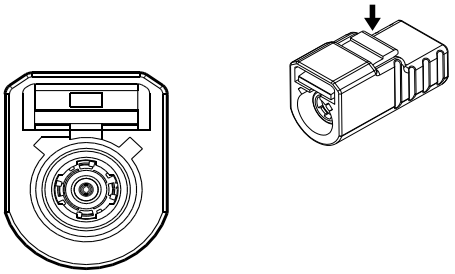
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

B225L Sideview Camera - Left (UV2/UVI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Coaxial Antenna TV1 Signal	I	—

B225R Sideview Camera - Right (UV2/UVI)



4883521

Connector Part Information

Harness Type: Passenger Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

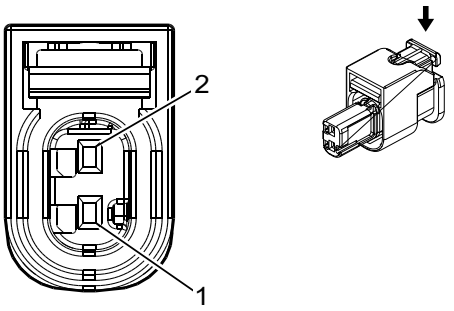
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

B225R Sideview Camera - Right (UV2/UVI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Coaxial Antenna TV2 Signal	I	—

B280 Automatic Transmission Accumulator Solenoid Valve (MQE)



4051102

Connector Part Information

Harness Type: Transmission
OEM Connector: 2138873-4
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BN)

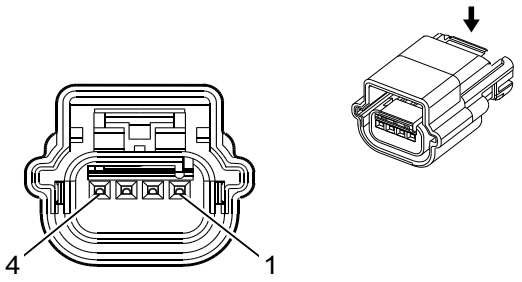
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B280 Automatic Transmission Accumulator Solenoid Valve (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	—
2	0.5	WH/GY	4578	Surge Accumulator Solenoid Low Side Control	I	—

B303 Transmission Range Sensor (MQB)



4789353

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 6006314801
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Series, Sealed (BK)

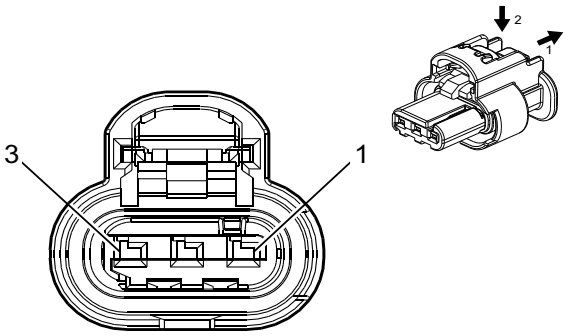
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	-	No Tool Required	Not Required	Not Required	Not Required	Not Required

B303 Transmission Range Sensor (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GY	3927	IMS Mode Switch Low Reference	I	—
2	0.5	YE	5724	Ignition Mode Switch Mode Control	I	—
3	0.5	YE/GY	5726	Ignition Mode Switch Mode Control Backup	I	—
4	0.5	OG	480	Engine Control Sensors 5 Volt Reference (2)	I	—

B306A Parking Assist Sensor - Front Left Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

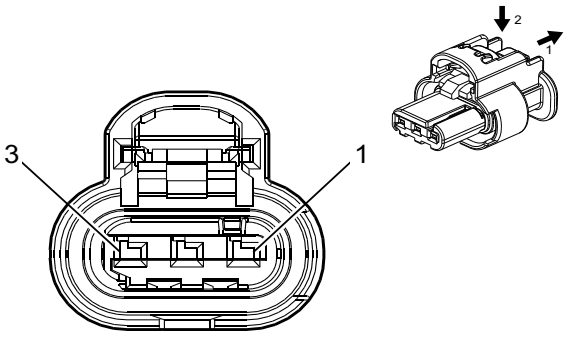
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306A Parking Assist Sensor - Front Left Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	5213	Front Parking Left/Right/Mid Sensor	I	—
2	0.5	VT/WH	5215	Front Parking Left Corner Sensor	I	—
3	0.5	BK/BU	5214	Front Parking Sensor Low Reference	I	—

B306B Parking Assist Sensor - Front Left Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

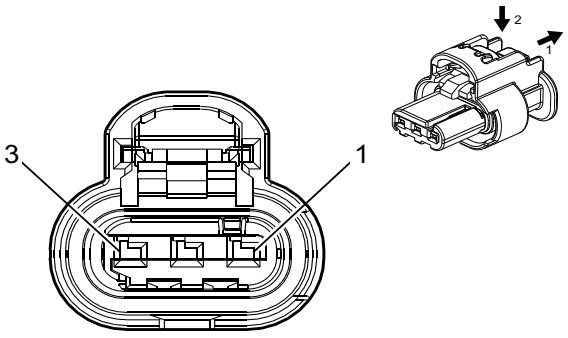
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306B Parking Assist Sensor - Front Left Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	5213	Front Parking Left/Right/Mid Sensor	I	—
2	0.5	YE/GY	5216	Front Parking Left Mid Sensor	I	—
3	0.5	BK/BU	5214	Front Parking Sensor Low Reference	I	—

B306C Parking Assist Sensor - Front Right Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

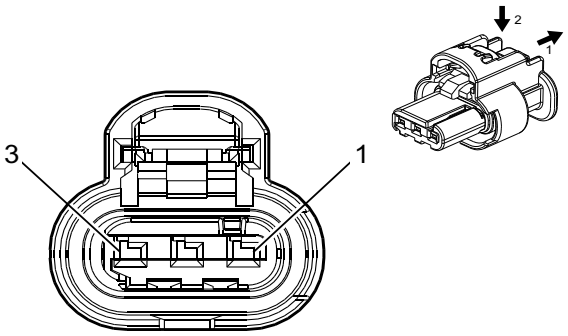
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306C Parking Assist Sensor - Front Right Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	5213	Front Parking Left/Right/Mid Sensor	I	—
2	0.5	VT/GY	5218	Front Parking Right Mid Sensor	I	—
3	0.5	BK/BU	5214	Front Parking Sensor Low Reference	I	—

B306D Parking Assist Sensor - Front Right Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

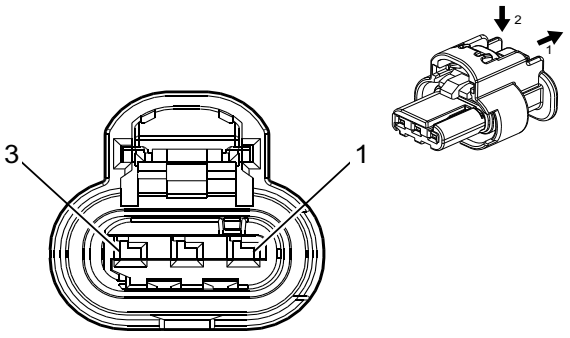
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306D Parking Assist Sensor - Front Right Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	5213	Front Parking Left/Right/Mid Sensor	I	—
2	0.5	WH/GY	5217	Front Parking Right Corner Sensor	I	—
3	0.5	BK/BU	5214	Front Parking Sensor Low Reference	I	—

B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

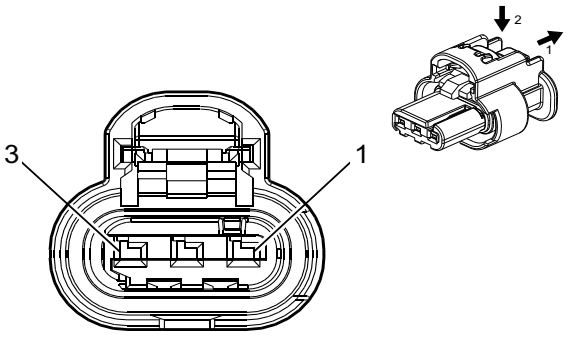
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	I	—
2	0.5	YE	2375	Left Rear Corner Object Sensor Signal	I	—
3	0.5	BK/GY	2379	Object Sensor Low Reference	I	—

B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

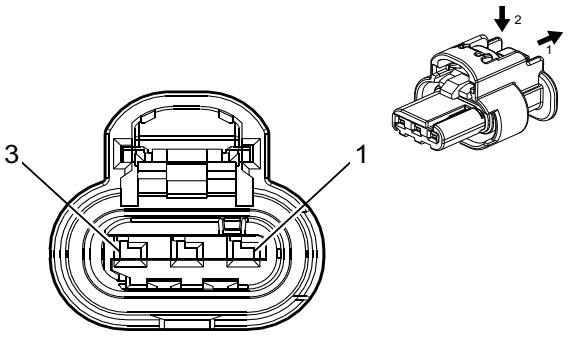
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	I	—
2	0.5	YE/BU	2376	Left Rear Middle Object Sensor Signal	I	—
3	0.5	BK/GY	2379	Object Sensor Low Reference	I	—

B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

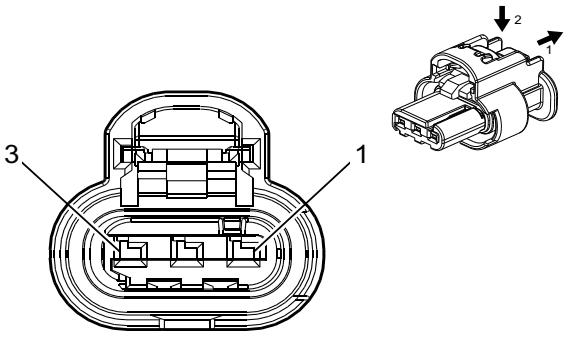
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	I	—
2	0.5	YE/WH	2377	Right Rear Middle Object Sensor Signal	I	—
3	0.5	BK/GY	2379	Object Sensor Low Reference	I	—

B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)



4581126

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

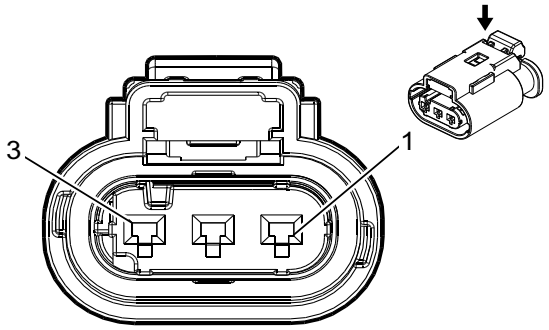
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	I	—
2	0.5	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	—
3	0.5	BK/GY	2379	Object Sensor Low Reference	I	—

B310 Fuel Pressure/Temperature Sensor (L3B)



3240107

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

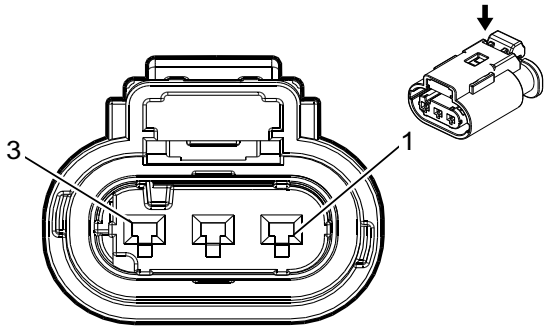
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B310 Fuel Pressure/Temperature 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	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—

B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)



3240107

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

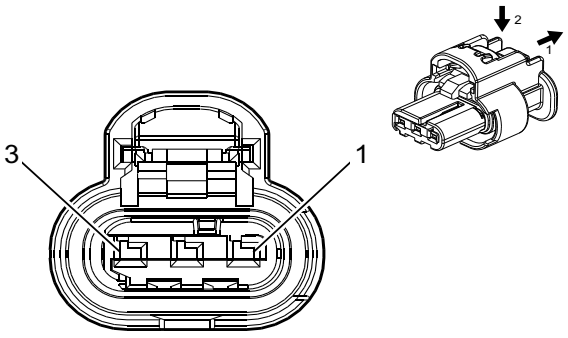
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

B310 Fuel Pressure/Temperature Sensor (LV3/L82/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	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	BN/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—

B321 Crankcase Pressure Sensor (LM2)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

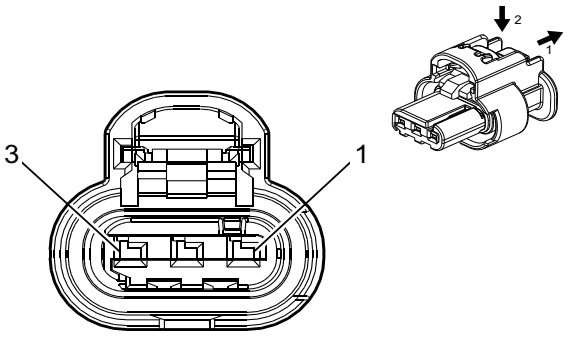
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B321 Crankcase Pressure Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	LM2
2	0.5	YE/GY	3926	Crankcase Differential Pressure Sensor Signal	I	LM2
3	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	I	LM2

B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

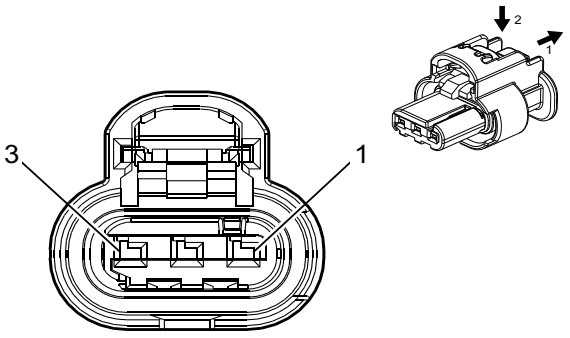
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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 Actuator Position Sensor 2 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

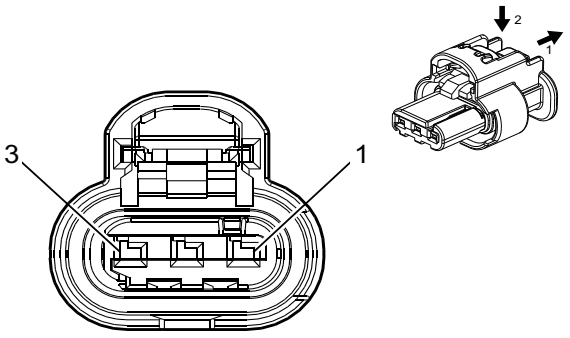
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B338B Intake Camshaft Profile Actuator Position Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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 Actuator Position Sensor 1 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

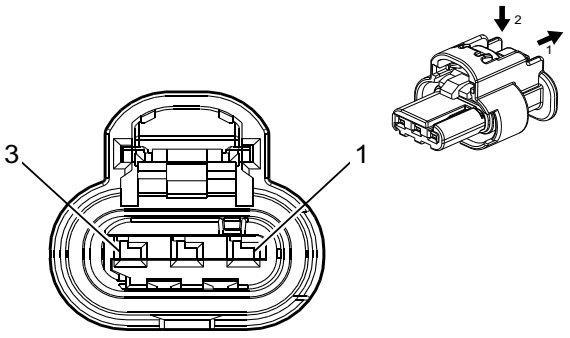
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B339A Exhaust Camshaft Profile Actuator Position Sensor 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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 Actuator Position Sensor 2 (L3B)



4581126

Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

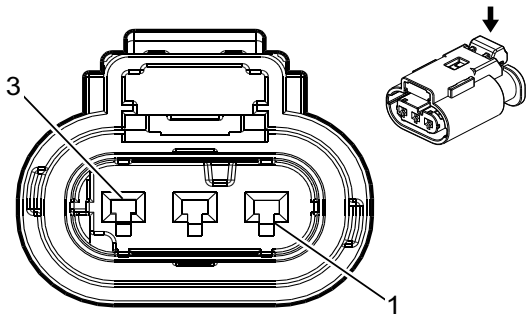
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B339B Exhaust Camshaft Profile Actuator Position Sensor 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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	—

B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)



2687961

Connector Part Information

Harness Type: Engine
OEM Connector: 13863839
Service Connector: 13422451
Description: 3-Way F 1.2 Multilock Series, Sealed (NA)

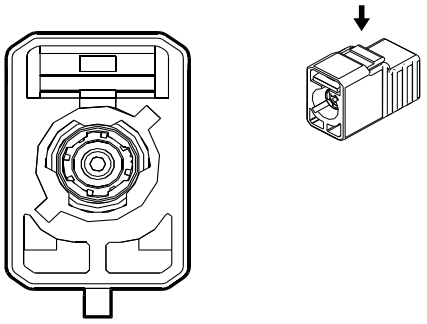
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
2	0.5	VT/GY	7246	Exhaust Gas Recirculation Differential Pressure Signal	I	—
3	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

B352 Video Display Inside Rearview Mirror Camera (DRZ)



3293625

Connector Part Information

Harness Type: Rearview Camera Jumper LVDS
OEM Connector: 13583914
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BU)

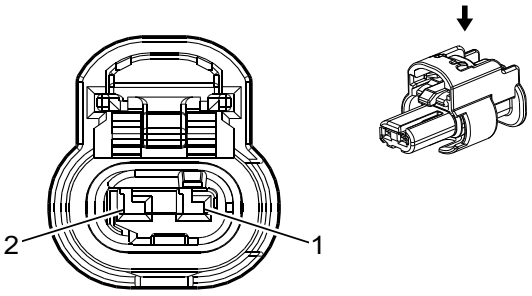
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

B352 Video Display Inside Rearview Mirror Camera (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

E2A Marker Lamp - Endgate



4649903

Connector Part Information

Harness Type: Endgate
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E2A Marker Lamp - Endgate

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.75	BK	1450	Ground	I	—

E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	709	Left Park Lamp Control	I	—
3	—	BK	150	Ground	I	—

E2LR Side Marker Lamp - Left Rear (GF3/GF5)

—

Connector Part Information

Harness Type: Left Taillamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: —

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E2LR Side Marker Lamp - Left Rear (GF3/GF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	709	Left Park Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	309	Right Park Lamp Control	I	—
3	—	BK	250	Ground	I	—

E2RR Side Marker Lamp - Right Rear (GF3/GF5)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E2RR Side Marker Lamp - Right Rear (GF3/GF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	309	Right Park Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	711	Left Headlamp High Beam Control	I	—
2	—	BK	150	Ground	I	—

E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	311	Right Headlamp High Beam Control	I	—
2	—	BK	250	Ground	I	—

E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	712	Left Headlamp Low Beam Control	I	—
2	—	BK	150	Ground	I	—

E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	312	Right Headlamp Low Beam Control	I	—
2	—	BK	250	Ground	I	—

E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: L90002902
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	150	Ground	I	—

E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	709	Left Park Lamp Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	150	Ground	I	—

E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	309	Right Park Lamp Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	250	Ground	I	—

E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

—

Connector Part Information

Harness Type: —
OEM Connector: L90002902
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	250	Ground	I	—

E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	24	Backup Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

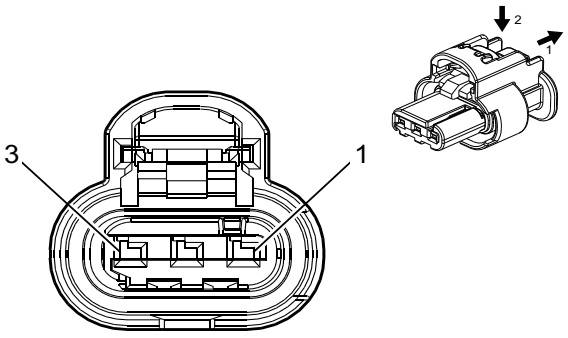
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	24	Backup Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)



4581126

Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper
OEM Connector: 33276797
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

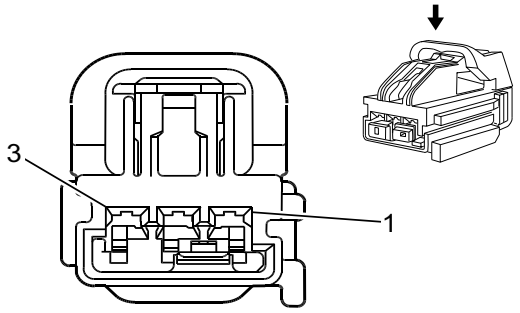
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.35	VT/WH	5065	Stop Lamp Relay Coil Control	I	—
3	0.35	BK	1050	Ground	I	—

E6 Center High Mounted Stop Lamp (Regular Cab)



1787799

Connector Part Information

Harness Type: Headliner
OEM Connector: 10847008
Service Connector: 19149536
Description: 3-Way F 1.5 Kaizen Series (L-GY)

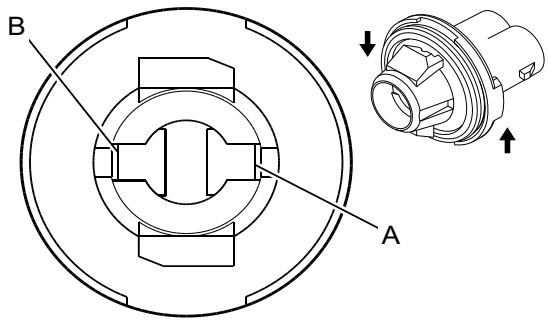
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E6 Center High Mounted Stop Lamp (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/VT	1430	Exterior Courtesy Lamp Control	I	—
2	0.5	VT/GY	1054	Stop Lamp Control	I	—
3	0.35	BK	1050	Ground	I	—

E7 License Plate Lamp (ZW9)



744036

Connector Part Information

Harness Type: License Lamp Jumper
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

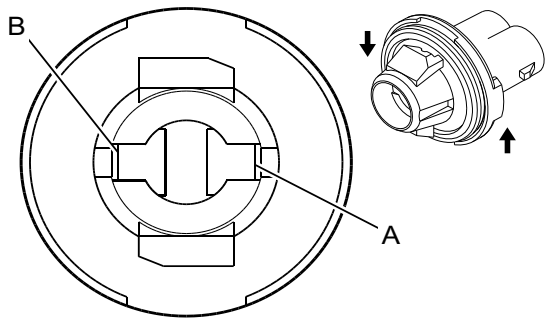
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E7 License Plate Lamp (ZW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	GN/YE	6846	Rear License Lamp Control	I	—
B	—	BK	1450	Ground	I	—

E7L License Plate Lamp - Left (E63)



744036

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

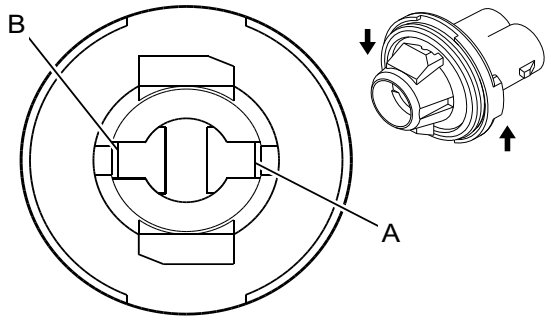
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

E7L License Plate Lamp - Left (E63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/YE	6846	Rear License Lamp Control	I	—
B	0.5	BK	1450	Ground	I	—

E7R License Plate Lamp - Right (E63)



744036

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

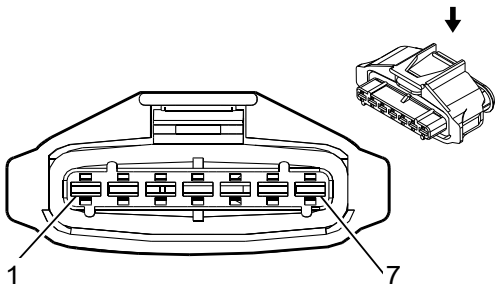
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

E7R License Plate Lamp - Right (E63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/YE	6846	Rear License Lamp Control	I	—
B	0.5	BK	1450	Ground	I	—

E11A Fuel Heater/Water in Fuel Sensor (LM2)



2537256

Connector Part Information

Harness Type: Chassis
OEM Connector: 10774827
Service Connector: 19354080
Description: 7-Way F 2.8 Junior Power Timer Series, Sealed (BK)

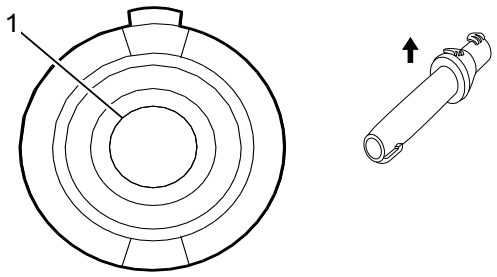
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E11A Fuel Heater/Water in Fuel Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1750	Ground	I	—
2	2.5	VT/GN	355	Fuel Filter Heater Voltage	I	—
3	0.5	WH/RD	6862	Water In Fuel Sensor 5V Reference	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/VT	455	Fuel Filter Temperature Signal	I	—
7	0.5	BK/VT	412	Fuel Filter Temperature Sensor Low Reference	I	—

E12A Glow Plug 1 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

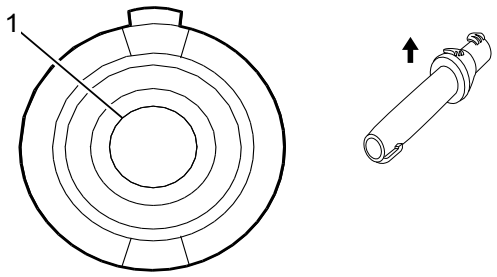
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12A Glow Plug 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/BU	1581	Glow Plug Control 1	I	—

E12B Glow Plug 2 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

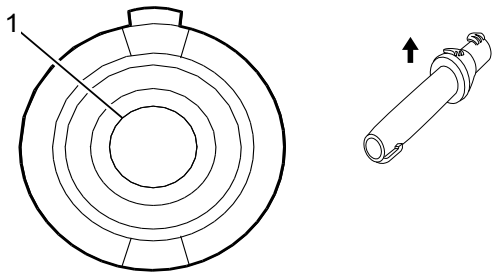
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12B Glow Plug 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/BN	1582	Glow Plug Control 2	I	—

E12C Glow Plug 3 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

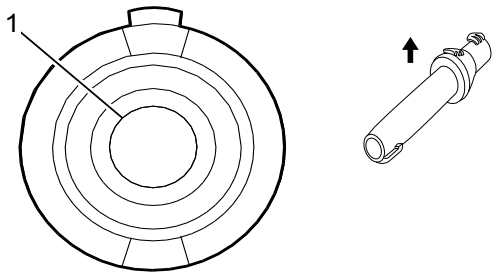
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12C Glow Plug 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/GN	1583	Glow Plug Control 3	I	—

E12D Glow Plug 4 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

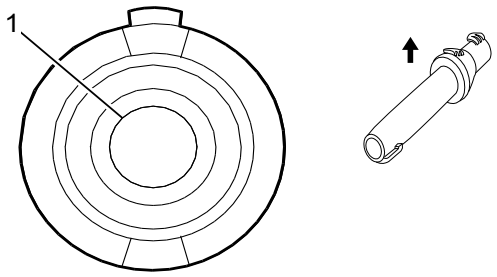
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12D Glow Plug 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/YE	1584	Glow Plug Control 4	I	—

E12E Glow Plug 5 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

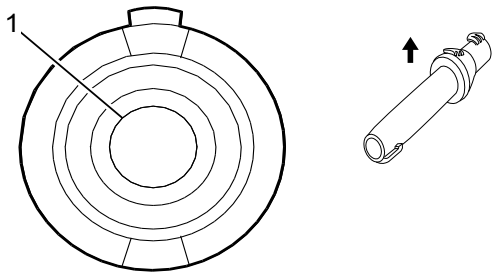
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12E Glow Plug 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/WH	1585	Glow Plug Control 5	I	—

E12F Glow Plug 6 (LM2)



2231591

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

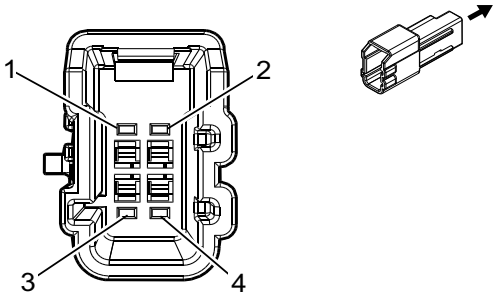
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E12F Glow Plug 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/VT	1586	Glow Plug Control 6	I	—

E14A Seat Heating Element - Driver Back (KA1)



4293695

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

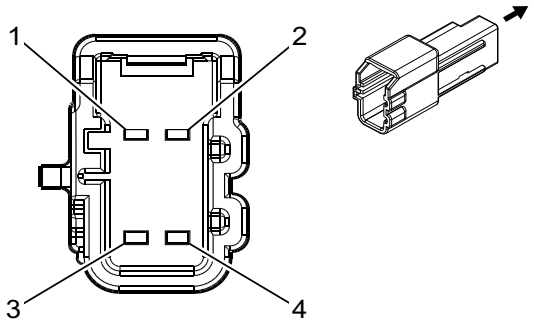
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14A Seat Heating Element - Driver Back (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	2432	Driver Heated Back Element Control	I	—
2	0.5	BU	2425	Driver Heated Back NTC Signal	I	—
3	0.5	BK/VT	2426	Driver Heated Back NTC Low Reference	I	—
4	0.75	BN/BK	2078	Driver Heated Seat Element Low Reference	I	—

E14B Seat Heating Element - Driver Cushion (KA1)



4210503

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

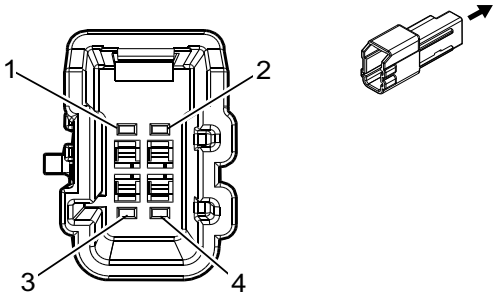
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14B Seat Heating Element - Driver Cushion (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/VT	2077	Driver Heated Seat Element Control	I	—
2	0.5	YE/GY	2079	Driver Heated Seat NTC Signal	I	—
3	0.5	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	—
4	0.75	BN/BK	2078	Driver Heated Seat Element Low Reference	I	—

E14C Seat Heating Element - Passenger Back (KA1)



4293695

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

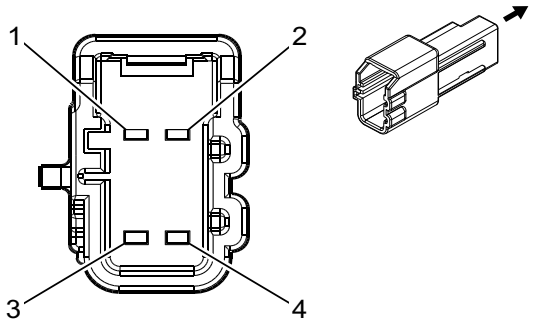
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14C Seat Heating Element - Passenger Back (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BN	2481	Passenger Heated Back Element Control	I	—
2	0.5	WH/BU	2436	Passenger Heated Back NTC Signal	I	—
3	0.5	BK/GN	2482	Passenger Heated Back NTC Low Reference	I	—
4	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	—

E14D Seat Heating Element - Passenger Cushion (KA1)



4210503

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

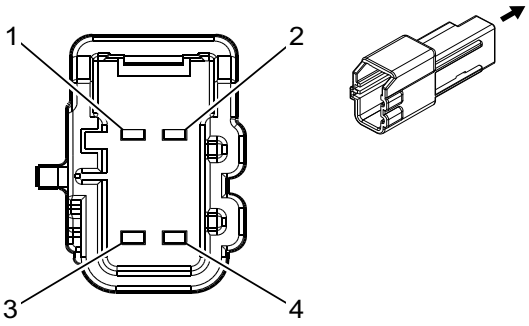
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14D Seat Heating Element - Passenger Cushion (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	2479	Passenger Heated Seat Element Control	I	—
2	0.5	WH/GY	2434	Passenger Heated Seat NTC Signal	I	—
3	0.5	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	—
4	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	—

E14F Seat Heating Element - Left Rear Cushion (KA6)



4210503

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

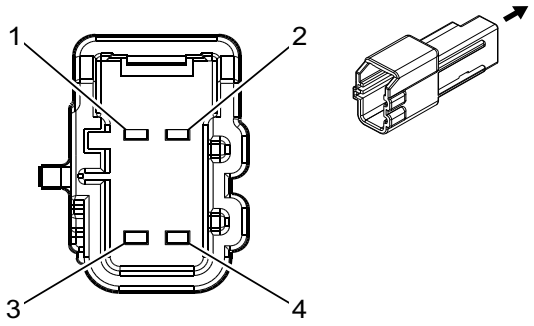
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14F Seat Heating Element - Left Rear Cushion (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	2294	Left Rear Heated Seat Cushion Element Control	I	—
2	0.75	WH/BU	7047	Left Rear Cushion NTC Signal	I	—
3	0.75	BU/WH	7048	Left Rear Cushion NTC Low Reference	I	—
4	0.75	BN/BK	2295	Left Rear Heated Seat Cushion Element Low Reference	I	—

E14H Seat Heating Element - Right Rear Cushion (KA6)



4210503

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

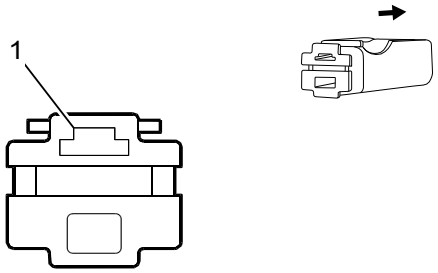
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E14H Seat Heating Element - Right Rear Cushion (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN/BN	2296	Right Rear Heated Seat Cushion Element Control	I	—
2	0.75	YE/WH	7053	Right Rear Cushion NTC Signal	I	—
3	0.75	WH/BK	7054	Right Rear Cushion NTC Low Reference	I	—
4	0.75	GN/BK	2297	Right Rear Heated Seat Cushion Element Low Reference	I	—

E18 Rear Defogger Grid X1



1413086

Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series (BK)

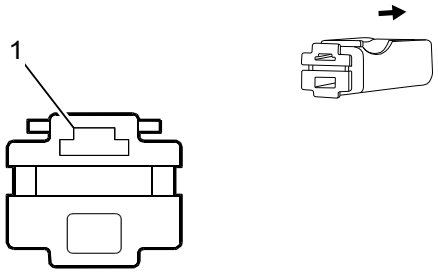
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E18 Rear Defogger Grid X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BN/VT	293	Rear Defog Element Control	I	—

E18 Rear Defogger Grid X2



1413086

Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series (BK)

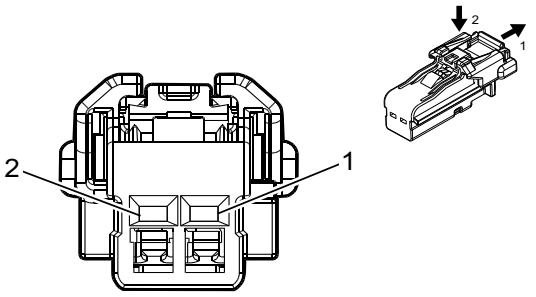
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E18 Rear Defogger Grid X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1350	Ground	I	—

E28 Center Console Compartment Lamp



4115691

Connector Part Information

Harness Type: Floor Console
OEM Connector: 35026312
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

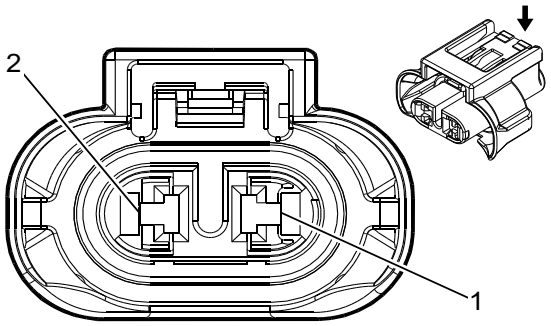
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E28 Center Console Compartment Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.5	WH/BN	6815	Inadvertent Power Control	I	—

E29LF Fog Lamp - Left Front (T3U)



3404058

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 13818129
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed (BK)

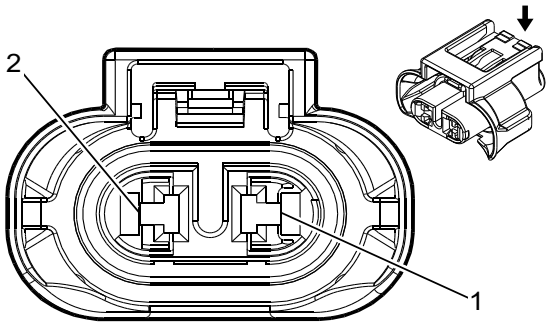
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E29LF Fog Lamp - Left Front (T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	150	Ground	I	—

E29RF Fog Lamp - Right Front (T3U)



3404058

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 13818129
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed (BK)

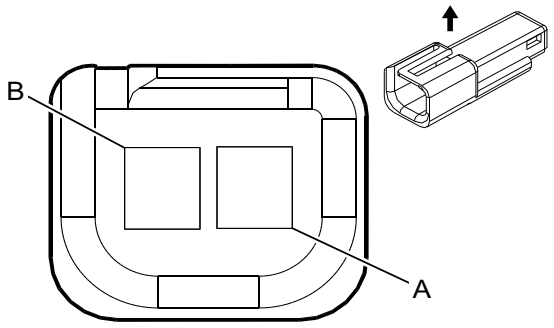
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E29RF Fog Lamp - Right Front (T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/VT	2234	Front Fog Lamp Control	I	—
2	0.5	BK	250	Ground	I	—

E31L Sunshade Mirror Lamp - Left (DH6)



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

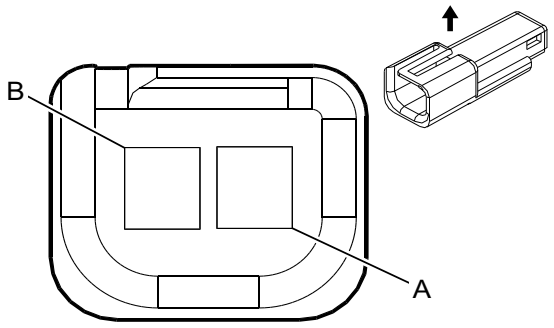
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E31L Sunshade Mirror Lamp - Left (DH6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BN	6815	Inadvertent Power Control	I	—
B	0.5	BK	1050	Ground	I	—

E31R Sunshade Mirror Lamp - Right (DH6)



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

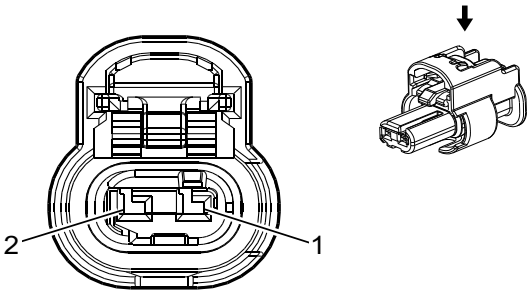
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E31R Sunshade Mirror Lamp - Right (DH6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BN	6815	Inadvertent Power Control	I	—
B	0.5	BK	1050	Ground	I	—

E33L Cargo Lamp - Left (UF2)



4649903

Connector Part Information

Harness Type: Left Taillamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

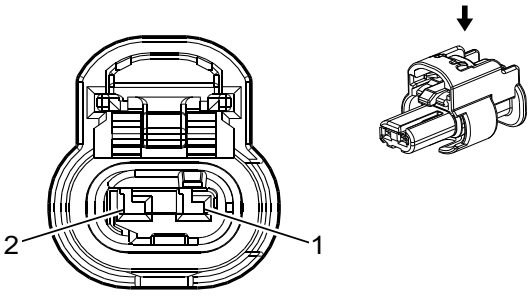
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E33L Cargo Lamp - Left (UF2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	7762	Cargo Bed Lamp Control	I	—
2	—	BK	1450	Ground	I	—

E33R Cargo Lamp - Right (UF2)



4649903

Connector Part Information

Harness Type: Right Taillamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

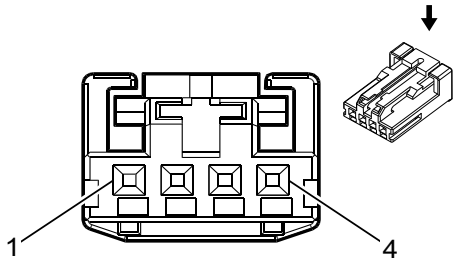
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E33R Cargo Lamp - Right (UF2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	7762	Cargo Bed Lamp Control	I	—
2	—	BK	1750	Ground	I	—

E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)



2717162

Connector Part Information

Harness Type: Headliner
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/YE	240	Battery Positive Voltage	I	—
2	0.35	GY	157	Interior Lamp Control	I	—
3	0.5	BK	1050	Ground	I	—
4	0.5	WH/BN	6815	Inadvertent Power Control	I	—

E40 Electrical Auxiliary Heater X1 (C32)

—

Connector Part Information

Harness Type: Electrical Auxiliary Heater Jumper
OEM Connector: 13507723
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

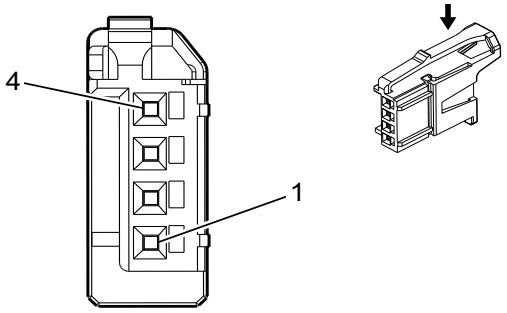
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E40 Electrical Auxiliary Heater X1 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	RD/GY	642	Battery Positive Voltage	I	—

E40 Electrical Auxiliary Heater X2 (C32)



4500098

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33250857
Service Connector: 19354403
Description: 4-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E40 Electrical Auxiliary Heater X2 (C32)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	3195	Auxiliary Heater Control	I	—
2	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK	1050	Ground	I	—

E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

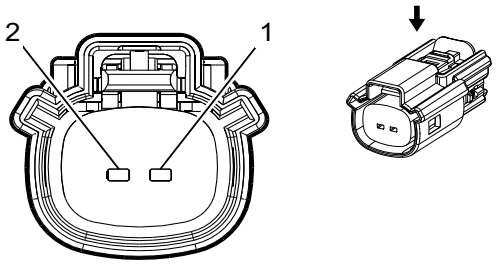
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	709	Left Park Lamp Control	I	—
2	0.75	RD	5356	Left Tail Lamp Outage Detection Signal	I	—
3	0.75	GN	18	Left Rear Stop/Turn Lamp Control	I	—
4	0.75	BK	1450	Ground	I	—

E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)



2474713

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

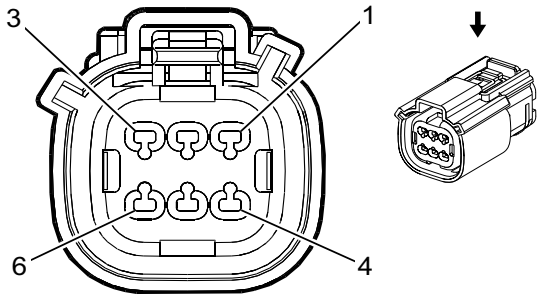
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1450	Ground	I	—
2	0.75	BN	709	Left Park Lamp Control	I	—

E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)



3225042

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13592503
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	709	Left Park Lamp Control	I	—
2	0.75	RD	5356	Left Tail Lamp Outage Detection Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN	24	Backup Lamp Control	I	—
5	0.75	GN	18	Left Rear Stop/Turn Lamp Control	I	—
6	0.75	BK	1450	Ground	I	—

E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

—

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

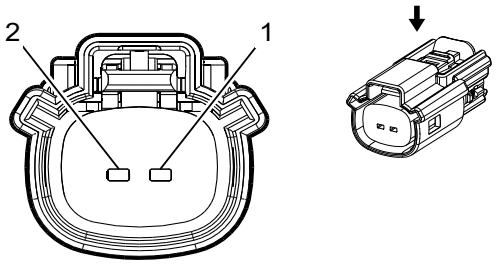
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	309	Right Park Lamp Control	I	—
2	0.75	RD	5357	Right Tail Lamp Outage Detection Signal	I	—
3	0.75	GN	19	Right Rear Stop/Turn Lamp Control	I	—
4	0.75	BK	1750	Ground	I	—

E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)



2474713

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

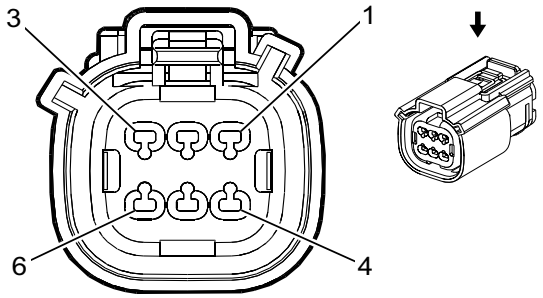
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1750	Ground	I	—
2	0.75	BN	309	Right Park Lamp Control	I	—

E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)



3225042

Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13592503
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 Series, Sealed (GY)

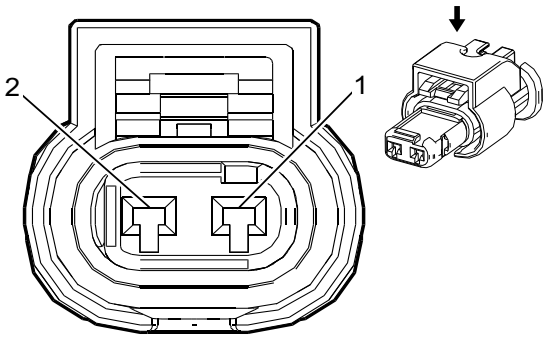
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	309	Right Park Lamp Control	I	—
2	0.75	RD	5357	Right Tail Lamp Outage Detection Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN	24	Backup Lamp Control	I	—
5	0.75	GN	19	Right Rear Stop/Turn Lamp Control	I	—
6	0.75	BK	1750	Ground	I	—

E52 Reductant Line Heater (LM2)



2474752

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13927761
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

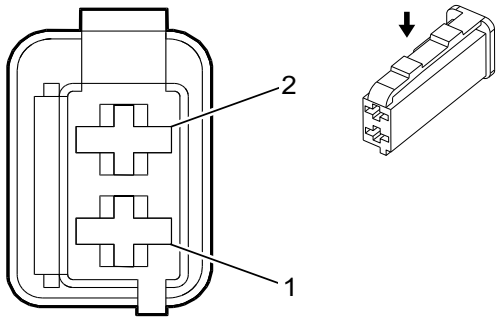
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

E52 Reductant Line Heater (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.0	BK	—	—	I	—
2	1.0	BK	—	—	I	—

E63D Flood Lamp - Driver Door Handle (AU3)



2339593

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.6 Timer Series (BK)

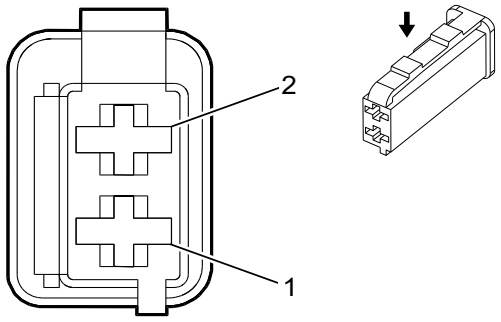
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E63D Flood Lamp - Driver Door Handle (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	—
2	0.35	BK	1150	Ground	I	—

E63P Flood Lamp - Passenger Door Handle (AU3)



2339593

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E63P Flood Lamp - Passenger Door Handle (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	—
2	0.75	BK	1250	Ground	I	—

F101 Passenger Instrument Panel Air Bag X1

—

Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598467
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

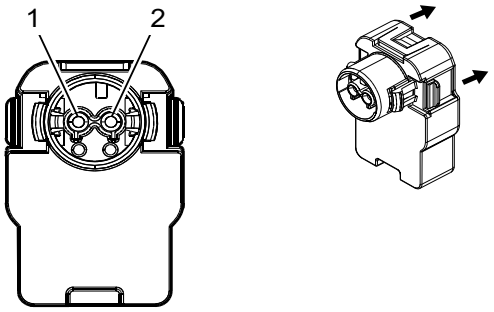
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

F101 Passenger Instrument Panel Air Bag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE/OG	3025	Passenger IP Module Stage 1 High Control	I	—
2	—	OG/WH	3024	Passenger IP Module Stage 1 Low Control	I	—

F101 Passenger Instrument Panel Air Bag X2



4772246

Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598468
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PU with YE Cover)

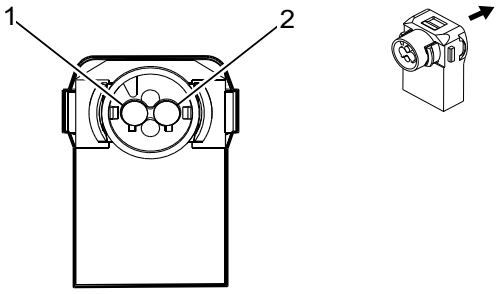
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

F101 Passenger Instrument Panel Air Bag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/OG	3027	Passenger IP Module Stage 2 High Control	I	—
2	—	OG/VT	3026	Passenger IP Module Stage 2 Low Control	I	—

F105L Roof Rail Air Bag - Left (Crew Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

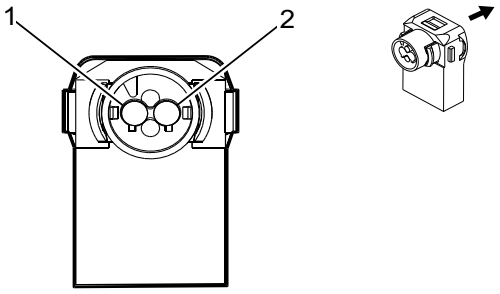
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105L Roof Rail Air Bag - Left (Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	I	—
2	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	—

F105L Roof Rail Air Bag - Left (Extended Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

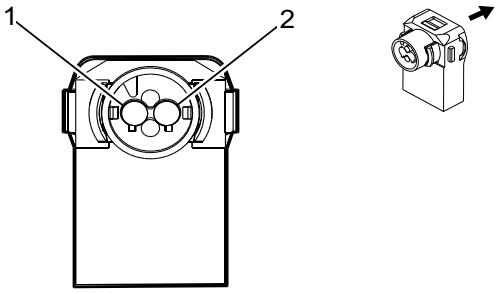
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105L Roof Rail Air Bag - Left (Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	I	—
2	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	—

F105L Roof Rail Air Bag - Left (Regular Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

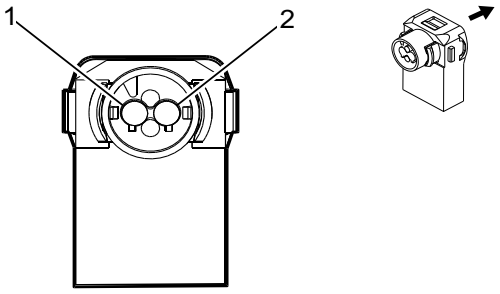
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105L Roof Rail Air Bag - Left (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	I	—
2	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	—

F105R Roof Rail Air Bag - Right (Crew Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

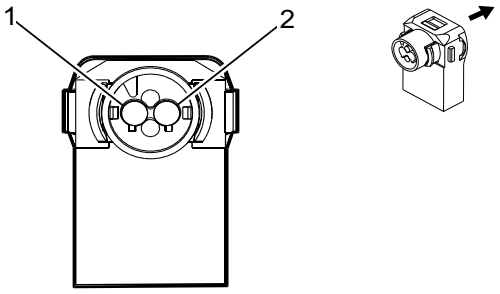
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105R Roof Rail Air Bag - Right (Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	—
2	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	—

F105R Roof Rail Air Bag - Right (Extended Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

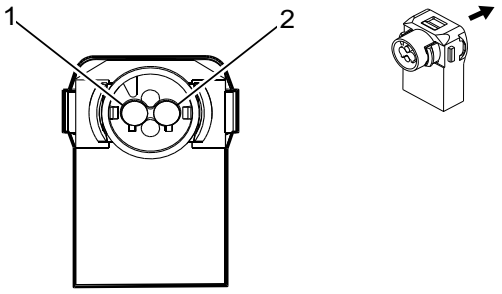
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105R Roof Rail Air Bag - Right (Extended Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	—
2	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	—

F105R Roof Rail Air Bag - Right (Regular Cab)



4679778

Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

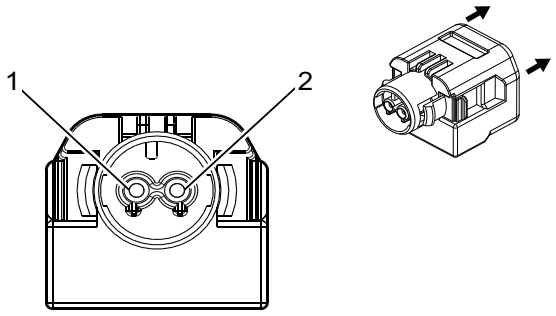
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F105R Roof Rail Air Bag - Right (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	—
2	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	—

F106D Seat Side Air Bag - Driver



4772226

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 1801935-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PK with YE Cover)

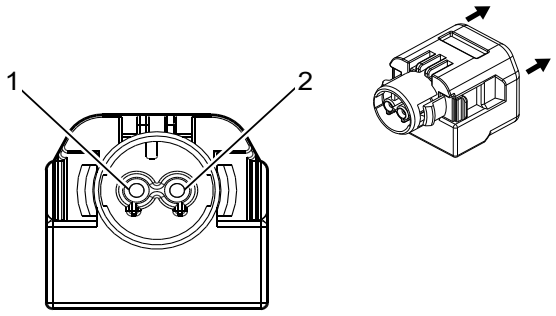
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

F106D Seat Side Air Bag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BU	3068	Driver Side Impact Module High Control	I	—
2	0.5	BK/OG	3069	Driver Side Impact Module Low Control	I	—

F106P Seat Side Air Bag - Passenger



4772226

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 1801935-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PK with YE Cover)

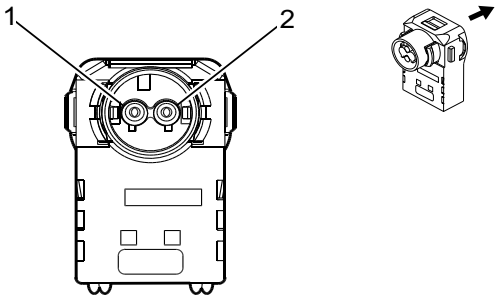
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

F106P Seat Side Air Bag - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	3066	Passenger Side Impact Module High Control	I	—
2	0.5	BU/OG	3067	Passenger Side Impact Module Low Control	I	—

F107 Steering Wheel Air Bag X1



4231869

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596550
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 MAC Series (PK with YE Cover)

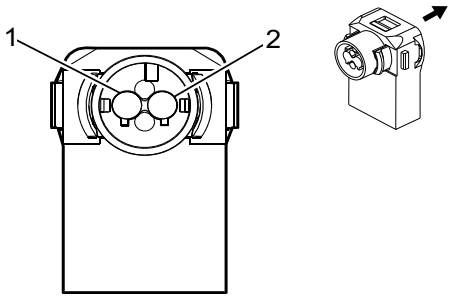
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

F107 Steering Wheel Air Bag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE/OG	3021	Steering Wheel Module Stage 1 High Control	I	—
2	—	OG/WH	3020	Steering Wheel Module Stage 1 Low Control	I	—

F107 Steering Wheel Air Bag X2



4241364

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596551
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 MAC Series (PU with YE Cover)

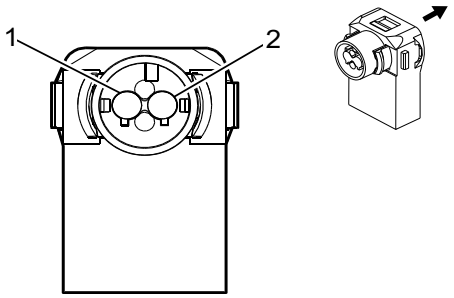
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

F107 Steering Wheel Air Bag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/OG	3023	Steering Wheel Module Stage 2 High Control	I	—
2	—	OG/VT	3022	Steering Wheel Module Stage 2 Low Control	I	—

F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

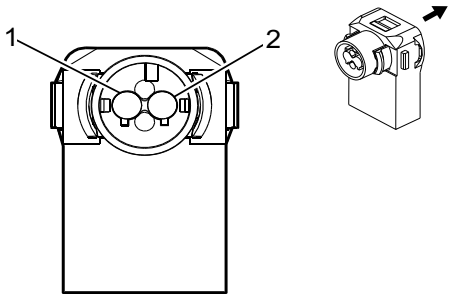
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)

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	GY/OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—

F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

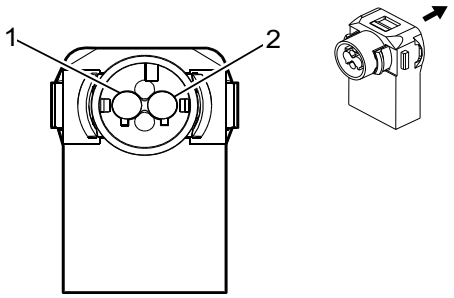
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)

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	GY/OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—

F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/Extended Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

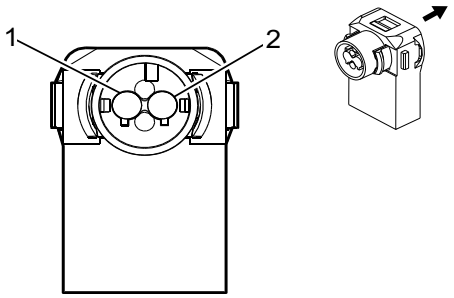
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/Extended Cab)

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	—

F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)



4241364

Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

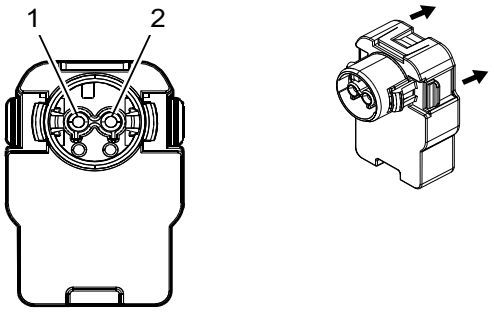
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
2	0.35	WH/OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—

F113D Seat Belt Anchor Pretensioner - Driver



4823732

Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13598467
Description: 2-Way F 1.0 Series (PK with YE Cover)

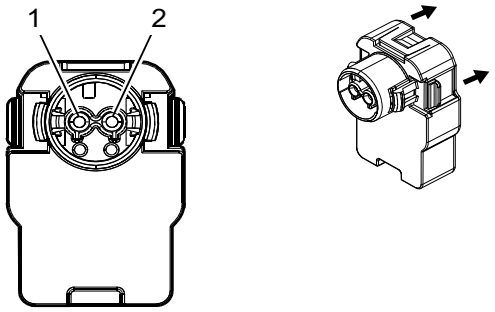
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F113D Seat Belt Anchor Pretensioner - 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	YE/OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	—

F113P Seat Belt Anchor Pretensioner - Passenger



4823732

Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13598467
Description: 2-Way F 1.0 Series (PK with YE Cover)

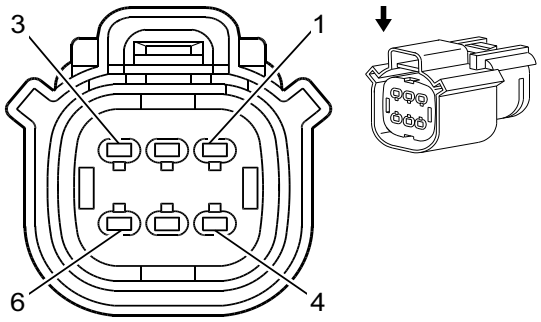
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

F113P Seat Belt Anchor Pretensioner - 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 (MQB)



1664625

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F Sealed

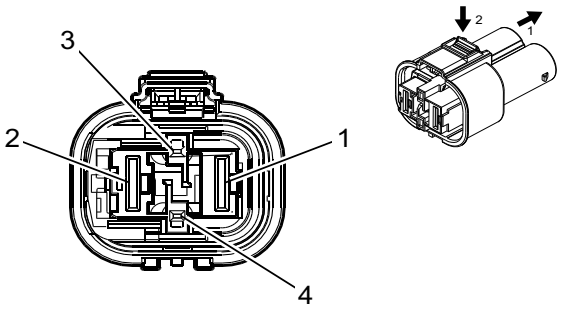
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/VT	8640	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BN	6387	Transmission High Side Driver 1 Signal Driver	I	—
4	0.5	GY/OG	2968	Transmission Auxiliary Oil Pump Control	I	—
5	—	—	—	Not Occupied	—	—
6	1.5	BK/YE	4450	Ground	I	—

G10B Cooling Fan Motor - Lower (L3B)



4847569

Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

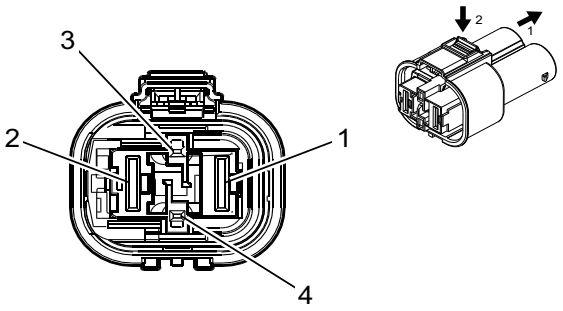
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G10B Cooling Fan Motor - Lower (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	5	BK	4450	Ground	II	L3B
3	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—
4	—	—	—	Not Occupied	—	—

G10B Cooling Fan Motor - Lower (LM2)



4847569

Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

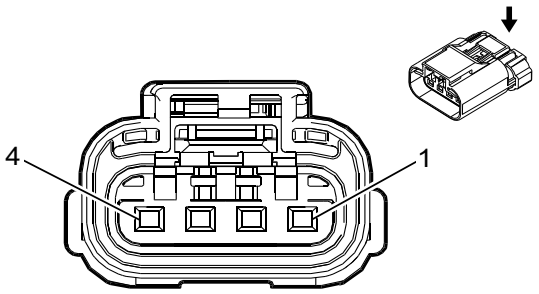
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G10B Cooling Fan Motor - Lower (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD/VT	842	Battery Positive Voltage	II	—
2	5	BK	4450	Ground	II	—
3	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—
4	—	—	—	Not Occupied	—	—

G10L Cooling Fan Motor - Left



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 19367553
Description: 4-Way F 2.8 APEX Series, Sealed (BK)

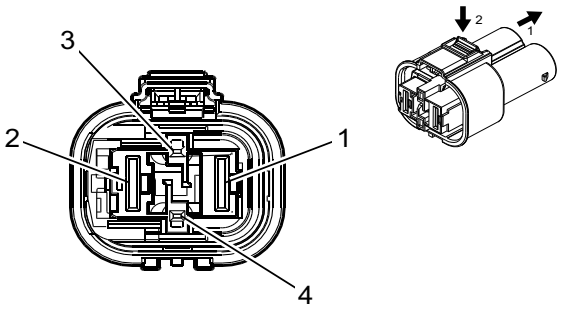
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G10L Cooling Fan Motor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD/WH	342	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—

G10R Cooling Fan Motor - Right (LM2)



4847569

Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

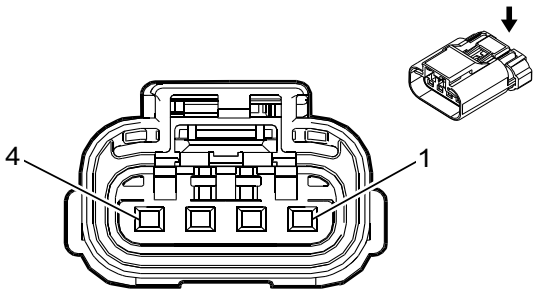
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G10R Cooling Fan Motor - Right (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	8	RD	642	Battery Positive Voltage	II	—
2	8	BK	4450	Ground	II	—
3	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—
4	—	—	—	Not Occupied	—	—

G10R Cooling Fan Motor - Right (-LM2)



4732789

Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 19367553
Description: 4-Way F 2.8 APEX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G10R Cooling Fan Motor - Right (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	4450	Ground	II	—
2	5	RD/GY	642	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—

G13 Generator X2

—

Connector Part Information

Harness Type: Generator
OEM Connector: 84238913
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

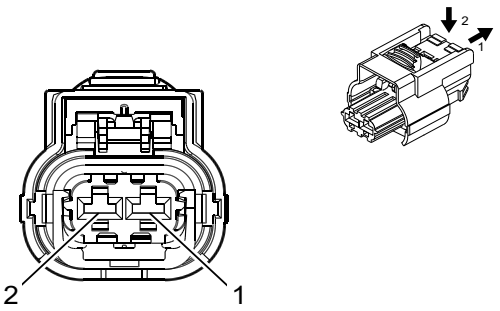
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

G13 Generator X2

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

G13 Generator X1 (L3B)



4992524

Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

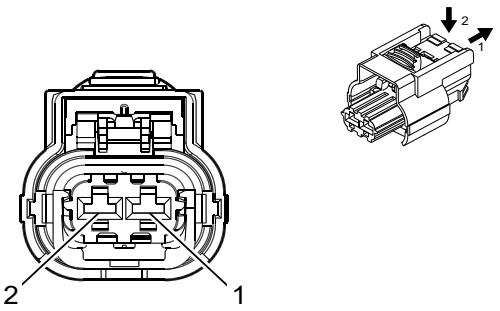
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G13 Generator X1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
	0.5	BN	25	Charge Indicator Control		VYU
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
	0.5	GY	23	Generator Field Duty Cycle Signal		VYU

G13 Generator X1 (L82/LM2)



4992524

Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

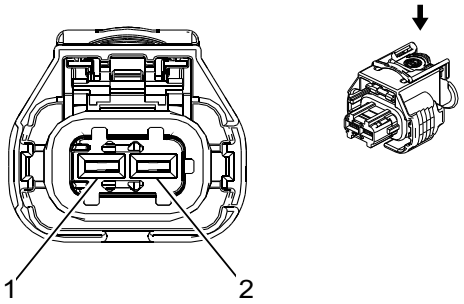
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G13 Generator X1 (L82/LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
	0.5	GY	23	Generator Field Duty Cycle Signal		VYU
2	0.5	BN	25	Charge Indicator Control	I	—
	0.5	BN	25	Charge Indicator Control		VYU

G13 Generator X1 (L84/L87)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

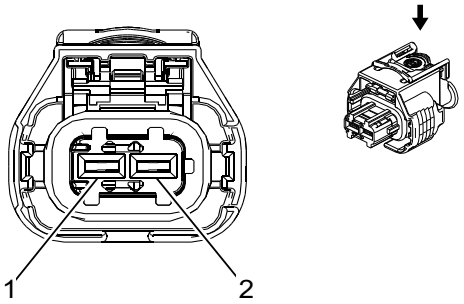
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G13 Generator X1 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
	0.5	BN	25	Charge Indicator Control		VYU
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
	0.5	GY	23	Generator Field Duty Cycle Signal		VYU

G13 Generator X1 (LV3)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

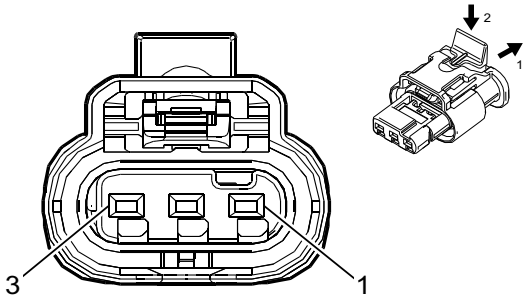
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G13 Generator X1 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
	0.5	GY	23	Generator Field Duty Cycle Signal		VYU
2	0.5	BN	25	Charge Indicator Control	I	—
	0.5	BN	25	Charge Indicator Control		VYU

G17 Heater Coolant Pump (L84/L87/LM2)



4249125

Connector Part Information

Harness Type: Engine
OEM Connector: 33176362
Service Connector: 19352065
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

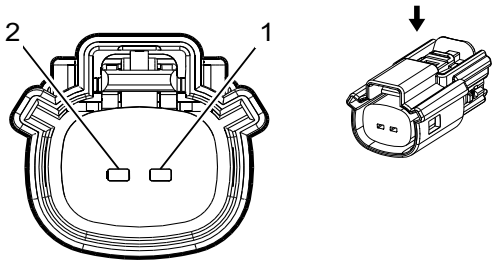
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G17 Heater Coolant Pump (L84/L87/LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	4450	Ground	I	L84/L87
	0.5	BK	4450	Ground	I	LM2
2	0.5	YE/BU	5126	After Boil Heater Pump Control	I	—
3	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	—

G18 High Pressure Fuel Pump (L3B)



2474713

Connector Part Information

Harness Type: Engine
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 150 MX Series, Sealed (BK)

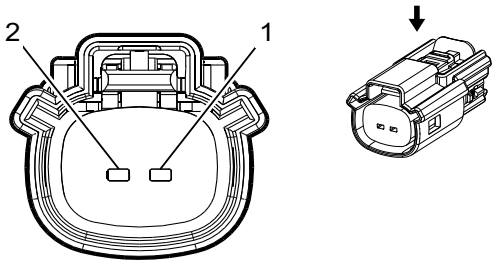
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G18 High Pressure Fuel Pump (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	—
2	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	—

G18 High Pressure Fuel Pump (L82/L84/L87/LV3)



2474713

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

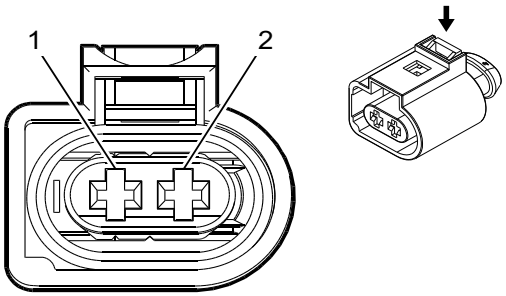
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

G18 High Pressure Fuel Pump (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	—
2	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	—

G24 Windshield Washer Pump



2474738

Connector Part Information

Harness Type: Body
OEM Connector: 10863916
Service Connector: 19368727
Description: 2-Way F 2.8 MDK5 Series, Sealed (BK)

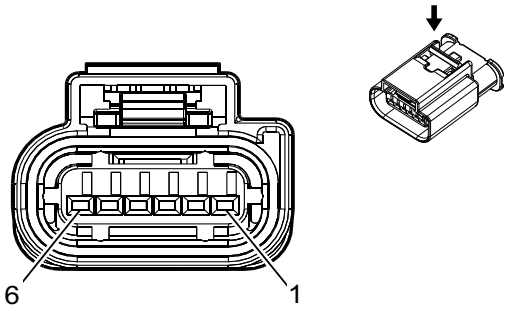
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/VT	228	Windshield Washer Pump Control	I	—
2	0.75	BK	150	Ground	I	—

G58 Evaporative Emission Purge Pump (L3B)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33225994
Service Connector: 19354437
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

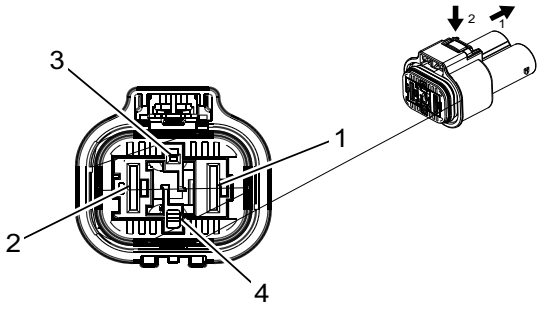
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G58 Evaporative Emission 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	0.75	BK/YE	548	Engine Control Sensors Low Reference (1)	I	—
3	0.75	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	—
4	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	—
5	0.5	BK	4450	Ground	I	—
6	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—

G59 Engine Coolant Pump (L3B)



4994735

Connector Part Information

Harness Type: Engine
OEM Connector: 33368755
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series, Sealed (BK)

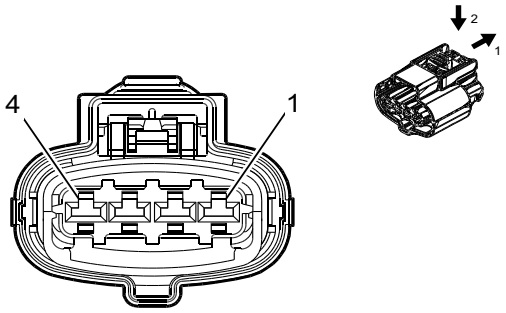
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G59 Engine Coolant Pump (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD/BN	440	Battery Positive Voltage	II	—
2	10	BK	4450	Ground	II	—
3	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	—
4	—	—	—	Not Occupied	—	—

G59 Engine Coolant Pump (LM2)



4997613

Connector Part Information

Harness Type: Engine
OEM Connector: 33230781
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed (BK)

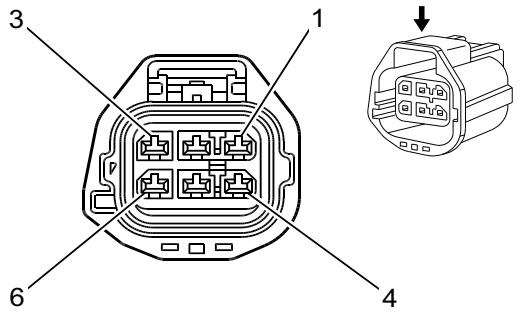
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

G59 Engine Coolant Pump (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	550	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	—
4	1	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	—

K4 Assist Step Control Module X1 (BRS)



1420587

Connector Part Information

Harness Type: Chassis
OEM Connector: 33334914
Service Connector: 19368855
Description: 6-Way F 2.8 Series, Sealed (GY)

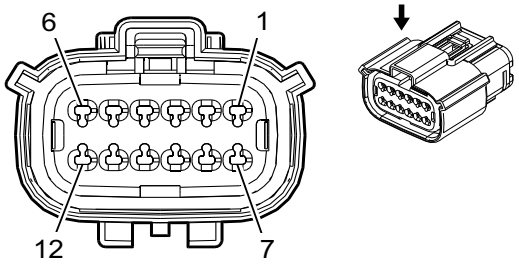
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K4 Assist Step Control Module X1 (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	GN	7469	Articulating Running Boards Motor Right Control Retract	I	—
2	2.5	BK	2150	Ground	I	—
3	2	WH/BN	7471	Articulating Running Boards Motor Left Control Extend	I	—
4	2	BU	7470	Articulating Running Boards Motor Right Control Extend	I	—
5	2.5	RD/YE	1142	Battery Positive Voltage	I	—
6	2	GY	7472	Articulating Running Boards Motor Left Control Retract	I	—

K4 Assist Step Control Module X2 (BRS)



2424960

Connector Part Information

Harness Type: Chassis
OEM Connector: 33297566
Service Connector: 19352907
Description: 12-Way F 150 MX Series, Sealed (BK)

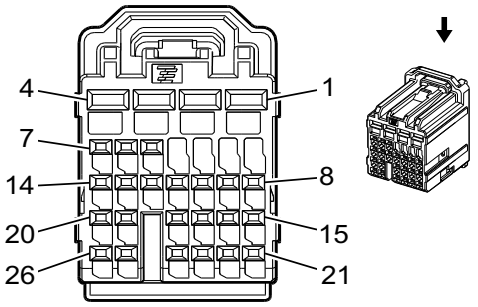
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300625	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

K4 Assist Step Control Module X2 (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/RD	7468	Running Boards Motor Hall Sensor Left 5V Reference	I	—
2	0.5	GN/RD	7464	Running Boards Motor Hall Sensor Right 5V Reference	I	—
3	0.5	YE	7467	Running Boards Motor Hall Sensor Left Signal	I	—
4	0.5	VT	7465	Running Boards Motor Hall Sensor Right Signal	I	—
5	0.5	YE/BN	7466	Running Boards Motor Hall Sensor Left Low Reference	I	—
6	0.5	YE/BK	7463	Running Boards Motor Hall Sensor Right Low Reference	I	—
7	0.5	BK/BU	685	Articulating Running Board Kick Switch Return	I	—
8	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	BN/WH	7462	Running Boards Disable Signal	I	—
11	0.5	BU/GN	4746	Articulating Running Board Left Kick Switch Signal	I	—
12	0.5	WH	4747	Articulating Running Board Right Kick Switch Signal	I	—

K9 Body Control Module X1



2537268

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824335
Service Connector: 13576031
Description: 26-Way F 0.64, 2.8 Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	8100-4445	Sumitomo 22	F	D
II	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	Sumitomo 22	2	A
IV	19366999	J-35616-35 (VT)	J-38125-553	8100-4443	Sumitomo 22	E	A

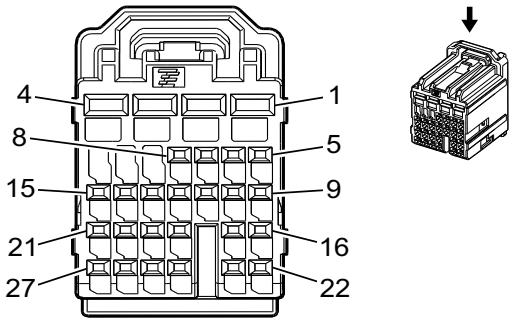
K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1850	Ground	I	—
2	1	RD/BU	2540	Battery Positive Voltage	III	—
3	0.5	RD/GY	2140	Battery Positive Voltage	IV	—
4	0.75	RD/BN	2240	Battery Positive Voltage	III	—
5	0.5	WH	6816	Indicator Dimming Control	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.35	BN/BK	5720	Ignition Mode Switch Accessory LED Signal	II	—
9	0.35	WH/BN	7555	Lighting Control Switch Signal	II	—
10	—	—	—	Not Occupied	—	—
11	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	II	—
12	0.35	BU	1111	Auto Stop Start Switch Signal	II	—
13	0.35	YE	7556	Lighting Control Switch Reference	II	—
14	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	II	—
15	—	—	—	Not Occupied	—	—
16	0.35	WH/VT	103	Headlamp Switch On Signal	II	—
17	—	—	—	Not Occupied	—	—

K9 Body Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	BU/VT	5904	Steering Column Lock Status Signal	II	—
19	0.35	BK/BN	5360	Brake Apply Sensor Low Reference	II	—
20	0.35	BU/BK	5719	Ignition Mode Switch Start LED Signal	II	—
21	0.35	GY	728	Security Indicator Control	II	—
22	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	II	—
23	0.35	GY	157	Interior Lamp Control	II	—
24	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
25	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
26	0.35	BU/WH	3275	Remote Function Actuator Receive Signal	II	—

K9 Body Control Module X2



2537269

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824336
Service Connector: 13576032
Description: 27-Way F 0.64, 2.8 Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	8100-4445	Sumitomo 22	F	D
II	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19366999	J-35616-35 (VT)	J-38125-553	8100-4443	Sumitomo 22	E	A

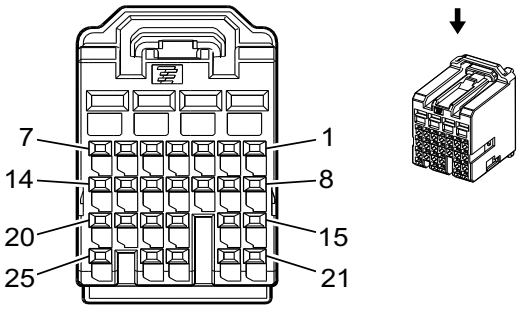
K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	2740	Battery Positive Voltage	III	—
2	2.5	BK	1850	Ground	I	—
3	0.5	RD/BN	2940	Battery Positive Voltage	III	—
4	2.5	RD/VT	4040	Battery Positive Voltage	I	—
5	0.35	VT/GN	7558	LED Ambient Lighting Control 2	II	—
6	0.35	BU	1110	Auto Stop Start Indicator Control	II	—
7	0.35	BU/YE	5361	Brake Apply Sensor Signal	II	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.35	WH/BU	278	Ambient Light Sensor Signal	II	—
11	0.35	YE/BU	7295	Left Minor Endgate Ajar Signal	II	—
12	0.35	WH/BN	7296	Right Minor Endgate Ajar Signal	II	—
13	0.35	WH	5359	Brake Apply Sensor Control	II	—
14	0.35	BU/VT	1788	Traction Control Switch Signal 1	II	—
15	0.35 0.35	GY/WH GY/WH	4630 7176	AC Power Outlet Switch Signal All Windows Open Switch Signal	II II	KC9/KCA -KC9-KCA-KI4-KI5
16	0.35	GY	3273	Remote Function Actuator Low Reference	II	—
17	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	II	—

K9 Body Control Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	GY	158	Cargo Lamp Switch Signal	II	—
19	0.35	WH/GY	2935	Task Lamp Switch Signal	II	—
20	0.5	WH/BU	3691	Trailer Brake Apply Signal	II	—
21	0.5	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	II	—
22	0.35	GN	5060	Low Speed GMLAN Serial Data	II	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.35	GY/WH	3272	Remote Function Actuator Control	II	—
26	0.35	GN/WH	111	Hazard Switch Signal	II	—
27	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	II	—

K9 Body Control Module X3



2537274

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824337
Service Connector: 13576037
Description: 25-Way F 0.64, 2.8 Series (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

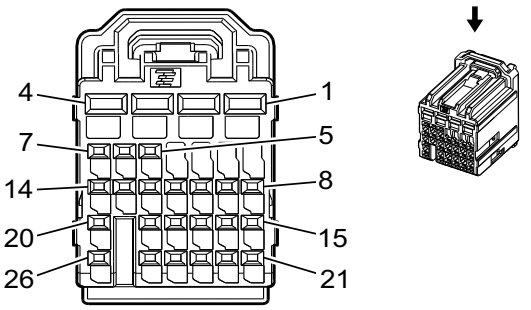
K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.5	GN/GY GN/GY	3277 3277	Vehicle Anti-Theft System Immobilizer Low Reference Vehicle Anti-Theft System Immobilizer Low Reference	I I	BTM -BTM
2	0.35 0.5	GN/VT GN/VT	7533 7533	Local Interconnect Network Serial Data Bus 11 Local Interconnect Network Serial Data Bus 11	I I	BTM -BTM
3	0.35 0.5	GY/BK GY/BK	3276 3276	Vehicle Anti-Theft System Immobilizer Control Vehicle Anti-Theft System Immobilizer Control	I I	BTM -BTM
4	0.35	WH/RD	1444	12V Reference	I	—
5	0.35	VT/YE	4	Accessory Ignition Voltage	I	—
6	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
10	0.5	BK/GY	6009	Windshield Wiper Switch Low Reference	I	—
11	0.5	WH	524	Headlamp Dimmer Switch High Beam Signal	I	—
12	0.5	WH/GN	663	Hazard Switch Left Turn Signal	I	—
13	0.5	YE/BU	1714	Windshield Wiper Switch Low Signal	I	—
14	0.5	WH/GY	3849	High Beam Auto On/Off Switch Signal	I	—
15	0.35	WH/VT	1020	Off/Run/Crank Ignition Voltage	I	—
16	0.35	GY/GN	5737	Adaptive Cruise Control Gap Up/Down Switch Signal	I	—
17	0.5	YE/BN	307	Headlamp Switch Flash To Pass Signal	I	—

K9 Body Control Module X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	GN/WH	3287	Horn Switch Signal	I	—
19	0.35	GN/WH	4115	Local Interconnect Network Serial Data Bus 15	I	—
20	0.5	GY	1715	Windshield Wiper Switch High Signal	I	—
21	0.5	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	—
22	0.35	WH/BK	1073	Ignition Key Resistor Signal	I	—
23	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	—
24	0.5	VT/BU	664	Hazard Switch Right Turn Signal	I	—
25	0.35	WH/BK	94	Windshield Washer Switch Signal	I	—

K9 Body Control Module X4



2537270

Connector Part Information

Harness Type: Body
OEM Connector: 13826914
Service Connector: 13576033
Description: 26-Way F 0.64, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	13582298	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	Sumitomo 22	2	A
IV	19366999	J-35616-35 (VT)	J-38125-553	8100-4443	Sumitomo 22	E	A

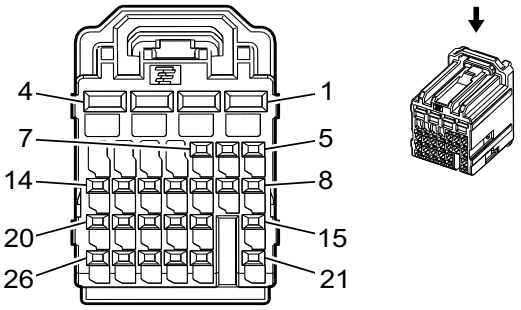
K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	712	Left Headlamp Low Beam Control	III	—
2	1	YE	312	Right Headlamp Low Beam Control	III	—
3	0.5	GN/VT	1315	Right Front Turn Signal Lamp Control	IV	—
4	1	BN/GN	19	Right Rear Stop/Turn Lamp Control	III	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	GY/BU	7538	Left Front DRL Control	I	—
8	0.35	VT/GY	1630	Steering Column Key Cylinder Lock Solenoid Control	I	-BTM
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	VT/WH	5065	Stop Lamp Relay Coil Control	I	—
12	0.35	GY/VT	755	RAP Relay Coil Control	I	—
13	0.35	GN/YE	6846	Rear License Lamp Control	I	—
14	0.35	BN/GY	2268	Windshield Washer Relay Control	I	—
15	0.35	GN/VT	5199	Run/Crank Relay Coil Control	I	—
16	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
17	0.35	BN/GN	196	Windshield Wiper Motor Park Switch Signal	I	—

K9 Body Control Module X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	WH/YE	5075	Current Sensor Signal	I	-KL9
	0.35	GN/BU	761	Blower Speed Feedback Signal	I	L3B/LM2
19	0.35	BU/YE	6844	ABS/TCS Hill Descent Control Switch Signal	I	JHD
	0.35	BU/YE	7176	All Windows Open Switch Signal	I	-JHD
20	0.75	RD/YE	2340	Battery Positive Voltage	II	—
21	0.35	BU/VT	5076	Current Sensor Control	I	-KL9
22	0.35	VT/YE	5985	Accessory Wakeup Serial Data	I	—
23	0.35	WH/BU	5986	Serial Data Communication Enable	I	—
24	0.35	BN/GN	4064	Hood Status B Signal	I	—
25	0.35	YE/BU	4086	Pushbutton Start Challenge Active Signal	I	BTM
26	0.75	BK/WH	2351	Signal Ground	II	—

K9 Body Control Module X5



2537271

Connector Part Information

Harness Type: Body
OEM Connector: 13826916
Service Connector: 13576034
Description: 26-Way F 0.64, 2.8 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	Sumitomo 22	2	A
III	19366999	J-35616-35 (VT)	J-38125-553	8100-4443	Sumitomo 22	E	A

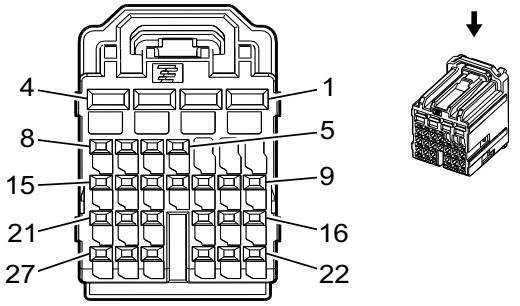
K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE/BU	18	Left Rear Stop/Turn Lamp Control	II	—
2	0.5	BU/WH	1314	Left Front Turn Signal Lamp Control	III	—
3	0.5	RD/GN	5140	Battery Positive Voltage	III	—
4	0.5	RD/WH	3440	Battery Positive Voltage	III	—
5	—	—	—	Not Occupied	—	—
6	0.35	BK/VT	5077	Current Sensor Low Reference	I	—
7	0.35	BU/BN	7539	Right Front DRL Control	I	—
8	0.5	BU/WH	5186	Left Trailer Turn Signal Lamp Control	I	—
9	0.35	BU/VT	7729	Major Endgate Low Relay Control	I	—
10	0.5	BN/WH	1317	Fog Lamp Relay Control	I	—
11	0.35	WH/GN	7728	Major Endgate High Relay Control	I	—
12	0.35	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	—
13	0.35	YE	6812	Out of Park Signal	I	—
14	0.35	VT/BN	300	Run Ignition 3 Voltage	I	—
15	0.35	BU/GY	4672	Dome Lamp Off Indicator Control	I	—
16	—	—	—	Not Occupied	—	—
17	0.5	YE/GY	5187	Right Trailer Turn Signal Lamp Control	I	—

K9 Body Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	BN/VT	1969	Headlamp High Beam Relay Control	I	—
19	0.35	BN/WH	28	Horn Relay Control	I	—
20	0.35	YE	7755	AC Power Outlet Status Indicator Control	I	—
21	0.5	YE/BN	2229	Left Headlamp Relay Control	I	—
22	0.35	BU	45	Park Lamp Relay Control	I	—
23	—	—	—	Not Occupied	—	—
24	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	I	—
25	0.35	BN	7754	AC Power Outlet Enable	I	—
26	0.35	BU/BN	38	Backup Lamp Relay Control	I	—

K9 Body Control Module X6



2537272

Connector Part Information

Harness Type: Body
OEM Connector: 13826917
Service Connector: 13576035
Description: 27-Way F 0.64, 2.8 Series (PK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	Not Available	Not Available	Not Available	Not Available
II	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	Sumitomo 22	2	A

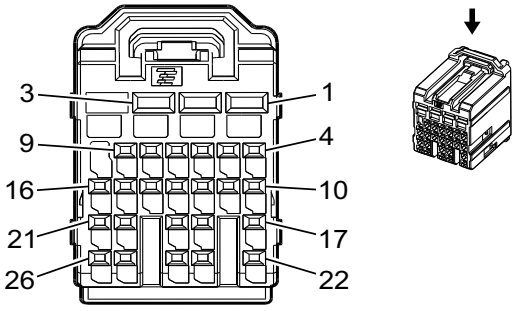
K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	5911	Door Lock Actuator Lock Control 2	III	—
2	0.75	GY	295	Door Lock Actuator Lock Control	III	—
3	1.5	BK	1150	Ground	I	—
4	0.75	BN/YE	294	Door Lock Actuator Unlock Control	III	—
5	0.35	BN	7291	Major Endgate Release Switch Signal Interior	II	—
6	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	II	—
7	0.35	WH/GY	7297	Minor Endgate High Relay Control	II	—
8	—	—	—	Not Occupied	—	—
9	0.35	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	II	—
10	0.5	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	—
11	—	—	—	Not Occupied	—	—
12	0.35	YE/BK	5356	Left Tail Lamp Outage Detection Signal	II	—
13	—	—	—	Not Occupied	—	—
14	0.35	GY	7292	Major Endgate Release Switch Signal Exterior	II	—
15	0.35	YE	7294	Minor Endgate Release Switch Discrete Signal Exterior	II	—
16	0.5	GN/BN	6132	Local Interconnect Network Serial Data Bus 1	II	—
17 - 20	—	—	—	Not Occupied	—	—

K9 Body Control Module X6 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.35	WH/VT	6821	Surveillance Switch Signal	II	—
22	0.35	VT/YE	5357	Right Tail Lamp Outage Detection Signal	II	—
23	—	—	—	Not Occupied	—	—
24	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
25	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
26	0.35	BN/WH	1429	Standing Lamp Relay Control	II	—
27	0.35	BN/WH	781	Driver Door Lock Switch Unlock Signal	II	—

K9 Body Control Module X7



2537273

Connector Part Information

Harness Type: Body
OEM Connector: 13826915
Service Connector: 13576036
Description: 26-Way F 0.64, 2.8 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13582297	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19366999	J-35616-35 (VT)	J-38125-553	8100-4443	Sumitomo 22	E	A

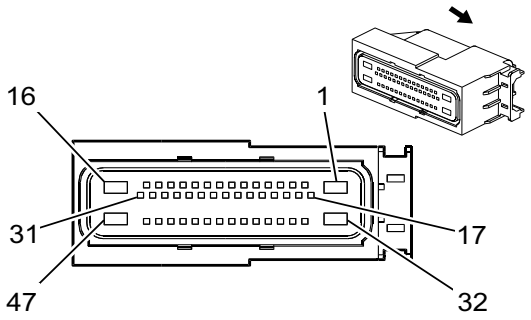
K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	WH/BN	6815	Inadvertent Power Control	II	—
4	0.5	GY/BU	7762	Cargo Bed Lamp Control	I	—
5	0.35	BU	2082	Puddle Lamp Control	I	—
6	0.35	YE/WH	816	Brake Transmission Shift Interlock Solenoid Control	I	—
7	0.35	GY/BU	7298	Minor Endgate Low Relay Control	I	—
8	0.35	GY/GN	5996	Driver Outside Rear View Mirror Puddle Lamp Control	I	—
9	0.35	YE	6817	LED Backlight Dimming Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BN/YE	780	Driver Door Lock Switch Lock Signal	I	—
12	0.35	BN	4511	Wireless Charging System Fault Indicator Control	I	—
13	0.35	GN/WH	1932	Shift Select Switch Park Signal	I	—
14	0.35 0.35	WH/BU GY	3203 746	Right Headlamp Bulb Outage Signal Right Front Door Ajar Switch Signal	I I	(AXG/-A6R) A6R
15	0.35	BU/GY	553	Shift Select Switch Performance Signal	I	—
16	0.5	WH/BU	3691	Trailer Brake Apply Signal	I	—
17	0.35	BU	2082	Puddle Lamp Control	I	—

K9 Body Control Module X7 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	—	—	—	Not Occupied	—	—
19	0.35	GY	156	Courtesy Lamp Switch Signal	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	YE/VT	244	Passenger Door Lock Switch Lock Control	I	—
22	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	—
23	—	—	—	Not Occupied	—	—
24	0.35	BN/VT	245	Passenger Door Lock Switch Unlock Control	I	—
25	0.35 0.35	GY BU/VT	745 3204	Left Front Door Ajar Switch Signal Left Headlamp Bulb Outage Signal	I I	A6Q AXG/-A6Q
26	—	—	—	Not Occupied	—	—

K19 Suspension Control Module (Z45)



1858233

Connector Part Information

Harness Type: Chassis
OEM Connector: 15491306
Service Connector: 19168025
Description: 47-Way F 0.64, 6.3 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578883	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	Yazaki 14	9	9
II	13580835	J-35616-42 (RD)	J-38125-553	Not Available	Not Available	Not Available	Not Available
III	13581373	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	Yazaki 14	9	9

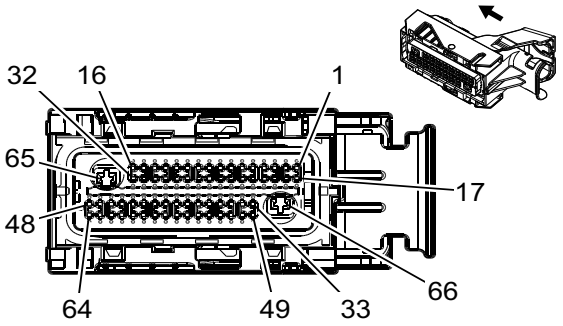
K19 Suspension Control Module (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	1750	Ground	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK/BU	1206	Left Front Strut Position Sensor Low Reference	I	—
4	0.5	BK/GY	1212	Right Front Strut Position Sensor Low Reference	I	—
5	0.5	BK/GN	1209	Left Rear Strut Position Sensor Low Reference	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	0.5	BU/RD	1205	Left Front Strut Position Sensor 5V Reference	I	—
11	0.5	BN/RD	1211	Right Front Strut Position Sensor 5V Reference	I	—
12	0.5	YE/RD	1208	Left Rear Strut Position Sensor 5V Reference	I	—
13 - 15	—	—	—	Not Occupied	—	—
16	1	YE/WH	1213	Right Front Strut Position Sensor Signal	II	—
17	—	—	—	Not Occupied	—	—
18	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
19	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
20	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
21	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
22 - 24	—	—	—	Not Occupied	—	—

K19 Suspension Control Module (Z45) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
28	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
29	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
30	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
31	—	—	—	Not Occupied	—	—
32	1	RD/GN	2440	Battery Positive Voltage	II	—
33	0.75	GN/GY	1119	Right Rear Damping Servo Control	III	—
34	0.75	BN/GN	1118	Right Rear Damping Servo Control	III	—
35	0.75	BU/GY	1114	Left Rear Damping Servo Control	III	—
36	0.75	GN/VT	1115	Left Rear Damping Servo Control	III	—
37 - 38	—	—	—	Not Occupied	—	—
39	0.5	WH/BU	5986	Serial Data Communication Enable	I	—
40	—	—	—	Not Occupied	—	—
41	0.5	BN/WH	1207	Left Front Strut Position Sensor Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.75	GY/BU	1113	Left Front Damping Servo Control	III	—
44	0.75	BN/WH	1107	Left Front Damping Servo Control	III	—
45	0.75	BN/BU	1116	Right Front Damping Servo Control	III	—
46	0.75	GY/WH	1117	Right Front Damping Servo Control	III	—
47	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L3B)



4504420

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	2	5
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19355819	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

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 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	BU	3584	Camshaft Stepper A Control	II	—
9	0.5	GN	3585	Camshaft Stepper B Control	II	—
10	0.5	YE/BU	3587	Camshaft Stepper D Control	II	—
11	0.5	GY	3586	Camshaft Stepper C Control	II	—
12	0.5	BU/WH	3589	Camshaft Stepper Position Sensor 1 Signal	II	—
13	0.5	GN/WH	3592	Camshaft Stepper Position Sensor 2 Signal	II	—
14	0.5	WH	924	Camshaft Stepper Position Sensor #3 Signal	II	—
15	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	—
16	0.5	VT/BU	5291	Powertrain Main Relay Fused Supply 2	II	—
17	0.75	GN/GY	465	Fuel Pump Primary Relay Control	II	—
18	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	—

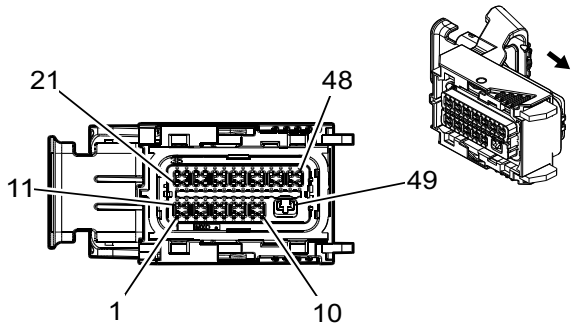
K20 Engine Control Module X1 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.5	BN/WH	419	Check Engine Indicator Control	II	—
20	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	III	—
21	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	II	—
22	0.5	BN/GN	927	Step Cam A Control	II	—
23	0.5	BU	926	Step Cam B Control	II	—
24	0.5	YE/VT	6265	Camshaft CAM W Signal	II	—
25	0.5	VT/BK	6264	Camshaft CAM X Signal	II	—
26	0.5	GY/BN	6262	Camshaft CAM Z Signal	II	—
27	0.5	GN/BN	6261	Camshaft CAM Z Control	II	—
28	0.5	BU/BK	928	Camshaft Stepper Position Sensor #4 Signal	II	—
29	0.5	BU	932	Camshaft Stepper Position Sensor Signal	II	—
30	0.5	GY/BN	933	Camshaft Stepper Position Sensor 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	0.5	YE	4063	Hood Status A Signal	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	II	—
40 - 41	—	—	—	Not Occupied	—	—
42	0.5	GN/BN	2732	Local Interconnect Network Bus 32	II	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	II	—
46	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	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	Outside Ambient Air Temperature Sensor Signal	II	—
54	0.5	BN	4645	Heater Core Outlet Temperature Signal	II	—
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	2501	High Speed GMLAN Serial Data (-) 1	II	—
60	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
61	—	—	—	Not Occupied	—	—
62	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
63	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	—
64	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	—
65	2	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X1 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
66	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—

K20 Engine Control Module X2 (L3B)



4596458

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	2	5
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

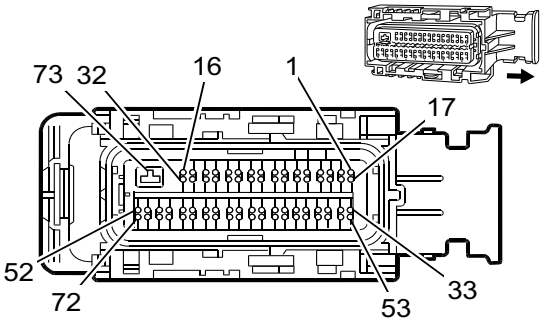
K20 Engine Control Module X2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	II	—
2	0.75	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 5	II	—
10	0.5	BK/BU	2978	Coolant Diverter Valve Position Signal	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	II	—
13 - 15	—	—	—	Not Occupied	—	—
16	0.5	YE/BN	331	Oil Pressure Sensor Signal	II	—
17	0.5	WH/VT	4108	Driver Mode Switch Signal	II	—
18	—	—	—	Not Occupied	—	—
19	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	—
20	0.5	WH	2590	Turbo Charger Wastegate Motor Feedback Signal	II	—
21	—	—	—	Not Occupied	—	—
22	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	II	—
23	0.5	VT	7485	Oil Temperature Sensor Signal	II	—

K20 Engine Control Module X2 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BN/BU	357	Oil Temperature Sensor Signal	II	—
25	0.5	YE	2596	Turbo Charger Inlet Absolute Pressure Sensor Signal	II	—
26 - 30	—	—	—	Not Occupied	—	—
31	0.75	YE/GY	6936	Heated Oxygen Sensor Collector Signal	II	—
32	0.75	BN	6934	Heated Oxygen Sensor Ground	II	—
33	—	—	—	Not Occupied	—	—
34	0.75	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	II	—
37	0.5	YE/BK	3000	Coolant Temperature Sensor 2 Signal	II	—
38	0.5	BN/GY	4644	Heater Core Inlet Temperature Signal	II	—
39	—	—	—	Not Occupied	—	—
40	0.5	GY/VT	2404	Engine Block Coolant Temperature Signal	II	—
41 - 44	—	—	—	Not Occupied	—	—
45	0.75	GN	6935	Heated Oxygen Sensor Current Adjust Signal	II	—
46	0.75	BN/WH	6933	Heated Oxygen Sensor Current Pump Signal	II	—
47	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	II	—
48	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	II	—
49	2	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L3B)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN	3060	Turbo Bypass Solenoid Control Bank 1	II	—
3	0.5	BN	25	Charge Indicator Control	II	—
4	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
5	—	—	—	Not Occupied	—	—
6	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	—
7	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	—
8	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
9	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	II	—
10	0.75	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	—
11	0.75	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	—
12	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	—
13	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid 1	II	—
14	0.75	BU	2976	Coolant Diverter Valve Actuator Control Low	II	—
15	0.75	WH/BN	2591	Turbo Charger Wastegate Motor Open Control	II	—
16	0.75	WH/BU	2592	Turbo Charger Wastegate Motor Close Control	II	—
17 - 19	—	—	—	Not Occupied	—	—
20	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	II	—

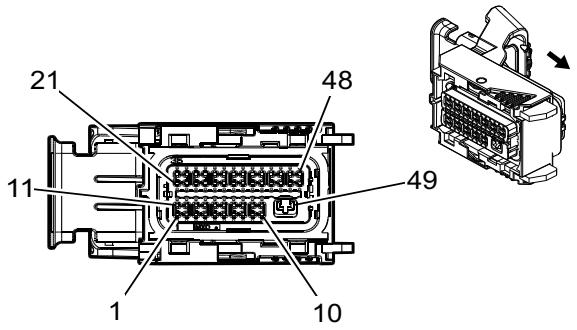
K20 Engine Control Module X3 (L3B) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.75	BK/YE	548	Engine Control Sensors Low Reference (1)	II	—
22	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	—
23	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	II	—
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	BN	7348	Induction Air Temperature Sensor 2 Signal	II	—
27	0.5	BN	906	Engine Coolant Temperature Sensor 3 Signal	II	—
28	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	—
29	0.5	BK/VT	6754	Cam Phaser X Low Reference	II	—
30	0.5	YE	581	Throttle Actuator Control Open	II	—
31	0.5	BN/WH	582	Throttle Actuator Control Close	II	—
32	0.75	BU/BN	2977	Coolant Diverter Valve Actuator Control High	II	—
33	0.5	VT/GY	496	Knock Sensor Signal 1	II	—
34	0.5	WH/GY	1876	Knock Sensor Signal 2	II	—
35	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
36	0.75	GN/BU	428	EVAP Canister Purge Solenoid Control	II	—
37 - 38	—	—	—	Not Occupied	—	—
39	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	—
40	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	II	—
41	—	—	—	Not Occupied	—	—
42	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	II	—
43	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	—
44	0.5	YE/BU	2124	Ignition Control 4	II	—
45	0.5	BU/WH	2122	Ignition Control 2	II	—
46	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	II	—
47	0.75	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	—
48	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	II	—
49	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	—
50	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	—
51	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	—
52	0.75	BU	4802	Direct Fuel Injector (DFI) 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	Oil Pump Command Signal	II	—
58	—	—	—	Not Occupied	—	—
59	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	—
60	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	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	Camshaft Position Intake Sensor 1	II	—
64	0.5	BU/VT	2121	Ignition Control 1	II	—
65	0.5	GN/BU	2123	Ignition Control 3	II	—
66	—	—	—	Not Occupied	—	—
67	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	II	—
68	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	—
69	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	—
70	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	—
71	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	—
72	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	—
73	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—

K20 Engine Control Module X1 (L82)



4596458

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

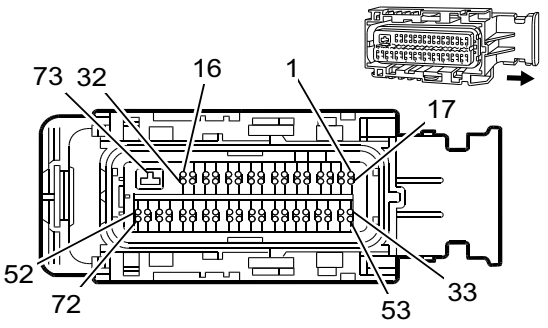
K20 Engine Control Module X1 (L82)

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	WH	4499	High Speed GMLAN Serial Data (-) 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	—
6	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
8	0.5	BN/WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	II	—
14	0.5	WH/GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	—
16	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
18	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	—
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 - 27	—	—	—	Not Occupied	—	—
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 2	II	—
33	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
34	0.5	RD/BN	440	Battery Positive Voltage	II	—
35	0.5	VT/YE	3854	Cabin Heater Coolant Motor Control	II	—
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	0.5	WH	1579	Fuel Temperature/Composition Signal	II	—
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	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
49	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—

K20 Engine Control Module X2 (L82)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

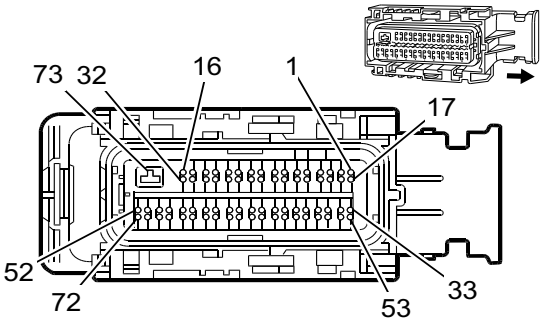
K20 Engine Control Module X2 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	II	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	II	—
11	0.5	WH/BK	3111	Heated Oxygen Sensor 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	5290	Powertrain Main Relay Fused Supply 1	II	—
15	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
16	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	—
18 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH/BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—

K20 Engine Control Module X2 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	II	—
27	0.5	YE/WH	3211	Heated Oxygen Sensor 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	—
30	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	—
31	0.5	BN	5496	Cylinder Shutoff Solenoid Control 6	II	—
32	0.5	YE/BN	2496	Cylinder Shutoff Solenoid Enable (6)	II	—
33	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Oil Pump Command Signal	II	—
36	0.5	YE/GN	2494	Cylinder Shutoff Solenoid Enable (4)	II	—
37	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT/GN	3220	Heated Oxygen Sensor 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 Control Close	II	—
53	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	—
54 - 55	—	—	—	Not Occupied	—	—
56	0.5	YE/BU	5494	Cylinder Shutoff Solenoid Control 4	II	—
57 - 58	—	—	—	Not Occupied	—	—
59	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	II	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH/GY	1876	Knock Sensor Signal 2	II	—
71	0.75	VT/GY	496	Knock Sensor Signal 1	II	—
72	0.5	YE	581	Throttle Actuator Control Open	II	—
73	2.5	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L82)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X3 (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	5497	Cylinder Shutoff Solenoid Control 7	II	—
2	0.5	GN/GY	2497	Cylinder Shutoff Solenoid Enable (7)	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	—
6	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	II	—
9	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	—
10	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	—
11	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
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 Actuator High - Control	II	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.5	BN/WH	6354	Output Speed High (Replicated TOS) Input Signal	II	—

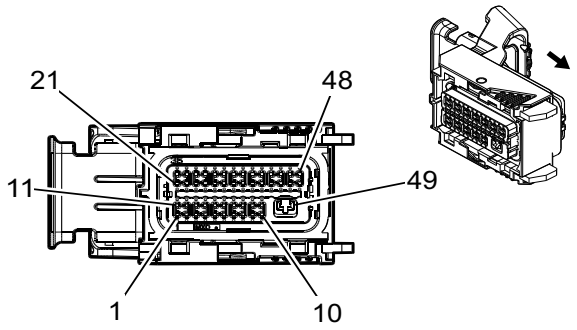
K20 Engine Control Module X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	—	—	—	Not Occupied	—	—
21	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	—
25	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	—
26	0.5	BK/VT	6272	Crankshaft 60X 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 Actuator Low - Control	II	—
33	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	II	—
34	0.5	WH/BU	2491	Cylinder Shutoff Solenoid Enable (1)	II	—
35	—	—	—	Not Occupied	—	—
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 Sensors Low Reference (3)	II	—
44	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	II	—
45	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	—
46	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	—
47	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	—
48	0.75	GN/VT	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	—
50	0.75	YE/GY	4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Shutoff Solenoid Control 1	II	—
54	—	—	—	Not Occupied	—	—
55	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) 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	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (L82) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
60	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65	0.75	GN/BK	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	—
66	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	—
67	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	—
68	0.75	VT	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	—
69	0.75	BN/GN	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	—
70	0.75	WH/YE	4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	II	—
71	0.75	WH/GN	4908	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	II	—
72	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	—
73	2.5	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X1 (L84/L87)



4596458

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

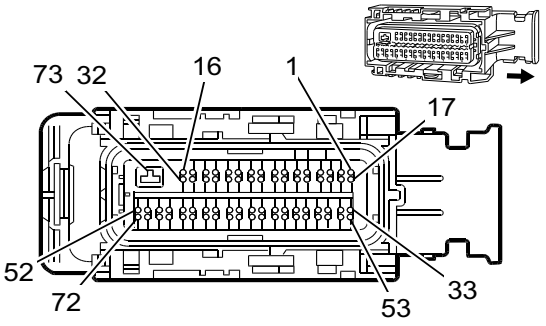
K20 Engine Control Module X1 (L84/L87)

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	WH	4499	High Speed GMLAN Serial Data (-) 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	—
6	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
8	0.5	BN/WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	II	—
14	0.5	WH/GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	—
16	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
18	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	—
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	WH/BU	5726	Ignition Mode Switch Mode Control Backup	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 2	II	—
33	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
34	0.5	RD/BN	440	Battery Positive Voltage	II	—
35	0.5	VT/YE	3854	Cabin Heater Coolant Motor Control	II	—
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	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
49	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—

K20 Engine Control Module X2 (L84/L87)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

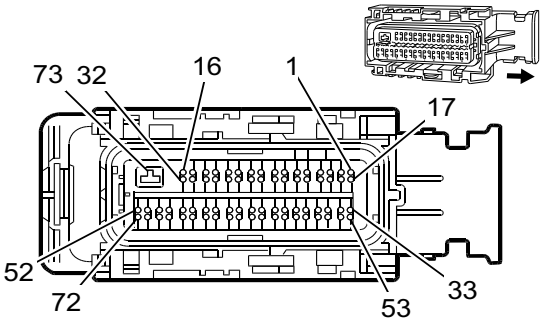
K20 Engine Control Module X2 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	II	—
2	0.5	GY	5493	Cylinder Shutoff Solenoid Control 3	II	—
3	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	II	—
8	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	II	—
11	0.5	WH/BK	3111	Heated Oxygen Sensor 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	5290	Powertrain Main Relay Fused Supply 1	II	—
15	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
16	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	—
18	0.5	YE/GY	2493	Cylinder Shutoff Solenoid Enable (3)	II	—

K20 Engine Control Module X2 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH/BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—
22 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	II	—
27	0.5	YE/WH	3211	Heated Oxygen Sensor 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	—
30	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	—
31	0.5	BN	5496	Cylinder Shutoff Solenoid Control 6	II	—
32	0.5	YE/BN	2496	Cylinder Shutoff Solenoid Enable (6)	II	—
33	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Oil Pump Command Signal	II	—
36	0.5	YE/GN	2494	Cylinder Shutoff Solenoid Enable (4)	II	—
37	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT/GN	3220	Heated Oxygen Sensor 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 Control Close	II	—
53	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	—
54	0.5	VT	5495	Cylinder Shutoff Solenoid Control 5	II	—
55	0.5	WH/VT	2495	Cylinder Shutoff Solenoid Enable (5)	II	—
56	0.5	YE/BU	5494	Cylinder Shutoff Solenoid Control 4	II	—
57	0.5	GN	5492	Cylinder Shutoff Solenoid Control 2	II	—
58	0.5	WH/GN	2492	Cylinder Shutoff Solenoid Enable (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	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH/GY	1876	Knock Sensor Signal 2	II	—
71	0.75	VT/GY	496	Knock Sensor Signal 1	II	—
72	0.5	YE	581	Throttle Actuator Control Open	II	—
73	2.5	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (L84/L87)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X3 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	5497	Cylinder Shutoff Solenoid Control 7	II	—
2	0.5	GN/GY	2497	Cylinder Shutoff Solenoid Enable (7)	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	—
6	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	II	—
9	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	—
10	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	—
11	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
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 Actuator High - Control	II	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—

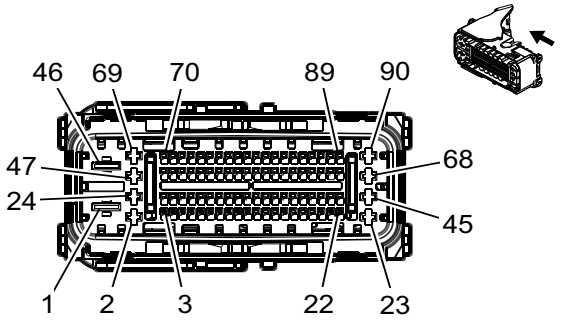
K20 Engine Control Module X3 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	—
25	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	—
26	0.5	BK/VT	6272	Crankshaft 60X 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 Actuator Low - Control	II	—
33	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	II	—
34	0.5	WH/BU	2491	Cylinder Shutoff Solenoid Enable (1)	II	—
35	0.5	WH/YE	2498	Cylinder Shutoff Solenoid Enable (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 Sensors Low Reference (3)	II	—
44	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	II	—
45	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	—
46	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	—
47	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	—
48	0.75	GN/VT	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	—
50	0.75	YE/GY	4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Shutoff Solenoid Control 1	II	—
54	0.5	YE	5498	Cylinder Shutoff Solenoid Control 8	II	—
55	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) 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	—	—	—	Not Occupied	—	—
60	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
63	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65	0.75	GN/BK	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	—
66	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	—
67	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	—
68	0.75	VT	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	—
69	0.75	BN/GN	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	—
70	0.75	WH/YE	4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	II	—
71	0.75	WH/GN	4908	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	II	—
72	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	—
73	2.5	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X1 (LM2)



4997706

Connector Part Information

Harness Type: Engine
OEM Connector: 35021651
Service Connector: 12670161
Description: 90-Way F 0.64 GEN-Y, 2.8, 6.3 MCP Series, Sealed (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19368490	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19371214	J-35616-35 (VT)	J-38125-557	1-968857-3	Lear 7	C	1
III	19371214	J-35616-35 (VT)	J-38125-557	Not Available	Not Available	Not Available	Not Available
IV	84616649	J-35616-40 (BU)	J-38125-556	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK/WH	451	Signal Ground	IV	—
2	1	YE/VT	2420	Fuel High Pressure Pump Low Enable	III	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	I	—
6	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	I	—
7	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	VT/GY	7246	Exhaust Gas Recirculation Differential Pressure Signal	I	—
10	0.5	YE/GY	3926	Crankcase Differential Pressure Sensor Signal	I	—
11 - 14	—	—	—	Not Occupied	—	—
15	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
16	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	I	—
17	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
18	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—

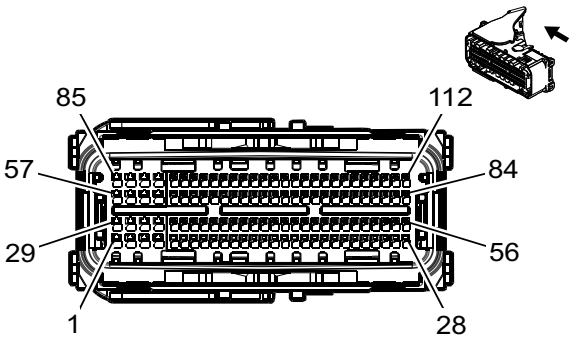
K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.75	GY/BK	1330	Variable Geometry Turbocharger Position Sensor Motor Close Control	I	—
20	0.75	WH/VT	5764	Exhaust Gas Recirculation Valve Motor High Signal	I	—
21	0.75	WH/BN	1313	Variable Geometry Turbocharger Position Sensor Motor Open Control	I	—
22	0.75	VT/BK	5746	Exhaust Gas Recirculation Valve Motor Low Signal	I	—
23	0.75	RD/BN	440	Battery Positive Voltage	III	—
24	0.75	YE/VT	7245	High Pressure Fuel Pump Low Enable	III	—
25	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	—
26	0.5	YE	5991	Powertrain Relay Coil Control	I	—
27	0.5	BN/WH	419	Check Engine Indicator Control	I	—
28	0.5	GN/BN	507	Wait To Start Indicator Control	I	—
29	0.5	WH/BN	1089	Coolant Pump Motor Relay Control	I	—
30	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
31	0.5	WH/BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
32 - 33	—	—	—	Not Occupied	—	—
34	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	—
35	—	—	—	Not Occupied	—	—
36	0.5	GY/GN	1417	Low Pressure Exhaust Gas Recirculation Actuator Signal	I	—
37	0.5	WH/BU	5726	Ignition Mode Switch Mode Control Backup	I	—
38	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	I	—
39	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
41	—	—	—	Not Occupied	—	—
42	0.75	YE/BN	1420	Exhaust Restrictor Motor Open Control	I	—
43	—	—	—	Not Occupied	—	—
44	0.75	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
45	—	—	—	Not Occupied	—	—
46	4	VT/BU	5291	Powertrain Main Relay Fused Supply 2	IV	—
47	1	GY/BN	2419	Fuel High Pressure Pump High Side Supply	III	—
48	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
49	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	I	—
50	0.5	GN/WH	1162	Accelerator Pedal Position Signal 2	I	—
51	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	I	—
52	0.5	WH/GN	5380	Brake Position Sensor Signal	I	—
53	—	—	—	Not Occupied	—	—
54	0.5	YE	4063	Hood Status A Signal	I	—
55	—	—	—	Not Occupied	—	—
56	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	I	—
57	0.5	GY	2973	Coolant Flow Control Valve Position Signal	I	—
58	0.5	GN/GY	7316	Variable Swirl Valve PWM Control Signal	I	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	—
62	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
63	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	I	—
64	—	—	—	Not Occupied	—	—
65	0.5	GN/BU	3889	DEF Power Module Relay Control	I	—
66	0.75	GY/BU	2971	Coolant Flow Control Actuator Control Low	I	—
67	—	—	—	Not Occupied	—	—
68	2.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
69	0.75	GY/BN	7244	High Pressure Fuel Pump High Side Supply	III	—
70	0.75	VT/GN	439	Run/Crank Ignition 1 Voltage	I	—
71	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference 1	I	—
72	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	I	—
73	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
74	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	—
75	0.5	VT	7485	Oil Temperature Sensor Signal	I	—
76	0.5	BN	4645	Heater Core Outlet Temperature Signal	I	—
77	—	—	—	Not Occupied	—	—
78	0.5	GY/VT	2404	Engine Block Coolant Temperature Signal	I	—
79	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—
80	—	—	—	Not Occupied	—	—
81	0.5	VT/YE	5947	Variable Nozzle Turbo Position Sensor Signal	I	—
82	0.5	BN/WH	5763	Exhaust Gas Recirculation Valve Sensor Signal	I	—
83	0.5	BU/GY	2978	Coolant Diverter Valve Position Signal	I	—
84	—	—	—	Not Occupied	—	—
85	0.5	BN/GN	4305	Exhaust Flapper Valve Control 1	I	—
86	0.5	GN/GY	465	Fuel Pump Primary Relay Control	I	—
87	0.5	YE/BK	625	Starter Enable Relay Control	I	—
88	0.75	GY/BN	2972	Coolant Flow Control Actuator Control High	I	—
89	—	—	—	Not Occupied	—	—
90	2.5	VT/BU	5292	Powertrain Main Relay Fused Supply 3	II	—

K20 Engine Control Module X2 (LM2)



4997563

Connector Part Information

Harness Type: Engine
OEM Connector: 35021652
Service Connector: 12670164
Description: 112-Way F 0.64 GEN-Y, 1.2 MCON Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19331730	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19331733	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19368490	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—
2	1.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—
3	0.5	BK/YE	2834	Fuel Rail Pressure Solenoid Low Reference	II	—
4	0.5	BU/WH	2530	Fuel Rail Pressure Solenoid Control	II	—
5	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	III	—
6	0.5	GN	6271	Crankshaft 60X Sensor Signal	III	—
7	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	III	—
8	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	III	—
9	0.75	BN	3099	DEF Dosing Valve High Control	III	—
10	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	III	—
11	0.5	BN	25	Charge Indicator Control	III	—
12	0.5	BN/BU	357	Oil Temperature Sensor Signal	III	—
13	0.5	YE/BU	2408	Engine Inlet Coolant Temperature Signal	III	—
14	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	III	—
15	0.5	YE/BK	3000	Coolant Temperature Sensor 2 Signal	III	—
16	0.5	BN/GY	4644	Heater Core Inlet Temperature Signal	III	—

K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
17	0.5	GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	III	—
18	0.5	YE/BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	III	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	BN/YE	1372	Engine Metal Temperature Sensor Signal (2)	III	—
22	0.5	GY/BU	6118	Manifold Air Temperature Sensor Signal	III	—
23	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	III	—
24	—	—	—	Not Occupied	—	—
25	0.5	YE/GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	III	—
26	0.75	BU/WH	4014	Low Pressure Exhaust Gas Recirculation Actuator Control Open	III	—
27	0.75	BU/BN	2977	Coolant Diverter Valve Actuator Control High	III	—
28	0.75	BU	2976	Coolant Diverter Valve Actuator Control Low	III	—
29	1.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
30	1.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
31	0.5	BU	179	Oil Pump Command Signal	II	—
32	0.5	YE/BN	106	Oil Pump Motor Control	II	—
33	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	III	—
34	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	III	—
35	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	III	—
36	—	—	—	Not Occupied	—	—
37	0.75	BN/WH	3100	DEF Dosing Valve Low Control	III	—
38	—	—	—	Not Occupied	—	—
39	0.5	GY/BN	7071	Heater Fuel Control	III	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.75	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	III	—
47	0.5	BU/GN	4012	Low Pressure Exhaust Gas Recirculation Actuator Position Signal	III	—
48	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	III	—
49	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	III	—
50	—	—	—	Not Occupied	—	—
51	0.5	GN/BN	2732	Local Interconnect Network Bus 32	III	—
52	—	—	—	Not Occupied	—	—
53	0.5	BK/YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	III	—
54	—	—	—	Not Occupied	—	—
55	0.75	BU/BN	4013	Low Pressure Exhaust Gas Recirculation Actuator Control Close	III	—
56	—	—	—	Not Occupied	—	—
57	1.5	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—
58	1.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—

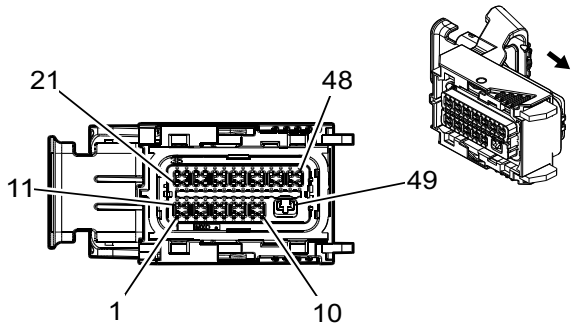
K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
59	1.5	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—
60	1.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
61 - 67	—	—	—	Not Occupied	—	—
68	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	III	—
69	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	III	—
70	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	III	—
71	0.5	YE/BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	III	—
72 - 73	—	—	—	Not Occupied	—	—
74	0.5	BK/BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	III	—
75	0.5	BU	6053	Exhaust Pressure Sensor Signal 1	III	—
76	0.5	BK/GN	3235	Exhaust Gas Recirculation Temperature Sensor 3 Low Reference	III	—
77	0.5	GY	23	Generator Field Duty Cycle Signal	III	—
78	0.5	BU/BK	1422	Engine Water Charge Air Coolant Temperature Signal	III	—
79 - 80	—	—	—	Not Occupied	—	—
81	0.5	BK/GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	III	—
82 - 83	—	—	—	Not Occupied	—	—
84	0.75	BN/WH	582	Throttle Actuator Control Close	III	—
85	1.5	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—
86	1.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—
87	1.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—
88	1.5	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—
89 - 95	—	—	—	Not Occupied	—	—
96	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	III	—
97	0.5	BN/YE	2161	Fuel Rail Pressure Sensor 2 Signal	III	—
98 - 100	—	—	—	Not Occupied	—	—
101	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	III	—
102	0.5	BU/WH	5277	Exhaust Gas Temperature Sensor 1	III	—
103	0.5	WH/GY	3234	Exhaust Gas Recirculation Temperature Sensor 3 Signal	III	—
104	0.5	BU/GN	5377	Exhaust Gas Temperature Sensor 2	III	—
105	0.5	BK/BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	III	—
106	0.5	GN/YE	37	Engine Metal Temperature Sensor Signal	III	—
107 - 108	—	—	—	Not Occupied	—	—
109	0.5	GY/GN	5378	Exhaust Gas Temperature Sensor 3	III	—
110	0.75	BK/BU	1408	Variable Swirl Valve Close Control	III	—
111	0.75	YE	581	Throttle Actuator Control Open	III	—

K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
112	0.75	BK/GN	1389	Variable Swirl Valve Open Control	III	—

K20 Engine Control Module X1 (LV3)



4596458

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19355819	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

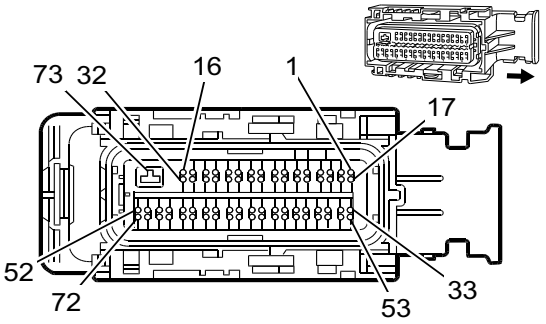
K20 Engine Control Module X1 (LV3)

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	WH	4499	High Speed GMLAN Serial Data (-) 7	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	—
6	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	III	—
8	0.5	BN/WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10	0.5	BN/YE	473	High Speed Cooling Fan Relay Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	—
13	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	II	—
14	0.5	WH/GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	—
16	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	III	—

K20 Engine Control Module X1 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
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	—
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 - 27	—	—	—	Not Occupied	—	—
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 2	II	—
33	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
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	0.5	YE	4063	Hood Status A Signal	II	—
47	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
49	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	—

K20 Engine Control Module X2 (LV3)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

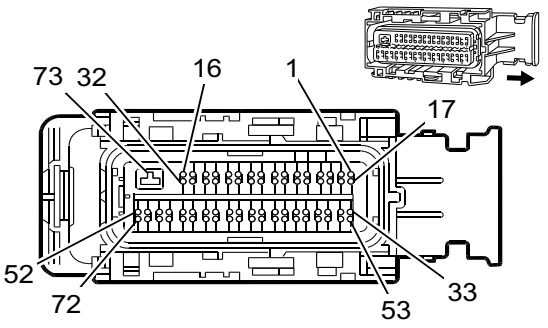
K20 Engine Control Module X2 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK/YE	548	Engine Control Sensors Low Reference (1)	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN/WH	4622	Local Interconnect Network Serial Data Bus 22	II	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	II	—
11	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	II	—
12	—	—	—	Not Occupied	—	—
13	0.5	GN/BU	2123	Ignition Control 3	II	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	—
17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	—
18 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH/BN	2203	Enhanced Driver Mode 2 Switch Signal	II	—
22 - 25	—	—	—	Not Occupied	—	—

K20 Engine Control Module X2 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	II	—
27	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	II	—
28	—	—	—	Not Occupied	—	—
29	0.5	BU/WH	2122	Ignition Control 2	II	—
30	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Oil Pump Command Signal	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT/GN	3220	Heated Oxygen Sensor 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 Control Close	II	—
53	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	—
54 - 58	—	—	—	Not Occupied	—	—
59	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	II	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH/GY	1876	Knock Sensor Signal 2	II	—
71	0.75	VT/GY	496	Knock Sensor Signal 1	II	—
72	0.5	YE	581	Throttle Actuator Control Open	II	—
73	2.5	BK/WH	451	Signal Ground	I	—

K20 Engine Control Module X3 (LV3)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576376	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K20 Engine Control Module X3 (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	—
6	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	II	—
9	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	—
10	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	—
11	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	—
12	0.5	YE/BU	2124	Ignition Control 4	II	—
13	0.5	BN/BU	2126	Ignition Control 6	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.5	BN/WH	6354	Output Speed High (Replicated TOS) Input Signal	II	—
20	—	—	—	Not Occupied	—	—
21	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	—

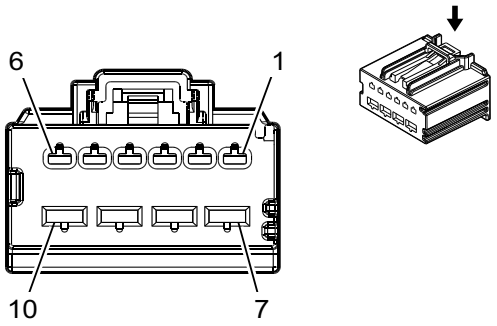
K20 Engine Control Module X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	—
25	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	—
26	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	BU/GY	2125	Ignition Control 5	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 Actuator Low - Control	II	—
33 - 35	—	—	—	Not Occupied	—	—
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 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK/GY	626	Engine Control Sensors Low Reference (3)	II	—
44	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	II	—
45 - 46	—	—	—	Not Occupied	—	—
47	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	—
48	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	—
49	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	—
50	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	—
51	0.75	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	—
52	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Shutoff Solenoid Control 1	II	—
54	0.5	GN	5492	Cylinder Shutoff Solenoid Control 2	II	—
55	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) 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	—	—	—	Not Occupied	—	—
60	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65 - 66	—	—	—	Not Occupied	—	—
67	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	—

K20 Engine Control Module X3 (LV3) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
68	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	—
69	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	—
70	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	—
71	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	—
72	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	—
73	0.5	BK/WH	451	Signal Ground	I	—

K29F Seat Heating Control Module - Front X1 (KA1)



3791446

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

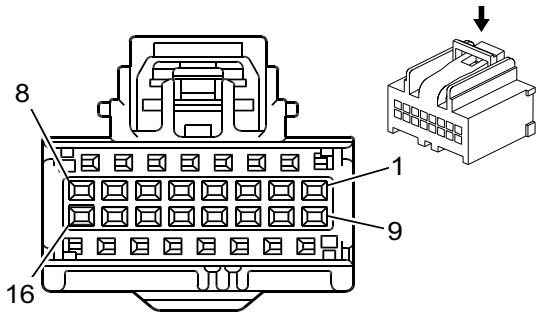
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29F Seat Heating Control Module - Front X1 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BN	2481	Passenger Heated Back Element Control	I	—
2	0.75	BN/BU	2479	Passenger Heated Seat Element Control	I	—
3	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	—
4	0.75	BN/BK	2078	Driver Heated Seat Element Low Reference	I	—
5	0.75	BN	2432	Driver Heated Back Element Control	I	—
6	0.75	BN/VT	2077	Driver Heated Seat Element Control	I	—
7	0.75	RD	6140	Battery Positive Voltage	II	—
8	0.75	BK	1250	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD/GN	5140	Battery Positive Voltage	II	—

K29F Seat Heating Control Module - Front X2 (KA1)



1653409

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 15136073
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

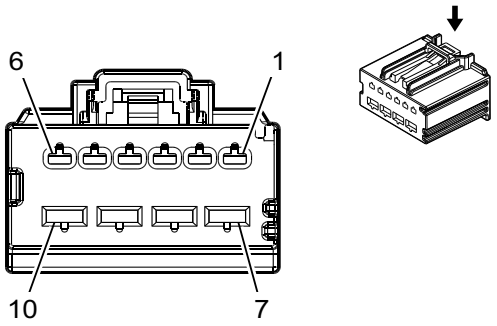
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29F Seat Heating Control Module - Front X2 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	—
2	0.5	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	—
3	0.5	BU	2425	Driver Heated Back NTC Signal	I	—
4	0.5	WH/BU	2436	Passenger Heated Back NTC Signal	I	—
5	0.5	WH/GY	2434	Passenger Heated Seat NTC Signal	I	—
6	0.5	YE/GY	2079	Driver Heated Seat NTC Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	I	—
9	0.35	GN/VT	5906	Driver Seat Vent Motor Control 1	I	—
10	0.5	WH	5908	Passenger Seat Vent Motor Control 1	I	—
11	0.5	BK/VT	2426	Driver Heated Back NTC Low Reference	I	—
12	0.5	BK/GN	2482	Passenger Heated Back NTC Low Reference	I	—
13 - 16	—	—	—	Not Occupied	—	—

K29F Seat Heating Control Module - Front X1 (KQV)



3791446

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

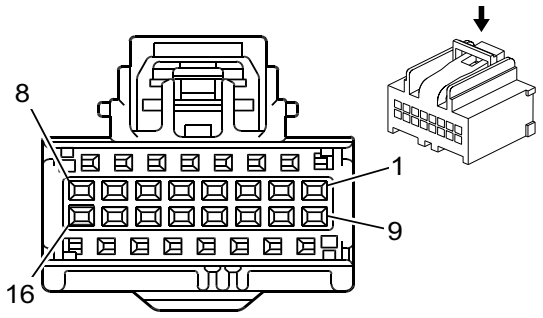
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29F Seat Heating Control Module - Front X1 (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BN	2481	Passenger Heated Back Element Control	I	—
2	0.75	BN/BU	2479	Passenger Heated Seat Element Control	I	—
3	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	—
4	0.75	BN/BK	2078	Driver Heated Seat Element Low Reference	I	—
5	0.75	BN	2432	Driver Heated Back Element Control	I	—
6	0.75	BN/VT	2077	Driver Heated Seat Element Control	I	—
7	0.75	RD	6140	Battery Positive Voltage	II	—
8	0.75	BK	1250	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD/GN	5140	Battery Positive Voltage	II	—

K29F Seat Heating Control Module - Front X2 (KQV)



1653409

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

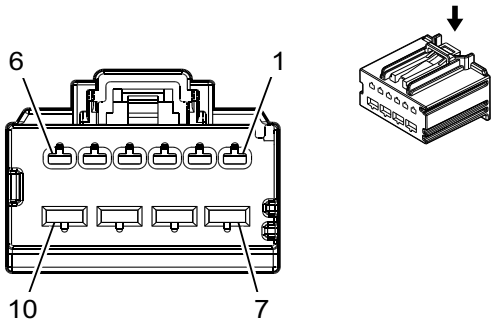
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29F Seat Heating Control Module - Front X2 (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	—
2	0.5	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	—
3	0.5	BU	2425	Driver Heated Back NTC Signal	I	—
4	0.5	WH/BU	2436	Passenger Heated Back NTC Signal	I	—
5	0.5	WH/GY	2434	Passenger Heated Seat NTC Signal	I	—
6	0.5	YE/GY	2079	Driver Heated Seat NTC Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	I	—
9	0.35	GN/VT	5906	Driver Seat Vent Motor Control 1	I	—
10	0.5	WH	5908	Passenger Seat Vent Motor Control 1	I	—
11	0.5	BK/VT	2426	Driver Heated Back NTC Low Reference	I	—
12	0.5	BK/GN	2482	Passenger Heated Back NTC Low Reference	I	—
13 - 16	—	—	—	Not Occupied	—	—

K29R Seat Heating Control Module - Rear X1 (KA6)



3791446

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

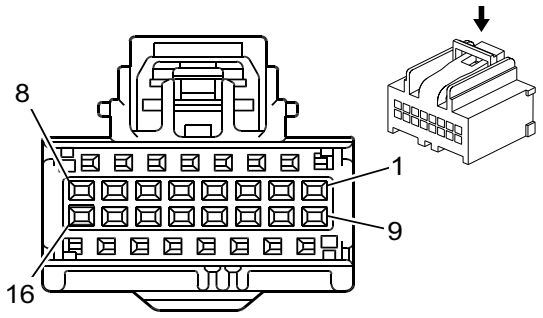
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29R Seat Heating Control Module - Rear X1 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN/BN	2296	Right Rear Heated Seat Cushion Element Control	I	—
3	0.75	GN/BK	2297	Right Rear Heated Seat Cushion Element Low Reference	I	—
4	0.75	BN/BK	2295	Left Rear Heated Seat Cushion Element Low Reference	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	GY	2294	Left Rear Heated Seat Cushion 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 Seat Heating Control Module - Rear X2 (KA6)



1653409

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 15136073
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

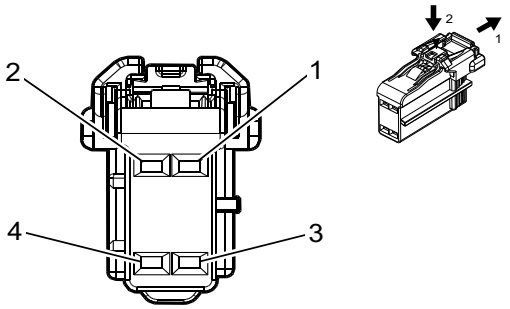
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K29R Seat Heating Control Module - Rear X2 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	7048	Left Rear Cushion NTC Low Reference	I	—
2	0.75	WH/BK	7054	Right Rear Cushion NTC Low Reference	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.75	YE/WH	7053	Right Rear Cushion NTC Signal	I	—
6	0.75	WH/BU	7047	Left Rear Cushion NTC Signal	I	—
7	0.5	BK	1150	Ground	I	—
8	0.5	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	I	—
9 - 16	—	—	—	Not Occupied	—	—

K32 Steering Wheel Heating Control Module X1 (UVD)



4115727

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13595574
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series (BK)

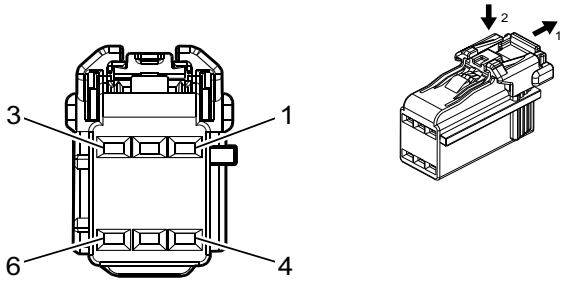
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K32 Steering Wheel Heating Control Module X1 (UVD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	5888	Heated Steering Wheel High Control	I	—
2	—	BK	1354	Heated Steering Wheel Low Reference	I	—
3	—	BU	5885	Heated Steering Wheel Voltage Reference	I	—
4	—	GY	5886	Heated Steering Wheel Sensor Signal	I	—

K32 Steering Wheel Heating Control Module X2 (UVD)



4862126

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588647
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series (BK)

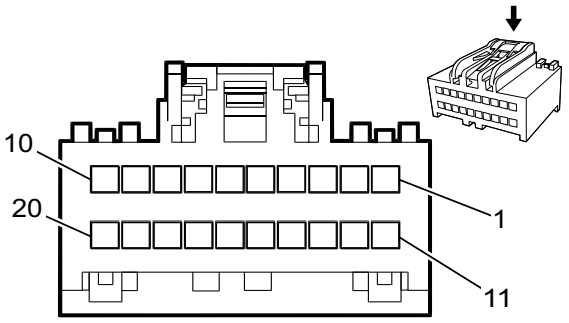
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K32 Steering Wheel Heating Control Module X2 (UVD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	5883	Heated Steering Wheel Switch Signal	I	—
2	—	GY/OG	5884	Heated Steering Wheel Switch LED Control	I	—
3	—	OG	1139	Run/Crank Ignition 1 Voltage	I	—
4	—	BK	1850	Ground	I	—
5	—	BK	1850	Ground	I	—
6	—	WH	4119	Local Interconnect Network Serial Data Bus 19	I	—

K33 HVAC Control Module X1



2180227

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13950637
Service Connector: 13593934
Description: 20-Way F 0.64 Series (GN)

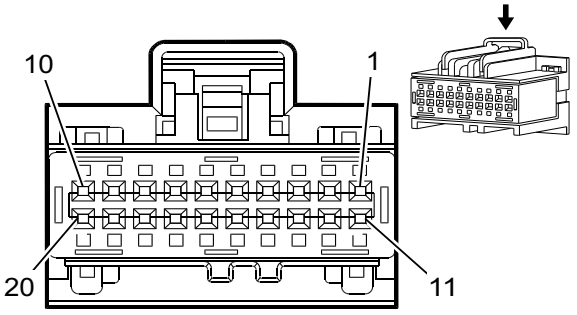
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K33 HVAC Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	GY/GN	7565	Windscreen Temp Sensor Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BU/WH	734	Inside Air Temperature Sensor Signal	I	—
5	0.35	YE/BU	3197	Humidity Temperature Sensor Signal	I	—
6	0.35	YE/RD	597	5V Reference	I	—
7	0.35	BK/BU	7566	Humidity/Windscreen Temp Sensor Low Reference	I	—
8 - 11	—	—	—	Not Occupied	—	—
12	0.35	GY/BU	7564	Humidity Sensor Signal	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	GY	590	Solar Sensor Driver Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	BK	1050	Ground	I	—
17 - 20	—	—	—	Not Occupied	—	—

K33 HVAC Control Module X2



1664552

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13950640
Service Connector: 15126709
Description: 20-Way F USCAR 64 Series (BN)

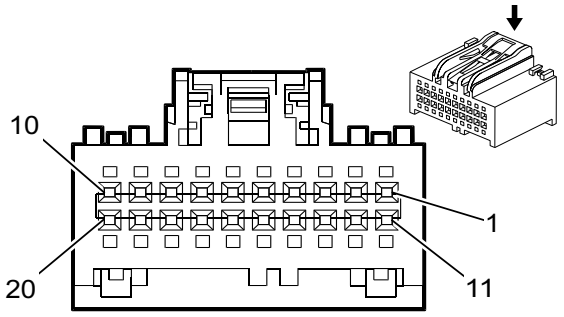
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K33 HVAC Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/VT	3340	Battery Positive Voltage	I	—
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	GN/YE	7531	Local Interconnect Network Serial Data Bus 9	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	GN/BU	4119	Local Interconnect Network Serial Data Bus 19	I	—
7	0.35	VT	3195	Auxiliary Heater Control	I	—
8	0.35	BK	1050	Ground	I	—
9	0.35	VT/BN	300	Run Ignition 3 Voltage	I	—
10	0.35	BU/YE	7574	Electric Variable Displacement Control	I	—
11	0.35	BU/BN	7573	Electric Variable Displacement Supply	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.35	BU/GY	754	Blower Motor Speed Control	I	—
16 - 17	—	—	—	Not Occupied	—	—
18	0.35	BK/GN	7567	Solar Sensor Low Reference	I	—
19	0.5	BN/VT	193	Rear Defog Relay Control	I	—
20	—	—	—	Not Occupied	—	—

K33 HVAC Control Module X3



1715223

Connector Part Information

Harness Type: HVAC
OEM Connector: 13593931
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 64 Series, Sealed (BK)

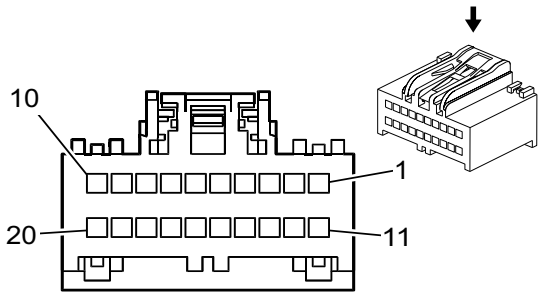
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K33 HVAC Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	GY	3165	Mode Door Stepper Motor Control 1	I	—
3	—	BN/GN	3166	Mode Door Stepper Motor Control 2	I	—
4	—	BU/BN	3167	Mode Door Stepper Motor Control 3	I	—
5	—	GY/	3168	Mode Door Stepper Motor Control 4	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	—	BK/YE	1791	Air Temperature Door Control Low Reference	I	—
10	—	—	—	Not Occupied	—	—
11	—	BN/VT	3169	Temp Door Stepper Motor Control 1	I	—
12	—	BN/WH	3170	Temp Door Stepper Motor Control 2	I	—
13	—	BN/WH	3171	Temp Door Stepper Motor Control 3	I	—
14	—	WH	3172	Temp Door Stepper Motor Control 4	I	—
15	—	WH/BK	7572	HVAC Motor Control	I	—
16	—	WH/BK	3173	Air Inlet Door Stepper Motor Control 1	I	—
17	—	VT/GN	3174	Air Inlet Door Stepper Motor Control 2	I	—
18	—	YE/GN	3175	Air Inlet Door Stepper Motor Control 3	I	—
19	—	YE	3176	Air Inlet Door Stepper Motor Control 4	I	—
20	—	BN	6137	EVAP Core Temperature Sensor Signal	I	—

K33 HVAC Control Module X4



1715228

Connector Part Information

Harness Type: HVAC
OEM Connector: 13593932
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F USCAR 64 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K33 HVAC Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	—	GY	3181	Temp Door Stepper Motor Passenger Control 1	I	—
6	—	BN/GN	3182	Temp Door Stepper Motor Passenger Control 2	I	—
7	—	BN	3183	Temp Door Stepper Motor Passenger Control 3	I	—
8	—	VT/GN	3184	Temp Door Stepper Motor Passenger Control 4	I	CJ2
9 - 20	—	—	—	Not Occupied	—	—

K34 Glow Plug Control Module X1 (LM2)

—

Connector Part Information

Harness Type: Glow Plug
OEM Connector: 12639355
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

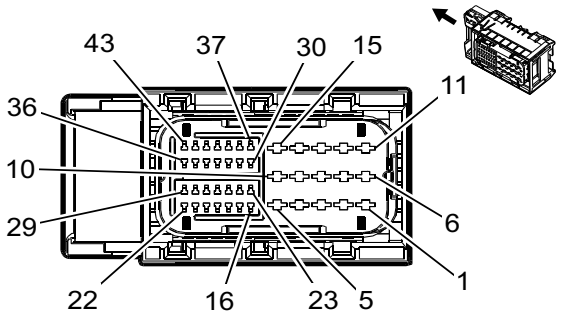
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K34 Glow Plug Control Module X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD/VT	842	Battery Positive Voltage	I	—

K34 Glow Plug Control Module X2 (LM2)



3553744

Connector Part Information

Harness Type: Engine
OEM Connector: 13699580
Service Connector: 13576417
Description: 43-Way F 1.2, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576372	J-35616-4A (PU)	J-38125-556	Not Available	Not Available	Not Available	Not Available
II	19371215	J-35616-16 (LT GN)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

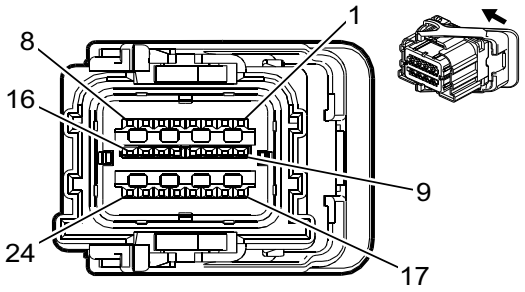
K34 Glow Plug Control Module X2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	2.5	GY/YE	1584	Glow Plug Control 4	I	—
3	2.5	GY/GN	1583	Glow Plug Control 3	I	—
4	2.5	GY/BN	1582	Glow Plug Control 2	I	—
5	2.5	GY/BU	1581	Glow Plug Control 1	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	2.5	BK/WH	4451	—	I	—
11	—	—	—	Not Occupied	—	—
12	2.5	GY/WH	1585	Glow Plug Control 5	I	—
13	2.5	GY/VT	1586	Glow Plug Control 6	I	—
14 - 17	—	—	—	Not Occupied	—	—
18	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
19	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
20 - 24	—	—	—	Not Occupied	—	—
25	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
26	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
27 - 32	—	—	—	Not Occupied	—	—
33	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
34 - 39	—	—	—	Not Occupied	—	—

K34 Glow Plug Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
40	0.35	VT/YE	43	Accessory Ignition Voltage	II	—
41 - 43	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1



3240106

Connector Part Information

Harness Type: Body
OEM Connector: 13887360
Service Connector: 19328755
Description: 24-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19328872	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19368490	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

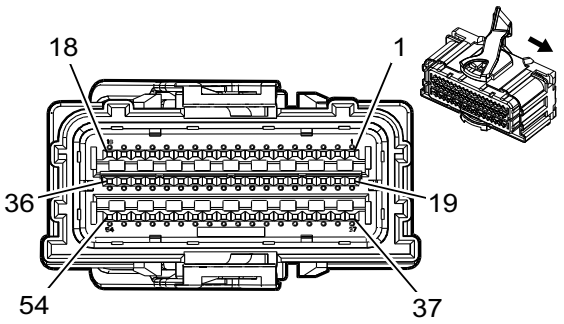
K36 Inflatable Restraint Sensing and Diagnostic Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	3023	Steering Wheel Module Stage 2 High Control	I	—
2	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	I	—
3	0.35	BN/OG	3020	Steering Wheel Module Stage 1 Low Control	I	—
4	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	I	—
5	0.35	YE/OG	3025	Passenger IP Module Stage 1 High Control	I	—
6	0.35	OG/WH	3024	Passenger IP Module Stage 1 Low Control	I	—
7	0.35	OG/VT	3026	Passenger IP Module Stage 2 Low Control	I	—
8	0.35	GY/OG	3027	Passenger IP Module Stage 2 High Control	I	—
9	0.5	RD/GN	4440	Battery Positive Voltage	II	—
10	0.35	VT/WH	5234	Passenger Seat Belt Indicator Control	I	—
11	0.35	BU	2307	Passenger Air Bag On Indicator Control	I	—
12	0.35	GN	2308	Passenger Air Bag Off Indicator Control	I	—
13	0.5	BU/WH	3119	Roof Rail Air Bag Defeat Switch Signal	II	—
14	0.5	BN/WH	3895	Roof Rail Air Bag Defeat Switch Low Reference	II	—
15	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
16	—	—	—	Not Occupied	—	—
17	0.35	WH/BU	5986	Serial Data Communication Enable	I	—
18	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	II	—
19	0.75	BK/WH	2551	Signal Ground	II	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	II	—
21 - 24	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2



2817420

Connector Part Information

Harness Type: Body
OEM Connector: 13944372
Service Connector: 19303770
Description: 54-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19328872	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19368490	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Available	Not Available	Not Available	Not Available

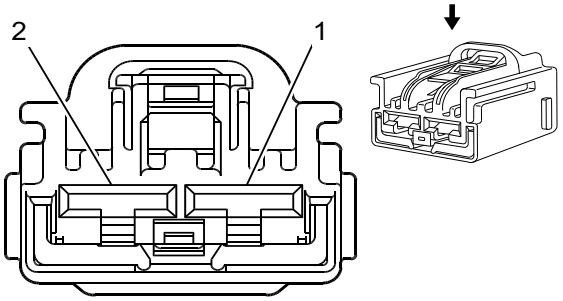
K36 Inflatable Restraint Sensing and Diagnostic Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 8	—	—	—	Not Occupied	—	—
9	0.5	OG/YE	3481	Driver Seat Belt Anchor Pretensioner High Control	III	—
10	0.5	YE/OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	III	—
11	0.5	GY/OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	III	—
12	0.5	OG/BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	III	—
13	0.5	OG/BU	3068	Driver Side Impact Module High Control	II	—
14	0.5	GN/OG	3069	Driver Side Impact Module Low Control	II	—
15	0.35	BN/OG	3067	Passenger Side Impact Module Low Control	I	—
16	0.35	OG/GY	3066	Passenger Side Impact Module High Control	I	—
17	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	III	—
18	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	III	—
19	0.35	OG/GN	2132	Left Front Side Impact Sensing Module Signal	I	—
20	0.35	BK/OG	6628	Left Front Side Impact Sensing Module Low Reference	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.35	BK/OG	6629	Right Front Side Impact Sensing Module Low Reference	I	—
22	0.35	BN/OG	2134	Right Front Side Impact Sensing Module Signal	I	—
23	0.5	OG/YE	354	Left Front Discriminating Sensor Signal	II	—
24	0.5	BK/OG	5045	Left Front Discriminating Sensor Low Reference	II	—
25	0.5	BK/OG	5600	Right Front Discriminating Sensor Low Reference	II	—
26	0.5	OG/GN	1409	Right Front Discriminating Sensor Signal	II	—
27	0.35	OG/BU	6622	Left Rear Side Impact Sensing Module Signal	I	—
28	0.35	BK/OG	6623	Left Rear Side Impact Sensing Module Low Reference	I	—
29	0.35	BK/OG	6627	Right Rear Side Impact Sensing Module Low Reference	I	—
30	0.35	OG/WH	6626	Right Rear Side Impact Sensing Module Signal	I	—
31 - 36	—	—	—	Not Occupied	—	—
37	0.5	OG/WH	3477	Driver Seat Belt Retractor Pretensioner High Control	III	—
38	0.5	GY/OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	III	—
39	0.35	WH/OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	III	—
40	0.35	OG/GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	III	—
41	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.35	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	—
44	0.35	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	—
45	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	—
46 - 52	—	—	—	Not Occupied	—	—
53	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	III	—
54	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	III	—

K40 Seat Memory Control Module X1 (A45)



1817814

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-6458-40
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 6.3 Series (L-GY)

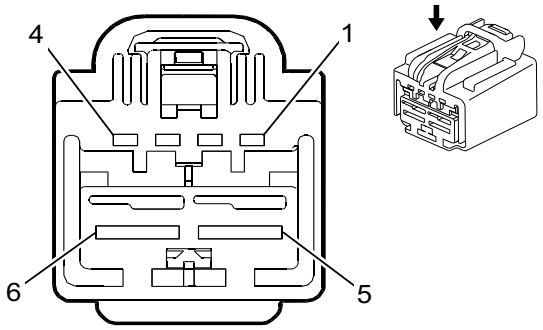
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K40 Seat Memory Control Module X1 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BN	1140	Battery Positive Voltage	I	—
2	2.5	RD/YE	5040	Battery Positive Voltage	I	—

K40 Seat Memory Control Module X2 (A45)



1798802

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-9749-30
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F YESC Kaizen Series (BK)

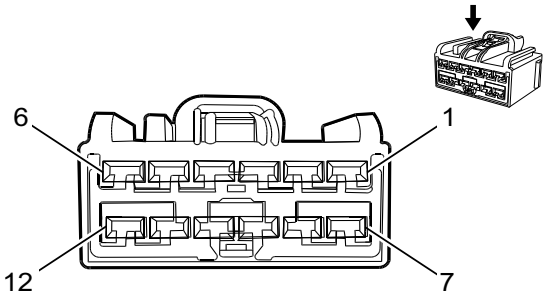
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K40 Seat Memory Control Module X2 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	I	—
4	—	—	—	Not Occupied	—	—
5	2.5	BK	1150	Ground	II	—
6	—	—	—	Not Occupied	—	—

K40 Seat Memory Control Module X3 (A45)



2231648

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-6467-40
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 2.8 Kaizen Series (L-GY)

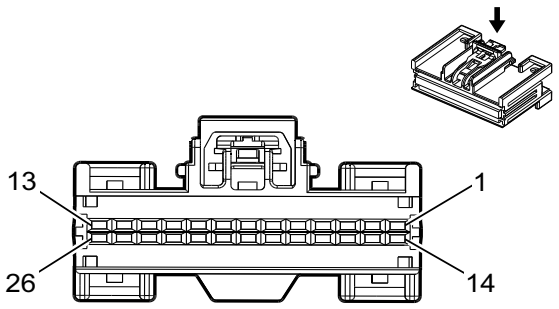
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K40 Seat Memory Control Module X3 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	—
2	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	—
3	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control	I	—
4	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	—
5	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
6	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
7 - 10	—	—	—	Not Occupied	—	—
11	1.5	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	—
12	1.5	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—

K40 Seat Memory Control Module X5 (A45)



2916473

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7287-2043-30
Service Connector: Service by Harness - See Part Catalog
Description: 26-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

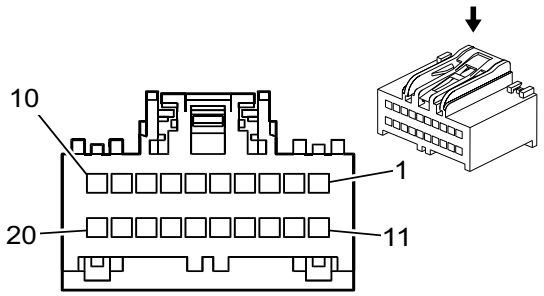
K40 Seat Memory Control Module X5 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	3298	Memory Sensor High Reference 2	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BN	3038	Right Rear Haptic Seat Motor Control	I	—
5	0.5	YE/BN	3037	Left Rear Haptic Seat Motor Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE/BN	1522	Power Seat Horizontal Forward Switch Signal	I	—
8	0.5	GY/GN	1523	Power Seat Horizontal Rearward Switch Signal	I	—
9	0.5	GN/BN	1518	Power Seat Front Vertical Up Switch Signal	I	—
10	0.5	BU/VT	1520	Power Seat Front Vertical Down Switch Signal	I	—
11	0.5	GN	569	Memory Seat Horizontal Motor Position Sensor Signal	I	—
12	0.5	BN/WH	557	Memory Seat Front Vertical Motor Position Sensor Signal	I	—
13 - 18	—	—	—	Not Occupied	—	—
19	0.5	YE	1519	Power Seat Rear Vertical Up Switch Signal	I	—
20	0.5	YE/BU	1521	Power Seat Rear Vertical Down Switch Signal	I	—
21	0.5	GY/BK	1269	Power Seat Recline Forward Switch Signal	I	—
22	0.5	GN/GY	1270	Power Seat Recline Rearward Switch Signal	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	YE/BU	568	Memory Seat Rear Vertical Motor Position Sensor Signal	I	—

K40 Seat Memory Control Module X5 (A45) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	0.5	WH/BK	570	Driver Memory Seat Recline Motor Position Sensor Signal	I	—

K40 Seat Memory Control Module X6 (A45)



1715228

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 31410-0201
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F USCAR 64 Series (GY)

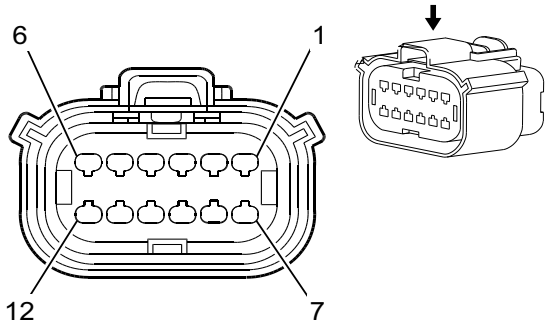
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K40 Seat Memory Control Module X6 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 10	—	—	—	Not Occupied	—	—
11	0.5	BK/BU	5978	Memory Switch Low Reference	I	—
12	0.5	WH	615	Memory Seat Switch Signal 1	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.5	BU/GN	614	Memory Seat Switch Set Signal	I	—
16 - 20	—	—	—	Not Occupied	—	—

K43 Power Steering Control Module X1



1825165

Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 19178148
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K43 Power Steering Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
3	—	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
4	—	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
5	—	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	—	WH/BU	5986	Serial Data Communication Enable	I	—
9	—	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
10	—	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
11	—	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
12	—	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—

K43 Power Steering Control Module X2

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Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

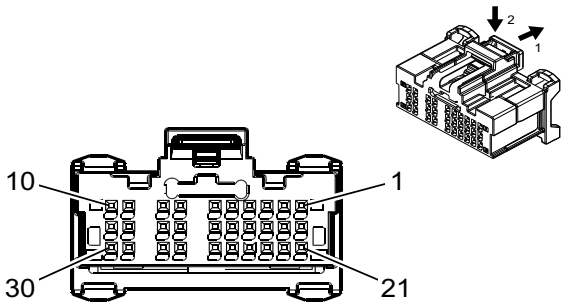
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K43 Power Steering Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD/VT	3542	Battery Positive Voltage	I	—
2	—	BK	350	Ground	I	—

K56 Serial Data Gateway Module X1



4900333

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35077574
Service Connector: 13519319
Description: 30-Way F 0.5 MQS Series (GY)

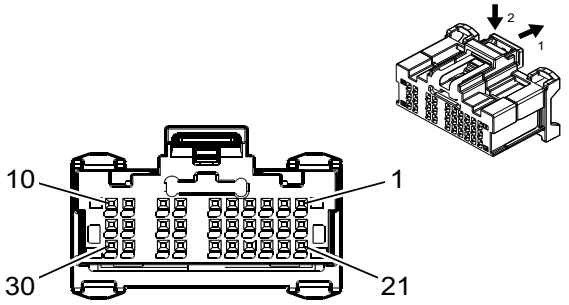
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19370262	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K56 Serial Data Gateway Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/VT	3340	Battery Positive Voltage	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
5	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BK/WH	1851	Signal Ground	I	—
8	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
9	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.35	BU/WH	2089	High Speed GMLAN Serial Data (+)(13)	I	—
14	0.35	WH	2090	High Speed GMLAN Serial Data (-)(13)	I	—
15	0.35	BU/BK	1978	High Speed GMLAN Serial Data (+)(11)	I	—
16	0.35	WH	1979	High Speed GMLAN Serial Data (-)(11)	I	—
17	0.35	BU/BN	1980	High Speed GMLAN Serial Data (+)(12)	I	—
18	0.35	WH	1981	High Speed GMLAN Serial Data (-)(12)	I	—
19	—	—	—	Not Occupied	—	—
20	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
21 - 25	—	—	—	Not Occupied	—	—
26	0.35	GN/WH	2100	Low Speed GMLAN Serial Data #3	I	—
27 - 29	—	—	—	Not Occupied	—	—
30	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	—

K56 Serial Data Gateway Module X2



4897967

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35074169
Service Connector: 13519320
Description: 30-Way F 0.5 MQS Series (BU)

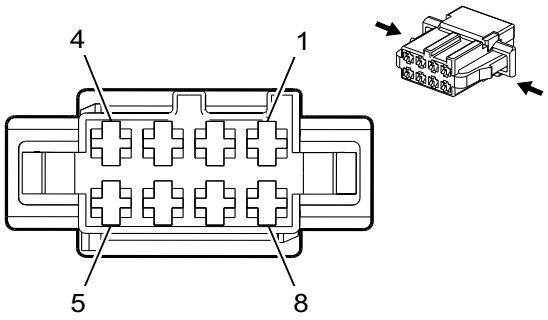
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19370262	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K56 Serial Data Gateway Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
5	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
6	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
7	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—
8	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
9	0.35	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
10	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
11 - 13	—	—	—	Not Occupied	—	—
14	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
15	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
16	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
17	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—
18	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
19	0.35	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
20	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—
21 - 22	—	—	—	Not Occupied	—	—
23	0.35	VT/BK	1639	Run/Crank Ignition 1 Voltage	I	—
24	—	—	—	Not Occupied	—	—
25	0.35	WH/BU	5986	Serial Data Communication Enable	I	—
26 - 30	—	—	—	Not Occupied	—	—

K60 Steering Column Lock Module (BTM)



2173871

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10718780
Service Connector: 13576545
Description: 8-Way F 1.6 Micro-Timer Series (BK)

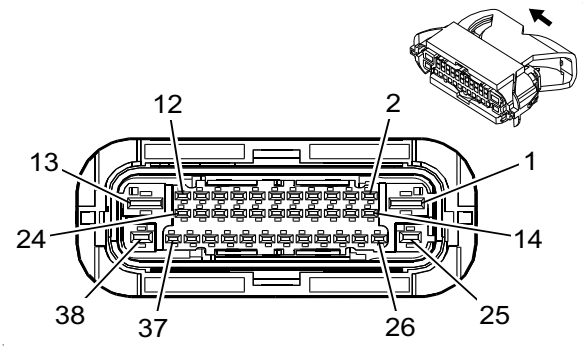
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K60 Steering Column Lock Module (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BU/VT	5904	Steering Column Lock Status Signal	I	—
3	0.35	BU/VT	807	OFF /Accessory Ignition Voltage	I	—
4	0.35	GN/VT	1601	Steering Column Lock Signal	I	—
5	0.5	RD/GY	4140	Battery Positive Voltage	I	—
6	0.35	BK	1850	Ground	I	—
7	0.35	BK/WH	1851	Signal Ground	I	—
8	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—

K68 Trailer Lighting Control Module (U1D)



5141918

Connector Part Information

Harness Type: Chassis
OEM Connector: 13670757
Service Connector: 19371190
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576374	J-35616-35 (VT)	J-38125-557	1-968857-3	Lear 7	C	1
II	19301757	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	A	B
III	19301776	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

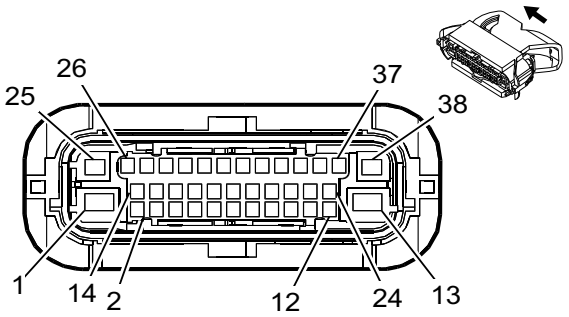
K68 Trailer Lighting Control Module (U1D)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	RD/YE	5840	Battery Positive Voltage	II	—
2	0.75	YE/GY	1618	Left Rear Trailer Stop/Turn Lamp Control	III	—
3	0.75	GN/VT	1619	Right Rear Trailer Stop/Turn Lamp Control	III	—
4	—	—	—	Not Occupied	—	—
5	0.75	GY/BN	2109	Trailer Park Lamp Control	III	—
6	—	—	—	Not Occupied	—	—
7	0.75	GN/WH	5189	Trailer Backup Lamp Control	III	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	III	—
11	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	III	—
12	—	—	—	Not Occupied	—	—
13	2.5	BK	1750	Ground	II	—
14 - 24	—	—	—	Not Occupied	—	—
25	2	RD/BN	7601	Trailer Battery Charge Control	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	GN	5060	Low Speed GMLAN Serial Data	III	—
28 - 37	—	—	—	Not Occupied	—	—

K68 Trailer Lighting Control Module (U1D) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
38	2	RD/VT	5640	Battery Positive Voltage	I	—

K69 Transfer Case Control Module (NP0/NQH)



3240112

Connector Part Information

Harness Type: Engine
OEM Connector: 33110415
Service Connector: 19353395
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576374	J-35616-35 (VT)	J-38125-557	1-968857-3	Lear 7	C	1
II	13582180	J-35616-14 (GN)	J-38125-557	1241374-1	Lear 17	E	2
III	19301757	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	B	G
IV	19301776	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19333088	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

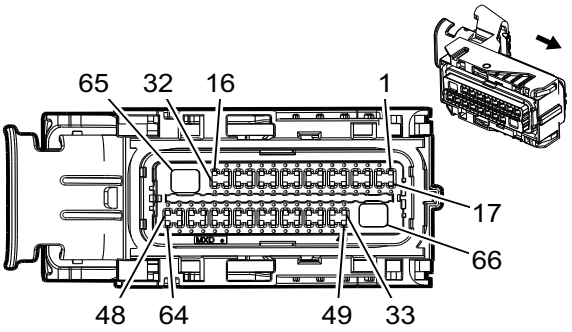
K69 Transfer Case Control Module (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD/GY	1342	Battery Positive Voltage	III	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	IV	NQH
4	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	IV	NQH
5	0.5	WH/GN	7479	Rotary Position Sensor Signal	IV	NQH
6	—	—	—	Not Occupied	—	—
7	0.5	YE	7474	Incremental Encoder Direction Signal	IV	NQH
8	—	—	—	Not Occupied	—	—
9	0.5	YE/WH	1695	Four Wheel Drive Wheel Lock Indicator Control	II	NQH
10	0.5	BN	1560	Neutral Indicator Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	GY/BK	1570	Front Axle Actuator Control	IV	NQH
13	3	YE/VT	1553	Transfer Case Motor Counter Clockwise Control	III	NQH
14	—	—	—	Not Occupied	—	—

K69 Transfer Case Control Module (NP0/NQH) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
15	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	NQH
16	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	IV	NQH
17	—	—	—	Not Occupied	—	—
18	0.5	WH/BU	5986	Serial Data Communication Enable	II	NQH
19	0.5	BU/GY	7473	Incremental Encoder Impulse Signal	IV	NQH
20	0.5	WH/RD	7477	Rotary Position Sensor 5V Reference	IV	NQH
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	GN	953	Transfer Case Motor Shield	IV	NQH
25	2.5	BK	4450	Ground	V	NQH
26	—	—	—	Not Occupied	—	—
27	0.5	GN	951	Knock Sensor Shield	IV	NQH
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	YE/BK	7478	Rotary Position Sensor Low Reference	II	NQH
31	0.5	WH/GN	7475	Incremental Encoder Sensor 8V Reference	II	NQH
32	—	—	—	Not Occupied	—	—
33	0.75	BK	952	Transfer Case Lock Solenoid 12V Reference	II	NQH
34	0.75	YE/BN	1569	Transfer Case Lock Solenoid Control	II	NQH
35	—	—	—	Not Occupied	—	—
36	0.5	VT	7476	Incremental Encoder Sensor Low Reference	II	NQH
37	—	—	—	Not Occupied	—	—
38	2.5	YE/GY	1552	Transfer Case Motor Clockwise Control	I	NQH

K71 Transmission Control Module (MQB)



4024881

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

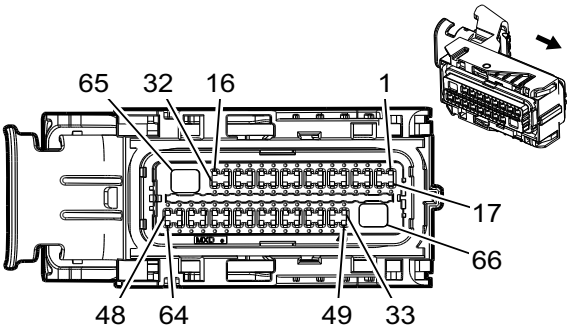
K71 Transmission Control Module (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	422	Torque Converter Clutch Solenoid Control	II	—
2	0.5	GY/GN	6403	Clutch 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 Position Sensor B 9V Reference	II	—
8	0.5	YE/BU	4171	Transmission Position Sensor A 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 Mainline Pressure Solenoid Control	II	—
18	0.5	YE/BN	6404	Clutch E Control	II	—
19	0.5	GY	6402	Clutch C Control	II	—
20	0.5	VT	4509	Transmission Clutch F Control	II	—
21	—	—	—	Not Occupied	—	—

K71 Transmission Control Module (MQB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.5	GN/BK	7819	Default Disable Solenoid Control	II	—
23	—	—	—	Not Occupied	—	—
24	0.5	GN/WH	2968	Transmission Auxiliary Oil Pump Control	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
55 - 62	—	—	—	Not Occupied	—	—
63	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	—
64	0.5	VT/BU	5724	Ignition Mode Switch Mode Control	II	—
65	1.5	BK/WH	451	Signal Ground	I	—
66	1.5	RD/GN	1840	Battery Positive Voltage	I	—

K71 Transmission Control Module (MQE)



4024881

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	19330179	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

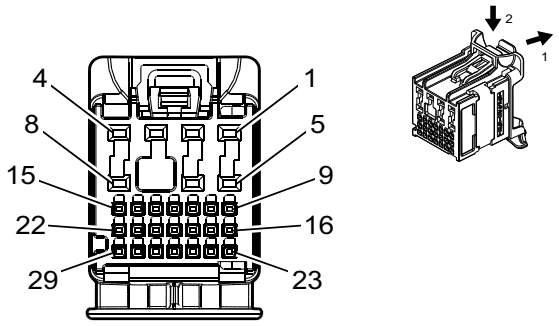
K71 Transmission Control Module (MQE)

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 B Control	II	—
3	0.5	GN/WH	1530	Transmission Mainline Pressure Solenoid Control	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE/GN	4170	Transmission Position Sensor B 9V Reference	II	—
8	0.5	YE/BU	4171	Transmission Position Sensor A 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	GN/YE	6353	Input Speed Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	WH	4508	Transmission Clutch G Control	II	—
18	0.5	BN	6400	Clutch A Control	II	—
19	0.5	GY	6402	Clutch C Control	II	—
20	0.5	VT/WH	422	Torque Converter Clutch Solenoid Control	II	—
21	0.5	GN/WH	6380	TCC On/Off Solenoid A Control	II	—
22	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	II	—
23	—	—	—	Not Occupied	—	—

K71 Transmission Control Module (MQE) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	WH/GY	4578	Surge Accumulator Solenoid Low Side Control	II	—
25	0.5	BK/GY	3927	IMS Mode Switch Low Reference	II	—
26 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
39 - 46	—	—	—	Not Occupied	—	—
47	0.5	GY/YE	4169	PRNDL S Signal	II	—
48	—	—	—	Not Occupied	—	—
49	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
55 - 58	—	—	—	Not Occupied	—	—
59	0.5	GY/WH	4168	PRNDL P Signal	II	—
60	0.5	WH/BK	5983	PRNDL C Signal	II	—
61	0.5	GY/BN	5982	PRNDL B Signal	II	—
62	0.5	VT/WH	5981	PRNDL A Signal	II	—
63	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	—
64	—	—	—	Not Occupied	—	—
65	1.5	BK/WH	451	Signal Ground	I	—
66	1.5	RD/GN	1840	Battery Positive Voltage	I	—

K73 Telematics Communication Interface Control Module X1 (UE1)



4496253

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303954
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19354361	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K73 Telematics Communication Interface Control Module X1 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BU	3240	Battery Positive Voltage	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK/WH	2751	Signal Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	GN/BK	2515	Keypad Control	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	BK/WH	2751	Signal Ground	I	—
9	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	II	—
10	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	II	—
11	0.35	GN/WH	2514	Keypad Signal	II	—
12	0.35	WH/BU	5986	Serial Data Communication Enable	II	—
13	0.35	Bare	1792	Low Reference	II	—
14	0.35	BK/GY	5152	Voice Recognition Audio Low Reference	II	—
15	0.35	GY/YE	5149	Voice Recognition Audio Signal	II	—
16	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	II	—
17	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	II	—
18	—	—	—	Not Occupied	—	—
19	0.35	YE/VT	2516	Keypad Green LED Control	II	—
20	0.35	Bare	1782	Low Reference	II	—

K73 Telematics Communication Interface Control Module X1 (UE1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.35	BK/BN	654	Cellular Telephone Microphone Low Reference	II	—
22	0.35	BU	655	Cellular Telephone Microphone Signal	II	—
23	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	II	—
24 - 25	—	—	—	Not Occupied	—	—
26	0.35	BN/WH	2517	Keypad Red LED Control	II	—
27	—	—	—	Not Occupied	—	—
28	0.35	GY/WH	7211	Ethernet Bus 4 (+)	II	—
29	0.35	GY	7210	Ethernet Bus 4 (-)	II	—

K73 Telematics Communication Interface Control Module X5 (UE1)

—

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150100
Service Connector: Not Available
Description: 1-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

K73 Telematics Communication Interface Control Module X5 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
VT	—	—	COAX	Coax Cable	I	—

K73 Telematics Communication Interface Control Module X7 (UE1)

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Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150100
Service Connector: Not Available
Description: 1-Way

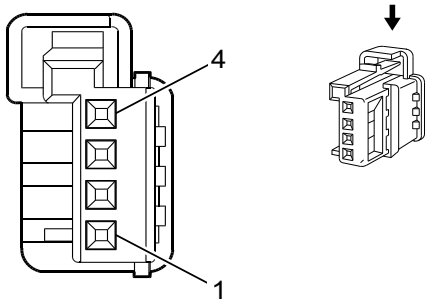
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

K73 Telematics Communication Interface Control Module X7 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BN	—	—	COAX	Coax Cable	I	—

K77 Remote Control Door Lock Receiver



2179793

Connector Part Information

Harness Type: Body
OEM Connector: 10768790
Service Connector: 13584096
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

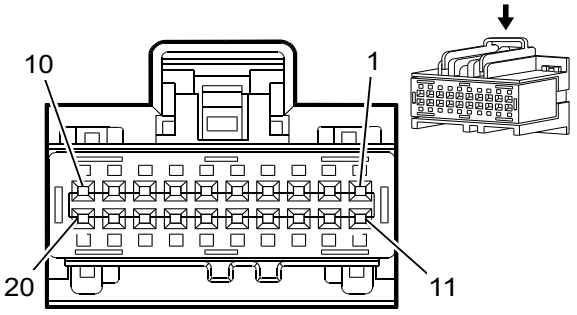
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K77 Remote Control Door Lock Receiver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	3273	Remote Function Actuator Low Reference	I	—
2	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	I	—
3	0.35	BU/WH	3275	Remote Function Actuator Receive Signal	I	—
4	0.35	GY/WH	3272	Remote Function Actuator Control	I	—

K84 Keyless Entry Control Module X1 (BTM)



1664552

Connector Part Information

Harness Type: Body
OEM Connector: 13950640
Service Connector: 15126709
Description: 20-Way F USCAR 64 Series (BN)

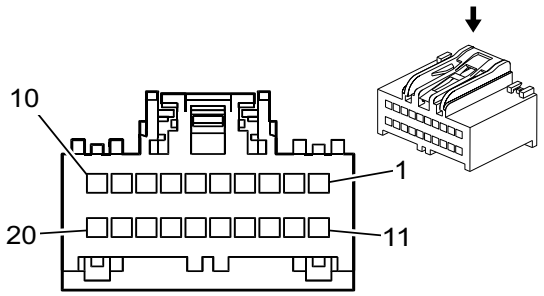
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K84 Keyless Entry Control Module X1 (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/VT	1601	Steering Column Lock Signal	I	—
2	0.5	RD/YE	4340	Battery Positive Voltage	I	—
3	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	VT/YE	4	Accessory Ignition Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	GY/GN	4083	RAP Relay 2 Coil Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH/YE	3574	Driver Door Open Switch Signal	I	—
10	0.35	YE/BU	4086	Pushbutton Start Challenge Active Signal	I	—
11	0.35	GN/BK	3558	Passive Start Switch Signal 2	I	—
12	0.35	BK/GY	3559	Passive Start Switch 2 Low Reference	I	—
13	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	—
14	0.5	BK/WH	1151	Signal Ground	I	—
15	0.35	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	—
16	0.35	BN/BK	3552	Passive Start Interior Antenna 1 Signal Hi	I	—
17	0.35	WH	3553	Passive Start Interior Antenna 1 Signal Lo	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.35	BU	3554	Passive Start Interior Antenna 2 Signal Hi	I	—

K84 Keyless Entry Control Module X2 (BTM)



1715228

Connector Part Information

Harness Type: Body
OEM Connector: 13859758
Service Connector: 15126710
Description: 20-Way F USCAR 64 Series (GY)

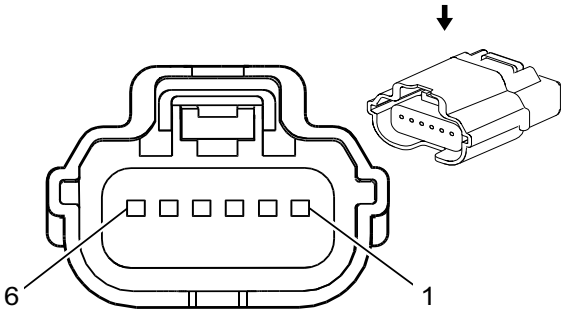
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K84 Keyless Entry Control Module X2 (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/GY	6158	Right Rear Door Handle Switch Signal	I	—
2	0.35	BN/YE	6157	Left Rear Door Handle Switch Signal	I	—
3 - 5	—	—	—	Not Occupied	—	—
6	0.5	VT	3560	Passive Entry Driver Door Antenna Signal Hi	I	—
7	0.5	VT/GY	3561	Passive Entry Driver Door Antenna Signal Lo	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	GN/BK	3563	Passive Entry Passenger Door Antenna Signal Lo	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	VT/WH	3571	Passenger Door Handle Switch Signal	I	—
12	0.35	GN/WH	3570	Driver Door Handle Switch Signal	I	—
13 - 15	—	—	—	Not Occupied	—	—
16	0.5	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	—
19	—	—	—	Not Occupied	—	—
20	0.5	GN/YE	3562	Passive Entry Passenger Door Antenna Signal Hi	I	—

K85 Passenger Presence Module



1974974

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31404-6132
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed (BK)

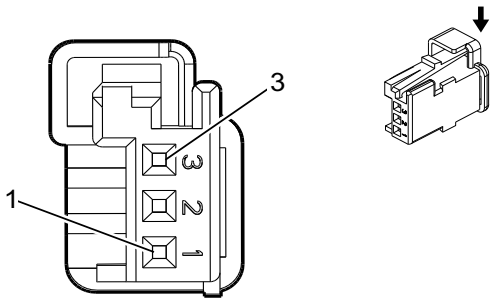
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K85 Passenger Presence Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	4440	Battery Positive Voltage	I	—
2	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK/WH	2551	Signal Ground	I	—
5	0.5	GY/OG	3946	Automatic Locking Retractor Switch Low Reference	I	—
6	0.5	OG/BN	3947	Automatic Locking Retractor Switch Signal	I	—

K89 Immobilizer Control Module (-BTM)



4218883

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10763117
Service Connector: 19333317
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

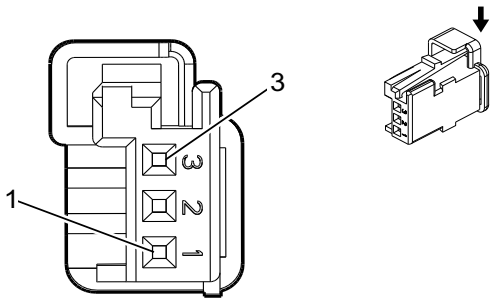
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K89 Immobilizer Control Module (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.5	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	—
3	0.5	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	—

K89 Immobilizer Control Module (BTM+D07)



4218883

Connector Part Information

Harness Type: Floor Console
OEM Connector: 10763117
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

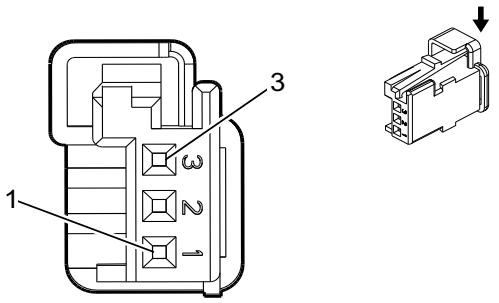
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K89 Immobilizer Control Module (BTM+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.35	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	—
3	0.35	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	—

K89 Immobilizer Control Module (BTM-D07)



4218883

Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 953697-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

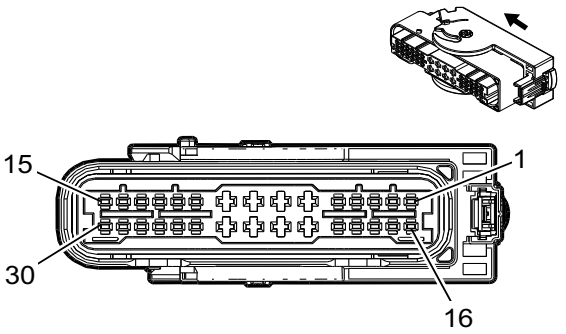
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K89 Immobilizer Control Module (BTM-D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	—
2	0.35	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	—
3	0.35	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	—

K111 Fuel Pump Driver Control Module



3240109

Connector Part Information

Harness Type: Chassis
OEM Connector: 33386317
Service Connector: 19354086
Description: 30-Way F 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300440	J-35616-4A (PU)	J-38125-557	Not Available	Not Available	Not Available	Not Available
II	19329958	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

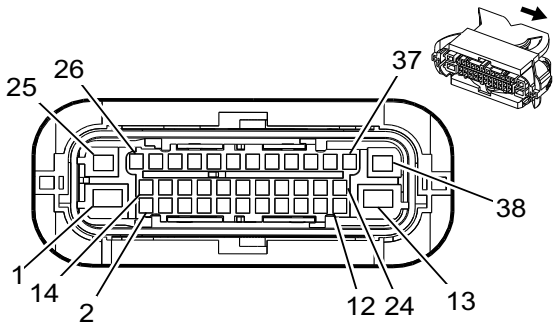
K111 Fuel Pump Driver Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/RD	6862	Water In Fuel Sensor 5V Reference	II	—
2	0.5	BU/YE	6861	Water In Fuel Sensor Signal	II	—
3	0.5	BK/BU	6863	Water In Fuel Sensor Low Reference	II	—
4	0.5	BN/VT	455	Fuel Filter Temperature Signal	II	—
5 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD/VT	1940	Battery Positive Voltage	I	—
8	2.5	GY	120	Fuel Pump Control	I	—
9	2.5	YE/GY	4137	Fuel Pump Supply Voltage Phase 2	I	—
10	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	II	—
11	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	II	—
12	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	II	—
13	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	II	—
14	—	—	—	Not Occupied	—	—
15	0.5	WH	4499	High Speed GMLAN Serial Data (-) 7	II	—
16	0.5	VT/GN	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	II	—
17	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	—
18	0.5	GN/GY	465	Fuel Pump Primary Relay Control	II	—
19	0.5	BK/VT	412	Fuel Filter Temperature Sensor Low Reference	II	—

K111 Fuel Pump Driver Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	—	—	—	Not Occupied	—	—
21	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	—
22	2.5	BK	1750	Ground	I	—
23	0.35	BN	7444	Fuel System Control Module Shield Ground	I	LM2
	0.5	BN	7444	Fuel System Control Module Shield Ground	I	-LM2
24	2.5	WH/BN	4138	Fuel Pump Supply Voltage Phase 3	I	—
25	0.5	BK/BN	6284	Fuel Tank Vapor Pressure Sensor Low Reference	II	—
26	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
27	0.5	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	II	—
28	0.5	BK/GN	6281	Fuel Level Sensor Low Reference	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BU/BN	4498	High Speed GMLAN Serial Data (+) 7	II	—

K115 Reductant Control Module (LM2)



3240110

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

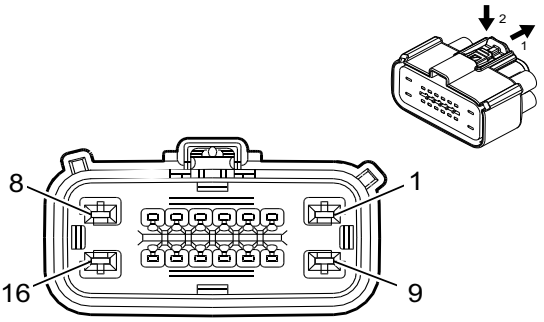
K115 Reductant Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3.0	BK	3921	DEF Heater Supply 1	I	—
2	1.0	BN	—	—	I	—
3	—	—	—	Not Occupied	—	—
4	1.0	YE	—	—	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	BK	—	—	I	—
7	0.5	BK	—	—	I	—
8	0.5	BN	—	—	I	—
9	0.5	BK	—	—	I	—
10	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
11	1.0	YE	—	—	I	—
12	—	—	—	Not Occupied	—	—
13	3.0	WH	1651	Signal Ground	I	—
14	1.0	BN	—	—	I	—
15	—	—	—	Not Occupied	—	—
16	1.0	BU	—	—	I	—
17	0.5	BK	5985	Accessory Wakeup Serial Data	I	—
18	0.5	BN	—	—	I	—
19	0.5	BN	—	—	I	—
20	0.5	BU	—	—	I	—
21	0.5	BU	—	—	I	—

K115 Reductant Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.5	BN	2500	High Speed GMLAN Serial Data (+) 1	I	—
23	0.5	BK	2501	High Speed GMLAN Serial Data (-) 1	I	—
24	0.5	BN	—	—	I	—
25	2.0	BK	1651	Signal Ground	I	—
26	1.0	WH	—	—	I	—
27	—	—	—	Not Occupied	—	—
28	1.0	BN	—	—	I	—
29	0.5	BK	4320	Selective Catalytic Reduction Power Module Wake-Up Signal	I	—
30	0.5	BN	439	Run/Crank Ignition 1 Voltage	I	—
31	0.5	BU	4498	High Speed GMLAN Serial Data (+) 7	I	—
32	0.5	BU	4498	High Speed GMLAN Serial Data (+) 7	I	—
33	0.5	BN	4499	High Speed GMLAN Serial Data (-) 7	I	—
34	0.5	BN	4499	High Speed GMLAN Serial Data (-) 7	I	—
35	0.5	BN	2501	High Speed GMLAN Serial Data (-) 1	I	—
36	1.0	BU	—	—	I	—
37	1.0	WH	—	—	I	—
38	2.0	RD	3440	Battery Positive Voltage	I	—

K133 Trailer Brake Power Control Module (JL1)



4624589

Connector Part Information

Harness Type: Chassis
OEM Connector: 33297568
Service Connector: 13599889
Description: 16-Way F 1.5, 2.8 Series, Sealed (GY)

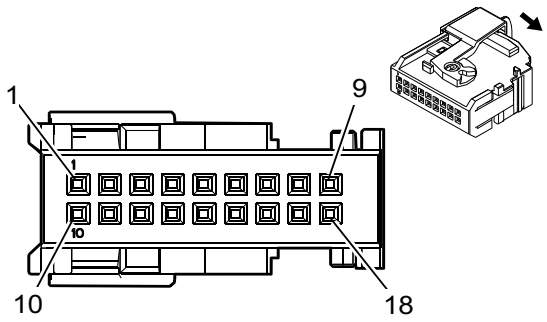
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	19300432	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

K133 Trailer Brake Power Control Module (JL1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD/VT	1242	Battery Positive Voltage	I	—
2	1	WH/BK	2223	Trailer Brake Control 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	1450	Ground	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	GN/BU	2733	Local Interconnect Network Bus 33	II	—
13 - 16	—	—	—	Not Occupied	—	—

K157 Video Processing Control Module X1 (UVI/UV2)



4329088

Connector Part Information

Harness Type: Body
OEM Connector: 33168840
Service Connector: 19369840
Description: 18-Way F Micro-Quadlock Series (BK)

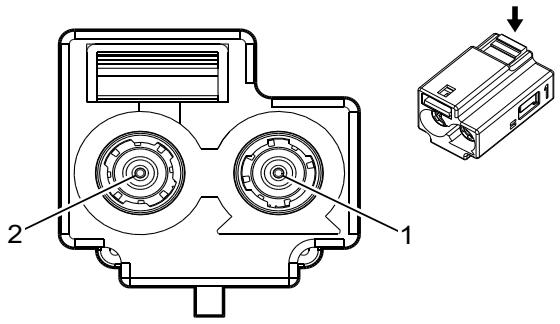
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575587	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
II	13575859	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

K157 Video Processing Control Module X1 (UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/VT	1640	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK/WH	2751	Signal Ground	II	—
4 - 8	—	—	—	Not Occupied	—	—
9	0.75	GY/GN	1102	Low Speed GMLAN Serial Data #2	II	—
10	0.35	RD/VT	1640	Battery Positive Voltage	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	BK/WH	2751	Signal Ground	II	—
13 - 18	—	—	—	Not Occupied	—	—

K157 Video Processing Control Module X3 (UVI/UV2)



4877749

Connector Part Information

Harness Type: Body
OEM Connector: 13509682
Service Connector: Not Available
Description: 2-Way F Coax Type (RD)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

K157 Video Processing Control Module X3 (UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	COAX	—	Combined Camera Video Signal #2	I	—
2	—	COAX	—	Camera Signal 2	I	—

K157 Video Processing Control Module X4 (UVI/UV2)

—

Connector Part Information

Harness Type: Body
OEM Connector: 13509683
Service Connector: Service by Harness - See Part Catalog
Description: F Coax Type

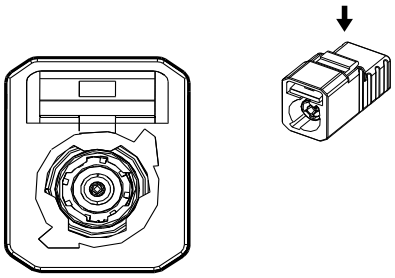
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K157 Video Processing Control Module X4 (UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	COAX	—	Left Side Vision Camera Video Signal	I	—
2	—	COAX	—	Right Side Vision Camera Video Signal	I	—

K157 Video Processing Control Module X5 (UVI/UV2)



4883187

Connector Part Information

Harness Type: Body COAX
OEM Connector: 13598487
Service Connector: Service by Cable Assembly — See Part Catalog
Description: F Coax Type

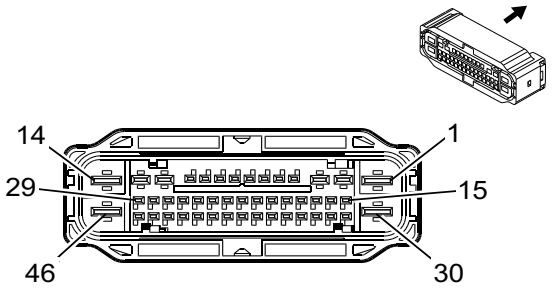
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

K157 Video Processing Control Module X5 (UVI/UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Front Vision Camera #1 Signal	I	—

K160 Brake System Control Module



4162046

Connector Part Information

Harness Type: Body
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 4.8 CTS Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332900	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332900	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19333088	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19333088	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19370818	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19370818	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K160 Brake System Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK	150	Ground	II	—
2	2.5	WH	2001	Park Brake Motor Apply Left Rear Control	III	—
3	2.5	GY/BK	4369	Park Brake Motor Low Reference Left Rear	III	—
4	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	I	—
5	0.5	GY	830	Wheel Speed Sensor Signal Left Front	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	—
10	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	I	—
11	0.5	YE	872	Wheel Speed Sensor Signal Right Front	I	—

K160 Brake System Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
12	2.5	GN/VT	1988	Park Brake Motor Apply Right Rear Control	III	—
13	2.5	GY	4368	Park Brake Motor Low Reference Right Rear	III	—
14	6	RD/YE	442	Battery Positive Voltage	II	—
15	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	I	—
16	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	I	—
17	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
18	—	—	—	Not Occupied	—	—
19	0.35	GN/GY	817	Vehicle Speed Signal	I	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	GN/YE	2731	Local Interconnect Network Bus 31	I	—
24	—	—	—	Not Occupied	—	—
25	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
26	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
27	0.35	VT/YE	5985	Accessory Wakeup Serial Data	I	—
28	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	I	—
29	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	I	—
30	6	BK	2250	Ground	II	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
34	—	—	—	Not Occupied	—	—
35	0.35	GN/BU	2733	Local Interconnect Network Bus 33	I	—
36	1	WH/BK	2223	Trailer Brake Control Signal	IV	—
37	0.5	YE/BK	2224	Trailer Brake Enable Signal	I	—
38	0.5	GN/GY	333	Brake Fluid Level Sensor Signal	I	—
39	0.5	WH	1612	Brake Lining Wear Sensor Signal Left Front	I	—
40	—	—	—	Not Occupied	—	—
41	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
42	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
43	—	—	—	Not Occupied	—	—
44	0.5	GN/YE	1616	Brake Lining Wear Sensor Signal Rear	I	—
45	—	—	—	Not Occupied	—	—
46	6	RD/VT	1640	Battery Positive Voltage	II	—

K166L Multifunction LED Control Module - Left Headlamp (GFD)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K166L Multifunction LED Control Module - Left Headlamp (GFD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7538	Left Front DRL Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BK	—	—	I	—
8	—	BK	—	—	I	—
9	—	BK	—	—	I	—
10	—	BK	150	Ground	I	—
11	—	BK	2227	Left Headlamp Control	I	—
12	—	BK	711	Left Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	—	—	I	—
17	—	BK	3204	Left Headlamp Bulb Outage Signal	I	—
18	—	BK	712	Left Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—

K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

—

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7538	Left Front DRL Control	I	—
2	—	BK	1314	Left Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BU	—	—	I	—
8	—	GY	—	—	I	—
9	—	BK	—	—	I	—
11	—	BK	2227	Left Headlamp Control	I	—
12	—	BK	711	Left Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	—	—	I	—
17	—	BK	709	Left Park Lamp Control	I	—
18	—	BK	712	Left Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—
21	—	BK	—	—	I	—
22	—	BK	—	—	I	—
23	—	BK	—	—	I	—
24	—	BK	150	Ground	I	—
25	—	BK	—	—	I	—
26	—	BK	—	—	I	—
27	—	BK	—	—	I	—
29	—	BK	—	—	I	—
31	—	BK	—	—	I	—

K166R Multifunction LED Control Module - Right Headlamp (GFD)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K166R Multifunction LED Control Module - Right Headlamp (GFD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7539	Right Front DRL Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BK	—	—	I	—
8	—	BK	—	—	I	—
9	—	BK	—	—	I	—
10	—	BK	250	Ground	I	—
11	—	BK	2226	Right Headlamp Control	I	—
12	—	BK	311	Right Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	—	—	I	—
17	—	BK	3203	Right Headlamp Bulb Outage Signal	I	—
18	—	BK	312	Right Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—

K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way

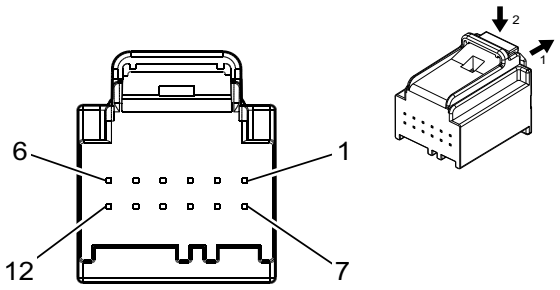
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	7539	Right Front DRL Control	I	—
2	—	BK	1315	Right Front Turn Signal Lamp Control	I	—
3	—	BK	—	—	I	—
4	—	BK	—	—	I	—
5	—	BK	—	—	I	—
6	—	BK	—	—	I	—
7	—	BK	—	—	I	—
8	—	BK	—	—	I	—
9	—	BK	—	—	I	—
11	—	BK	2226	Right Headlamp Control	I	—
12	—	BK	311	Right Headlamp High Beam Control	I	—
13	—	BK	—	—	I	—
14	—	BK	—	—	I	—
15	—	BK	—	—	I	—
16	—	BK	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	—
17	—	BK	309	Right Park Lamp Control	I	—
18	—	BK	312	Right Headlamp Low Beam Control	I	—
19	—	BK	—	—	I	—
20	—	BK	—	—	I	—
21	—	BK	—	—	I	—
22	—	BK	—	—	I	—
23	—	BK	—	—	I	—
24	—	BK	250	Ground	I	—
25	—	BK	—	—	I	—
26	—	BK	—	—	I	—
27	—	BK	—	—	I	—
29	—	BK	—	—	I	—
31	—	BK	—	—	I	—

K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))



5095565

Connector Part Information

Harness Type: Body
OEM Connector: 35130710
Service Connector: 13525987
Description: 12-Way F 0.64 Series, Sealed (BK)

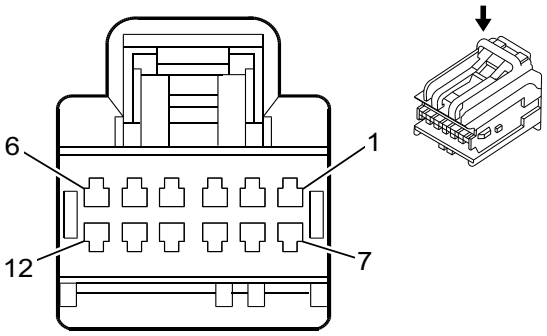
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/GN	3140	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN/BN	5852	Rear Park Assist LED Disable Signal	I	—
4	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.35	GY/GN	2555	Rear Park Assist Disable Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35 0.5	BK/WH BK/WH	1151 1151	Signal Ground Signal Ground	I I	(UD5/UD7) +BTM (UD5/UD7)-BTM
11 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)



1664569

Connector Part Information

Harness Type: Body
OEM Connector: 13950639
Service Connector: 19354838
Description: 12-Way F 0.64 Series, Sealed (BK)

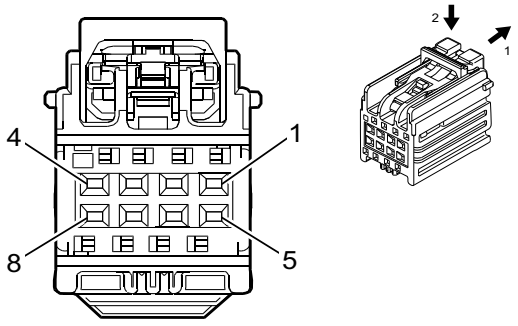
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300631	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/GN	3140	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN/BN	5852	Rear Park Assist LED Disable Signal	I	—
4	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.35	GY/GN	2555	Rear Park Assist Disable Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35 0.5	BK/WH BK/WH	1151 1151	Signal Ground Signal Ground	I I	(UD5/UD7) +BTM (UD5/UD7)-BTM
11 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X2 (UD5/UD7)



4280711

Connector Part Information

Harness Type: Body
OEM Connector: 33183559
Service Connector: 19355209
Description: 8-Way F YESC Kaizen Series (GY)

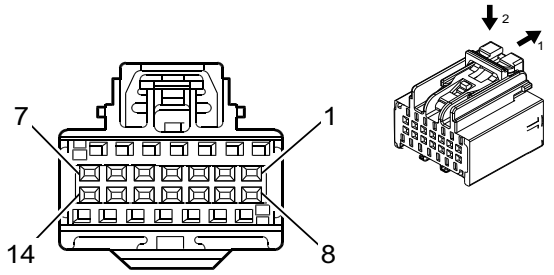
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Object Sensor Signal	I	—
3	0.5	YE	2375	Left Rear Corner Object Sensor Signal	I	—
4	0.5	BN/WH	2374	Object Sensor Control	I	—
5	0.5	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	—
6	0.5	YE/BU	2376	Left Rear Middle Object 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
OEM Connector: 35014564
Service Connector: 19354933
Description: 14-Way F 0.64 Kaizen Series (BU)

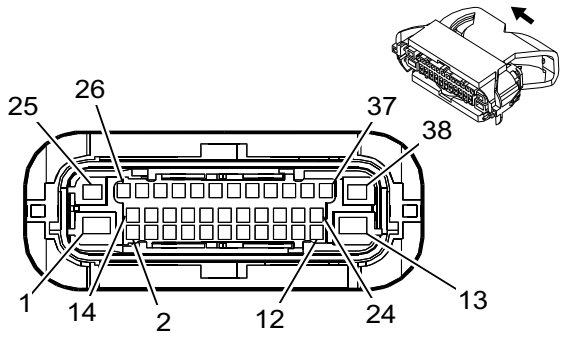
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575742	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

K182 Parking Assist Control Module X3 (UD5/UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	5213	Front Parking Left/Right/Mid Sensor	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	YE/GY	5216	Front Parking Left Mid Sensor	I	—
5	0.5	WH/GY	5217	Front Parking Right Corner Sensor	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK/BU	5214	Front Parking Sensor Low Reference	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT/WH	5215	Front Parking Left Corner Sensor	I	—
11	0.5	VT/GY	5218	Front Parking Right Mid Sensor	I	—
12 - 14	—	—	—	Not Occupied	—	—

K194 Pickup Box Endgate Control Module



3240111

Connector Part Information

Harness Type: Endgate
OEM Connector: 13924619
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

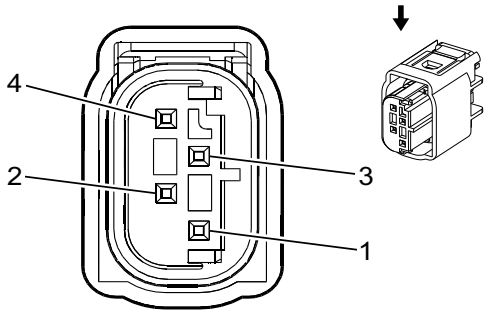
K194 Pickup Box Endgate Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1450	Ground	II	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.5	PK/BK	4668	Rear Closure Ajar Switch Signal 3	I	—
6	0.5	GY/VT	4678	Rear Closure Ajar Switch Signal 1	I	—
7	0.35	GN/BK	4659	Rear Closure Open	I	—
8	0.35	BU/BK	4665	Rear Closure Ajar Switch Signal 2	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	YE	1144	Endgate Release Switch Discrete Signal Exterior	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	GY	1198	Endgate Release Switch Analog Signal Interior	I	—
13	2.5	RD/GY	7040	Battery Positive Voltage	II	—
14	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	YE/RD	7734	Rear Closure Latch 2 Rachet Status	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	BN/RD	4683	Rear Closure Position Sensor Voltage Reference	I	—

K194 Pickup Box Endgate Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.35	BK/GN	4687	Rear Closure Position Sensor Low Reference	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	BN/YE	4686	Rear Closure Position Sensor Signal 2	I	—
22	0.5	BU/WH	4685	Rear Closure Position Sensor Signal 1	I	—
23	0.5	WH	7735	Rear Closure Latch 2 Pawl Status	I	—
24	0.5	VT	7736	Rear Closure Latch 2 Unlatch Status	I	—
25	1	BN/WH	4690	Rear Closure Open/Close Motor Close Control	III	—
26	0.35	OG	7733	Rear Closure Latch 2 Sector Status	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	PK	1499	Rear Closure Cinch Latch Motor 2 Cinch Control	I	—
32	—	—	—	Not Occupied	—	—
33	1	BU/GY	4682	Rear Closure Cinch Latch Motor Close Control	I	—
34	1	BN	4681	Rear Closure Cinch Latch Motor Open Control	I	—
35	0.5	GN	1577	Rear Closure Clutch Control	I	—
36	0.5	OG/WH	1590	Rear Closure Clutch Return	I	—
37	—	—	—	Not Occupied	—	—
38	1	WH	4689	Rear Closure Open/Close Motor Open Control	III	—

K214 Trailer Tire Pressure Indicator Module



2173574

Connector Part Information

Harness Type: Chassis
OEM Connector: 13679454
Service Connector: 13314098
Description: 4-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

K214 Trailer Tire Pressure Indicator Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	1840	Battery Positive Voltage	I	—
2	0.75	BK	1750	Ground	I	—
3	0.5	BU/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
4	0.5	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—

M4 Air Inlet Door Actuator

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Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M4 Air Inlet Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/BK	3173	Air Inlet Door Stepper Motor Control 1	I	—
2	—	GY/BU	7572	HVAC Motor Control	I	—
3	—	VT/GN	3174	Air Inlet Door Stepper Motor Control 2	I	—
4	—	YE/GN	3175	Air Inlet Door Stepper Motor Control 3	I	—
6	—	YE	3176	Air Inlet Door Stepper Motor Control 4	I	—

M6L Air Temperature Door Actuator - Left

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Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M6L Air Temperature Door Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN/VT	3169	Temp Door Stepper Motor Control 1	I	—
2	—	YE/	7572	HVAC Motor Control	I	—
3	—	BN/WH	3170	Temp Door Stepper Motor Control 2	I	—
4	—	BN/WH	3171	Temp Door Stepper Motor Control 3	I	—
6	—	WH	3172	Temp Door Stepper Motor Control 4	I	—

M6R Air Temperature Door Actuator - Right (CJ2)

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Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

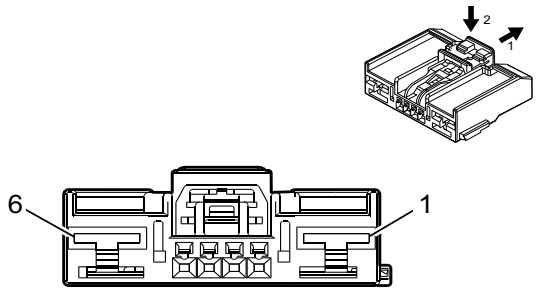
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M6R Air Temperature Door Actuator - Right (CJ2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY	3181	Temp Door Stepper Motor Passenger Control 1	I	—
2	—	BK/YE	7572	HVAC Motor Control	I	—
3	—	BN/GN	3182	Temp Door Stepper Motor Passenger Control 2	I	—
4	—	BN	3183	Temp Door Stepper Motor Passenger Control 3	I	—
6	—	VT/GN	3184	Temp Door Stepper Motor Passenger Control 4	I	—

M8 Blower Motor



4650258

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33395154
Service Connector: 19356432
Description: 6-Way F 0.64, 6.3 Series (BK)

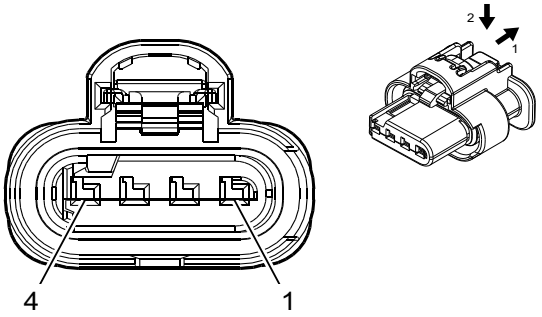
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M8 Blower Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/VT	542	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	—

M26 Front Axle Engagement Actuator (NP0/NQH)



4210809

Connector Part Information

Harness Type: Transfer Case
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M26 Front Axle Engagement Actuator (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GY/BK	1570	Front Axle Actuator Control	I	—
3	0.5	YE/WH	1695	Four Wheel Drive Wheel Lock Indicator Control	I	—
4	0.5	BK	4450	Ground	I	—

M37 Mode Door Actuator

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Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

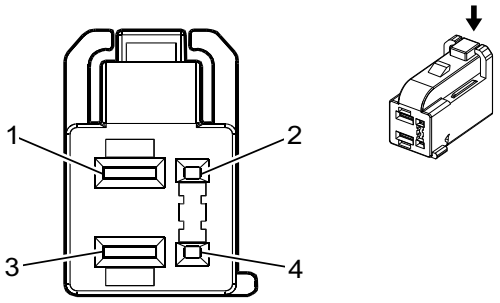
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M37 Mode Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY	3165	Mode Door Stepper Motor Control 1	I	—
2	—	BN/	7572	HVAC Motor Control	I	—
3	—	BN/GN	3166	Mode Door Stepper Motor Control 2	I	—
4	—	BU/BN	3167	Mode Door Stepper Motor Control 3	I	—
6	—	GY	3168	Mode Door Stepper Motor Control 4	I	—

M50D Seat Front Vertical Motor - Driver



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

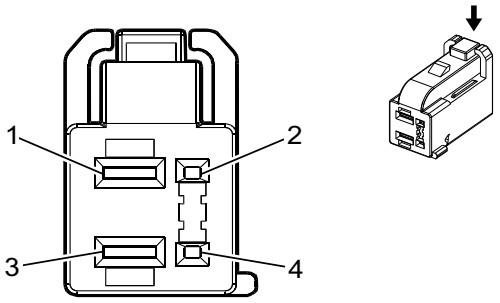
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M50D Seat Front Vertical Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	—
2	0.5	WH/RD	3298	Memory Sensor High Reference 2	II	—
3	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control	I	—
4	0.5	BN/WH	557	Memory Seat Front Vertical Motor Position Sensor Signal	II	—

M50P Seat Front Vertical Motor - Passenger (A7K)



3683652

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

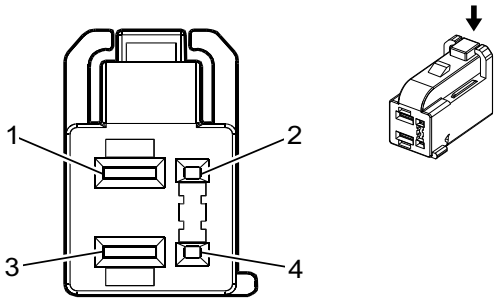
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M50P Seat Front Vertical Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/VT	297	Passenger Power Seat Front Vertical Motor Up Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN/BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—
4	—	—	—	Not Occupied	—	—

M51D Seat Horizontal Motor - Driver



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

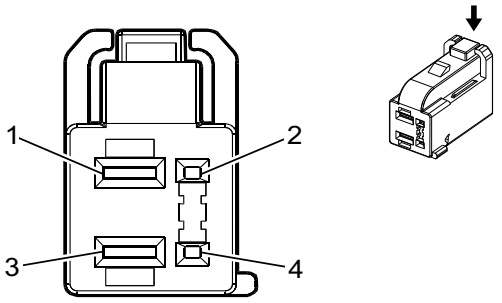
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M51D Seat Horizontal Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—
2	0.5	GN	569	Memory Seat Horizontal Motor Position Sensor Signal	II	—
3	1.5	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	—
4	0.5	WH/RD	3298	Memory Sensor High Reference 2	II	—

M51P Seat Horizontal Motor - Passenger (A7K)



3683652

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

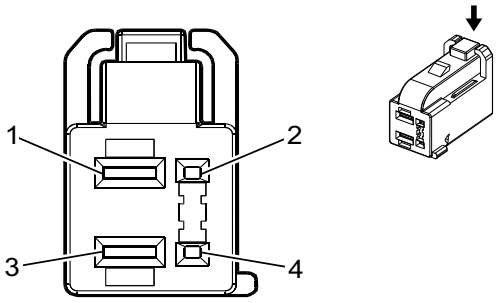
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M51P Seat Horizontal Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE/WH	296	Passenger Power Seat Horizontal Motor Forward Control	I	—
4	—	—	—	Not Occupied	—	—

M55D Seat Rear Vertical Motor - Driver



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

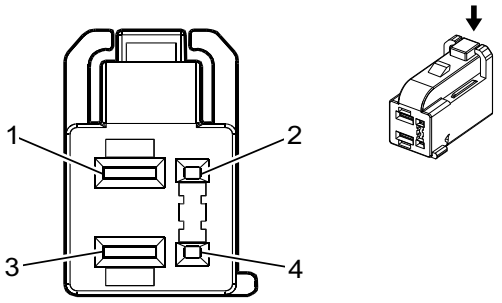
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M55D Seat Rear Vertical Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
2	0.5	YE/BU	568	Memory Seat Rear Vertical Motor Position Sensor Signal	II	—
3	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
4	0.5	WH/RD	3298	Memory Sensor High Reference 2	II	—

M55P Seat Rear Vertical Motor - Passenger (A7K)



3683652

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

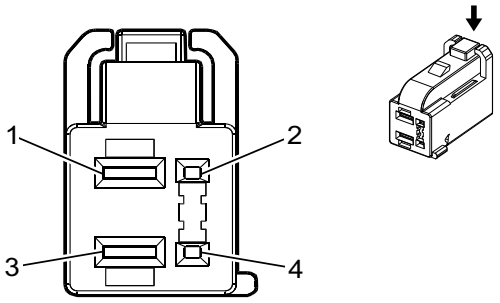
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M55P Seat Rear Vertical Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M56D Seat Recline Motor - Driver



3683652

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

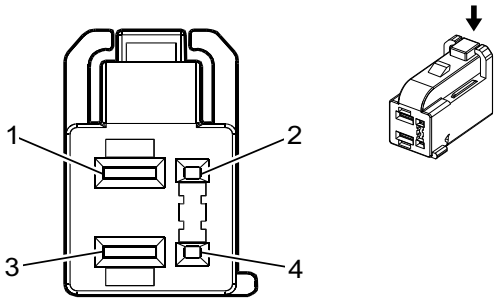
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M56D Seat Recline Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	—
2	0.5	WH/RD	3298	Memory Sensor High Reference 2	II	—
3	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	—
4	0.5	WH/BK	570	Driver Memory Seat Recline Motor Position Sensor Signal	II	—

M56P Seat Recline Motor - Passenger (A7K)



3683652

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

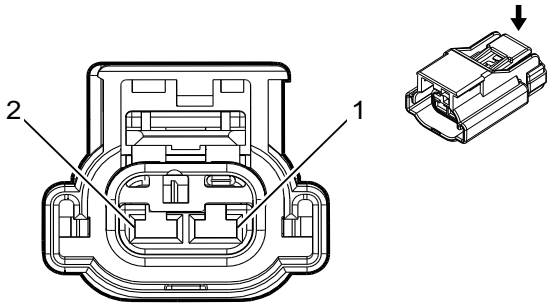
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M56P Seat Recline Motor - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	76	Passenger Power Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M63 Sliding Rear Window Motor (A48)



2716333

Connector Part Information

Harness Type: Body
OEM Connector: 13863838
Service Connector: 19301518
Description: 2-Way F 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M63 Sliding Rear Window Motor (A48)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE/BU	5442	Endgate Window Regulator Up Signal	I	—
2	2.5	GY/GN	5441	Endgate Window Regulator Down Signal	I	—

M64 Starter Motor X2

—

Connector Part Information

Harness Type: Starter Motor
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

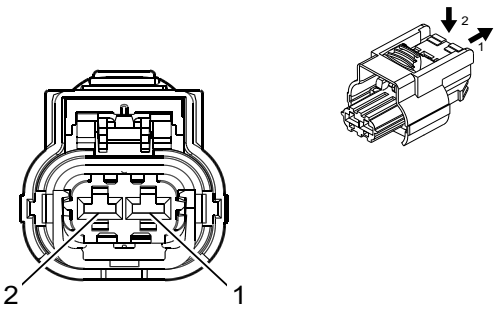
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

M64 Starter Motor X2

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

M64 Starter Motor X1 (L3B)



4992524

Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

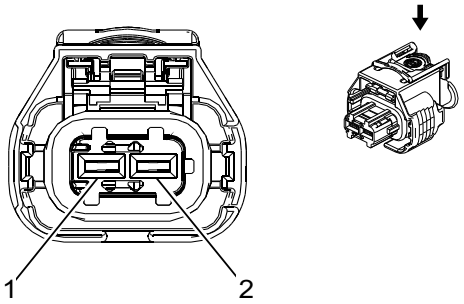
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M64 Starter Motor X1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	L3B+KL9
2	2.5	YE/GN	4358	Starter Pinion Solenoid Voltage	I	L3B+KL9

M64 Starter Motor X1 (L84/L87)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

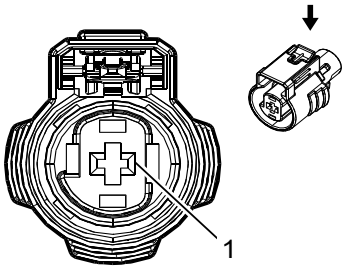
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M64 Starter Motor 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 Motor X1 (LM2/LV3/L82)



2717134

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M64 Starter Motor X1 (LM2/LV3/L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M69 Sunroof Motor (CF5)

—

Connector Part Information

Harness Type: Sunroof Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F

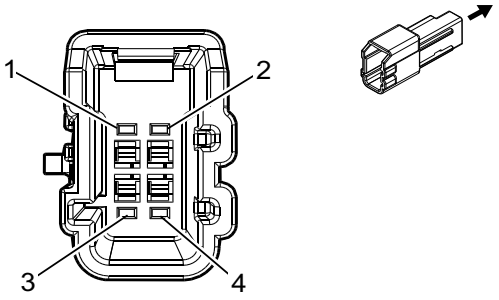
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M69 Sunroof Motor (CF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD/GN	3140	Battery Positive Voltage	I	—
2	—	BK	1050	Ground	I	—
3	—	BK/GY	128	Sunroof Switch Low Reference	I	—
5	—	GN/BN	3031	Sunroof Vent Switch Signal	I	—
7	—	BU/VT	6132	Local Interconnect Network Serial Data Bus 1	I	—
8	—	WH/GN	5027	Sunroof Switch Data 1 Signal	I	—

M73A Seat Blower Motor - Driver Back (KQV)



4293695

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

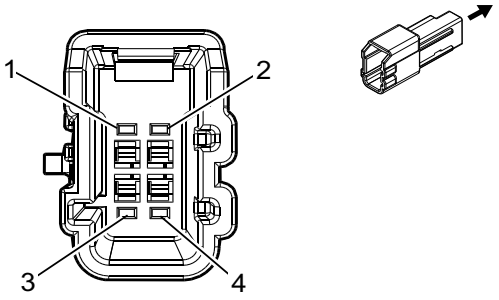
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M73A Seat Blower Motor - Driver Back (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GN/VT	5906	Driver Seat Vent Motor Control 1	I	—
3	0.75	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73B Seat Blower Motor - Passenger Back (KQV)



4293695

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

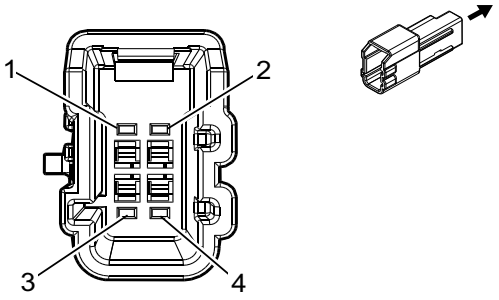
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M73B Seat Blower Motor - Passenger Back (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	WH	5908	Passenger Seat Vent Motor Control 1	I	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73C Seat Blower Motor - Driver Cushion (KQV)



4293695

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

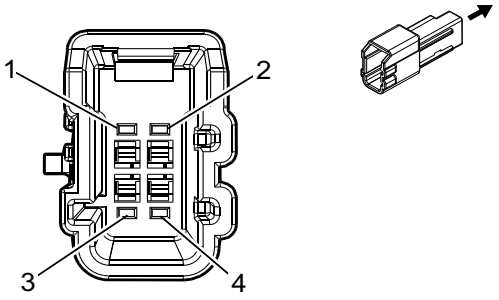
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M73C Seat Blower Motor - Driver Cushion (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GN/VT	5906	Driver Seat Vent Motor Control 1	I	—
3	0.75	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73D Seat Blower Motor - Passenger Cushion (KQV)



4293695

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

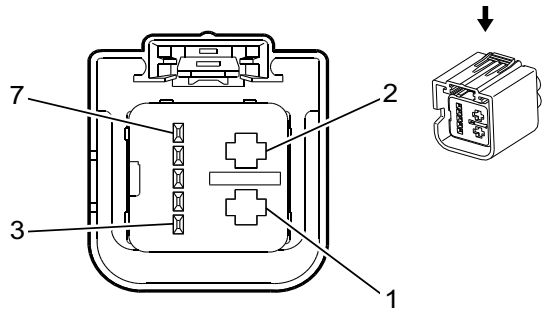
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M73D Seat Blower Motor - Passenger Cushion (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/WH	4939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	WH	5908	Passenger Seat Vent Motor Control 1	I	—
3	0.75	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M74D Window Motor - Driver (AXG)



2282932

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

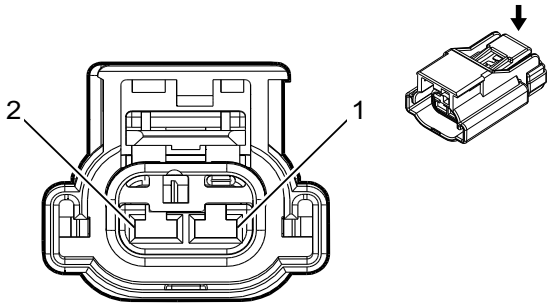
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M74D Window Motor - Driver (AXG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	I	—
2	2.5	RD/BU	1842	Battery Positive Voltage	I	—
3	0.35	GN/WH	3379	Power Window Switch Driver Up Signal	II	—
4	0.5	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	—
5	0.35	GN	3381	Power Window Switch Driver Express Signal	II	—
6	0.35	GY	745	Left Front Door Ajar Switch Signal	II	A6Q
	0.5	PK	745	Left Front Door Ajar Switch Signal	II	AXG
7	0.35	GY	3380	Power Window Switch Driver Down Signal	II	A6Q
	0.5	GY	3380	Power Window Switch Driver Down Signal	II	AXG

M74LR Window Motor - Left Rear (AEQ)



2716333

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

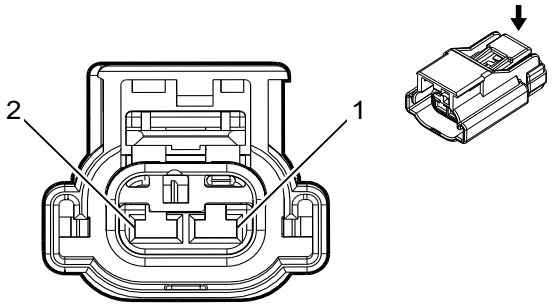
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M74LR Window Motor - Left Rear (AEQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BU/VT	668	Power Window Motor Left Rear Up Control	I	—
2	2	YE/BU	669	Power Window Motor Left Rear Down Control	I	—

M74P Window Motor - Passenger (AED)



2716333

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

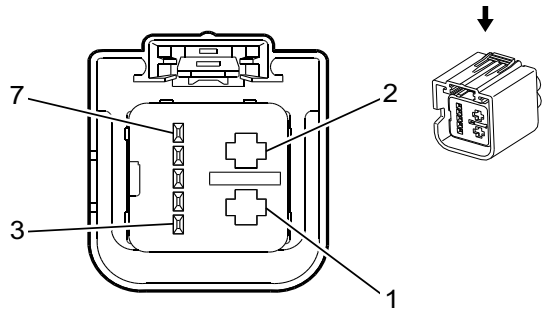
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M74P Window Motor - Passenger (AED)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN/GY	3387	Power Window Motor Passenger Up Control	I	AED
	2	GN/GY	3387	Power Window Motor Passenger Up Control	I	EXTENDED/ CREW CAB
	1.5	GN/GY	3387	Power Window Motor Passenger Up Control	I	REGULAR CAB
2	2	YE/BU	3388	Power Window Motor Passenger Down Control	I	—

M74P Window Motor - Passenger (AEF)



2282932

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

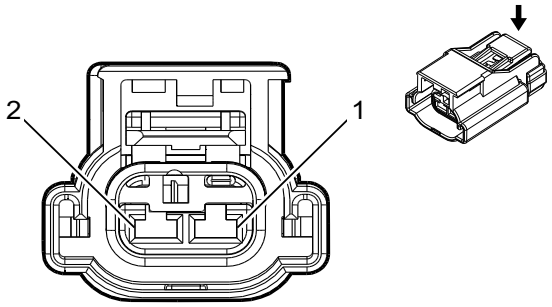
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M74P Window Motor - Passenger (AEF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1250	Ground	I	—
2	2.5	RD/WH	1340	Battery Positive Voltage	I	—
3	0.35	YE/BK	3384	Power Window Switch Passenger Up Signal	II	—
4	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	—
5	0.35	VT/GY	3386	Power Window Switch Passenger Express Signal	II	—
6	0.5	GY	746	Right Front Door Ajar Switch Signal	II	—
7	0.5	BN/YE	3385	Power Window Switch Passenger Down Signal	II	—

M74RR Window Motor - Right Rear (AEQ)



2716333

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

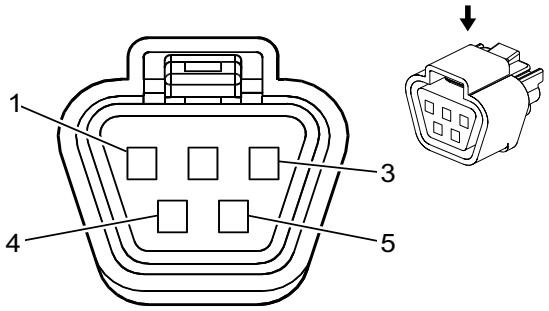
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M74RR Window Motor - Right Rear (AEQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BU/GY	670	Power Window Motor Right Rear Up Control	I	—
2	2	GN/BK	671	Power Window Motor Right Rear Down Control	I	—

M75 Windshield Wiper Motor



1715213

Connector Part Information

Harness Type: Body
OEM Connector: 15316488
Service Connector: 13587179
Description: 5-Way F 090 Series, Sealed (BK)

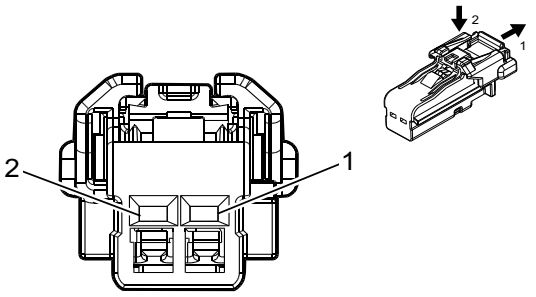
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not 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	I	—
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	I	—
5	2	BK	150	Ground	I	—

M93 Key Capture Solenoid Actuator (-BTM)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M93 Key Capture Solenoid Actuator (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/GY	1630	Steering Column Key Cylinder Lock Solenoid Control	I	—
2	0.35	BK	1850	Ground	I	—

M95L Assist Step - Left (BRS)

—

Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M95L Assist Step - Left (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG/	7471	Articulating Running Boards Motor Left Control Extend	I	—
2	—	OG/WH	7468	Running Boards Motor Hall Sensor Left 5V Reference	I	—
3	—	YE/	7472	Articulating Running Boards Motor Left Control Retract	I	—
4	—	YE/WH	7467	Running Boards Motor Hall Sensor Left Signal	I	—
7	—	BN/WH	7466	Running Boards Motor Hall Sensor Left Low Reference	I	—

M95R Assist Step - Right (BRS)

—

Connector Part Information

Harness Type: Right Step Assist Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

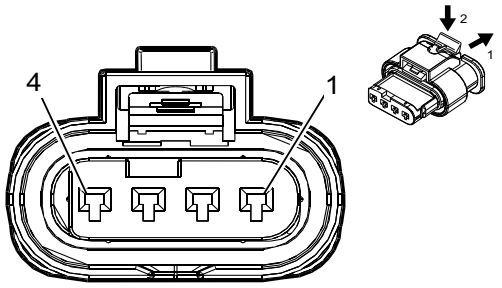
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M95R Assist Step - Right (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG/	7470	Articulating Running Boards Motor Right Control Extend	I	—
2	—	OG/WH	7464	Running Boards Motor Hall Sensor Right 5V Reference	I	—
3	—	YE/	7469	Articulating Running Boards Motor Right Control Retract	I	—
4	—	YE/WH	7465	Running Boards Motor Hall Sensor Right Signal	I	—
7	—	BN/WH	7463	Running Boards Motor Hall Sensor Right Low Reference	I	—

M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)



4256124

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series (BK)

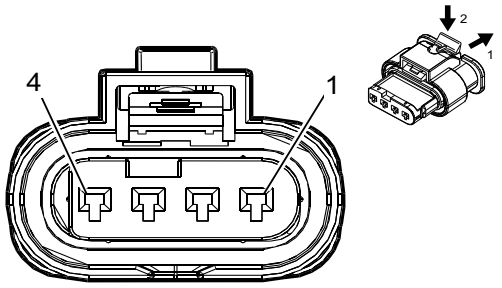
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT/BU	5705	Powertrain Main Relay Fused Control 6	I	—
2	—	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	I	—
3	—	—	—	Not Occupied	—	—
4	—	BK	4450	Ground	I	—

M96B Active Grille Air Shutter 2 Actuator (WMI)



4256124

Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series (BK)

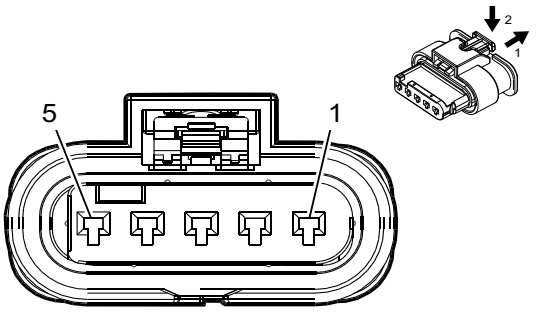
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

M96B Active Grille Air Shutter 2 Actuator (WMI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT/BU	5705	Powertrain Main Relay Fused Control 6	I	—
2	—	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	I	—
3	—	BK	4450	Ground	I	—
4	—	BK	4450	Ground	I	—

M103 Turbocharger Vane Position Actuator (LM2)



3338689

Connector Part Information

Harness Type: Engine
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed (BK)

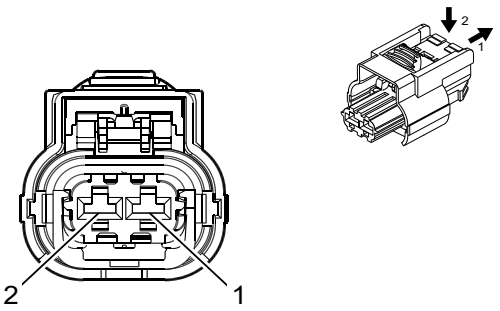
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M103 Turbocharger Vane Position Actuator (LM2)

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	Variable Nozzle Turbo Position Sensor Signal	I	—
3	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—
4	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	—
5	0.75	GY/BK	1330	Variable Geometry Turbocharger Position Sensor Motor Close Control	I	—

M104L Park Brake Actuator - Left



4992524

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13522815
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

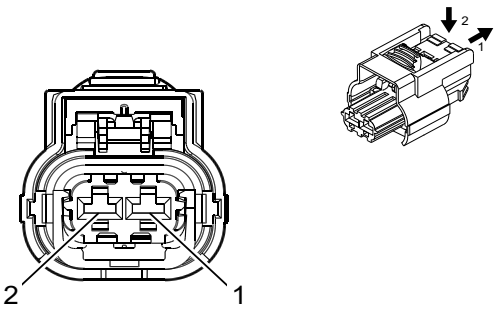
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M104L Park Brake Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH	2001	Park Brake Motor Apply Left Rear Control	I	—
2	2.5	OG	4369	Park Brake Motor Low Reference Left Rear	I	—

M104R Park Brake Actuator - Right



4992524

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13522815
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

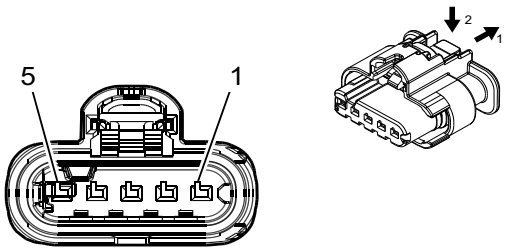
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M104R Park Brake Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	OG	1988	Park Brake Motor Apply Right Rear Control	I	—
2	2.5	WH	4368	Park Brake Motor Low Reference Right Rear	I	—

M106 Exhaust Flow Control Valve Actuator (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

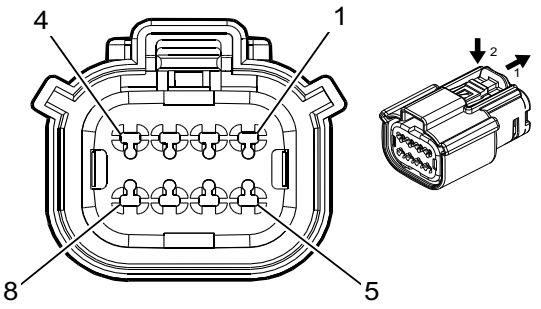
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M106 Exhaust Flow Control Valve Actuator (LM2)

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/GN	4305	Exhaust Flapper Valve Control 1	I	—
3	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	—
4	0.75	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
5	0.75	YE/BN	1420	Exhaust Restrictor Motor Open Control	I	—

M125 Pickup Box Endgate Power Assist Actuator



4846407

Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

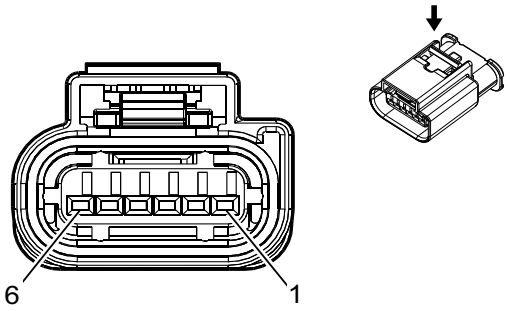
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M125 Pickup Box Endgate Power Assist Actuator

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	OG/WH	1590	Rear Closure Clutch 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	0.35	BN/YE	4686	Rear Closure Position Sensor Signal 2	I	—
7	0.35	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
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

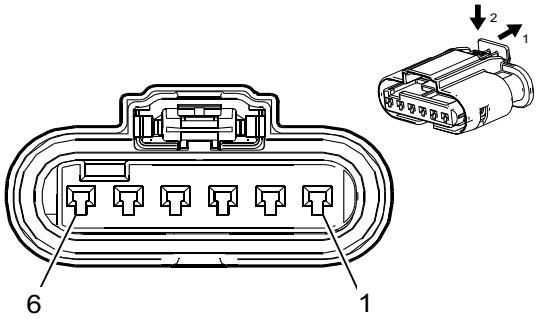
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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	Turbo Charger 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	Turbo Charger Wastegate Motor Close Control	I	—
5	0.75	WH/BN	2591	Turbo Charger Wastegate Motor Open Control	I	—
6	—	—	—	Not Occupied	—	—

M129A Intake Camshaft Profile Actuator 1 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

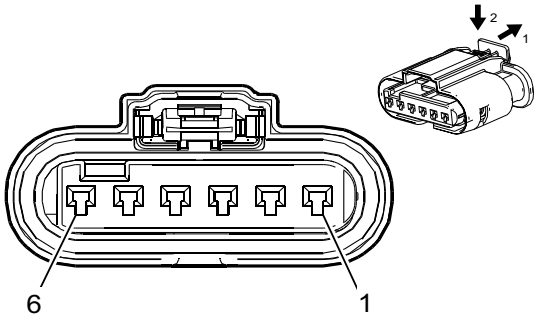
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Stepper 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 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
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

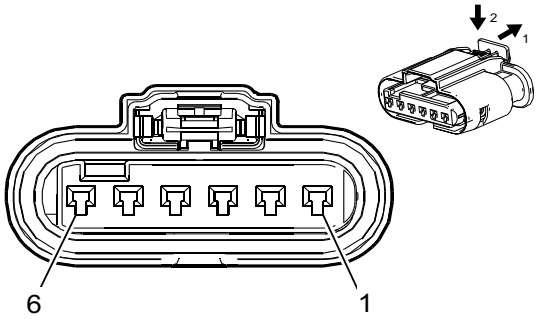
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M129B Intake Camshaft Profile Actuator 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3584	Camshaft Stepper A Control	I	—
2	0.5	GN/WH	3592	Camshaft Stepper 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 4	I	—
6	0.5	GN	3585	Camshaft Stepper B Control	I	—

M129C Intake Camshaft Profile Actuator 3 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

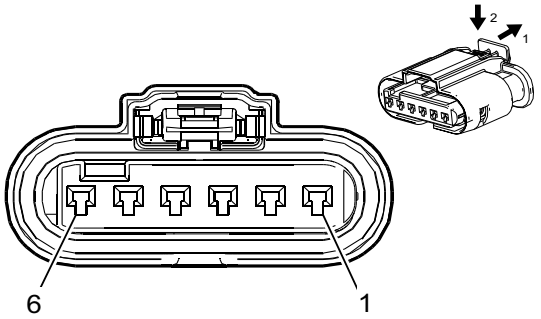
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M129C Intake Camshaft Profile Actuator 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BU	3587	Camshaft Stepper D Control	I	—
2	0.5	WH	924	—	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 4	I	—
6	0.5	GY	3586	Camshaft Stepper C Control	I	—

M129D Intake Camshaft Profile Actuator 4 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

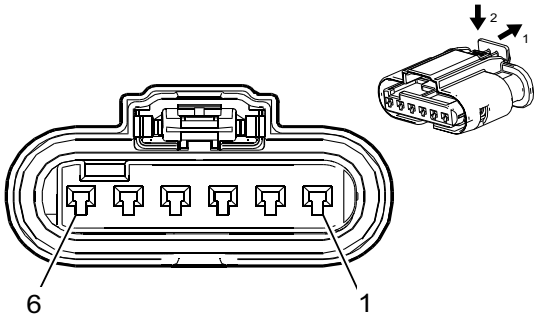
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M129D Intake Camshaft Profile Actuator 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/GN	927	Step Cam A Control	I	—
2	0.5	BU/BK	928	Camshaft Stepper Position Sensor #4 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 4	I	—
6	0.5	BU	926	Step Cam B Control	I	—

M130B Exhaust Camshaft Profile Actuator 2 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

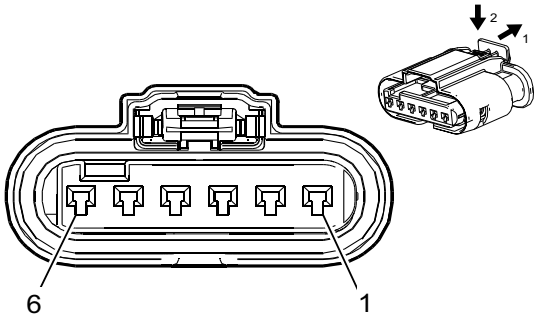
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M130B Exhaust Camshaft Profile Actuator 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	6265	Camshaft CAM W Signal	I	—
2	0.5	BU	932	Camshaft Stepper 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 4	I	—
6	0.5	VT/BK	6264	Camshaft CAM X Signal	I	—

M130C Exhaust Camshaft Profile Actuator 3 (L3B)



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

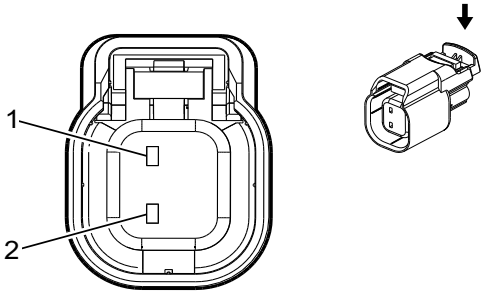
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M130C Exhaust Camshaft Profile Actuator 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BN	6262	Camshaft CAM Z Signal	I	—
2	0.5	GY/BN	933	Camshaft Stepper 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 4	I	—
6	0.5	GN/BN	6261	Camshaft CAM Z Control	I	—

P12 Horn



2792100

Connector Part Information

Harness Type: Body
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

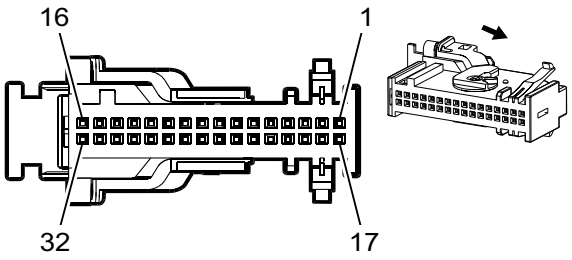
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P12 Horn

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	—
2	0.75	BN/GY	29	Horn Control	I	—

P16 Instrument Cluster X1



627214

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12198036
Service Connector: 88988405
Description: 32-Way F 0.64 Micro-Quadlock Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579993	J-35616-64B (LT BU)	J-38125-12A	144969-1	Lear 25	E	2

P16 Instrument Cluster X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/BU	7216	Ethernet Bus 7 (-)	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.35	RD/GY	2840	Battery Positive Voltage	I	—
8	0.35	VT/BK	1639	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/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
14	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	BN/WH	419	Check Engine Indicator Control	I	—
17	0.35	GY/BU	7217	Ethernet Bus 7 (+)	I	—
18	—	—	—	Not Occupied	—	—
19	0.35	BK/WH	1851	Signal Ground	I	—
20	0.35	GN/BK	3894	Local Interconnect Network Serial Data Bus 12	I	—
21 - 22	—	—	—	Not Occupied	—	—
23	0.35	WH/BU	5986	Serial Data Communication Enable	I	—
24	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
25 - 28	—	—	—	Not Occupied	—	—

P16 Instrument Cluster X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
30	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—
31	—	—	—	Not Occupied	—	—
32	0.35	GN/BN	507	Wait To Start Indicator Control	I	—

P16 Instrument Cluster X2 (UV6)

—

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13585112
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type

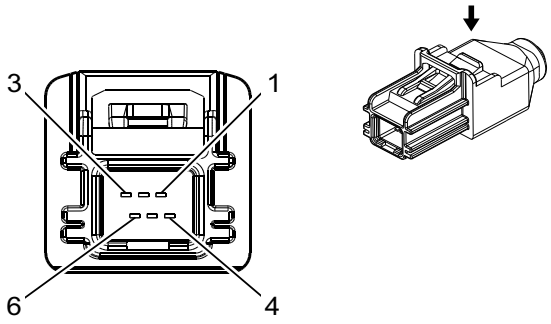
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

P16 Instrument Cluster X2 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
GY	—	—	LVDS	LVDS Cable	I	—

P17 Info Display Module X2



4806625

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13522802
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M HSAL-2 Series (BK)

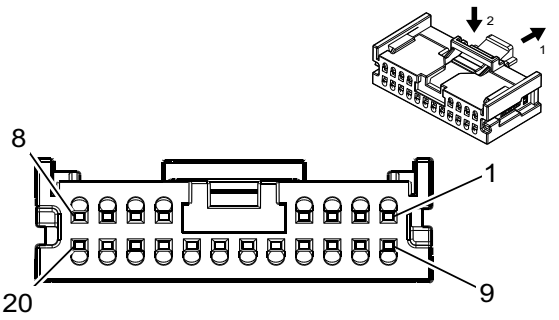
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

P17 Info Display Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
BK	—	—	LVDS	LVDS Cable	I	—

P17 Info Display Module X1 (UIR)



4231339

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33167777
Service Connector: 13596105
Description: 20-Way F Mini 50 Series (BK)

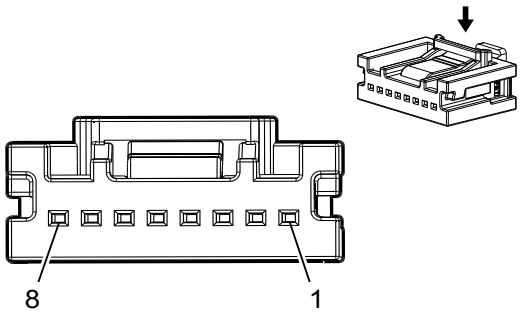
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19333221	EL-35616-58 (BK)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

P17 Info Display Module X1 (UIR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/RD	2807	Radio Keypad Voltage Reference	I	—
2	0.35	GY/BU	2803	Radio Display Touch Interrupt Request Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BU	4315	Radio Volume Up Signal	I	—
5	0.35	GY/BN	4314	Radio Volume Down Signal	I	—
6	0.35	BN/WH	2809	Radio Keypad Power Signal	I	—
7	0.35	VT/WH	2810	Radio Keypad Button Signal	I	—
8	0.35	BU/GY	2808	Radio Keypad Dimming Control	I	—
9	0.35	BU/GN	2813	Radio Display Backlight Dimming Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BK/GN	2804	Radio Display Backlight Low Reference	I	—
12	0.35	BU/RD	2807	Radio Keypad Voltage Reference	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	BU	4315	Radio Volume Up Signal	I	—
15	0.35	GY/BN	4314	Radio Volume Down Signal	I	—
16	0.35	BN/WH	2809	Radio Keypad Power Signal	I	—
17	0.35	VT/WH	2810	Radio Keypad Button Signal	I	—
18	0.35	BU/GY	2808	Radio Keypad Dimming Control	I	—
19	0.35	GY/VT	3363	Navigation Display Dimming Control	I	—
20	0.35	BK/YE	2806	Radio Keypad Low Reference	I	—

P17 Info Display Module X1 (UIJ/UIK)



4017639

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33227522
Service Connector: 19354223
Description: 8-Way F Mini 50 Series (BK)

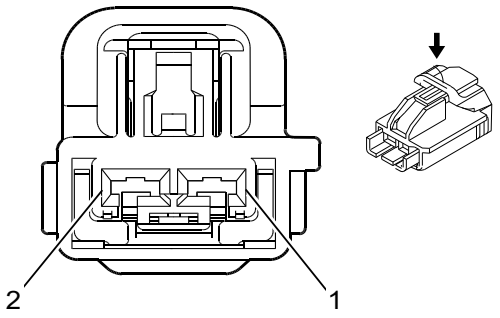
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	EL-35616-58 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P17 Info Display Module X1 (UIJ/UIK)

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	2751	Signal Ground	I	—

P19AC Speaker - Subwoofer (UQA)



1803142

Connector Part Information

Harness Type: Body
OEM Connector: 10846819
Service Connector: 19367562
Description: 2-Way F YESC Kaizen Series (L-GY)

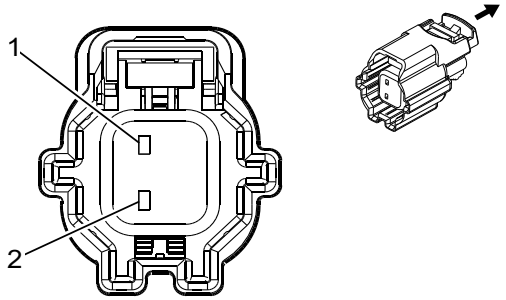
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19AC Speaker - Subwoofer (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN/BK	1794	Left/Rear Subwoofer Speaker (-) Low Reference	I	—
2	2.5	BU/GY	346	Left/Rear Subwoofer Speaker Control (+)	I	—

P19AG Speaker - Left Front Door



4223204

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

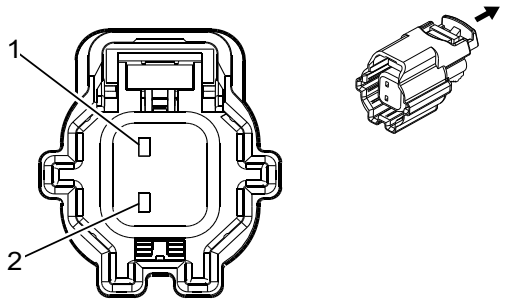
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19AG Speaker - Left Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	118	Left Front Speaker Signal (-) 1	I	—
2	0.75	BU	201	Left Front Speaker Control (+) 1	I	—

P19AH Speaker - Right Front Door (U95/UQF/UQA)



4223204

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

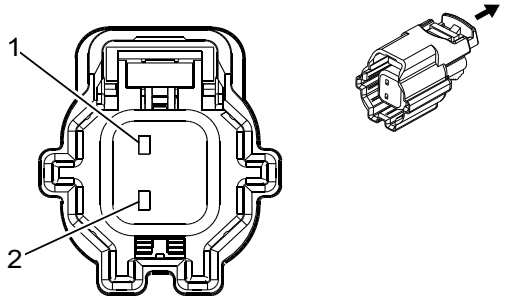
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19AH Speaker - Right Front Door (U95/UQF/UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	117	Right Front Speaker Signal (-) 1	I	—
2	0.75	YE	200	Right Front Speaker Control (+) 1	I	—

P19AL Speaker - Left Rear Door (UQA/UQF)



4223204

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

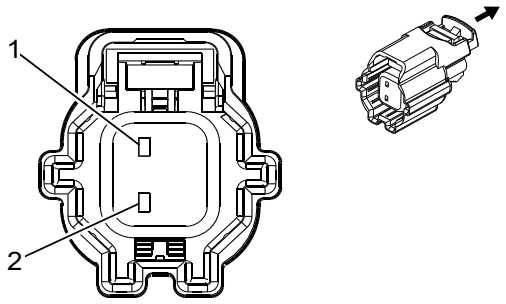
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19AL Speaker - Left Rear Door (UQA/UQF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/BK	116	Left Rear Speaker Signal (-)	I	—
2	0.5	GN	199	Left Rear Speaker Control (+)	I	—

P19AM Speaker - Right Rear Door (UQA/UQF)



4223204

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

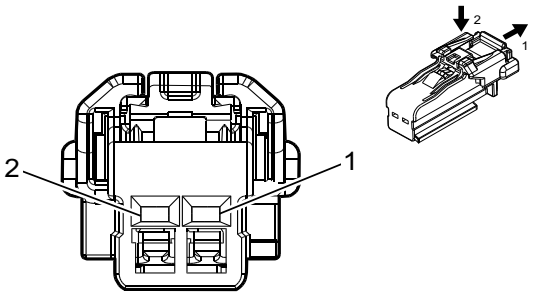
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19AM Speaker - Right Rear Door (UQA/UQF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/BK	115	Right Rear Speaker Signal (-)	I	—
2	0.5	WH	46	Right Rear Speaker Control (+)	I	—

P19J Speaker - Left Instrument Panel (UQA)



4373379

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35034269
Service Connector: 19369632
Description: 2-Way F 1.2 Series (GY)

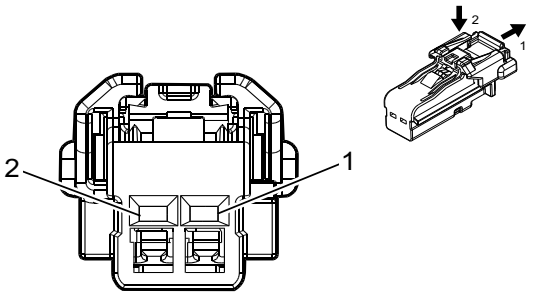
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19J Speaker - Left Instrument Panel (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/BN	1957	Left Front Midrange Speaker (-) Low Reference	I	—
2	0.75	BU/VT	1857	Left Front Midrange Speaker Control (+)	I	—

P19J Speaker - Left Instrument Panel (UQF/U95)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

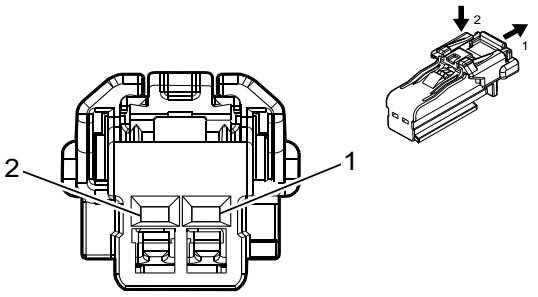
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19J Speaker - Left Instrument Panel (UQF/U95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	118	Left Front Speaker Signal (-) 1	I	—
2	0.75	BU	201	Left Front Speaker Control (+) 1	I	—

P19W Speaker - Right Instrument Panel (UQA)



4373379

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35034269
Service Connector: 19369632
Description: 2-Way F 1.2 Series (GY)

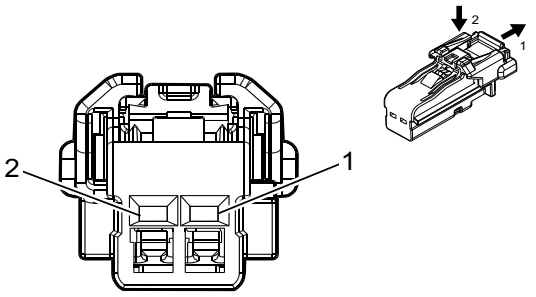
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19W Speaker - Right Instrument Panel (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BK	1953	Right Front Midrange Speaker (-) Low Reference	I	—
2	0.75	WH/YE	1853	Right Front Midrange Speaker Control (+)	I	—

P19W Speaker - Right Instrument Panel (UQF/U95)



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

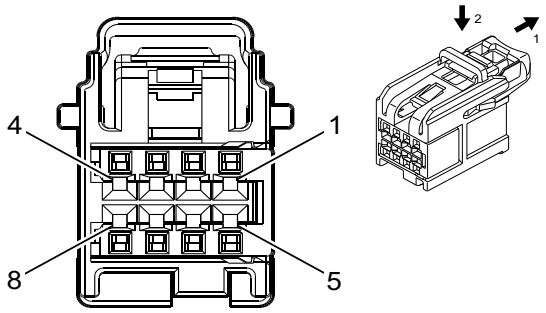
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P19W Speaker - Right Instrument Panel (UQF/U95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	117	Right Front Speaker Signal (-) 1	I	—
2	0.75	YE	200	Right Front Speaker Control (+) 1	I	—

P29 Head-Up Display X1 (UV6)



4935776

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series (BK)

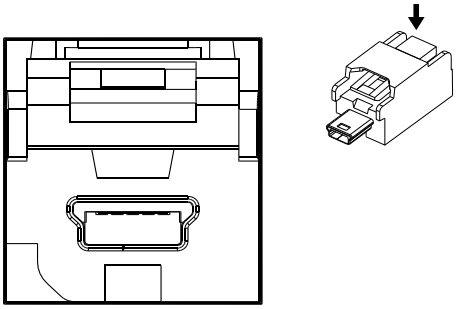
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P29 Head-Up Display X1 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/BK	3894	Local Interconnect Network Serial Data Bus 12	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	YE/WH	622	Head Up Display Switch Signal	I	—
4	0.35	BK/WH	1851	Signal Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	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
OEM Connector: 13584751
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type (GY)

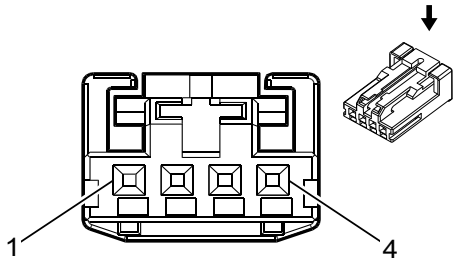
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

P29 Head-Up Display X2 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
GY	—	—	LVDS	LVDS Cable	I	—
USB	—	—	—	Not Occupied	—	—

P43 Collision Alert Indicators ((UEU/UHX)-UV6)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

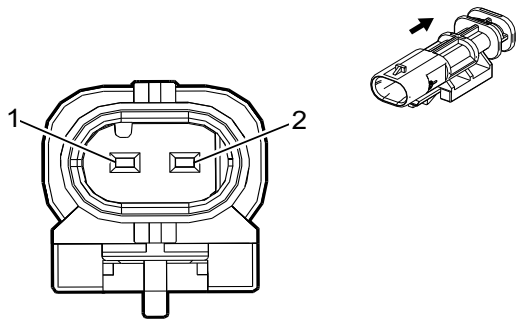
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P43 Collision Alert Indicators ((UEU/UHX)-UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BK	1639	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	1851	Signal Ground	I	—

P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)



2474755

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

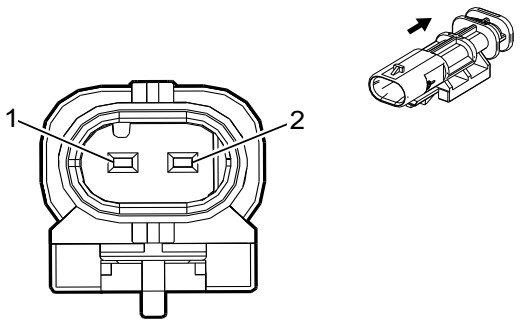
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.5	YE/BN	3037	Left Rear Haptic Seat Motor Control	I	—

P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)



2474755

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

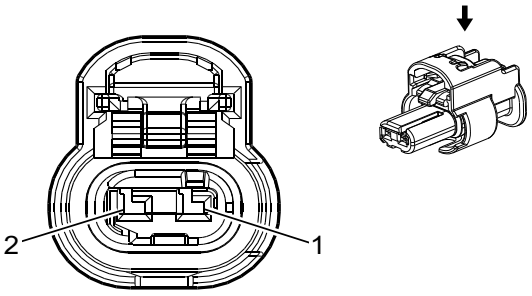
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.5	BN	3038	Right Rear Haptic Seat Motor Control	I	—

Q2 A/C Compressor Clutch (L3B/L3V)



4036662

Connector Part Information

Harness Type: Engine
OEM Connector: 33121579
Service Connector: 19330898
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

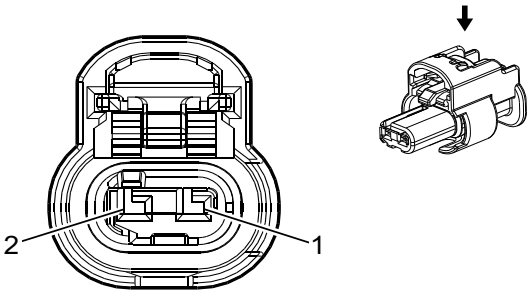
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q2 A/C Compressor Clutch (L3B/L3V)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	4450	Ground	I	—
2	0.5	BN/GN	59	A/C Compressor Clutch Control	I	—

Q2 A/C Compressor Clutch (L82)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

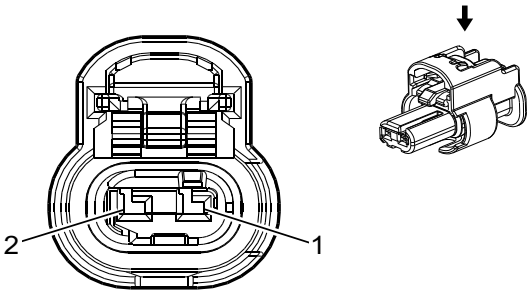
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q2 A/C Compressor Clutch (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	4450	Ground	I	—
2	0.5	BN/GN	59	A/C Compressor Clutch Control	I	—

Q2 A/C Compressor Clutch (LM2/L84/L87)



4649903

Connector Part Information

Harness Type: Engine
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

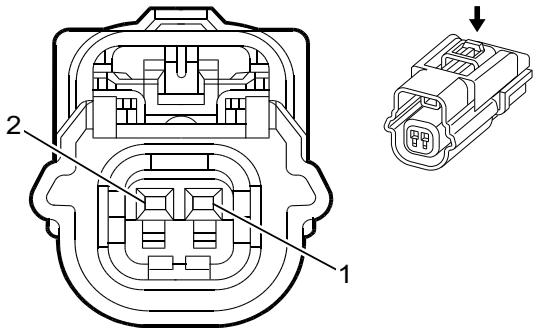
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q2 A/C Compressor Clutch (LM2/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	4450	Ground	I	—
2	0.5	BN/GN	59	A/C Compressor Clutch Control	I	—

Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)



1664592

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

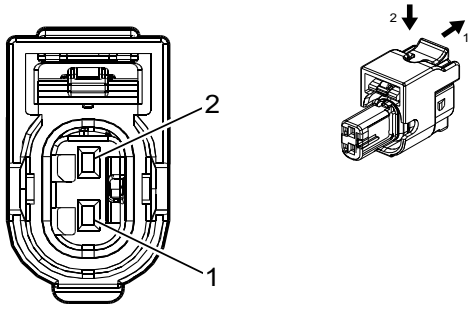
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	—
2	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	I	—

Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)



4994585

Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

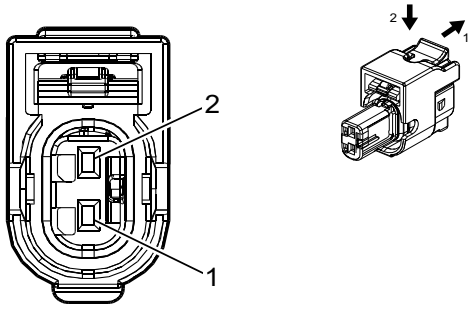
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid 1	I	—
2	0.5	BK/VT	6754	Cam Phaser X Low Reference	I	—

Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)



4994585

Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

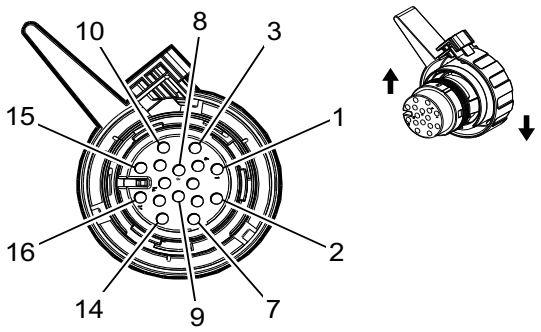
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	I	—
2	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	—

Q8 Control Solenoid Valve Assembly X1 (MYC)



3277917

Connector Part Information

Harness Type: Engine
OEM Connector: 13878751
Service Connector: 19303772
Description: 16-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575434	J-35616-66 (YE)	J-38125-28	2 21 24 47220 0	Yazaki 12	E	1
II	13578934	J-35616-66 (YE)	J-38125-28	2 21 24 47220 0	Yazaki 12	E	1

Q8 Control Solenoid Valve Assembly X1 (MYC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/GN	1840	Battery Positive Voltage	II	—
2	0.75	BK/WH	451	Signal Ground	II	—
3	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	II	—
4	0.75	RD/GN	1840	Battery Positive Voltage	II	—
5	0.75	BK/WH	451	Signal Ground	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
10	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
11	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
12	0.5 0.5 0.5	VT/BK WH/GY VT/BK	2139 2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	II	NP0/NQH NP0/NQH -NP0-NQH
13	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
14	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
15	—	—	—	Not Occupied	—	—
16	0.5	BN/WH	6354	Output Speed High (Replicated TOS) Input Signal	II	—

Q8 Control Solenoid Valve Assembly X2 (MYC)

—

Connector Part Information

Harness Type: Transmission Internal Mode Switch
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way

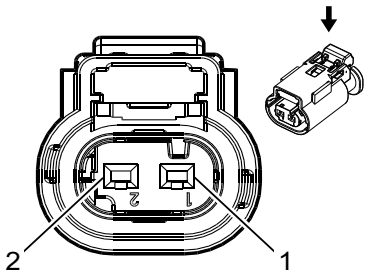
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q8 Control Solenoid Valve Assembly X2 (MYC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	GY	50	Ground	I	—
B	—	BK	776	Transmission Position Switch Parity Bit Signal	I	—
C	—	YE	773	Transmission Position Switch Bit 3 Signal	I	—
D	—	RD	772	Transmission Position Switch Bit 2 Signal	I	—
E	—	GN	771	Transmission Position Switch Bit 1 Signal	I	—
F	—	WH	1786	Transmission Park/Neutral Signal 1	I	—

Q12 Evaporative Emission Purge Solenoid Valve (-LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

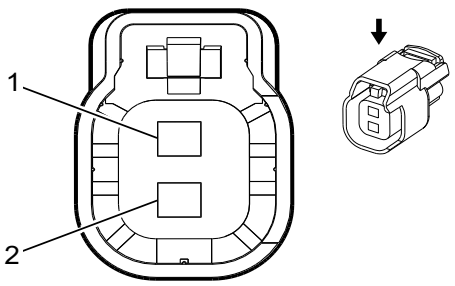
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q12 Evaporative Emission Purge Solenoid Valve (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
2	0.75	GN/BU	428	EVAP Canister Purge Solenoid Control	I	L3B
	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	L82/L84/L87

Q13 Evaporative Emission Vent Solenoid Valve (-LM2)



2422378

Connector Part Information

Harness Type: Chassis
OEM Connector: 13771883
Service Connector: 13579002
Description: 2-Way F 1.5 Series, Sealed (BK)

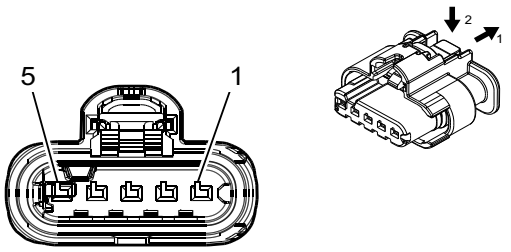
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q13 Evaporative Emission Vent Solenoid Valve (-LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	—
2	0.5	RD/WH	2040	Battery Positive Voltage	I	—

Q14A Exhaust Gas Recirculation Valve 1 (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

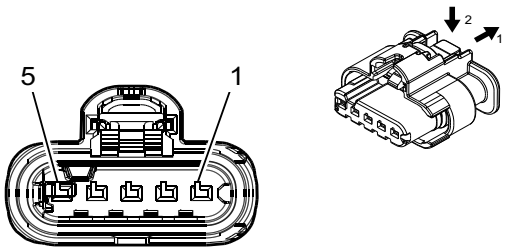
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q14A Exhaust Gas Recirculation Valve 1 (LM2)

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 Valve Sensor 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 Motor High Signal	I	—
5	0.75	VT/BK	5746	Exhaust Gas Recirculation Valve Motor Low Signal	I	—

Q14B Exhaust Gas Recirculation Valve 2 (LM2)



4997783

Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

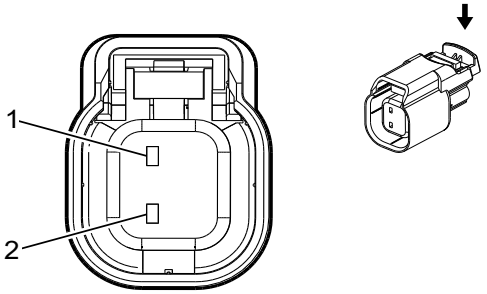
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q14B Exhaust Gas Recirculation Valve 2 (LM2)

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	Low Pressure Exhaust Gas Recirculation Actuator Position Signal	I	—
3	0.5	BU/RD	460	Engine Control Sensors 5 Volt Reference (1)	I	—
4	0.75	BU/WH	4014	Low Pressure Exhaust Gas Recirculation Actuator Control Open	I	—
5	0.75	BU/BN	4013	Low Pressure Exhaust Gas Recirculation Actuator Control Close	I	—

Q17A Fuel Injector 1 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

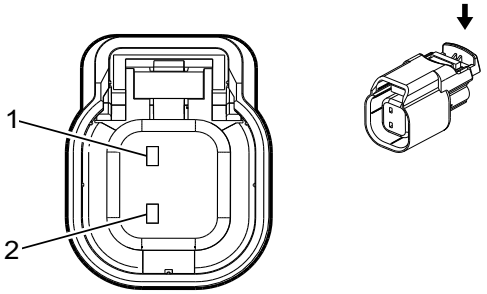
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17A Fuel Injector 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—
2	0.8	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—

Q17A Fuel Injector 1 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

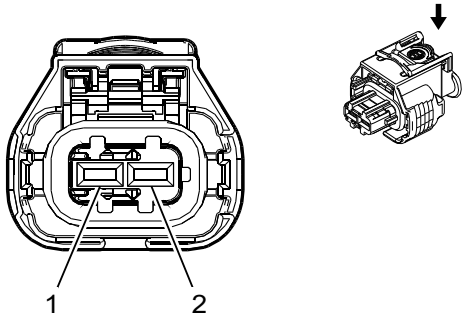
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17A Fuel Injector 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—
2	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—

Q17A Fuel Injector 1 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

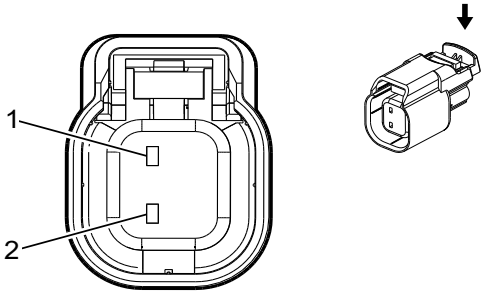
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17A Fuel Injector 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—
2	1.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—

Q17B Fuel Injector 2 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

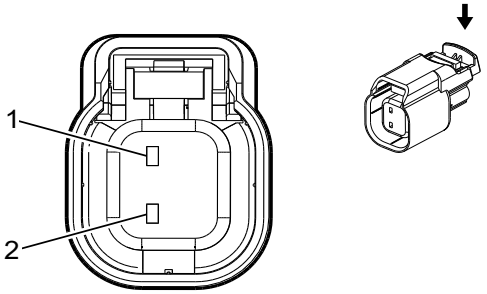
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17B Fuel Injector 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—
2	0.8	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—

Q17B Fuel Injector 2 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

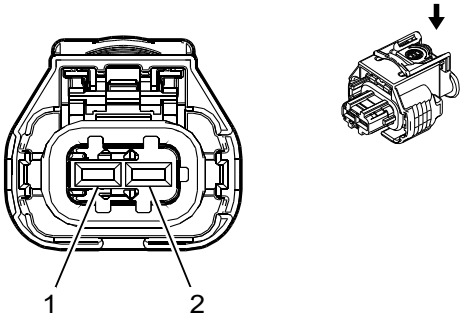
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17B Fuel Injector 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
2	—	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—

Q17B Fuel Injector 2 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

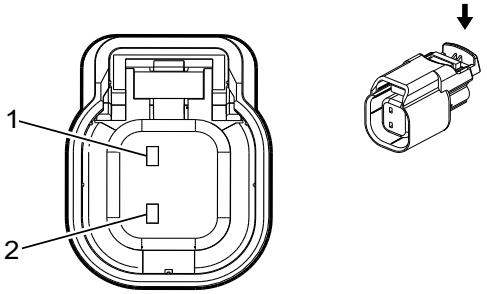
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17B Fuel Injector 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
2	1.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—

Q17C Fuel Injector 3 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

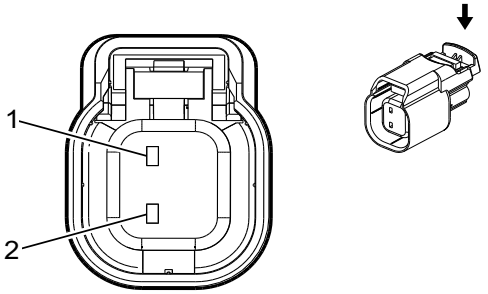
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17C Fuel Injector 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—
2	0.8	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—

Q17C Fuel Injector 3 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

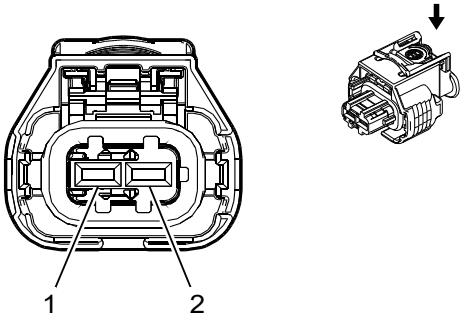
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17C Fuel Injector 3 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
2	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—

Q17C Fuel Injector 3 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

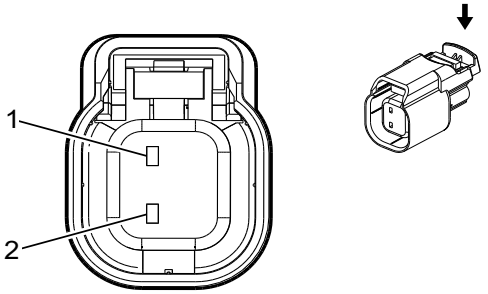
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17C Fuel Injector 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
2	1.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—

Q17D Fuel Injector 4 (L3B)



2792100

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

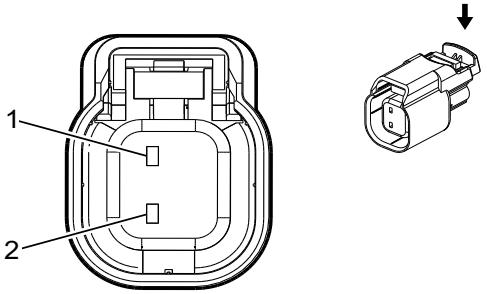
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17D Fuel Injector 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—
2	0.8	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—

Q17D Fuel Injector 4 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

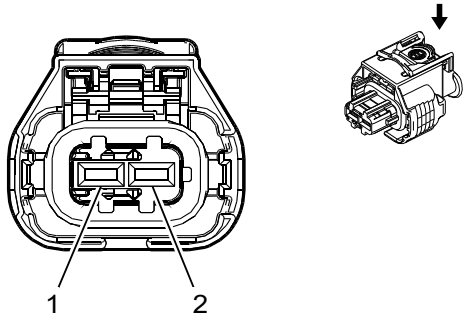
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17D Fuel Injector 4 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
2	—	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—

Q17D Fuel Injector 4 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

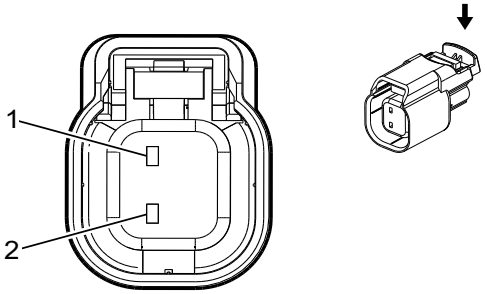
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17D Fuel Injector 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
2	1.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—

Q17E Fuel Injector 5 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

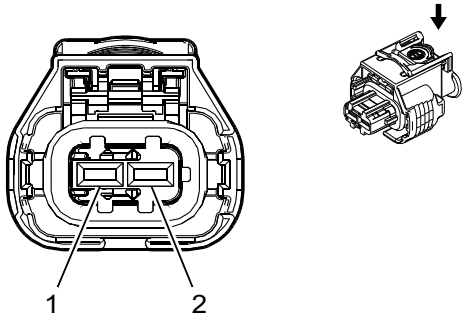
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17E Fuel Injector 5 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—
2	—	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—

Q17E Fuel Injector 5 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

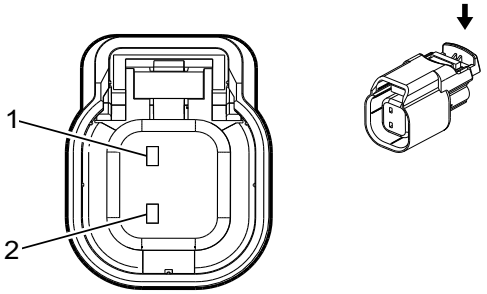
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17E Fuel Injector 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—
2	1.5	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—

Q17F Fuel Injector 6 (L82/L84/L87/LV3)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

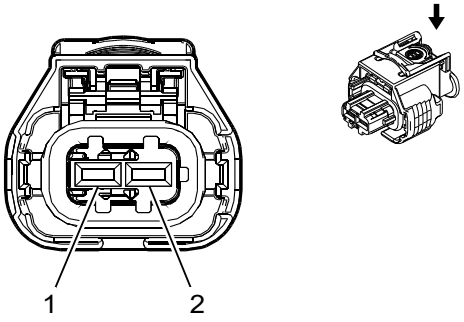
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17F Fuel Injector 6 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—
2	—	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—

Q17F Fuel Injector 6 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

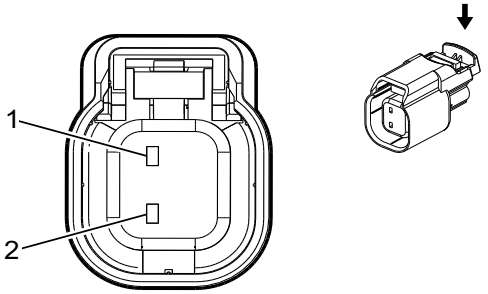
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17F Fuel Injector 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—
2	1.5	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—

Q17G Fuel Injector 7 (L82/L84/L87)



2792100

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

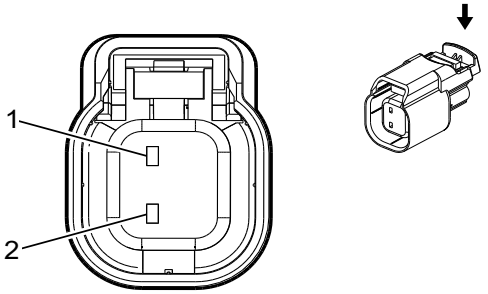
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17G Fuel Injector 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/YE	4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	I	—
2	—	YE/GY	4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	I	—

Q17H Fuel Injector 8 (L82/L84/L87)



2792100

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

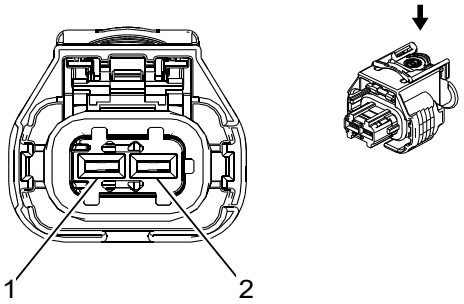
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q17H Fuel Injector 8 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/WH	4908	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	I	—
2	—	GY	4808	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	I	—

Q18A Fuel Pressure Regulator 1 (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

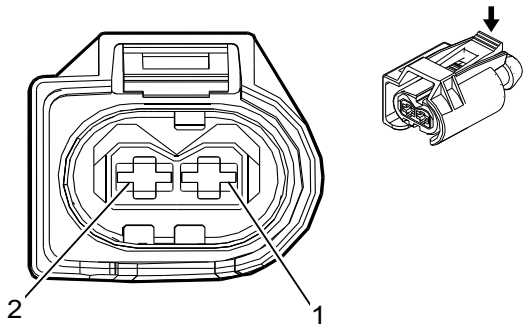
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q18A Fuel Pressure Regulator 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/VT	7245	High Pressure Fuel Pump Low Enable	I	—
2	0.75	GY/BN	7244	High Pressure Fuel Pump High Side Supply	I	—

Q18B Fuel Pressure Regulator 2 (LM2)



5095463

Connector Part Information

Harness Type: Engine
OEM Connector: 33163309
Service Connector: 84616656
Description: 2-Way F 2.8 Series, Sealed (BK)

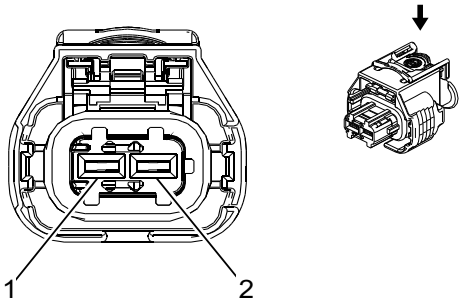
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q18B Fuel Pressure Regulator 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/YE	2834	Fuel Rail Pressure Solenoid Low Reference	I	—
2	0.5	BU/WH	2530	Fuel Rail Pressure Solenoid Control	I	—

Q18C Fuel Pressure Regulator 3 (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

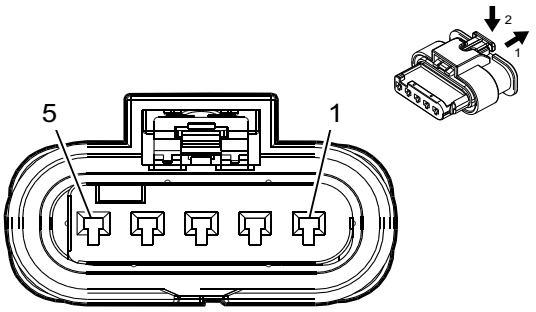
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q18C Fuel Pressure Regulator 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE/VT	2420	Fuel High Pressure Pump Low Enable	I	—
2	1	GY/BN	2419	Fuel High Pressure Pump High Side Supply	I	—

Q22 Intake Manifold Tuning Solenoid Valve (LM2)



3338689

Connector Part Information

Harness Type: Engine
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed (BK)

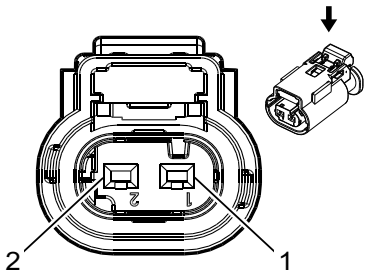
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q22 Intake Manifold Tuning Solenoid Valve (LM2)

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	GN/GY	7316	Variable Swirl Valve PWM Control Signal	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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	—

Q37LF Shock Absorber Actuator - Left Front (Z45)



2717066

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

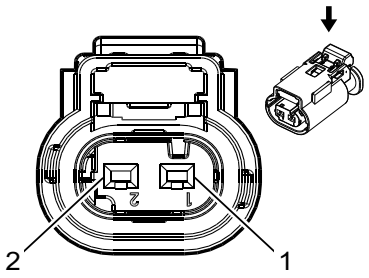
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q37LF Shock Absorber Actuator - Left Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1107	Left Front Damping Servo Control	I	—
2	0.75	GY	1113	Left Front Damping Servo Control	I	—

Q37LR Shock Absorber Actuator - Left Rear (Z45)



2717066

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

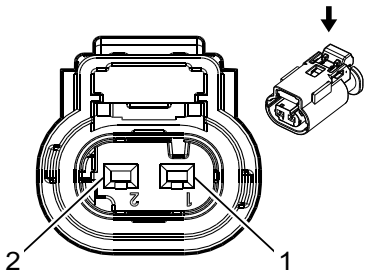
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q37LR Shock Absorber Actuator - Left Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1114	Left Rear Damping Servo Control	I	Z45
2	0.75	GN	1115	Left Rear Damping Servo Control	I	Z45

Q37RF Shock Absorber Actuator - Right Front (Z45)



2717066

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

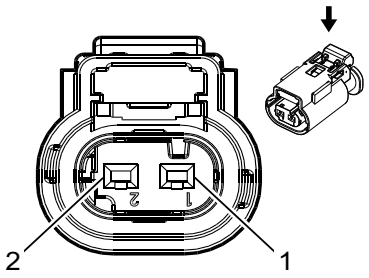
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q37RF Shock Absorber Actuator - Right Front (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1116	Right Front Damping Servo Control	I	—
2	0.75	GY	1117	Right Front Damping Servo Control	I	—

Q37RR Shock Absorber Actuator - Right Rear (Z45)



2717066

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

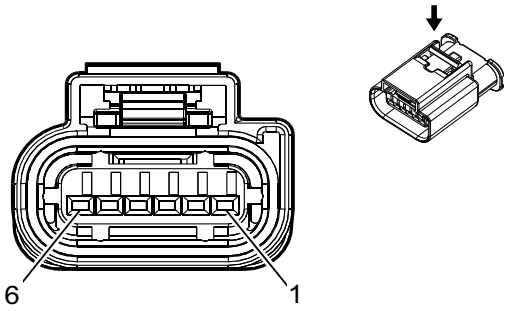
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q37RR Shock Absorber Actuator - Right Rear (Z45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1118	Right Rear Damping Servo Control	I	Z45
2	0.75	BU/WH	1119	Right Rear Damping Servo Control	I	Z45

Q38 Throttle Body



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

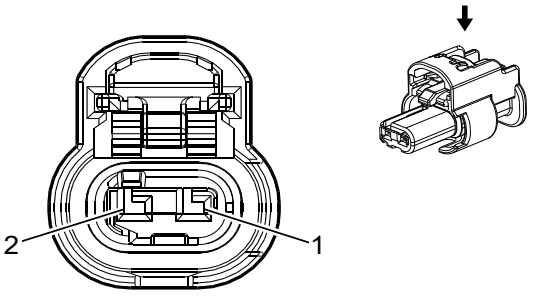
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q38 Throttle Body

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.75	YE YE	581 581	Throttle Actuator Control Open Throttle Actuator Control Open	I I	L3B/L82/L84/ L87/LV3 LM2
2	0.5 0.75	BN/WH BN/WH	582 582	Throttle Actuator Control Close Throttle Actuator Control Close	I I	L3B/L82/L84/ L87/LV3 LM2
3	0.5 0.75	BU/WH BU/WH	3630 3630	Throttle Position Sensor (SENT1) Signal Throttle Position Sensor (SENT1) Signal	I I	L3B/L82/L84/ L87/LV3 LM2
4	0.5 0.5	BK/BN BK/GN	2752 580	Throttle Position Sensor Low Reference Engine Control Sensors Low Reference (2)	I I	L3B/L82/L84/ L87/LV3 LM2
5	0.5 0.5	BN/RD WH/RD	2701 480	Throttle Position Sensor 5V Reference Engine Control Sensors 5 Volt Reference (2)	I I	L3B/L82/L84/ L87/LV3 LM2
6	—	—	—	Not Occupied	—	—

Q40 Turbocharger Bypass Solenoid Valve (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

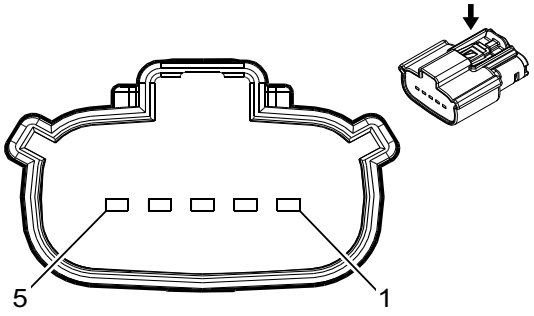
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q40 Turbocharger Bypass Solenoid Valve (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
2	0.75	GN	3060	Turbo Bypass Solenoid Control Bank 1	I	—

Q43 Valve Lifter Oil Manifold Assembly (LV3)



3240108

Connector Part Information

Harness Type: Engine
OEM Connector: 13843947
Service Connector: 19301721
Description: 5-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q43 Valve Lifter Oil Manifold Assembly (LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	5491	Cylinder Shutoff Solenoid Control 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	GN	5492	Cylinder Shutoff Solenoid Control 2	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (L3B)

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Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

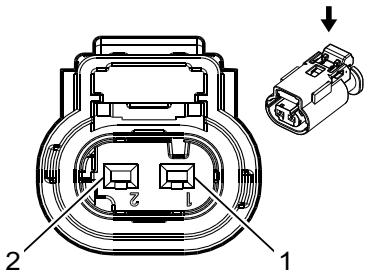
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q44 Engine Oil Pressure Control Solenoid Valve (L3B)

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	Oil Pump Command Signal	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)



2717066

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

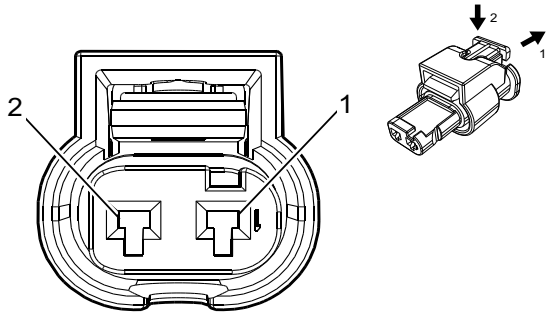
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—
2	0.5	BU	179	Oil Pump Command Signal	I	—

Q44 Engine Oil Pressure Control Solenoid Valve (LM2)



4284830

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13587570
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

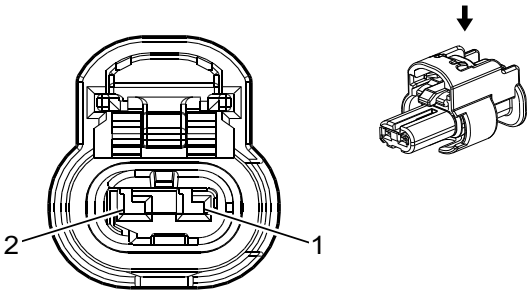
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q44 Engine Oil Pressure Control Solenoid Valve (LM2)

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	Oil Pump Command Signal	I	—

Q46 A/C Compressor Solenoid Valve (L3B/LV3)



4335931

Connector Part Information

Harness Type: Engine
OEM Connector: 33208371
Service Connector: 19353141
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

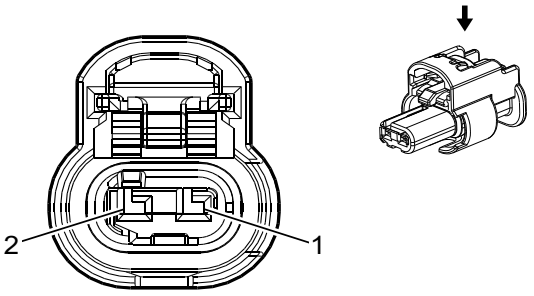
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q46 A/C Compressor Solenoid Valve (L3B/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	7574	Electric Variable Displacement Control	I	—
2	0.5	BU/BN	7573	Electric Variable Displacement Supply	I	—

Q46 A/C Compressor Solenoid Valve (L82)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

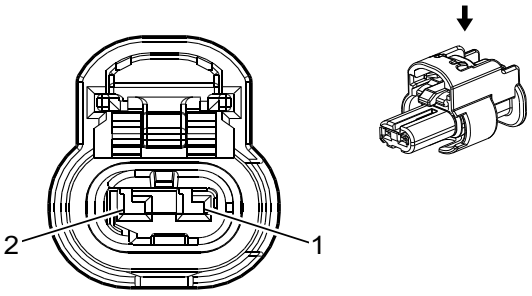
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q46 A/C Compressor Solenoid Valve (L82)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	7574	Electric Variable Displacement Control	I	—
2	0.5	BU/BN	7573	Electric Variable Displacement Supply	I	—

Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)



4335931

Connector Part Information

Harness Type: Engine
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

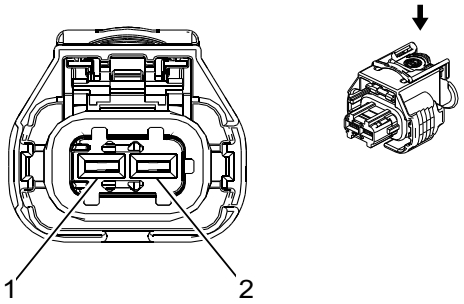
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	7574	Electric Variable Displacement Control	I	—
2	0.5	BU/BN	7573	Electric Variable Displacement Supply	I	—

Q61 Reductant Injector (LM2)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

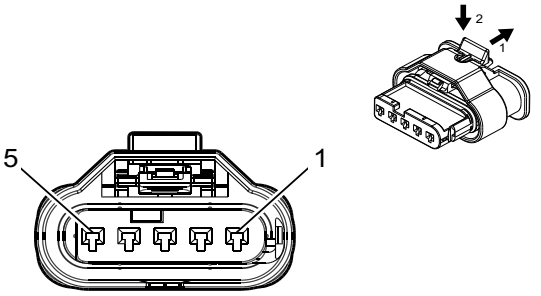
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q61 Reductant Injector (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/WH	3100	DEF Dosing Valve Low Control	I	—
2	0.75	BN	3099	DEF Dosing Valve High Control	I	—

Q74 Engine Coolant Bypass Valve (L3B)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

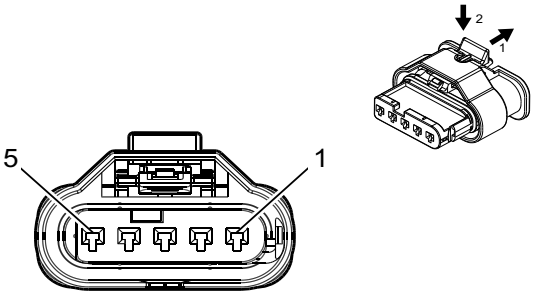
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Low	I	—
2	0.75	BU/BN	2977	Coolant Diverter Valve Actuator Control High	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
4	0.5	BK/BU	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 (LM2)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

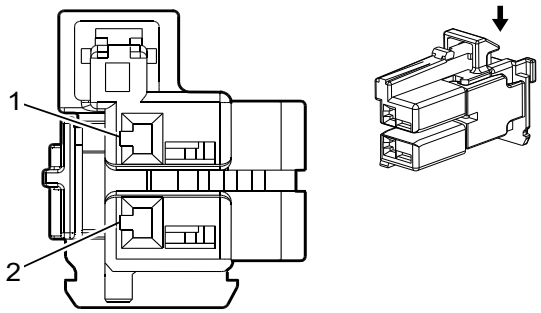
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q74 Engine Coolant Bypass Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	2976	Coolant Diverter Valve Actuator Control Low	I	—
2	0.75	BU/BN	2977	Coolant Diverter Valve Actuator Control High	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	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 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

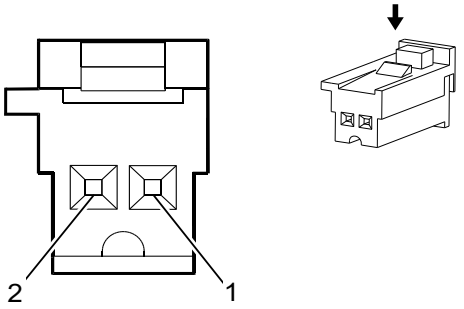
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77A Transmission Control Solenoid Valve 1 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	I	—
2	0.5	BU/GN	6404	Clutch E Control	I	—

Q77A Transmission Control Solenoid Valve 1 (MQE)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

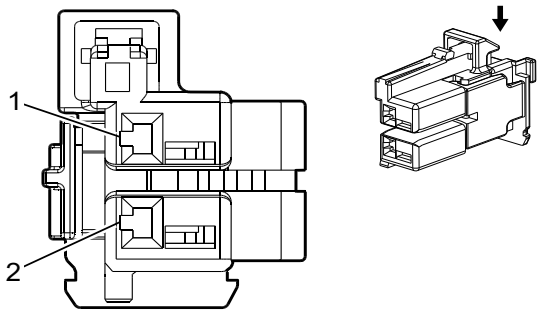
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77A Transmission Control Solenoid Valve 1 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6400	Clutch A Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77B Transmission Control Solenoid Valve 2 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

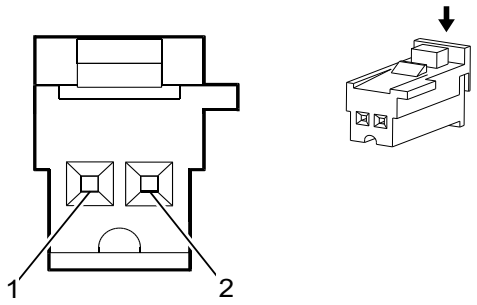
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77B Transmission Control Solenoid Valve 2 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	I	—
2	0.5	GN/BN	6403	Clutch D Control	I	—

Q77B Transmission Control Solenoid Valve 2 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

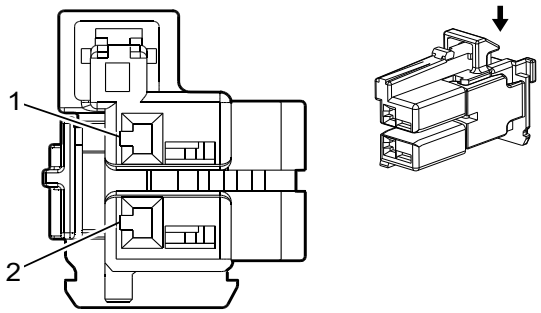
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77B Transmission Control Solenoid Valve 2 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	6401	Clutch B Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77C Transmission Control Solenoid Valve 3 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

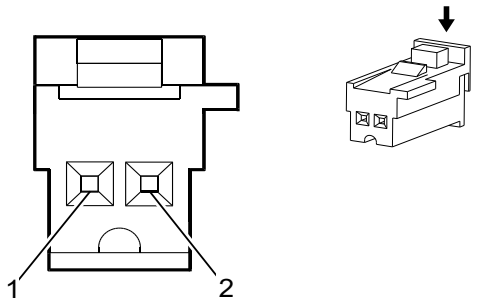
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77C Transmission Control Solenoid Valve 3 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	I	—
2	0.5	GY/	6402	Clutch C Control	I	—

Q77C Transmission Control Solenoid Valve 3 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

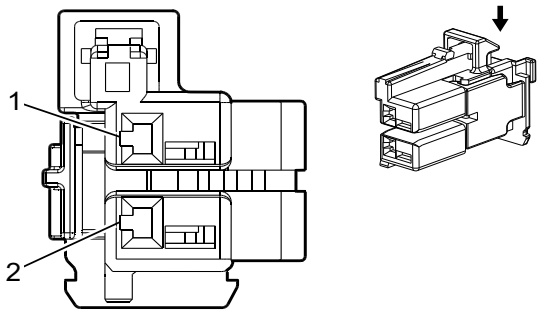
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77C Transmission Control Solenoid Valve 3 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	6402	Clutch C Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77D Transmission Control Solenoid Valve 4 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

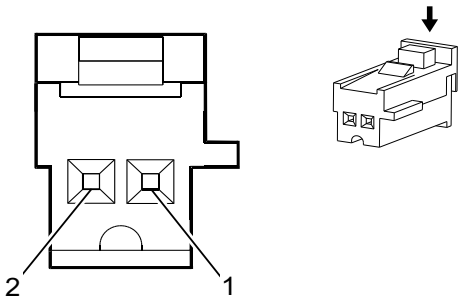
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77D Transmission Control Solenoid Valve 4 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	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: Transmission Control
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (NA)

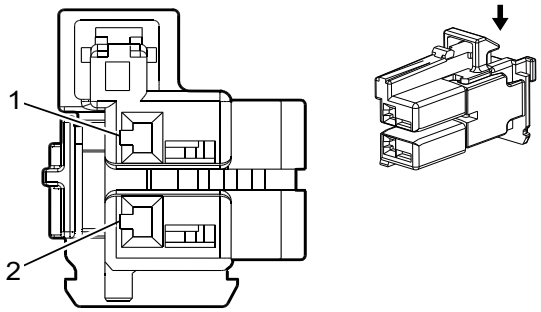
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Signal Driver	I	—

Q77E Transmission Control Solenoid Valve 5 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

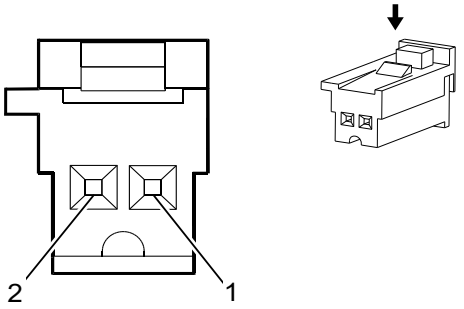
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77E Transmission Control Solenoid Valve 5 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	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: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

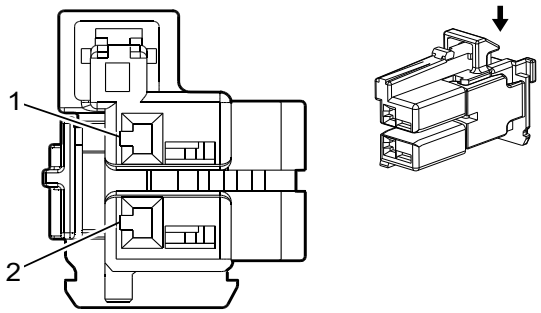
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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 Signal Driver	I	—

Q77F Transmission Control Solenoid Valve 6 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

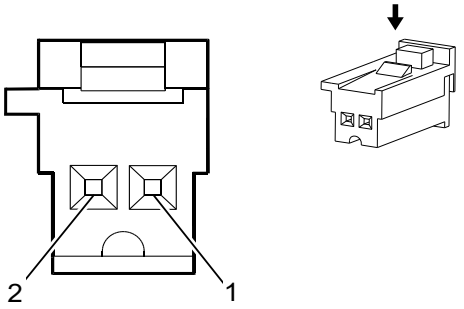
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77F Transmission Control Solenoid Valve 6 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/	6388	Transmission High Side Driver 2 Signal	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: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

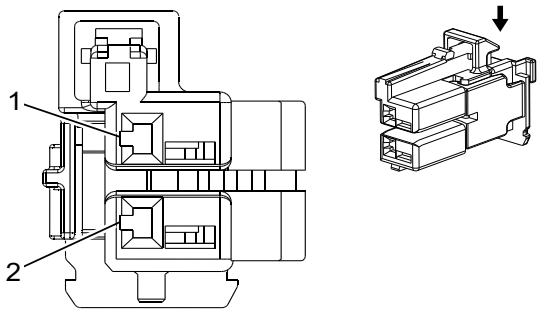
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77F Transmission Control Solenoid Valve 6 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/GN	6403	Clutch D Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77G Transmission Control Solenoid Valve 7 (MQB)



4364736

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BU)

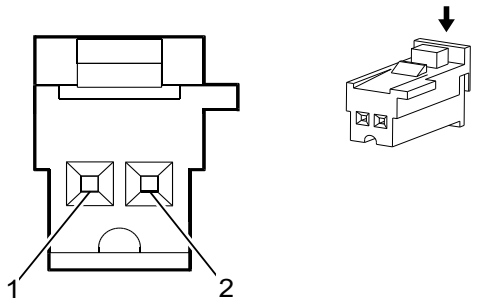
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77G Transmission Control Solenoid Valve 7 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Signal Driver	I	—
2	0.5	GN/OG	1530	Transmission Mainline Pressure Solenoid Control	I	—

Q77G Transmission Control Solenoid Valve 7 (MQE)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

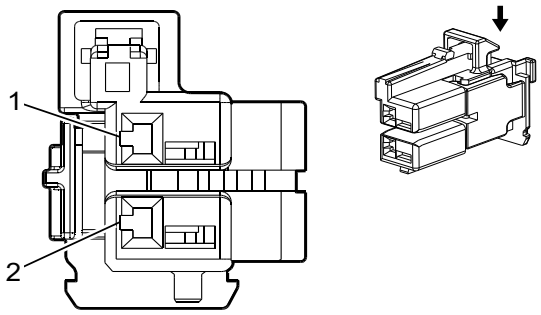
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77G Transmission Control Solenoid Valve 7 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	6404	Clutch E Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77H Transmission Control Solenoid Valve 8 (MQB)



4672683

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (GN)

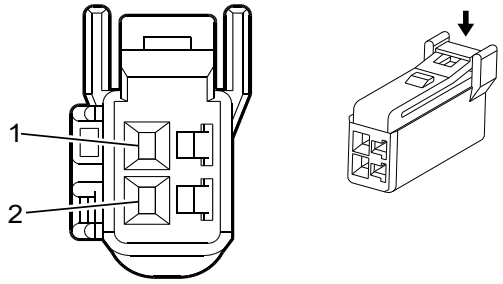
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77H Transmission Control Solenoid Valve 8 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Signal Driver	I	—
2	0.5	GY/BN	422	Torque Converter Clutch Solenoid Control	I	—

Q77H Transmission Control Solenoid Valve 8 (MQE)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

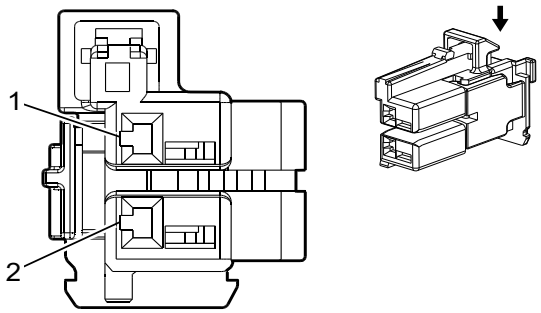
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77H Transmission Control Solenoid Valve 8 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/WH	6380	TCC On/Off Solenoid A Control	I	—
2	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	—

Q77J Transmission Control Solenoid Valve 9 (MQB)



4672650

Connector Part Information

Harness Type: Transmission Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

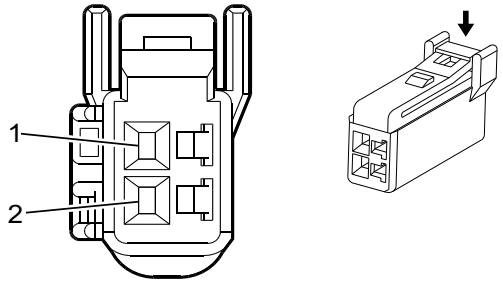
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77J Transmission Control Solenoid Valve 9 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/	6388	Transmission High Side Driver 2 Signal	I	—
2	—	VT/	7819	Default Disable Solenoid Control	I	—

Q77J Transmission Control Solenoid Valve 9 (MQE)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

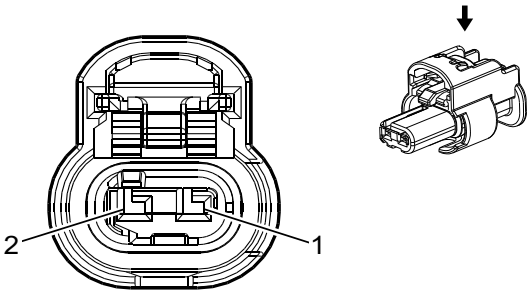
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q77J Transmission Control Solenoid Valve 9 (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q80L Engine Mount Solenoid Valve - Left (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

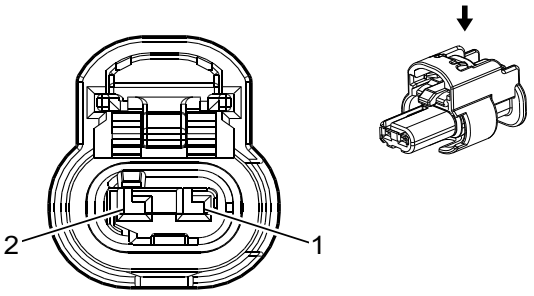
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q80L Engine Mount Solenoid Valve - Left (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	40	Battery Positive Voltage	I	—
2	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	I	—

Q80L Engine Mount Solenoid Valve - Left (LM2)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

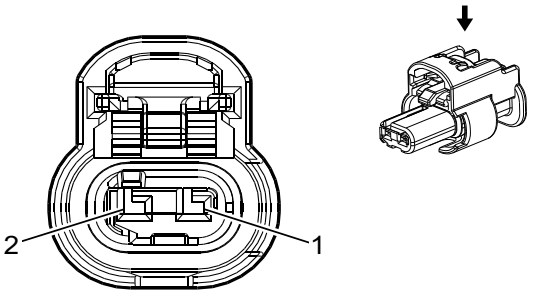
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q80L Engine Mount Solenoid Valve - Left (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	40	Battery Positive Voltage	I	—
2	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	I	—

Q80R Engine Mount Solenoid Valve - Right (L3B)



4690744

Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

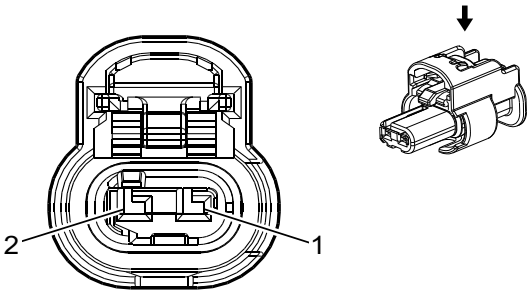
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q80R Engine Mount Solenoid Valve - Right (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	40	Battery Positive Voltage	I	—
2	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	I	—

Q80R Engine Mount Solenoid Valve - Right (LM2)



4690744

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q80R Engine Mount Solenoid Valve - Right (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	40	Battery Positive Voltage	I	—
2	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	I	—

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/BU	2491	Cylinder Shutoff Solenoid Enable (1)	I	—
2	—	BU	5491	Cylinder Shutoff Solenoid Control 1	I	—

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/GN	2492	Cylinder Shutoff Solenoid Enable (2)	I	—
2	—	GN	5492	Cylinder Shutoff Solenoid Control 2	I	—

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE/GY	2493	Cylinder Shutoff Solenoid Enable (3)	I	—
2	—	GY	5493	Cylinder Shutoff Solenoid Control 3	I	—

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE/GN	2494	Cylinder Shutoff Solenoid Enable (4)	I	—
2	—	YE/BU	5494	Cylinder Shutoff Solenoid Control 4	I	—

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/VT	2495	Cylinder Shutoff Solenoid Enable (5)	I	—
2	—	VT	5495	Cylinder Shutoff Solenoid Control 5	I	—

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE/BN	2496	Cylinder Shutoff Solenoid Enable (6)	I	—
2	—	BN	5496	Cylinder Shutoff Solenoid Control 6	I	—

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN/GY	2497	Cylinder Shutoff Solenoid Enable (7)	I	—
2	—	WH	5497	Cylinder Shutoff Solenoid Control 7	I	—

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

—

Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

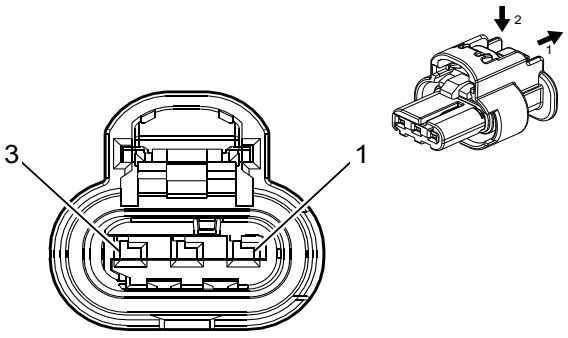
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/YE	2498	Cylinder Shutoff Solenoid Enable (8)	I	—
2	—	YE	5498	Cylinder Shutoff Solenoid Control 8	I	—

Q97 Engine Coolant Flow Control Valve (L3B)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 33277161
Service Connector: 19371206
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

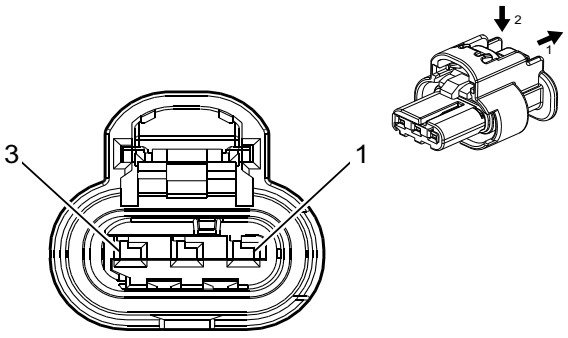
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q97 Engine Coolant Flow Control Valve (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	L3B
2	0.5	BK	4450	Ground	I	L3B
3	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	I	LM2

Q97B Engine Coolant Flow Control Valve - Block (LM2)



4778903

Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

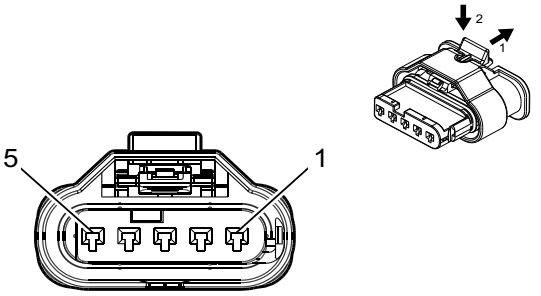
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q97B Engine Coolant Flow Control Valve - Block (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/BN	2732	Local Interconnect Network Bus 32	I	—
2	0.75	BK	4450	Ground	I	—
3	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	—

Q97M Engine Coolant Flow Control Valve - Main (LM2)



4994456

Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

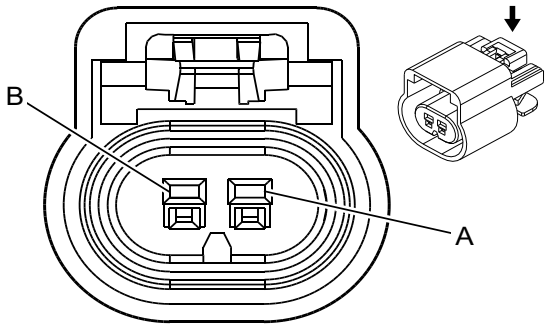
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q97M Engine Coolant Flow Control Valve - Main (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/BN	2972	Coolant Flow Control Actuator Control High	I	—
2	0.75	GY/BU	2971	Coolant Flow Control Actuator Control Low	I	—
3	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	I	—
4	0.5	GY	2973	Coolant Flow Control Valve Position Signal	I	—
5	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	I	—

R6A Terminating Resistor - High Speed Bus (IOS/IOT)



523630

Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

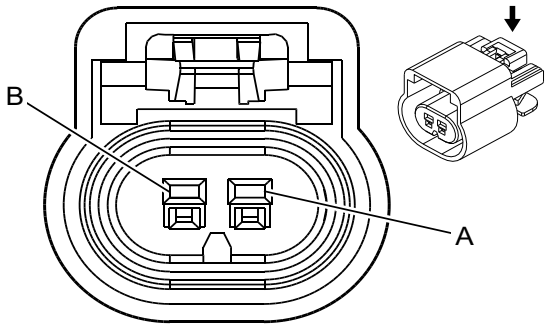
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

R6A Terminating Resistor - High Speed Bus (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
B	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—

R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)



523630

Connector Part Information

Harness Type: Headliner
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

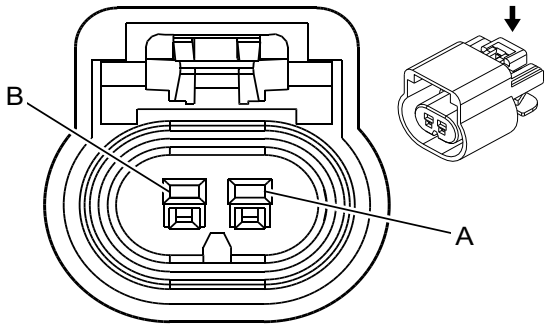
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/GY	3935	High Speed GMLAN Serial Data (+) 8	I	—
B	0.35	WH/GY	3936	High Speed GMLAN Serial Data (-) 8	I	—

R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)



523630

Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

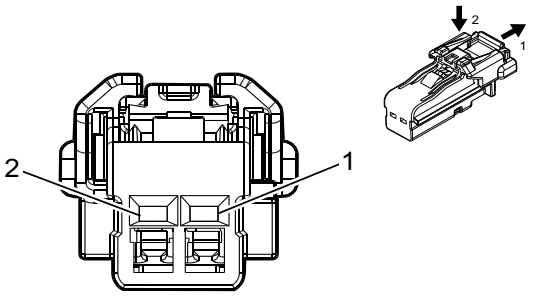
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU/GN	1304	High Speed GMLAN Serial Data (+)9	I	—
B	0.5	WH/GN	1305	High Speed GMLAN Serial Data (-)9	I	—

S2 Transmission Manual Shift Switch



4115691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

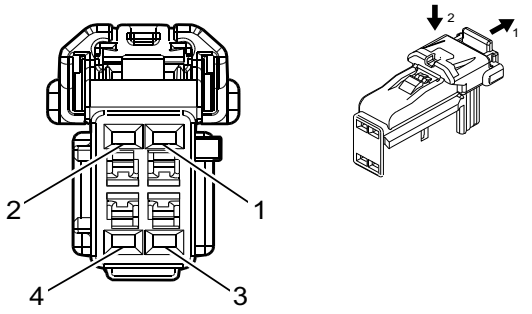
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S2 Transmission Manual Shift Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	—
2	0.5	BK/WH	1851	Signal Ground	I	—

S3 Transmission Shift Lever



4872683

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35029308
Service Connector: 19369633
Description: 4-Way F 1.2 Series (BK)

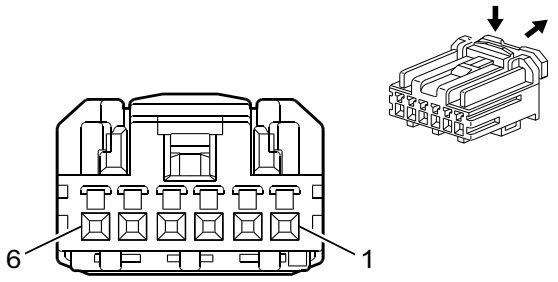
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S3 Transmission Shift Lever

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/WH	816	Brake Transmission Shift Interlock Solenoid Control	I	—
2	0.35	BK	1850	Ground	I	—
3	0.35	GN/WH	1932	Shift Select Switch Park Signal	I	—
4	0.35	BK	1850	Ground	I	—

S13D Door Lock Switch - Driver



4650256

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series (BK)

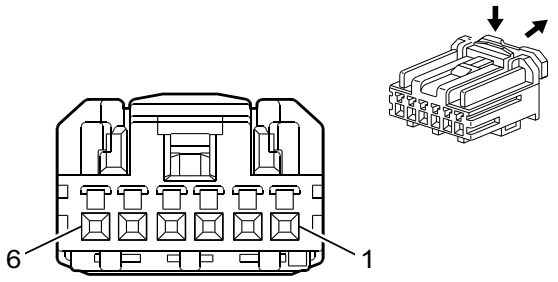
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S13D Door Lock Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	A45
	0.5	YE	6817	LED Backlight Dimming Control	I	AU3
2	0.5	BN/YE	780	Driver Door Lock Switch Lock Signal	I	—
3	0.35	BN/WH	781	Driver Door Lock Switch Unlock Signal	I	—
4	0.35	BK	1150	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

S13P Door Lock Switch - Passenger (AU3)



4650256

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series (BK)

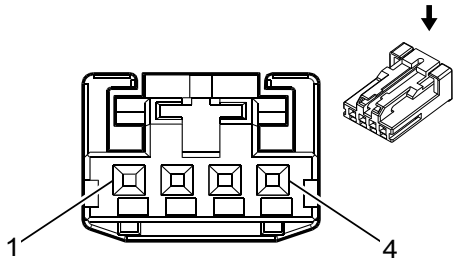
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S13P Door Lock Switch - Passenger (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	—
2	0.35	YE/VT	244	Passenger Door Lock Switch Lock Control	I	—
3	0.35	BN/VT	245	Passenger Door Lock Switch Unlock Control	I	—
4	0.35	BK	1250	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

S27 Head-Up Display Switch (UV6)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

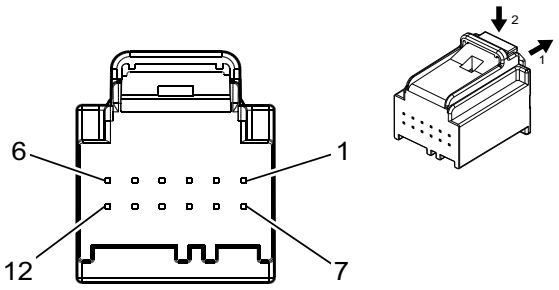
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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	I	—
2	0.35	BK	1850	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



5095565

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35130710
Service Connector: 13525987
Description: 12-Way F 0.64 Series, Sealed (BK)

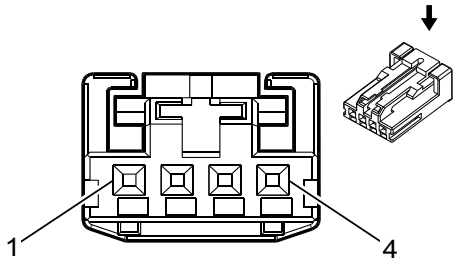
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575742	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P
II	13575867	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

S30 Headlamp Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/VT	103	Headlamp Switch On Signal	II	—
2	0.35	YE	6817	LED Backlight Dimming Control	II	—
3	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	II	—
4	0.35	GY	158	Cargo Lamp Switch Signal	II	—
5	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	II	—
6	0.5	WH/VT	1430	Exterior Courtesy Lamp Control	I	—
7	0.35	WH/GY	2935	Task Lamp Switch Signal	II	—
8	0.35	BK/WH	1851	Signal Ground	II	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH/BN	7555	Lighting Control Switch Signal	II	—
12	0.35	YE	7556	Lighting Control Switch Reference	II	—

S32R Seat Heating Switch - Rear (D07+KA6)



2717162

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

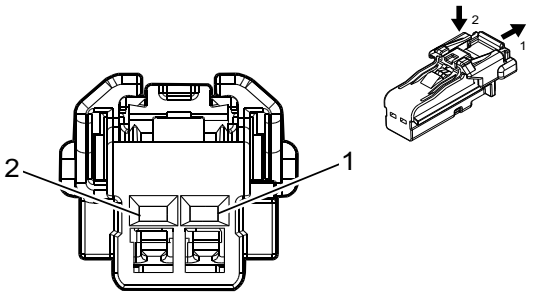
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S32R Seat Heating Switch - Rear (D07+KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/WH	1340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN/WH	4115	Local Interconnect Network Serial Data Bus 15	I	—
4	0.35	BK	1250	Ground	I	—

S33 Horn Switch



4115691

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588640
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

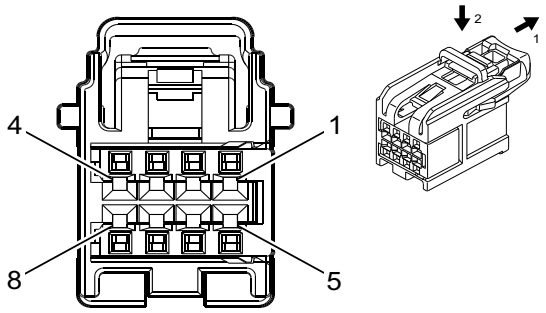
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S33 Horn Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1850	Ground	I	—
2	—	RD	3287	Horn Switch Signal	I	—

S38 Ignition Mode Switch (BTM)



4232228

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series (GY)

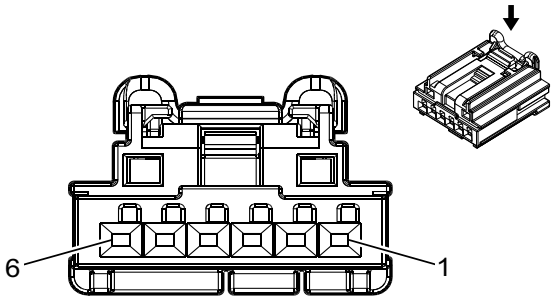
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S38 Ignition Mode Switch (BTM)

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	1851	Signal Ground	I	—
4	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	I	—
5	0.35	YE	6817	LED Backlight Dimming Control	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	—

S39 Ignition Switch (-BTM)



3960313

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series (BK)

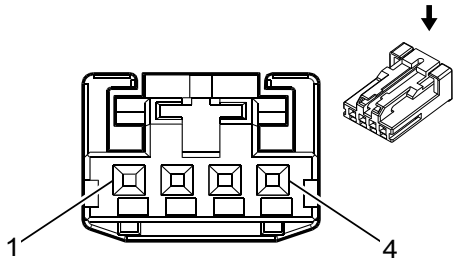
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S39 Ignition Switch (-BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/BK	1073	Ignition Key Resistor Signal	I	—
2	0.5	WH/VT	1020	Off/Run/Crank Ignition Voltage	I	—
3	0.35	VT/YE	4	Accessory Ignition Voltage	I	—
4	0.35	RD/BU	540	Battery Positive Voltage	I	—
5	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	—
6	0.5	WH/VT	1020	Off/Run/Crank Ignition Voltage	I	—

S47D Seat Memory Switch - Driver (A45)



2717162

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

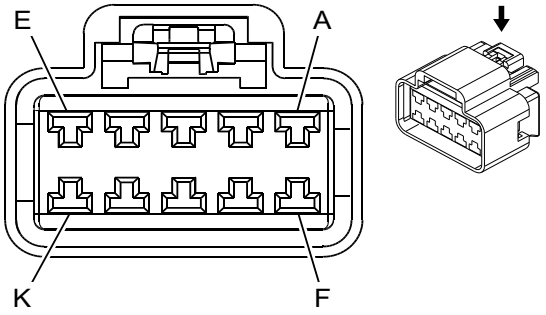
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S47D Seat Memory Switch - Driver (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	—
2	0.35	BK/BU	5978	Memory Switch Low Reference	I	—
3	0.35	WH	615	Memory Seat Switch Signal 1	I	—
4	0.35	BU/GN	614	Memory Seat Switch Set Signal	I	—

S64D Seat Adjuster Switch - Driver



623046

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 15326931
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

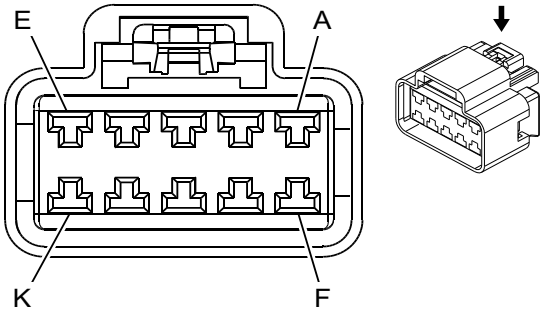
S64D Seat Adjuster Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5 0.5	GN/BN GN/BN	286 1518	Driver Power Seat Front Vertical Motor Up Control Power Seat Front Vertical Up Switch Signal	I I	A2X-A45 A45
B	2.5	BK	1150	Ground	I	—
C	1.5 0.5	GY/GN GY/GN	284 1523	Driver Power Seat Horizontal Motor Rearward Control Power Seat Horizontal Rearward Switch Signal	I I	A2X-A45 A45
D	1.5 0.5	YE/BU YE/BN	285 1522	Driver Power Seat Horizontal Motor Forward Control Power Seat Horizontal Forward Switch Signal	I I	A2X-A45 A45
E	2.5 0.5	RD/YE BK	5040 1150	Battery Positive Voltage Ground	I I	A2X-A45 A45
F	1.5 0.5	YE YE	282 1519	Driver Power Seat Rear Vertical Motor Up Control Power Seat Rear Vertical Up Switch Signal	I I	A2X-A45 A45
G	1.5 0.5	BU/YE GN/GY	277 1270	Driver Power Seat Recline Motor Rearward Control Power Seat Recline Rearward Switch Signal	I I	A2X-A45 A45
H	1.5 0.5	GN/YE GY/BK	276 1269	Driver Power Seat Recline Motor Forward Control Power Seat Recline Forward Switch Signal	I I	A2X-A45 A45
J	1.5 0.5	GY/BU YE/BU	283 1521	Driver Power Seat Rear Vertical Motor Down Control Power Seat Rear Vertical Down Switch Signal	I I	A2X-A45 A45

S64D Seat Adjuster Switch - Driver (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
K	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	A2X-A45
	0.5	BU/VT	1520	Power Seat Front Vertical Down Switch Signal	I	A45

S64P Seat Adjuster Switch - Passenger



623046

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series (BK)

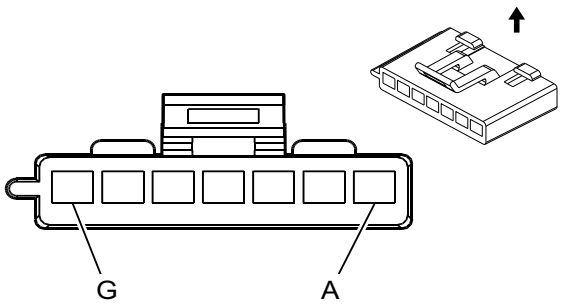
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S64P Seat Adjuster Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	GN/BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—
B	2.5	BK	1250	Ground	I	—
C	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
D	1.5	YE/WH	296	Passenger Power Seat Horizontal Motor Forward Control	I	—
E	2.5	RD/BN	1440	Battery Positive Voltage	I	—
F	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—
G	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward Control	I	—
H	1.5	GN	76	Passenger Power Seat Recline Motor Forward Control	I	—
J	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
K	1.5	GN/VT	297	Passenger Power Seat Front Vertical Motor Up Control	I	—

S65D Seat Lumbar Support Switch - Driver (A2X-A45)



73146

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280 Metri-Pack Series (BK)

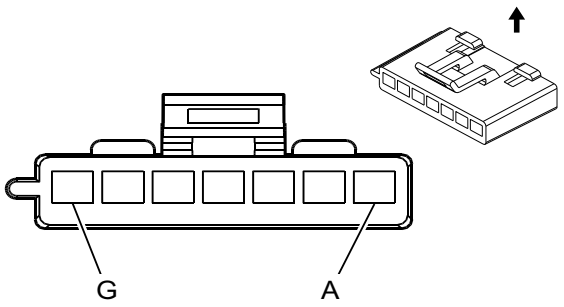
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S65D Seat Lumbar Support Switch - Driver (A2X-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.75	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	—
C	0.75	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	—
D	—	—	—	Not Occupied	—	—
E	0.75	BK	1150	Ground	I	—
F	—	—	—	Not Occupied	—	—
G	0.75	RD/YE	8840	Battery Positive Voltage	I	—

S65P Seat Lumbar Support Switch - Passenger (A7K)



73146

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280 Metri-Pack Series (BK)

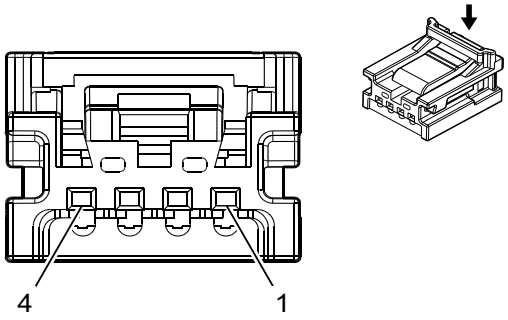
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S65P Seat Lumbar Support Switch - Passenger (A7K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.75	VT	210	Passenger Power Seat Lumbar Motor Rearward Control	I	—
C	0.75	BU	211	Passenger Power Seat Lumbar Motor Forward Control	I	—
D	—	—	—	Not Occupied	—	—
E	0.75	BK	1250	Ground	I	—
F	—	—	—	Not Occupied	—	—
G	0.75	RD/YE	8840	Battery Positive Voltage	I	—

S70E Steering Wheel Controls Switch - Radio Presets (UK3)



4215060

Connector Part Information

Harness Type: Steering Wheel
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S70E Steering Wheel Controls Switch - Radio Presets (UK3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BN/RD	4313	Radio Favorite Forward Signal	I	—
3	—	BN/RD	4312	Radio Favorite Back Signal	I	—
4	—	—	—	Not Occupied	—	—

S70F Steering Wheel Controls Switch - Radio Volume (UK3)

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Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507115
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

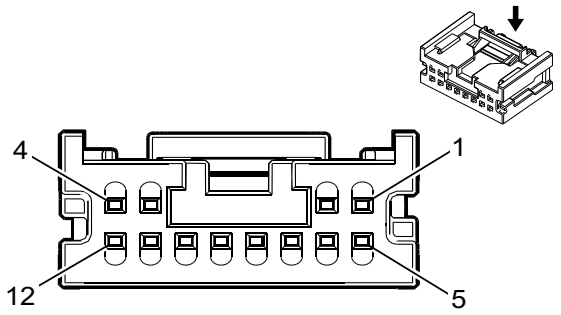
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S70F Steering Wheel Controls Switch - Radio Volume (UK3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	GN/RD	4314	Radio Volume Down Signal	I	—
3	—	OG/RD	4315	Radio Volume Up Signal	I	—

S70L Steering Wheel Controls Switch - Left



3824362

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507121
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S70L Steering Wheel Controls Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	3040	Battery Positive Voltage	I	—
2	— —	PK YE	3893 6817	LED Backlight Dimming Control 2 LED Backlight Dimming Control	I	— UK3
3	—	GN/OG	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	—	VT	5737	Adaptive Cruise Control Gap Up/Down Switch Signal	I	—
5	—	—	—	Not Occupied	—	—
6	—	BK	1050	Ground	I	—
7	—	GY/OG	5884	Heated Steering Wheel Switch LED Control	I	—
8	—	GN	5883	Heated Steering Wheel Switch Signal	I	—
9	—	—	—	Not Occupied	—	—
10	—	BU	1444	12V Reference	I	—
11 - 12	—	—	—	Not Occupied	—	—

S70R Steering Wheel Controls Switch - Right

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Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13593917
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way

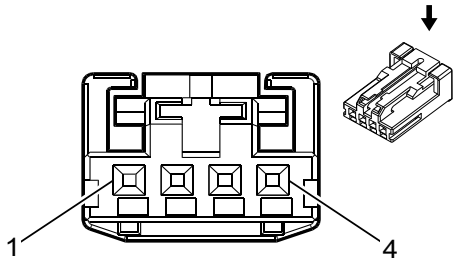
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S70R Steering Wheel Controls Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN	3040	Battery Positive Voltage	I	—
2	—	PK	3893	LED Backlight Dimming Control 2	I	—
3	—	BK/BU	3894	Local Interconnect Network Serial Data Bus 12	I	—
6	—	BK	1050	Ground	I	—
7	—	BN/RD	4313	Radio Favorite Forward Signal	I	—
8	—	BN/RD	4312	Radio Favorite Back Signal	I	—
10	—	OG/RD	4315	Radio Volume Up Signal	I	—
11	—	GN/RD	4314	Radio Volume Down Signal	I	—

S76 Trailer Brake Control Switch (JL1)



2717162

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

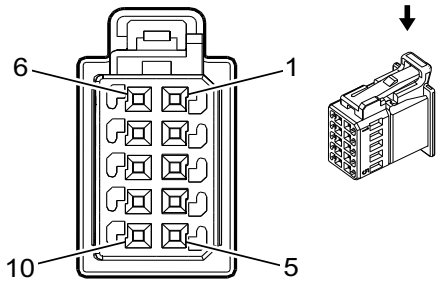
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S76 Trailer Brake Control Switch (JL1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/GN	5140	Battery Positive Voltage	I	—
2	0.35	GN/BU	2733	Local Interconnect Network Bus 33	I	—
3	0.35	BK/WH	1851	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

S78 Turn Signal/Multifunction Switch



2830955

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13650061
Service Connector: 19299776
Description: 10-Way F 0.64 Micro-Quadlock Series (BK)

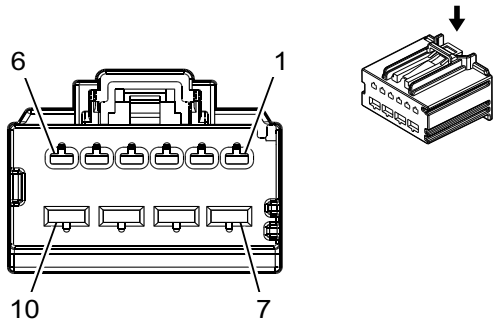
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579993	J-35616-64B (LT BU)	J-38125-12A	144969-1	Lear 25	E	2

S78 Turn Signal/Multifunction Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GN	663	Hazard Switch Left Turn Signal	I	—
2	0.5	VT/BU	664	Hazard Switch Right Turn Signal	I	—
3	0.5	BK/WH	1851	Signal Ground	I	—
4	0.5	WH/GY	3849	High Beam Auto On/Off Switch Signal	I	—
5	0.35	WH/BK	94	Windshield Washer Switch Signal	I	—
6	0.5	YE/BN	307	Headlamp Switch Flash To Pass Signal	I	—
7	0.5	WH	524	Headlamp Dimmer Switch High Beam Signal	I	—
8	0.5	BK/GY	6009	Windshield Wiper Switch Low Reference	I	—
9	0.5	GY	1715	Windshield Wiper Switch High Signal	I	—
10	0.5	YE/BU	1714	Windshield Wiper Switch Low Signal	I	—

S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)



3791446

Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

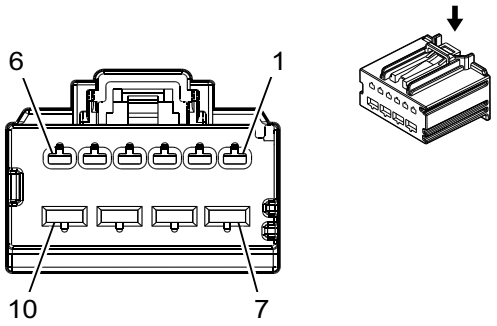
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	I	—
2	0.5 0.5	GY GN	747 747	Left Rear Door Ajar Switch Signal Left Rear Door Ajar Switch Signal	I I	CREW CAB EXTENDED CAB
3	0.75	BK	1150	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1150	Ground	II	—
8	2.5	RD/BU	1842	Battery Positive Voltage	II	—
9	2	BU/VT	668	Power Window Motor Left Rear Up Control	II	—
10	2	YE/BU	669	Power Window Motor Left Rear Down Control	II	—

S79P Window Switch - Passenger (AED)



3791446

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

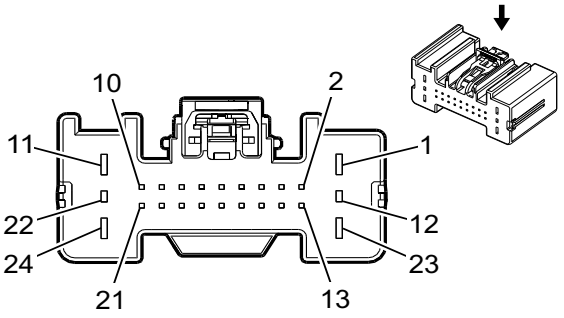
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S79P Window Switch - Passenger (AED)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.5	GN/YE GN/YE	6134 6134	Local Interconnect Network Serial Data Bus 3 Local Interconnect Network Serial Data Bus 3	I I	EXTENDED / CREW CAB REGULAR CAB
2	0.5	GY	746	Right Front Door Ajar Switch Signal	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1250	Ground	II	—
8	2.5	RD/WH	1340	Battery Positive Voltage	II	—
9	2.5	GN/GY	3387	Power Window Motor Passenger Up Control	II	—
10	2.5	YE/BU	3388	Power Window Motor Passenger Down Control	II	—

S79P Window Switch - Passenger (AEF)



2871905

Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

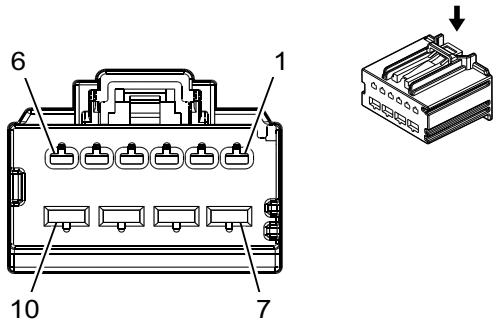
S79P Window Switch - Passenger (AEF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/YE	3385	Power Window Switch Passenger Down Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN/BK	3396	Passenger Mirror Motor Right (+) Left (-) Control	IV	—
4	0.35	YE/VT	3397	Passenger Mirror Motor Up (+) Down (-) Control	IV	—
5	0.35 0.5	WH WH	3398 3398	Passenger Mirror Motor Common Control Passenger Mirror Motor Common Control	IV IV	EXTENDED/ CREW CAB REGULAR CAB
6	0.35	YE/RD	3399	Passenger Mirror Position Sensor 5V Reference	IV	—
7	0.35	BU/YE	3401	Passenger Mirror Position Sensor Up (+) Down (-) Signal	IV	—
8	0.35	BK/GN	3400	Passenger Mirror Position Sensor Low Reference	IV	—
9	0.35	VT/WH	3403	Passenger Mirror Position Sensor Left (-) Right (+) Signal	IV	—
10	0.35	YE	6817	LED Backlight Dimming Control	IV	—
11	0.5	YE/BK	3384	Power Window Switch Passenger Up Signal	II	—
12	0.5	BU/GY	3414	Passenger Mirror Motor Fold In Control	I	—

S79P Window Switch - Passenger (AEF) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
13	0.35	VT/GY	3386	Power Window Switch Passenger Express Signal	IV	—
14 - 20	—	—	—	Not Occupied	—	—
21	0.35	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	IV	—
22	0.5	YE/WH	3413	Passenger Mirror Motor Fold Out Control	I	—
23	2.5	RD/WH	1340	Battery Positive Voltage	III	—
24	2.5	BK	1250	Ground	III	—

S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)



3791446

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

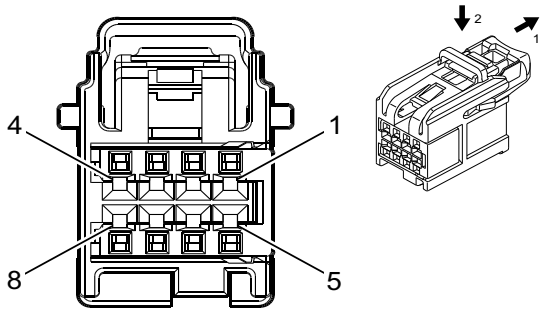
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	I	—
2	0.5	GN	748	Right Rear Door Ajar Switch Signal	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	2.5	BK	1250	Ground	II	—
8	2.5	RD/WH	1340	Battery Positive Voltage	II	—
9	2	BU/GY	670	Power Window Motor Right Rear Up Control	II	—
10	2	GN/BK	671	Power Window Motor Right Rear Down Control	II	—

S86 Vehicle Stability Control Switch



4935776

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series (BK)

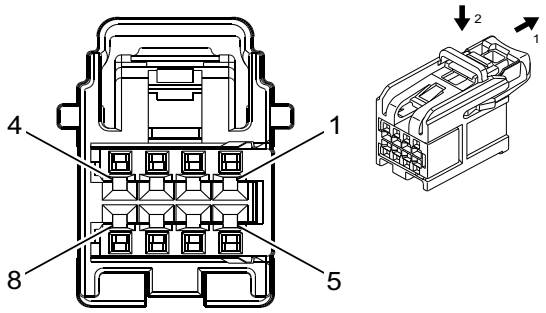
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S86 Vehicle Stability Control 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	I	—
3	0.35	BN	7291	Major Endgate Release Switch Signal Interior	I	QT5
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	BK	1050	Ground	I	—
7	0.35	GN/WH	111	Hazard Switch Signal	I	—
8	0.35	GY	1198	Endgate Release Switch Analog Signal Interior	I	QT6

S126 Drive Mode Select Switch (URC)



4232228

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series (GY)

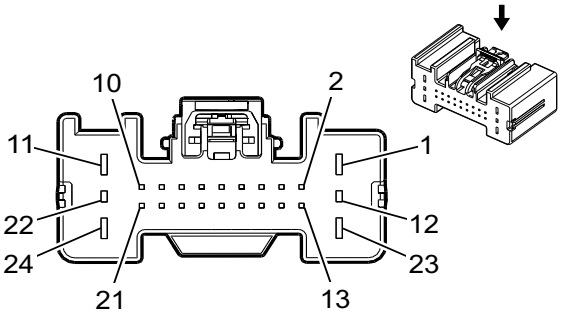
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S126 Drive Mode Select Switch (URC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
2	0.35	GY	4109	Driver Mode Switch 5V Reference	I	—
3	0.35	BK/GY	2204	Enhanced Driver Mode 1 Switch Low Reference	I	—
4	0.35	YE	6817	LED Backlight Dimming Control	I	—
5	0.35	BK	1850	Ground	I	—
6	0.35	VT/BN	300	Run Ignition 3 Voltage	I	—
7	0.35	BN	1560	Neutral Indicator Control	I	—
8	—	—	—	Not Occupied	—	—

S146 Window/Outside Rearview Mirror Switch - Driver



2871905

Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

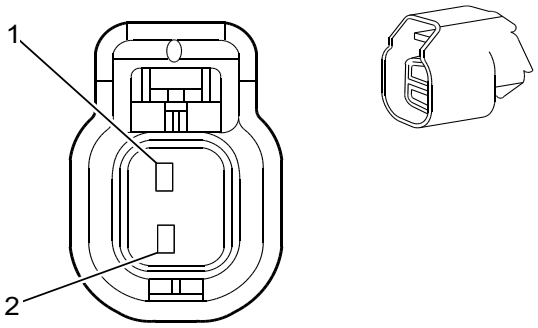
S146 Window/Outside Rearview Mirror Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	3380	Power Window Switch Driver Down Signal	II	—
2	0.35	YE/VT	3397	Passenger Mirror Motor Up (+) Down (-) Control	III	—
3	0.5	WH	3398	Passenger Mirror Motor Common Control	III	—
4	0.35	GN/BK	3396	Passenger Mirror Motor Right (+) Left (-) Control	III	—
5	0.35	GN	3381	Power Window Switch Driver Express Signal	III	—
6	0.35	BN/BK	3389	Driver Mirror Motor Right (+) Left (-) Control	III	—
7	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	III	—
8	0.35	YE/BN	3391	Driver Mirror Motor Common Control	III	—
9	0.5	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	III	—
10	—	—	—	Not Occupied	—	—
11	0.5	GN/WH	3379	Power Window Switch Driver Up Signal	II	—
12	0.35	WH/GN	3412	Driver Mirror Motor Fold In Control	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	WH/VT	3270	Driver Door Lock Motor Status Signal	III	—
15	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	III	—
16	0.35	WH/YE	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	III	—
17	0.5	VT/RD	3392	Driver Mirror Position Sensor 5V Reference	III	—

S146 Window/Outside Rearview Mirror Switch - Driver (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	III	—
19	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	III	—
20	—	—	—	Not Occupied	—	—
21	0.5	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	III	—
22	0.35	GY/WH	3411	Driver Mirror Motor Fold Out Control	I	—
23	0.5	RD/VT	1940	Battery Positive Voltage	II	—
24	0.35	BK	1150	Ground	II	—

S148L Assist Step Kick Switch - Left (BRS)



1413014

Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

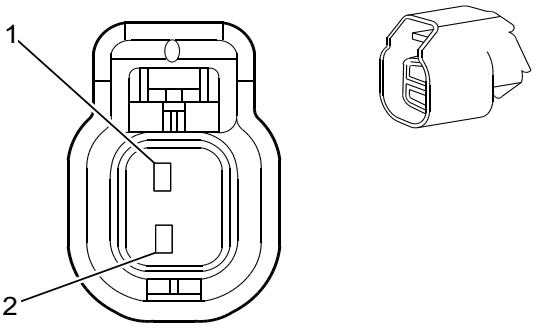
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S148L Assist Step Kick Switch - Left (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD	4746	Articulating Running Board Left Kick Switch Signal	I	—
2	—	BK	685	Articulating Running Board Kick Switch Return	I	—

S148R Assist Step Kick Switch - Right (BRS)



1413014

Connector Part Information

Harness Type: Right Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

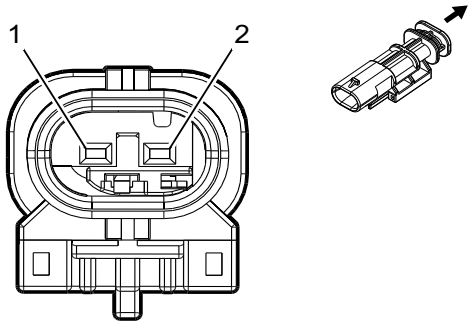
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

S148R Assist Step Kick Switch - Right (BRS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD	4747	Articulating Running Board Right Kick Switch Signal	I	—
2	—	BK	685	Articulating Running Board Kick Switch Return	I	—

S157 Pickup Box Endgate Unlatch Switch



4994411

Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GY)

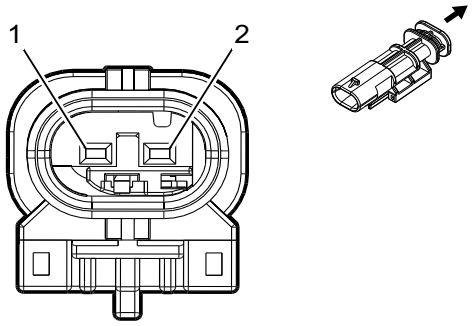
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S157 Pickup Box Endgate Unlatch Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	7292	Major Endgate Release Switch Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	(QK1/QK2)+QT5

S159E Pickup Box Endgate Control Switch - Exterior (QK1)



4994411

Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GY)

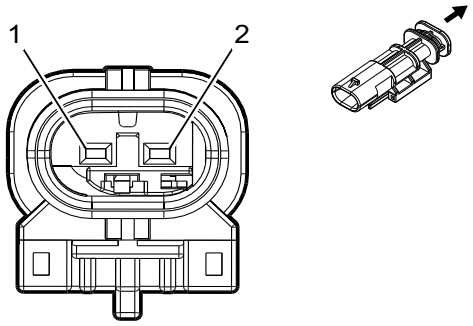
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S159E Pickup Box Endgate Control Switch - Exterior (QK1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	1144	Endgate Release Switch Discrete Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	—

S159E Pickup Box Endgate Control Switch - Exterior (QK2)



4994410

Connector Part Information

Harness Type: Endgate
OEM Connector: 33365831
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GY)

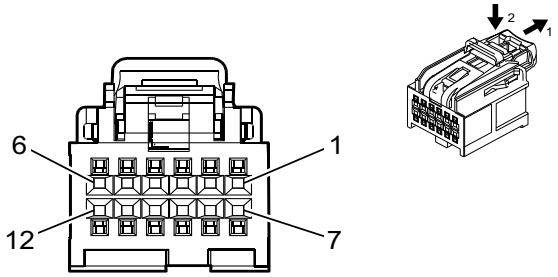
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

S159E Pickup Box Endgate Control Switch - Exterior (QK2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	7294	Minor Endgate Release Switch Discrete Signal Exterior	I	—
2	0.75	BK	1450	Ground	I	QT6

S171L Instrument Panel Center Accessory Function Switch - Left



4975223

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series (BK)

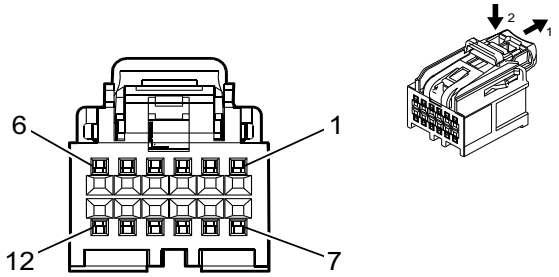
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

S171L Instrument Panel Center Accessory Function Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/GN	2555	Rear Park Assist Disable Signal	I	UD5/UD7
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.5	BU/WH	3119	Roof Rail Air Bag Defeat Switch Signal	I	—
4	0.35	GY/WH	3153	Lane Departure Warning Disable Switch Signal	I	UEU/UHX
5	0.35	WH	3152	Lane Departure Warning Indicator Control	I	UEU/UHX
6	0.35 0.35	BU/YE BU/YE	6844 7176	ABS/TCS Hill Descent Control Switch Signal All Windows Open Switch Signal	I I	JHD -JHD
7	0.5	WH	6816	Indicator Dimming Control	I	—
8	0.35	GN/BN	5852	Rear Park Assist LED Disable Signal	I	UD5/UD7
9	0.5	BK	1050	Ground	I	—
10	0.5	BN/WH	3895	Roof Rail Air Bag Defeat Switch Low Reference	I	—
11	0.35	BU	1110	Auto Stop Start Indicator Control	I	KL9+URC
12	0.35	BU	1111	Auto Stop Start Switch Signal	I	KL9+URC

S171R Instrument Panel Center Accessory Function Switch - Right



4997362

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016613
Service Connector: 13519752
Description: 12-Way F 0.64 OCS Series (BN)

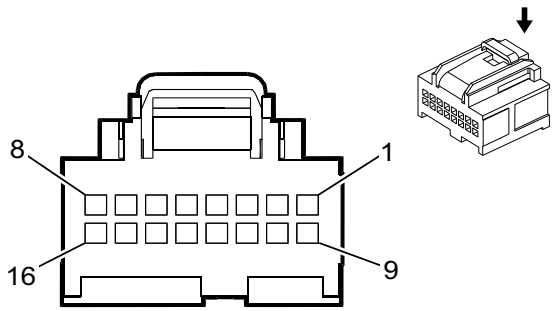
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

S171R Instrument Panel Center Accessory Function Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/WH	4630	AC Power Outlet Switch Signal	I	KC9/KCA
	0.35	GY/WH	7176	All Windows Open Switch Signal	I	WLD+OPT1
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.35	BU/YE	6844	ABS/TCS Hill Descent Control Switch Signal	I	JHD+URC
	0.35	BU/YE	7176	All Windows Open Switch Signal	I	WLD+OPT2
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	BU	1110	Auto Stop Start Indicator Control	I	KL9-URC
7	—	—	—	Not Occupied	—	—
8	0.5	BN/WH	7462	Running Boards Disable Signal	I	BRS
9	0.5	BK	1050	Ground	I	—
10	0.35	WH	6816	Indicator Dimming Control	I	—
11	0.35	YE	7755	AC Power Outlet Status Indicator Control	I	KI4/KI5
12	0.35	BU	1111	Auto Stop Start Switch Signal	I	KL9-URC
	0.35	BU/GY	553	Shift Select Switch Performance Signal	I	-URC

S172 Auxiliary Multifunction Switch (9L7)



3240102

Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series (BK)

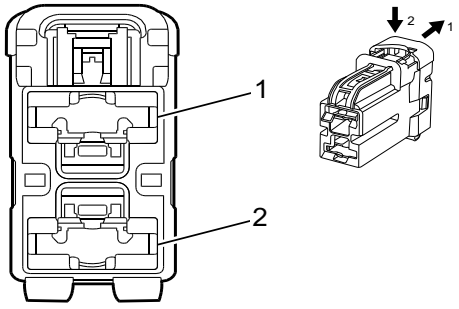
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not 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	I	—
3	0.35	WH	6816	Indicator Dimming Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	BK	961	Auxiliary 1 Switch Signal	I	—
7	0.35	BK	962	Auxiliary 2 Switch Signal	I	—
8	0.35	BK	963	Auxiliary 3 Switch Signal	I	—
9	0.35 0.35	BK BK	6821 964	Surveillance Switch Signal Auxiliary 4 Switch Signal	I	— —
10	0.5	WH/BK	5990	Emergency Lamp Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	BK	1050	Ground	I	—
13 - 16	—	—	—	Not Occupied	—	—

T1 Accessory DC/AC Power Inverter Module X1 (KI4/KI5)



2453116

Connector Part Information

Harness Type: Body
OEM Connector: 13581928
Service Connector: Service By Harness - See Part Catalog
Description: 2-Way F 9.5 Series (BK)

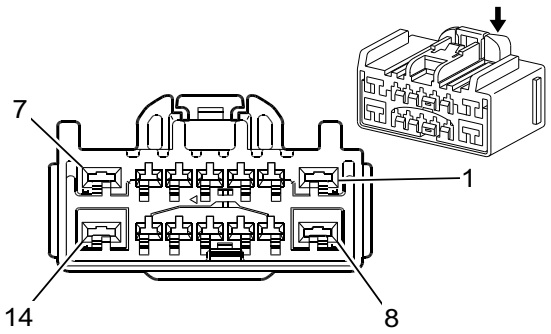
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T1 Accessory DC/AC Power Inverter 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	1150	Ground	I	—

T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)



1540775

Connector Part Information

Harness Type: Rear Body Extension
OEM Connector: 33356826
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 Series (BU)

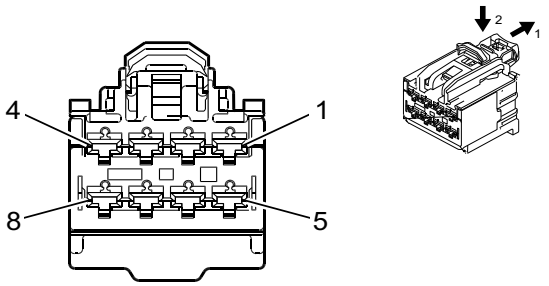
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	5683	120 V AC Phase A	II	—
2	—	—	—	Not Occupied	—	—
3	0.35	VT/YE	5985	Accessory Wakeup Serial Data	I	—
4	0.35	WH/GN	4628	DC/AC Inverter Relay Control	I	—
5	0.35	BU/BN	6807	DC To AC Inverter Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK/WH	2264	120 VAC Phase A 2	II	—
8	0.75	RD	5684	120 V AC Phase B	II	—
9	0.35	Bare	514	Low Reference	I	—
10	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	GN/BN	2266	DC To AC Inverter Control 2	I	—
13	0.35	Bare	2257	Drain Wire	I	—
14	0.75	RD/WH	2265	120 VAC Phase B 2	II	—

T3 Audio Amplifier X1 (UQA)



4875738

Connector Part Information

Harness Type: Body
OEM Connector: 33223792
Service Connector: 19369366
Description: 8-Way F 2.8 OCS Series (BK)

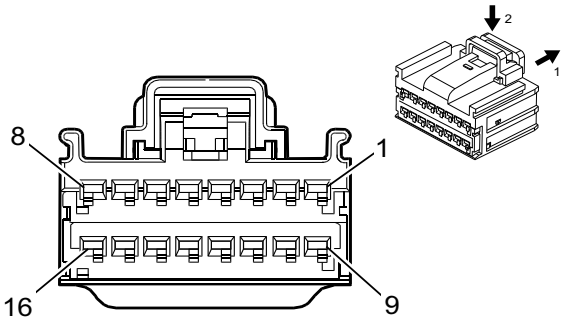
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T3 Audio Amplifier X1 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BU/GY	346	Left/Rear Subwoofer Speaker Control (+)	I	—
2	0.75	YE	200	Right Front Speaker Control (+) 1	I	—
3	0.75	BU	201	Left Front Speaker Control (+) 1	I	—
4	2.5	RD/YE	3740	Battery Positive Voltage	I	—
5	2.5	GN/BK	1794	Left/Rear Subwoofer Speaker (-) Low Reference	I	—
6	0.75	YE/BK	117	Right Front Speaker Signal (-) 1	I	—
7	0.75	BN/BU	118	Left Front Speaker Signal (-) 1	I	—
8	2.5	BK/WH	2751	Signal Ground	I	—

T3 Audio Amplifier X2 (UQA)



4332214

Connector Part Information

Harness Type: Body
OEM Connector: 15512506
Service Connector: 13591061
Description: 16-Way F 1.5 OCS Series (BK)

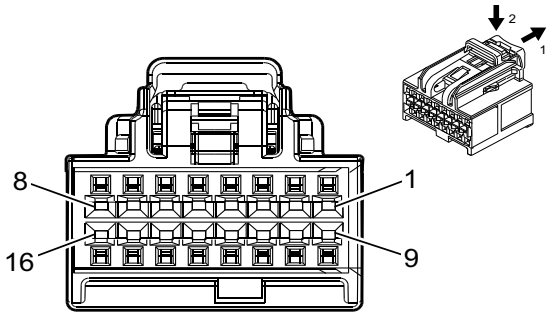
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19301767	J-35616-2A (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

T3 Audio Amplifier X2 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	BN/BK	1953	Right Front Midrange Speaker (-) Low Reference	I	—
3	0.75	BU/VT	1857	Left Front Midrange Speaker Control (+)	I	—
4	0.5	WH	46	Right Rear Speaker Control (+)	I	—
5	0.5	GN	199	Left Rear Speaker Control (+)	I	—
6 - 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 (-) Low Reference	I	—
12	0.5	BU/BK	115	Right Rear Speaker Signal (-)	I	—
13	0.5	GN/BK	116	Left Rear Speaker Signal (-)	I	—
14 - 16	—	—	—	Not Occupied	—	—

T3 Audio Amplifier X3 (UQA)



4873243

Connector Part Information

Harness Type: Body
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series (BK)

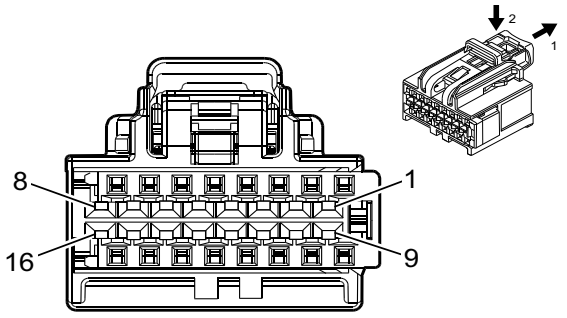
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

T3 Audio Amplifier X3 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	—
2 - 16	—	—	—	Not Occupied	—	—

T3 Audio Amplifier X4 (UQA)



4256181

Connector Part Information

Harness Type: Body
OEM Connector: 35016345
Service Connector: 13519740
Description: 16-Way F 0.64 OCS Series (BN)

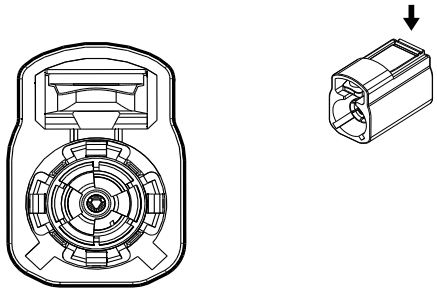
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300660	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

T3 Audio Amplifier X4 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	GY/BK	7215	Ethernet Bus 6 (+)	I	—
4	0.35	BN/BK	7214	Ethernet Bus 6 (-)	I	—
5 - 16	—	—	—	Not Occupied	—	—

T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)



4044034

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581700
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

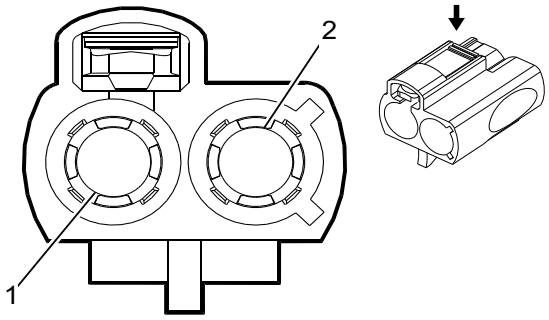
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(XM +/-HD) Coaxial Antenna XM Signal	I	—

T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)



3418133

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13583911
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Coax Type (PU)

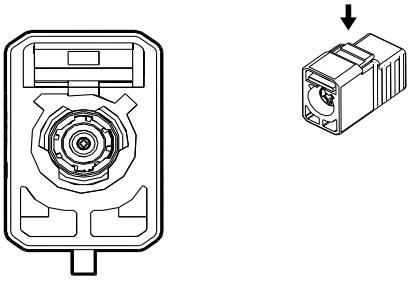
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	COAX	—	Coaxial Antenna Cell/GPS combined Signal	I	—
2	—	COAX	—	Coaxial Antenna Cell Phone Signal	I	—

T4M Radio Antenna



2893647

Connector Part Information

Harness Type: Radio Antenna COAX
OEM Connector: 13581687
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

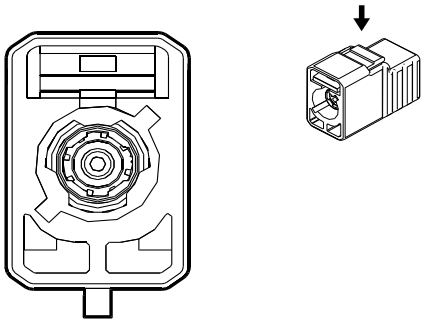
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

T4M Radio Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(AM/FM) Antenna RF Signal	I	—

T4P Navigation Antenna ((IOS/IOT)-UE1)



3293625

Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581690
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BU)

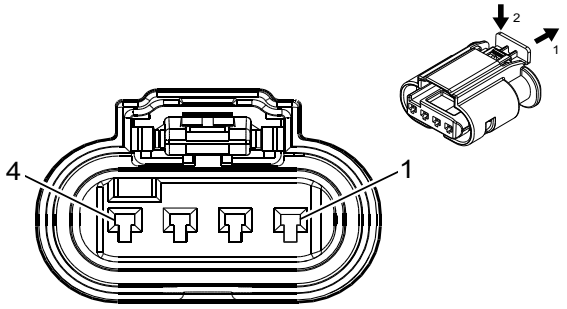
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

T4P Navigation Antenna ((IOS/IOT)-UE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	(GPS only) Coaxial Antenna GPS Signal	I	—

T8A Ignition Coil 1 (L3B)



4994577

Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

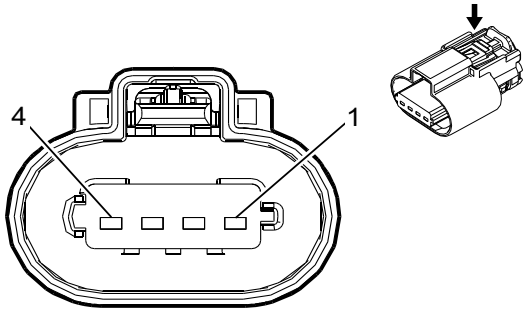
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8A Ignition Coil 1 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/VT	2121	Ignition Control 1	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8A Ignition Coil 1 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

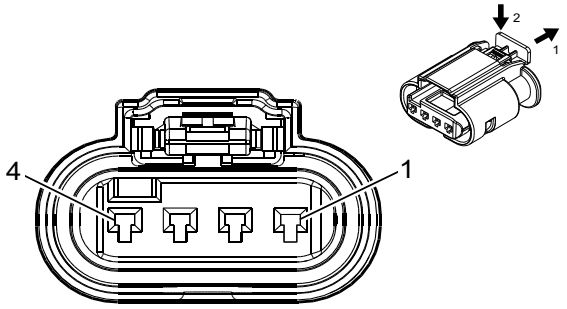
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8A Ignition Coil 1 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L84/L87
	0.75	BK	4450	Ground	I	LV3
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/VT	2121	Ignition Control 1	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8B Ignition Coil 2 (L3B)



4994577

Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

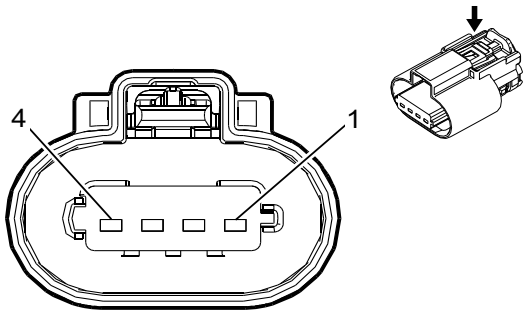
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8B Ignition Coil 2 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/WH	2122	Ignition Control 2	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8B Ignition Coil 2 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

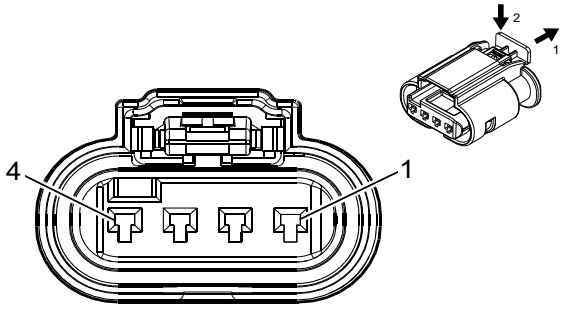
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8B Ignition Coil 2 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L84/L87
	0.75	BK	350	Ground	I	LV3
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BU/WH	2122	Ignition Control 2	I	—
4	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	—

T8C Ignition Coil 3 (L3B)



4994577

Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

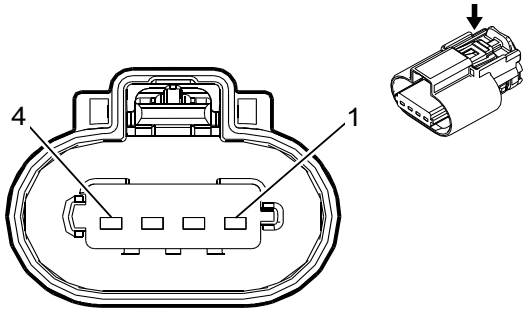
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8C Ignition Coil 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN/BU	2123	Ignition Control 3	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8C Ignition Coil 3 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

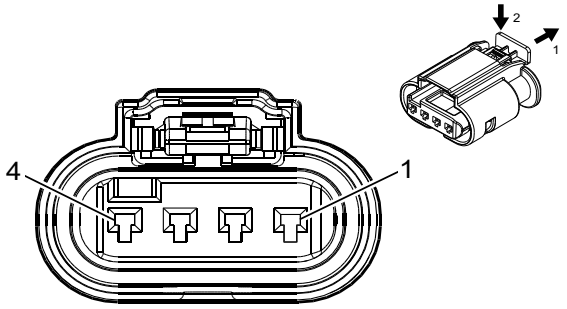
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8C Ignition Coil 3 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L84/L87
	0.75	BK	4450	Ground	I	LV3
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN/BU	2123	Ignition Control 3	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8D Ignition Coil 4 (L3B)



4994577

Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

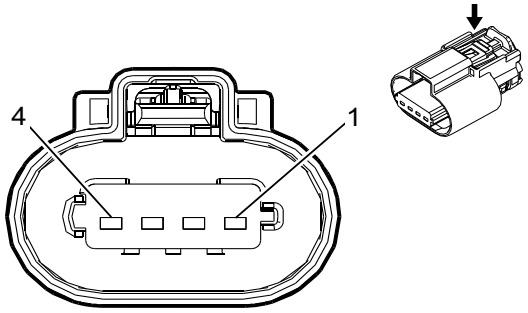
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8D Ignition Coil 4 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	450	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	YE/BU	2124	Ignition Control 4	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8D Ignition Coil 4 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

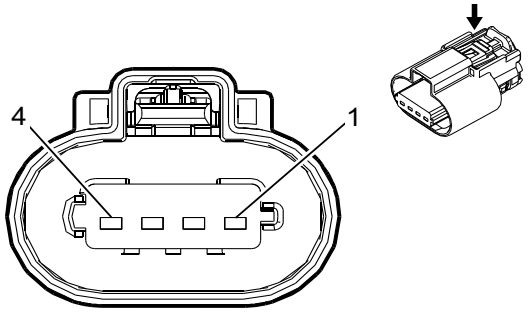
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8D Ignition Coil 4 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L82/L84/L87
	0.75	BK	4450	Ground	I	LV3
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	YE/BU	2124	Ignition Control 4	I	—
4	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	—

T8E Ignition Coil 5 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

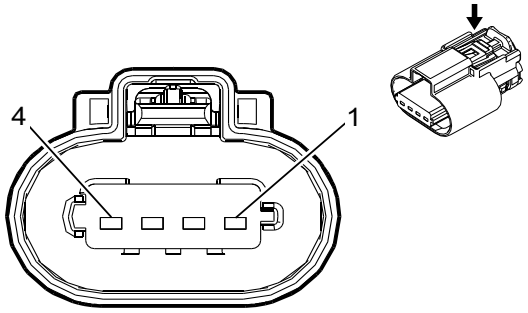
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8E Ignition Coil 5 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L84/L87
	0.75	BK	4450	Ground	I	LV3
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/GY	2125	Ignition Control 5	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8F Ignition Coil 6 (L82/L84/L87/LV3)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

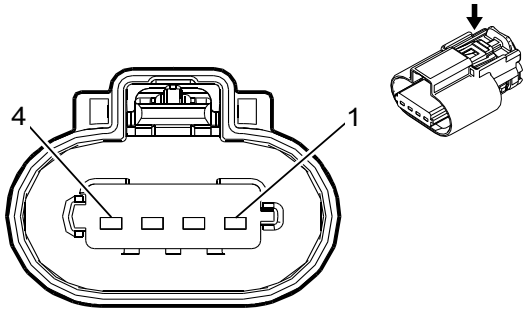
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8F Ignition Coil 6 (L82/L84/L87/LV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	L82/L84/L87
	0.5	BK	4450	Ground	I	LV3
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BN/BU	2126	Ignition Control 6	I	—
4	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	L82/L84/L87
	0.5	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	LV3

T8G Ignition Coil 7 (L82/L84/L87)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

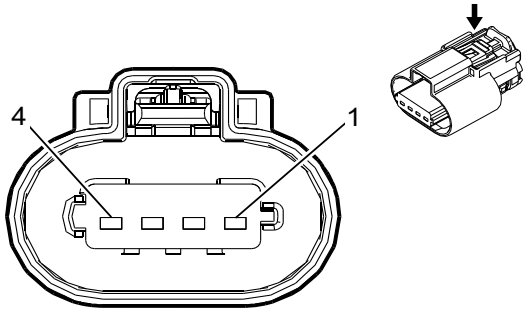
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8G Ignition Coil 7 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN/GY	2127	Ignition Control 7	I	—
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	I	—

T8H Ignition Coil 8 (L82/L84/L87)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

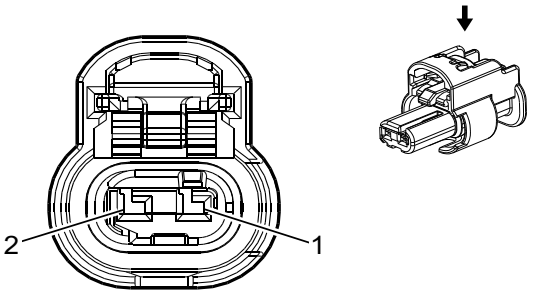
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T8H Ignition Coil 8 (L82/L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	4550	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	VT/WH	2128	Ignition Control 8	I	—
4	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	I	—

T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)



4649903

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

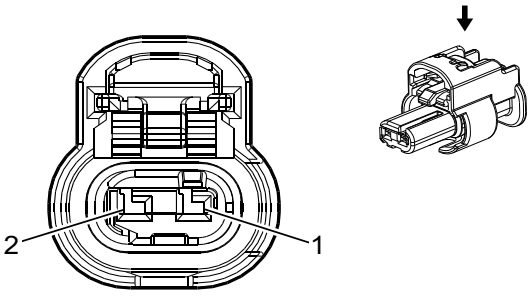
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BK	3552	Passive Start Interior Antenna 1 Signal Hi	I	—
2	0.5	WH	3553	Passive Start Interior Antenna 1 Signal Lo	I	—

T10E Keyless Entry Antenna - Rear Compartment (BTM)



4649903

Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

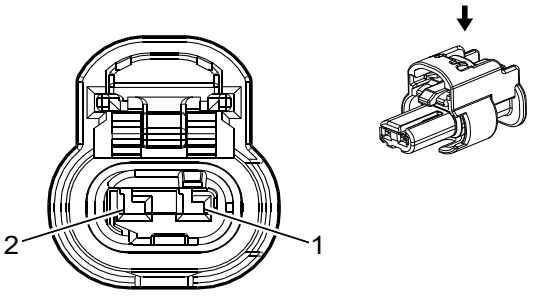
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T10E Keyless Entry Antenna - Rear Compartment (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	—
2	0.5	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	—

T10J Keyless Entry Antenna - Center Console Front (BTM+D07)



4649903

Connector Part Information

Harness Type: Floor Console
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

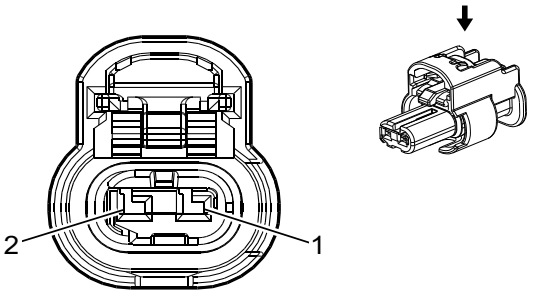
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T10J Keyless Entry Antenna - Center Console Front (BTM+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3554	Passive Start Interior Antenna 2 Signal Hi	I	—
2	0.5	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	—

T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)



4335931

Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 1-2296694-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

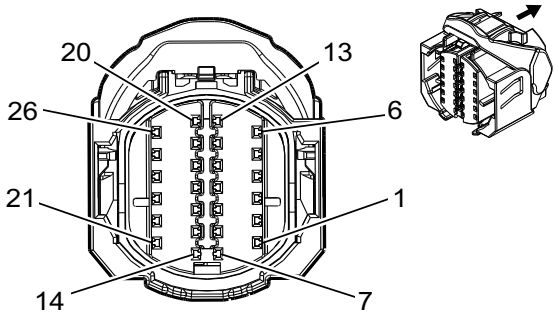
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3554	Passive Start Interior Antenna 2 Signal Hi	I	—
2	0.5	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	—

T12 Automatic Transmission Assembly X1 (MQB)



4420489

Connector Part Information

Harness Type: Engine
OEM Connector: 33178413
Service Connector: 13596549
Description: 26-Way F 1.2 MCON-CB Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19331730	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19331733	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

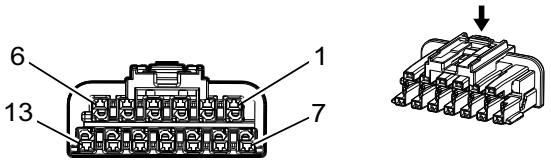
T12 Automatic Transmission Assembly X1 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	6353	Input Speed Signal	II	—
2	0.5	GN/VT	4510	Transmission Intermediate Speed Signal	II	—
3	0.5	BN/WH	6254	Transmission Input Speed Sensor Signal	II	—
4	0.5	GY/BU	6358	Output Speed Signal	II	—
5	0.5	VT/BU	5724	Ignition Mode Switch Mode Control	II	—
6	0.5	WH/BU	5726	Ignition Mode Switch Mode Control Backup	II	—
7	0.5	YE/GN	4170	Transmission Position Sensor B 9V Reference	II	—
8	0.5	YE/BU	4171	Transmission Position Sensor A 9V Reference	II	—
9	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	II	—
10	0.75	RD/VT	7940	Battery Positive Voltage	II	—
11	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	II	—
12	0.5	WH/RD	480	Engine Control Sensors 5 Volt Reference (2)	II	—
13	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	—
14	0.5	YE/BN	6404	Clutch E Control	II	—
15	0.5	GY/GN	6403	Clutch D Control	II	—
16	0.5	GY	6402	Clutch C Control	II	—
17	1	BK	4450	Ground	I	—
18	0.5	GN/WH	2968	Transmission Auxiliary Oil Pump Control	II	—
19	0.5	GN/BK	7819	Default Disable Solenoid Control	II	—

T12 Automatic Transmission Assembly X1 (MQB) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	BK/GN	580	Engine Control Sensors Low Reference (2)	II	—
21	0.5	VT	4509	Transmission Clutch F Control	II	—
22	0.5	WH/BU	4507	Transmission Clutch H Control	II	—
23	0.5	WH	4508	Transmission Clutch G Control	II	—
24	0.5	GN/WH	1530	Transmission Mainline Pressure Solenoid Control	II	—
25	0.5	VT/WH	422	Torque Converter Clutch Solenoid Control	II	—
26	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	II	—

T12 Automatic Transmission Assembly X2 (MQB)



4757907

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series (BN)

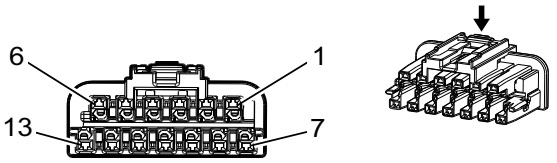
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T12 Automatic Transmission Assembly X2 (MQB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/GY	5726	Ignition Mode Switch Mode Control Backup	I	—
2	0.5	YE	5724	Ignition Mode Switch Mode Control	I	—
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 Oil Temperature Sensor Signal	I	—
8	0.5	OG	480	Engine Control Sensors 5 Volt Reference (2)	I	—
9	0.5	BN	6387	Transmission High Side Driver 1 Signal Driver	I	—
10	1.5	GN/VT	8640	Battery Positive Voltage	I	—
11	0.5	WH	6388	Transmission High Side Driver 2 Signal	I	—
12	0.5	BU	4171	Transmission Position Sensor A 9V Reference	I	—
13	0.5	GN	4170	Transmission Position Sensor B 9V Reference	I	—

T12 Automatic Transmission Assembly X3 (MQB)



4757999

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series (BN)

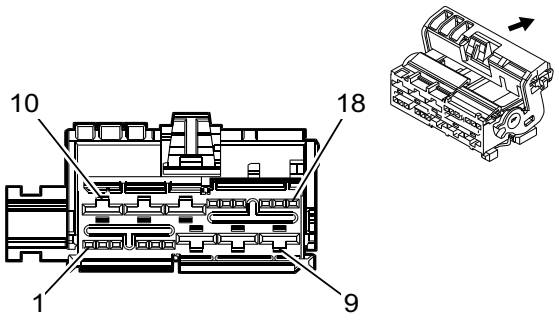
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T12 Automatic Transmission Assembly X3 (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 Mainline Pressure Solenoid Control	I	—
5	0.5	GY/BN	422	Torque Converter Clutch Solenoid Control	I	—
6	0.5	BU/BN	586	Transmission Oil Temperature Sensor Low Reference	I	—
7	0.5	BU/GN	6404	Clutch E Control	I	—
8	0.5	GN/BN	6403	Clutch D Control	I	—
9	0.5	GY	6402	Clutch C Control	I	—
10	1.5	BK/YE	4450	Ground	I	—
11	0.5	GY/OG	2968	Transmission Auxiliary Oil Pump Control	I	—
12	0.5	VT	7819	Default Disable Solenoid Control	I	—
13	0.5	BK/GY	3927	IMS Mode Switch Low Reference	I	—

T19 Power Supply Transformer (KL9)



3825662

Connector Part Information

Harness Type: Body
OEM Connector: 15534193
Service Connector: 19330678
Description: 18-Way F 0.64 MTS, 6.3 MCP Series (BK)

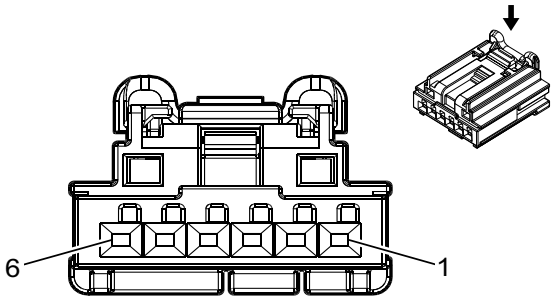
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13327122	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	13327123	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	13579915	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	A	B

T19 Power Supply Transformer (KL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	VT/YE	5985	Accessory Wakeup Serial Data	II	—
5	0.5	YE/BK	625	Starter Enable Relay Control	I	—
6	0.5	VT/GN	1739	Run/Crank Ignition 1 Voltage	I	—
7	2.5	BK	1250	Ground	III	—
8	2.5	RD/YE	8140	Battery Positive Voltage	III	—
9	2.5	RD/GN	2173	12V Regulated Supply Voltage 2	III	—
10	2.5	RD/YE	2172	12V Regulated Supply Voltage 1	III	—
11	2.5	RD/WH	8040	Battery Positive Voltage	III	—
12	2.5	BK	1150	Ground	III	—
13	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
14	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
15	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
16	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
17	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
18	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—

T22 Mobile Device Wireless Charger Module (K4C)



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

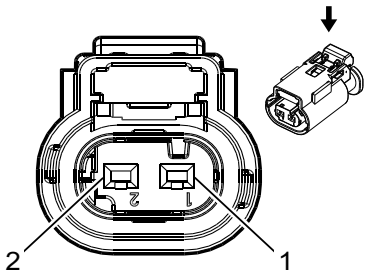
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

T22 Mobile Device Wireless Charger Module (K4C)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	4601	Retained Accessory Power Fused Control	I	—
2	0.5	BK	1150	Ground	I	—
3	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	—
4	0.35	BN	4511	Wireless Charging System Fault Indicator Control	I	—
5 - 6	—	—	—	Not Occupied	—	—

TBD1 Engine Coolant Temperature 7 (LM2)



2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

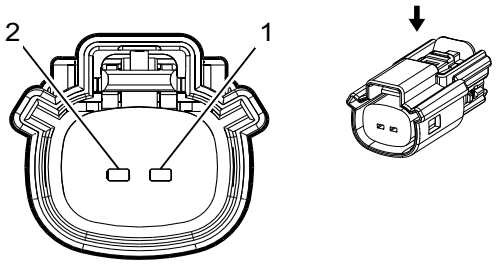
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

TBD1 Engine Coolant Temperature 7 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/YE	626	Engine Control Sensors Low Reference (3)	I	—
2	0.5	BU/BK	1422	Engine Water Charge Air Coolant Temperature Signal	I	—

TBD9 Pickup Box Endgate Latch (QK1+QT5)



2474713

Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

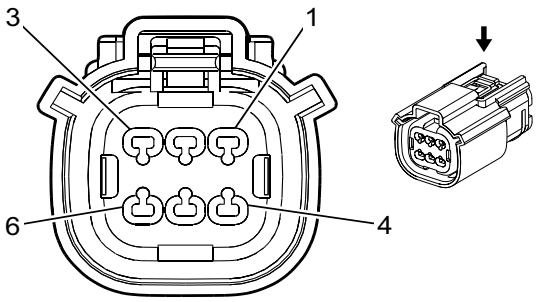
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

TBD9 Pickup Box Endgate Latch (QK1+QT5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	1299	Major Endgate Motor Supply Voltage	I	—
2	0.5	YE/BK	7730	Major Endgate Motor Return	I	—

X80C Accessory Power Receptacle - Cargo (KC9/KCA)



1986157

Connector Part Information

Harness Type: Cargo Accessory Power Receptacle Jumper
OEM Connector: 15533832
Service Connector: 19333336
Description: 6-Way F 150 MX Series, Sealed (BK)

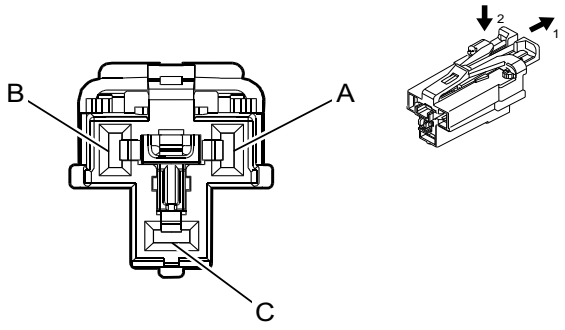
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X80C Accessory Power Receptacle - Cargo (KC9/KCA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	7754	AC Power Outlet Enable	I	—
2	0.75	GN/BN	2266	DC To AC Inverter Control 2	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	BK/WH	2264	120 VAC Phase A 2	I	—
5	1	BK	6650	Ground (66) Propulsion System	I	—
6	0.75	RD/WH	2265	120 VAC Phase B 2	I	—

X80G Accessory Power Receptacle - Instrument Panel



4872413

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33386302
Service Connector: 19369281
Description: 3-Way F 2.8 APEX Series (GY)

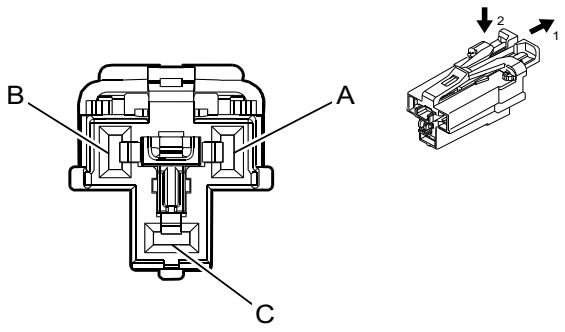
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X80G Accessory Power Receptacle - Instrument Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD/BN	4240	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1050	Ground	I	—

X80L Accessory Power Receptacle - Center Console Rear (A50/D07)



4872413

Connector Part Information

Harness Type: Floor Console
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series (GY)

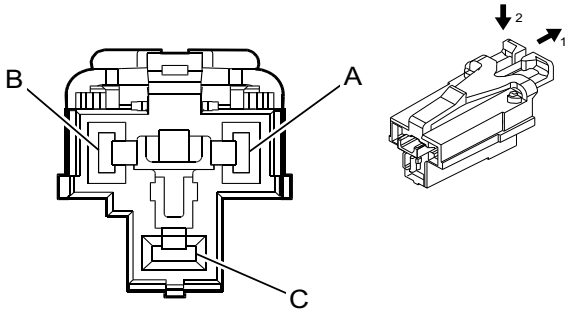
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X80L Accessory Power Receptacle - Center Console Rear (A50/D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD/WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1150	Ground	I	—

X80M Accessory Power Receptacle - Rear Seat (KPA+(AE7/AZ3))



4997561

Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 33266036
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series (GY)

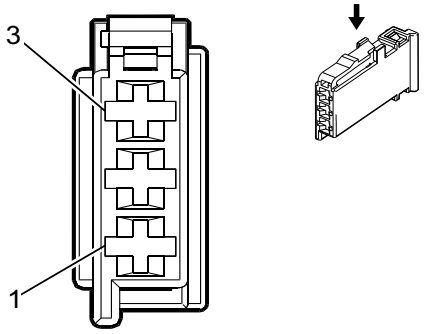
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X80M Accessory Power Receptacle - Rear Seat (KPA+(AE7/AZ3))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	RD/WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1.5	BK	1150	Ground	I	—

X81 Accessory Power Receptacle - 110V AC X1 (KI4)



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3-Way F 1.6 Micro-Timer Series (BK)

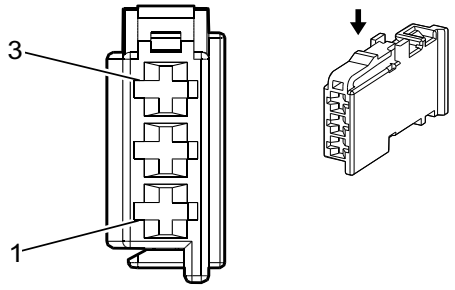
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X81 Accessory Power Receptacle - 110V AC X1 (KI4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	7754	AC Power Outlet Enable	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK	5683	120 V AC Phase A	I	—

X81 Accessory Power Receptacle - 110V AC X2 (KI4)



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3-Way F 1.6 Timer Series, Sealed (GY)

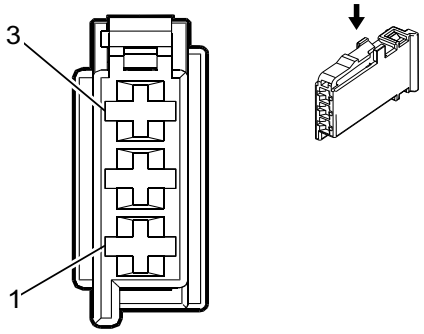
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X81 Accessory Power Receptacle - 110V AC X2 (KI4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/BN	6807	DC To AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD	5684	120 V AC Phase B	I	—

X81B Accessory Power Receptacle - 220V AC X1 (KI5)



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3-Way F 1.6 Micro-Timer Series (BK)

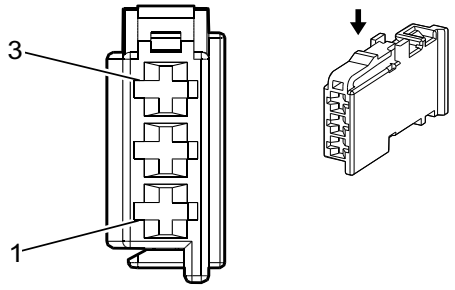
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X81B Accessory Power Receptacle - 220V AC X1 (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	7754	AC Power Outlet Enable	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	BK	5683	120 V AC Phase A	I	—

X81B Accessory Power Receptacle - 220V AC X2 (KI5)



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3-Way F 1.6 Timer Series, Sealed (GY)

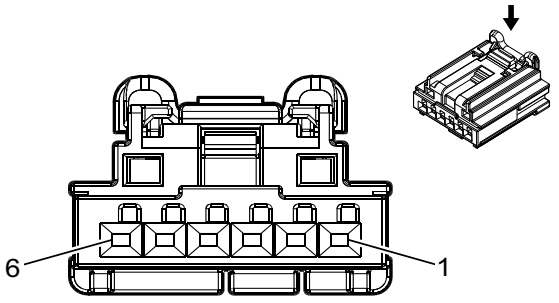
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X81B Accessory Power Receptacle - 220V AC X2 (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/BN	6807	DC To AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD	5684	120 V AC Phase B	I	—

X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

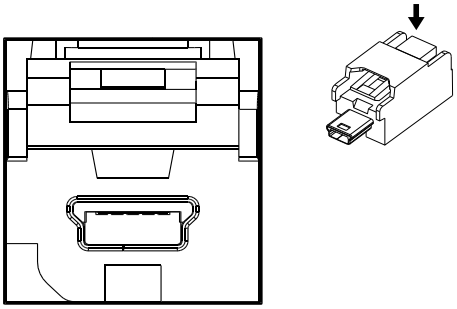
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/WH	1340	Battery Positive Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.35	BK	1250	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)



3214018

Connector Part Information

Harness Type: Floor Console USB
OEM Connector: 13584747
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type (GY)

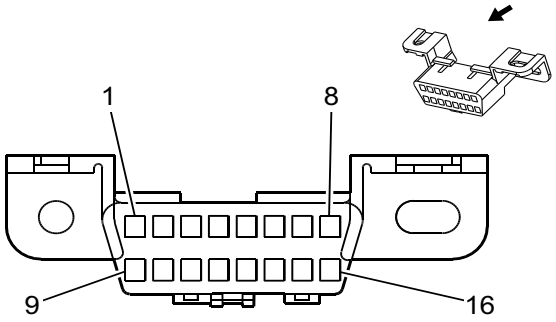
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X83 Auxiliary Audio Input X2 ((IOS/IOT)+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
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series (BK)

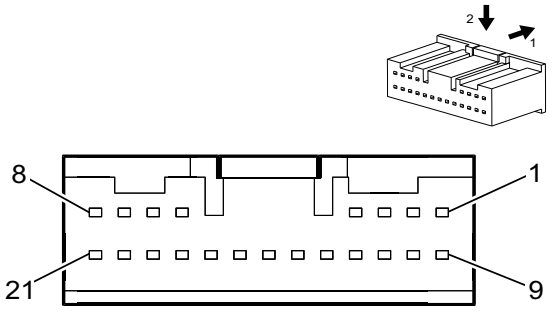
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13580059	J-35616-14 (GN)	J-38125-12A	12129484	Delphi 19	E	C

X84 Data Link Connector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	2100	Low Speed GMLAN Serial Data #3	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BU/WH	2089	High Speed GMLAN Serial Data (+)(13)	I	—
4	0.35	BK	1850	Ground	I	—
5	0.5	BK/WH	1851	Signal Ground	I	—
6	0.35	BU/BK	1978	High Speed GMLAN Serial Data (+)(11)	I	—
7 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH	2090	High Speed GMLAN Serial Data (-)(13)	I	—
12	0.35	BU/BN	1980	High Speed GMLAN Serial Data (+)(12)	I	—
13	0.35	WH	1981	High Speed GMLAN Serial Data (-)(12)	I	—
14	0.35	WH	1979	High Speed GMLAN Serial Data (-)(11)	I	—
15	—	—	—	Not Occupied	—	—
16	0.5	RD/WH	640	Battery Positive Voltage	I	—

X85 Steering Wheel Air Bag Coil X1



3960237

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575742	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P
II	13575864	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03GF-M064	Yazaki 27	P	P
III	13575867	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

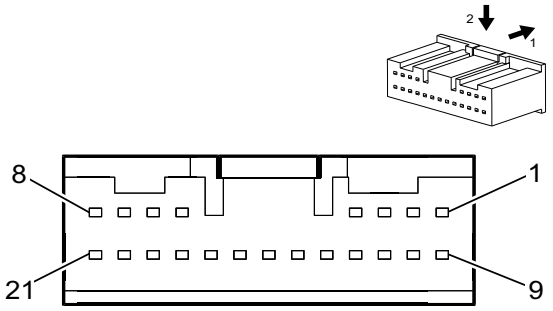
X85 Steering Wheel Air Bag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	1851	Signal Ground	I	—
2	0.35	GN/WH	3287	Horn Switch Signal	III	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	OG/GN	3023	Steering Wheel Module Stage 2 High Control	II	—
6	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	II	—
7	0.35	BN/OG	3020	Steering Wheel Module Stage 1 Low Control	II	—
8	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	II	—
9	0.35	GN/BK	3894	Local Interconnect Network Serial Data Bus 12	III	—
10	0.35	GN/BU	4119	Local Interconnect Network Serial Data Bus 19	III	—
11	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	III	—
12	0.35	WH/RD	1444	12V Reference	III	—
13	—	—	—	Not Occupied	—	—
14	0.35	RD/YE	3040	Battery Positive Voltage	III	—
15	0.35	GY/GN	5737	Adaptive Cruise Control Gap Up/Down Switch Signal	III	—
16	—	—	—	Not Occupied	—	—
17	0.5	YE	6817	LED Backlight Dimming Control	I	—

X85 Steering Wheel Air Bag Coil X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18 - 19	—	—	—	Not Occupied	—	—
20	0.5	BK	1850	Ground	I	—
21	0.5	VT/WH	1139	Run/Crank Ignition 1 Voltage	I	—

X85 Steering Wheel Air Bag Coil X2



3960237

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13510218
Service Connector: Service by Harness - See Part Catalog
Description: 21-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

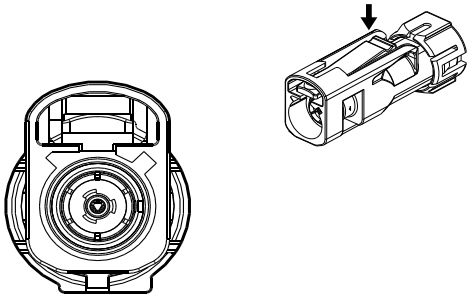
X85 Steering Wheel Air Bag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	— —	BK BK	1850 1850	Ground Ground	I	— —
2	—	RD	3287	Horn Switch Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	—	GY/OG	3023	Steering Wheel Module Stage 2 High Control	I	—
6	—	OG/VT	3022	Steering Wheel Module Stage 2 Low Control	I	—
7	—	OG/WH	3020	Steering Wheel Module Stage 1 Low Control	I	—
8	—	YE/OG	3021	Steering Wheel Module Stage 1 High Control	I	—
9	—	OG	1139	Run/Crank Ignition 1 Voltage	I	—
10	—	BK	1850	Ground	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	—	YE/	6817	LED Backlight Dimming Control	I	—
14	—	—	—	Not Occupied	—	—
15	—	VT	5737	Adaptive Cruise Control Gap Up/Down Switch Signal	I	—
16	— —	GN GN	3040 3040	Battery Positive Voltage Battery Positive Voltage	I	— —
17	—	—	—	Not Occupied	—	—
18	—	BU	1444	12V Reference	I	—
19	—	GN/OG	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
20	—	WH	4119	Local Interconnect Network Serial Data Bus 19	I	—

X85 Steering Wheel Air Bag Coil X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	—	BK/BU	3894	Local Interconnect Network Serial Data Bus 12	I	—
	—	BK/BU	3894	Local Interconnect Network Serial Data Bus 12		—

X88 Trailer Connector X2 (UVI)



4817703

Connector Part Information

Harness Type: Chassis COAX
OEM Connector: 13514209
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

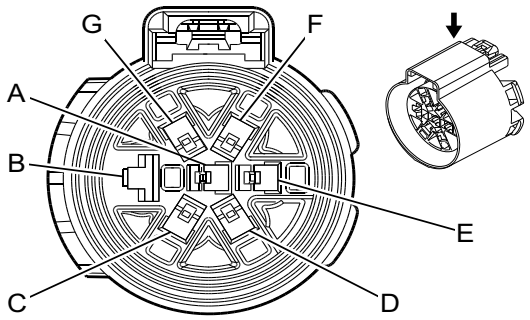
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X88 Trailer Connector X2 (UVI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax	—	Front Vision Camera #1 Signal	I	—

X88 Trailer Connector X1 (Z82-U1D)



2056936

Connector Part Information

Harness Type: Chassis
OEM Connector: 13857223
Service Connector: 13583927
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed (BK)

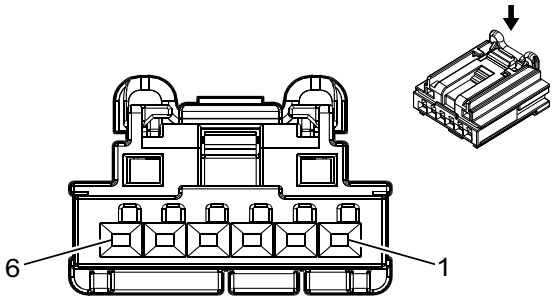
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X88 Trailer Connector X1 (Z82-U1D)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	GN/WH	5189	Trailer Backup Lamp Control	II	U1D
	0.75	WH/GN	1624	Trailer Backup Lamp Control	II	-U1D
B	5	BK	1750	Ground	I	U1D
	5	WH	22	Trailer Ground	I	-U1D
C	2.5	BU	47	Trailer Auxiliary Control	II	—
D	0.75	GN/VT	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	2	RD/BN	7601	Trailer Battery Charge Control	II	U1D
	4	RD/GN	742	Battery Positive Voltage	II	-U1D
F	0.75	GY/BN	2109	Trailer Park Lamp Control	II	U1D
	1.5	GY/BN	2109	Trailer Park Lamp Control	II	Z82/-U1D
G	0.75	YE/GY	1618	Left Rear Trailer Stop/Turn Lamp Control	II	U1D
	0.75	YE/BU	318	Left Rear Trailer Stop/Turn Lamp Control	II	-U1D

X92 USB Receptacle X1



3960313

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series (BK)

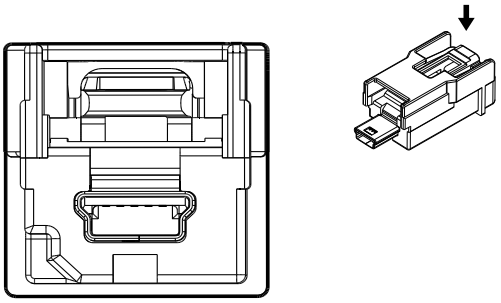
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X92 USB Receptacle X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/WH	1340	Battery Positive Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.35	BK/WH	1851	Signal Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

X92 USB Receptacle X2



2807491

Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13581313
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X92 USB Receptacle X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X92 USB Receptacle X3 (D07+(IOS/IOT))

—

Connector Part Information

Harness Type: USB Receptacle Jumper
OEM Connector: 13584986
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

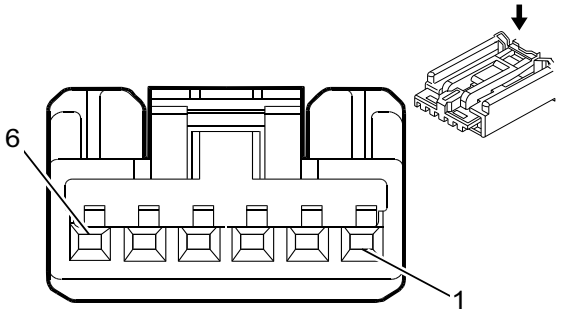
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X92 USB Receptacle X3 (D07+(IOS/IOT))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BK	—	—	USB	USB Cable	I	—

X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)



1862240

Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: AIT2PB-06-1AK
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Kaizen Series (BK)

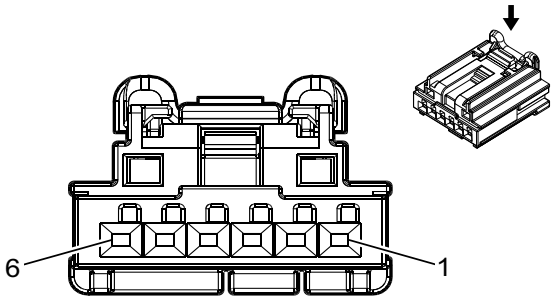
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK	1150	Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	VT/YE	143	Accessory Ignition Voltage	I	—

X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))



3960313

Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

Terminal Part Information

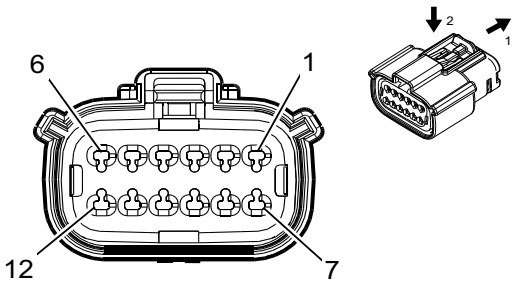
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))

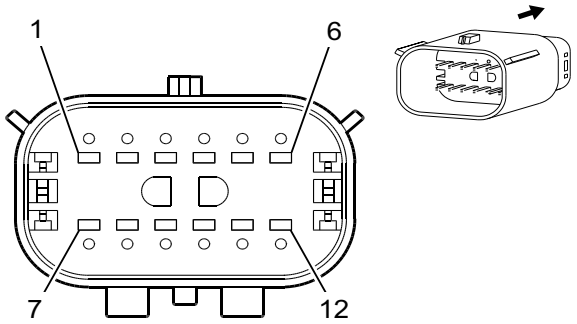
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/YE	143	Accessory Ignition Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.5	BK	1150	Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

Inline Harness Connector End Views

X100 Front Fascia Harness to Body Harness (T3U/UD5)



2871860



1825167

Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33276998
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 33369138
Service Connector: 19369242
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119395	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	19119440	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

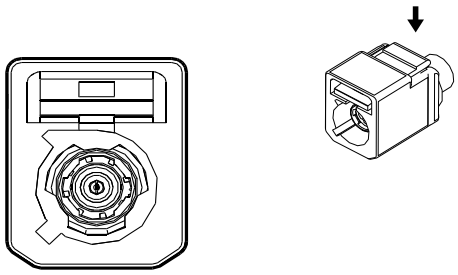
X100 Front Fascia Harness to Body Harness (T3U/UD5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	250	I	—	Ground	1	0.5	BK	250	II	—
2	0.5	VT/GY	5218	I	—	Front Parking Right Mid Sensor	2	0.5	VT/GY	5218	II	—
3	0.5	WH/GY	5217	I	—	Front Parking Right Corner Sensor	3	0.5	WH/GY	5217	II	—
4	0.5	BK	150	I	—	Ground	4	0.75	BK	150	III	—
5	0.5	VT/WH	5215	I	—	Front Parking Left Corner Sensor	5	0.5	VT/WH	5215	II	—
6	0.5	BK/BU	5214	I	—	Front Parking Sensor Low Reference	6	0.5	BK/BU	5214	II	—
7	0.5	YE/GY	5216	I	—	Front Parking Left Mid Sensor	7	0.5	YE/GY	5216	II	—
8	0.5	YE/VT	5213	I	—	Front Parking Left/Right/Mid Sensor	8	0.5	YE/VT	5213	II	—

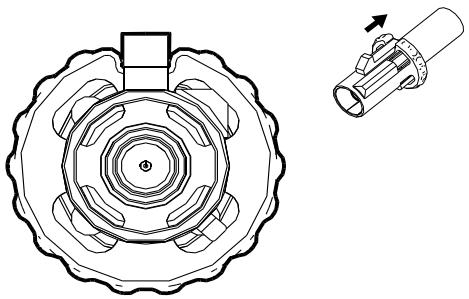
X100 Front Fascia Harness to Body Harness (T3U/UD5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.5	BN/VT	2234	I	—	Front Fog Lamp Control	9	0.5	BN/VT	2234	II	—
10 - 12	—	—	—	—	—	Not Occupied	10 - 12	—	—	—	—	—

X109 Chassis Harness to Body Harness (UVB)



4002773



4380044

Connector Part Information

Harness Type: Chassis COAX

OEM Connector: 13514208

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BN)

Connector Part Information

Harness Type: Body COAX

OEM Connector: 13514205

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BN)

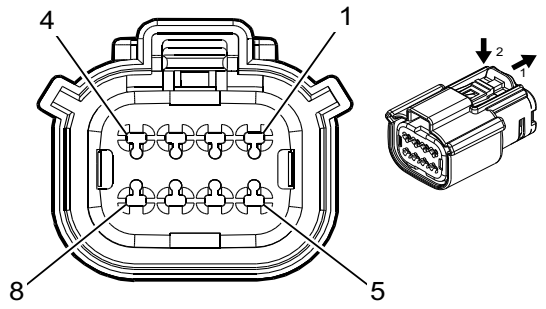
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

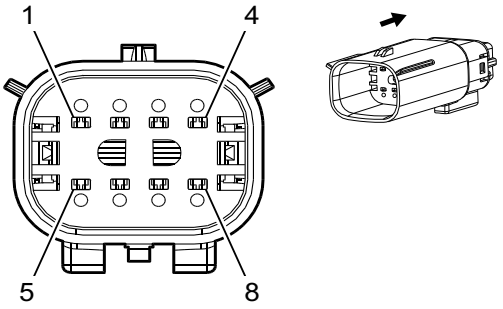
X109 Chassis Harness to Body Harness (UVB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Coaxial Camera Signal	—	—	Coax	—	I	—

X110 Body Harness to Left Headlamp Harness



4846407



2667653

Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 19368638
Description: 8-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

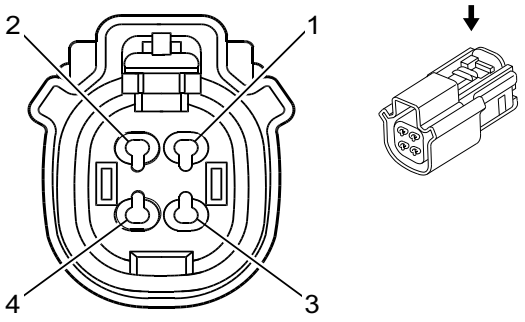
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

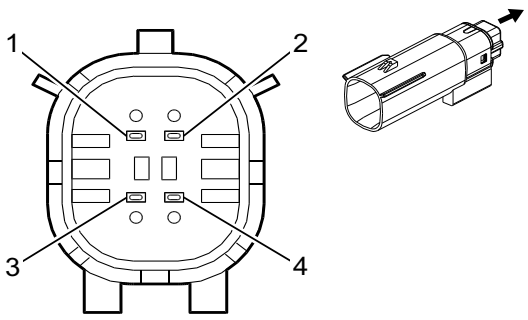
X110 Body Harness to Left Headlamp Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	150	I	—	Ground	1	0.75	BK	150	II	—
2	0.75	YE	2227	I	-GF2-GF5-GPZ	Left Headlamp Control	2	0.75	BK	2227	II	-GF2-GF5-GPZ
3	0.75	YE	712	I	—	Left Headlamp Low Beam Control	3	0.75	BK	712	II	—
4	0.75	WH	711	I	—	Left Headlamp High Beam Control	4	0.75	BK	711	II	—
5	0.5	VT/GY	709	I	—	Left Park Lamp Control	5	0.5	BK	709	II	—
6	0.35	BU/VT	3204	I	-GF2-GF5-GPZ	Left Headlamp Bulb Outage Signal	6	0.35	BK	3204	II	-GF2-GF5-GPZ
7	0.5	BU/WH	1314	I	—	Left Front Turn Signal Lamp Control	7	0.5	BK	1314	II	—
8	0.35	GY/BU	7538	I	-GF2-GF5-GPZ	Left Front DRL Control	8	0.35	BK	7538	II	-GF2-GF5-GPZ

X111 Transfer Case Harness to Engine Harness ((NP0/NQH)+LM2)



1960031



2368875

Connector Part Information

Harness Type: Transfer Case
OEM Connector: 33346391
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Engine
OEM Connector: 33344515
Service Connector: 19330396
Description: 4-Way M 150 MX Series, Sealed (BK)

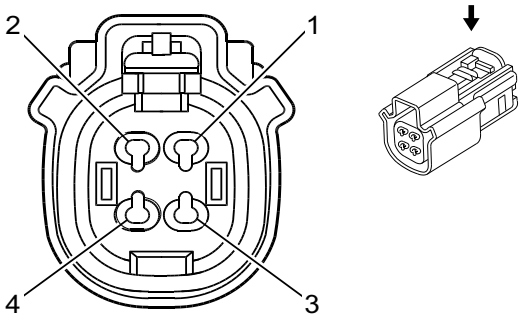
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

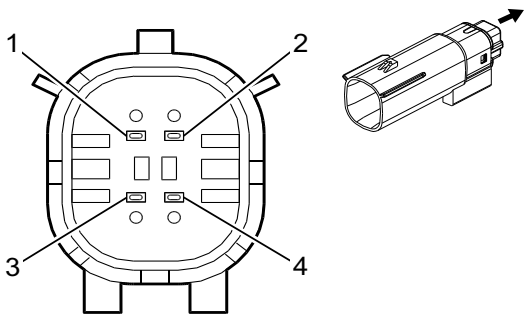
X111 Transfer Case Harness to Engine Harness ((NP0/NQH)+LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	4450	I	—	Ground	1	0.5	BK	4450	II	—
2	0.5	YE/WH	1695	I	—	Four Wheel Drive Wheel Lock Indicator Control	2	0.5	YE/WH	1695	II	—
3	0.5	VT/BK	2139	I	—	Run/Crank Ignition 1 Voltage	3	0.5	VT/BK	2139	II	—
4	0.5	GY/BK	1570	I	—	Front Axle Actuator Control	4	0.5	GY/BK	1570	II	—

X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)



1960031



2368875

Connector Part Information

Harness Type: Transfer Case
OEM Connector: 33346391
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Engine
OEM Connector: 33344515
Service Connector: 19330396
Description: 4-Way M 150 MX Series, Sealed (BK)

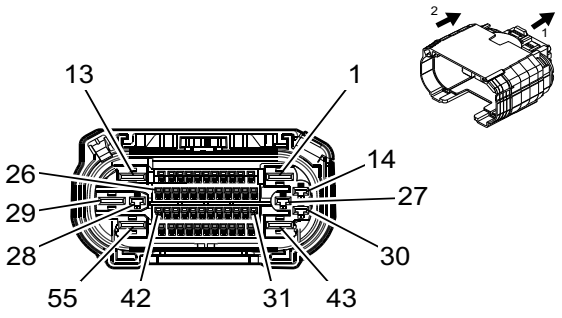
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

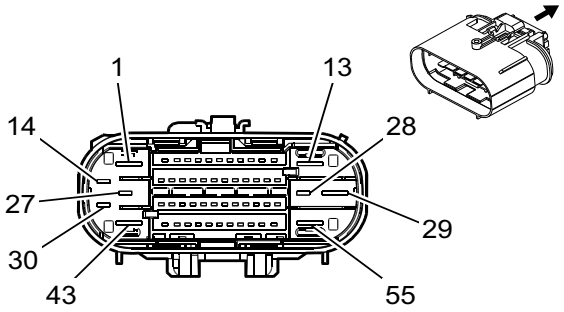
X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	4450	I	—	Ground Ground	1	1 0.5	BK BK	4450 4450	II II	L82 LV3/L3B
2	0.5	YE/WH	1695	I	—	Four Wheel Drive Wheel Lock Indicator Control	2	0.5	YE/WH	1695	II	—
3	0.5	VT/BK	2139	I	—	Run/Crank Ignition 1 Voltage	3	0.5	VT/BK	2139	II	—
4	0.5	GY/BK	1570	I	—	Front Axle Actuator Control	4	0.5	GY/BK	1570	II	—

X115 Engine Harness to Body Harness



4992329



4994369

Connector Part Information

Harness Type: Engine

OEM Connector: 33357990

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (GY)

Connector Part Information

Harness Type: Body

OEM Connector: 33357992

Service Connector: 19371182

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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332900	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19370818	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19371217	J-25616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
V	19371217	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	84616650	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IX	Not Required	J-35616-43 (RD)	No Tool Required	Not Available	Not Available	Not Available	Not Available

X115 Engine Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	1	BK	9003	III	—	Not Used	2	1	BK	9003	VII	—
3	0.5	BK/BU	1271	IV	—	Accelerator Pedal Position Low Reference 1	3	0.35	BK/BU	1271	VIII	—

X115 Engine Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
4	0.5	BN/WH	419	I	—	Check Engine Indicator Control	4	0.35	BN/WH	419	VI	—
5	0.5	GN/WH	1162	IV	—	Accelerator Pedal Position Signal 2	5	0.35	GN/WH	1162	VIII	—
6	0.5	GN/BN	507	I	—	Wait To Start Indicator Control	6	0.35	GN/BN	507	VI	—
7 - 11	—	—	—	—	—	Not Occupied	7 - 11	—	—	—	—	—
12	1	BK	9003	III	—	Not Used	12	1	BK	9003	VII	—
13 - 14	—	—	—	—	—	Not Occupied	13 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.35	YE	4063	VI	—
16	0.5	VT/GN	439	I	—	Run/Crank Ignition 1 Voltage	16	0.5	VT/GN	439	VI	—
17	0.5	WH/BU	5986	I	—	Serial Data Communication Enable	17	0.35	WH/BU	5986	VI	—
18	0.5	BK/GY	626	I	—	Engine Control Sensors Low Reference (3)	18	0.35	BK/GY	2204	VI	—
19	0.5 0.5	WH/VT WH/BN	4108 2203	I I	L3B -L3B	Enhanced Driver Mode 2 Switch Signal Enhanced Driver Mode 2 Switch Signal	19					
20	0.5	BU/RD	460	I	URC	Engine Control Sensors 5 Volt Reference (1)	20	0.35	GY	4109	VI	URC
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	VT/YE	5985	I	—	Accessory Wakeup Serial Data	22	0.35	VT/YE	5985	VI	—
23	0.5	GN/VT	4621	I	—	Local Interconnect Network Serial Data Bus 21	23	0.5	GN/VT	4621	VI	—
24	0.5	BU/BK	7493	I	—	High Speed GMLAN Serial Data (+)3	24	0.5	BU/BK	7493	VI	—
25	0.5	WH	7494	I	—	High Speed GMLAN Serial Data (-)3	25	0.5	WH	7494	VI	—
26	0.5	BU/GY	636	I	—	Outside Ambient Air Temperature Sensor Signal	26	0.35	BU/GY	636	VI	—

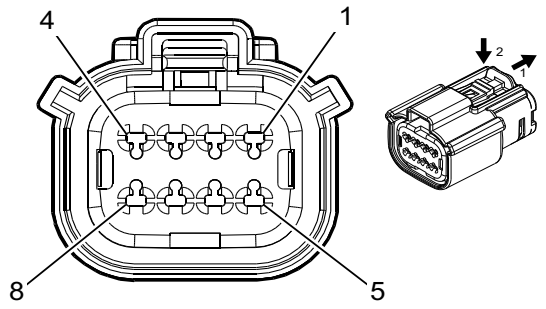
X115 Engine Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
27 - 30	—	—	—	—	—	Not Occupied	27 - 30	—	—	—	—	—
31	0.5	WH/BU	6311	I	—	Cruise/ETC/TCC Brake Signal	31	0.35	WH/BU	6311	VI	—
32	0.5	VT/BU	6091	I	—	Crankshaft Position Sensor Replicated Signal	32	0.35	VT/BU	6091	VI	—
33	0.5	BN	1560	I	—	Neutral Indicator Control	33	0.35	BN	1560	VI	—
34	0.35	VT/YE	43	I	—	Accessory Ignition Voltage	34	0.35	VT/YE	43	VI	—
35	0.5	BK/GY	626	I	—	Engine Control Sensors Low Reference (3)	35	0.35	BK/YE	5382	VI	—
36	0.5	WH/GN	5380	I	—	Brake Position Sensor Signal	36	0.35	WH/GN	5380	VI	—
37	0.5	WH/RD	480	I	—	Engine Control Sensors 5 Volt Reference (2)	37	0.35	WH/RD	5381	VI	—
38	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	38	0.5	BU	2500	VI	—
39	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	39	0.5	WH	2501	VI	—
40	0.5	BK/VT	1272	IV	—	Accelerator Pedal Position Low Reference 2	40	0.35	BK/VT	1272	VIII	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE/BK	625	I	—	Starter Enable Relay Control	42	0.5	YE/BK	625	VI	—
43	6	BK/WH	451	II	—	Signal Ground	43	6	BK/WH	2251	IX	—
44	1.5	RD/GN	1840	V	—	Battery Positive Voltage	44	1	RD/GN	1840	VII	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.5	BK/GN	580	I	—	Engine Control Sensors Low Reference (2)	46	0.35	BK/GN	580	VI	—
47	0.5	BU/BN	7573	I	—	Electric Variable Displacement Supply	47	0.35	BU/BN	7573	VI	—
48	0.5	RD/GN	40	I	—	Battery Positive Voltage	48	0.35	RD/GN	40	VI	—

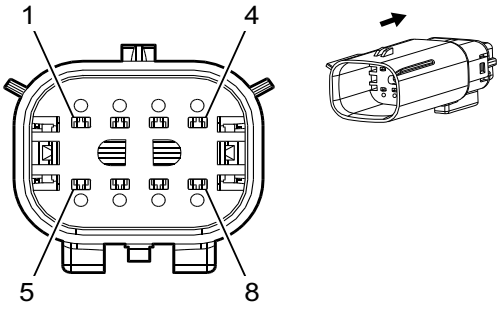
X115 Engine Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.5	YE/ WH	1161	IV	—	Accelerator Pedal Position Signal 1	49	0.35	YE/ WH	1161	VIII	—
50	0.5	WH/ RD	1164	IV	—	Accelerator Pedal Position 5V Reference 1	50	0.35	WH/ RD	1164	VIII	—
51	0.5	BN/ RD	1274	IV	—	Accelerator Pedal Position 5V Reference 2	51	0.35	BN/ RD	1274	VIII	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU/ YE	7574	I	—	Electric Variable Displacement Control	53	0.35	BU/ YE	7574	VI	—
54	1	BK	9003	III	—	Not Used	54	1	BK	9003	VII	—
55	—	—	—	—	—	Not Occupied	55	—	—	—	—	—

X120 Body Harness to Right Headlamp Harness



4846407



2667653

Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

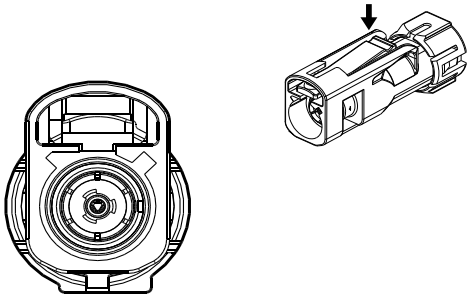
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

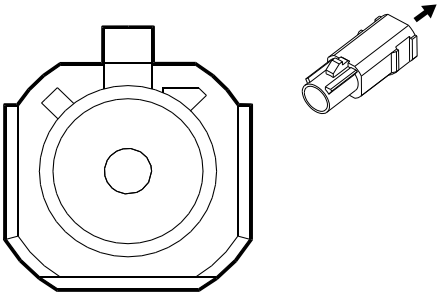
X120 Body Harness to Right Headlamp Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	250	I	—	Ground	1	0.75	BK	250	II	—
2	0.75	YE/GY	2226	I	-GF2-GF5-GPZ	Right Headlamp Control	2	0.75	BK	2226	II	-GF2-GF5-GPZ
3	1	YE	312	I	—	Right Headlamp Low Beam Control	3	1	BK	312	II	—
4	0.75	WH	311	I	—	Right Headlamp High Beam Control	4	0.75	BK	311	II	—
5	0.5	GY/BN	309	I	—	Right Park Lamp Control	5	0.5	BK	309	II	—
6	0.35	WH/BU	3203	I	-GF2-GF5-GPZ	Right Headlamp Bulb Outage Signal	6	0.35	BK	3203	II	-GF2-GF5-GPZ
7	0.5	GN/VT	1315	I	—	Right Front Turn Signal Lamp Control	7	0.5	BK	1315	II	—
8	0.35	BU/BN	7539	I	-GF2-GF5-GPZ	Right Front DRL Control	8	0.35	BK	7539	II	-GF2-GF5-GPZ

X127 Grille Frontview Camera Harness to Body Harness (UV2)



4817703



3681549

Connector Part Information

Harness Type: Grille Frontview Camera COAX

OEM Connector: 13514209

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BK)

Connector Part Information

Harness Type: Body COAX

OEM Connector: 13514206

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type

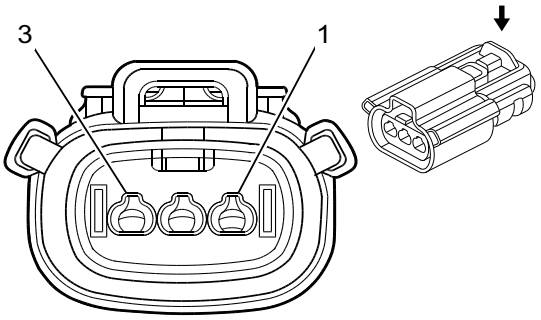
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

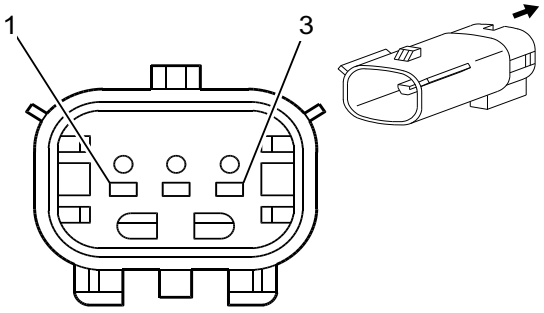
X127 Grille Frontview Camera Harness to Body Harness (UV2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Front Vision Camera #1 Signal	—	—	Coax	—	I	—

X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)



1862095



1870038

Connector Part Information

Harness Type: Engine
OEM Connector: 13541759
Service Connector: 19301648
Description: 3-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M

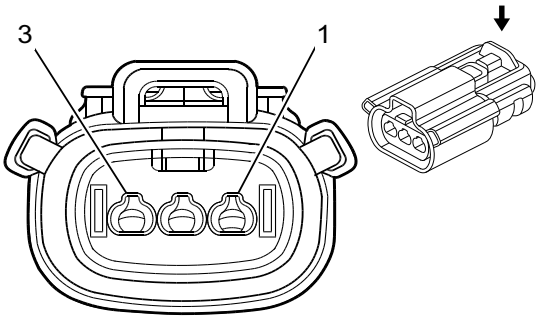
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

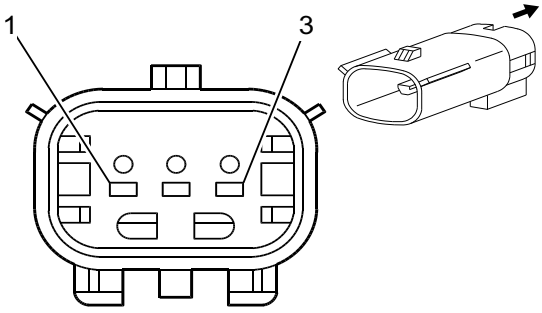
X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)

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 Fused Control 6	1	0.5	VT/BU	5705	II	—
2	0.5	GN/VT	4621	I	—	Local Interconnect Network Serial Data Bus 21	2	0.5	GN/VT	4621	II	—
3	1	BK	4450	I	—	Ground	3	1	BK	4450	II	—

X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)



1862095



1870038

Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13503225
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13503931
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M 150 MX Series (BK)

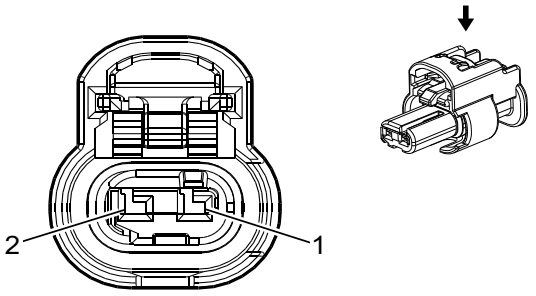
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

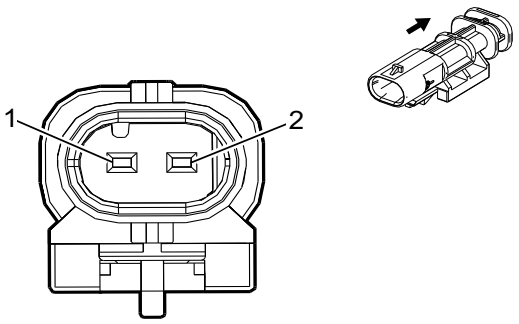
X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	—	GN/VT	4621	I	—	Local Interconnect Network Serial Data Bus 21	2	—	GN/VT	4621	II	—
3	—	BK	4450	I	—	Ground	3	—	BK	4450	II	—

X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)



4649903



2474755

Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

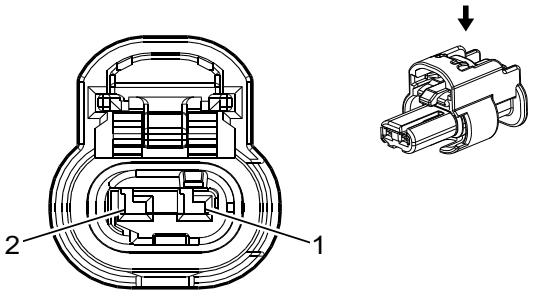
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

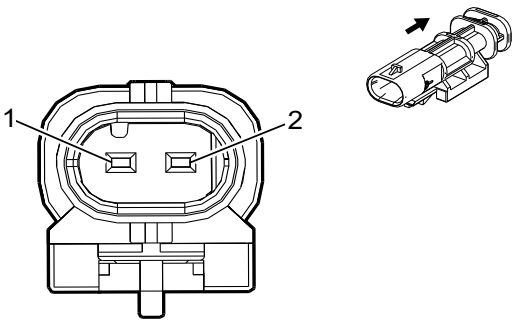
X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

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 Damping Servo Control	1	0.75	BU/WH	1107	II	—
2	0.75	GY/BU	1113	I	—	Left Front Damping Servo Control	2	0.75	GY	1113	II	—

X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)



4649903



2474755

Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

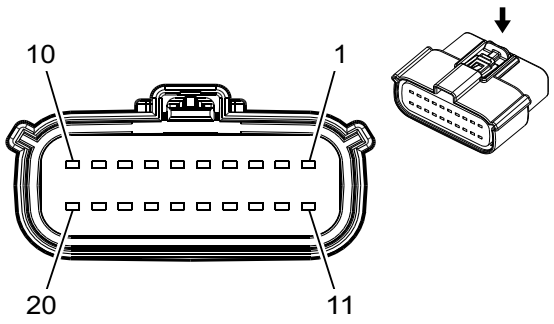
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

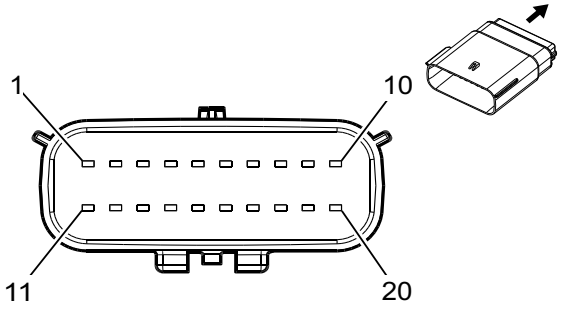
X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

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 Damping Servo Control	1	0.75	BU/WH	1116	II	—
2	0.75	GY/WH	1117	I	—	Right Front Damping Servo Control	2	0.75	GY	1117	II	—

X138 Body Harness to Chassis Harness



2871898



2871861

Connector Part Information

Harness Type: Body
OEM Connector: 13650143
Service Connector: 19300557
Description: 20-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33181044
Service Connector: 19351705
Description: 20-Way M 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300432	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	19300635	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	19119395	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
IV	19119440	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

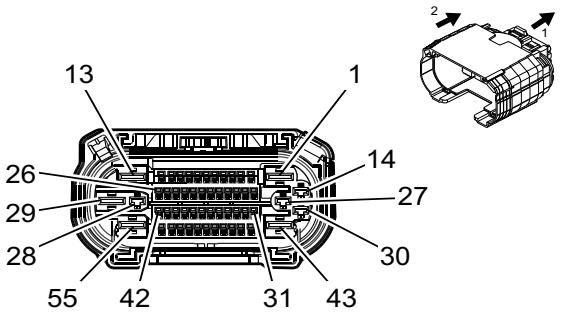
X138 Body Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/GN	1739	I	—	Run/Crank Ignition 1 Voltage	1	0.5	VT/GN	1739	IV	—
2	0.35	BN/WH	7462	II	—	Running Boards Disable Signal	2	0.5	BN/WH	7462	IV	—
3	0.35	WH/BU	6973	II	—	Camera Signal 2	3	0.5	WH/BU	6973	IV	—
4	0.75	GN/BN	2266	I	—	DC To AC Inverter Control 2	4	0.75	GN/BN	2266	IV	—
5	0.5	VT/WH	5065	I	—	Stop Lamp Relay Coil Control	5	0.5	VT/WH	5065	IV	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	BN/GN	3568	I	—	Passive Entry Rear Closure Antenna Signal Hi	7	0.5	BN/GN	3568	IV	—

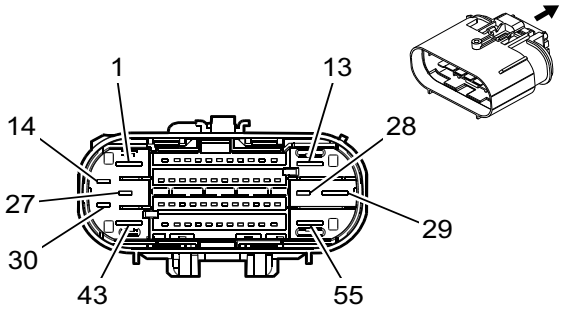
X138 Body Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	BK/ WH	2264	I	—	120 VAC Phase A 2	8	0.75	BK/ WH	2264	IV	—
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—
11	0.35	GN	5060	II	—	Low Speed GMLAN Serial Data	11	0.5	GN	5060	IV	—
12	0.35	BK	6974	II	UVC	Camera Low Reference	12	0.5	BU	6974	IV	UVC
13	0.35	GY/ YE	6972	II	—	Camera Signal 2 +	13	0.5	GY/ YE	6972	IV	—
14	0.75	RD/ WH	2265	I	—	120 VAC Phase B 2	14	0.75	RD/ WH	2265	IV	—
15	0.35	WH/ BU	5986	II	—	Serial Data Communication Enable	15	0.5 0.5	WH/ BU WH/ BU	5986 5986	IV	Z45 —
16	1	WH/ VT	1430	I	—	Exterior Courtesy Lamp Control	16	0.5	WH/ VT	1430	III	—
17	0.5	GN/ GY	3569	I	—	Passive Entry Rear Closure Antenna Signal Lo	17	0.5	GN/ GY	3569	IV	—
18	0.35	BN	2257	II	—	Drain Wire	18	0.5	BN	2257	IV	—
19	0.5	BU/ GN	1304	I	—	High Speed GMLAN Serial Data (+)9	19	0.5	BU/ GN	1304	IV	—
20	0.5	WH/ GN	1305	I	—	High Speed GMLAN Serial Data (-)9	20	0.5	WH/ GN	1305	IV	—

X140 Chassis Harness to Body Harness



4992168



4993301

Connector Part Information

Harness Type: Chassis

OEM Connector: 35027625

Service Connector: 84616677

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

Connector Part Information

Harness Type: Body

OEM Connector: 33357991

Service Connector: 19371183

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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19332900	J-35616-42 (RD)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	19333088	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19370818	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	13578881	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19329756	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available
VII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IX	19368968	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X140 Chassis Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	5	GN/VT	1988	II	—	Park Brake Motor Apply Right Rear Control	1	2.5	GN/VT	1988	VI	—
2	1	BN/GN	19	IV	—	Right Rear Stop/Turn Lamp Control	2	1	BN/GN	19	VIII	—

X140 Chassis Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
3	0.5	GY/YE	7128	I	—	Wheel Speed Sensor Control Right Rear	3	0.5	GY/YE	7128	VII	—
4	0.5	VT	882	I	—	Wheel Speed Sensor Signal Right Rear	4	0.5	VT	882	VII	—
5	0.5	GY/YE	1760	I	—	Left Side Object Detection LED Control	5	0.35	GY/YE	1760	VII	—
6	0.5	GY/WH	7064	I	—	Wheel Speed Sensor Control Left Front	6	0.5	GY/WH	7064	VII	—
7	0.5	GY	830	I	—	Wheel Speed Sensor Signal Left Front	7	0.5	GY	830	VII	—
8	0.5	GY/BN	7065	I	—	Wheel Speed Sensor Control Right Front	8	0.5	GY/BN	7065	VII	—
9	0.5	YE	872	I	—	Wheel Speed Sensor Signal Right Front	9	0.5	YE	872	VII	—
10	0.5	GY/BK	7127	I	—	Wheel Speed Sensor Control Left Rear	10	0.5	GY/BK	7127	VII	—
11	0.5	BU	884	I	—	Wheel Speed Sensor Signal Left Rear	11	0.5	BU	884	VII	—
12	1	YE/BU	18	IV	—	Left Rear Stop/Turn Lamp Control	12	1	YE/BU	18	VIII	—
13	5	WH	2001	II	—	Park Brake Motor Apply Left Rear Control	13	2.5	WH	2001	VI	—
14	2.5	RD/VT	1242	III	—	Battery Positive Voltage	14	2 2	RD/VT RD/VT	1242 1242	V IX	REGULAR CAB EXTENDED CAB/CREW CAB
15	0.5	BN/BK	7726	I	—	Minor Endgate Motor Return	15	0.5	BN/BK	7726	VII	—
16	0.5	GY	7292	I	—	Major Endgate Release Switch Signal Exterior	16	0.35	GY	7292	VII	—
17	0.5	VT	7725	I	—	Minor Endgate Motor Supply Voltage	17	0.5	VT	7725	VII	—
18	0.5	GN/YE	6846	I	—	Rear License Lamp Control	18	0.35	GN/YE	6846	VII	—
19	0.5	YE/BK	2224	I	—	Trailer Brake Enable Signal	19	0.5	YE/BK	2224	VII	—

X140 Chassis Harness to Body Harness (cont'd)

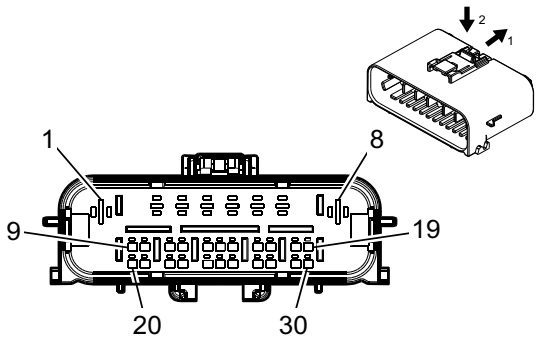
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
20	0.5	GN/ YE	1616	I	—	Brake Lining Wear Sensor Signal Rear	20	0.5	GN/ YE	1616	VII	—
21	0.5	GN	1299	I	—	Major Endgate Motor Supply Voltage	21	0.5	GN	1299	VII	—
22	—	—	—	—	—	Not Occupied	22	—	—	—	—	—
23	0.5	VT/ GN	439	I	—	Run/Crank Ignition 1 Voltage	23	0.5	VT/ GN	439	VII	—
24	0.5	YE	7294	I	—	Minor Endgate Release Switch Discrete Signal Exterior	24	0.35	YE	7294	VII	—
25	0.5	BN/ WH	2374	I	—	Object Sensor Control	25	0.5	BN/ WH	2374	VII	—
26	0.5	YE/ BU	2376	I	—	Left Rear Middle Object Sensor Signal	26	0.5	YE/ BU	2376	VII	—
27	—	—	—	—	—	Ground	27	2.5	BK	150	IX	—
28	2.5	RD/ GY	7040	III	—	Battery Positive Voltage	28	2.5	RD/ GY	7040	IX	—
29	5	GY/ BK	4369	II	—	Park Brake Motor Low Reference Left Rear	29	2.5	GY/ BK	4369	VI	—
30	2.5	BU	47	III	—	Trailer Auxiliary Control	30	2 2	BU BU	47 47	V IX	REGULAR CAB EXTENDED CAB/ CREW CAB
31	0.5	GY	1198	I	—	Endgate Release Switch Analog Signal Interior	31	0.35	GY	1198	VII	—
32	0.5	YE/ BK	7730	I	—	Major Endgate Motor Return	32	0.5	YE/ BK	7730	VII	—
33	0.5	WH	1612	I	—	Brake Lining Wear Sensor Signal Left Front	33	0.5	WH	1612	VII	—
34	0.5	GY/ BU	7762	I	—	Cargo Bed Lamp Control	34	0.5	GY/ BU	7762	VII	—
35	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	35	0.5	BU	2500	VII	—
36	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	36	0.5	WH	2501	VII	—
37	0.5	YE/ BU	7295	I	—	Left Minor Endgate Ajar Signal	37	0.35	YE/ BU	7295	VII	—

X140 Chassis Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
38	0.5	GN/BU	2733	I	—	Local Interconnect Network Bus 33	38	0.35	GN/BU	2733	VII	—
39	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	39	0.5	WH	6106	VII	—
40	0.5	YE/BK	5356	I	—	Left Tail Lamp Outage Detection Signal	40	0.35	YE/BK	5356	VII	—
41	0.5	BU/YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	41	0.5	BU/YE	6105	VII	—
42	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	42	0.5	WH	6106	VII	—
43	5	GY	4368	II	—	Park Brake Motor Low Reference Right Rear	43	2.5	GY	4368	VI	—
44	—	—	—	—	—	Not Occupied	44	—	—	—	—	—
45	0.5	BK/GY	2379	I	—	Object Sensor Low Reference	45	0.5	BK/GY	2379	VII	—
46	0.5	YE/WH	2377	I	—	Right Rear Middle Object Sensor Signal	46	0.5	YE/WH	2377	VII	—
47	0.5	YE/VT	2378	I	—	Right Rear Corner Object Sensor Signal	47	0.5	YE/VT	2378	VII	—
48	0.5	GY	1761	I	—	Right Side Object Detection LED Control	48	0.35	GY	1761	VII	—
49	0.5	BN	7754	I	—	AC Power Outlet Enable	49	0.5	BN	7754	VII	—
50	0.5	VT/YE	5357	I	—	Right Tail Lamp Outage Detection Signal	50	0.35	VT/YE	5357	VII	—
51	0.5	WH/BN	7296	I	—	Right Minor Endgate Ajar Signal	51	0.35	WH/BN	7296	VII	—
52	0.5	YE	2375	I	—	Left Rear Corner Object Sensor Signal	52	0.5	YE	2375	VII	—
53	0.5	BU/YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	53	0.5	BU/YE	6105	VII	—
54	1	WH/BK	2223	IV	JL1	Trailer Brake Control Signal	54	1	WH/BK	2223	VIII	JL1
55	—	—	—	—	—	Battery Positive Voltage	55	4	RD/YE	442	VI	—

X143 DEF Jumper Harness to Chassis Harness (LM2)

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4817393

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 2301462-7
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 35099030
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575350	J-35616-5 (PU)	J-38125-36	1-962915-3	Yazaki 15	E	1
III	13575376	J-35616-43 (RD)	J-38125-557	Not Available	Not Available	Not Available	Not Available
IV	19330704	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

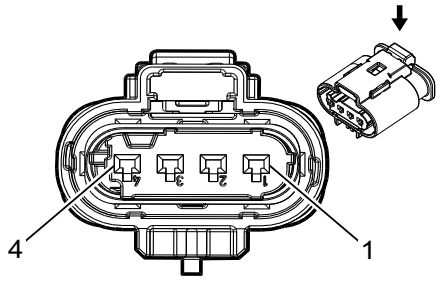
X143 DEF Jumper Harness to Chassis Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3.0	BK	3921	I	—	DEF Heater Supply 1	1	2.5	BU	3921	III	—
2	2.0	RD	3440	I	—	Battery Positive Voltage	2	1	RD/WH	3440	II	—
7	2.0	BK	1651	I	—	Signal Ground	7	0.75	BK/WH	1651	II	—
8	3.0	WH	1651	I	—	Signal Ground	8	2.5	BK/WH	1651	III	—
11	0.5	BU	4498	I	—	High Speed GMLAN Serial Data (+) 7	11	0.5	BU/BN	4498	IV	—
12	0.5	BN	4499	I	—	High Speed GMLAN Serial Data (-) 7	12	0.5	WH	4499	IV	—
14	0.5	BK	4320	I	—	Selective Catalytic Reduction Power Module Wake-Up Signal	14	0.5	VT/GN	4320	IV	—

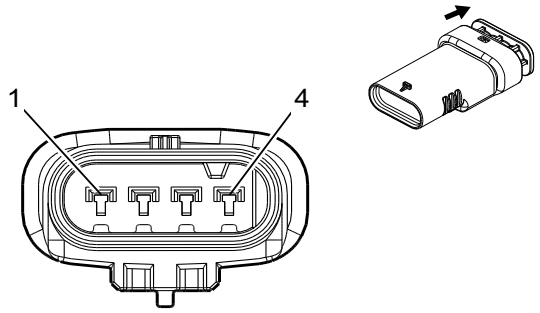
X143 DEF Jumper Harness to Chassis Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15	0.5	BK	5985	I	—	Accessory Wakeup Serial Data	15	0.5	VT/YE	5985	IV	—
16	0.5	BN	2500	I	—	High Speed GMLAN Serial Data (+) 1	16	0.5	BU	2500	IV	—
17	0.5	BK	2501	I	—	High Speed GMLAN Serial Data (-) 1	17	0.5	WH	2501	IV	—
22	0.5	BU	4498	I	—	High Speed GMLAN Serial Data (+) 7	22	0.5	BU/BN	4498	IV	—
23	0.5	BN	4499	I	—	High Speed GMLAN Serial Data (-) 7	23	0.5	WH	4499	IV	—
25	0.5	BN	439	I	—	Run/Crank Ignition 1 Voltage	25	0.5	VT/GN	439	IV	—
27	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	27	0.5	BU	2500	IV	—
28	0.5	BN	2501	I	—	High Speed GMLAN Serial Data (-) 1	28	0.5	WH	2501	IV	—

X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)



2717079



4560843

Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10013906
Service Connector: 13587299
Description: 4-Way M 1.2 Multilock Series (GY)

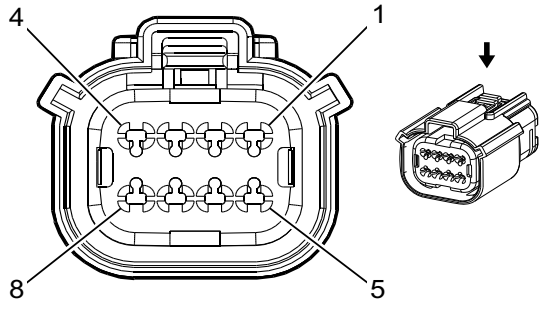
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

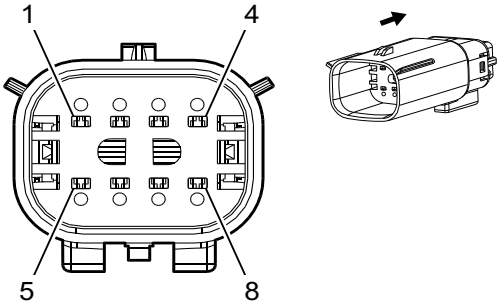
X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/VT	2404	I	—	Engine Block Coolant Temperature Signal	1	0.5	BU	2404	II	—
2	0.5	BK/GN	580	I	—	Engine Control Sensors Low Reference (2)	2	0.5	BK/GN	580	II	—
3	0.5	VT	2988	I	—	Engine Outlet Coolant Temperature Signal	3	0.5	VT	2988	II	—
4	0.5	BK/GN	580	I	—	Engine Control Sensors Low Reference (2)	4	0.5	BK/GN	580	II	—

X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)



2268728



2667653

Connector Part Information

Harness Type: Engine
OEM Connector: 13884361
Service Connector: 19366859
Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 35021067
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

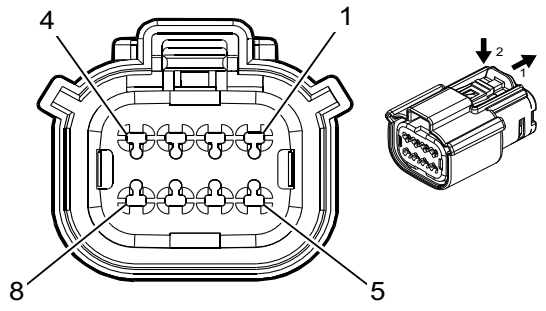
X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/BU	5300	I	—	Camshaft Position Intake Sensor Control 1	1	0.5	GY/BU	5300	II	—
2	0.5	BK/GN	5301	I	—	Camshaft Position Intake Sensor Low Reference 1	2	0.5	BK/GN	5301	II	—
3	0.5	YE/VT	5275	I	—	Camshaft Position Intake Sensor 1	3	0.5	YE/VT	5275	II	—
4	0.5	BU	179	I	—	Oil Pump Command Signal	4	0.5	BU	179	II	—
5	0.5	VT/BN	5284	I	—	Camshaft Phaser Intake Solenoid 1	5	0.5	VT/BN	5284	II	—
6	0.5	BK/BN	6753	I	—	Cam Phaser W Low Reference	6	0.5	BK/BN	6753	II	—

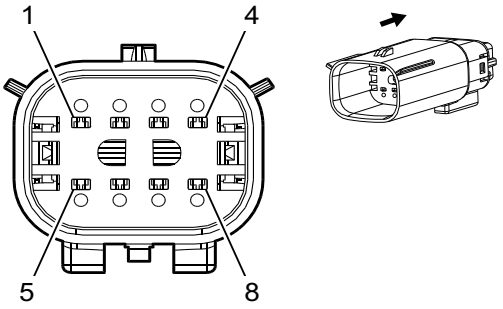
X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5 0.75	VT/ BU VT/ BU	5293 5293	I I	L3B L84/L87	Powertrain Main Relay Fused Supply 4 Powertrain Main Relay Fused Supply 4	7	0.5	VT/ BU	5293	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)



4846407



2667653

Connector Part Information

Harness Type: Engine
OEM Connector: 35063116
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13520589
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

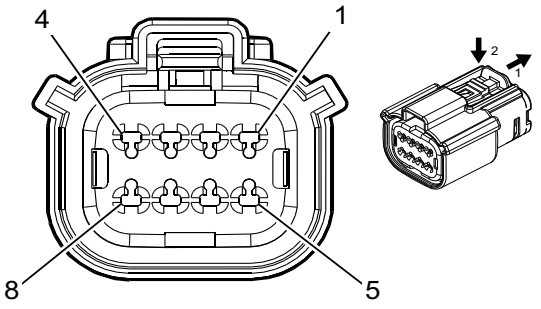
X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/BU	5300	I	—	Camshaft Position Intake Sensor Control 1	1	0.5	GY/BU	5300	II	—
2	0.5	BK/GN	5301	I	—	Camshaft Position Intake Sensor Low Reference 1	2	0.5	BK/GN	5301	II	—
3	0.5	YE/VT	5275	I	—	Camshaft Position Intake Sensor 1	3	0.5	YE/VT	5275	II	—
4	0.5	BU	179	I	—	Oil Pump Command Signal	4	0.5	BU	179	II	—
5	0.5	VT/BN	5284	I	—	Camshaft Phaser Intake Solenoid 1	5	0.5	VT/BN	5284	II	—
6	0.5	BK/BN	6753	I	—	Cam Phaser W Low Reference	6	0.5	BK/BN	6753	II	—

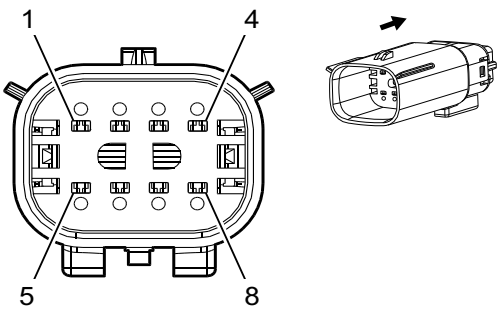
X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	VT/ BU	5293	I	—	Powertrain Main Relay Fused Supply 4	7	0.5	VT/ BU	5293	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)



4846407



2667653

Connector Part Information

Harness Type: Engine
OEM Connector: 35037827
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13520577
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

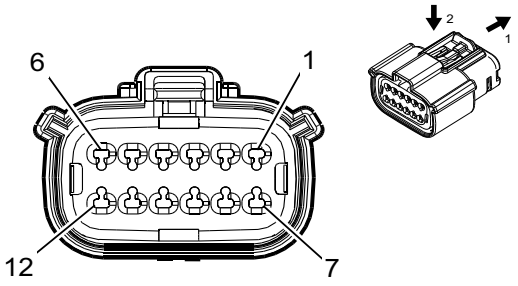
X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)

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 (2)	1	0.5	WH/GN	2492	II	—
2	0.5	GN	5492	I	—	Cylinder Shutoff Solenoid Control 2	2	0.5	GN	5492	II	—
3	0.5	YE/GY	2493	I	—	Cylinder Shutoff Solenoid Enable (3)	3	0.5	YE/GY	2493	II	—
4	0.5	GY	5493	I	—	Cylinder Shutoff Solenoid Control 3	4	0.5	GY	5493	II	—
5	0.5	WH/VT	2495	I	—	Cylinder Shutoff Solenoid Enable (5)	5	0.5	WH/VT	2495	II	—
6	0.5	VT	5495	I	—	Cylinder Shutoff Solenoid Control 5	6	0.5	VT	5495	II	—

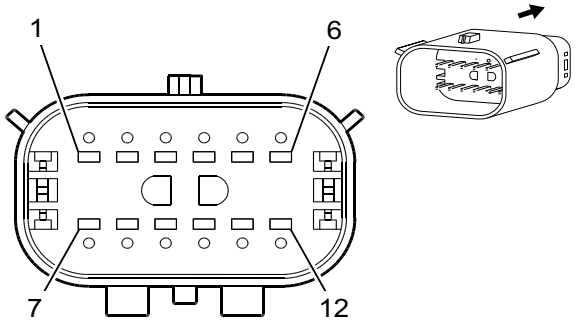
X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87) (cont'd)

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 (8)	7	0.5	WH/ YE	2498	II	—
8	0.5	YE	5498	I	—	Cylinder Shutoff Solenoid Control 8	8	0.5	YE	5498	II	—

X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87)



2871860



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 33362189
Service Connector: 13503528
Description: 12-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13520609
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/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 (1)	1	0.5	WH/BU	2491	II	—
2	0.5	BU	5491	I	—	Cylinder Shutoff Solenoid Control 1	2	0.5	BU	5491	II	—
3	0.5	YE/GN	2494	I	—	Cylinder Shutoff Solenoid Enable (4)	3	0.5	YE/GN	2494	II	—
4	0.5	YE/BU	5494	I	—	Cylinder Shutoff Solenoid Control 4	4	0.5	YE/BU	5494	II	—
5	0.5	YE/BN	2496	I	—	Cylinder Shutoff Solenoid Enable (6)	5	0.5	YE/BN	2496	II	—
6	0.5	BN	5496	I	—	Cylinder Shutoff Solenoid Control 6	6	0.5	BN	5496	II	—

X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/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 (7)	7	0.5	GN/GY	2497	II	—
8	0.5	WH	5497	I	—	Cylinder Shutoff Solenoid 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/YE	548	I	—	Engine Control Sensors Low Reference (1)	10	0.5	BK/BN	2761	II	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)

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Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13257299
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F

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Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 12670796
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

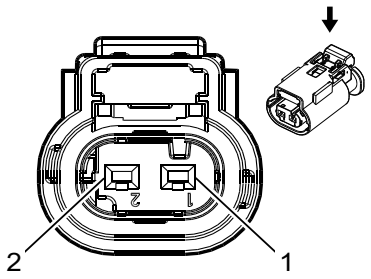
X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH/GN	2492	I	L84/L87	Cylinder Shutoff Solenoid Enable (2)	1	0.5	WH/GN	2492	II	L84/L87
2	0.5	GN	5492	I	L84/L87	Cylinder Shutoff Solenoid Control 2	2	0.5	GN	5492	II	L84/L87
3	0.5	YE/GY	2493	I	L84/L87	Cylinder Shutoff Solenoid Enable (3)	3	0.5	YE/GY	2493	II	L84/L87
4	0.5	GY	5493	I	L84/L87	Cylinder Shutoff Solenoid Control 3	4	0.5	GY	5493	II	L84/L87
5	0.5	WH/VT	2495	I	L84/L87	Cylinder Shutoff Solenoid Enable (5)	5	0.5	WH/VT	2495	II	L84/L87
6	0.5	VT	5495	I	L84/L87	Cylinder Shutoff Solenoid Control 5	6	0.5	VT	5495	II	L84/L87
7	0.5	WH/YE	2498	I	L84/L87	Cylinder Shutoff Solenoid Enable (8)	7	0.5	WH/YE	2498	II	L84/L87
8	0.5	YE	5498	I	L84/L87	Cylinder Shutoff Solenoid Control 8	8	0.5	YE	5498	II	L84/L87
9	0.5	WH/BU	2491	I	—	Cylinder Shutoff Solenoid Enable (1)	9	0.5	WH/BU	2491	II	—

X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	BU	5491	I	—	Cylinder Shutoff Solenoid Control 1	10	0.5	BU	5491	II	—
11	0.5	YE/GN	2494	I	—	Cylinder Shutoff Solenoid Enable (4)	11	0.5	YE/GN	2494	II	—
12	0.5	YE/BU	5494	I	—	Cylinder Shutoff Solenoid Control 4	12	0.5	YE/BU	5494	II	—
13	0.5	YE/BN	2496	I	—	Cylinder Shutoff Solenoid Enable (6)	13	0.5	YE/BN	2496	II	—
14	0.5	BN	5496	I	—	Cylinder Shutoff Solenoid Control 6	14	0.5	BN	5496	II	—
15	0.5	GN/GY	2497	I	—	Cylinder Shutoff Solenoid Enable (7)	15	0.5	GN/GY	2497	II	—
16	0.5	WH	5497	I	—	Cylinder Shutoff Solenoid Control 7	16	0.5	WH	5497	II	—

X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)



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2717066

Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

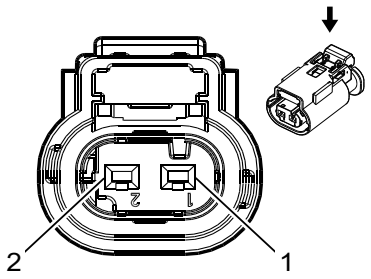
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)

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	—	Oil Pump Command Signal	2	0.5	BU	179	II	—

X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L87)



—

2717066

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13735326
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

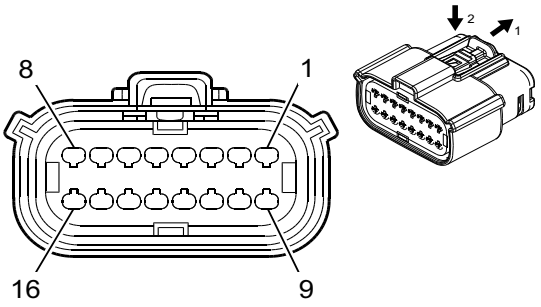
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (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 4	1	0.5	VT/BU	5293	II	—
2	0.5	BU	179	I	—	Oil Pump Command Signal	2	0.5	BU	179	II	—

X160 Engine Harness to Fuel Rail Harness (L3B)



—

4574233

Connector Part Information

Harness Type: Engine
OEM Connector: 33386201
Service Connector: Not Available
Description: 16-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13520643
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

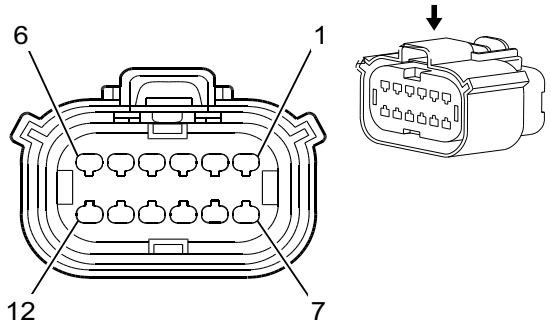
X160 Engine Harness to Fuel Rail Harness (L3B)

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 Signal 1	1	0.5	VT/GY	496	II	—
2	0.75	BN	4801	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	2	0.8	BN	4801	II	—
3	0.5	WH/RD	480	I	—	Engine Control Sensors 5 Volt Reference (2)	3	0.5	WH/RD	480	II	—
4	0.75	GY/BU	4804	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	4	0.8	GY/BU	4804	II	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.75	GN	4803	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	6	0.8	GN	4803	II	—

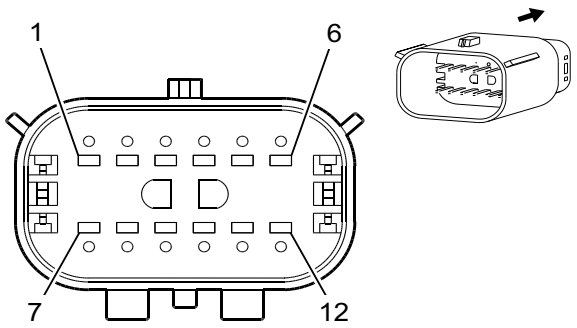
X160 Engine Harness to Fuel Rail Harness (L3B) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	BU	4802	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	7	0.8	BU	4802	II	—
8	0.5	WH/GY	1876	I	—	Knock Sensor Signal 2	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 (DFI) High Voltage Supply Cylinder 1	10	0.8	BN/WH	4901	II	—
11	0.5	BU/WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU/WH	2918	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 (DFI) High Voltage Supply Cylinder 4	13	0.8	BU/WH	4904	II	—
14	0.75	GN/GY	4903	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	14	0.8	GN/GY	4903	II	—
15	0.75	BU/GY	4902	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	15	0.8	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 Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)



1825165



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 13653762
Service Connector: 13503528
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503542
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

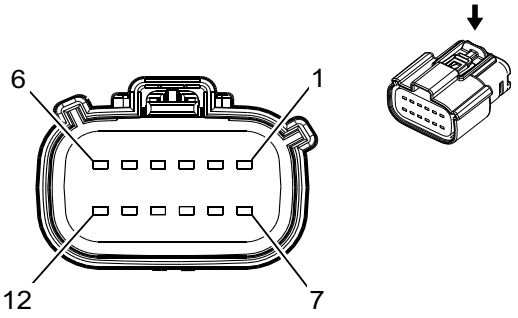
X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)

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 (DFI) High Voltage Supply Cylinder 1	1	0.75	BN/WH	4901	II	—
2	0.75	GN/BK	4903	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	2	0.75	GN/GY	4903	II	—
3	0.75	GN/WH	4905	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	3	0.75	GN/WH	4905	II	—
4	0.75	WH/YE	4907	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	4	0.75	WH/YE	4907	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

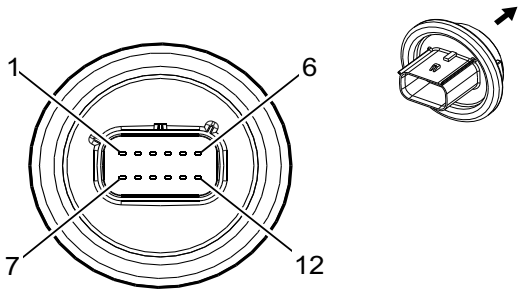
X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87) (cont'd)

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 (DFI) High Voltage Control Cylinder 3	7	0.75	GN	4803	II	—
8	0.75	WH/GN	4805	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	8	0.75	WH/GN	4805	II	—
9	0.75	YE/GY	4807	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	9	0.75	YE/GY	4807	II	—
10	0.5	WH/RD	480	I	—	Engine Control Sensors 5 Volt Reference (2)	10	0.5	BN/RD	480	II	—
11	0.5	BU/WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU/WH	2918	II	—
12	0.5	BK/YE	548	I	—	Engine Control Sensors Low Reference (1)	12	0.5	BK/GN	548	II	—

X160 Engine Harness to Fuel Injector Harness (LM2)



2871866



3610369

Connector Part Information

Harness Type: Engine
OEM Connector: 33221171
Service Connector: 19333239
Description: 12-Way F 150 MX Series, Sealed (D-GY)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19368973	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

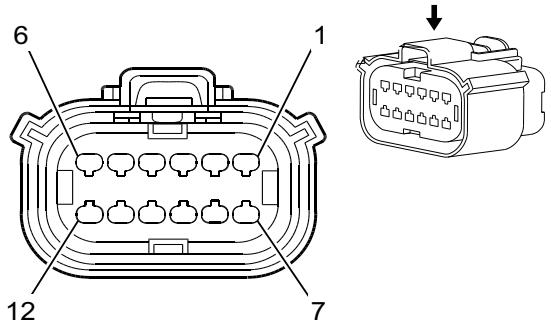
X160 Engine Harness to Fuel Injector Harness (LM2)

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 (DFI) High Voltage Supply Cylinder 1	1	1.5	BN/WH	4901	II	—
2	1.5	BN	4801	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	2	1.5	BN	4801	II	—
3	1.5	BU/GY	4902	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	3	1.5	BU/GY	4902	II	—
4	1.5	BU	4802	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	4	1.5	BU	4802	II	—
5	1.5	GN/GY	4903	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	5	1.5	GN/GY	4903	II	—

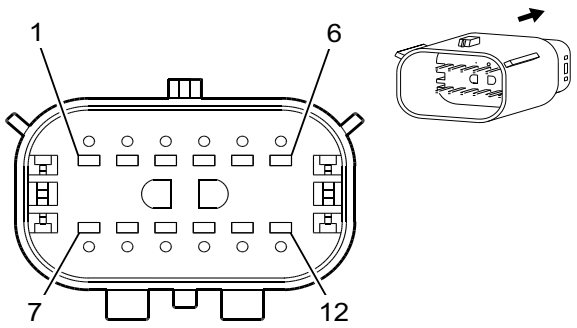
X160 Engine Harness to Fuel Injector Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	1.5	GN	4803	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	6	1.5	GN	4803	II	—
7	1.5	BU/WH	4904	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	7	1.5	BU/WH	4904	II	—
8	1.5	GY/BU	4804	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	8	1.5	GY/BU	4804	II	—
9	1.5	GN/WH	4905	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	9	1.5	GN/WH	4905	II	—
10	1.5	WH/GN	4805	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	10	1.5	WH/GN	4805	II	—
11	1.5	VT/GY	4906	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	11	1.5	VT/GY	4906	II	—
12	1.5	VT/GN	4806	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	12	1.5	VT/GN	4806	II	—

X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)



1825165



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 13609715
Service Connector: 19178148
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503543
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

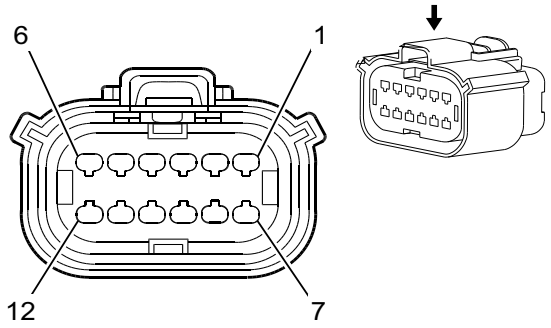
X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BN/WH	4901	II	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	2	0.75	BN/WH	4901	III	—
3	0.75	GN/GY	4903	II	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	3	0.75	GN/GY	4903	III	—
4	0.75	GN/WH	4905	II	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	4	0.75	GN/WH	4905	III	—
5	0.75	BN	4801	II	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	5	0.75	BN	4801	III	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

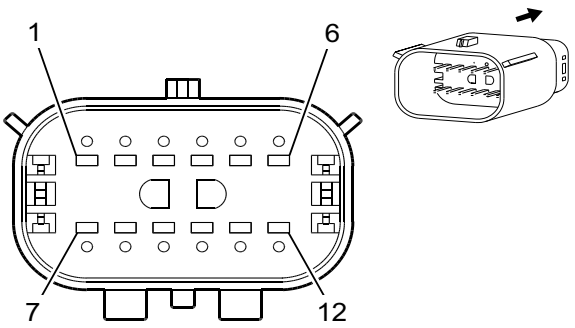
X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	GN	4803	II	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	8	0.75	GN	4803	III	—
9	0.75	WH/GN	4805	II	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	9	0.75	WH/GN	4805	III	—
10	0.5	WH/RD	480	I	—	Engine Control Sensors 5 Volt Reference (2)	10	0.5	BN/RD	480	III	—
11	0.5	BU/WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	BU/WH	2918	III	—
12	0.5	BK/YE	548	I	—	Engine Control Sensors Low Reference (1)	12	0.5	BK/GN	548	III	—

X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)



1825165



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 13922706
Service Connector: 13503528
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13577094
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

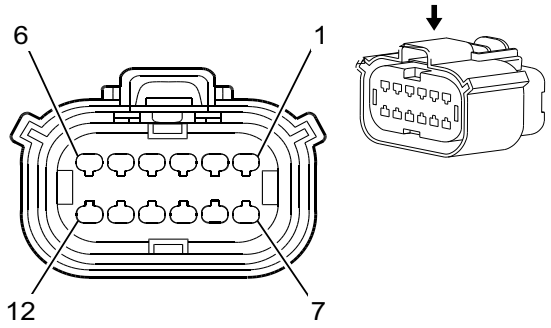
X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN/GN	4902	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	1	0.75	BU/GY	4902	II	—
2	0.75	BU/WH	4904	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	2	0.75	BU/WH	4904	II	—
3	0.75	VT	4906	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	3	0.75	VT/GY	4906	II	—
4	0.75	WH/GN	4908	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	4	0.75	GY/WH	4908	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	5	0.75	BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

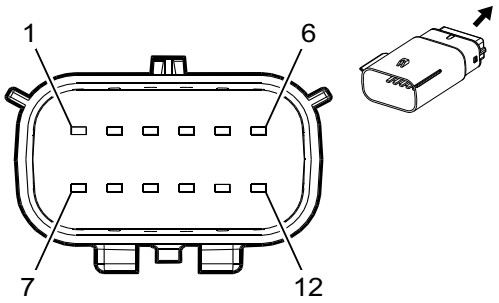
X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87) (cont'd)

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 (DFI) High Voltage Control Cylinder 4	8	0.75	GY/BU	4804	II	—
9	0.75	GN/VT	4806	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	9	0.75	VT/GN	4806	II	—
10	0.75	GY	4808	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	10	0.75	GY	4808	II	—
11	0.75	VT/BK	7300	I	—	High Pressure Fuel Pump Actuator Low - Control	11	0.75	VT/BK	7300	II	—
12	0.75	YE	7301	I	—	High Pressure Fuel Pump Actuator High - Control	12	0.75	YE	7301	II	—

X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)



1825165



2687960

Connector Part Information

Harness Type: Engine
OEM Connector: 13863397
Service Connector: 19329931
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

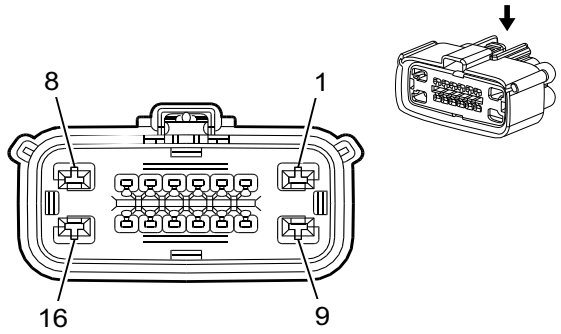
X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BU/GY	4902	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	2	0.75	BU/GY	4902	II	—
3	0.75	BU/WH	4904	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	3	0.75	BU/WH	4904	II	—
4	0.75	VT/GY	4906	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	4	0.75	VT/GY	4906	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	5	0.75	BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

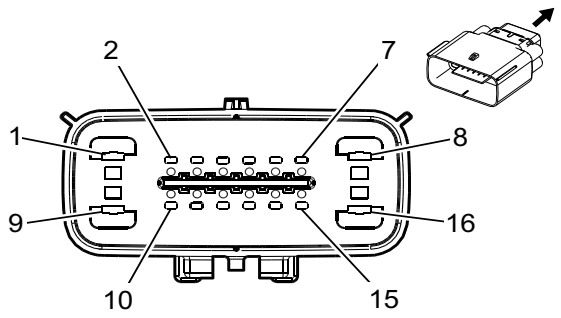
X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3) (cont'd)

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 (DFI) High Voltage Control Cylinder 4	8	0.75	GY/BU	4804	II	—
9	0.75	VT/GN	4806	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	9	0.75	VT/GN	4806	II	—
10	0.75	VT/BK	7300	I	—	High Pressure Fuel Pump Actuator Low - Control	10	0.75	VT/BK	7300	II	—
11	0.75	YE	7301	I	—	High Pressure Fuel Pump Actuator High - Control	11	0.75	YE	7301	II	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—

X171 Engine Harness to Chassis Harness



3684497



2373686

Connector Part Information

Harness Type: Engine
OEM Connector: 33218250
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33129084
Service Connector: 19331031
Description: 16-Way M 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576376	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
II	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
III	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	A	4
IV	19300432	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
V	19119395	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
VI	19329833	J-35616-5 (PU)	J-38125-12A	1326030-6	Lear 17	E	2
VII	19332835	J-35616-5 (PU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

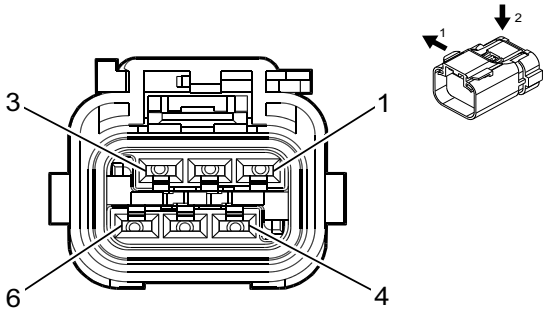
X171 Engine Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	VT/GN	355	II	—	Fuel Filter Heater Voltage	1	2.5	VT/GN	355	VII	—
2	0.5	VT/YE	5985	IV	LB3	Accessory Wakeup Serial Data	2	0.5	VT/YE	5985	V	—
3	0.5	BU/BN	4498	IV	—	High Speed GMLAN Serial Data (+) 7	3	0.5	BU/BN	4498	V	—
4	0.5	BU/WH	7446	IV	—	Fuel Line Pressure Sensor Signal	4	0.5	BU/WH	7446	V	—

X171 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.5	BK/GN	580	IV	—	Engine Control Sensors Low Reference (2)	5	0.5	BK/YE	7447	V	—
6	0.5	WH	1579	IV	—	Fuel Temperature/Composition Signal	6	0.5	WH	1579	V	—
7	0.5	VT/GN	4320	IV	—	Selective Catalytic Reduction Power Module Wake-Up Signal	7	0.5	VT/GN	4320	V	—
8	0.5	BK/WH	451	I	—	Signal Ground	8	0.5	BK/WH	451	VI	—
9	1.5	VT/BU	3674	III	—	NOx Sensor 1 Control	9	1.5	VT/BU	3674	VII	—
10	0.5	VT/GN	5294	IV	FHS	Powertrain Main Relay Fused Supply 5	10	0.5	VT/BU	5294	V	FHS
11	0.5	WH	4499	IV	—	High Speed GMLAN Serial Data (-) 7	11	0.5	WH	4499	V	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	BU/RD	460	IV	—	Engine Control Sensors 5 Volt Reference (1)	13	0.5	BN/RD	7445	V	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.75 0.5	GN/GY GN/GY	465 465	IV IV	L3B LV3	Fuel Pump Primary Relay Control Fuel Pump Primary Relay Control	15	0.5	GN/GY	465	V	—
16	2.5	BU	3921	II	—	DEF Heater Supply 1	16	2.5	BU	3921	VII	—

X172 Engine Harness to Glow Plug Jumper Harness (LM2)



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4997615

Connector Part Information

Harness Type: Engine
OEM Connector: 15419838
Service Connector: 19371212
Description: 6-Way F 2.8 APEX Series, Sealed (BK)

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M

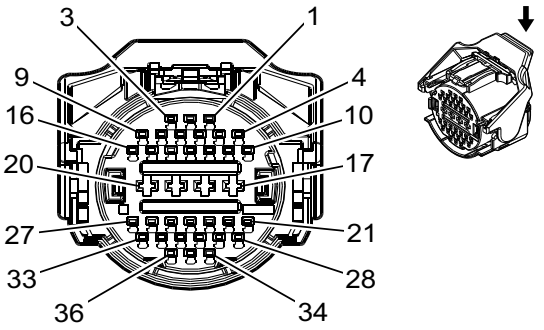
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

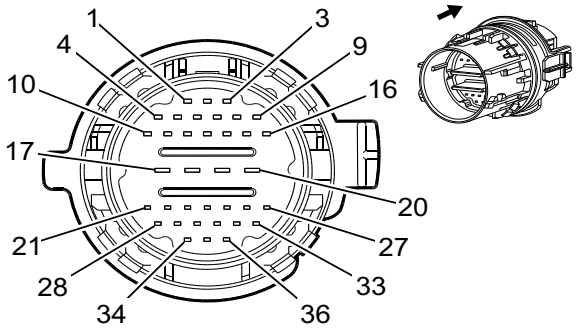
X172 Engine Harness to Glow Plug Jumper Harness (LM2)

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 Control 1	1	2.5	GY/BU	1581	II	—
2	2.5	GY/BN	1582	I	—	Glow Plug Control 2	2	2.5	GY/BN	1582	II	—
3	2.5	GY/GN	1583	I	—	Glow Plug Control 3	3	2.5	GY/GN	1583	II	—
4	2.5	GY/YE	1584	I	—	Glow Plug Control 4	4	2.5	GY/YE	1584	II	—
5	2.5	GY/WH	1585	I	—	Glow Plug Control 5	5	2.5	GY/WH	1585	II	—
6	2.5	GY/VT	1586	I	—	Glow Plug Control 6	6	2.5	GY/VT	1586	II	—

X175 Engine Harness to Transmission Harness (MQE)



3621473



3977661

Connector Part Information

Harness Type: Engine

OEM Connector: 15532799

Service Connector: 19332681

Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed (BK)

Connector Part Information

Harness Type: Transmission

OEM Connector: 2138338–5

Service Connector: Service by Harness - See Part Catalog

Description: 36-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19119772	J-35616-35 (VT)	J-38125-215A	1241388-1	Lear 17	E	C
II	19300445	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X175 Engine Harness to Transmission Harness (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	—	TCC On/Off Solenoid A Control	1	0.5	GN/WH	6380	III	—
2	0.5	GN/GY	6387	II	—	Surge Accumulator Solenoid High Side Control	2	0.5	YE/GN	4579	III	—
3	0.5	VT/WH	422	II	—	Clutch E Control	3	0.5	YE/BN	6404	III	—
4	0.5	GN/WH	1530	II	—	Clutch D Control	4	0.5	GY/GN	6403	III	—
5	0.5	BN	6400	II	—	Clutch A Control	5	0.5	BN	6400	III	—
6	0.5	BU	6401	II	—	Clutch B Control	6	0.5	BU	6401	III	—
7	0.5	YE/BN	6210	II	—	TCC On/Off Solenoid B Control	7	0.5	YE/BN	6210	III	—
8	0.5	WH/GY	4578	II	—	Surge Accumulator Solenoid Low Side Control	8	0.5	WH/GY	4578	III	—

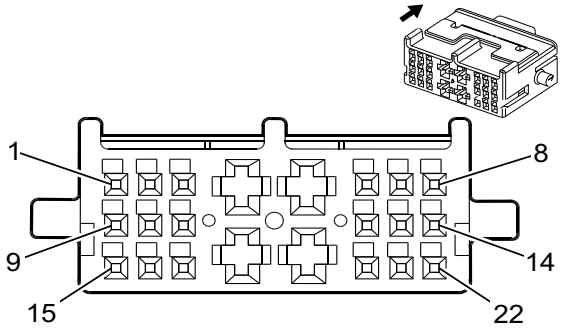
X175 Engine Harness to Transmission Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	GY	6402	II	—	Clutch C Control	10	0.5	GY	6402	III	—
11	0.5	BK/BN	586	II	—	Transmission Oil Temperature Sensor Low Reference	11	0.5	BK/BN	586	III	—
12	0.5	BN/WH	585	II	—	Transmission Oil 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 Signal Driver	18	0.5	GN/GY	6387	III	—
19	0.5	GY/BN	6388	I	—	Transmission High Side Driver 2 Signal	19	0.5	GY/BN	6388	III	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.5	WH/BK	5983	II	—	PRNDL C Signal	21	0.5	WH/BK	5983	III	—
22	0.5	VT/WH	5981	II	—	PRNDL A Signal	22	0.5	VT/WH	5981	III	—
23	0.5	GY/WH	4168	II	—	PRNDL P Signal	23	0.5	GY/WH	4168	III	—
24	0.5	GY/BU	6358	II	—	Output Speed Signal	24	0.5	GY/BU	6358	III	—
25	0.5	YE/GN	4170	II	—	Transmission Position Sensor B 9V Reference	25	0.5	YE/GN	4170	III	—
26	0.5	GN/YE	6353	II	—	Input Speed Signal	26	0.5	GN/YE	6353	III	—
27	0.5	YE/BU	4171	II	—	Transmission Position Sensor A 9V Reference	27	0.5	YE/BU	4171	III	—
28	0.5	GY/BN	5982	II	—	PRNDL B Signal	28	0.5	GY/BN	5982	III	—
29	0.5	YE/BU	4171	II	—	Transmission Position Sensor A 9V Reference	29	0.5	YE/BU	4171	III	—
30	0.5	BK/GY	3927	II	—	IMS Mode Switch Low Reference	30	0.5	BK/GY	3927	III	—

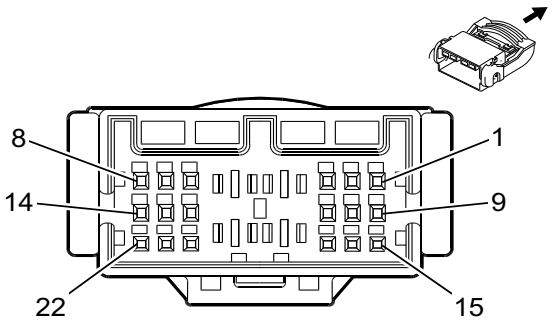
X175 Engine Harness to Transmission Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.5	YE/ GN	4170	II	—	Transmission Position Sensor B 9V Reference	31	0.5	YE/ GN	4170	III	—
32	0.5	GN/ VT	4510	II	—	Transmission Intermediate Speed Signal	32	0.5	GN/ VT	4510	III	—
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	0.5	GY/ YE	4169	II	—	PRNDL S Signal	34	0.5	GY/ YE	4169	III	—
35	0.5	WH/ GY	1786	II	—	Transmission Park/Neutral Signal 1	35	0.5	WH/ GY	1786	III	—
36	—	—	—	—	—	Not Occupied	36	—	—	—	—	—

X176 Transmission Case Harness to Transmission Control Harness (MQB)



3977748



3977770

Connector Part Information

Harness Type: Transmission 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: Transmission 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X176 Transmission Case Harness to Transmission Control Harness (MQB)

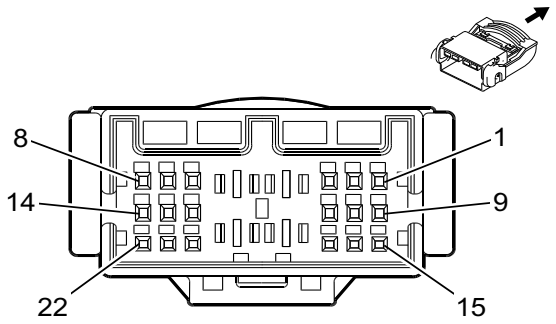
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT	7819	I	—	Default Disable Solenoid Control	1	0.5	VT	7819	III	—
2	0.5	GN/OG	1530	I	—	Transmission Mainline Pressure Solenoid Control	2	0.5	GN/OG	1530	III	—
3	0.5	GY/BN	422	I	—	Torque Converter Clutch Solenoid Control	3	0.5	GY/BN	422	III	—
4	0.5	BN	6387	I	—	Transmission High Side Driver 1 Signal Driver	4	0.5	BN	6387	III	—
5 - 12	—	—	—	—	—	Not Occupied	5 - 12	—	—	—	—	—
13	0.5	BU/BN	586	I	—	Transmission Oil Temperature Sensor Low Reference	13	0.5	BU/BN	586	III	—

X176 Transmission Case Harness to Transmission Control Harness (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	I	—	Transmission Oil Temperature Sensor Signal	14	0.5	BN/YE	585	III	—
15	0.5	BU/GN	6404	I	—	Clutch E Control	15	0.5	BU/GN	6404	III	—
16	0.5	GN/BN	6403	I	—	Clutch D Control	16	0.5	GN/BN	6403	III	—
17	0.5	GY	6402	I	—	Clutch C Control	17	0.5	GY	6402	III	—
18	0.5	WH	6388	I	—	Transmission High Side Driver 2 Signal	18	0.5	WH	6388	III	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	BN/WH	4509	I	—	Transmission Clutch F Control	20	0.5	BN/WH	4509	III	—
21	0.5	YE/VT	4507	I	—	Transmission Clutch H Control	21	0.5	YE/VT	4507	II	—
22	0.5	BU/GY	4508	I	—	Transmission Clutch G Control	22	0.5	BU/GY	4508	II	—

X176 Transmission Case Harness to Transmission Control Harness (MQE)

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3977770

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: —
Description: —

Connector Part Information

Harness Type: Transmission 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

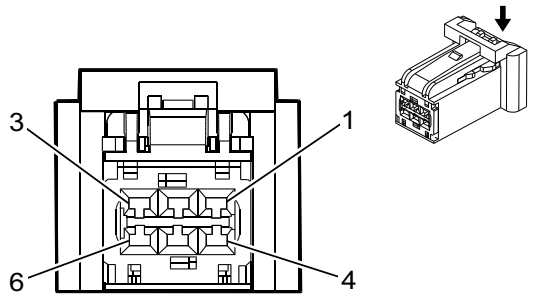
X176 Transmission Case Harness to Transmission Control Harness (MQE)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	TCC On/Off Solenoid A Control	1	0.5	GN/WH	6380	II	—
2	—	—	—	—	—	PRNDL A Signal	2	0.5	VT/WH	5981	II	—
3	—	—	—	—	—	PRNDL B Signal	3	0.5	GY/BN	5982	II	—
4	—	—	—	—	—	Transmission High Side Driver 1 Signal Driver	4	2.5	GN/GY	6387	I	—
5	—	—	—	—	—	Transmission Position Sensor A 9V Reference	5	0.5	YE/BU	4171	I	—
6	—	—	—	—	—	PRNDL S Signal	6	0.5	GY/YE	4169	II	—
7	—	—	—	—	—	Transmission Clutch H Control	7	0.5	WH/BU	4507	II	—
8	—	—	—	—	—	Clutch D Control	8	0.5	GY/GN	6403	II	—

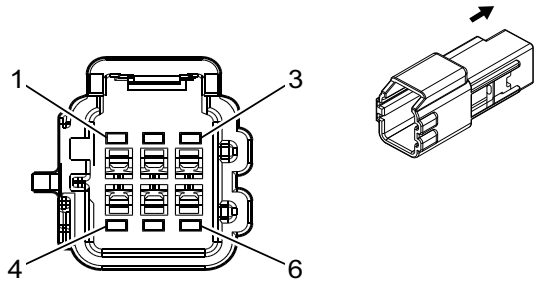
X176 Transmission Case Harness to Transmission Control Harness (MQE) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Transmission Clutch G Control	9	0.5	WH	4508	II	—
10	—	—	—	—	—	TCC On/Off Solenoid B Control	10	0.5	YE/BN	6210	II	—
11	—	—	—	—	—	PRNDL C Signal	11	0.5	WH/BK	5983	II	—
12	—	—	—	—	—	Transmission Park/Neutral Signal 1	12	0.5	WH/GY	1786	II	—
13	—	—	—	—	—	Clutch C Control	13	0.5	GY	6402	II	—
14	—	—	—	—	—	Clutch E Control	14	0.5	YE/BN	6404	II	—
15	—	—	—	—	—	Transmission Oil Temperature Sensor Signal	15	0.5	BK/BN	585	II	—
16	—	—	—	—	—	Transmission Oil Temperature Sensor Low Reference	16	0.5	BK/BN	586	II	—
17	—	—	—	—	—	PRNDL P Signal	17	0.5	GY/WH	4168	II	—
18	—	—	—	—	—	Transmission High Side Driver 2 Signal	18	2.5	GY/BN	6388	I	—
19	—	—	—	—	—	Transmission Position Sensor B 9V Reference	19	0.5	YE/GN	4170	I	—
20	—	—	—	—	—	IMS Mode Switch Low Reference	20	0.5	BK/GY	3927	II	—
21	—	—	—	—	—	Clutch A Control	21	0.5	BN	6400	II	—
22	—	—	—	—	—	Clutch B Control	22	0.5	BU	6401	II	—

X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQB)



3977938



4446774

Connector Part Information

Harness Type: Transmission Range Control
OEM Connector: 6098-8427
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 6098-8429
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M

Terminal Part Information

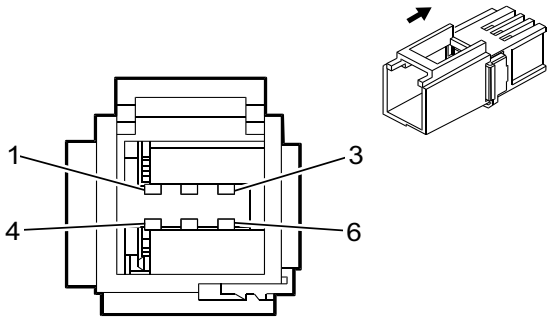
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X177 Transmission Case Harness to Speed Sensor Assembly Harness (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 Signal Driver	1	0.5	BN	6387	II	—
2	0.5	GN/OG	1530	I	—	Transmission Mainline Pressure Solenoid Control	2	0.5	GN/OG	1530	II	—
3	0.5	GY/BN	422	I	—	Torque Converter Clutch Solenoid 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 Signal	5	0.5	WH	6388	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)

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3977959

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: —
Description: —

Connector Part Information

Harness Type: Speed Sensor Assembly
OEM Connector: 13955963
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 0.64 II Series (GY)

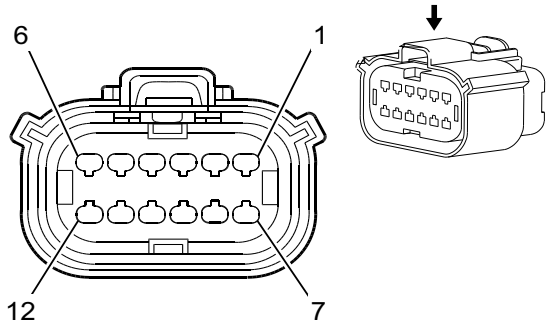
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

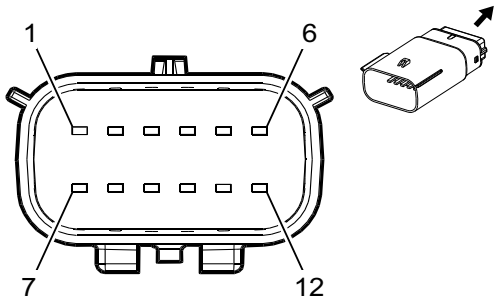
X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Output Speed Signal	1	0.5	YE	6358	I	—
2	—	—	—	—	—	Transmission Position Sensor B 9V Reference	2	0.5	RD	4170	I	—
3	—	—	—	—	—	Transmission Position Sensor B 9V Reference	3	0.5	WH	4170	I	—
4	—	—	—	—	—	Transmission Position Sensor A 9V Reference	4	0.5	WH	4171	I	—
5	—	—	—	—	—	Input Speed Signal	5	0.5	GN	6353	I	—
6	—	—	—	—	—	Transmission Intermediate Speed Signal	6	0.5	BK	4510	I	—

X182 Chassis Harness to Power Steering Harness (Z45)



1825165



2687960

Connector Part Information

Harness Type: Chassis
OEM Connector: 13609715
Service Connector: 19178148
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Power Steering
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300432	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X182 Chassis Harness to Power Steering Harness (Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	2	0.5	BU	2500	II	—
3	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	3	0.5	WH	2501	II	—
4	0.5	BU/YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	4	0.5	BU/YE	6105	II	—
5	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	5	0.5	WH	6106	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.5	WH/BU	5986	I	—	Serial Data Communication Enable	8	0.5	WH/BU	5986	II	—
9	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	9	0.5	BU	2500	II	—
10	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	10	0.5	WH	2501	II	—

X182 Chassis Harness to Power Steering Harness (Z45) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	BU/ YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	11	0.5	BU/ YE	6105	II	—
12	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	12	0.5	WH	6106	II	—

X183 Power Steering Harness to Power Steering Jumper Harness

—

Connector Part Information

Harness Type: Power Steering
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

—

Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 13582138
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

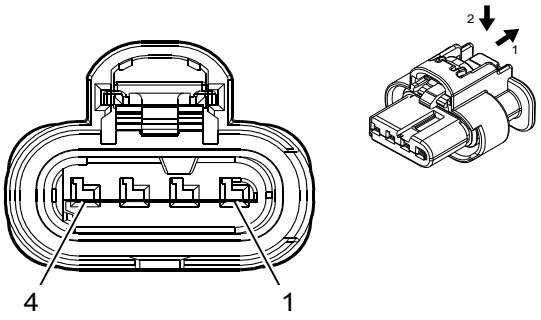
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X183 Power Steering Harness to Power Steering Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	BK	350	I	—	Ground	1	—	BK	350	II	—
2	—	RD/VT	3542	I	—	Battery Positive Voltage	2	—	RD/VT	3542	II	—

X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness



4900699

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Connector Part Information

Harness Type: Instrument Panel
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
OEM Connector: 13583527
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

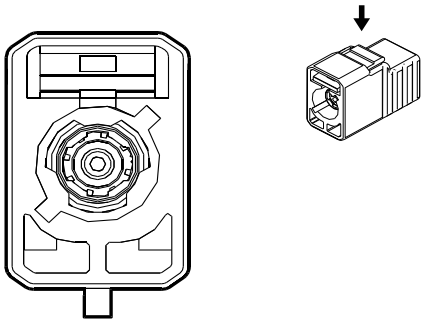
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

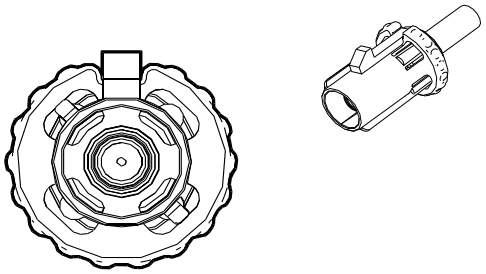
X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness

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 IP Module Stage 1 High Control	1	0.35	YE/OG	3025	II	—
2	0.35	OG/WH	3024	I	—	Passenger IP Module Stage 1 Low Control	2	0.35	OG/WH	3024	II	—
3	0.35	GY/OG	3027	I	—	Passenger IP Module Stage 2 High Control	3	0.35	GY/OG	3027	II	—
4	0.35	OG/VT	3026	I	—	Passenger IP Module Stage 2 Low Control	4	0.35	OG/VT	3026	II	—

X209 Instrument Panel Harness to Body Harness (UVB)



3293625



4054894

Connector Part Information

Harness Type: Body COAX

OEM Connector: 13581690

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BU)

Connector Part Information

Harness Type: Instrument Panel COAX

OEM Connector: 13581676

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BU)

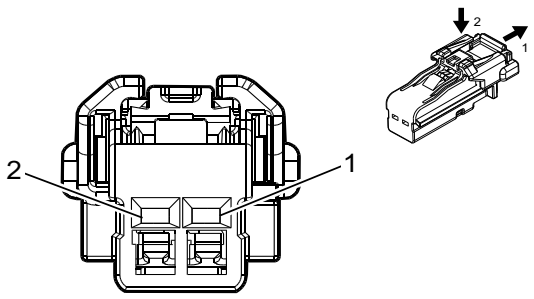
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

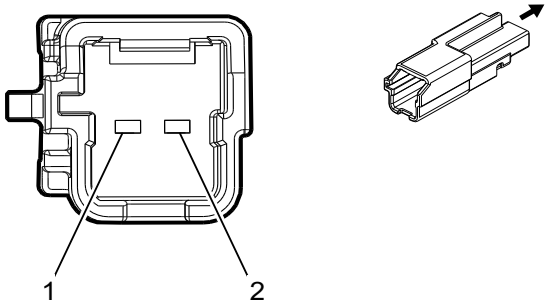
X209 Instrument Panel Harness to Body Harness (UVB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Coaxial Camera Signal	—	—	Coax	—	I	—

X211 Instrument Panel Harness to Body Harness



4115691



4116496

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 33189233
Service Connector: 19332376
Description: 2-Way M 1.2 Series (BK)

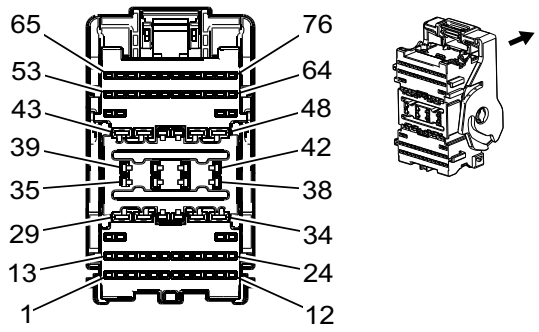
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

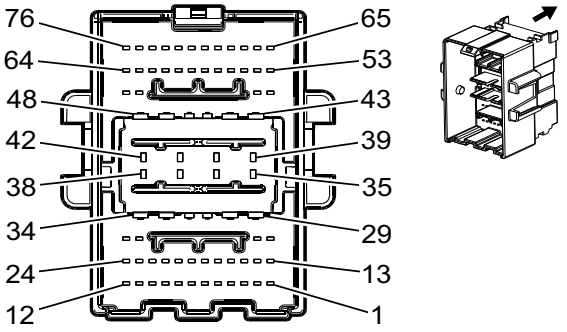
X211 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/BK	7214	I	—	Ethernet Bus 6 (-)	1	0.35	BN/BK	7214	II	—
2	0.35	GY/BK	7215	I	—	Ethernet Bus 6 (+)	2	0.35	GY/BK	7215	II	—

X225 Instrument Panel Harness to Body Harness



3960183



3960526

Connector Part Information

Harness Type: Instrument Panel
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
OEM Connector: 33303580
Service Connector: 19355187
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575708	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	13578891	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
III	13578893	J-35616-4A (PU)	J-38125-11A	7116-4110-02	Yazaki 9	E	C
IV	13580025	J-35616-4A (PU)	J-38125-11A	7116-4111-02	Yazaki 9	E	A
V	13582232	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19300649	J-35616-4A (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19301752	J-35616-4A (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IX	19301767	J-35616-2A (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
X	19333323	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XI	19367551	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XIV	19352417	J-35616-3 (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XV	19352418	J-35616-3 (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XVI	19354072	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

Terminal Part Information (cont'd)

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
XVII	19355729	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XVIII	84616651	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X225 Instrument Panel Harness to Body 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	0.35	BU/YE	5361	X	—	Brake Apply Sensor Signal	3	0.35	BU/YE	5361	XII	—
4	0.35	BK/BN	5360	X	—	Brake Apply Sensor Low Reference	4	0.35	BK/BN	5360	XII	—
5	0.35	WH	5359	X	—	Brake Apply Sensor Control	5	0.35	WH	5359	XII	—
6	0.35	BK/GY	2204	X	—	Enhanced Driver Mode 1 Switch Low Reference	6	0.35	BK/GY	2204	XII	—
7	0.35	GY	4109	X	—	Driver Mode Switch 5V Reference	7	0.35	GY	4109	XII	—
8	0.35	WH/BN	2203	X	—	Enhanced Driver Mode 2 Switch Signal	8	0.35	WH/BN	2203	XII	—
9	0.35	YE	6817	X	—	LED Backlight Dimming Control	9	0.35	YE	6817	XII	—
10	0.35	GN	5060	X	—	Low Speed GMLAN Serial Data	10	0.35	GN	5060	XII	—
11	0.35	VT/GY	1630	X	—	Steering Column Key Cylinder Lock Solenoid Control	11	0.35	VT/GY	1630	XII	—
12	0.35	VT/BK	3	X	—	Run/Crank Ignition 1 Voltage	12	0.35	VT/BK	3	XII	—
13	0.35	GN/BK	3558	X	—	Passive Start Switch Signal 2	13	0.35	GN/BK	3558	XII	—
14	0.35	VT/YE	4	X	—	Accessory Ignition Voltage	14	0.35	VT/YE	4	XII	—
15	0.35	OG/VT	3021	V	—	Steering Wheel Module Stage 1 High Control	15	0.35	OG/VT	3021	XVIII	—
16	0.35	BN/OG	3020	V	—	Steering Wheel Module Stage 1 Low Control	16	0.35	BN/OG	3020	XVIII	—

X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
17	0.35	OG/GN	3023	V	—	Steering Wheel Module Stage 2 High Control	17	0.35	OG/GN	3023	XVIII	—
18	0.35	WH/OG	3022	V	—	Steering Wheel Module Stage 2 Low Control	18	0.35	WH/OG	3022	XVIII	—
19	0.35	GN/BU	2733	X	—	Local Interconnect Network Bus 33	19	0.35	GN/BU	2733	XII	—
20	0.35	YE/WH	1690	X	—	Automatic Day/Night Mirror Signal	20	0.35	YE/WH	1690	XII	—
21	0.35	BK/YE	1691	X	—	Automatic Day/Night Mirror Low Reference	21	0.35	BK/YE	1691	XII	—
22	0.35	GN	4512	X	—	Wireless Charging System Charge Indicator Control	22	0.35	GN	4512	XII	—
23	0.35	GN/WH	4115	X	—	Local Interconnect Network Serial Data Bus 15	23	0.35	GN/WH	4115	XII	—
24	0.35	BU/YE	6105	X	—	High Speed GMLAN Serial Data (+) 2	24	0.5	BU/YE	6105	XII	—
25	0.35	WH	6106	X	—	High Speed GMLAN Serial Data (-) 2	25	0.5	WH	6106	XII	—
26	0.35	BN/WH	419	X	—	Check Engine Indicator Control	26	0.35	BN/WH	419	XII	—
27	0.35	GN/GY	3277	X	—	Vehicle Anti-Theft System Immobilizer Low Reference	27	0.35	GN/GY	3277	XII	—
28	0.35	WH/BU	5986	X	—	Serial Data Communication Enable	28	0.35	WH/BU	5986	XII	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.35	YE/WH	816	III	—	Brake Transmission Shift Interlock Solenoid Control	30	0.35	YE/WH	816	XVIII	—
31	0.35	WH	2501	II	—	High Speed GMLAN Serial Data (-) 1	31	0.5	WH	2501	XIV	—
32	0.35	BU	2500	II	—	High Speed GMLAN Serial Data (+) 1	32	0.5	BU	2500	XIV	—
33	0.75	BU/VT	1857	IV	—	Left Front Midrange Speaker Control (+)	33	0.75	BU/VT	1857	XVII	—

X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
34	0.75	BU/ BN	1957	IV	—	Left Front Midrange Speaker (-) Low Reference	34	0.75	BU/ BN	1957	XVII	—
35	0.5	WH/ BN	6815	IX	—	Inadvertent Power Control	35	0.5	WH/ BN	6815	XIV	—
36	0.35	GN/ WH	1932	II	—	Shift Select Switch Park Signal	36	0.35	GN/ WH	1932	XIV	—
37 - 38	—	—	—	—	—	Not Occupied	37 - 38	—	—	—	—	—
39	0.35	BU/ GY	553	II	—	Shift Select Switch Performance Signal	39	0.35	BU/ GY	553	XIV	—
40 - 41	—	—	—	—	—	Not Occupied	40 - 41	—	—	—	—	—
42	0.35 0.35	BU/ YE BU/ YE	6844 7176	I I	JHD -JHD	ABS/TCS Hill Descent Control Switch Signal All Windows Open Switch Signal	42	0.35 0.35	BU/ YE BU/ YE	6844 7176	XIV XIV	JHD -JHD
43	—	—	—	—	—	Not Occupied	43	—	—	—	—	—
44	0.35	Bare	514	VII	—	Low Reference	44	0.35	Bare	514	XVI	—
45	0.75	BK	5683	I	—	120 V AC Phase A	45	0.75	BK	5683	XV	—
46	0.75	RD	5684	I	—	120 V AC Phase B	46	0.75	RD	5684	XV	—
47	0.75	BN/ BU	118	VIII	—	Left Front Speaker Signal (-) 1	47	0.75	BN/ BU	118	XVII	—
48	0.75	BU	201	VIII	—	Left Front Speaker Control (+) 1	48	0.75	BU	201	XVII	—
49	0.35	BU/ BN	7573	X	—	Electric Variable Displacement Supply	49	0.35	BU/ BN	7573	XII	—
50	0.35	BU/ YE	7574	X	—	Electric Variable Displacement Control	50	0.35	BU/ YE	7574	XII	—
51	0.5	GN	199	VI	U95/UQF	Left Rear Speaker Control (+)	51	0.5	GN	199	XII	U95/UQF
52	0.5	GN/ BK	116	VI	U95/UQF	Left Rear Speaker Signal (-)	52	0.5	GN/ BK	116	XII	U95/UQF
53	0.35	GN/ BN	507	X	—	Wait To Start Indicator Control	53	0.35	GN/ BN	507	XII	—

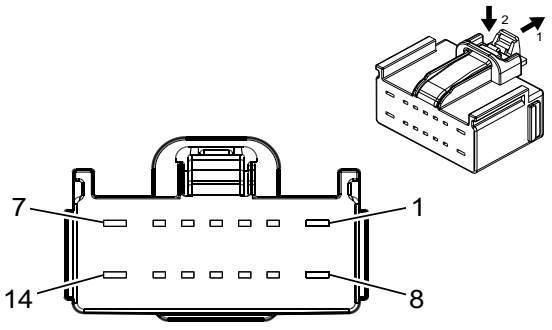
X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
54	0.35	WH/ BN	7296	X	—	Right Minor Endgate Ajar Signal	54	0.35	WH/ BN	7296	XII	—
55	0.35	YE/ BU	7295	X	—	Left Minor Endgate Ajar Signal	55	0.35	YE/ BU	7295	XII	—
56	0.35	GN/ VT	7533	X	—	Local Interconnect Network Serial Data Bus 11	56	0.35	GN/ VT	7533	XII	—
57	0.35	GN/ YE	2731	X	—	Local Interconnect Network Bus 31	57	0.35	GN/ YE	2731	XII	—
58	—	—	—	—	—	Not Occupied	58	—	—	—	—	—
59	0.35	BN	7754	X	—	AC Power Outlet Enable	59	0.5	BN	7754	XIII	—
60	0.35	GN/ VT	1601	X	—	Steering Column Lock Signal	60	0.35	GN/ VT	1601	XII	—
61	0.35	BK/ GY	3559	X	—	Passive Start Switch 2 Low Reference	61	0.35	BK/ GY	3559	XII	—
62	—	—	—	—	—	Not Occupied	62	—	—	—	—	—
63	0.35	BU/ YE	6105	X	—	High Speed GMLAN Serial Data (+) 2	63	0.5	BU/ YE	6105	XII	—
64	0.35	WH	6106	X	—	High Speed GMLAN Serial Data (-) 2	64	0.5	WH	6106	XII	—
65	—	—	—	—	—	Not Occupied	65	—	—	—	—	—
66	0.5	BN/ BK	3552	VI	—	Passive Start Interior Antenna 1 Signal Hi	66	0.35	BN/ BK	3552	XII	—
67	0.5	WH	3553	VI	—	Passive Start Interior Antenna 1 Signal Lo	67	0.35	WH	3553	XII	—
68	0.35	YE/ VT	6191	X	—	Power Sliding Window Switch Open Signal	68	0.35	YE/ VT	6191	XII	—
69	0.35	WH	6192	X	—	Power Sliding Window Switch Close Signal	69	0.35	WH	6192	XII	—
70	0.35	GY/ BK	3276	X	—	Vehicle Anti-Theft System Immobilizer Control	70	0.35	GY/ BK	3276	XII	—
71	—	—	—	—	—	Not Occupied	71	—	—	—	—	—
72	0.35	BN	1560	X	—	Neutral Indicator Control	72	0.35	BN	1560	XII	—

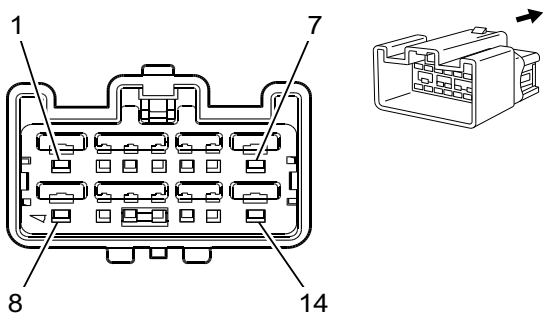
X225 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
73	—	—	—	—	—	Not Occupied	73	—	—	—	—	—
74	0.35	BU/BN	6807	X	—	DC To AC Inverter Control	74	0.35	BU/BN	6807	XII	—
75	0.35	VT	185	X	—	Low Washer Fluid Indicator Control	75	0.35	VT	185	XII	—
76	0.5	BN/WH	7462	XI	—	Running Boards Disable Signal	76	0.35	BN/WH	7462	XII	—

X241 Body Harness to Power Inverter Module Jumper Harness (KI5)



4934172



1283905

Connector Part Information

Harness Type: Body
OEM Connector: 33366376
Service Connector: 13513605
Description: 14-Way F 1.5, 2.8 Series (GY)

Connector Part Information

Harness Type: Rear Body Extension
OEM Connector: 10846900
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way M 1.5, 2.8 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575708	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	13578891	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
III	13580025	J-35616-4A (PU)	J-38125-11A	7116-4111-02	Yazaki 9	E	A
IV	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
V	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X241 Body Harness to Power Inverter Module Jumper Harness (KI5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	5683	III	—	120 V AC Phase A	1	0.75	BK	5683	V	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	VT/YE	5985	II	—	Accessory Wakeup Serial Data	3	0.35	VT/YE	5985	IV	—
4	0.35	WH/GN	4628	II	—	DC/AC Inverter Relay Control	4	0.35	WH/GN	4628	IV	—
5	0.35	BU/BN	6807	II	—	DC To AC Inverter Control	5	0.35	BU/BN	6807	IV	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.75	BK/WH	2264	III	—	120 VAC Phase A 2	7	0.75	BK/WH	2264	V	—

X241 Body Harness to Power Inverter Module Jumper Harness (KI5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	RD	5684	III	—	120 V AC Phase B	8	0.75	RD	5684	V	—
9	0.35	Bare	514	II	—	Low Reference	9	0.35	Bare	514	IV	—
10	0.35	GN	5060	II	—	Low Speed GMLAN Serial Data	10	0.35	GN	5060	IV	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.75	GN/BN	2266	I	—	DC To AC Inverter Control 2	12	0.75	GN/BN	2266	IV	—
13	0.35	Bare	2257	II	—	Drain Wire	13	0.35	Bare	2257	IV	—
14	0.75	RD/WH	2265	III	—	120 VAC Phase B 2	14	0.75	RD/WH	2265	V	—

X250 Auxiliary Heater Jumper Harness to Body Harness (C32)

—

Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: —
Description: —

—

Connector Part Information

Harness Type: Body
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

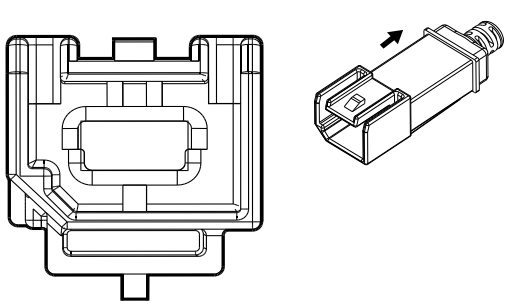
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-21 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

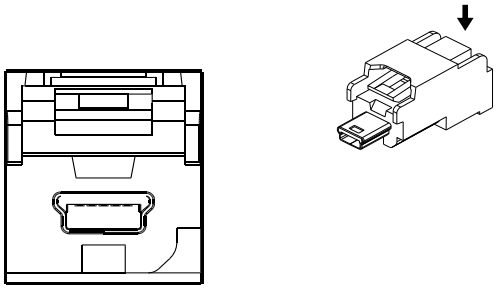
X250 Auxiliary Heater Jumper Harness to Body Harness (C32)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	—	—	—	—	—	Battery Positive Voltage	2	10	RD/GY	642	I	—

X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)



2830616



3028808

Connector Part Information

Harness Type: USB Receptacle Jumper USB

OEM Connector: 13584921

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type

Connector Part Information

Harness Type: Floor Console USB

OEM Connector: 13584764

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type

Terminal Part Information

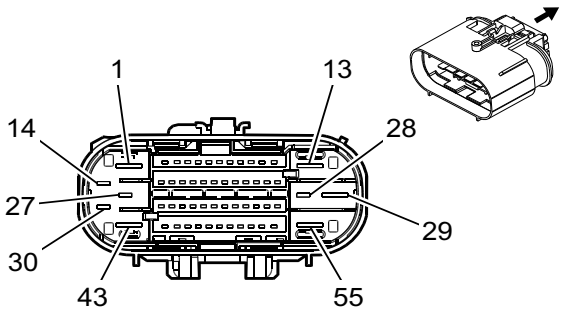
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+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	—

X256 Headliner Harness to Instrument Panel Harness

—



4993301

Connector Part Information

Harness Type: Headliner
OEM Connector: 35141318
Service Connector: 84616678
Description: 55-Way F

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35027621
Service Connector: 19371179
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19301757	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	A	B
III	19333088	J-35616-35 (VT)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19371217	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	13578881	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19329756	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available
VII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X256 Headliner Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1050	II	—	Ground	1	2.5	BK	1050	VI	—
2	1.5	BK	9003	IV	—	Not Used	2	1	BK	9000	VIII	—
3	0.35	BU/BK	7044	I	—	Microphone (-) Low Reference	3	0.35	BU/BK	7044	VII	—
4	0.35	VT/YE	7043	I	—	Microphone (+) Signal	4	0.35	VT/YE	7043	VII	—
5	0.35	BU	655	I	—	Cellular Telephone Microphone Signal	5	0.35	BU	655	VII	—

X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.35	BK/ BN	654	I	—	Cellular Telephone Microphone Low Reference	6	0.35	BK/ BN	654	VII	—
7	0.35	BK	1782	I	—	Low Reference	7	0.35	BK	1782	VII	—
8	0.35	WH/ GY	3936	I	—	High Speed GMLAN Serial Data (-) 8	8	0.35	WH/ GY	3936	VII	—
9	0.35	BU/ GY	3935	I	—	High Speed GMLAN Serial Data (+) 8	9	0.35	BU/ GY	3935	VII	—
10	0.35	GY	157	I	—	Interior Lamp Control	10	0.35	GY	157	VII	—
11	0.35	BK/ WH	1851	I	—	Signal Ground	11	0.35	BK/ WH	1851	VII	—
12	1.5	BK	9003	IV	—	Not Used	12	1	BK	9000	VIII	—
14	2.5	RD/ GN	3140	III	—	Battery Positive Voltage	14	2.5	RD/ GN	3140	V	—
15	0.5	WH/ VT	1430	I	—	Exterior Courtesy Lamp Control	15	0.5	WH/ VT	1430	VII	—
16	0.35	WH/ BU	5986	I	—	Serial Data Communication Enable	16	0.35	WH/ BU	5986	VII	—
17	0.35	BK/ YE	1691	I	—	Automatic Day/Night Mirror Low Reference	17	0.35	BK/ YE	1691	VII	—
18	0.35	GY/ GN	7565	I	—	Windscreen Temp Sensor Signal	18	0.35	GY/ GN	7565	VII	—
19	0.5	WH/ BN	6815	I	—	Inadvertent Power Control	19	0.5	WH/ BN	6815	VII	—
20	0.35	GN	2308	I	—	Passenger Air Bag Off Indicator Control	20	0.35	GN	2308	VII	—
21	0.35	BU	2307	I	—	Passenger Air Bag On Indicator Control	21	0.35	BU	2307	VII	—
22	0.35	YE/ WH	1690	I	—	Automatic Day/Night Mirror Signal	22	0.35	YE/ WH	1690	VII	—
23	0.35	WH	6192	I	—	Power Sliding Window Switch Close Signal	23	0.35	WH	6192	VII	—
24	0.35	GY	156	I	—	Courtesy Lamp Switch Signal	24	0.35	GY	156	VII	—
25	0.35	GN	5060	I	—	Low Speed GMLAN Serial Data	25	0.35	GN	5060	VII	—

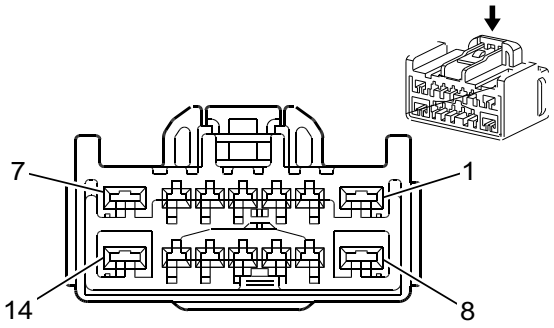
X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
26	0.35	YE/ BU	3197	I	—	Humidity Temperature Sensor Signal	26	0.35	YE/ BU	3197	VII	—
30	2.5	GN/ BU	5989	III	—	Emergency Lamp Relay Contact Control	30	2.5	GN/ BU	5989	V	—
31	0.35	BN/ WH	2517	I	—	Keypad Red LED Control	31	0.35	BN/ WH	2517	VII	—
32	0.35	YE/ VT	2516	I	—	Keypad Green LED Control	32	0.35	YE/ VT	2516	VII	—
33	0.35	GN/ WH	24	I	—	Backup Lamp Control	33	0.35	GN/ WH	24	VII	—
34	0.35	GY/ GN	328	I	—	Interior Lamp Defeat Switch Signal	34	0.35	GY/ GN	328	VII	—
35	0.35	BU/ GY	4672	I	—	Dome Lamp Off Indicator Control	35	0.35	BU/ GY	4672	VII	—
37	0.35	GN/ WH	2514	I	—	Keypad Signal	37	0.35	GN/ WH	2514	VII	—
38	0.35	GN/ BK	2515	I	—	Keypad Control	38	0.35	GN/ BK	2515	VII	—
39	0.5 0.5	VT/ WH VT/ GY	5065 1054	I I	EXTENDED/ CREW CAB REGULAR CAB	Stop Lamp Control Stop Lamp Control	39	0.35	VT/ GY	1054	VII	—
40	0.35	WH	3152	I	—	Lane Departure Warning Indicator Control	40	0.35	WH	3152	VII	—
41	0.35	GY/ WH	3153	I	—	Lane Departure Warning Disable Switch Signal	41	0.35	GY/ WH	3153	VII	—
42	0.35	YE	6817	I	—	LED Backlight Dimming Control	42	0.35	YE	6817	VII	—
44	1.5	BK	9003	IV	—	Not Used	44	1	BK	9000	VIII	—
45	0.35	WH	6816	I	—	Indicator Dimming Control	45	0.35	WH	6816	VII	—
46	0.35	YE/ RD	597	I	—	5V Reference	46	0.35	YE/ RD	597	VII	—
47	0.35	VT/ GN	7558	I	—	LED Ambient Lighting Control 2	47	0.35	VT/ GN	7558	VII	—
48	0.35	VT/ WH	5234	I	—	Passenger Seat Belt Indicator Control	48	0.35	VT/ WH	5234	VII	—

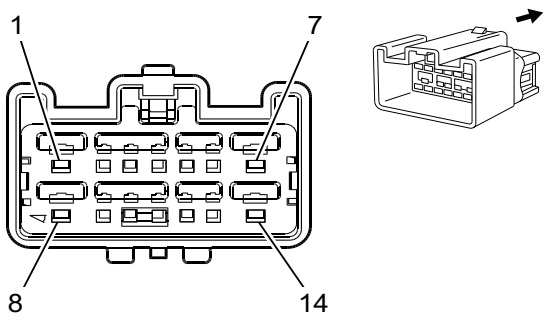
X256 Headliner Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.35	BK/ BU	7566	I	—	Humidity/ Windscreen Temp Sensor Low Refer- ence	49	0.35	BK/ BU	7566	VII	—
50	0.35	GN/ BN	6132	I	—	Local Inter- connect Net- work Serial Data Bus 1	50	0.35	GN/ BN	6132	VII	—
51	0.35	GY/ BU	7564	I	—	Humidity Sensor Sig- nal	51	0.35	GY/ BU	7564	VII	—
52	0.35	YE/ VT	6191	I	—	Power Slid- ing Window Switch Open Signal	52	0.35	YE/ VT	6191	VII	—
54	1.5	BK	9003	IV	—	Not Used	54	1	BK	9000	VIII	—

X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness



823290



1283905

Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 10847017
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 Series (L-GY)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846900
Service Connector: 88956523
Description: 14-Way M 1.5, 2.8 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13575818	J-35616-3 (GY)	J-38125-553	Not Available	Not Available	Not Available	Not Available
IV	13575824	J-35616-5 (PU)	J-38125-11A	7114-4112-02	Yazaki 9	C	D

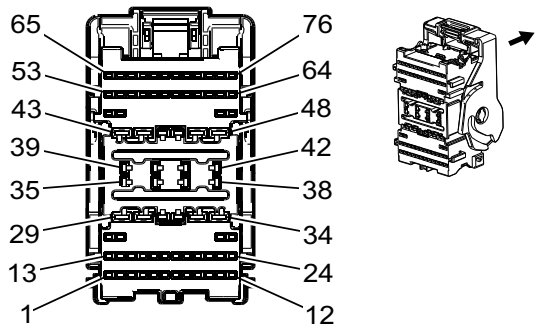
X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	BK	1250	II	-JL1+Z82	Ground	1	2	BK	1250	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	YE	6817	I	—	LED Backlight Dimming Control	3	0.5	YE	6817	III	—
4	0.35	BK	6821	I	—	Surveillance Switch Signal	4	0.35	WH/VT	6821	III	—
5	0.5	WH/BU	3691	I	—	Trailer Brake Apply Signal	5	0.5	WH/BU	3691	III	—
6	—	—	—	—	—	Accessory Ignition Voltage	6	0.35	VT/YE	43	III	—
7	2	RD/VT	1242	II	—	Battery Positive Voltage	7	2	RD/VT	1242	IV	—
8	2.5	GN/BU	5989	II	—	Emergency Lamp Relay Contact Control	8	2.5	GN/BU	5989	IV	—

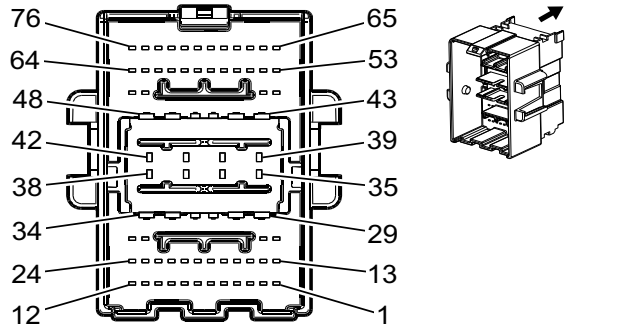
X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness (cont'd)

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/GN	39	I	—	Run/Crank Ignition 1 Voltage	13	0.35	VT/WH	239	III	—
14	2	BU	47	II	—	Trailer Auxiliary Control	14	2	BU	47	IV	—

X275 Instrument Panel Harness to Body Harness



3960183



3960526

Connector Part Information

Harness Type: Instrument Panel
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
OEM Connector: 33303580
Service Connector: 19355187
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575708	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	13578891	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
III	13580025	J-35616-4A (PU)	J-38125-11A	7116-4111-02	Yazaki 9	E	A
IV	13582232	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	13582322	J-35616-4A (PU)	J-38125-11A	7116-4110-02	Yazaki 9	E	C
VI	19300649	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19301752	J-35616-4A (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19301767	J-35616-2A (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IX	19333323	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
X	19367551	J-35616-16 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XI	13575818	J-35616-3 (GY)	J-38125-553	Not Available	Not Available	Not Available	Not Available
XII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XIV	19352417	J-35616-3 (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XV	19352418	J-35616-3 (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XVI	19355729	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

Terminal Part Information (cont'd)

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
XVII	19355731	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
XVIII	19369872	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X275 Instrument Panel Harness to Body 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/WH	3440	VI	—	Battery Positive Voltage	2	0.5	RD/WH	3440	XII	—
3	0.5	BN/WH	3895	X	—	Roof Rail Air Bag Defeat Switch Low Reference	3	0.5	BN/WH	3895	XII	—
4	0.5	BU/WH	3119	X	—	Roof Rail Air Bag Defeat Switch Signal	4	0.5	BU/WH	3119	XII	—
5	0.35	GY/GN	2555	IX	—	Rear Park Assist Disable Signal	5	0.35	GY/GN	2555	XII	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	VT/WH	5234	IX	—	Passenger Seat Belt Indicator Control	7	0.35	VT/WH	5234	XII	—
8	0.35	BU	2307	IX	—	Passenger Air Bag On Indicator Control	8	0.35	BU	2307	XII	—
9	0.35	BU/GY	4672	IX	—	Dome Lamp Off Indicator Control	9	0.35	BU/GY	4672	XII	—
10	0.35	GY	156	IX	—	Courtesy Lamp Switch Signal	10	0.35	GY	156	XII	—
11	0.35	GN/BU	761	IX	—	Blower Speed Feedback Signal	11	0.35	GN/BU	761	XII	—
12	0.35	GN/GY	817	IX	—	Vehicle Speed Signal	12	0.35	GN/GY	817	XII	—
13	0.35	GN	2308	IX	—	Passenger Air Bag Off Indicator Control	13	0.35	GN	2308	XII	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.35	YE/OG	3025	IV	—	Passenger IP Module Stage 1 High Control	15	0.35	YE/OG	3025	XI	—
16	0.35	OG/WH	3024	IV	—	Passenger IP Module Stage 1 Low Control	16	0.35	OG/WH	3024	XI	—

X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
17	0.35	GY/OG	3027	IV	—	Passenger IP Module Stage 2 High Control	17	0.35	GY/OG	3027	XI	—
18	0.35	OG/VT	3026	IV	—	Passenger IP Module Stage 2 Low Control	18	0.35	OG/VT	3026	XI	—
19	0.35	GN/BN	6132	IX	—	Local Interconnect Network Serial Data Bus 1	19	0.5	GN/BN	6132	XII	—
20	0.35	GY/GN	1102	IX	—	Low Speed GMLAN Serial Data #2	20	0.75	GY/GN	1102	XIII	—
21	0.35	YE	6817	IX	—	LED Backlight Dimming Control	21	0.35	YE	6817	XII	—
22	0.5	GN/GY	6135	X	—	Local Interconnect Network Serial Data Bus 4	22	0.35	GN/GY	6135	XIII	—
23 - 26	—	—	—	—	—	Not Occupied	23 - 26	—	—	—	—	—
27	0.35	YE	7755	IX	—	AC Power Outlet Status Indicator Control	27	0.35	YE	7755	XII	—
28	0.35	VT/WH	239	IX	—	Run/Crank Ignition 1 Voltage	28	0.35	VT/WH	239	XII	—
29	2	BK	1250	VII	—	Ground	29	2	BK	1250	XVII	—
30	0.5	RD/GN	5140	V	—	Battery Positive Voltage	30	0.5	RD/GN	5140	XVIII	—
31	0.5	BK/WH	2751	I	—	Signal Ground	31	0.5	BK/WH	2751	XIV	—
32	0.35	WH/VT	6821	II	—	Surveillance Switch Signal	32	0.35	WH/VT	6821	XIV	—
33	0.75	WH/YE	1853	III	—	Right Front Midrange Speaker Control (+)	33	0.75	WH/YE	1853	XVI	—
34	0.75	BN/BK	1953	III	—	Right Front Midrange Speaker (-) Low Reference	34	0.75	BN/BK	1953	XVI	—
35	0.35	GY	1198	II	—	Endgate Release Switch Analog Signal Interior	35	0.35	GY	1198	XIV	—
36	0.5	WH/BU	3691	VIII	—	Trailer Brake Apply Signal	36	0.5	WH/BU	3691	XIV	—
37	0.35	RD/WH	1340	II	—	Battery Positive Voltage	37	0.35	RD/WH	1340	XIV	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—

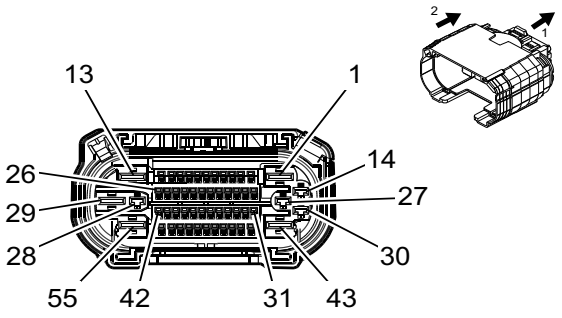
X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
40	0.35 0.35	GN/WH GN/WH	24 24	VIII	— DD8/DRZ	Backup Lamp Control Backup Lamp Control	40					
41	0.5 0.5	WH/VT WH/VT	1430 1430	VIII	QT5/QT6 QT5/QT6	Exterior Courtesy Lamp Control Exterior Courtesy Lamp Control	41	0.5 0.5	WH/VT WH/VT	1430 1430	XIV XIV	QT5/QT6 —
42	0.35	VT/BN	300	VIII	—	Run Ignition 3 Voltage	42	0.35	VT/BN	300	XIV	—
43	2	BU	47	VII	—	Trailer Auxiliary Control	43	2	BU	47	XVII	—
44	2	RD/VT	1242	VII	—	Battery Positive Voltage	44	2	RD/VT	1242	XVII	—
45	0.75	BK/WH	2751	I	—	Signal Ground	45	0.75	BK/WH	2751	XV	—
46	0.35	VT/BU	6091	II	—	Crankshaft Position Sensor Replicated Signal	46	0.35	VT/BU	6091	XIV	—
47	0.75	YE/BK	117	VII	—	Right Front Speaker Signal (-) 1	47	0.75	YE/BK	117	XVI	—
48	0.75	YE	200	VII	—	Right Front Speaker Control (+) 1	48	0.75	YE	200	XVI	—
49 - 50	—	—	—	—	—	Not Occupied	49 - 50	—	—	—	—	—
51	0.5	WH	46	VI	UQF	Right Rear Speaker Control (+)	51	0.5	WH	46	XII	UQF
52	0.5	BU/BK	115	VI	UQF	Right Rear Speaker Signal (-)	52	0.5	BU/BK	115	XII	UQF
53	—	—	—	—	—	Not Occupied	53	—	—	—	—	—
54	0.35	GY/WH	3272	IX	—	Remote Function Actuator Control	54	0.35	GY/WH	3272	XII	—
55	0.35	BU/WH	3275	IX	—	Remote Function Actuator Receive Signal	55	0.35	BU/WH	3275	XII	—
56	0.35	YE/GN	3274	IX	—	Remote Function Actuator Transmit Signal	56	0.35	YE/GN	3274	XII	—
57	0.35	GY	3273	IX	—	Remote Function Actuator Low Reference	57	0.35	GY	3273	XII	—
58	0.5	BN/VT	193	X	—	Rear Defog Relay Control	58	0.5	BN/VT	193	XII	—

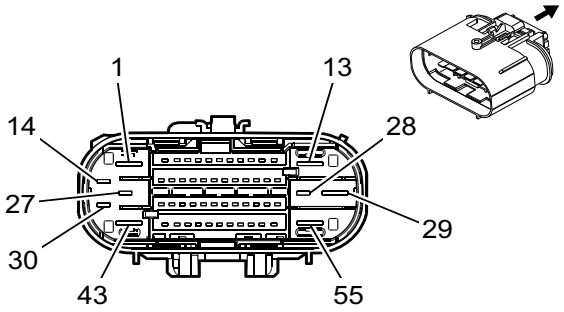
X275 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
59	0.35	YE	6812	IX	—	Out of Park Signal	59	0.35	YE	6812	XII	—
60 - 62	—	—	—	—	—	Not Occupied	60 - 62	—	—	—	—	—
63	0.35	WH/GN	1305	IX	—	High Speed GMLAN Serial Data (-)9	63	0.5	WH/GN	1305	XII	—
64	0.35	BU/GN	1304	IX	—	High Speed GMLAN Serial Data (+)9	64	0.5	BU/GN	1304	XII	—
65	—	—	—	—	—	Not Occupied	65	—	—	—	—	—
66	0.35	Bare	6974	IX	—	Camera Low Reference	66	0.35	Bare	6974	XII	—
67	0.35	GY/YE	6972	IX	—	Camera Signal 2 +	67	0.35	GY/YE	6972	XII	—
68	0.35	WH/BU	6973	IX	—	Camera Signal 2	68	0.35	WH/BU	6973	XII	—
69	0.35	GN/BN	5852	IX	—	Rear Park Assist LED Disable Signal	69	0.35	GN/BN	5852	XII	—
70	0.35	VT/YE	43	IX	—	Accessory Ignition Voltage	70	0.35	VT/YE	43	XII	—
71 - 72	—	—	—	—	—	Not Occupied	71 - 72	—	—	—	—	—
73	0.35	VT/GY	1054	IX	—	Stop Lamp Control	73	0.35 0.35	VT/WH VT/GY	5065 1054	XII XII	EXTENDED/CREW CAB REGULAR CAB
74	0.35	BN	7291	VI	—	Major Endgate Release Switch Signal Interior	74	0.35	BN	7291	XII	—
75 - 76	—	—	—	—	—	Not Occupied	75 - 76	—	—	—	—	—

X310 Driver Seat Harness to Body Harness



4992168



4993301

Connector Part Information

Harness Type: Driver Seat

OEM Connector: 33357989

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

OEM Connector: 33357991

Service Connector: 19371183

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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	19329756	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available
V	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VI	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19371217	J-25616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
VIII	84616650	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X310 Driver Seat Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1150	II	—	Ground	1	2.5	BK	1150	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	GN/WH	7530	I	—	Local Interconnect Network Serial Data Bus 8	3	0.35	GN/WH	7530	V	—
4	0.5	RD/BN	1140	I	—	Battery Positive Voltage	4	0.35	RD/BN	1140	V	—

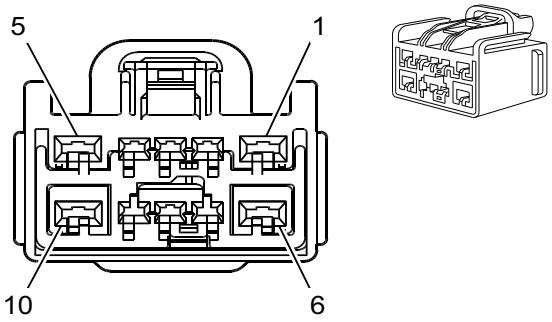
X310 Driver Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	5	0.35	GN	5060	V	—
6	0.5	BU/GN	614	I	—	Memory Seat Switch Set Signal	6	0.35	BU/GN	614	V	—
7	0.5	BK/BU	5978	I	—	Memory Switch Low Reference	7	0.35	BK/BU	5978	V	—
8	0.5	WH	615	I	—	Memory Seat Switch Signal 1	8	0.35	WH	615	V	—
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	BK/YE	2080	I	—	Driver Heated Seat NTC Low Reference	10	0.35	BK/YE	2080	V	—
11	0.5	YE/GY	2079	I	—	Driver Heated Seat NTC Signal	11	0.35	YE/GY	2079	V	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	2.5	RD/YE	5040	II	—	Battery Positive Voltage	13	2.5	RD/YE	5040	IV	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.75	BN/VT	2077	I	—	Driver Heated Seat Element Control	15	0.75	BN/VT	2077	VI	—
16	0.75	BN/BK	2078	I	—	Driver Heated Seat Element Low Reference	16	0.75	BN/BK	2078	VI	—
17	0.5	BK/VT	2426	I	—	Driver Heated Back NTC Low Reference	17	0.35	BK/VT	2426	V	—
18	0.5	BU	2425	I	—	Driver Heated Back NTC Signal	18	0.35	BU	2425	V	—
19	0.75	BN	2432	I	—	Driver Heated Back Element Control	19	0.75	BN	2432	VI	—
20	0.5	GN/VT	5906	I	—	Driver Seat Vent Motor Control 1	20	0.35	GN/VT	5906	V	—
21	0.75	VT/WH	4939	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT/WH	4939	V	—
22 - 28	—	—	—	—	—	Not Occupied	22 - 28	—	—	—	—	—
29	0.75	RD/YE	8840	II	—	Battery Positive Voltage	29	0.75	RD/YE	8840	IV	—

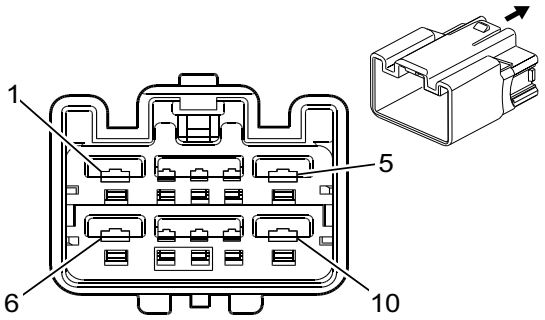
X310 Driver Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
30 - 31	—	—	—	—	—	Not Occupied	30 - 31	—	—	—	—	—
32	0.35	OG/BN	238	I	—	Driver Seat Belt Switch Signal	32	0.35	OG/BN	238	V	—
33	0.5	BK/OG	1363	I	—	Driver Seat Belt Switch Low Reference	33	0.35	BK/OG	1363	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG/BU	3068	III	—	Driver Side Impact Module High Control	35	0.5 0.5	OG/BU OG/BU	3068 3068	VIII VII	EXTENDED CAB/CREW CAB REGULAR CAB
36	0.5	BK/OG	3069	III	—	Driver Side Impact Module Low Control	36	0.5 0.5	GN/OG GN/OG	3069 3069	VII VIII	REGULAR CAB EXTENDED CAB/CREW CAB
37 - 43	—	—	—	—	—	Not Occupied	37 - 43	—	—	—	—	—
44	—	—	—	—	—	Not Used	44	1	BK	9003	VI	—
45 - 55	—	—	—	—	—	Not Occupied	45 - 55	—	—	—	—	—

X318 Sunroof Jumper Harness to Headliner Harness



1851891



1851890

Connector Part Information

Harness Type: Sunroof Jumper
OEM Connector: 19167677
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Kaizen Series (L-GY)

Connector Part Information

Harness Type: Headliner
OEM Connector: 13506926
Service Connector: 89047070
Description: 10-Way M YESC Kaizen Series (L-GY)

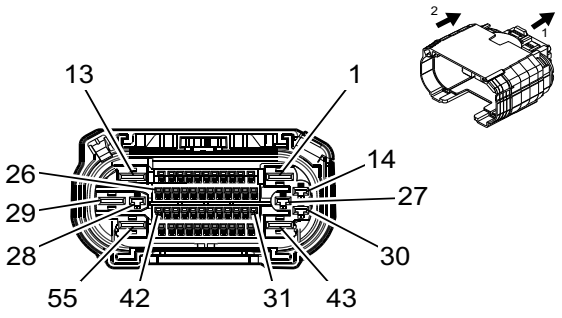
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575818	J-35616-3 (GY)	J-38125-553	Not Available	Not Available	Not Available	Not Available
III	13575824	J-35616-5 (PU)	J-38125-11A	7114-4112-02	Yazaki 9	C	D

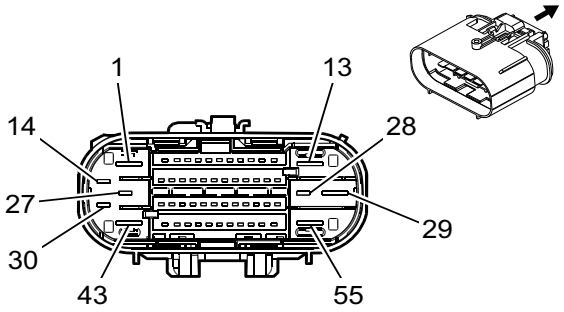
X318 Sunroof Jumper Harness to Headliner Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.35	BK/GY	128	I	—	Sunroof Switch Low Reference	3	0.35	BK/GY	128	II	—
4	0.35	GN/BN	6132	I	—	Local Interconnect Network Serial Data Bus 1	4	0.35	GN/BN	6132	II	—
5	2.5	BK	1050	I	—	Ground	5	2.5	BK	1050	III	—
6	2.5	RD/GY	3140	I	—	Battery Positive Voltage	6	2.5	RD/GN	3140	III	—
7	0.35	BU/VT	5027	I	—	Sunroof Switch Data 1 Signal	7	0.35	BU/VT	5027	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.35	WH/YE	3031	I	—	Sunroof Vent Switch Signal	9	0.35	WH/GN	3031	II	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

X320 Passenger Seat Harness to Body Harness



4992168



4993301

Connector Part Information

Harness Type: Passenger Seat

OEM Connector: 13512646

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

OEM Connector: 33357991

Service Connector: 19371183

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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	13580827	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19329756	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available
VI	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19371217	J-25616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
IX	84616650	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X320 Passenger Seat Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1250	III	—	Ground	1	2.5	BK	1250	V	—
2 - 8	—	—	—	—	—	Not Occupied	2 - 8	—	—	—	—	—
9	0.5	GN/BU	6133	I	—	Local Interconnect Network Serial Data Bus 2	9	0.35	GN/BU	6133	VI	—

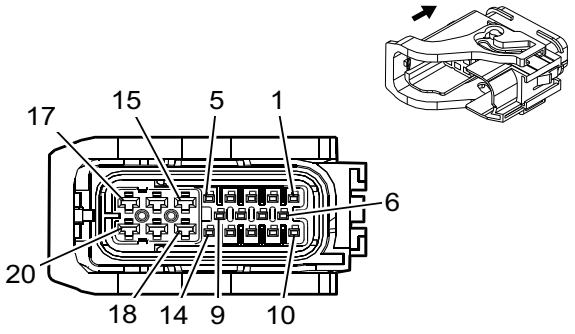
X320 Passenger Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	BK/YE	2080	I	—	Driver Heated Seat NTC Low Reference	10	0.35	BK/YE	2080	VI	—
11	0.5	YE/GY	2079	I	—	Driver Heated Seat NTC Signal	11	0.35	YE/GY	2079	VI	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	2.5	RD/BN	1440	III	—	Battery Positive Voltage	13	2.5	RD/BN	1440	V	—
14	0.75	RD	6140	II	—	Battery Positive Voltage	14	0.5	RD	6140	IV	—
15	0.75	BN/VT	2077	I	—	Driver Heated Seat Element Control	15	0.75	BN/VT	2077	VII	—
16	0.75	BN/BK	2078	I	—	Driver Heated Seat Element Low Reference	16	0.75	BN/BK	2078	VII	—
17	0.5	BK/VT	2426	I	—	Driver Heated Back NTC Low Reference	17	0.35	BK/VT	2426	VI	—
18	0.5	BU	2425	I	—	Driver Heated Back NTC Signal	18	0.35	BU	2425	VI	—
19	0.75	BN	2432	I	—	Driver Heated Back Element Control	19	0.75	BN	2432	VII	—
20	0.35	GN/VT	5906	I	—	Driver Seat Vent Motor Control 1	20	0.35	GN/VT	5906	VI	—
21	0.75	VT/WH	4939	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT/WH	4939	VI	—
22	0.5	RD/GN	4440	I	—	Battery Positive Voltage	22	0.5	RD/GN	4440	VI	—
23	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	23	0.35	GN	5060	VI	—
24	0.5	GY/OG	3946	I	—	Automatic Locking Retractor Switch Low Reference	24	0.5	GY/OG	3946	VI	—
25	0.5	OG/BN	3947	I	—	Automatic Locking Retractor Switch Signal	25	0.5	OG/BN	3947	VI	—
26	0.5	BK/WH	2551	I	—	Signal Ground	26	0.5	BK/WH	2551	VI	—
27	0.75	RD/GN	5140	II	—	Battery Positive Voltage	27	0.5	RD/GN	5140	IV	—
28	—	—	—	—	—	Not Occupied	28	—	—	—	—	—

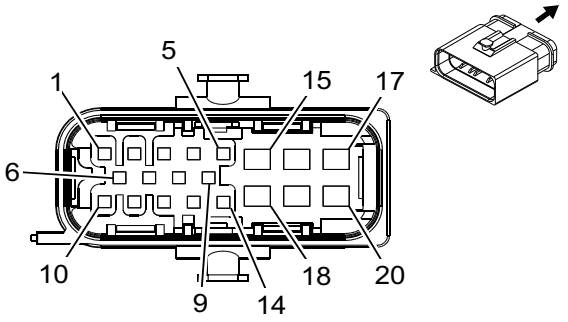
X320 Passenger Seat Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
29	0.75	RD/YE	8840	III	—	Battery Positive Voltage	29	0.75	RD/YE	8840	V	—
30 - 31	—	—	—	—	—	Not Occupied	30 - 31	—	—	—	—	—
32	0.35	OG/VT	1362	I	—	Passenger Seat Belt Switch Signal	32	0.35	OG/VT	1362	VI	—
33	0.5	BK/OG	1361	I	—	Passenger Seat Belt Switch Low Reference	33	0.35	BK/OG	1361	VI	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG/GY	3066	I	—	Passenger Side Impact Module High Control	35	0.35	OG/GY	3066	IX	—
36	0.5	BU/OG	3067	I	—	Passenger Side Impact Module Low Control	36	0.35	BN/OG	3067	VIII	—
37 - 55	—	—	—	—	—	Not Occupied	37 - 55	—	—	—	—	—

X348 Body Harness to Front Center Seat Harness (AZ3)



4287663



3825586

Connector Part Information

Harness Type: Body
OEM Connector: 13974124
Service Connector: 19371189
Description: 20-Way F

Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 13942796
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way M 1.2, 2.8 Multiple Contact Point Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576374	J-35616-35 (VT)	J-38125-557	1-968857-3	Lear 7	C	1
II	19119772	J-35616-35 (VT)	J-38125-215A	1241388-1	Lear 17	2	4
III	19119772	J-35616-35 (VT)	J-38125-215A	1241388-1	Lear 17	E	C
IV	19119772	J-35616-4A (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19301535	J-35616-16 (LT GN)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
VI	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

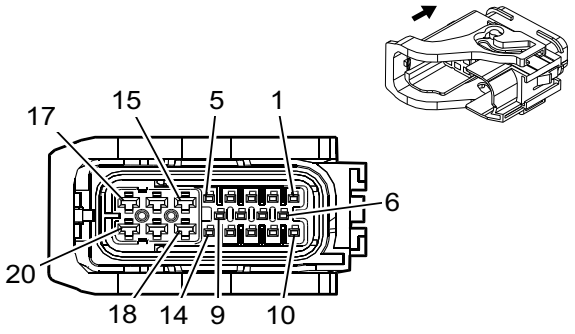
X348 Body Harness to Front Center Seat Harness (AZ3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.35	YE	6817	V	—	LED Backlight Dimming Control	2	—	—	—	—	—
3	0.35	GN/VT	7533	V	—	Local Interconnect Network Serial Data Bus 11	3	0.35	GN/VT	7533	VI	—
4	0.35	GN/GY	3277	V	—	Vehicle Anti-Theft System Immobilizer Low Reference	4	0.35	GN/GY	3277	VI	—

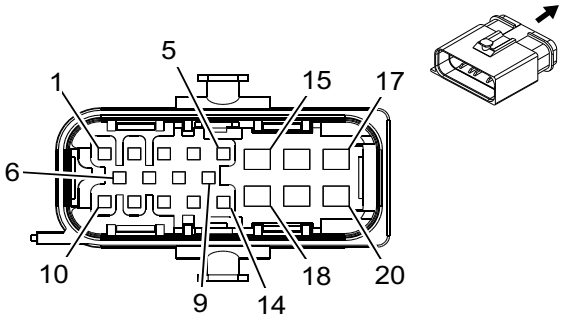
X348 Body Harness to Front Center Seat Harness (AZ3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.35	GY/BK	3276	V	—	Vehicle Anti-Theft System Immobilizer Control	5	0.35	GY/BK	3276	VI	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	RD/WH	1340	V	—	Battery Positive Voltage	7	—	—	—	—	—
8	0.35	GN/WH	4115	V	—	Local Interconnect Network Serial Data Bus 15	8	—	—	—	—	—
9	0.35	VT/YE	143	V	—	Accessory Ignition Voltage	9	0.5	VT/YE	143	VI	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.35	VT	4601	V	—	Retained Accessory Power Fused Control	11	—	—	—	—	—
12	0.35	GN	4512	V	—	Wireless Charging System Charge Indicator Control	12	—	—	—	—	—
13	0.35	GY/BK	3555	V	—	Passive Start Interior Antenna 2 Signal Lo	13	0.5	GY/BK	3555	VI	—
14	0.35	BU	3554	V	—	Passive Start Interior Antenna 2 Signal Hi	14	0.5	BU	3554	VI	—
15	1.5	RD/WH	1040	I	—	Battery Positive Voltage	15	1.5	RD/WH	1040	VI	—
16	0.5	WH/BN	6815	III	—	Inadvertent Power Control	16	—	—	—	—	—
17	1	BK	1250	II	—	Ground	17	—	—	—	—	—
18	—	—	—	—	—	Not Occupied	18	—	—	—	—	—
19	0.35	BN	4511	IV	—	Wireless Charging System Fault Indicator Control	19	—	—	—	—	—
20	2	BK	1250	I	—	Ground	20	2	BK	1150	VI	—

X348 Body Harness to Floor Console Harness (D07)



4287663



3825586

Connector Part Information

Harness Type: Body
OEM Connector: 13974124
Service Connector: 19371189
Description: 20-Way F

Connector Part Information

Harness Type: Floor Console
OEM Connector: 35137619
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576374	J-35616-35 (VT)	J-38125-557	1-968857-3	Lear 7	C	1
II	19119772	J-35616-35 (VT)	J-38125-215A	1241388-1	Lear 17	E	C
III	19119772	J-35616-4A (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19301535	J-35616-16 (LT GN)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
V	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
VI	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

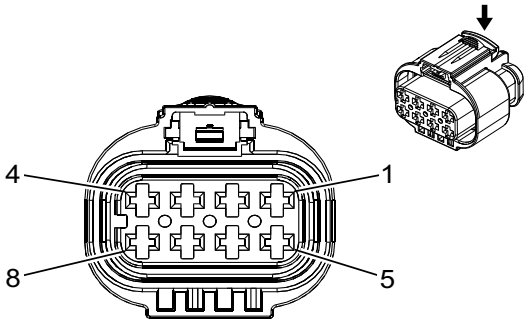
X348 Body Harness to Floor Console Harness (D07)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.35	YE	6817	IV	—	LED Backlight Dimming Control	2	0.35	YE	6817	V	—
3	0.35	GN/VT	7533	IV	—	Local Interconnect Network Serial Data Bus 11	3	0.35	GN/VT	7533	V	—
4	0.35	GN/GY	3277	IV	—	Vehicle Anti-Theft System Immobilizer Low Reference	4	0.35	GN/GY	3277	V	—

X348 Body Harness to Floor Console Harness (D07) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.35	GY/BK	3276	IV	—	Vehicle Anti-Theft System Immobilizer Control	5	0.35	GY/BK	3276	V	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	RD/WH	1340	IV	—	Battery Positive Voltage	7	0.35	RD/WH	1340	V	—
8	0.35	GN/WH	4115	IV	—	Local Interconnect Network Serial Data Bus 15	8	0.35	GN/WH	4115	V	—
9	0.35	VT/YE	143	IV	—	Accessory Ignition Voltage	9	0.35	VT/YE	143	V	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.35	VT	4601	IV	—	Retained Accessory Power Fused Control	11	0.35	VT	4601	V	—
12	0.35	GN	4512	IV	—	Wireless Charging System Charge Indicator Control	12	0.35	GN	4512	V	—
13	0.35	GY/BK	3555	IV	—	Passive Start Interior Antenna 2 Signal Lo	13	0.5	GY/BK	3555	V	—
14	0.35	BU	3554	IV	—	Passive Start Interior Antenna 2 Signal Hi	14	0.5	BU	3554	V	—
15	1.5	RD/WH	1040	I	—	Battery Positive Voltage	15	1.5	RD/WH	1040	VI	—
16	0.5	WH/BN	6815	II	—	Inadvertent Power Control	16	0.5	WH/BN	6815	VI	—
17	1.5	BK	1250	I	—	Ground	17	1	BK	1150	VI	—
18	—	—	—	—	—	Not Occupied	18	—	—	—	—	—
19	0.35	BN	4511	III	—	Wireless Charging System Fault Indicator Control	19	0.35	BN	4511	VI	—
20	2	BK	1250	I	—	Ground	20	2	BK	1150	VI	—

X350 Chassis Harness to Fuel Tank Harness



—

3749582

Connector Part Information

Harness Type: Chassis
OEM Connector: 33180742
Service Connector: 19354078
Description: 8-Way F 2.8 Series, Sealed (L-GY)

Connector Part Information

Harness Type: Fuel Tank
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

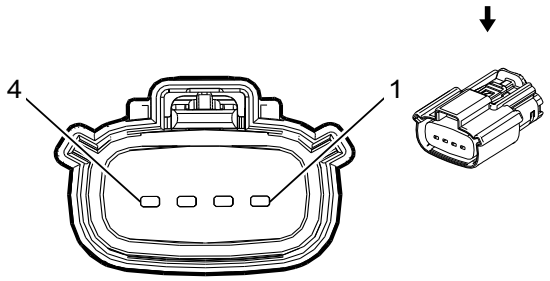
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

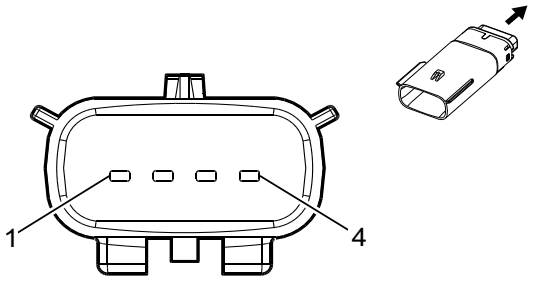
X350 Chassis Harness to Fuel Tank Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	GY	120	I	—	Fuel Pump Control	1	2.5	GY	120	II	—
2	2.5	YE/GY	4137	I	—	Fuel Pump Supply Voltage Phase 2	2	2.5	YE/GY	4137	II	—
3	2.5	WH/BN	4138	I	—	Fuel Pump Supply Voltage Phase 3	3	2.5	WH/BN	4138	II	—
4	0.35	BN	7444	I	—	Fuel System Control Module Shield Ground	4	0.35	BN	7444	II	—
5	0.5	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	5	0.5	BU/VT	1589	II	—
6	0.5	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	6	0.5	BK/GN	6281	II	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

X370 Body Harness to Rear Seat Harness (KA6)



2474747



2917338

Connector Part Information

Harness Type: Body
OEM Connector: 15456952
Service Connector: 19371211
Description: 4-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Rear Seat
OEM Connector: 33481-0401
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.5 Series, Sealed (BK)

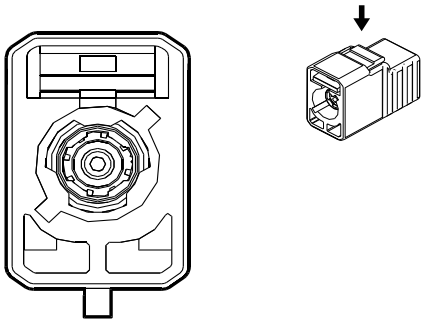
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

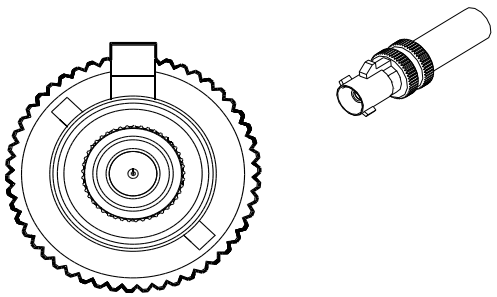
X370 Body Harness to Rear Seat Harness (KA6)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD/YE	240	I	—	Battery Positive Voltage	1	0.75	RD/YE	240	II	—
2	0.5	RD/VT	340	I	—	Battery Positive Voltage	2	0.75	RD/VT	340	II	—
3	0.35	GN/BU	6133	I	—	Local Interconnect Network Serial Data Bus 2	3	0.5	GN/BU	6133	II	—
4	1	BK	1150	I	—	Ground	4	1	BK	1150	II	—

X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)



3293625



4249257

Connector Part Information

Harness Type: Inside Rearview Mirror Jumper 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 Jumper COAX

OEM Connector: 13583912

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BU)

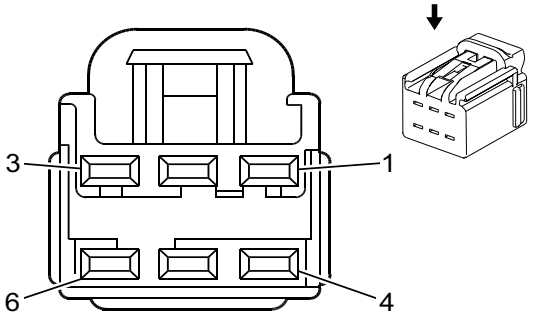
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

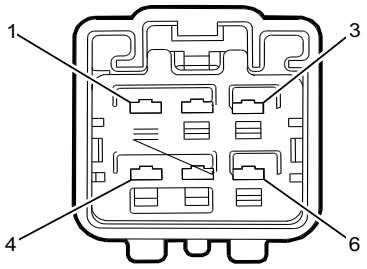
X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Coaxial Camera Signal	—	—	Coax	—	I	—

X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)



1519696



1849802

Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper
OEM Connector: 10847014
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F YESC Kaizen Series (L-GY)

Connector Part Information

Harness Type: Headliner
OEM Connector: 10847012
Service Connector: 19153164
Description: 6-Way M YESC Kaizen Series (L-GY)

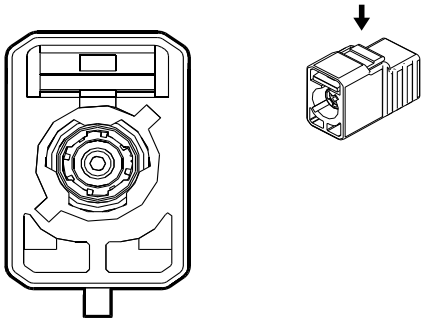
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

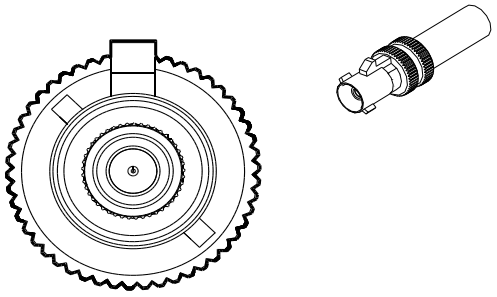
X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH/VT	1430	I	—	Exterior Courtesy Lamp Control	1	0.35	WH/VT	1430	II	—
2	0.35	VT/WH	5065	I	—	Stop Lamp Relay Coil Control	2	0.5	VT/WH	5065	II	—
3	0.35	BK	1050	I	—	Ground	3	0.35	BK	1050	II	—
4	2.5	GN/BU	5989	I	—	Emergency Lamp Relay Contact Control	4	2.5	GN/BU	5989	II	—
5	2.5	BK	1050	I	—	Ground	5	2.5	BK	1050	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)



3293625



4249257

Connector Part Information

Harness Type: Inside Rearview Mirror Jumper 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: Center High Mounted Stop Lamp Jumper COAX

OEM Connector: 13583912

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BU)

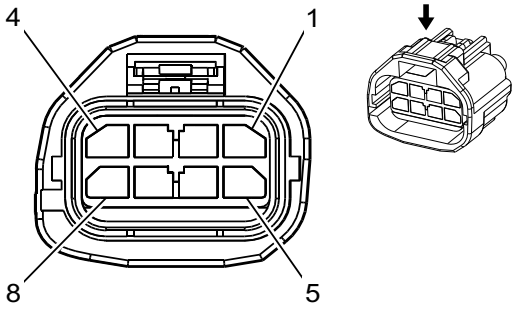
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

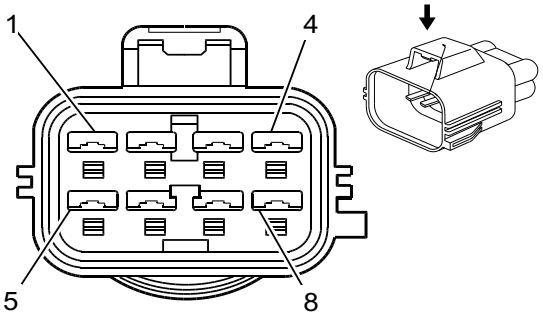
X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Coaxial Camera Signal	—	—	Coax	—	I	—

X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)



1401778



1856785

Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Chassis
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

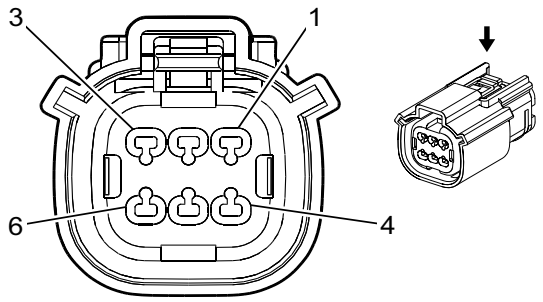
X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	YE	7472	I	—	Articulating Running Boards Motor Left Control Retract	1	2	GY	7472	II	—
2	0.5	OG/WH	7468	I	—	Running Boards Motor Hall Sensor Left 5V Reference	2	0.5	VT/RD	7468	II	—
3	0.5	YE/WH	7467	I	—	Running Boards Motor Hall Sensor Left Signal	3	0.5	YE	7467	II	—
4	0.5	BN/WH	7466	I	—	Running Boards Motor Hall Sensor Left Low Reference	4	0.5	YE/BN	7466	II	—
5	2	OG	7471	I	—	Articulating Running Boards Motor Left Control Extend	5	2	WH/BN	7471	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

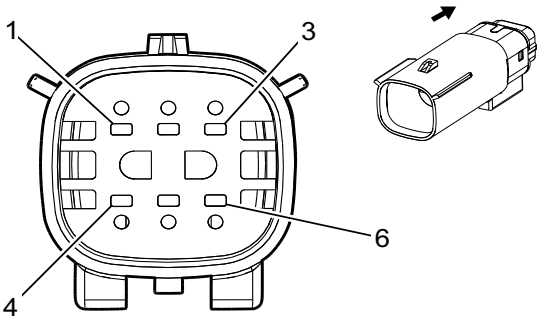
X408 Left Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	RD	4746	I	—	Articulating Running Board Left Kick Switch Signal	7	0.5	BU/ GN	4746	II	—
8	0.5	BK	685	I	—	Articulating Running Board Kick Switch Re-turn	8	0.5	BK/ BU	685	II	—

X410 Tail Lamp - Left Harness to Chassis Harness



1986157



1986159

Connector Part Information

Harness Type: Tail Lamp - Left
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 35014074
Service Connector: 13585853
Description: 6-Way M 150 MX Series, Sealed (BK)

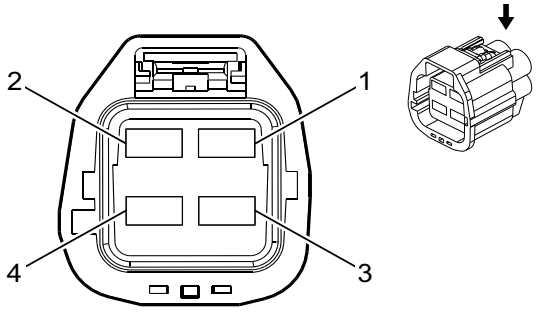
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

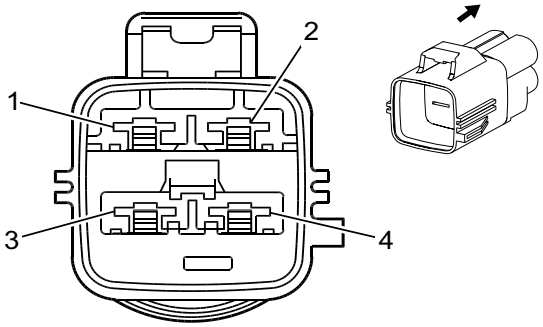
X410 Tail Lamp - Left Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	709	I	—	Left Park Lamp Control	1	0.75	VT/GY	709	II	—
2	0.5	RD	5356	I	GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ	Left Tail Lamp Outage Detection Signal	2	0.5	YE/BK	5356	II	GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ
3	0.5	BU	7762	I	—	Cargo Bed Lamp Control	3	0.5	GY/BU	7762	II	—
4	0.5	GN	24	I	—	Backup Lamp Control	4	0.5	GN/WH	24	II	—
5	1	GN	18	I	—	Left Rear Stop/Turn Lamp Control	5	1	YE/BU	18	II	—
6	0.75	BK	1450	I	—	Ground	6	0.75	BK	1450	II	—

X415 Chassis Rear Extension Harness to Chassis Harness



2852121



1853524

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 7283-3601-10
Service Connector: 19371198
Description: 4-Way F 6.3 Series, Sealed (GY)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33360098
Service Connector: 19371198
Description: 4-Way M 6.3 Series, Sealed (GY)

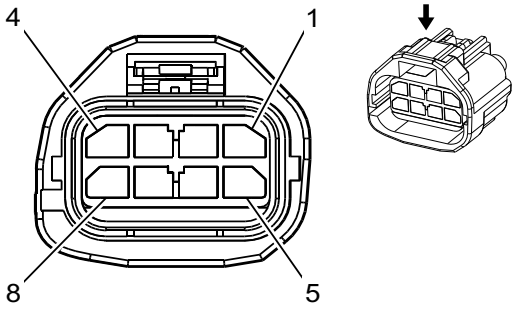
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-43 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

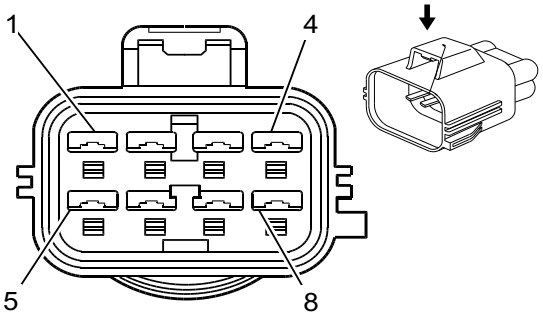
X415 Chassis Rear Extension Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	WH	2001	I	—	Park Brake Motor Apply Left Rear Control	1	5	WH	2001	II	—
2	2.5	OG	4369	I	—	Park Brake Motor Low Reference Left Rear	2	5	GY/BK	4369	II	—
3	2.5	OG	1988	I	—	Park Brake Motor Apply Right Rear Control	3	5	GN/VT	1988	II	—
4	2.5	WH	4368	I	—	Park Brake Motor Low Reference Right Rear	4	5	GY	4368	II	—

X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)



1401778



1856785

Connector Part Information

Harness Type: Right Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Chassis
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

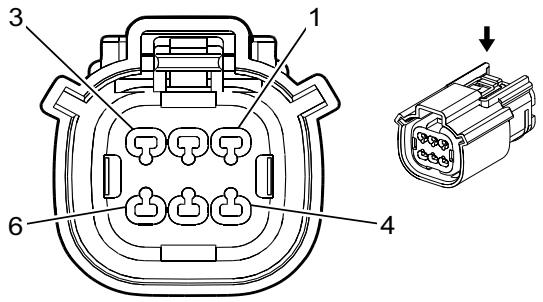
X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	YE	7469	I	—	Articulating Running Boards Motor Right Control Retract	1	2	GN	7469	II	—
2	0.5	OG/WH	7464	I	—	Running Boards Motor Hall Sensor Right 5V Reference	2	0.5	GN/RD	7464	II	—
3	0.5	YE/WH	7465	I	—	Running Boards Motor Hall Sensor Right Signal	3	0.5	VT	7465	II	—
4	0.5	BN/WH	7463	I	—	Running Boards Motor Hall Sensor Right Low Reference	4	0.5	YE/BK	7463	II	—
5	2	OG	7470	I	—	Articulating Running Boards Motor Right Control Extend	5	2	BU	7470	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

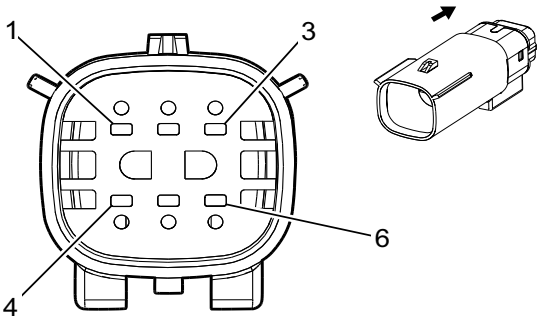
X418 Right Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	RD	4747	I	—	Articulating Running Board Right Kick Switch Signal	7	0.5	WH	4747	II	—
8	0.5	BK	685	I	—	Articulating Running Board Kick Switch Re-turn	8	0.5	BK/ BU	685	II	—

X420 Tail Lamp - Right Harness to Chassis Harness



1986157



1986159

Connector Part Information

Harness Type: Tail Lamp - Right
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

Connector Part Information

Harness Type: Chassis
OEM Connector: 35014074
Service Connector: 13585853
Description: 6-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X420 Tail Lamp - Right Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	309	I	—	Right Park Lamp Control	1	0.75	GY/BN	309	II	—
2	0.5	RD	5357	I	GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ	Right Tail Lamp Outage Detection Signal	2	0.5	VT/YE	5357	II	GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ
3	0.5	BU	7762	I	—	Cargo Bed Lamp Control	3	0.5	GY/BU	7762	II	—
4	0.5	GN	24	I	—	Backup Lamp Control	4	0.5	GN/WH	24	II	—
5	1	GN	19	I	—	Right Rear Stop/Turn Lamp Control	5	1	BN/GN	19	II	—
6	0.75	BK	1750	I	—	Ground	6	0.75	BK	1750	II	—

X427 Body Harness to Chassis Harness (UVI)

—

Connector Part Information

Harness Type: Body
OEM Connector: 13514203
Service Connector: -
Description: 1-Way F

—

Connector Part Information

Harness Type: Chassis
OEM Connector: 13514206
Service Connector: -
Description: 1-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X427 Body Harness to Chassis Harness (UVI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
BK	—	—	COAX	I	—	Coax Cable	BK	—	—	COAX	II	—

X428 Chassis Harness to Body Harness (UV2/UVI)

—

Connector Part Information

Harness Type: Chassis
OEM Connector: 13514208
Service Connector: -
Description: 1-Way F

—

Connector Part Information

Harness Type: Body
OEM Connector: 13514205
Service Connector: -
Description: 1-Way M

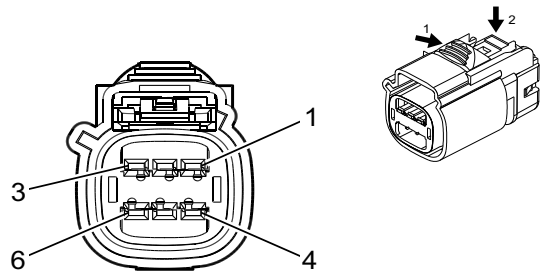
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

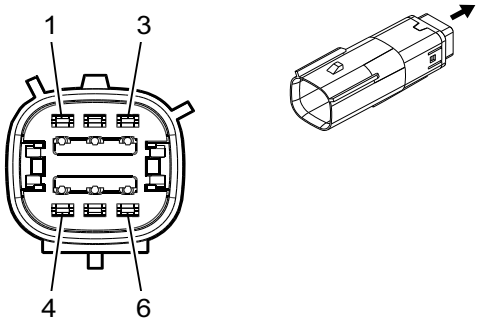
X428 Chassis Harness to Body Harness (UV2/UVI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
BN	—	—	COAX	I	—	Coax Cable	BN	—	—	COAX	II	—

X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)



4996962



4992963

Connector Part Information

Harness Type: Cargo Accessory Power Receptacle Jumper
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
OEM Connector: 15513475
Service Connector: 19371205
Description: 6-Way M 1.5 OCS Series, Sealed (GY)

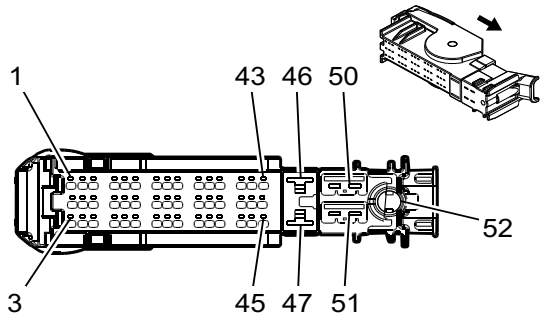
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

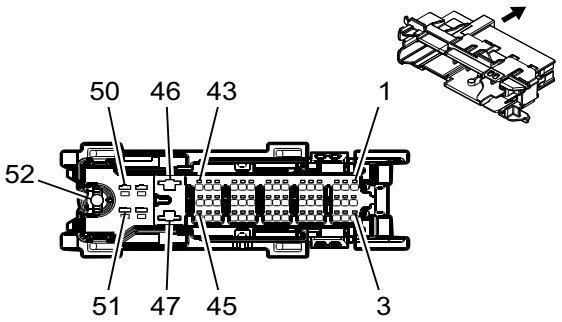
X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK/WH	2264	I	—	120 VAC Phase A 2	1	0.75	BK/WH	2264	II	—
2	0.75	RD/WH	2265	I	—	120 VAC Phase B 2	2	0.75	RD/WH	2265	II	—
3	0.5	GN	2257	I	—	Drain Wire	3	0.5	BN	2257	II	—
4	0.75	GN/BN	2266	I	—	DC To AC Inverter Control 2	4	0.75	GN/BN	2266	II	—
5	0.5	BN	7754	I	—	AC Power Outlet Enable	5	0.5	BN	7754	II	—
6	1	BK	6650	I	—	Ground (66) Propulsion System	6	1	BK	6650	II	—

X500 Driver Door Harness to Body Harness



4992530



4993484

Connector Part Information

Harness Type: Driver Door

OEM Connector: 35077349

Service Connector: Service by Harness - See Part Catalog

Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35072682

Service Connector: 13519704

Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
V	13575823	J-35616-5 (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
VI	13580023	J-35616-43 (RD)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
VII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X500 Driver Door Harness to Body 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	GY/YE	1760	I	UKC	Left Side Object Detection LED Control	2	0.35	GY/YE	1760	VII	UKC
3 - 5	—	—	—	—	—	Not Occupied	3 - 5	—	—	—	—	—

X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	YE/ VT	3397	I	AXG-A45	Passenger Mirror Motor Up (+) Down (-) Control	6	0.5	YE/ VT	3397	VII	AXG-A45
7	0.5	WH	3398	I	AXG-A45	Passenger Mirror Motor Common Control	7	0.5	WH	3398	VII	AXG-A45
8	0.5	GN/ BK	3396	I	AXG-A45	Passenger Mirror Motor Right (+) Left (-) Control	8	0.5	GN/ BK	3396	VII	AXG-A45
9	0.5	BU	2082	I	DEZ/DLF	Puddle Lamp Control	9	0.35	BU	2082	VII	DEZ/DLF
10	0.5	BK/ BU	5978	I	A45	Memory Switch Low Reference	10	0.35	BK/ BU	5978	VII	A45
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	WH	615	I	A45	Memory Seat Switch Signal 1	12	0.35	WH	615	VII	A45
13	0.5	BN/ WH	781	I	AU3	Driver Door Lock Switch Unlock Signal	13	0.35	BN/ WH	781	VII	AU3
14	0.5	BN/ YE	2267	I	DEZ/DLF	Mirror Heating Element Control	14	0.5	BN/ YE	2267	VII	DEZ/DLF
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	BU/ GN	614	I	A45	Memory Seat Switch Set Signal	16	0.35	BU/ GN	614	VII	A45
17 - 18	—	—	—	—	—	Not Occupied	17 - 18	—	—	—	—	—
19	0.35	WH/ YE	7557	I	AU3	LED Ambient Lighting Control 1	19	0.35	WH/ YE	7557	VII	AU3
20	0.5	GN/ WH	3570	I	BTM	Driver Door Handle Switch Signal	20	0.35	GN/ WH	3570	VII	BTM
21	0.5	WH/ YE	3574	I	BTM	Driver Door Open Switch Signal	21	0.35	WH/ YE	3574	VII	BTM
22	—	—	—	—	—	Not Occupied	22	—	—	—	—	—
23	0.5	GY	745	I	AEQ	Left Front Door Ajar Switch Signal	23	0.35	GY	745	VII	AEQ
24	—	—	—	—	—	Not Occupied	24	—	—	—	—	—
25	0.75	OG/ GN	2132	I	—	Left Front Side Impact Sensing Module Signal	25	0.35	OG/ GN	2132	VII	—

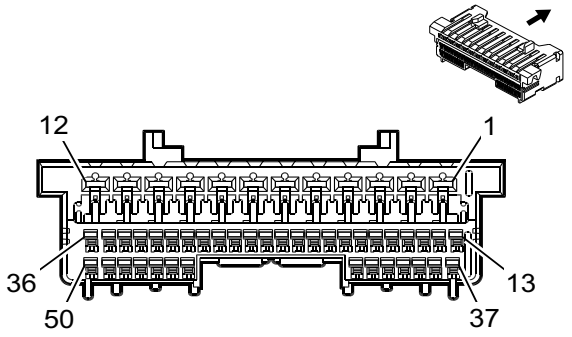
X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
26	0.5	YE/WH	1690	I	DD8/DRZ	Automatic Day/Night Mirror Signal	26	0.35	YE/WH	1690	VII	DD8/DRZ
27	0.5	GY/GN	5996	I	DEZ	Driver Outside Rear View Mirror Puddle Lamp Control	27	0.35	GY/GN	5996	VIII	DEZ
28	0.75	BK/OG	6628	I	—	Left Front Side Impact Sensing Module Low Reference	28	0.35	BK/OG	6628	VII	—
29	0.35	BN/YE	780	I	AU3	Driver Door Lock Switch Lock Signal	29	0.35	BN/YE	780	VII	AU3
30	0.5	RD/VT	1940	I	AXG	Battery Positive Voltage	30	0.35	RD/VT	1940	VII	AXG
31	0.5	VT/GY	3561	I	BTM	Passive Entry Driver Door Antenna Signal Lo	31	0.5	VT/GY	3561	VII	BTM
32	0.5	VT	3560	I	BTM	Passive Entry Driver Door Antenna Signal Hi	32	0.5	VT	3560	VII	BTM
33	0.5	BU/VT	1124	I	-AXG	Door Lock Key Switch Unlock Signal	33	0.35	BU/VT	1124	VII	-AXG
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	GN/YE	6134	I	AXG	Local Interconnect Network Serial Data Bus 3	35	0.35	GN/YE	6134	VII	AXG
36 - 42	—	—	—	—	—	Not Occupied	36 - 42	—	—	—	—	—
43	0.5	YE	6817	I	—	LED Backlight Dimming Control	43	0.35	YE	6817	VII	—
44	0.5	GN/WH	7530	I	—	Local Interconnect Network Serial Data Bus 8	44	0.35	GN/WH	7530	VIII	—
45	0.5	BK/YE	1691	I	DD8/DRZ	Automatic Day/Night Mirror Low Reference	45	0.35	BK/YE	1691	VII	DD8/DRZ
46	3	BK	1150	II	—	Ground	46	—	—	—	—	—
47	2.5	RD/BU	1842	II	AXG	Battery Positive Voltage	47	2.5	RD/BU	1842	VI	AXG
48	0.75	BN/YE	294	III	—	Door Lock Actuator Unlock Control	48	0.75	BN/YE	294	V	—
49	0.75	GY	5911	III	—	Door Lock Actuator Lock Control 2	49	0.75	GY	5911	V	—

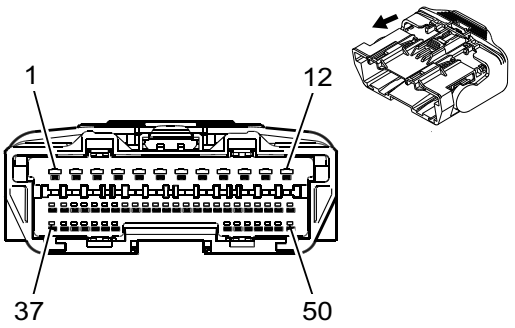
X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
50	0.75	BN/BU	118	III	—	Left Front Speaker Signal (-) 1	50	0.75	BN/BU	118	V	—
51	0.75	BU	201	III	—	Left Front Speaker Control (+) 1	51	0.75	BU	201	V	—
52	—	COA-X	2628	IV	UVI/UV2	Left Side Vision Camera Video Signal (+)	52	—	COA-X	2628	VIII	UVI/UV2

X505 Driver Door Harness to Driver Door Trim Harness



4997556



5022037

Connector Part Information

Harness Type: Driver Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series (BK)

Connector Part Information

Harness Type: Driver Door Trim
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X505 Driver Door Harness to Driver Door Trim Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 12	—	—	—	—	—	Not Occupied	1 - 12	—	—	—	—	—
13	0.5	GN/WH	7530	I	—	Local Interconnect Network Serial Data Bus 8	13	0.5	GN/WH	7530	II	—
14	0.35	BK/BN	3393	I	A45	Driver Mirror Position Sensor Low Reference	14	0.35	BK/BN	3393	II	—
15	0.5 0.35	BU/VT BU/VT	1124 1124	I I	AXG -AXG	Door Lock Key Switch Unlock Signal Door Lock Key Switch Unlock Signal	15	0.35	BU/VT	1124	II	—
16	0.35	GN/WH	3379	I	—	Power Window Switch Driver Up Signal	16	0.5	GN/WH	3379	II	—
17	0.5	RD/VT	1940	I	—	Battery Positive Voltage	17	0.5	RD/VT	1940	II	—

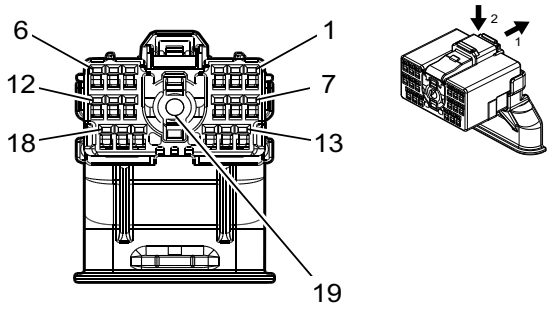
X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.35	GN	3381	I	—	Power Window Switch Driver Express Signal	18	0.35	GN	3381	II	—
19	0.5	WH	3398	I	—	Passenger Mirror Motor Common Control	19	0.5	WH	3398	II	—
20	0.35	WH/YE	7557	I	—	LED Ambient Lighting Control 1	20	0.35	WH/YE	7557	II	—
21	0.5	BN/BK	3389	I	—	Driver Mirror Motor Right (+) Left (-) Control	21	0.35	BN/BK	3389	II	—
22	0.5	WH/YE	3395	I	A45	Driver Mirror Position Sensor Left (-) Right (+) Signal	22	0.35	WH/YE	3395	II	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.35	WH/GN	3412	I	—	Driver Mirror Motor Fold In Control	24	0.35	WH/GN	3412	II	—
25	0.35	WH/VT	3270	I	—	Driver Door Lock Motor Status Signal	25	0.35	WH/VT	3270	II	—
26	0.35	GY/BN	3394	I	—	Driver Mirror Position Sensor Up (+) Down (-) Signal	26	0.35	GY/BN	3394	II	—
27	0.5	GN/YE	6134	I	—	Local Interconnect Network Serial Data Bus 3	27	0.5	GN/YE	6134	II	—
28	0.35	YE/BN	3391	I	—	Driver Mirror Motor Common Control	28	0.35	YE/BN	3391	II	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.75	BK	1150	I	—	Ground	30	0.5	BK	1150	II	—
31	0.35	GY/WH	3411	I	—	Driver Mirror Motor Fold Out Control	31	0.35	GY/WH	3411	II	—
32	—	—	—	—	—	Not Occupied	32	—	—	—	—	—
33	0.35	VT/BU	3390	I	—	Driver Mirror Motor Up (+) Down (-) Control	33	0.35	VT/BU	3390	II	—
34	0.5	WH	615	I	—	Memory Seat Switch Signal 1	34	0.35	WH	615	II	—
35	—	—	—	—	—	Not Occupied	35	—	—	—	—	—
36	0.5	YE	6817	I	—	LED Backlight Dimming Control	36	0.5 0.35	YE YE	6817 6817	II	AU3 A45

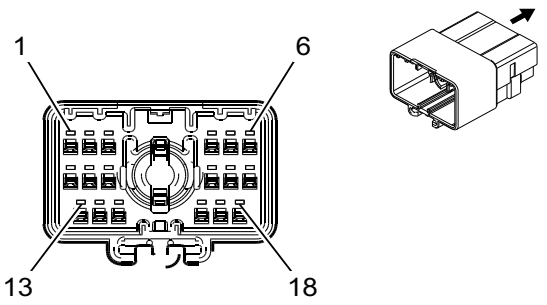
X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
37	—	—	—	—	—	Not Occupied	37	—	—	—	—	—
38	0.35	VT/RD	3392	I	—	Driver Mirror Position Sensor 5V Reference	38	0.5	VT/RD	3392	II	—
39	0.5	BN/WH	781	I	—	Driver Door Lock Switch Unlock Signal	39	0.35	BN/WH	781	II	—
40	0.5	GN/BK	3396	I	—	Passenger Mirror Motor Right (+) Left (-) Control	40	0.35	GN/BK	3396	II	—
41	0.5	YE/VT	3397	I	—	Passenger Mirror Motor Up (+) Down (-) Control	41	0.35	YE/VT	3397	II	—
42	0.5	GY	3380	I	—	Power Window Switch Driver Down Signal	42	0.5	GY	3380	II	—
43	0.5	BU/GN	614	I	—	Memory Seat Switch Set Signal	43	0.35	BU/GN	614	II	—
44	—	—	—	—	—	Not Occupied	44	—	—	—	—	—
45	0.5	BK/BU	5978	I	—	Memory Switch Low Reference	45	0.35	BK/BU	5978	II	—
46	—	—	—	—	—	Not Occupied	46	—	—	—	—	—
47	0.35	BN/YE	780	I	—	Driver Door Lock Switch Lock Signal	47	0.5	BN/YE	780	II	—
48 - 50	—	—	—	—	—	Not Occupied	48 - 50	—	—	—	—	—

X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness



4991775



4969165

Connector Part Information

Harness Type: Driver Door
OEM Connector: 35077331
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way F 1.2 MCON, Coax Series, Sealed (BK)

Connector Part Information

Harness Type: Outside Rearview Mirror - Driver
OEM Connector: 13518416
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way M 1.2 MCON, Coax Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

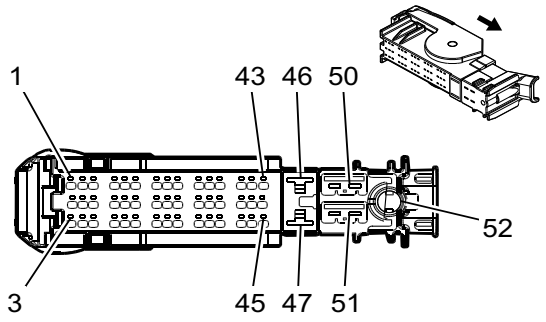
X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN/BK	3389	I	—	Driver Mirror Motor Right (+) Left (-) Control	1	0.5	BN/BK	3389	III	—
2	0.35	VT/BU	3390	I	—	Driver Mirror Motor Up (+) Down (-) Control	2	0.35	VT/BU	3390	III	—
3	0.35	WH/GN	3412	I	—	Driver Mirror Motor Fold In Control	3	0.35	WH/GN	3412	III	—
4	0.5	GY/YE	1760	I	—	Left Side Object Detection LED Control	4	0.5	GY/YE	1760	III	—
5	0.5	GY/GN	5996	I	—	Driver Outside Rear View Mirror Puddle Lamp Control	5	0.5	GY/GN	5996	III	—

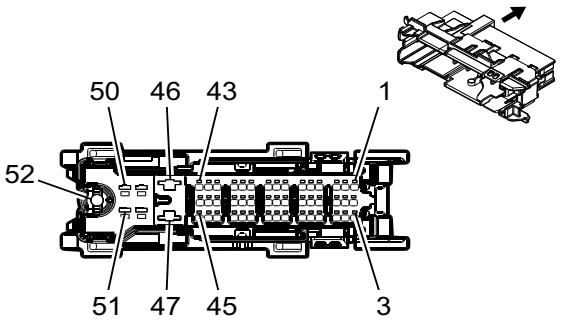
X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	WH/YE	3395	I	—	Driver Mirror Position Sensor Left (-) Right (+) Signal	6	0.5	WH/YE	3395	III	—
7	0.5	BN/YE	2267	I	—	Mirror Heating Element Control	7	0.5	BN/YE	2267	III	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.75	BK	1150	I	—	Ground	9	0.75	BK	1150	III	—
10	0.35	VT/RD	3392	I	—	Driver Mirror Position Sensor 5V Reference	10	0.35	VT/RD	3392	III	—
11	0.35	GY/BN	3394	I	—	Driver Mirror Position Sensor Up (+) Down (-) Signal	11	0.35	GY/BN	3394	III	—
12	0.5	BK/YE	1691	I	—	Automatic Day/Night Mirror Low Reference	12	0.5	BK/YE	1691	III	—
13	0.5	BU	2082	I	DEZ/DLF	Puddle Lamp Control	13	0.5	OG	2082	III	DEZ/DLF
14	0.35	YE/BN	3391	I	—	Driver Mirror Motor Common Control	14	0.35	YE/BN	3391	III	—
15	0.35	GY/WH	3411	I	—	Driver Mirror Motor Fold Out Control	15	0.35	VT/YE	3411	III	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—
17	0.5	YE/WH	1690	I	—	Automatic Day/Night Mirror Signal	17	0.5	YE/WH	1690	III	—
18	0.5	BK/BN	3393	I	—	Driver Mirror Position Sensor Low Reference	18	0.5	BK/BN	3393	III	—
19	—	COAX	2628	II	UVI/UV2	Left Side Vision Camera Video Signal (+)	19	—	COAX	2628	III	UVI/UV2

X600 Passenger Door Harness to Body Harness



4992530



4993484

Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077349

Service Connector: Service by Harness - See Part Catalog

Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

Connector Part Information

Harness Type: Body

OEM Connector: 35072682

Service Connector: 13519704

Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
V	13575823	J-35616-5 (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
VI	13580023	J-35616-43 (RD)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
VII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	19368518	J-35616-43 (RD)	J-38125-11A	7114-4122-02	Yazaki 9	A	B

X600 Passenger Door Harness to Body 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	0.5	GY	746	I	AER	Right Front Door Ajar Switch Signal	5	0.35	GY	746	VII	AER

X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	YE/VT	3397	I	AXG-A45	Passenger Mirror Motor Up (+) Down (-) Control	6	0.5	YE/VT	3397	VII	AXG-A45
7	0.5	WH	3398	I	AXG-A45	Passenger Mirror Motor Common Control	7	0.5	WH	3398	VII	AXG-A45
8	0.5	GN/BK	3396	I	AXG-A45	Passenger Mirror Motor Right (+) Left (-) Control	8	0.5	GN/BK	3396	VII	AXG-A45
9	0.5	BU	2082	I	DEZ/DLF	Puddle Lamp Control	9	0.35	BU	2082	VII	DEZ/DLF
10 - 12	—	—	—	—	—	Not Occupied	10 - 12	—	—	—	—	—
13	0.5	BN/VT	245	I	AU3	Passenger Door Lock Switch Unlock Control	13	0.35	BN/VT	245	VII	AU3
14 - 18	—	—	—	—	—	Not Occupied	14 - 18	—	—	—	—	—
19	0.35	WH/YE	7557	I	AU3	LED Ambient Lighting Control 1	19	0.35	WH/YE	7557	VII	AU3
20	0.5	VT/WH	3571	I	—	Passenger Door Handle Switch Signal	20	0.35	VT/WH	3571	VII	—
21	0.5	GY	1761	I	UKC	Right Side Object Detection LED Control	21	0.35	GY	1761	VII	UKC
22 - 23	—	—	—	—	—	Not Occupied	22 - 23	—	—	—	—	—
24	0.35	BK	1250	I	AU3	Ground	24	0.5	BK	1250	VII	AU3
25	0.75	BN/OG	2134	I	—	Right Front Side Impact Sensing Module Signal	25	0.35	BN/OG	2134	VII	—
26	—	—	—	—	—	Not Occupied	26	—	—	—	—	—
27	0.5	GY/GN	5996	I	DEZ	Driver Outside Rear View Mirror Puddle Lamp Control	27	0.35	GY/GN	5996	VII	DEZ
28	0.75	BK/OG	6629	I	—	Right Front Side Impact Sensing Module Low Reference	28	0.35	BK/OG	6629	VII	—
29	0.5	YE/VT	244	I	AU3	Passenger Door Lock Switch Lock Control	29	0.35	YE/VT	244	VII	AU3

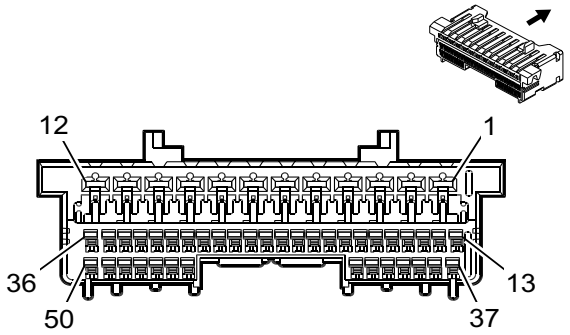
X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
30	—	—	—	—	—	Not Occupied	30	—	—	—	—	—
31	0.5	GN/BK	3563	I	BTM	Passive Entry Passenger Door Antenna Signal Lo	31	0.5	GN/BK	3563	VII	BTM
32	0.5	GN/YE	3562	I	BTM	Passive Entry Passenger Door Antenna Signal Hi	32	0.5	GN/YE	3562	VII	BTM
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	0.35	BK/GN	580	I	—	Engine Control Sensors Low Reference (2)	34	0.35	BK/GN	580	VII	—
35	0.5	GN/YE	6134	I	AED/AEF	Local Interconnect Network Serial Data Bus 3	35	0.35	GN/YE	6134	VII	AED/AEF
36	0.35	BU/GY	636	I	—	Outside Ambient Air Temperature Sensor Signal	36	0.35	BU/GY	636	VII	—
37	—	—	—	—	—	Not Occupied	37	—	—	—	—	—
38	0.5	BN/YE	2267	I	DEZ/DLF	Mirror Heating Element Control	38	0.5	BN/YE	2267	VII	DEZ/DLF
39 - 42	—	—	—	—	—	Not Occupied	39 - 42	—	—	—	—	—
43	0.5	YE	6817	I	—	LED Backlight Dimming Control	43	0.35	YE	6817	VII	—
44	0.5	GN/WH	7530	I	A45	Local Interconnect Network Serial Data Bus 8	44	0.35	GN/WH	7530	VII	A45
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	3	BK	1250	II	—	Ground	46	3	BK	1250	VIII	—
47	2.5	RD/WH	1340	II	AEF/AED	Battery Positive Voltage	47	2.5	RD/WH	1340	VI	AEF/AED
48	0.75	BN/YE	294	III	—	Door Lock Actuator Unlock Control	48	0.75	BN/YE	294	V	—
49	0.75	GY	295	III	—	Door Lock Actuator Lock Control	49	0.75	GY	295	V	—
50	0.75	YE/BK	117	III	—	Right Front Speaker Signal (-) 1	50	0.75	YE/BK	117	V	—
51	0.75	YE	200	III	—	Right Front Speaker Control (+) 1	51	0.75	YE	200	V	—

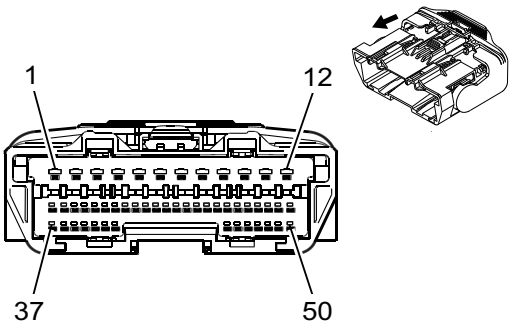
X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
52	—	COA-X	2627	IV	UVI/UV2	Right Side Vision Camera Video Signal (+)	52	—	COA-X	2627	VII	UVI/UV2

X605 Passenger Door Harness to Passenger Door Trim Harness



4997556



5022037

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series (BK)

Connector Part Information

Harness Type: Passenger Door Trim
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X605 Passenger Door Harness to Passenger Door Trim 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	2.5	RD/WH	1340	II	AED/AEF	Battery Positive Voltage	3	2.5	RD/WH	1340	IV	AED/AEF
4 - 6	—	—	—	—	—	Not Occupied	4 - 6	—	—	—	—	—
7	2	GN/GY	3387	II	AED	Power Window Motor Passenger Up Control	7	2.5	GN/GY	3387	IV	AED
8	2	YE/BU	3388	II	AED	Power Window Motor Passenger Down Control	8	2.5	YE/BU	3388	IV	AED
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	3	BK	1250	II	AEF/AU3	Ground	10	3	BK	1250	IV	AEF/AU3
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

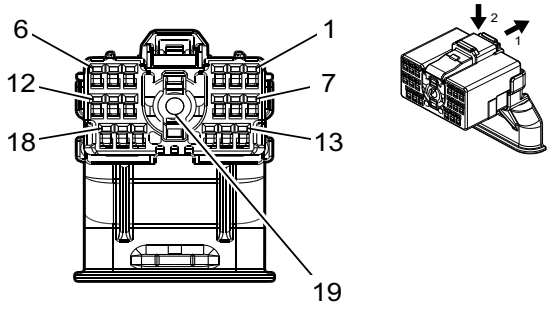
X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
13	0.5	WH	3398	I	A45	Passenger Mirror Motor Common Control	13	0.5	WH	3398	III	A45
14	0.5	VT/ WH	3403	I	A45	Passenger Mirror Position Sensor Left (-) Right (+) Signal	14	0.35	VT/ WH	3403	III	A45
15	0.35	YE/ VT	3397	I	A45	Passenger Mirror Motor Up (+) Down (-) Control	15	0.35	YE/ VT	3397	III	A45
16	0.5	GN/ BK	3396	I	A45	Passenger Mirror Motor Right (+) Left (-) Control	16	0.35	GN/ BK	3396	III	A45
17	0.5	YE	6817	I	AU3	LED Backlight Dimming Control	17	0.5 0.5	YE YE	6817 6817	III	AU3 AEF
18	0.5	BK/ GN	3400	I	A45	Passenger Mirror Position Sensor Low Reference	18	0.35	BK/ GN	3400	III	A45
19	0.5	GN/ WH	7530	I	A45	Local Interconnect Network Serial Data Bus 8	19	0.35	GN/ WH	7530	III	A45
20	0.5	BN/ VT	245	I	AU3	Passenger Door Lock Switch Unlock Control	20	0.35	BN/ VT	245	III	AU3
21	0.35	YE/ RD	3399	I	A45	Passenger Mirror Position Sensor 5V Reference	21	0.35	YE/ RD	3399	III	A45
22	0.35	BK	1250	I	AU3	Ground	22	0.35	BK	1250	III	AU3
23	0.5	YE/ VT	244	I	AU3	Passenger Door Lock Switch Lock Control	23	0.35	YE/ VT	244	III	AU3
24	0.35	WH/ YE	7557	I	AU3	LED Ambient Lighting Control 1	24	0.35	WH/ YE	7557	III	AU3
25	0.35	YE/ BK	3384	I	AEF	Power Window Switch Passenger Up Signal	25	0.5	YE/ BK	3384	III	AEF
26	0.5	YE/ WH	3413	I	A45	Passenger Mirror Motor Fold Out Control	26	0.5	YE/ WH	3413	III	A45
27	0.5	BU/ GY	3414	I	A45	Passenger Mirror Motor Fold In Control	27	0.5	BU/ GY	3414	III	A45
28	0.5	BN/ YE	3385	I	AEF	Power Window Switch Passenger Down Signal	28	0.5	BN/ YE	3385	III	AEF

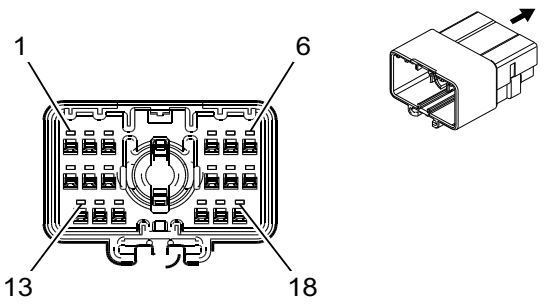
X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
29	0.5	GY	746	I	AED	Right Front Door Ajar Switch Signal	29	0.5	GY	746	III	AED
30	0.35	BU/YE	3401	I	A45	Passenger Mirror Position Sensor Up (+) Down (-) Signal	30	0.35	BU/YE	3401	III	A45
31 - 33	—	—	—	—	—	Not Occupied	31 - 33	—	—	—	—	—
34	0.35	VT/GY	3386	I	AEF	Power Window Switch Passenger Express Signal	34	0.35	VT/GY	3386	III	AEF
35	0.5	GN/YE	6134	I	AXG	Local Interconnect Network Serial Data Bus 3	35	0.5	GN/YE	6134	III	AXG
36 - 50	—	—	—	—	—	Not Occupied	36 - 50	—	—	—	—	—

X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness



4991775



4969165

Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077331

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way F 1.2 MCON, Coaxial Series, Sealed (BK)

Connector Part Information

Harness Type: Passenger Outside Rearview Mirror

OEM Connector: 13518416

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way M 1.2 MCON, Coax Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

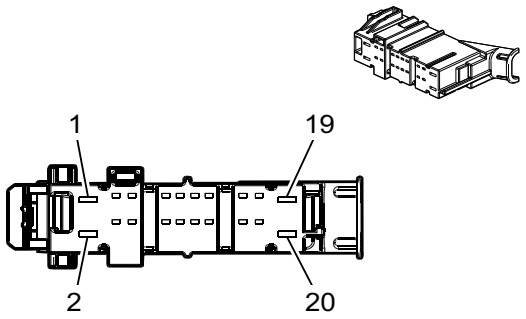
X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN/BK	3396	I	—	Passenger Mirror Motor Right (+) Left (-) Control	1	0.5	GN/BK	3396	III	—
2	0.5	YE/VT	3397	I	—	Passenger Mirror Motor Up (+) Down (-) Control	2	0.5	YE/VT	3397	III	—
3	0.5	BU/GY	3414	I	—	Passenger Mirror Motor Fold In Control	3	0.5	BU/GY	3414	III	—
4	0.5	GY	1761	I	—	Right Side Object Detection LED Control	4	0.5	GY	1761	III	—
5	0.5	GY/GN	5996	I	—	Driver Outside Rear View Mirror Puddle Lamp Control	5	0.5	GY/GN	5996	III	—

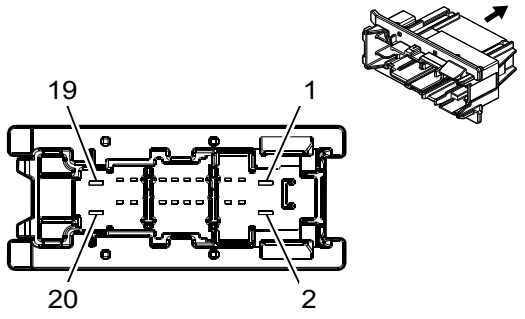
X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	VT/WH	3403	I	—	Passenger Mirror Position Sensor Left (-) Right (+) Signal	6	0.5	VT/WH	3403	III	—
7	0.5	BN/YE	2267	I	—	Mirror Heating Element Control	7	0.5	BN/YE	2267	III	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.75	BK	1250	I	—	Ground	9	0.75	BK	1250	III	—
10	0.35	YE/RD	3399	I	—	Passenger Mirror Position Sensor 5V Reference	10	0.35	YE/RD	3399	III	—
11	0.35	BU/YE	3401	I	—	Passenger Mirror Position Sensor Up (+) Down (-) Signal	11	0.35	BU/YE	3401	III	—
12	0.35	BK/GN	580	I	—	Engine Control Sensors Low Reference (2)	12	0.35	BK/GN	580	III	—
13	0.5	BU	2082	I	—	Puddle Lamp Control	13	0.5	OG	2082	III	—
14	0.5	WH	3398	I	—	Passenger Mirror Motor Common Control	14	0.5	WH	3398	III	—
15	0.5	YE/WH	3413	I	—	Passenger Mirror Motor Fold Out Control	15	0.5	YE/WH	3413	III	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—
17	0.35	BU/GY	636	I	—	Outside Ambient Air Temperature Sensor Signal	17	0.35	BU/GY	636	III	—
18	0.5	BK/GN	3400	I	—	Passenger Mirror Position Sensor Low Reference	18	0.5	BK/GN	3400	III	—
19	—	COAX	2627	II	—	Right Side Vision Camera Video Signal (+)	19	—	COAX	2627	III	—

X700 Left Rear Door Harness to Body Harness



4650257



4663657

Connector Part Information

Harness Type: Left Rear Door
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
OEM Connector: 33303657
Service Connector: 13509580
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13586064	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

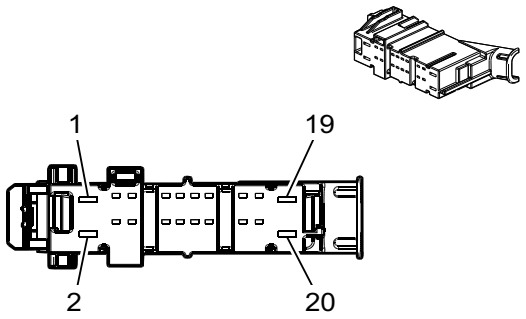
X700 Left Rear Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD/BU	1842	II	—	Battery Positive Voltage	1	2.5	RD/BU	1842	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.75	BN/YE	294	I	—	Door Lock Actuator Unlock Control	3	0.75	BN/YE	294	V	—
4 - 5	—	—	—	—	—	Not Occupied	4 - 5	—	—	—	—	—
6	0.5	PK	6157	I	—	Left Rear Door Handle Switch Signal	6	0.35	BN/YE	6157	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

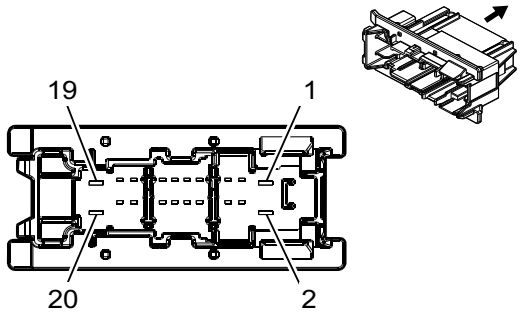
X700 Left Rear Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.5	OG/ BU	6622	I	—	Left Rear Side Impact Sensing Module Signal	9	0.35	OG/ BU	6622	IV	—
10	0.5	BK/ OG	6623	I	—	Left Rear Side Impact Sensing Module Low Reference	10	0.35	BK/ OG	6623	IV	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	GN/ GY	6135	I	—	Local Interconnect Network Serial Data Bus 4	12	0.35	GN/ GY	6135	IV	—
13	0.5	GN/ BK	116	I	—	Left Rear Speaker Signal (-)	13	0.5	GN/ BK	116	IV	—
14	0.5	GN	199	I	—	Left Rear Speaker Control (+)	14	0.5	GN	199	IV	—
15 - 16	—	—	—	—	—	Not Occupied	15 - 16	—	—	—	—	—
17	0.75	GY	295	I	—	Door Lock Actuator Lock Control	17	0.75	GY	295	V	—
18 - 19	—	—	—	—	—	Not Occupied	18 - 19	—	—	—	—	—
20	2.5	BK	1150	II	—	Ground	20	2.5	BK	1150	III	—

X800 Right Rear Door Harness to Body Harness



4650257



4663657

Connector Part Information

Harness Type: Right Rear Door
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
OEM Connector: 33303657
Service Connector: 13509580
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13586064	J-35616-5 (PU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
IV	19352074	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
V	19352075	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

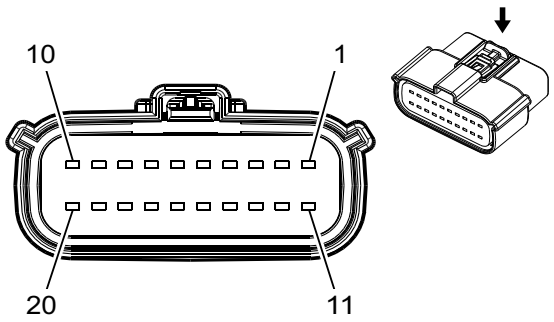
X800 Right Rear Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD/WH	1340	II	—	Battery Positive Voltage	1	2.5	RD/WH	1340	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.75	BN/YE	294	I	—	Door Lock Actuator Unlock Control	3	0.75	BN/YE	294	V	—
4 - 5	—	—	—	—	—	Not Occupied	4 - 5	—	—	—	—	—
6	0.5	YE/GY	6158	I	—	Right Rear Door Handle Switch Signal	6	0.35	YE/GY	6158	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

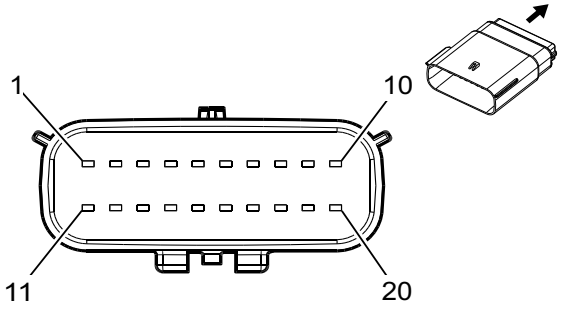
X800 Right Rear Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.5	OG/ VT	6626	I	—	Right Rear Side Impact Sensing Module Signal	9	0.35	OG/ WH	6626	IV	—
10	0.5	BK/ OG	6627	I	—	Right Rear Side Impact Sensing Module Low Reference	10	0.35	BK/ OG	6627	IV	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	GN/ GY	6135	I	—	Local Interconnect Network Serial Data Bus 4	12	0.35	GN/ GY	6135	IV	—
13	0.5	BU/ BK	115	I	—	Right Rear Speaker Signal (-)	13	0.5	BU/ BK	115	IV	—
14	0.5	WH	46	I	—	Right Rear Speaker Control (+)	14	0.5	WH	46	IV	—
15 - 16	—	—	—	—	—	Not Occupied	15 - 16	—	—	—	—	—
17	0.75	GY	295	I	—	Door Lock Actuator Lock Control	17	0.75	GY	295	V	—
18 - 19	—	—	—	—	—	Not Occupied	18 - 19	—	—	—	—	—
20	2.5	BK	1250	II	—	Ground	20	2.5	BK	1250	III	—

X901 Rear Fascia Harness to Chassis Harness



2871898



2871861

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13650143
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33181044
Service Connector: 19351705
Description: 20-Way M 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119395	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	19119440	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

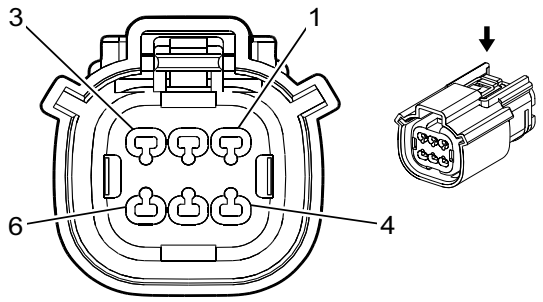
X901 Rear Fascia Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN/YE	6846	I	—	Rear License Lamp Control	1	0.5	GN/YE	6846	II	—
2 - 3	—	—	—	—	—	Not Occupied	2 - 3	—	—	—	—	—
4	0.5	BK/WH	1751	I	—	Signal Ground Signal Ground	4	0.75 0.5	BK/WH BK/WH	1751 1751	III II	-UKC UKC
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.5	BK	1450	I	—	Ground Ground	6	1 0.5	BK BK	1450 1450	III II	E63 ZW9
7	0.35	GY/YE	1760	I	—	Left Side Object Detection LED Control	7	0.5	GY/YE	1760	II	—
8	0.35	GY	1761	I	—	Right Side Object Detection LED Control	8	0.5	GY	1761	II	—
9	0.5	BN/WH	2374	I	—	Object Sensor Control	9	0.5	BN/WH	2374	II	—

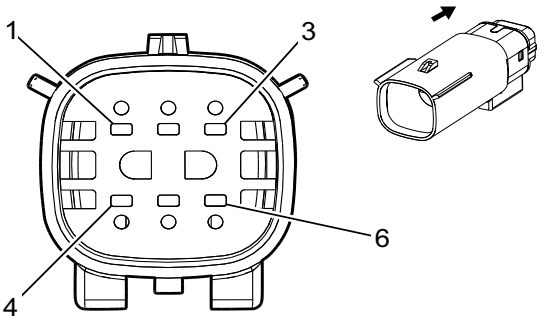
X901 Rear Fascia Harness to Chassis Harness (cont'd)

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 Corner Object Sensor Signal	10	0.5	YE	2375	II	—
11	0.5	YE/BU	2376	I	—	Left Rear Middle Object Sensor Signal	11	0.5	YE/BU	2376	II	—
12	0.5	YE/WH	2377	I	—	Right Rear Middle Object Sensor Signal	12	0.5	YE/WH	2377	II	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	RD/GN	1840	I	—	Battery Positive Voltage	14	0.5	RD/GN	1840	II	—
15	0.5	YE/VT	2378	I	—	Right Rear Corner Object Sensor Signal	15	0.5	YE/VT	2378	II	—
16	0.5	BK/GY	2379	I	—	Object Sensor Low Reference	16	0.5	BK/GY	2379	II	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	18	0.5	GN	5060	II	—
19 - 20	—	—	—	—	—	Not Occupied	19 - 20	—	—	—	—	—

X904 Chassis Harness to Rear Chassis Extension Harness (Z45)



1986157



1986159

Connector Part Information

Harness Type: Chassis
OEM Connector: 13609714
Service Connector: 13585853
Description: 6-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 33482-3601
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 150 MX Series, Sealed (BK)

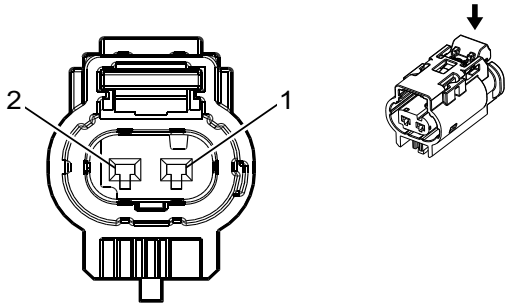
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

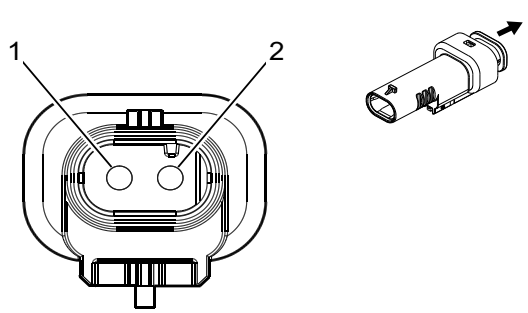
X904 Chassis Harness to Rear Chassis Extension Harness (Z45)

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 Damping Servo Control	1	0.75	BU/WH	1114	II	—
2	0.5	GN/YE	1616	I	—	Brake Lining Wear Sensor Signal Rear	2	0.75	GN	1616	II	—
3	0.75	BN/GN	1118	I	—	Right Rear Damping Servo Control	3	0.75	BU/WH	1118	II	—
4	0.75	GN/VT	1115	I	—	Left Rear Damping Servo Control	4	0.75	GN	1115	II	—
5	0.5	BK/WH	1751	I	—	Signal Ground	5	0.75	BK/WH	1751	II	—
6	0.75	GN/GY	1119	I	—	Right Rear Damping Servo Control	6	0.75	BU/WH	1119	II	—

X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)



3747581



4992757

Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13583199
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33356666
Service Connector: 19371200
Description: 2-Way M 1.2 MLK Series, Sealed (GY)

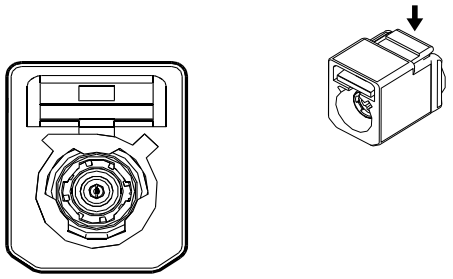
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

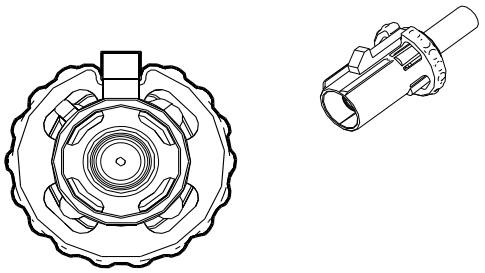
X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GN	1616	I	—	Brake Lining Wear Sensor Signal Rear	1	0.5	GN/YE	1616	II	—
2	0.75	BK/WH	1751	I	—	Signal Ground	2	0.5	BK/WH	1751	II	—

X909 Endgate Harness to Chassis Harness (UVB)



3293633



4109605

Connector Part Information

Harness Type: Endgate

OEM Connector: 13514203

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BK)

Connector Part Information

Harness Type: Chassis

OEM Connector: 13514206

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BK)

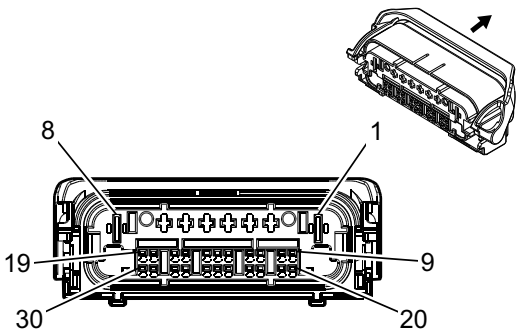
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

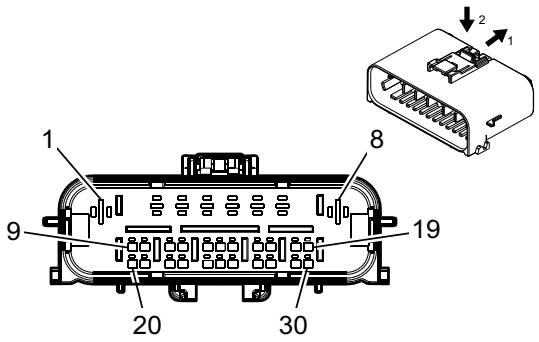
X909 Endgate Harness to Chassis Harness (UVB)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax	—	I	—	Coaxial Camera Signal	—	—	Coax	—	I	—

X926 Endgate Harness to Chassis Harness (QK2/QT5)



4650150



4817393

Connector Part Information

Harness Type: Endgate
OEM Connector: 33378383
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 1.2 MCON, 2.8, 6.3 MCP Series (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 33363373
Service Connector: 19371177
Description: 30-Way M 1.2 MCON, 2.8, 6.3 MCP Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13575376	J-35616-43 (RD)	J-38125-557	Not Available	Not Available	Not Available	Not Available
IV	19330704	J-35616-17 (LT GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

X926 Endgate Harness to Chassis Harness (QK2/QT5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD/GY	7040	II	QT6	Battery Positive Voltage	1	2.5	RD/GY	7040	III	QT6
2 - 7	—	—	—	—	—	Not Occupied	2 - 7	—	—	—	—	—
8	2.5	BK	1450	II	QT5/QT6	Ground	8	4	BK	1450	III	QT5/QT6
9	0.5	BK/WH	1751	I	UVC	Signal Ground	9	0.5	BK/WH	1751	IV	UVC
10	0.5	YE/BU	7295	I	QK2	Left Minor Endgate Ajar Signal	10	0.5	YE/BU	7295	IV	QK2
11	0.35	WH/BN	7296	I	QK2	Right Minor Endgate Ajar Signal	11	0.5	WH/BN	7296	IV	QK2
12	0.35	BU	6974	I	UVC	Camera Low Reference	12	0.5	BU	6974	IV	UVC
13	0.5	GY	1198	I	QT6	Endgate Release Switch Analog Signal Interior	13	0.5	GY	1198	IV	QT6

X926 Endgate Harness to Chassis Harness (QK2/QT5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
14	0.5	WH/BU	6973	I	UVC	Camera Signal 2	14	0.5	WH/BU	6973	IV	UVC
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	VT	7725	I	QK2	Minor Endgate Motor Supply Voltage	16	0.5	VT	7725	IV	QK2
17	0.5	YE/BK	7730	I	QT5	Major Endgate Motor Return	17	0.5	YE/BK	7730	IV	QT5
18	0.5	BN/BK	7726	I	QK2	Minor Endgate Motor Return	18	0.5	BN/BK	7726	IV	QK2
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	GN	5060	I	QT6	Low Speed GMLAN Serial Data	20	0.5	GN	5060	IV	QT6
21 - 23	—	—	—	—	—	Not Occupied	21 - 23	—	—	—	—	—
24	0.5	VT/GN	1739	I	UVC	Run/Crank Ignition 1 Voltage	24	0.5	VT/GN	1739	IV	UVC
25	0.5	WH/VT	1430	I	QT5/QT6	Exterior Courtesy Lamp Control	25	—	—	—	—	—
26	0.5	GY/YE	6972	I	UVC	Camera Signal 2 +	26	0.5	GY/YE	6972	IV	UVC
27	0.5	GY	7292	I	QT5	Major Endgate Release Switch Signal Exterior	27	0.5	GY	7292	IV	QT5
28	0.35	YE	7294	I	—	Minor Endgate Release Switch Discrete Signal Exterior	28	0.5	YE	7294	IV	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	0.5	GN	1299	I	QT5	Major Endgate Motor Supply Voltage	30	0.5	GN	1299	IV	QT5

X929 Endgate Harness to Chassis Harness (UV2/UVI)

—

Connector Part Information

Harness Type: Endgate
OEM Connector: 13514203
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F

—

Connector Part Information

Harness Type: Chassis
OEM Connector: 13514206
Service Connector: -
Description: 1-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X929 Endgate Harness to Chassis Harness (UV2/UVI)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
BK	—	—	COAX	I	—	Coax Cable	BK	—	—	COAX	II	—

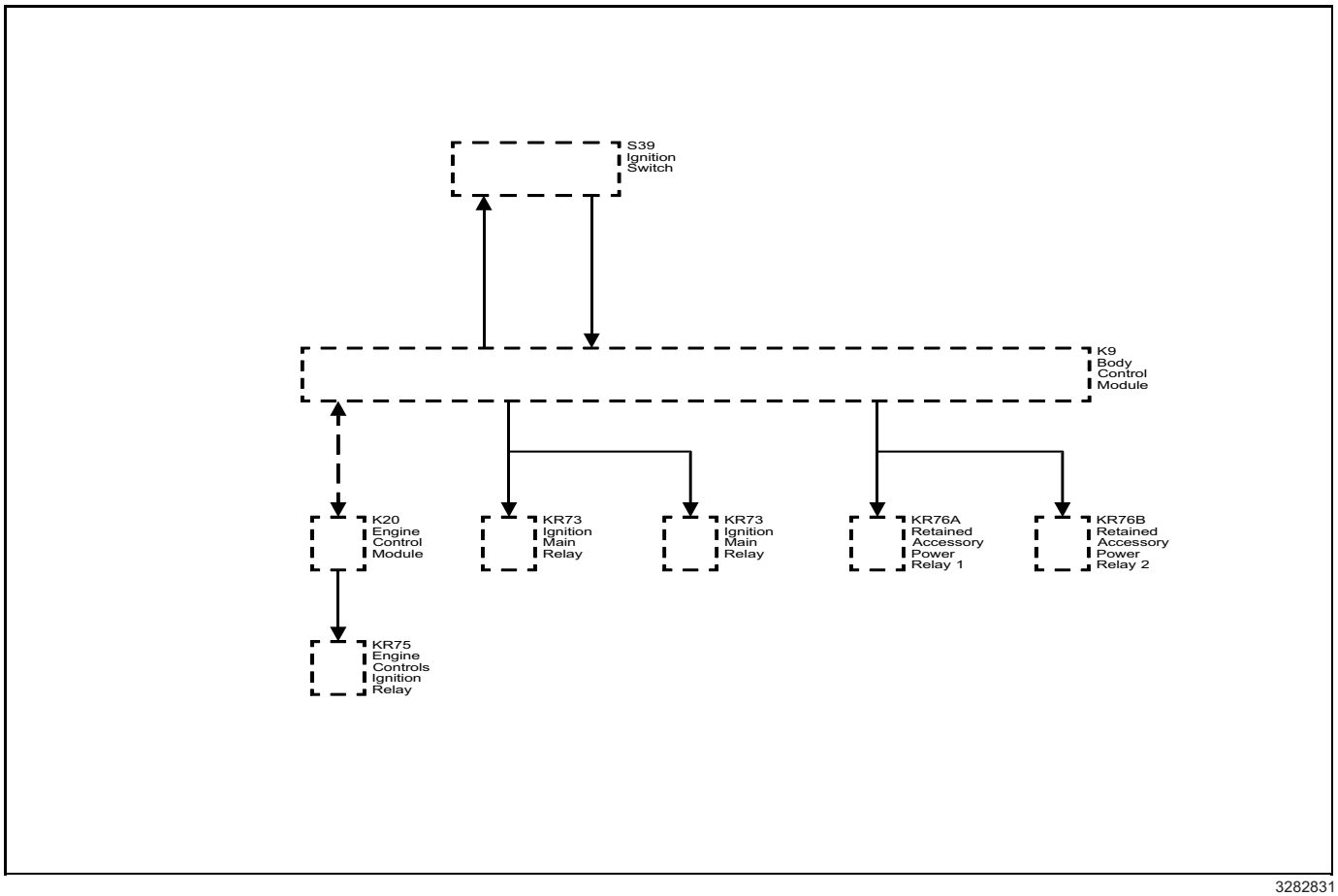
Wiring Systems and Power Management

Description and Operation

Power Mode Description and Operation

Serial Data Power Mode Master

Power Moding Description and Operation Block Diagram



3282831

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master. This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as needed. The power mode master determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.

The power mode master receives ignition switch signals to identify the operators desired power mode. The Power Mode Parameter tables below illustrate the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

Power Mode Parameters

Ignition Switch Position	Power Mode Transmitted	Ign. Off/Run/Crank (Off/Run Crank Voltage Circuit)	Ignition Accessory/Run (Accessory Voltage Circuit)	Ignition Run/Crank (Ignition 1 Voltage Circuit)
Off Key Out	Off	Key Out / ACC	Inactive	Inactive
Off Key IN	Off	Key In / Off	Inactive	Inactive
Accessory	Accessory	Key Out / ACC	Active	Inactive
Run	Run	Run	Active	Active
Start	Crank Request	Crank	Inactive	Active

Relay Controlled Power Mode

The BCM uses the discrete ignition switch inputs Off/Run/Crank Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay 1 and retained accessory power relay 2 remain on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 6-1040* for more information on the retained accessory power function.

Battery Saver Mode (Transport Mode)

Battery saver mode (transport mode) reduces the parasitic load of some modules during overseas shipment or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When a vehicle is in transport/storage, some features may have reduced functionality while in the battery saver mode, such as disabling keyless entry, afterblow, and content theft features. Battery saver mode is initiated by turning on the hazard flashers, applying the brake pedal, and then turning the ignition key to the start position or pushing the ignition mode switch with the foot on the brake for greater than 15 seconds. The mode is disengaged by repeating the previous process. The driver information center (if equipped) will display Transport Mode is On when battery saver mode is enabled and Transport Mode is Off when battery saver mode is disabled. For vehicles not equipped with a driver information center, the battery indicator light will constantly flash on the Instrument Cluster when battery saver mode is enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

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
- Key-in-ignition
- 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:

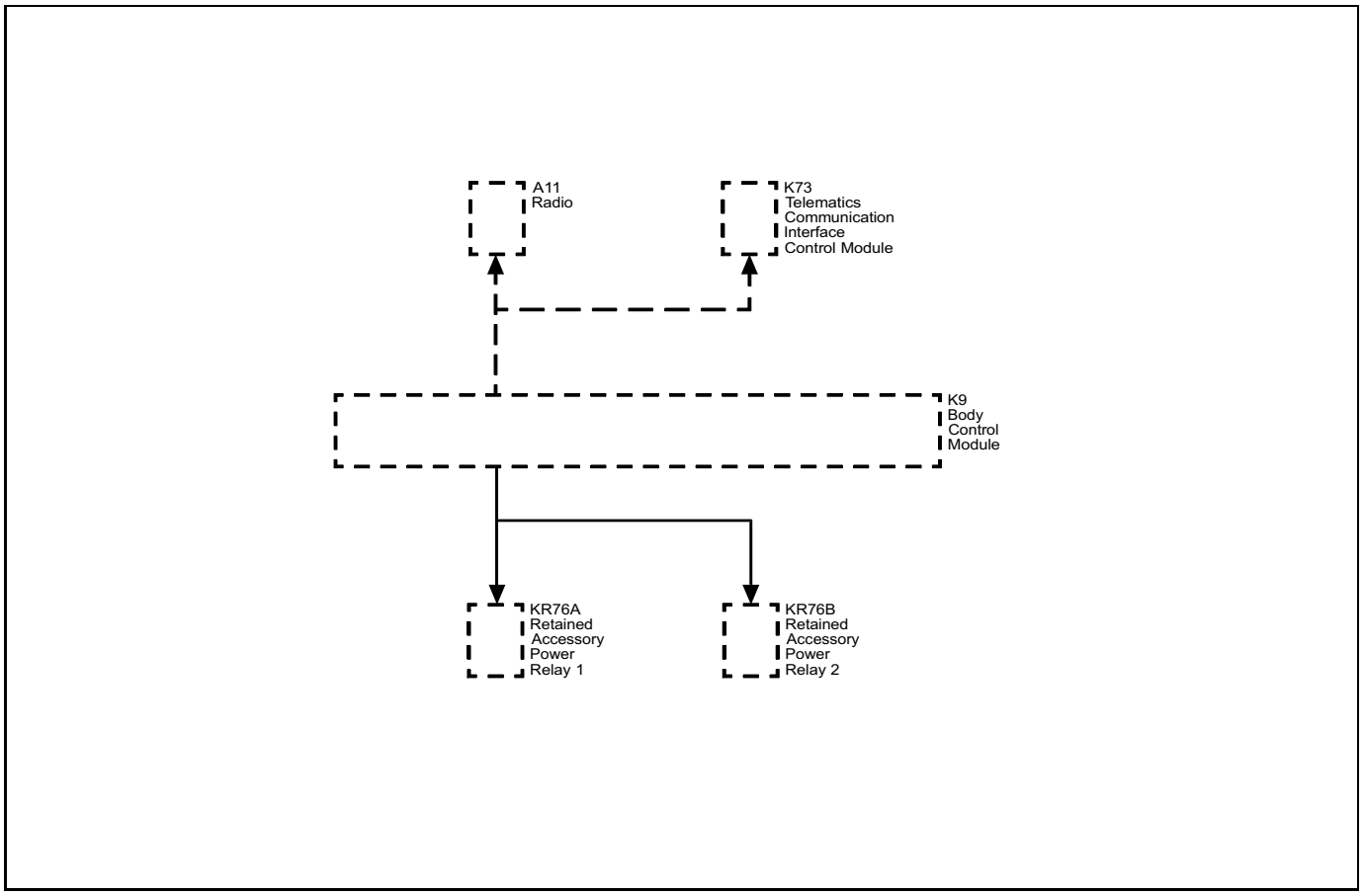
- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

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

RAP Description and Operation Block Diagram



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The body control module (BCM) monitors the ignition switch position, battery condition, and each door ajar/ open switch status to determine whether the retained accessory power should be initiated or terminated. Retained accessory power is controlled by two different methods; relay control and serial data. Some modules receive a retained accessory power message from the BCM over the serial data circuits. Serial data controlled retained accessory power is deactivated as required by their modules retained accessory power mode operation. Other subsystems are activated directly by the BCM through a relay. Components and systems that are active in retained accessory power are also activated anytime the ignition is any position other than OFF regardless of the door switch signals.

Relay Controlled Retained Accessory Power

The BCM keeps the retained accessory power relay 1 and retained accessory power relay 2 energized during all power modes, except Off-Awake and Crank. The retained accessory power relay 1 and retained accessory power relay 2 are also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled retained accessory power will end when one of the following conditions is met:

- The BCM receives an input from any door ajar or open switch indicating the opening of any door after the ignition key is out of the ignition.

  Note: If the BCM is receiving any door ajar or open signal from those switches when the ignition key is turned OFF, retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

Systems powered by the retained accessory power relay 1 and retained accessory power relay 2 during the retained accessory power mode are as follows:

Note: The vehicle may not be equipped with all components as listed below.

- Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Sunroof Control Module
- Sunroof Switch

- Sliding Rear Window Switch
- Mobile Device Wireless Charger Module

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 switch that will turn off the radio during retained accessory power is the driver door open switch.

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 when the ignition key is turned off the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

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Section 7

Transmission

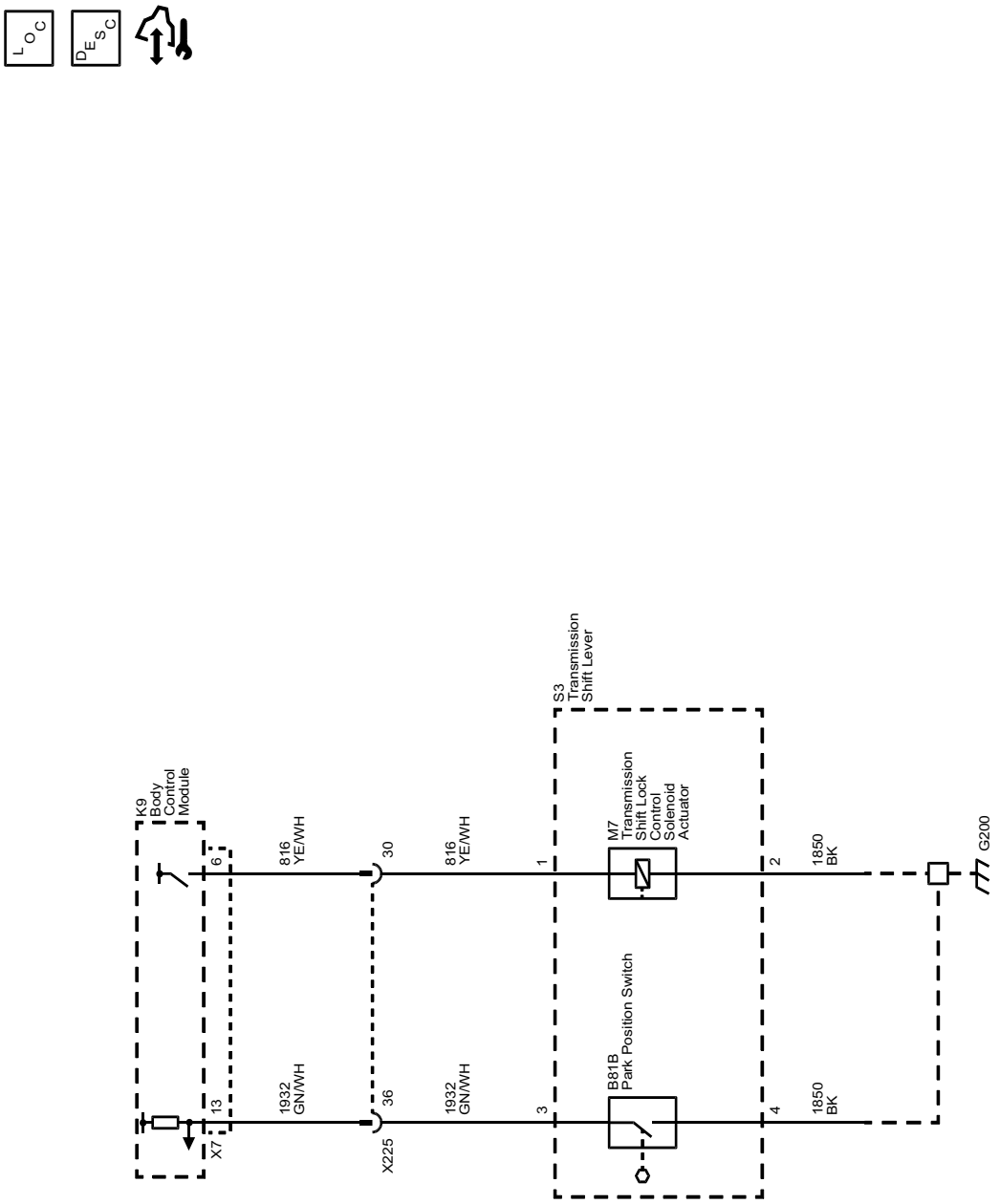
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Shift Lock Control

Schematic and Routing Diagrams

Shift Lock Control Schematics (Shift Lock Control)



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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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