Table of Contents

General Information 1-1
General Information 1-3

Body Systems 2-1
Fixed and Moveable Windows 2-3
Horns and Pedestrian Alerts 2-9
Lighting 2-12
Mirrors 2-53
Trailering Systems 2-60
Vehicle Access 2-74
Wipers and Washers 2-97

Driver Information and Entertainment 3-1
Image Display Cameras 3-3

Engine/Propulsion 4-1
12 V Starting and Charging 4-3

HVAC 5-1
Heating, Ventilation, and Air Conditioning 5-3
HVAC - Automatic 5-4

Power and Signal Distribution 6-1
Data Communications 6-3
Electrical Component and Inline Harness Connector End Views 6-34
Power Outlets 6-987
Wiring Systems and Power Management 6-997

INDEX INDEX-1

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Section 1

General Information

General Information 1-3
Introduction 1-3
Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage 1-3
Vehicle Certification, Tire Placard, and Anti-Theft Label 1-5
RPO Code List 1-7

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General Information

Introduction

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



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

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Country of Origin	1	United States
2	Manufacturer	G	General Motors
3	Vehicle Brand/Type	Y	Cadillac MPV
4	GVWR/Brake System/Body Style	F	7,001–8,000 lbs Cargo Van/Four (4) Door Cab/Utility, Passenger Van

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

Position	Definition	Character	Description
5/6	Line Chassis/Series	3/A	Escalade Luxury 2WD
		3/B	Escalade Premium Luxury 2WD
		3/C	Escalade Premium Luxury + Driver Assist Tech Pkg 2WD
		3/D	Escalade Premium Luxury Platinum 2WD
		3/E	Escalade Sport 2WD
		3/F	Escalade Sport + Driver Assist Tech Pkg 2WD
		3/G	Escalade Sport Platinum 2WD
		3/7	Cadillac Escalade 2WD (Non-US, Non-Canada)
		3/A	4x4, Chevrolet Suburban FL
		3/B	4x4, Chevrolet Suburban LS
		3/C	4x4, Chevrolet Suburban LT
		3/D	4x4, Chevrolet Suburban Z71
		3/E	4x4, Chevrolet Suburban RST
		3/F	4x4, Chevrolet Suburban Premier
		3/G	4x4, Chevrolet Suburban High Country
		3/9	4x4, Chevrolet Suburban, (Non-US, Non-Canada)
		3/J	Escalade ESV Luxury 2WD
		3/K	Escalade ESV Premium Luxury 2WD
		3/L	Escalade ESV Premium Luxury + Driver Assist Tech Pkg 2WD
		3/M	Escalade ESV Premium Luxury Platinum 2WD
		3/N	Escalade ESV Sport 2WD
		3/P	Escalade ESV Sport + Driver Assist Tech Pkg 2WD
		3/R	Escalade ESV Sport Platinum 2WD
		3/8	Cadillac Escalade ESV 2WD (Non-US, Non-Canada)
		4/A	Escalade Luxury 4WD
		4/B	Escalade Premium Luxury 4WD
		4/C	Escalade Premium Luxury + Driver Assist Tech Pkg 4WD
		4/D	Escalade Premium Luxury Platinum 4WD
		4/E	Escalade Sport 4WD
		4/F	Escalade Sport + Driver Assist Tech Pkg 4WD
		4/G	Escalade Sport Platinum 4WD
		4/7	Cadillac Escalade 4WD (Non-US, Non-Canada)
		4/J	Escalade ESV Luxury 4WD
		4/K	Escalade ESV Premium Luxury 4WD
		4/L	Escalade ESV Premium Luxury + Driver Assist Tech Pkg 4WD
		4/M	Escalade ESV Premium Luxury Platinum 4WD
		4/N	Escalade ESV Sport 4WD
		4/P	Escalade ESV Sport + Driver Assist Tech Pkg 4WD
		4/R	Escalade ESV Sport Platinum 4WD
		4/8	Cadillac Escalade ESV 4WD (Non-US, Non-Canada)
7	Restraint System	K	AYQ - Active Manual Belts, Airbag - Driver & Passenger - Front (1st row) , Front Seat Side (1st Row), Front Inboard Seat Side (1st row), Roof Side (all seating rows)

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

Position	Definition	Character	Description
8	Engine Type	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
		*	Unless Equipped with RPO YK9 – Not Equipped with Cylinder Deactivation
9	Check Digit	—	Check Digit
10	Model Year	P	2023
11	Plant Location	R	Arlington, USA
12–17	Plant Sequence Number	—	Plant Sequence Number

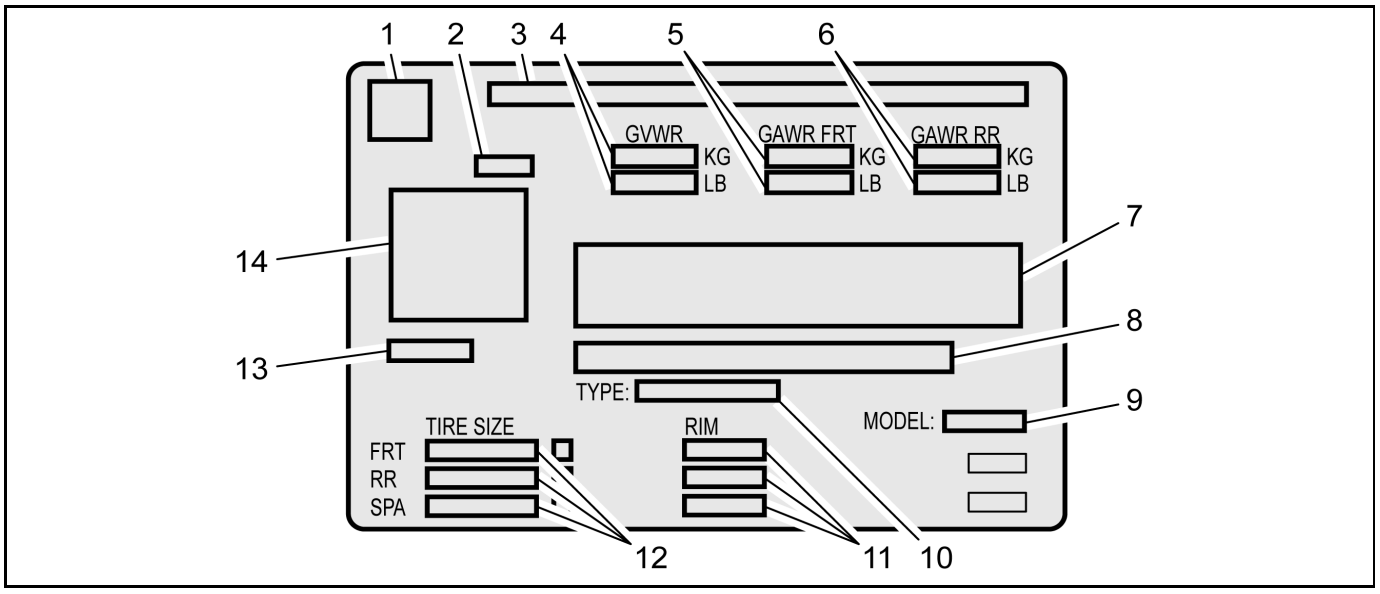
3.0L (LM2) Diesel Engine ID and VIN Derivative Location

Engine Identification

10L80 (MQC) Transmission ID and VIN Derivative Location

Transmission Identification Information

Vehicle Certification, Tire Placard, and Anti-Theft Label



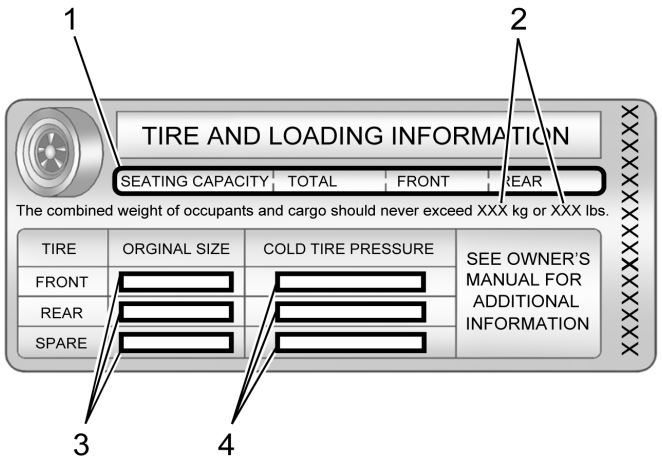
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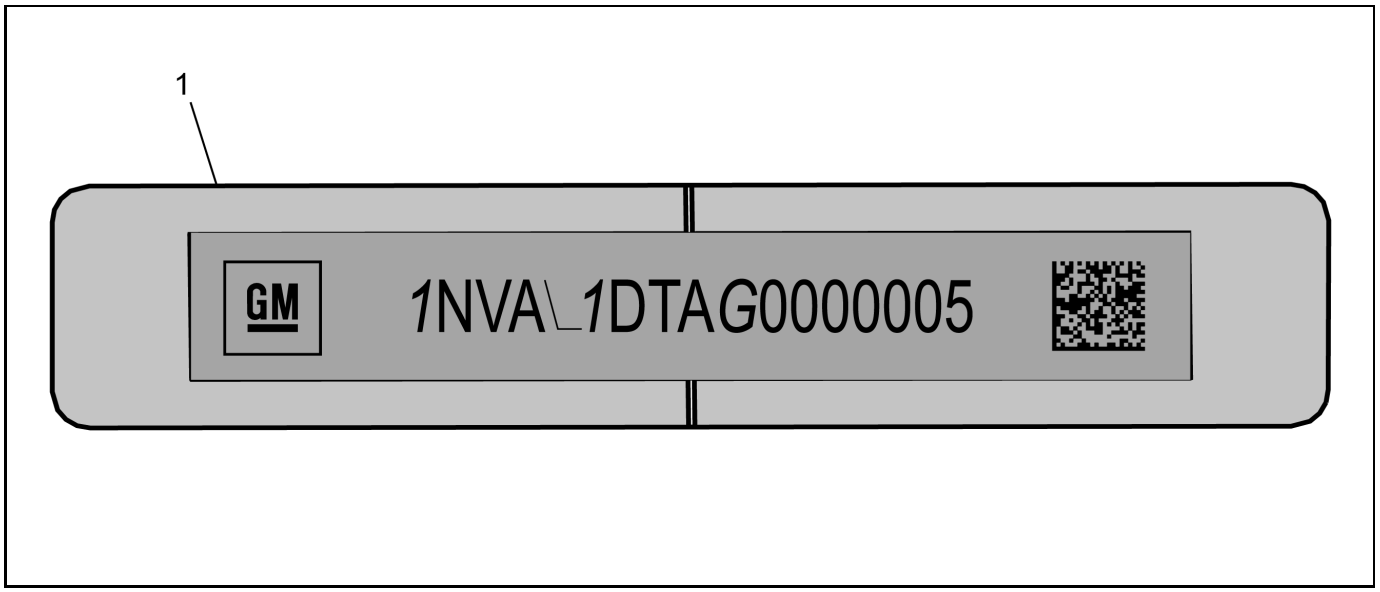
Vehicle Certification Label

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

Vehicle Certification Label (cont'd)

Callout	Description
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



4962289

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
00J	IDENTIFICATION-EQUIPPED WITH SENSING DIAGNOSTIC MODULE DESIGN 2
00N	IDENTIFICATION-NOT EQUIPPED WITH REAR EXPRESS POWER WINDOW
1SA	PACKAGE-OPTION 01
1SB	PACKAGE-OPTION 02
1SC	PACKAGE-OPTION 03
1SD	PACKAGE-OPTION 04
1SG	PACKAGE-OPTION 07
1SH	PACKAGE-OPTION 08
4AA	INTERIOR TRIM-JET BLACK
4BR	INTERIOR TRIM-VERY DARK ATMOSPHERE / BRANDY
4BS	INTERIOR TRIM-GIDEON / WHISPER BEIGE
4BY	INTERIOR TRIM-JET BLACK / PARCHMENT
4J1	INTERIOR TRIM-JET BLACK / BITTER SWEET
4JO	INTERIOR TRIM-JET BLACK/WHISPER BEIGE INTERIOR

RPO	Description
5JL	ACCESSORY-BRAKE UPGRADE PKG 1 - COMPLETE
5JR	ACCESSORY-MIRROR COVERS - ALTERNATE FINISH 1
5M8	DEFLECTOR-AIR DAM, ACTIVE
5RU	ACCESSORY-ILLUMINATED SILL PLATE - RR COMPT OPENING
5W7	ACCESSORY-AIR FILTER - PERFORMANCE
65C	LABEL, WARNING-CALIFORNIA, PROP 65 COMPLIANT
A2X	ADJUSTER DRIVER SEAT-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT
A45	MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION
A50	SEAT-FRT BKT
A7K	ADJUSTER PASS ST-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT
AAK	ACCESSORY-FLOOR LINER - CONTOURED - ALT DESIGN 1
AEF	WINDOW REG PASS DR-POWER OPERATED, EXPRESS UP/DOWN
AER	WINDOW REG REAR DR-POWER OPERATED, EXPRESS UP/DOWN
AF6	CONTROL-SEAT, MASSAGE, DRIVER
AF7	LATCH-FRT & RR DOORS, CINCHING
AKE	CONTROL-SEAT, MASSAGE, PASSENGER

RPO	Description
AKJ	WINDSHIELD STYLE-SHADE BAND
AKK	WINDSHIELD STYLE-ACOUSTIC PVB
AKO	WINDOW TYPE-PRIVACY
AKX	WINDSHIELD TYPE-SOLAR ABSORBING
AL0	SENSOR INDICATOR-INFLATABLE RESTRAINT, FRT PASS/CHILD PRESENCE DETECTOR
ARL	PLANT CODE-ARLINGTON, TX, USA
AS8	SEAT THIRD ROW-60/40 BENCH, POWER FOLD
ATH	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, ALL DOORS
ATN	SEAT RR-BUCKET, POWER CONFIGURABLE
ATT	SEAT RR-BENCH, 60/40 POWER CONFIGURABLE
AU3	LOCK CONTROL-SIDE DR, ELEC
AVI	RESTRAINT PROVISIONS-ADJUSTABLE GUIDE LOOP
AVK	LUMBAR DRIVER-SEAT, POWER, 4 WAY
AVU	LUMBAR PASSENGER-SEAT, POWER, 4-WAY
AX2	KEY-COMMON, VEHICULAR UNIQUE
AX7	RESTRAINT PROVISIONS-AUTOMATIC BELTS, PRE-CRASH, PRE-TIGHTENING
AXG	WINDOW REG DRVR DR-POWER OPERATED, EXPRESS UP/DOWN
AXP	VEHICLE TYPE-MULTI-PURPOSE PASSENGER VEHICLE
AYQ	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT, FRT SEAT SIDE, FRT INBOARD SEAT SIDE, ROOF SIDE
B30	COVERING FLOOR-CARPET
B3L	STEPS, RUNNINGBOARD-SIDE, RETRACTABLE, POWER, BLACK
B58	COVERING-FLOOR MAT, FRT & RR, CARPETED INSERT
B7G	PLATE-DOOR SILL COVER, ILLUMINATED
B85	MOLDING B/S-EXTERIOR, BRIGHT
BTM	SWITCH-START, KEYLESS
BTV	REMOTE START-VEHICLE
BVE	STEPS, RUNNINGBOARD-SIDE
BW2	MOLDING B/S-DELUXE
C25	WIPER SYS RR WINDOW-INTERMITTENT
C3A	HEATER AIR SYSTEM-HEATING/ DEFROSTER SYSTEM, REINFORCED, ELECTRIC, 1.5KW
C3Q	PLATE-DOOR SILL COVER, UPLEVEL
C3U	ROOF-SUN, GLASS, SLIDING, ELEC, TRANSPARENT GLASS FIXED
C49	DEFOGGER-RR WINDOW, ELECTRIC
C69	HVAC SYSTEM RR-AIR CONDITIONER

RPO	Description
CAV	ACCESSORY-TRAY - TRUNK/ CARGO AREA
CE1	WIPER SYS WINDSHIELD-PULSE, MOISTURE SENSITIVE
CJ2	HVAC SYSTEM-AIR CONDITIONER FRT, AUTO TEMP CONT, AUX TEMP CONT
CTT	HITCH ASSIST-GUIDELINES
CWA	WASHER-CAMERA, REAR
D07	CONSOLE-FRT COMPT, FLOOR, CUSTOM
D75	HANDLE O/S DOOR-BODY COLOR
D7A	HANDLE O/S DOOR-BODY COLOR, CHROME STRIP
DCK	CONSOLE-FRT COMPT, FLOOR, CUSTOM, W/COOLER
DD8	MIRROR I/S R/V-LT SENSITIVE
DH6	MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM
DP6	MIRROR PROVISIONS-HOUSING, PAINTED
DRZ	MIRROR I/S R/V-LT SENSITIVE, FULL VIDEO DISPLAY
DXR	MIRROR O/S-LH & RH, RC, ELEC, HEAT, FLAT/DRVR, PWRFOLD, LT SENS DRVR, CNVX/PASS, TURN SIG IND, PERM LIGHT
ENL	ENG CONTROL DISABLE-STOP/START, NON-LATCHING
EPH	TRANS RANGE SEL SYS-ELECTRONIC
F47	SUSPENSION SYSTEM-FRT & RR, AIR
F48	CHASSIS DRIVE LINE-ALL WHEEL DRIVE (AWD)/FOUR WHEEL DRIVE(4WD), DRIVER SELECT
FC3	TRIM PACKAGE-SPORT PLATINUM
FE9	CERTIFICATION-EMISSION, FEDERAL
FHX	VEHICLE FUEL-DIESEL B20
FJW	VEHICLE FUEL-GASOLINE E15
G0T	TRIM PACKAGE-LUXURY
G0V	TRIM PACKAGE-LUXURY PLATINUM
G1W	PRIMARY COLOR-EXTERIOR, ABALONE WHITE TRICOAT(140X)
G29	TRIM PACKAGE-SPORT
G2A	TRIM PACKAGE-V-SPORT
G48	PRIMARY COLOR-EXTERIOR, GALACTICA MET-1 (613G)
G6M	PRIMARY COLOR-EXTERIOR, RUSH MET-1 (618G)
G6N	PRIMARY COLOR-EXTERIOR, CYPRESS MET-1 (619G)
G86	AXLE-LIMITED SLIP
G96	AXLE POSITRACTION-LIMITED SLIP, ELECTRONIC
GBA	PRIMARY COLOR-EXTERIOR, BLACK (G) 8555
GFF	TRIM PACKAGE-BASE

RPO	Description
GJW	PRIMARY COLOR-EXTERIOR, EMPIRE BEIGE MET-1 (317E)
GLU	PRIMARY COLOR-EXTERIOR, DARKMOON BLUE MET-1 (328E)
GNT	PRIMARY COLOR-EXTERIOR, RADIANT RED TINT MET-1 (170H)
GU5	AXLE REAR-3.23 RATIO
GXD	PRIMARY COLOR-EXTERIOR, SHARKSKIN MET-1 (130H)
H0B	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, VERY DK ATMOSPHERE / BRANDY
H0C	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, JET BLACK / PARCHMENT
H0D	INTERIOR TRIM CONFIG-LEATHER, LEVEL 5, GIDEON / WHISPER BEIGE
H0E	INTERIOR TRIM CONFIG-LEATHER, LEVEL 5, JET BLACK / BITTER SWEET
H2U	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, JET BLACK
HD7	HANDLE-O/S, DR, ILLUMINATED
HGF	INTERIOR TRIM CONFIG-LEATHER, LEVEL 3, JET BLACK / WHISPER BEIGE
HIZ	INTERIOR TRIM CONFIG-LEATHER, LEVEL 5, JET BLACK
HS1	ALERT-SAFETY HAPTIC SEAT
HXR	INTERIOR TRIM CONFIG-VINYL, LEVEL 2, JET BLACK
IOV	RADIO-INFOTAINMENT SYSTEM - 3.X PANORAMIC HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, PREMIUM SD NAV
IWD	INTERIOR TRIM PKG-LEATHER WRAPPED DELUXE
J23	ENGINEERING YEAR-2023
J49	BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 20" HD
J61	BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 17"
JBK	BRAKE LINING WEAR SY-WEAR LIFE INDICATOR
JL1	BRK APL CTRL FEATURE-INTEGRATED TRAILER BRAKE
JM8	CONTROL-AUTOMATIC VEHICLE HOLD BRAKE
K05	HEATER ENG-BLOCK
K1O	FILTER MONITOR-ENGINE AIR
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K3W	BATTERY-LN5, AGM, 12V, 95AH, 900 ENCCA
K47	AIR CLEANER-HIGH CAPACITY
K4C	CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE
K6L	FILTER-AIR, POLLUTANT, ODOR & FINE DUST

RPO	Description
KA1	HEATER SEAT FRT-DRVR & PASS
KA6	HEATER SEAT-REAR
KC4	COOLING SYSTEM-ENG OIL
KC5	RECEPTACLE-ELECTRICAL, ACCESSORY
KD4	RECEPTACLE-ELECTRICAL, FRT CONSOLE I/S, 12 VOLT
KI3	STEERING WHEEL HEAT-AUTOMATIC
KI4	RECEPTACLE I/P-ELECTRICAL, 110 VOLT
KL9	ENG CONTROL-STOP/START SYS, CONVENTIONAL AT, CONVENTIONAL MT OR BRAKE RELEASE LATE RESTART
KNP	COOLING SYSTEM-TRANS, HD
KQV	HEATER-SEAT, VENTED, FRT
KSG	CRUISE CONTROL-AUTOMATIC, ADAPTIVE, WITH STOP/GO
KW5	GENERATOR-220 AMP
KX4	GENERATOR-250 AMP
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, VAR. 1
LT4	ENGINE-GAS, 8 CYL, 6.2L,DI, SC, AFM, VVT, ALUM, GMNA
MAH	MARKETING AREA-US, PUERTO RICO/USVI
MCR	RECEPTACLE-MEMORY CARD
MHO	TRANSMISSION-AUTO 10 SPD, 10L90, ETRS, GEN 2
MHS	TRANSMISSION-AUTO 10 SPD, 10L80, GRX, GEN 1, ATSS, ETRS, VAR 1
MQC	TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, ETRS, CPA, GEN 2
N06	STEERING COLUMN LOCK-ELECTRICAL
N08	LOCK CONTROL-FUEL FILLER DR, REM CONT
N10	EXHAUST SYSTEM-DUAL
N38	STEERING COLUMN-TILT, TELESCOPING, POWER
N57	STEERING WHEEL-SYNTHETIC, 4 SPOKE, THIN, ROUND
NE1	CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION
NKC	NOISE CONTROL-ACTIVE NOISE CANCELLATION, ENGINE
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
NUC	EMISSION SYSTEM-CALIFORNIA, ULEV50

RPO	Description
NUF	EMISSION SYSTEM-CALIFORNIA, ULEV125
NWM	SHIELD-LOCK & LATCH, CLOSURES
PPW	PHONE PROJECTION-PHONE PROJECTION WIRELESS
PTT	TRAILER TIRE PRESSUR-MANUAL LEARN
PZ8	IMAGE ADJUSTMENT-HITCH VIEW
Q8E	JACK-MECHANICAL, W/TOOLS
RBR	WHEEL-22 X 9.0, J, STEEL, DESIGN 1
RDI	ACCESSORY-KEYLESS ENTRY
RIB	ACCESSORY-FLOOR LINER - CONTOURED - 3RD ROW
RIK	ACCESSORY-BADGE - EXTERIOR, PACKAGE, DESIGN 1
RM7	WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 1
RSR	OCCUPANT DETECT SYS-REAR SEAT, DOOR ACTIVATED
RVG	ACCESSORY-ADAPTER - TRAILER HARNESS
RWL	CHASSIS DRIVE LINE-REAR WHEEL DRIVE (RWD)
RWS	ACCESSORY-FLOOR MATS - CARPET
RWU	ACCESSORY-CARGO AREA ORGANIZER - COLLAPSIBLE
RXH	ACCESSORY-CENTER CAP - WHEEL - DESIGN 1
RXI	ACCESSORY-ENGINE COVER - ALTERNATE FINISH 1
RXJ	ACCESSORY-CENTER CAP - WHEEL - DESIGN 2
RYT	ACCESSORY-FIRST AID KIT
S08	ACCESSORY-HIGHWAY SAFETY KIT
S0M	ACCESSORY-ILLUMINATED DOOR SILLS
S1V	ACCESSORY-HEADPHONES - RSE
S3I	ACCESSORY-LAMPS - PERIMETER ILLUMINATION
S45	ACCESSORY-LUG NUT AND WHEEL LOCK KIT
S47	ACCESSORY-LUG NUTS
S4W	ACCESSORY-LUG NUT AND WHEEL LOCK KIT DESIGN 2
S4X	ACCESSORY-MIRROR COVERS/SKULL CAPS - ALTERNATE FINISH - PAINTED
SAF	LOCK-SPARE TIRE, HOIST SHAFT
SBZ	ACCESSORY-SPORT PEDAL KIT
SD3	ACCESSORY-FOLDABLE BOX - FLEXIBLE ORGANIZER - RR COMPT
SD5	ACCESSORY-TIRE PRESSURE MONITOR
SET	ACCESSORY-WHEEL - 22" - ALUMINUM - DESIGN 10
SEY	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 5
SFE	ACCESSORY-WHEEL LOCKS
SFJ	ACCESSORY-WINDOW SHADES - REFLECTIVE
SFZ	ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1
SGG	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 5
SGK	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 6
SJ9	ACCESSORY-GRILLE / GRILLE INSERTS - ALTERNATE FINISH 1
SKO	ACCESSORY-ORGANIZER-2ND ROW SEATING
SL2	ACCESSORY-FRONT FASCIA EXTENSION - ALTERNATIVE FINISH
SMD	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 10
SML	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 12
SMM	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 13
SPY	ACCESSORY-LUG NUTS - ALT FINISH
SPZ	ACCESSORY-WHEEL LOCKS - ALT FINISH
SQO	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 12
SSV	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 16
SSX	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 18
ST1	SALES PACKAGE-PREMIUM EDITION
SUR	ACCESSORY-TRAILER TIRE PRESSURE MONITOR
T4L	HEADLAMPS-LED
T8Z	SEAT BELT SAFETY SYS-SHIFTER INTERLOCK, GEN 3, INFOTAINMENT CUSTOMIZABLE
T95	CONTROL, HEADLAMPS-BEAM, DIRECTIONAL (AFL)
TC2	BODY EQUIPMENT-LIFT GATE, POWER, HANDS FREE
TDM	MODE DRIVER SETTINGS-TEEN DRIVER, INFOTAINMENT
THS	TRAILERING ASSIST-GUIDELINES
TQ5	HEADLAMP HIGH BEAM-AUTO CONTROL
TR7	CONTROL, HEADLAMPS-LEVELING SYSTEM, AUTOMATIC
TRG	VISION TRAILER-INSIDE VIEW, REAR VIEW
TRO	ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED
TW5	LAMP-TAIL & STOP, SAE, LED
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U2L	RECEPTION-HD
UAR	DISPLAY ENHANCED-CLUSTER, AUGMENTED REALITY
UB3	ANTENNA-FIXED, RR SPOILER, RADIO

RPO	Description
UD5	PARK ASSIST-FRONT AND REAR
UDV	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED, FULL CLUSTER (MULTI COLOR GRAPHIC)
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UET	INDICATOR-SMART TRAILER INTEGRATION
UEU	SENSOR INDICATOR-FORWARD COLLISION ALERT
UFG	REAR CROSS TRAFFIC-ALERT
UG1	OPENER-GARAGE DOOR, UNIVERSAL
UGN	COLL IMMINENT BRK-ALL SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST
UH5	INDICATOR-SEAT BELT WARNING, REAR SEAT
UH6	INDICATOR-SEAT BELT WARNING, REAR SEAT, 3RD ROW
UHX	LANE ACTIVE SAFETY-KEEP ASSIST
UHY	COLL IMMINENT BRK-LOW SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST
UJN	TIRE PRESS INDICATOR-AUTO LEARN
UK3	CONTROL-STEERING WHEEL, ACCESSORY
UKC	SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED
UKJ	PED DETECTION FRT-BASIC, PEDESTRIANS
UKK	SENSOR INDICATOR-PEDESTRIAN DETECTION - REAR
UKL	LANE ACTIVE SAFETY-KEEP ASSIST, HANDS FREE LANE FOLLOWING(ENTIRE SPEED RANGE)
UKV	SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED, EXTENDED TRAILER VIEW
UKZ	PARK ASSIST-FRONT, REAR, LATERAL-FRONT (SEMIAUTOMATIC STEERING & BRAKING & GEAR SHIFTING ADVANCED PARKING AID)
UMN	SPEEDOMETER-INST, MILES & KILO, MILES ODOMETER
UQH	SPEAKER SYSTEM-PREMIUM AUDIOFILE AUDIO, BRANDED SURROUND AMPLIFIER
UQP	SPEAKER SYSTEM-PERFORMANCE AUDIO, BRANDED SURROUND AMPLIFIER
USR	RECEPTACLE-USB
USS	RECEPTACLE-USB CHARGE PORT
UTJ	THEFT DETERENT-ELECTRICAL, UNAUTHORIZED ENTRY
UTR	ALARM, HORN-CONTENT THEFT DETERENT, SELF POWERED
UTU	SENSOR, VEHICLE-INCLINATION

RPO	Description
UTV	SENSOR, VEHICLE-INTERIOR MOVEMENT
UTW	SENSOR, VEHICLE-GLASS BREAKAGE
UV3	CAMERA-ENHANCED VISION, INFRARED
UV6	HEAD UP DISPLAY-WINDSHIELD
UVG	HEADLAMP HIGH BEAM-AUTO CONTROL, ADAPTIVE HEADLAMP SYSTEM
UVZ	SENSOR-COLLISION AVOIDANCE & MITIGATION, VEHICLE REVERSE MOVEMENT
UW9	ENTERTAINMENT PKG-RR SEAT, DUAL DISPLAY, SEAT BACK
UXP	VISION-360 VIEW, MONO, ENHANCED HD DIGITAL
V03	COOLING SYSTEM-EXTRA CAPACITY
V54	LUGGAGE CARRIER-ROOF, PAINTED
V55	LUGGAGE CARRIER-ROOF, CHROME
V8D	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS
VAV	ACCESSORY-FLOOR MATS - ALL WEATHER
VFF	VIDEO FORMAT-REGION 1, NTSC
VGC	PROTECTOR-FILM, PAINT ETCH PREVENTIVE
VHM	PROGNOSTIC SYSTEM-VEHICLE HEALTH MANAGEMENT
VK3	LICENSE PLATE FRONT-FRT MOUNTING PKG
VKU	ACCESSORY-MIRROR CAPS - CHROME
VLG	ACCESSORY-CLOSEOUT - REAR FASCIA
VNI	ACCESSORY-REAR FASCIA APPLIQUE - ALTERNATIVE FINISH 1
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY
VQQ	ACCESSORY-CROSS RAILS - ROOF RACK - INTEGRATED - BLACK
VR6	HOOK-TIE-DN SHPG
VRS	ACCESSORY-CARGO SECURITY SHADE
VRV	ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED - PAINTED
VSX	LABEL-TOWING
VT7	OWNERS MANUAL-ENGLISH LANGUAGE
VTB	ACCESSORY-PROTECTOR - REAR BUMPER
VTD	ACCESSORY-GROUND EFFECTS PACKAGE
VTI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR
VV4	COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY
VW9	ACCESSORY-CENTER CAP - WHEEL - DESIGN 3
VWD	ACCESSORY-CENTER CAP - WHEEL - DESIGN 4

RPO	Description
VYW	ACCESSORY-FLOOR MATS - PREMIUM CARPET - DESIGN 1
W2D	ACCESSORY-CARGO NET
WBC	ACCESSORY-EXHAUST UPGRADE
WLE	WINDOW CONTROL-REMOTE EXPRESS-UP/DOWN, ALL WINDOWS
WMI	SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR
WMX	VIN MODEL YEAR-2023
WTX	FASCIA-FRT, STANDARD
XCG	TIRE ALL-275/50R22 SL 111H BW AL3
XCQ	TIRE SPARE-265/70R17 SL 115S BW SPR VAR1
XD6	ACCESSORY TIRE-TIRE ALL-275/50R22 SL 111H BW AL3
XL8	FREQUENCIES RATING-433 MHZ
XVR	RECORDER EXT VIDEO-MULTI-VIEW CAMERAS
YF5	CERTIFICATION-EMISSION, CALIFORNIA
Z66	APPEARANCE PACKAGE-PREMIUM RIDE SUSPENSION
Z75	MARKET BRAND-CADILLAC
Z82	TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D.
Z95	CHASSIS PACKAGE-MAGNERIDE
ZM1	SALES PACKAGE-ENHANCED TRAILER VIEW
ZR3	WARRANTY-150,000 MILES, 3 YEARS
ZW7	CHASSIS PACKAGE-PREMIUM SMOOTH RIDE

Section 2

Body Systems

Fixed and Moveable Windows 2-3
Schematic and Routing Diagrams 2-3
Moveable Window Schematics 2-4
Defogger Schematics 2-7
Description and Operation 2-8
Power Windows Description and Operation 2-8
Rear Window Defogger Description and Operation 2-8
Stationary Window Description 2-8

Horns and Pedestrian Alerts 2-9
Schematic and Routing Diagrams 2-9
Horn Schematics 2-10
Description and Operation 2-11
Horns System Description and Operation 2-11

Lighting 2-12
Schematic and Routing Diagrams 2-12
Headlights/Daytime Running Lights (DRL) Schematics 2-13
Fog Lights Schematics 2-19
Exterior Lights Schematics 2-20
Interior Lights Schematics 2-33
Interior Lights Dimming Schematics 2-44
Description and Operation 2-47
Exterior Lighting Systems Description and Operation 2-47
Interior Lighting Systems Description and Operation 2-51

Mirrors 2-53
Schematic and Routing Diagrams 2-53
Inside Rearview Mirror Schematics 2-54
Outside Rearview Mirror Schematics 2-55
Description and Operation 2-58
Automatic Day-Night Mirror Description and Operation 2-58
Outside Mirror Description and Operation 2-58

Trailering Systems 2-60
Schematic and Routing Diagrams 2-60
Trailering Systems Schematics 2-61
Description and Operation 2-67
Trailering Description and Operation 2-67

Vehicle Access 2-74
Schematic and Routing Diagrams 2-74
Door Lock/Indicator Schematics 2-75
Release Systems Schematics 2-86
Hood Latch Schematics 2-88
Liftgate Schematics 2-89
Description and Operation 2-92
Door Ajar Indicator Description and Operation 2-92
Fuel Fill Door Description and Operation 2-92
Hood Ajar Indicator Description and Operation 2-92
Liftgate Ajar Indicator Description and Operation 2-92
Liftgate Description and Operation 2-93
Luggage Compartment Description and Operation 2-94
Power Door Latch Description and Operation 2-94
Power Door Locks Description and Operation 2-95

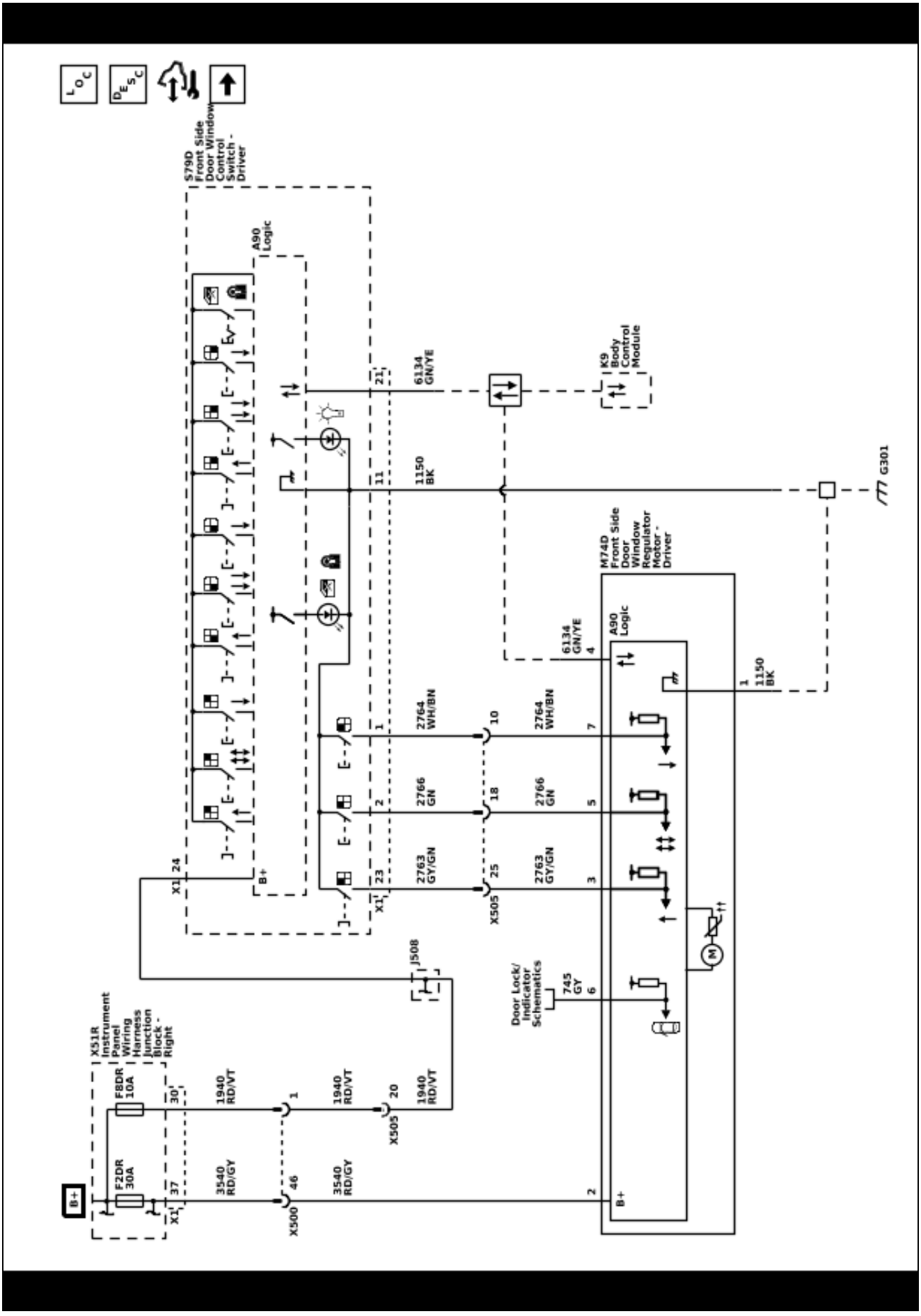
Wipers and Washers 2-97
Schematic and Routing Diagrams 2-97
Wiper/Washer Schematics 2-98
Description and Operation 2-103
Wiper/Washer System Description and Operation 2-103

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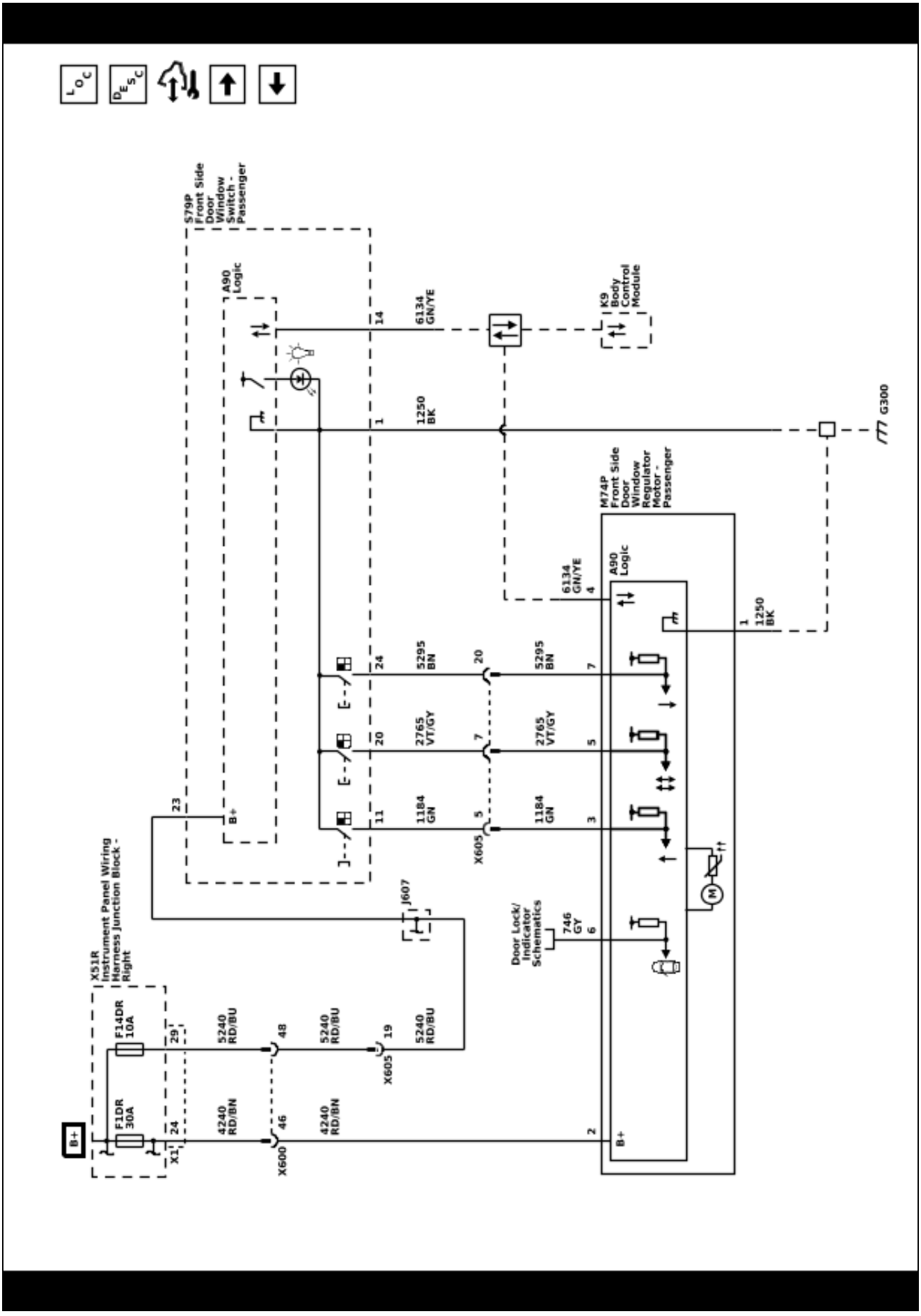
Fixed and Moveable Windows

Schematic and Routing Diagrams

Moveable Window Schematics (Driver Door)

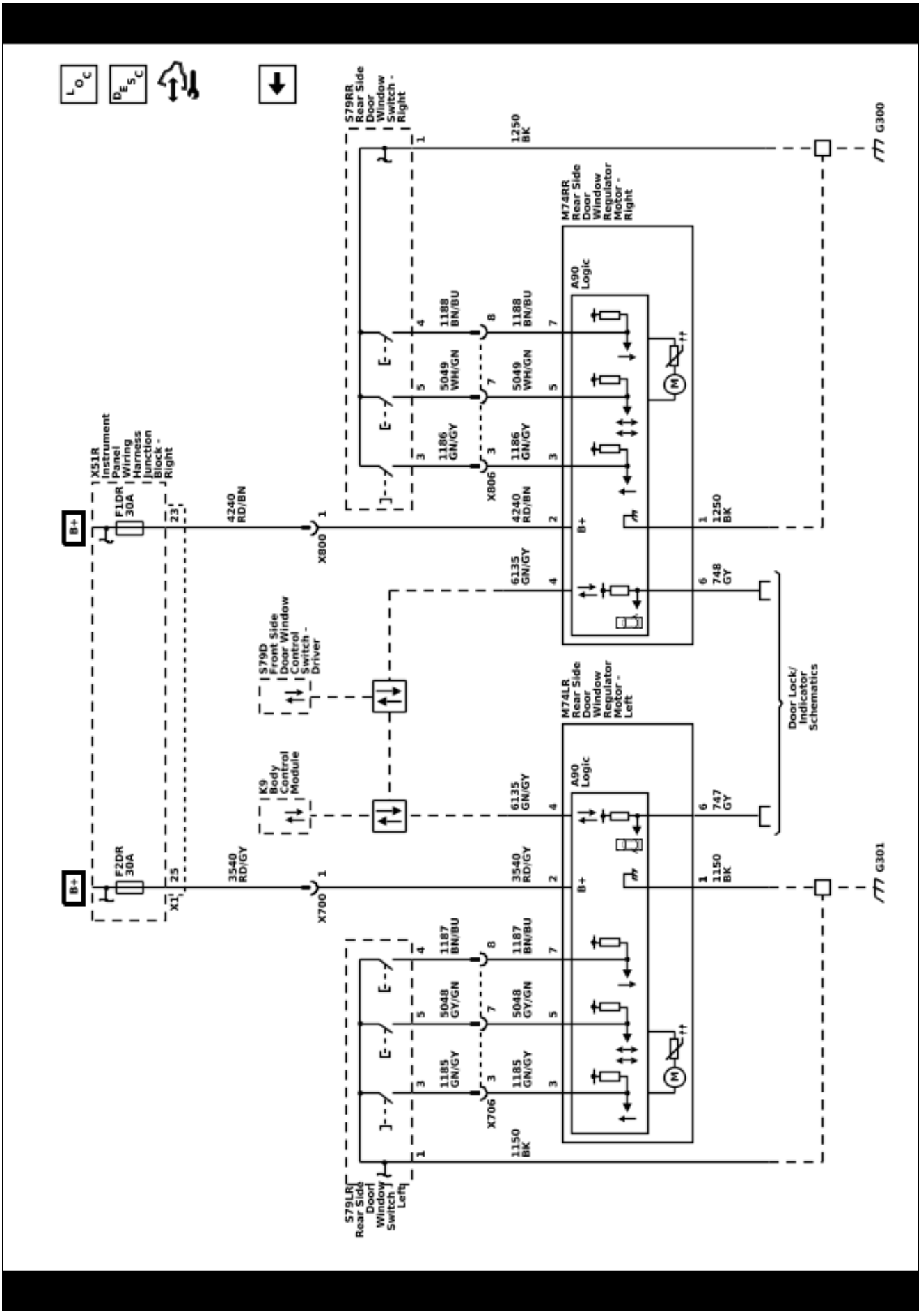


Moveable Window Schematics (Passenger Door)

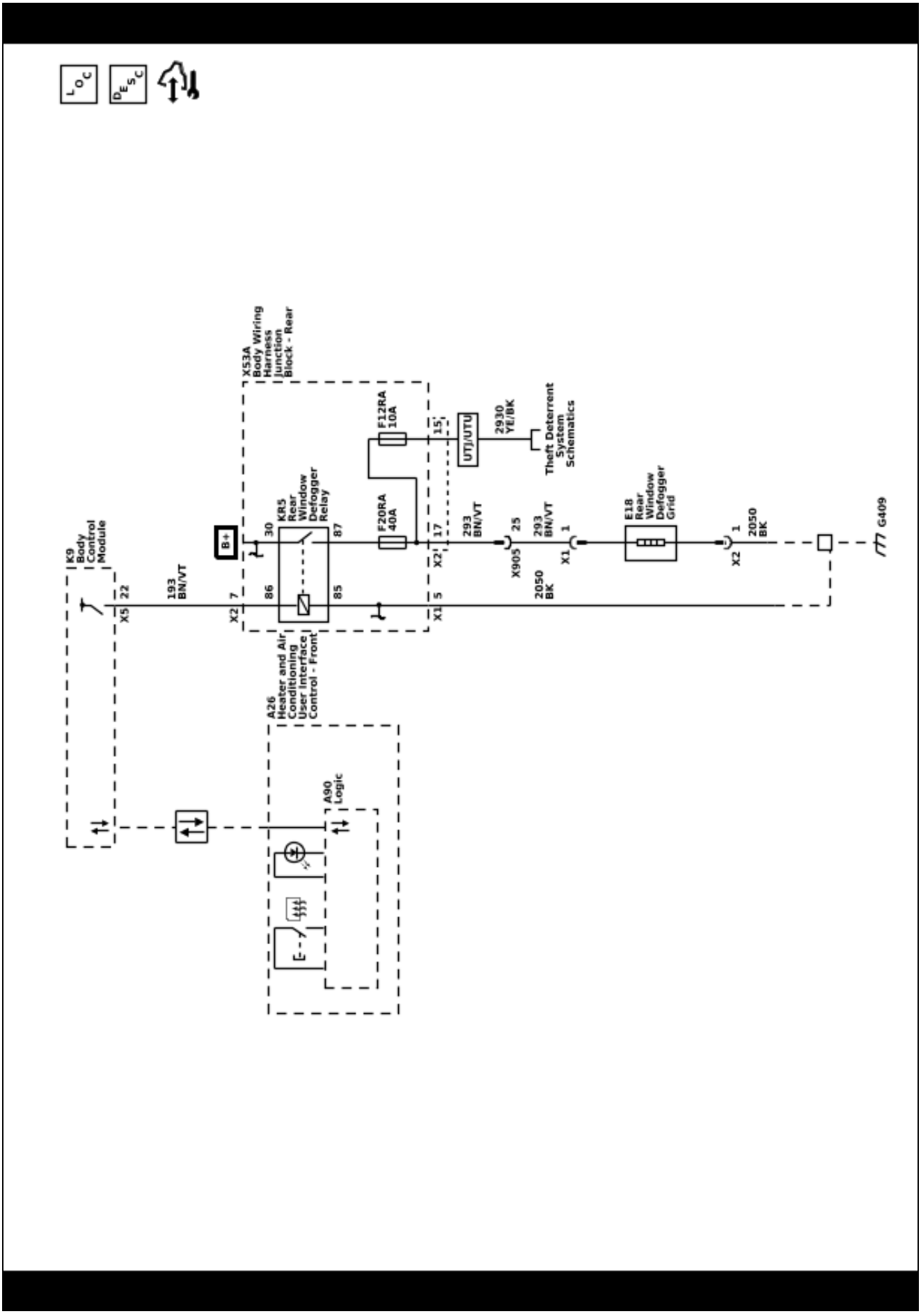


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Moveable Window Schematics (Rear Doors)



Defogger Schematics (Defogger)



Description and Operation

Power Windows Description and Operation

Power Windows System Components

The power window system consists of the following components:

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

Driver, Passenger and Rear Window Motors

The driver and passenger, left rear and right rear doors contain smart motors 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 motors monitor the up, down and express signal circuits which are normally equal to B+ voltage. When a switch is used on the driver, passenger, left rear or right rear 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.

Each window motor communicates to the body control module (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 front side door window control switch. When this switch is used, a serial data message is sent to the BCM requesting a window motor command, the BCM will then send a serial data message to the appropriate window motor which will then move in the direction requested.

Lockout Switch Feature

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

Rear Window Defogger Description and Operation

Rear Window Defogger System Components

The rear window defogger system consists of the following components:

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

Rear Window Defogger Operation

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

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

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

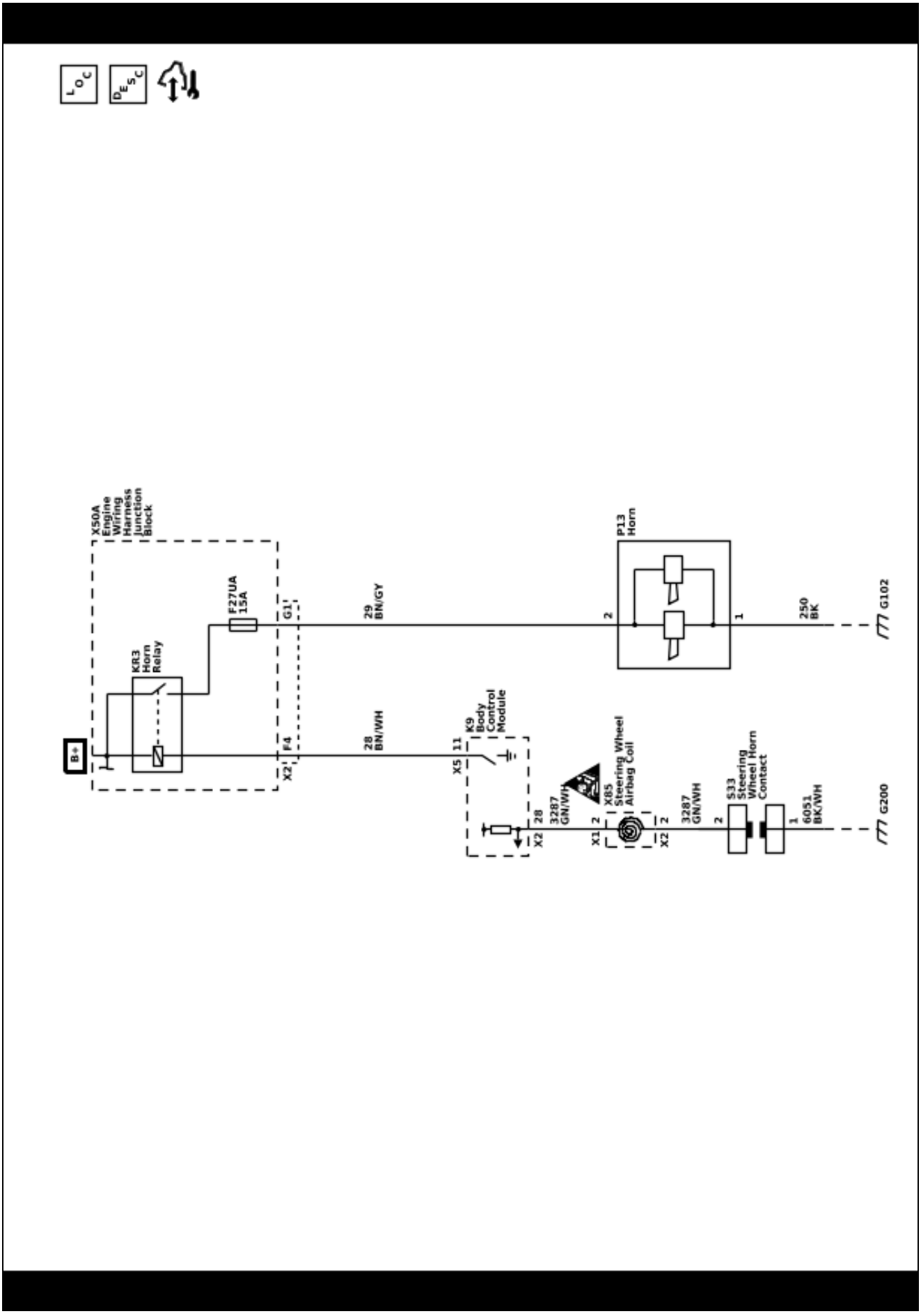
Stationary Window Description

Most stationary windows, specifically windshields, are retained to the body with urethane adhesive which adheres the window to the body, increasing structural integrity. The reinstallation of the windows with urethane adhesive requires complete replacement of the urethane adhesive bead, and is known as the full cut method.

Horns and Pedestrian Alerts

Schematic and Routing Diagrams

Horn Schematics (Horn)



Description and Operation

Horns System Description and Operation

System Description

The horn system consists of the following components:

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

System Operation

The vehicle horn system is activated under the following conditions:

- When the horn switch is depressed
- The BCM commands the horns ON under any of the following conditions:
  - When the content theft deterrent system detects a vehicle intrusion—For further information refer to Theft Systems Description and Operation.
  - When the panic button is depressed on the remote control door lock transmitter—For further information refer to Keyless Entry System Description and Operation.
  - 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.

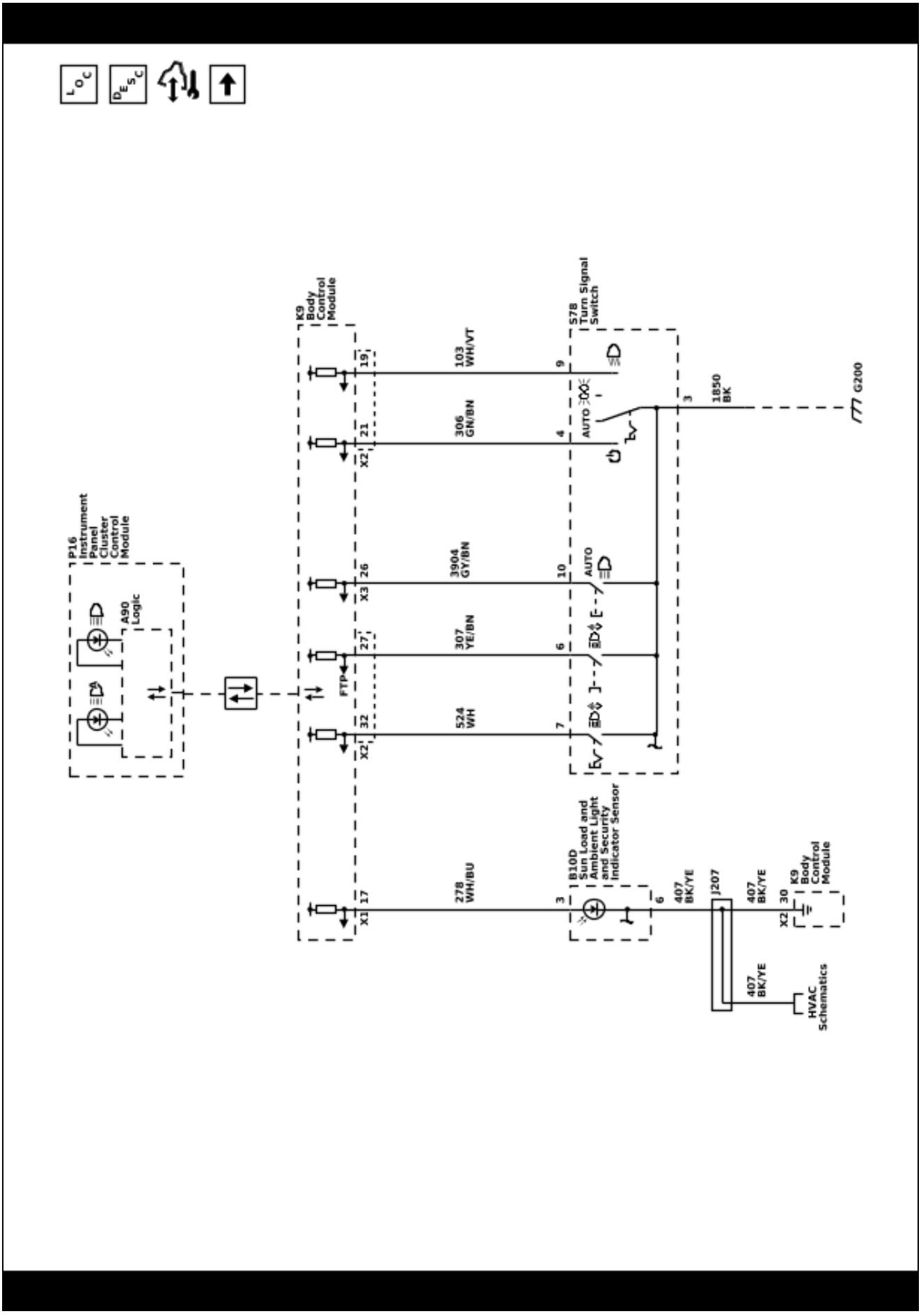
Circuit Operation

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.

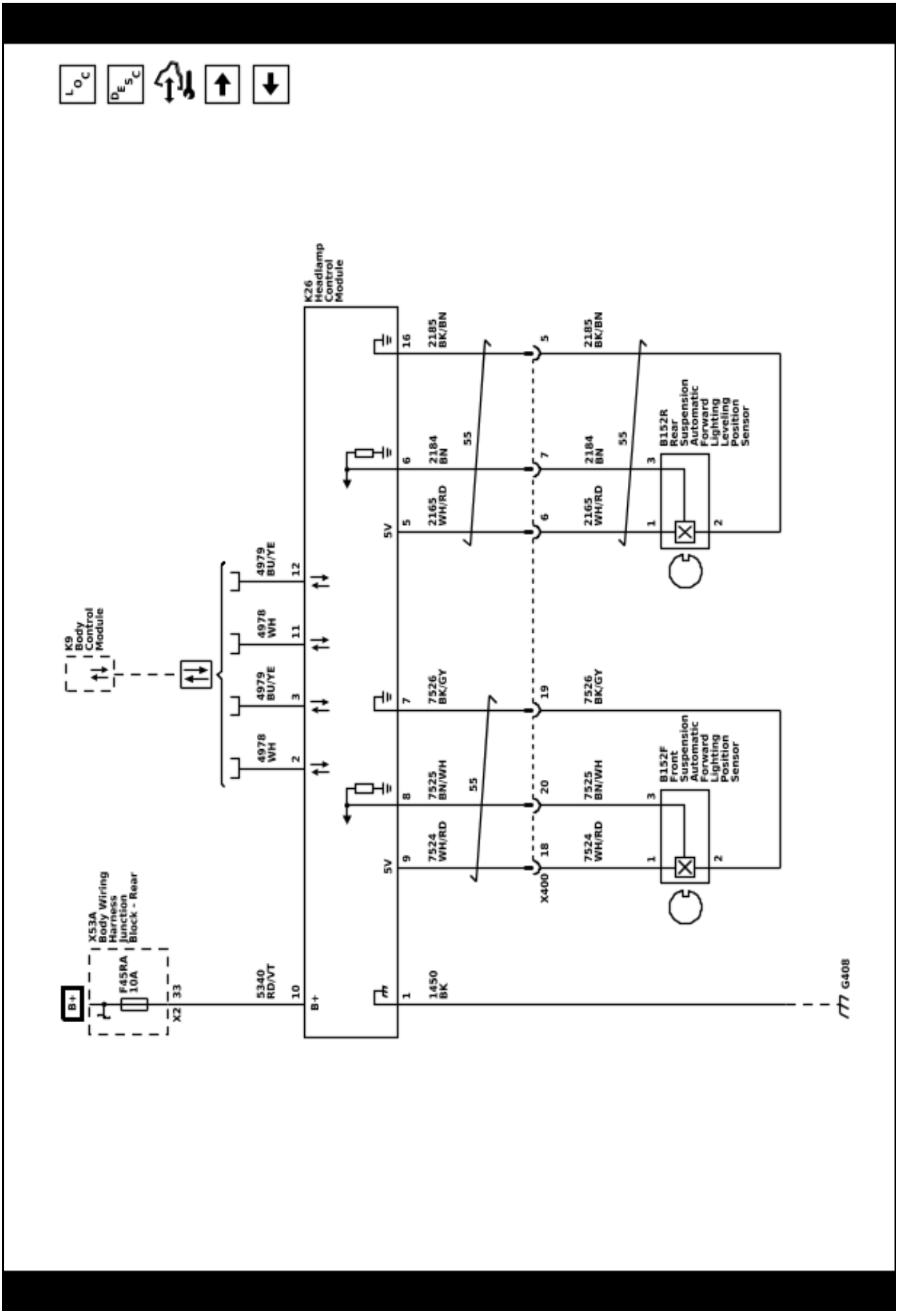
Lighting

Schematic and Routing Diagrams

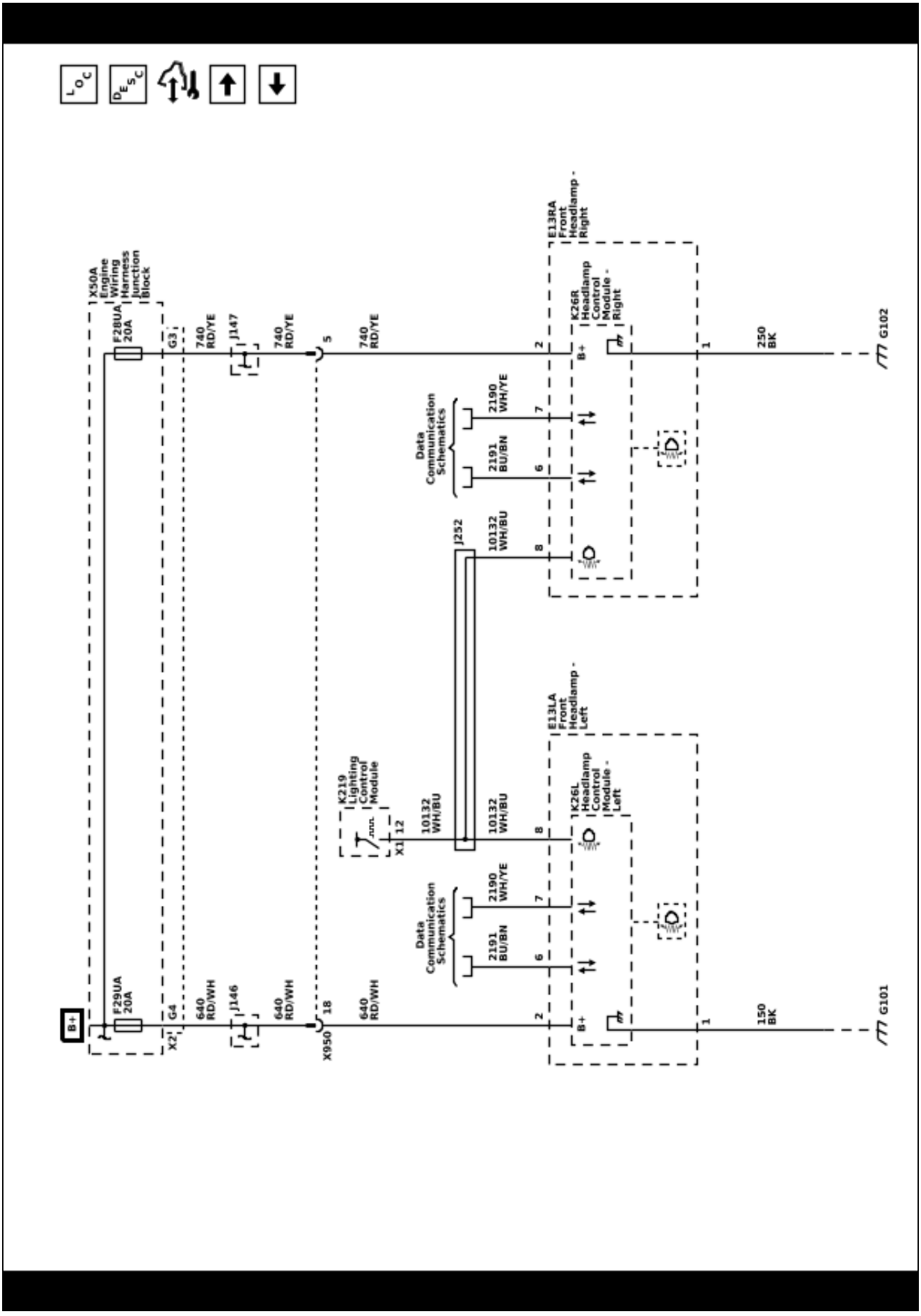
Headlights/Daytime Running Lights (DRL) Schematics (Controls and Indicators)



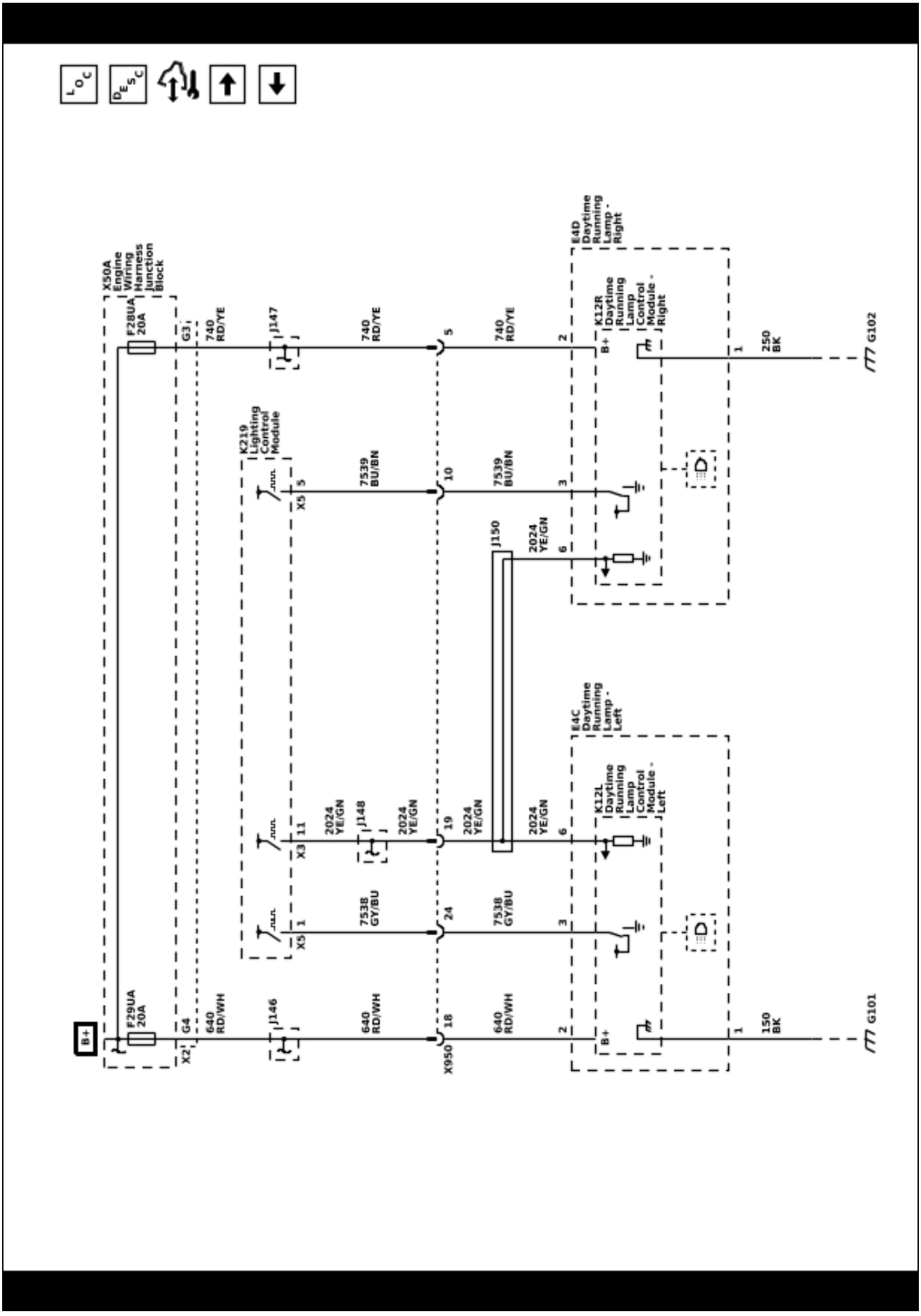
Headlights/Daytime Running Lights (DRL) Schematics (Automatic Leveling and Headlamp Control Power, Ground, Serial Data and Sensors (-F47))



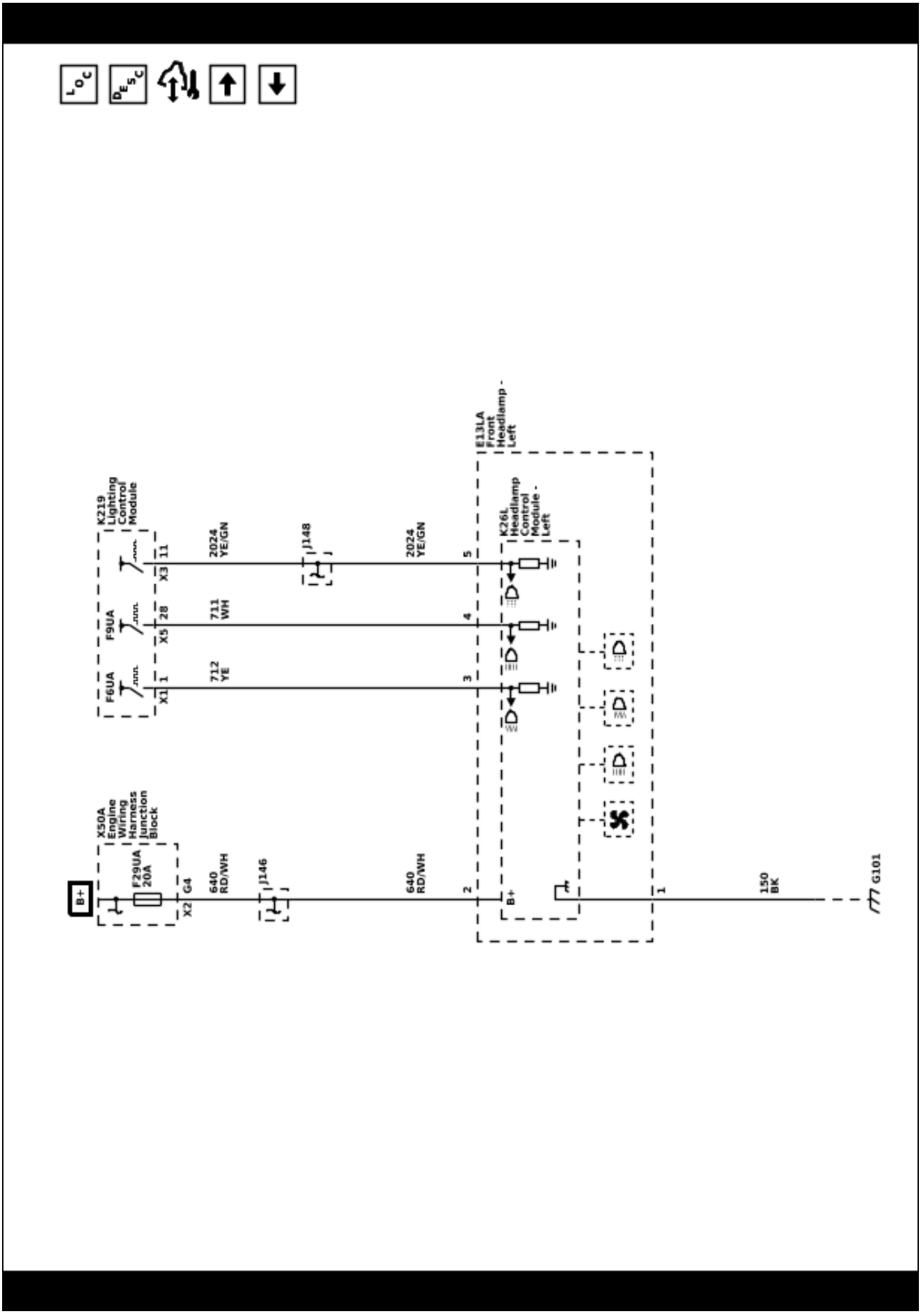
Headlights/Daytime Running Lights (DRL) Schematics (Automatic Leveling (UVG))



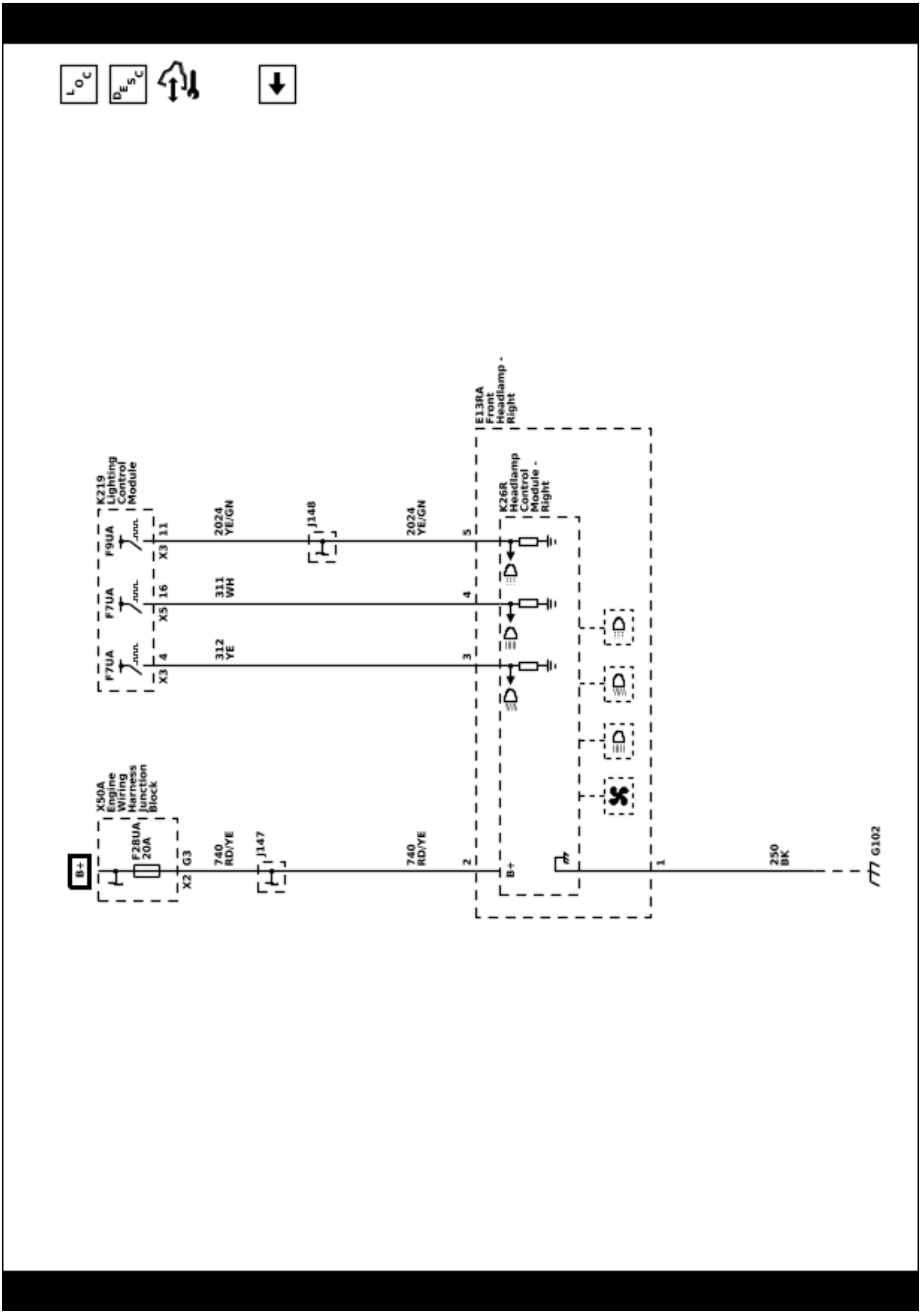
Headlights/Daytime Running Lights (DRL) Schematics (Daytime Running Lamps)



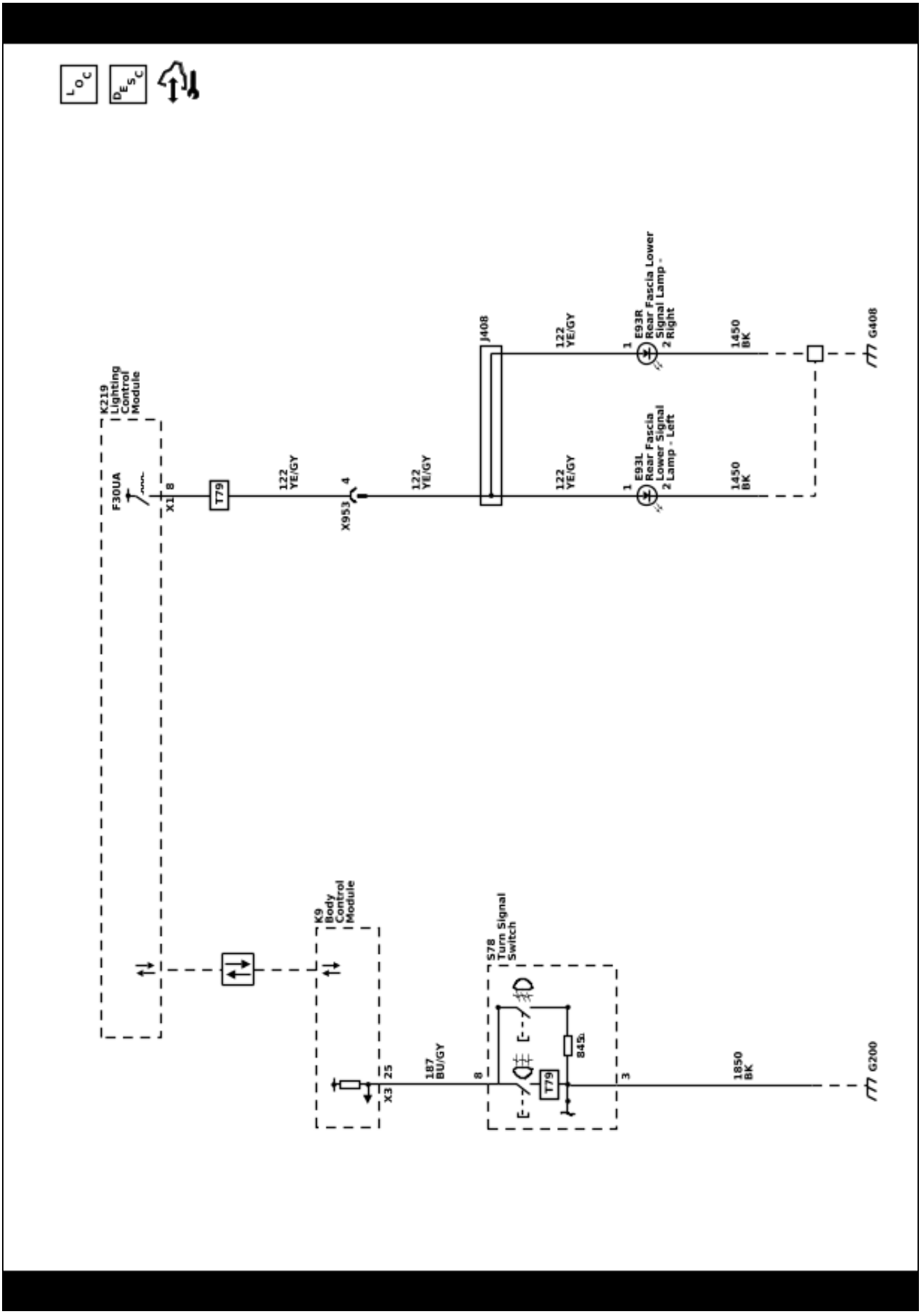
Headlights/Daytime Running Lights (DRL) Schematics (Headlamps - Left)



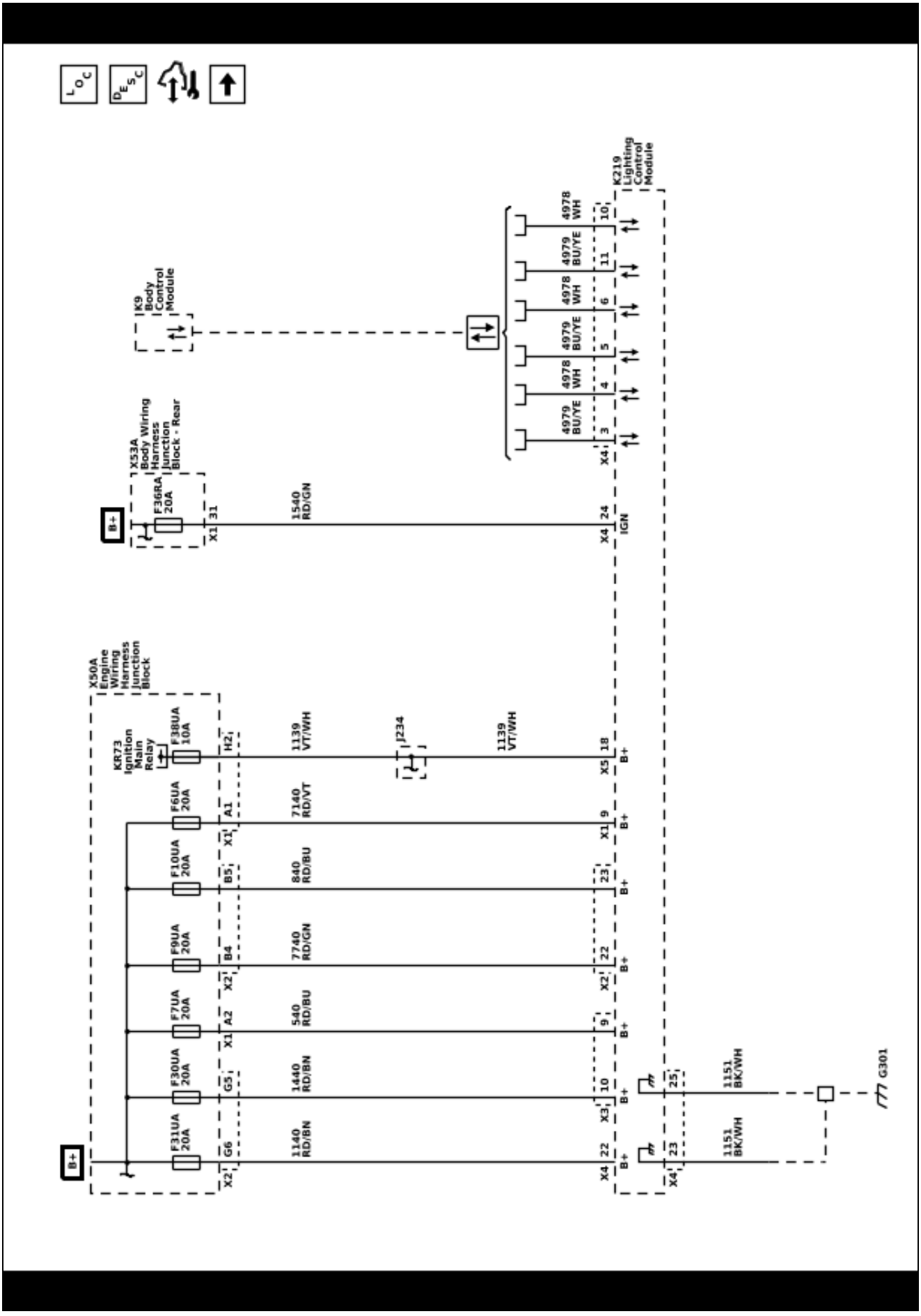
Headlights/Daytime Running Lights (DRL) Schematics (Headlamps - Right)



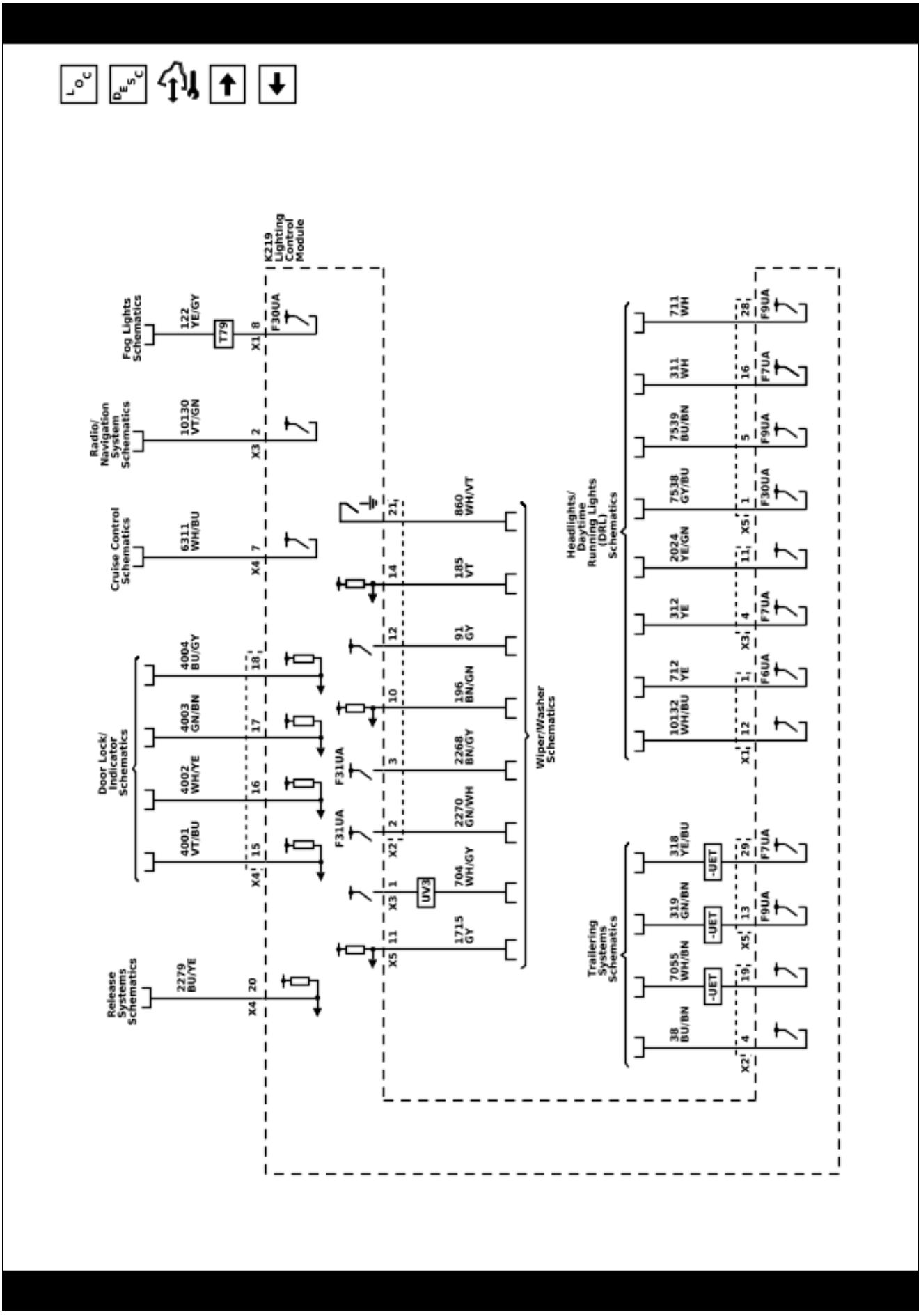
Fog Lights Schematics (Rear Fascia Lamps (T79))



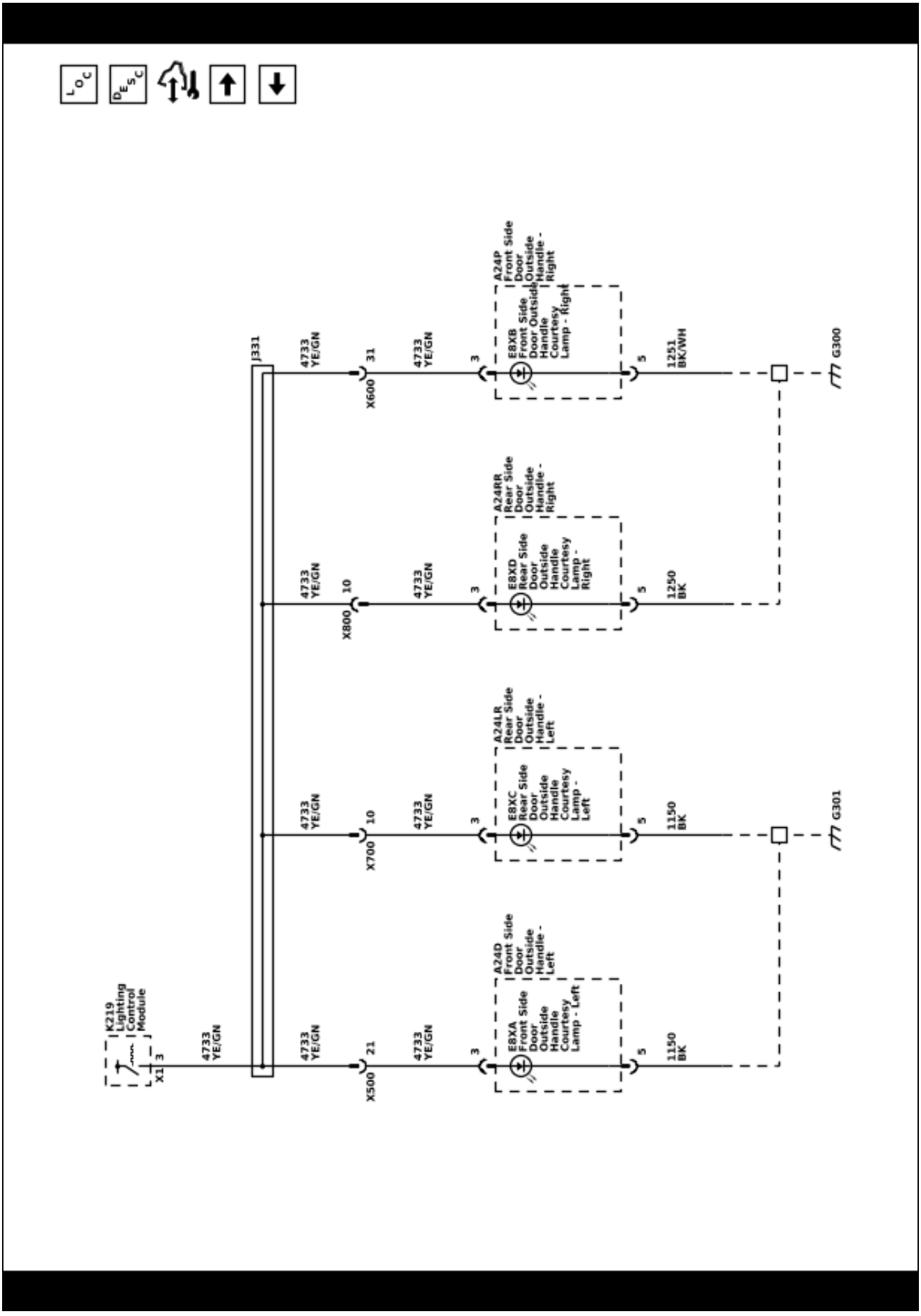
Exterior Lights Schematics (Lighting Control Module Power, Ground and Serial Data)



Exterior Lights Schematics (Exterior Lighting Control Module Subsystem Reference)

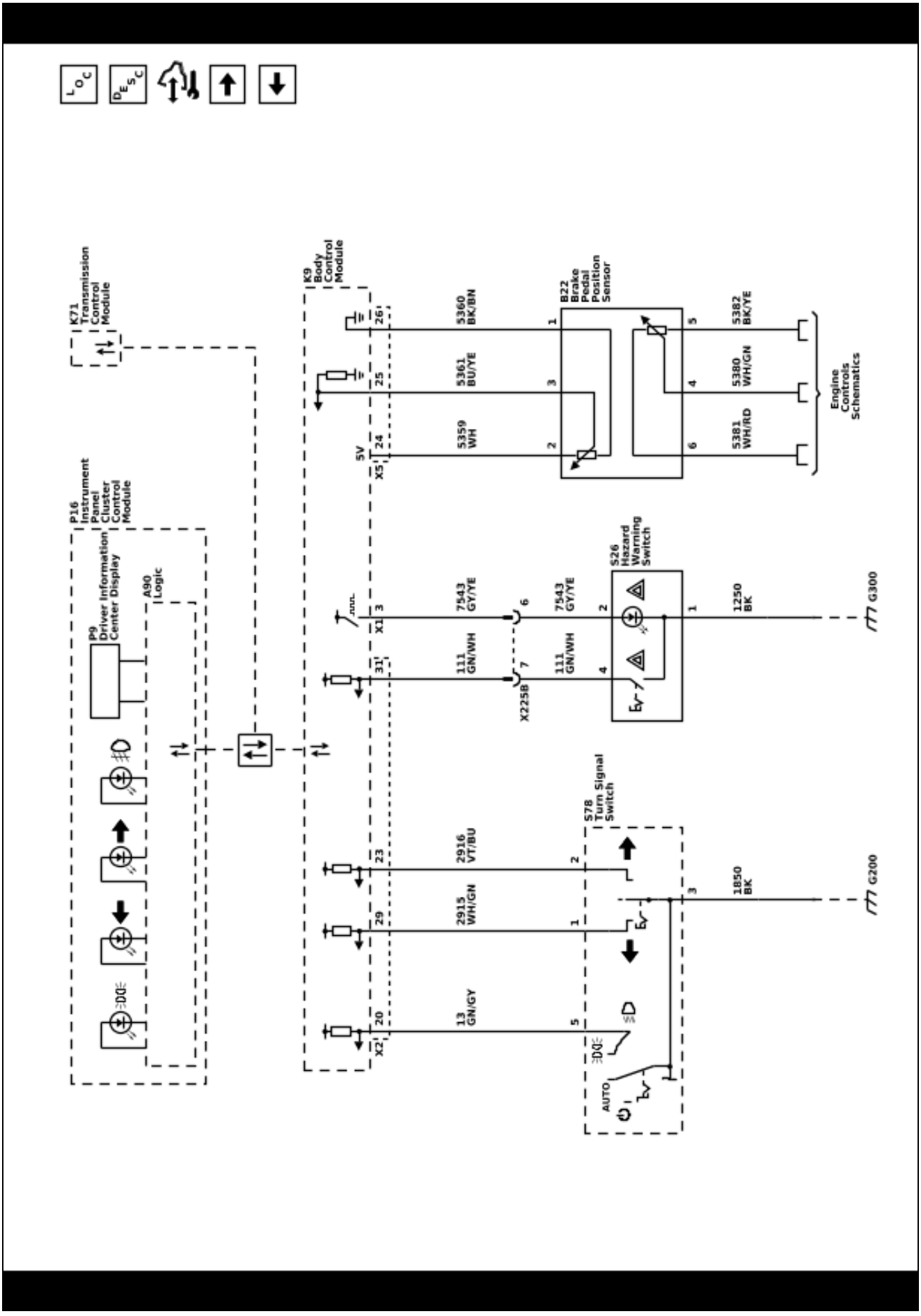


Exterior Lights Schematics (Exterior Door Handle Lights)



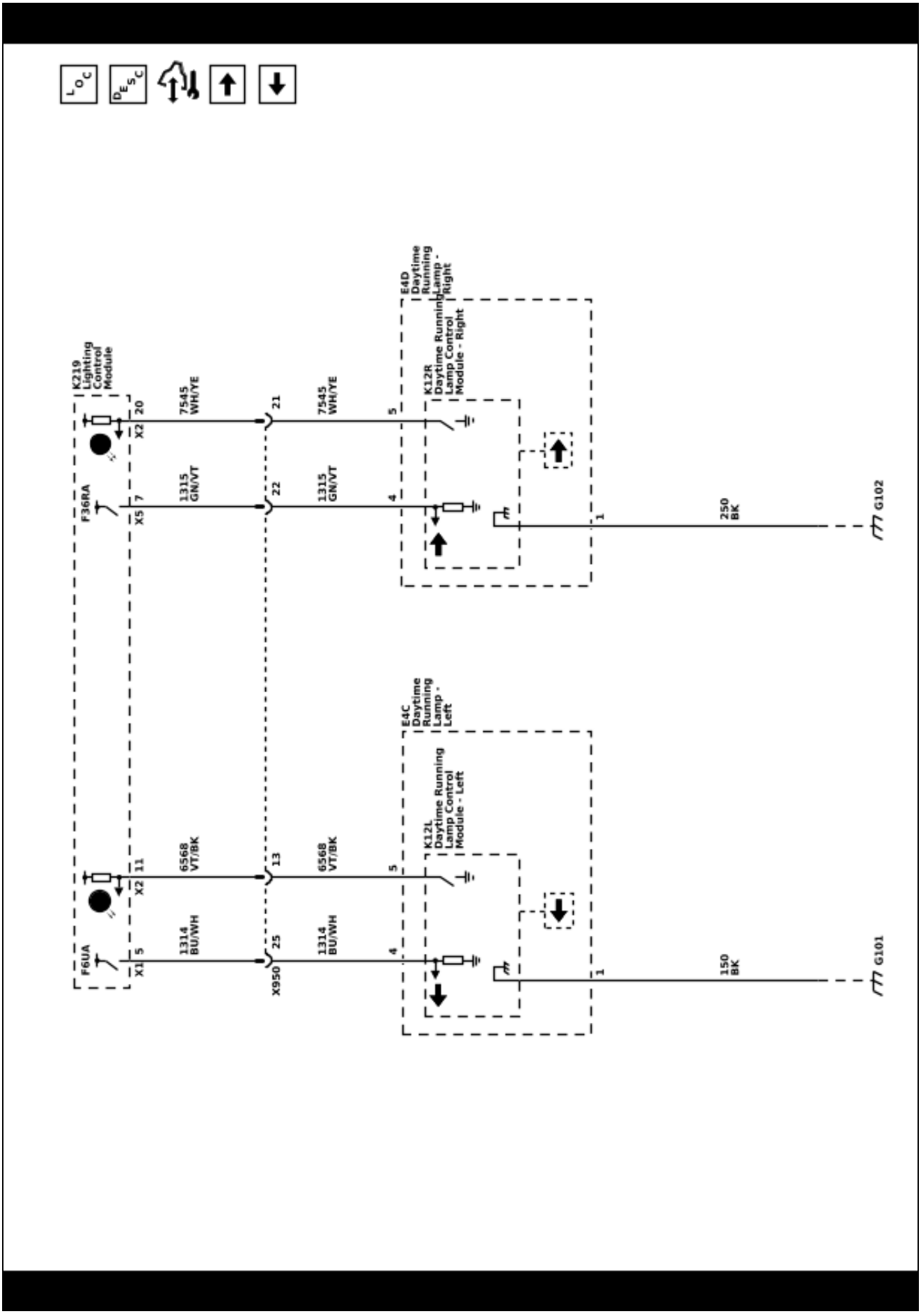
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Exterior Lights Schematics (Controls and Indicators)



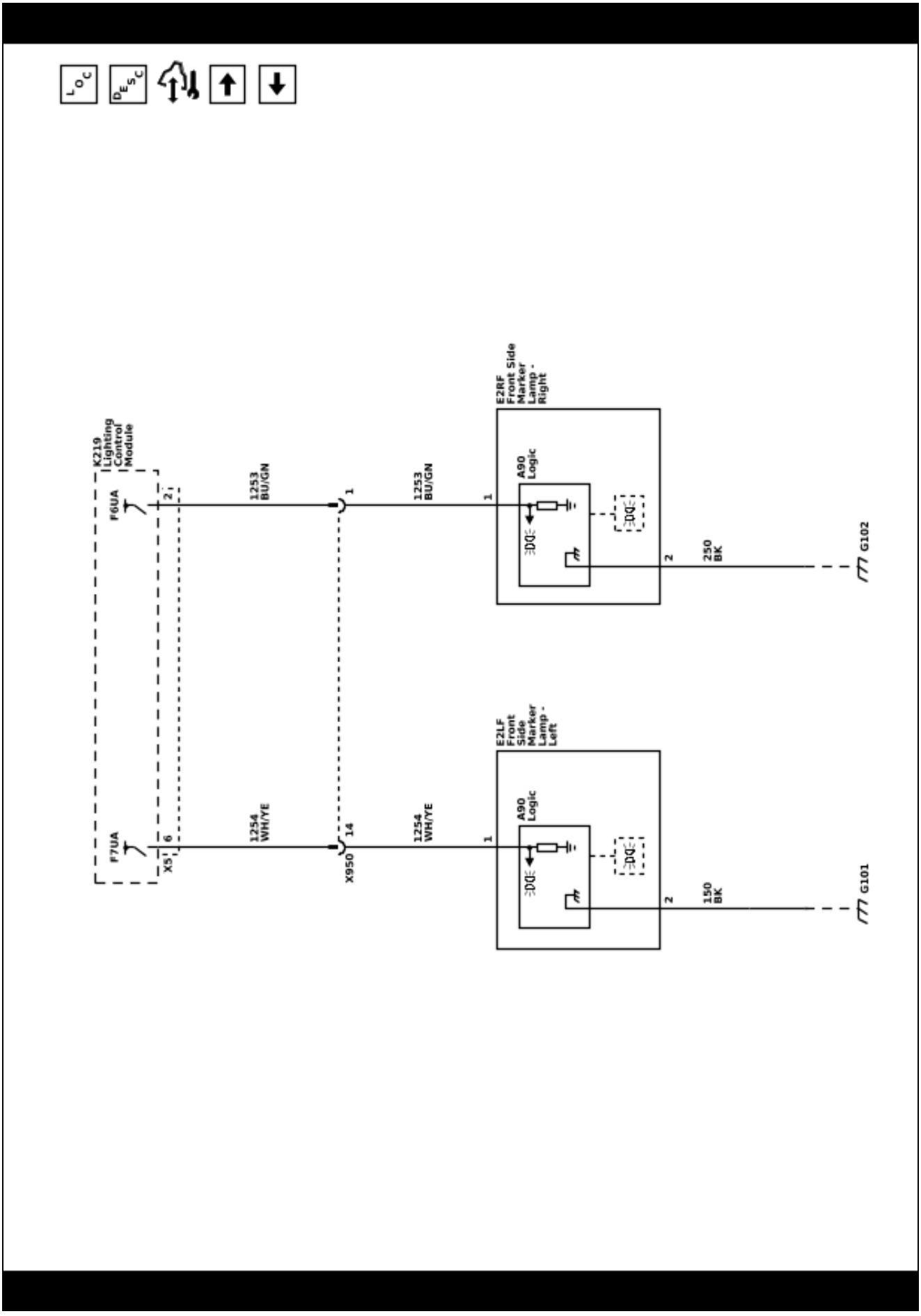
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Exterior Lights Schematics (Front Turn Signals)

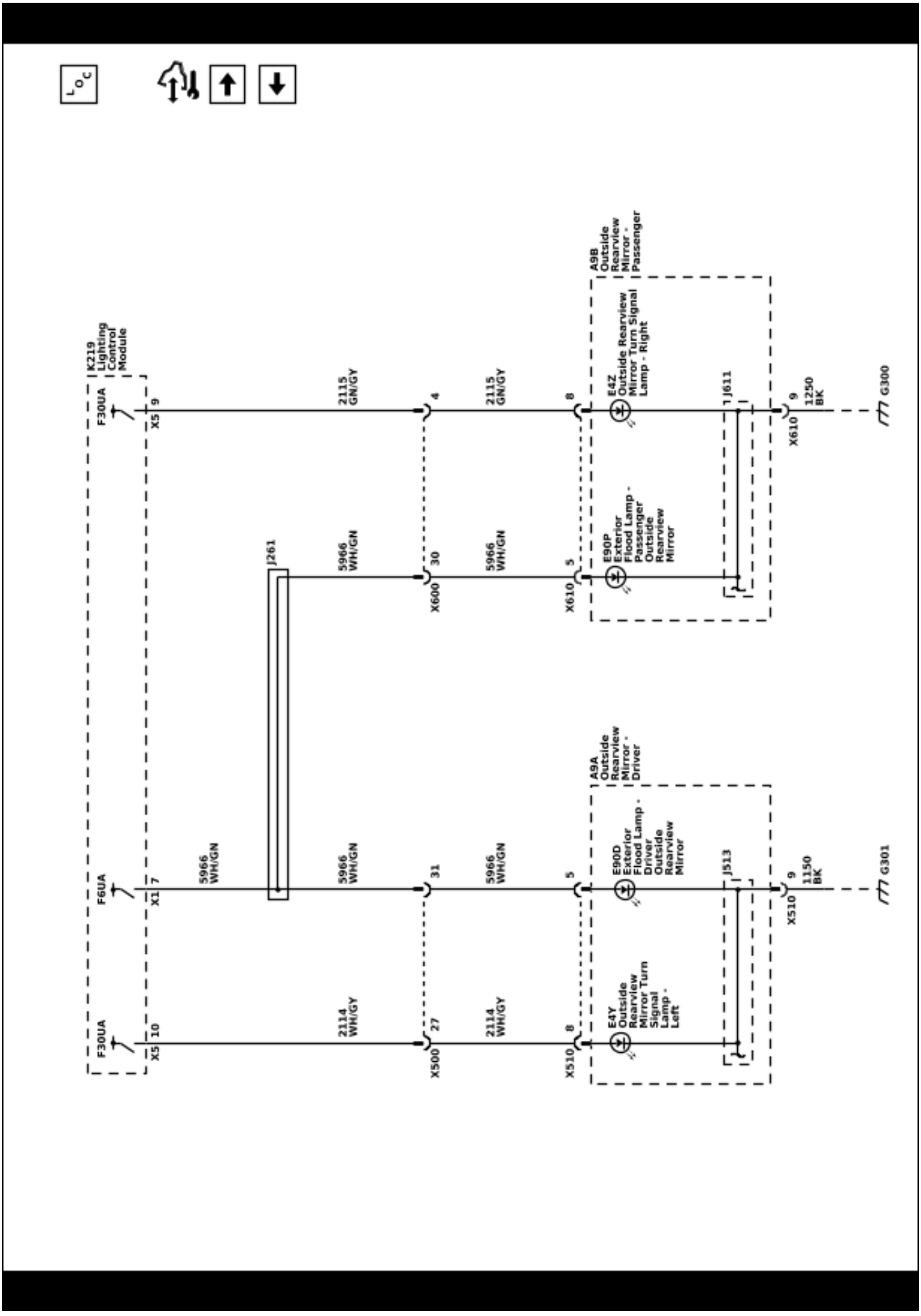


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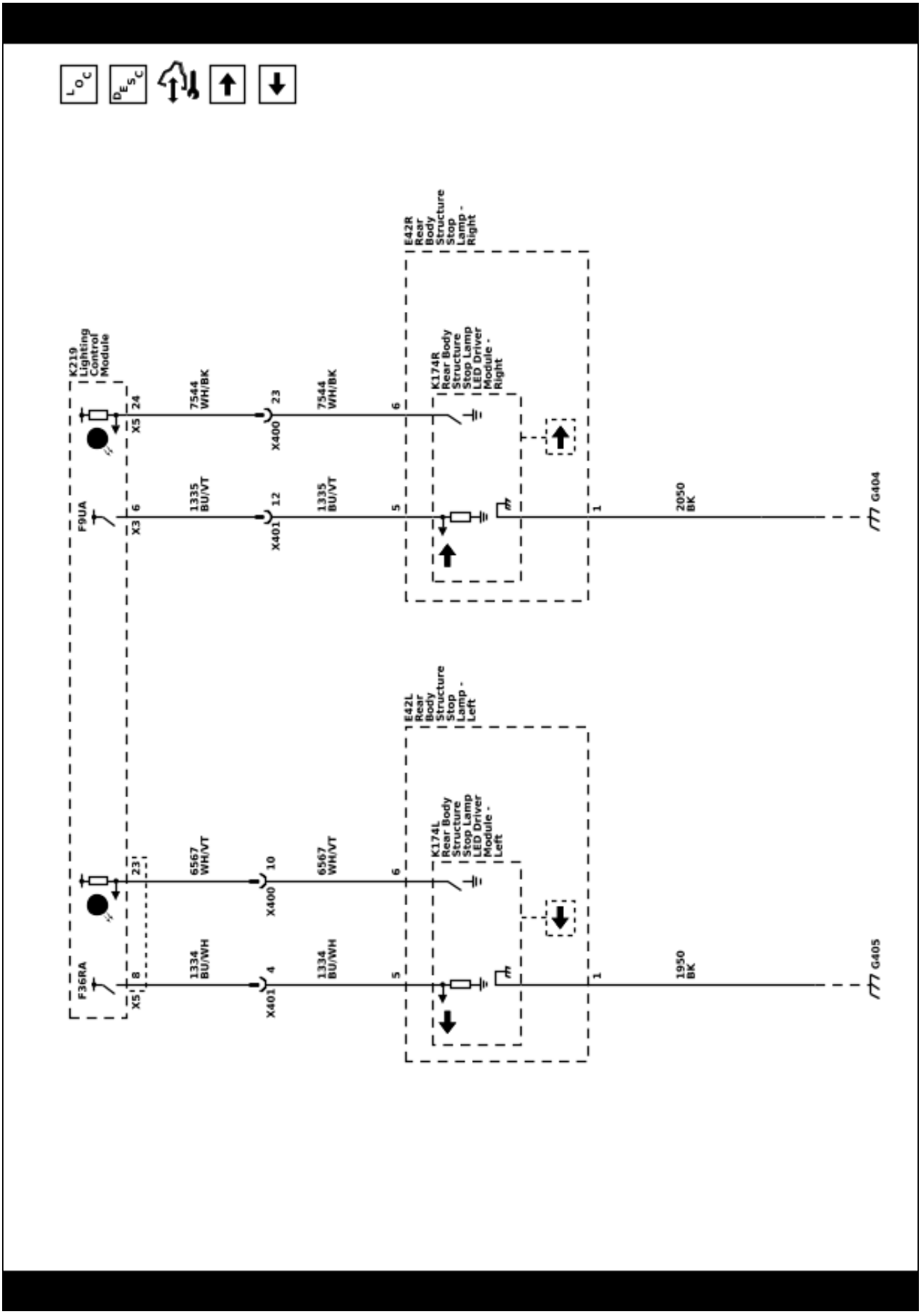
Exterior Lights Schematics (Front Side Marker Lamps - Left and Right Front)



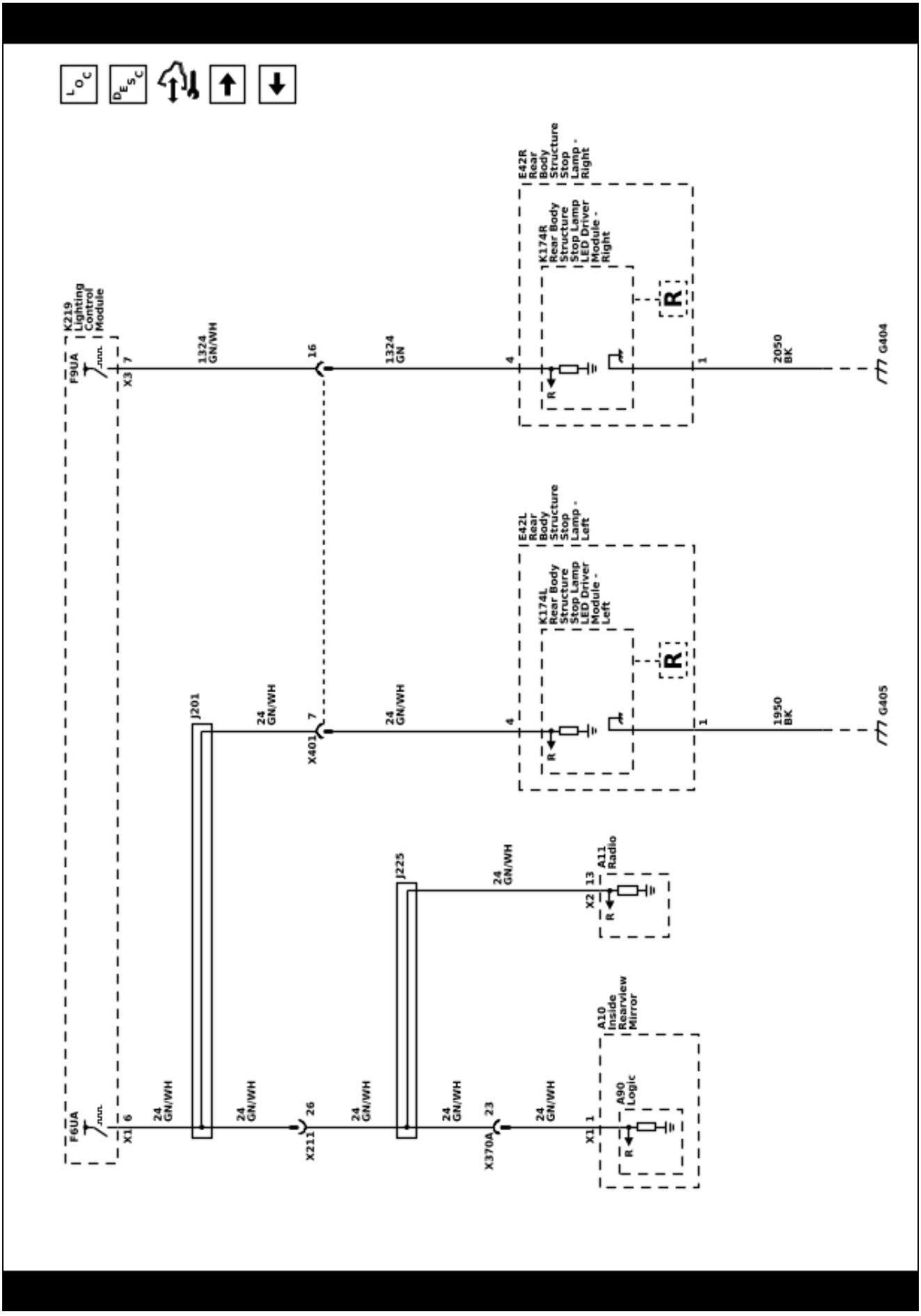
Exterior Lights Schematics (Outside Rearview Mirror Lamp (DXR / DW6))



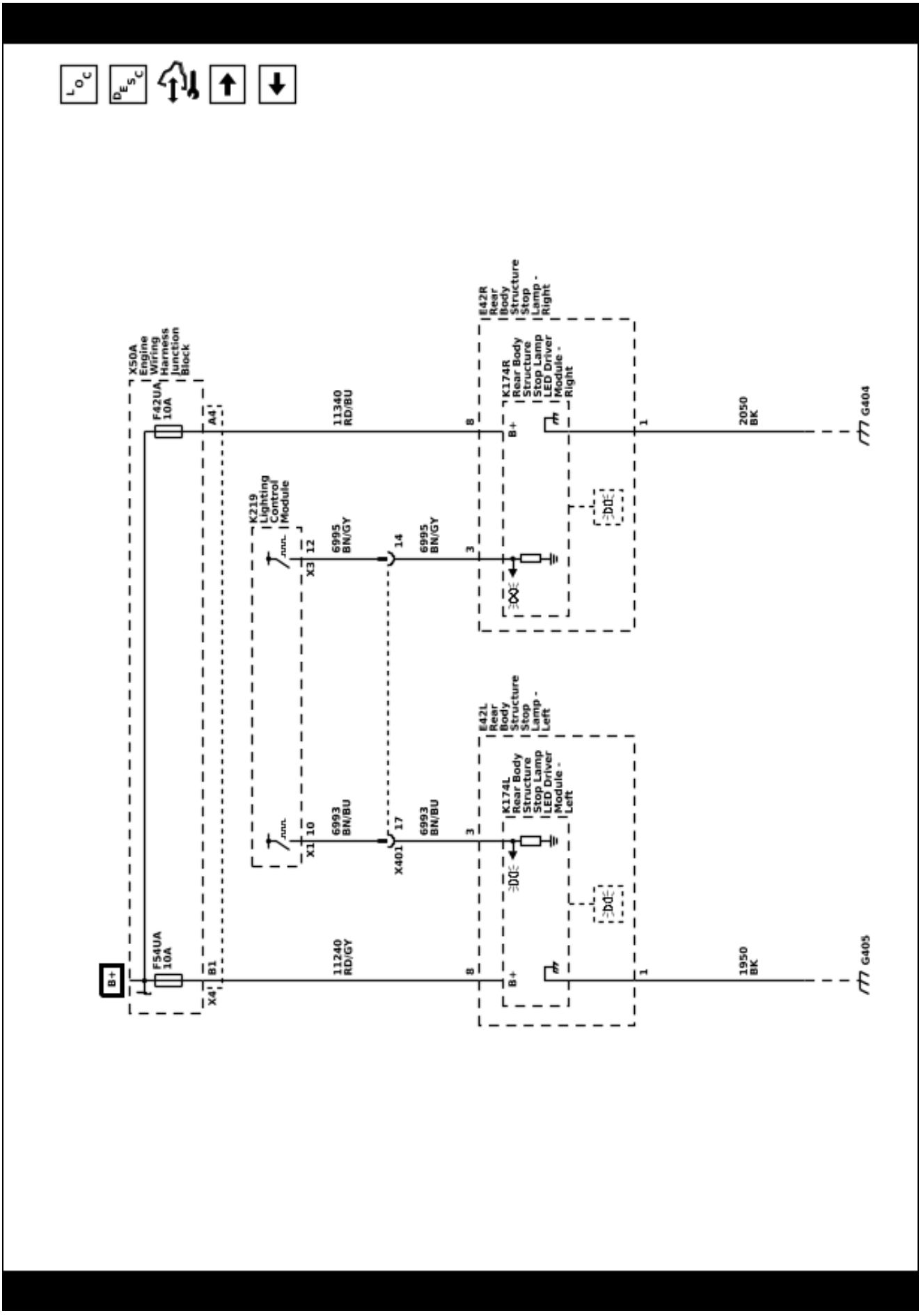
Exterior Lights Schematics (Turn Signals - Rear)



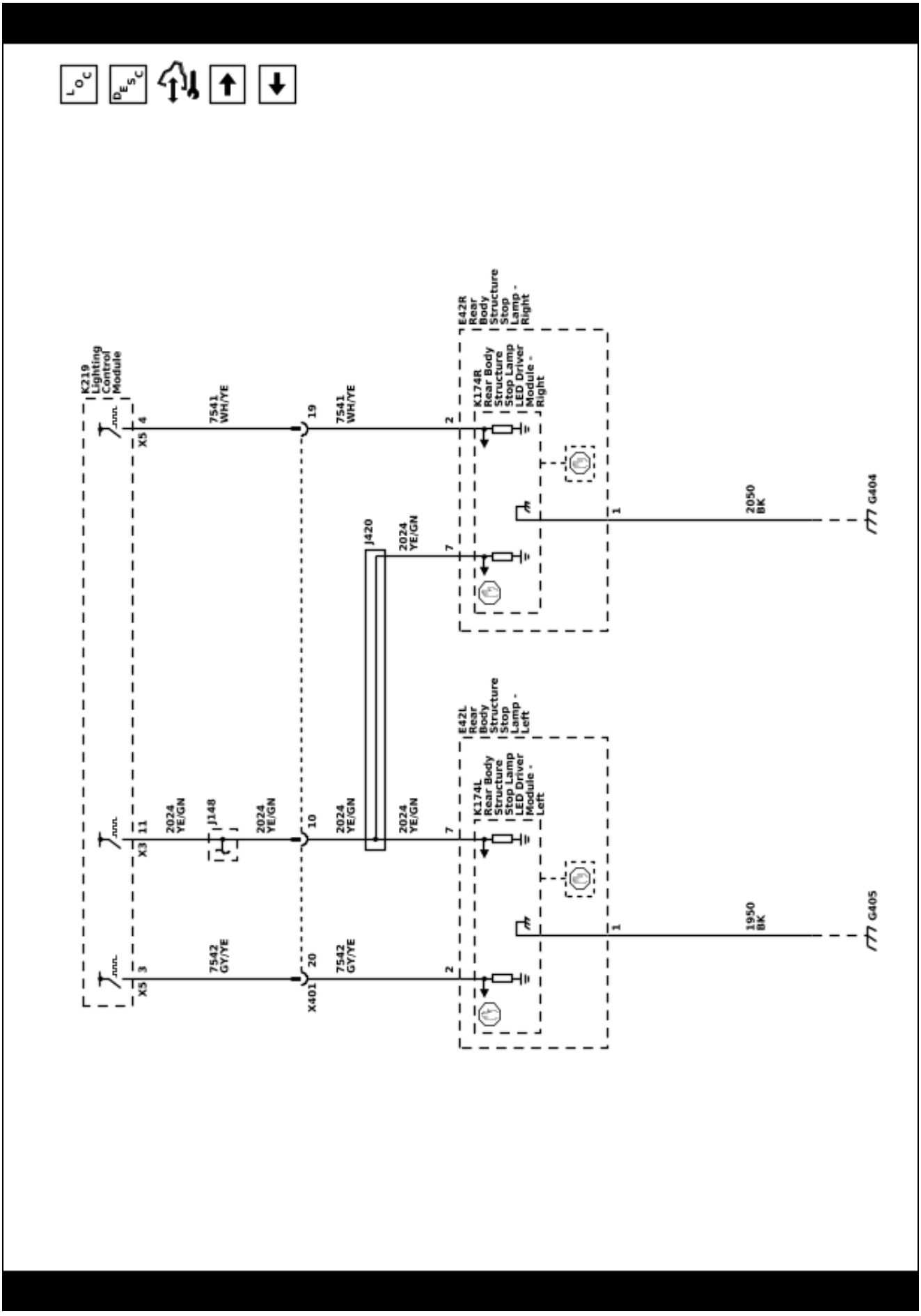
Exterior Lights Schematics (Backup Lamps)



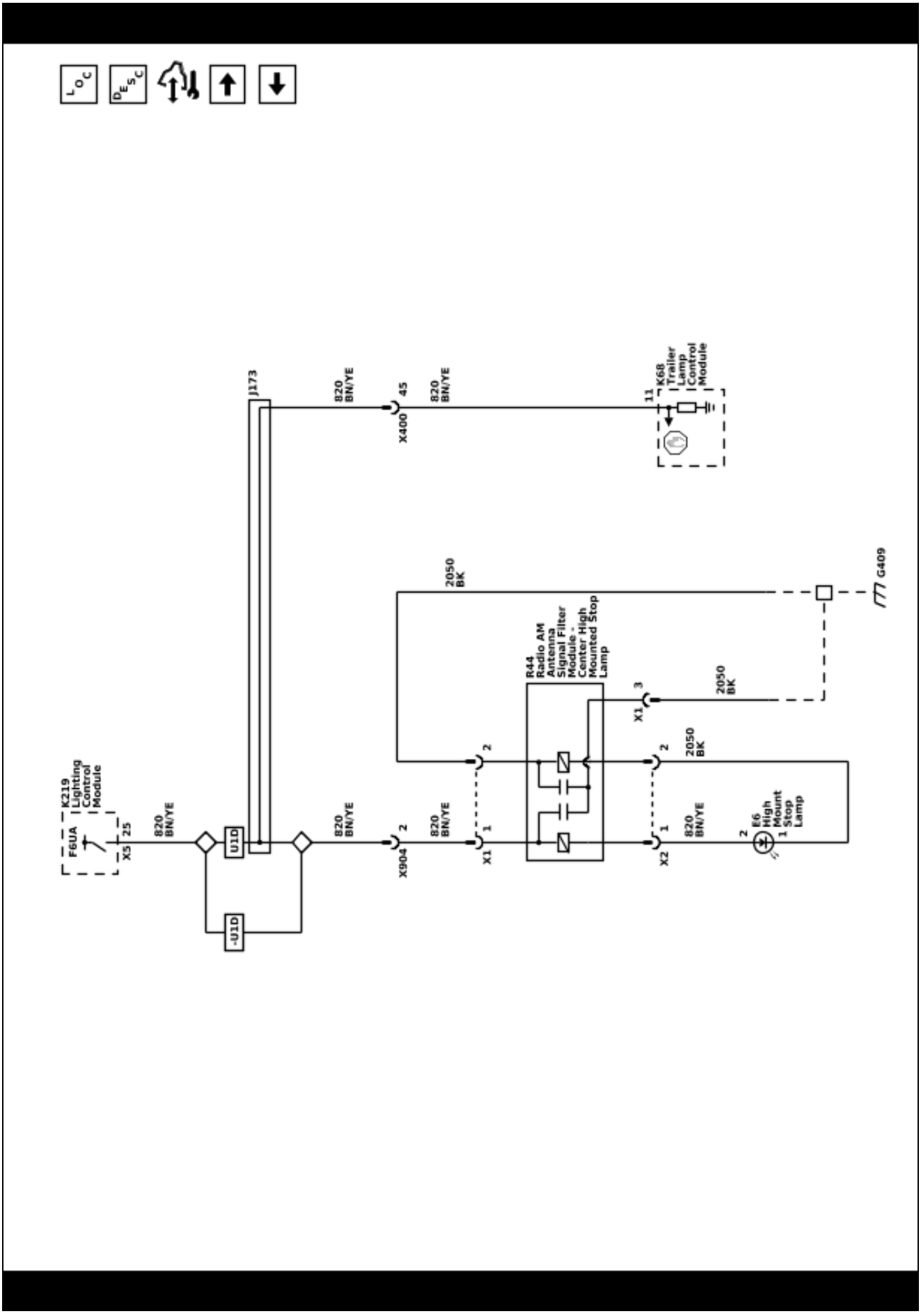
Exterior Lights Schematics (Park Lamps - Rear)



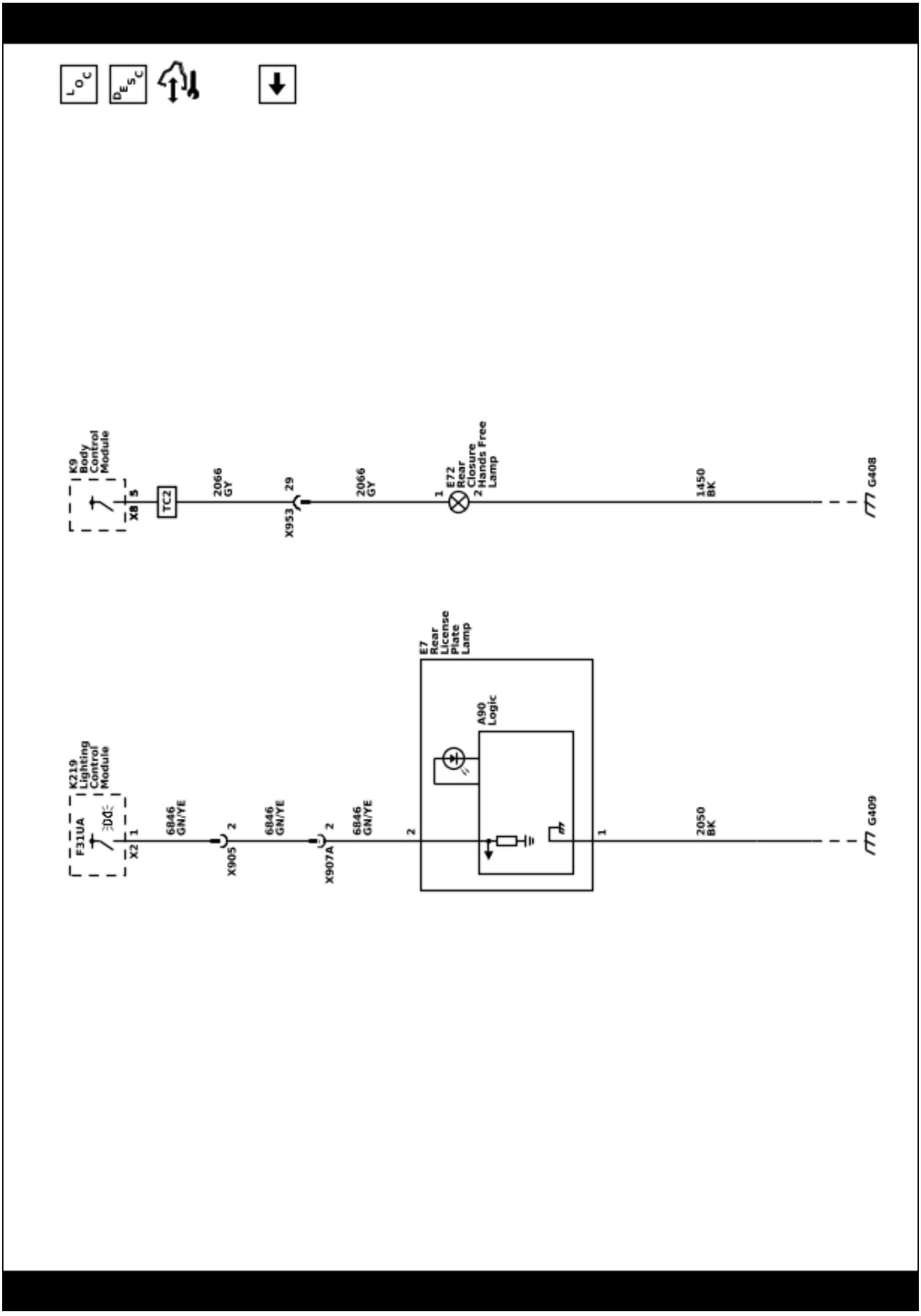
Exterior Lights Schematics (Stop Lamps)



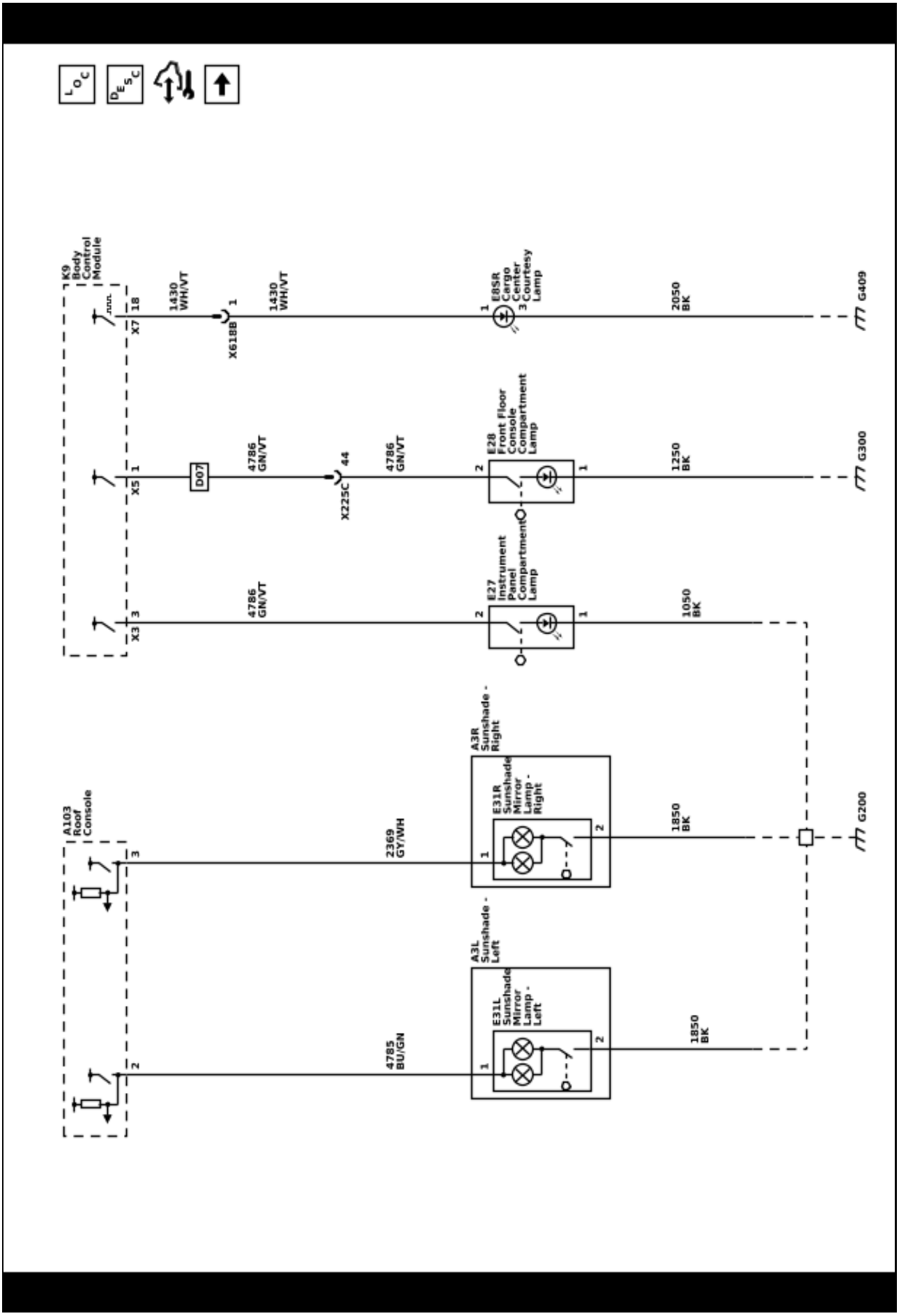
Exterior Lights Schematics (High Mounted Stop Lamp)



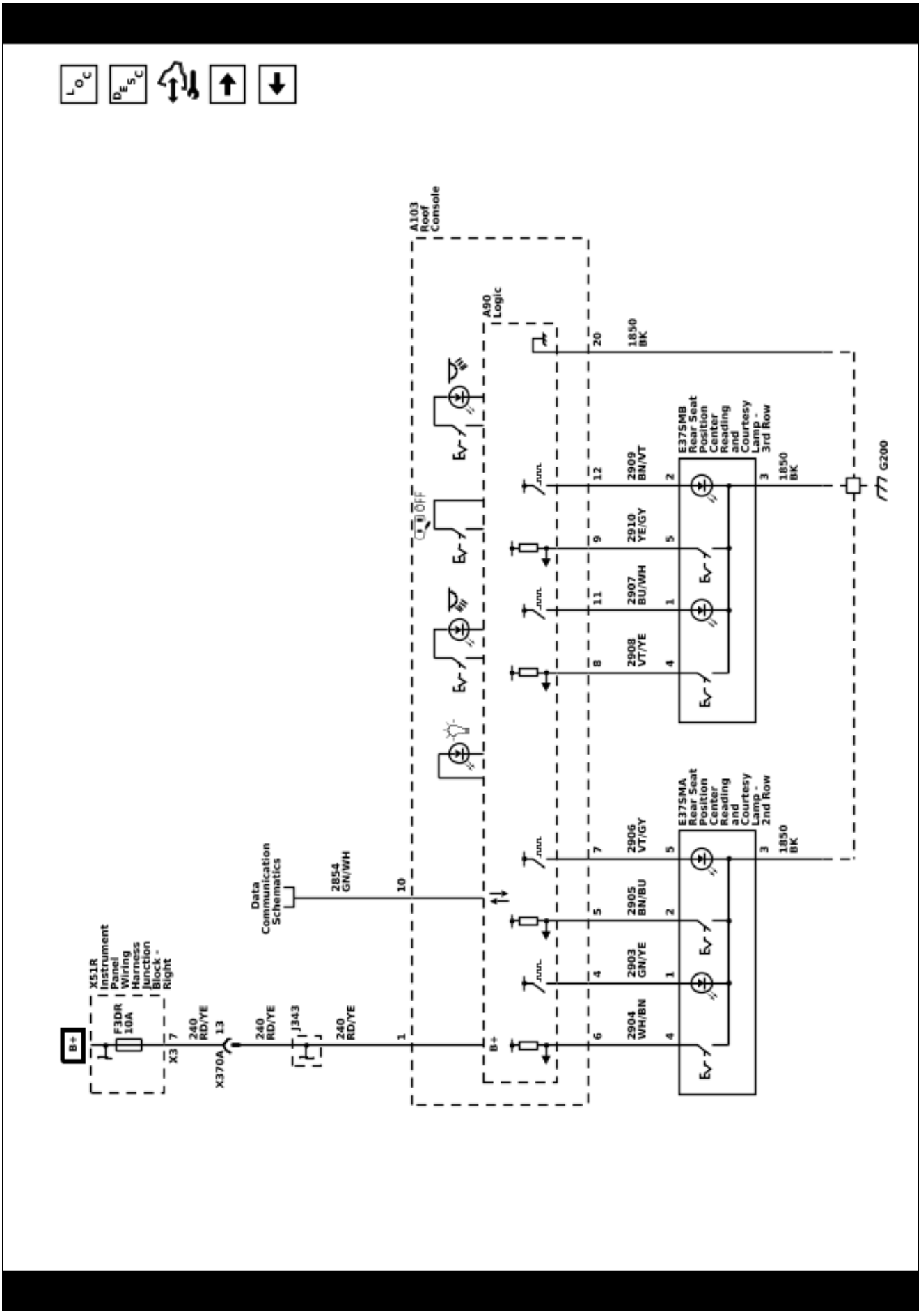
Exterior Lights Schematics (License Plate and Hands-Free Liftgate Lamps)



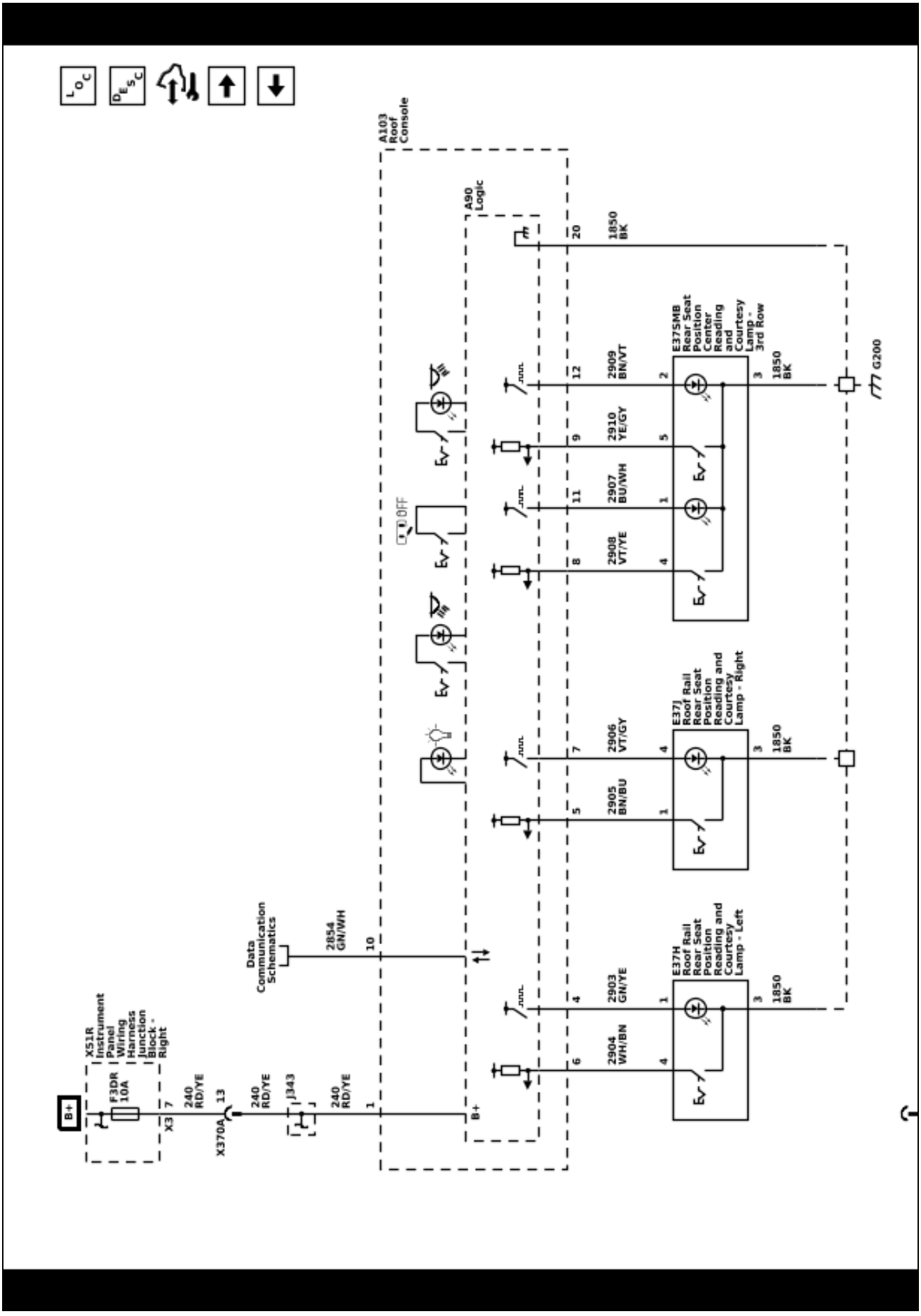
Interior Lights Schematics (Sunshades, Floor Console Compartment, Instrument Panel Compartment and Cargo Lights)



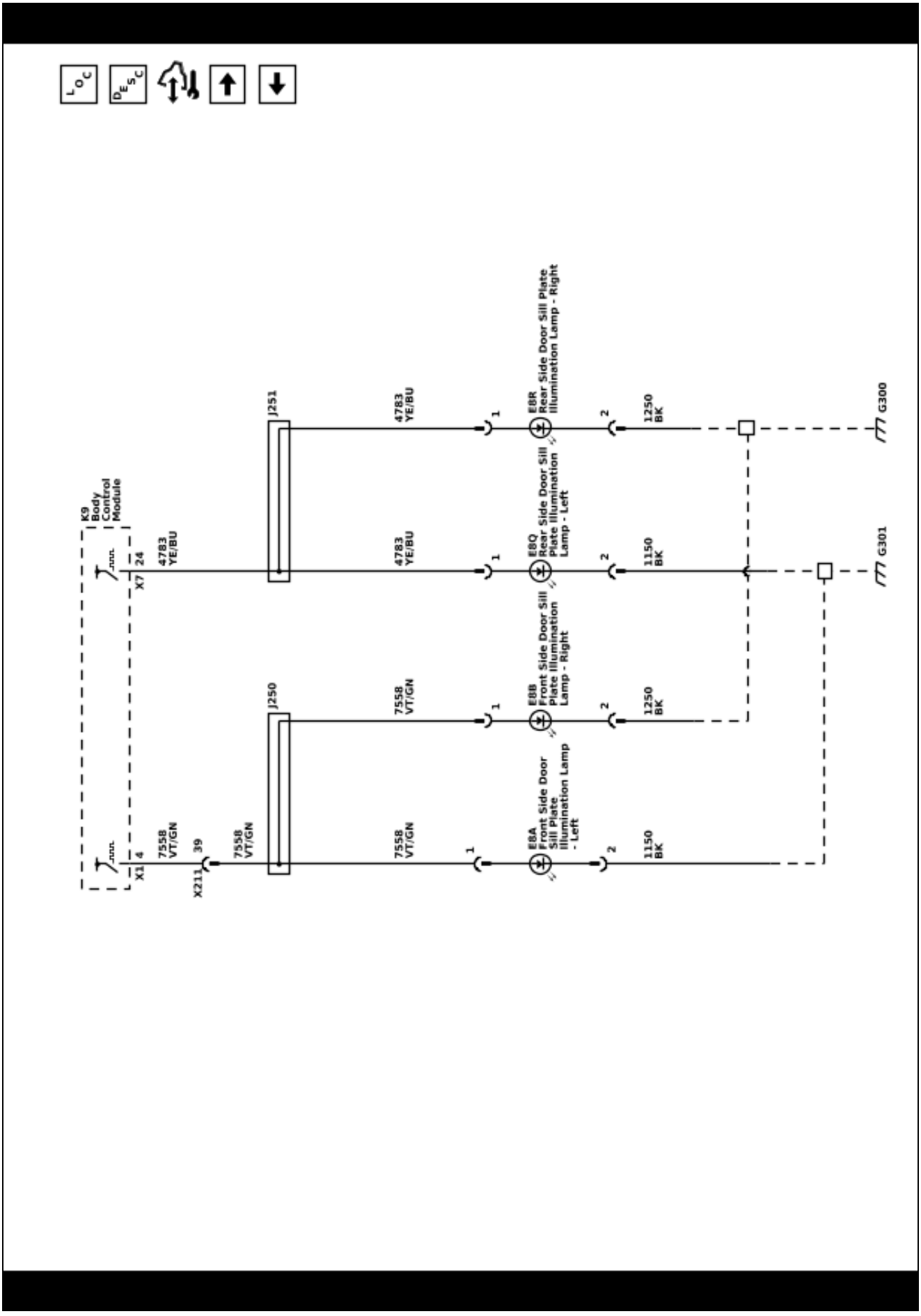
Interior Lights Schematics (Roof Console and Reading/Courtesy Lamps (- C3U))



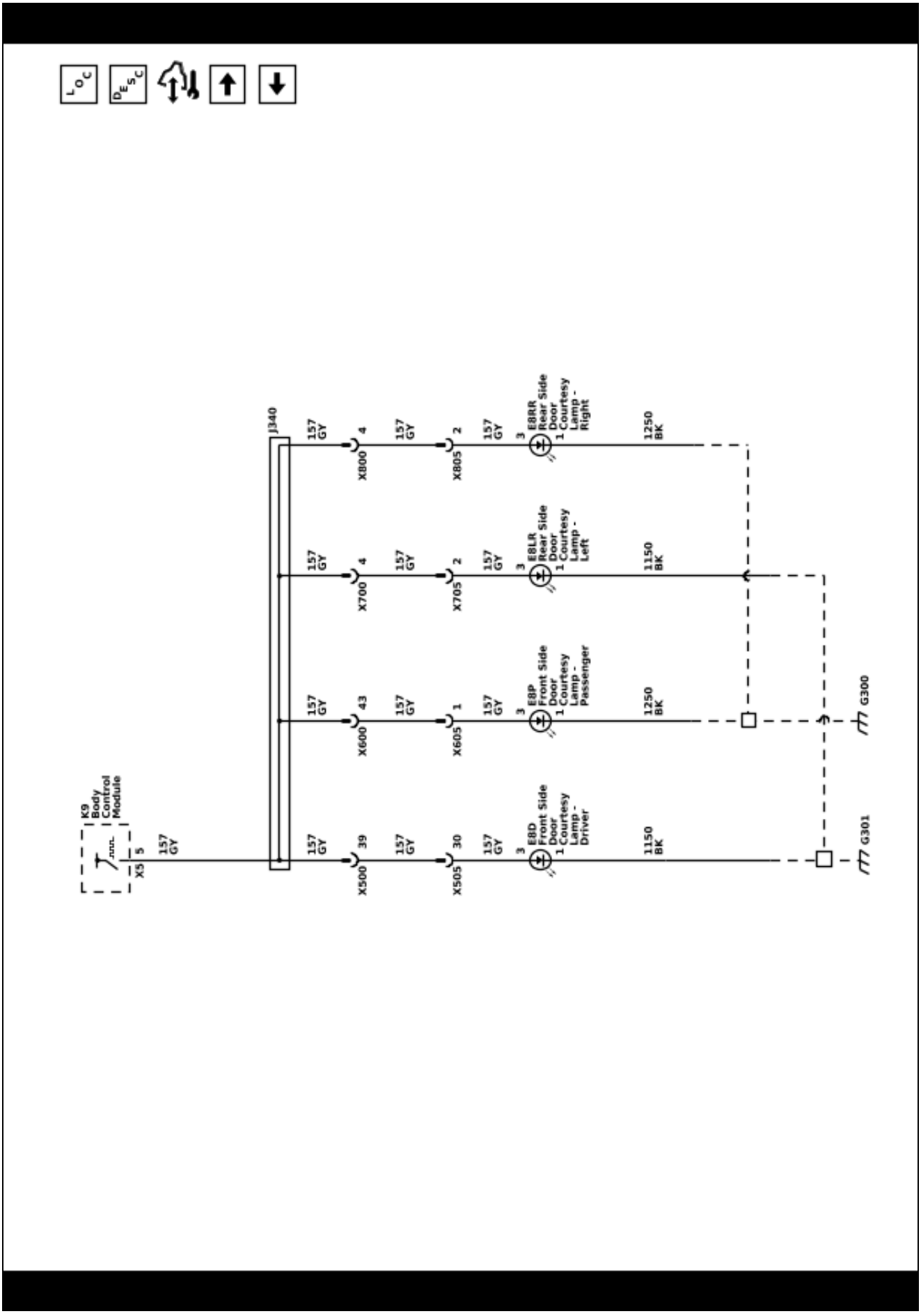
Interior Lights Schematics (Roof Console and Reading/Courtesy Lamps (C3U))



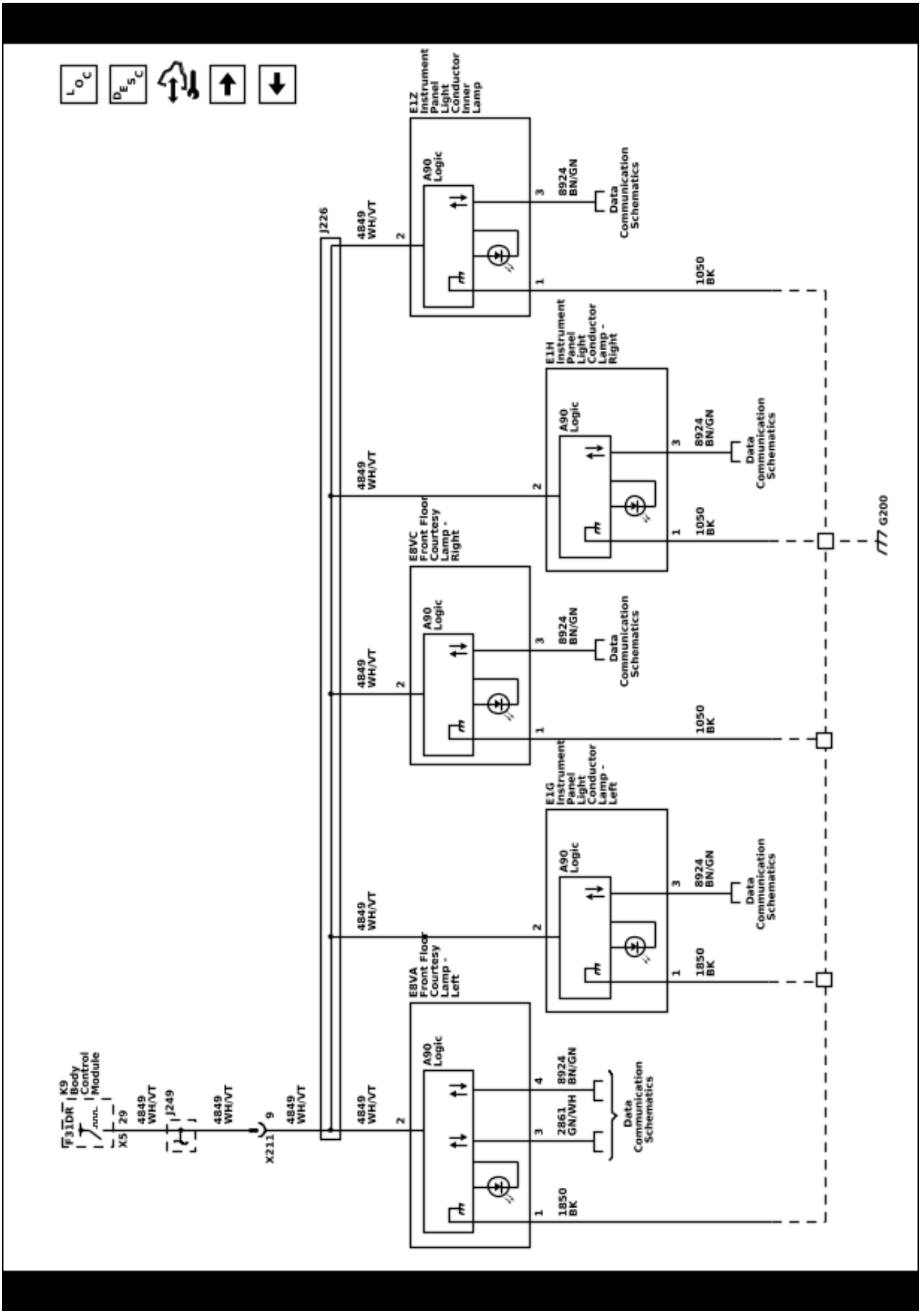
Interior Lights Schematics (Door Sill Plates Lamps (B7G))



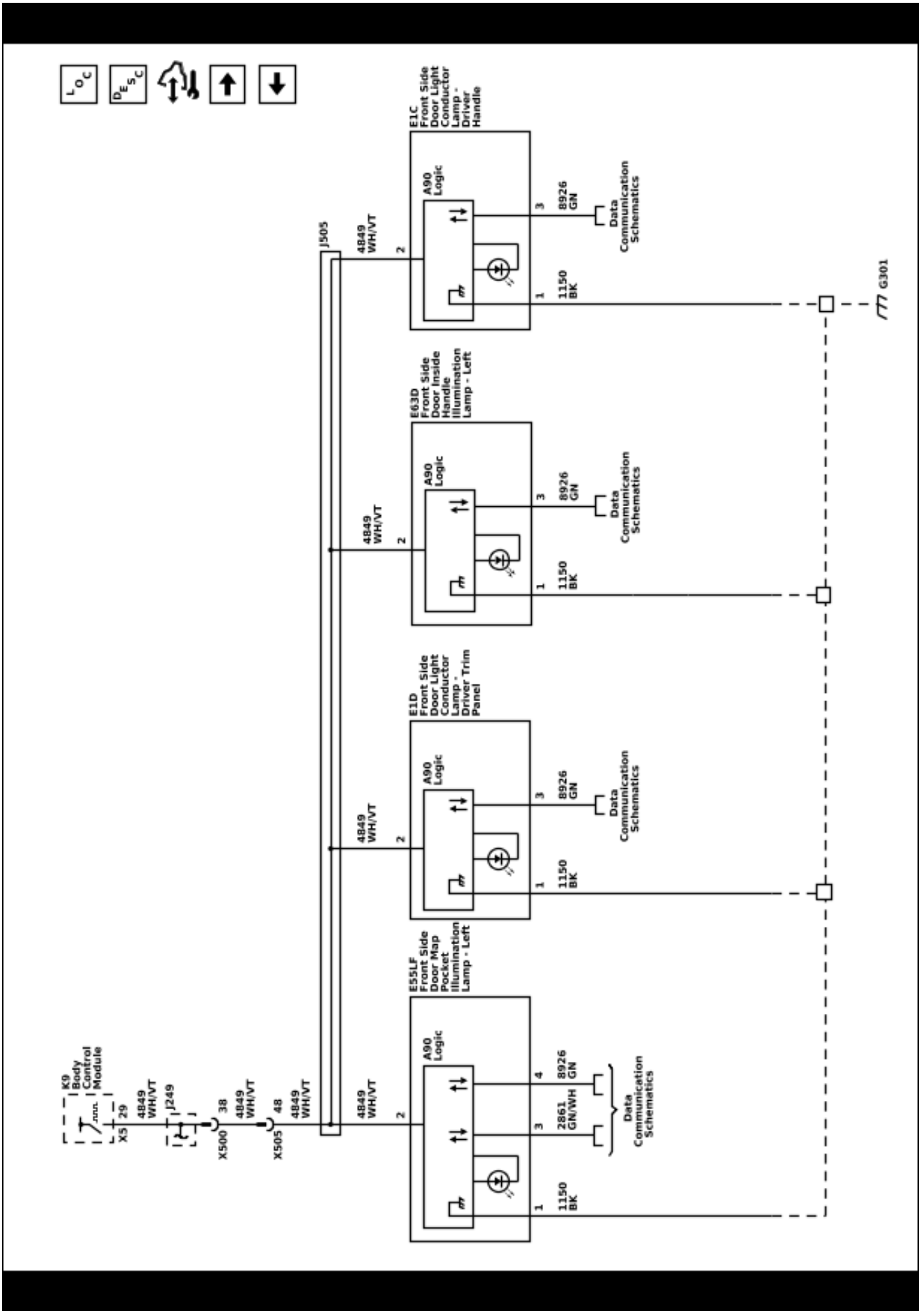
Interior Lights Schematics (Door Courtesy Lamps)



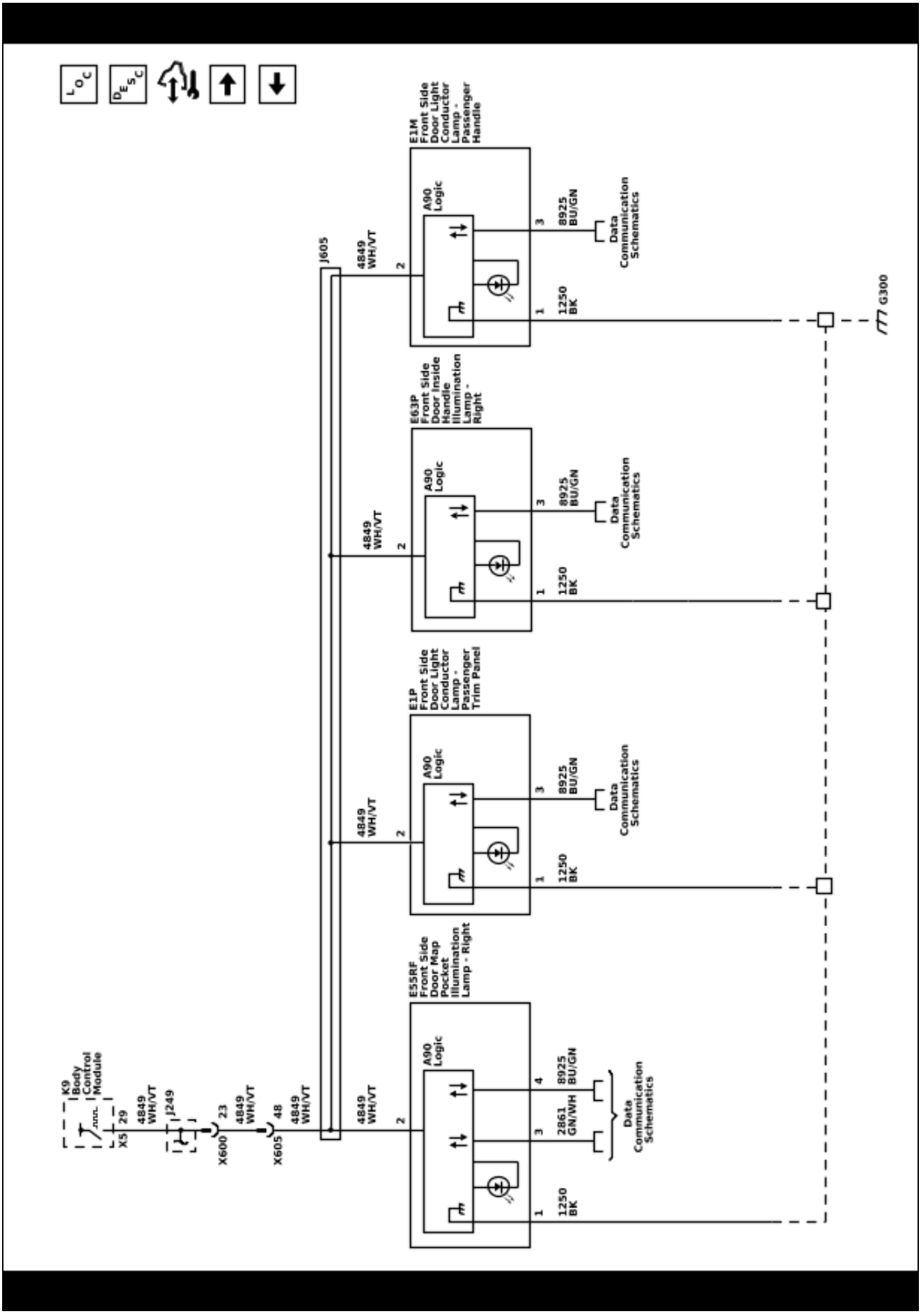
Interior Lights Schematics (Instrument Panel and Front Courtesy Lamps)



Interior Lights Schematics (Driver Door Lamps)

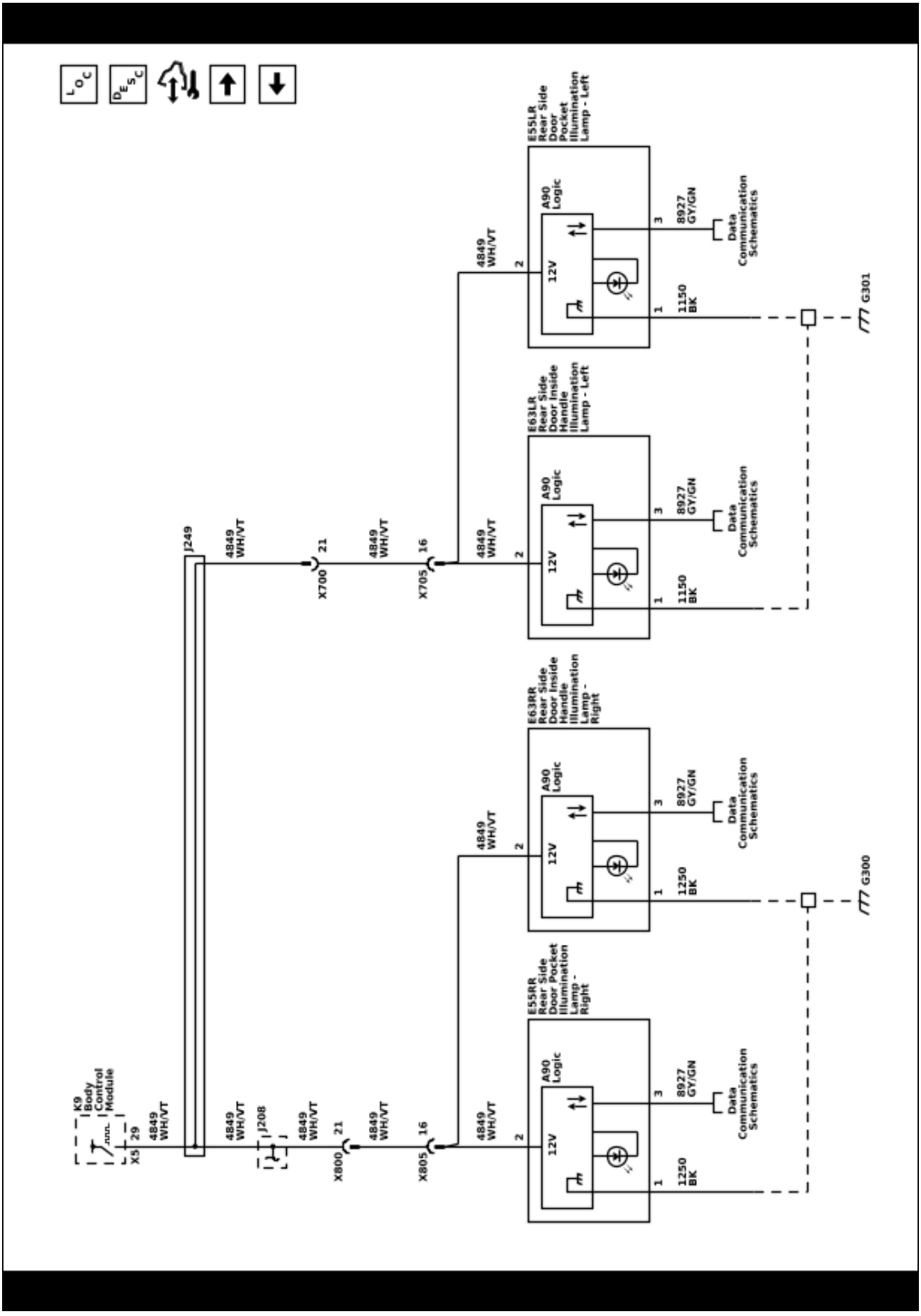


Interior Lights Schematics (Passenger Door Lamps)

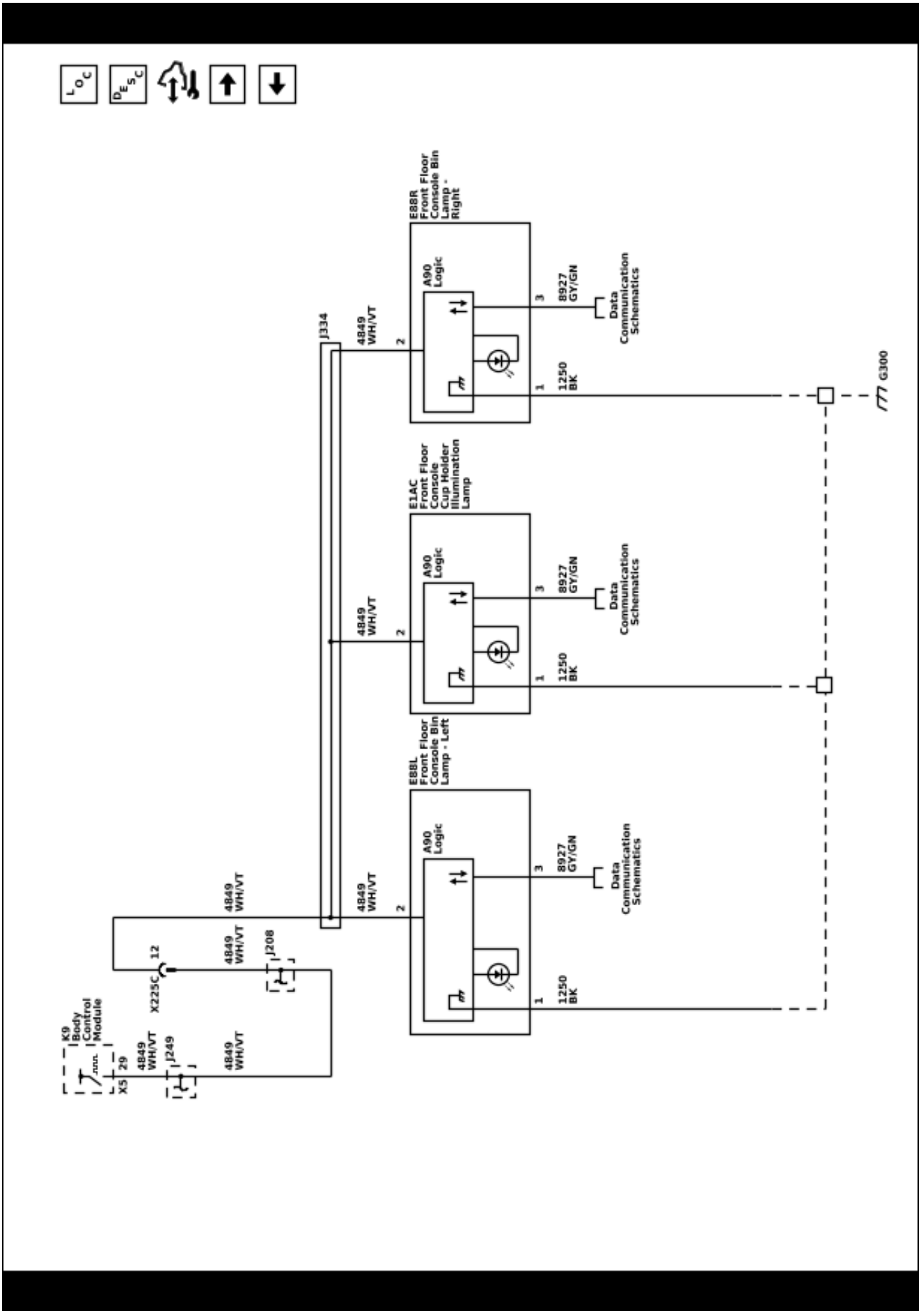


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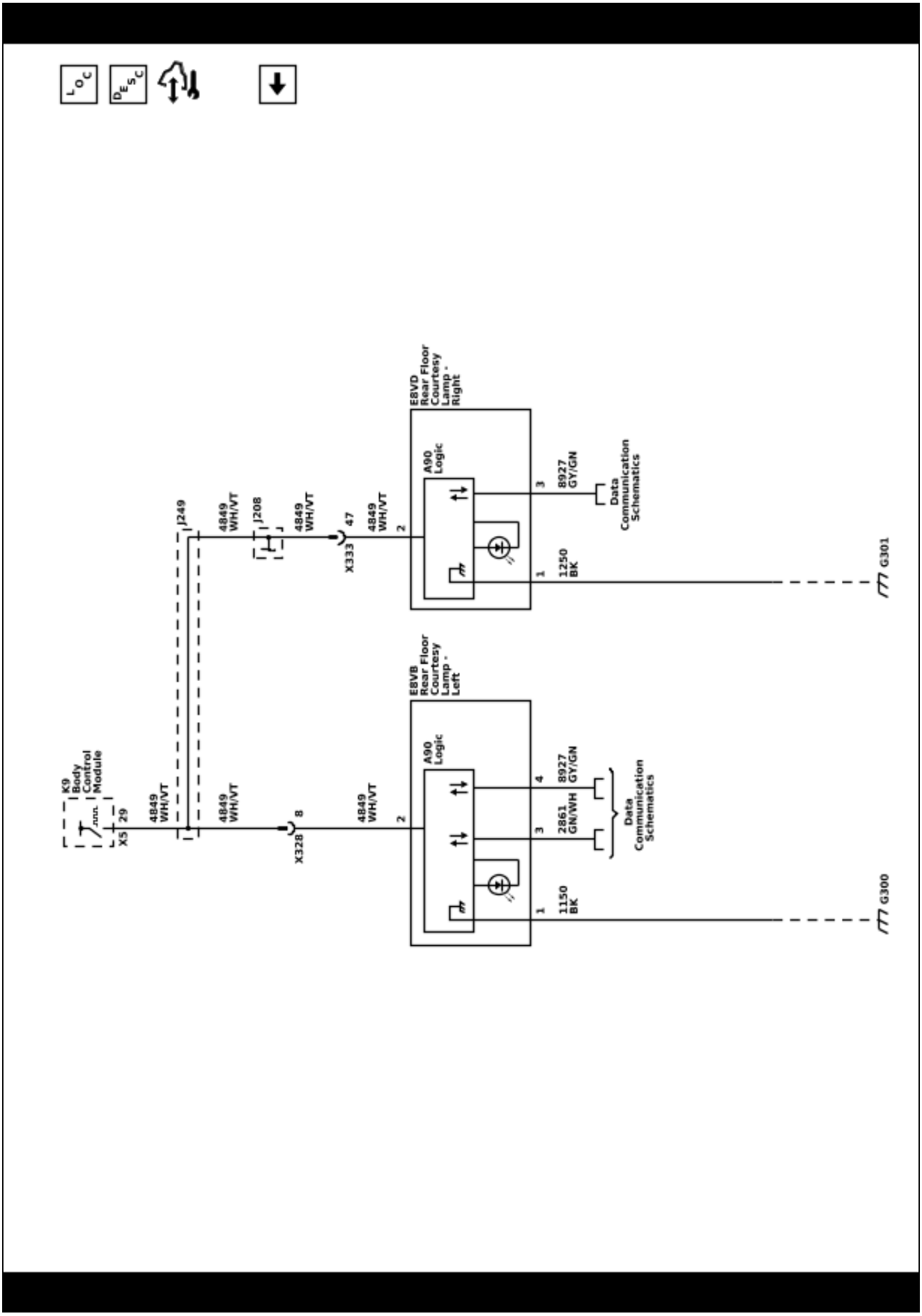
Interior Lights Schematics (Left and Rear Doors Lamps)



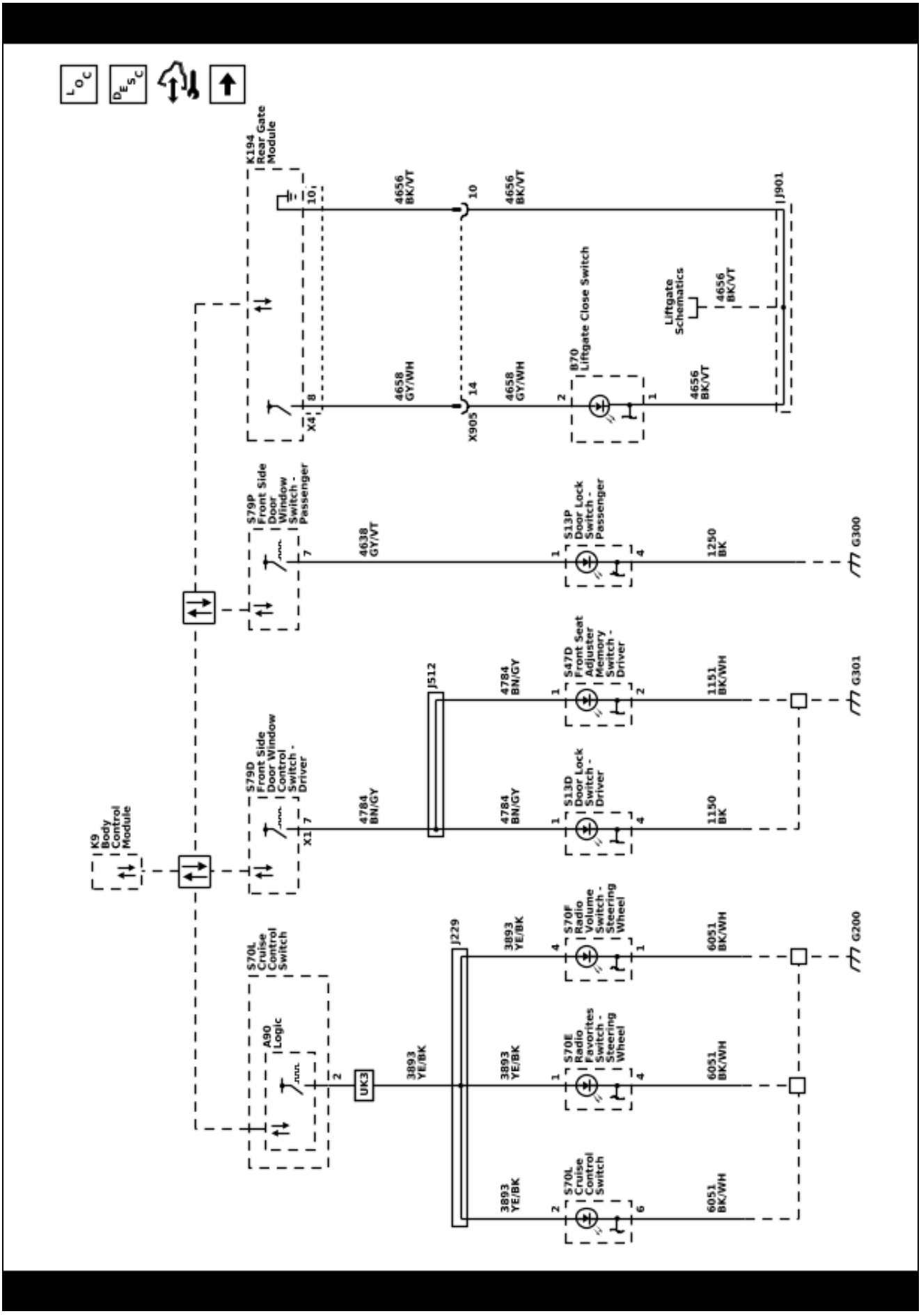
Interior Lights Schematics (Floor Console Lamps)



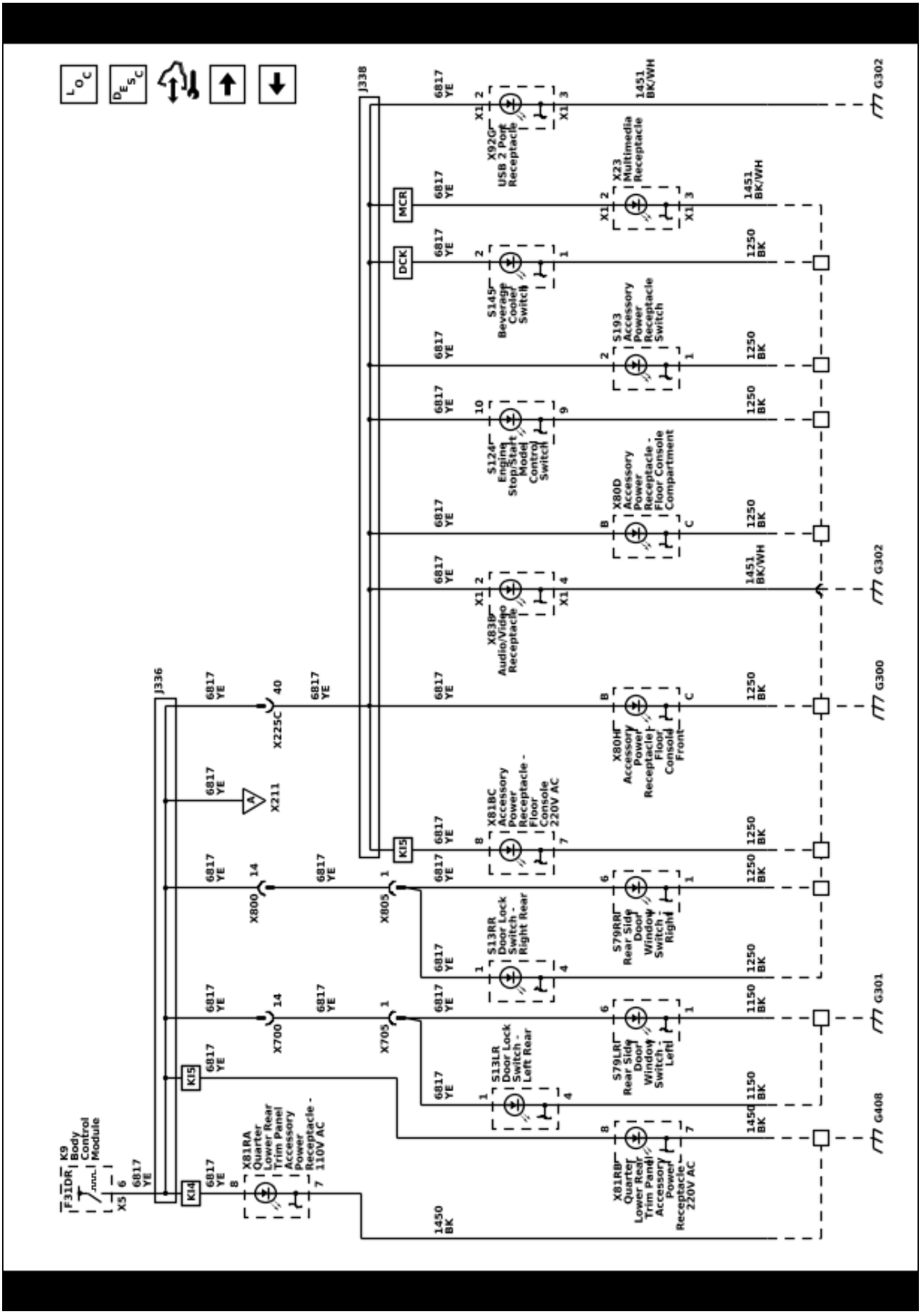
Interior Lights Schematics (Rear Floor Courtesy Lamps)



Interior Lights Dimming Schematics (Serial Data Dimming)

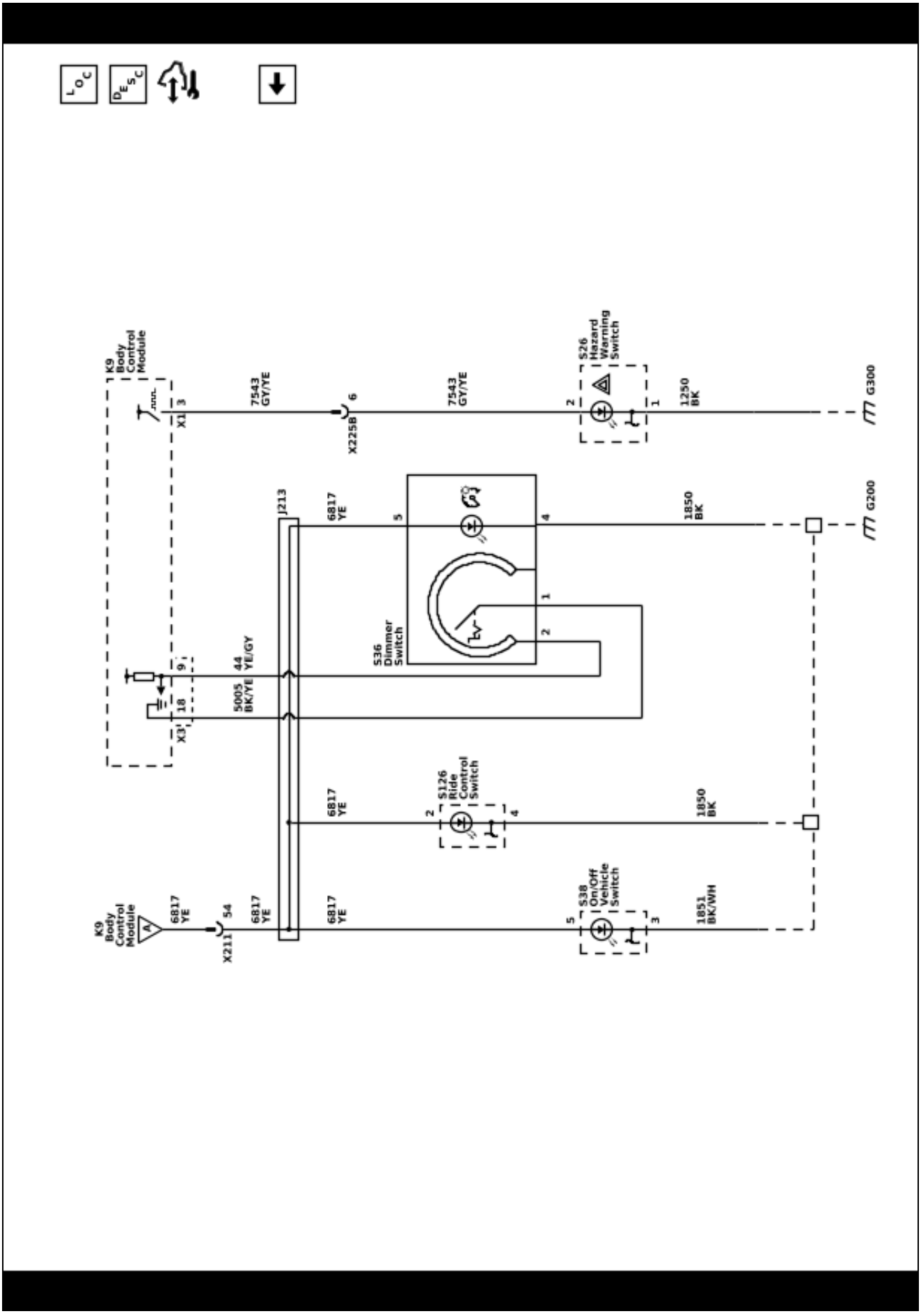


Interior Lights Dimming Schematics (Doors and Floor Console Dimming)



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Interior Lights Dimming Schematics (Instrument Panel Dimming)



Description and Operation

Exterior Lighting Systems Description and Operation

The exterior lighting system consist of the following lamps:

- Adaptive Headlamp System (UVG)
- Backup lamps
- Daytime running lamps (DRL)
- Exterior courtesy lamps
- Front fog lamps (T40)
- Hazard warning lamps
- Headlamps
- Headlamp Leveling (TR7)
- Intellibeam – Automatic High Beam Assist (TQ5)
- Park, tail, license, and marker lamps
- Rear fog lamps (T79)
- Stop lamps
- Turn signal lamps
- Trailer lighting, refer to *Trailering Description and Operation on page 2-67* for more information.

Low Beam Headlamps

The headlamps may be turned ON in 3 different ways:

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

The K9 Body Control Module (BCM) monitors three signal circuits from the headlamp switch located on the S78 Turn Signal Switch. When the headlamp switch is in the AUTO position, the three signal circuits are unaffected (open) and the BCM relies on the B10D Sun Load and Ambient Light and Security Indicator Sensor input to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. When the headlamp switch is placed in the headlamp OFF position, the headlamp switch headlamps OFF signal circuit is grounded, indicating to the BCM that the exterior lamps should be turned OFF. With the headlamp switch in the PARK LAMPS position, the headlamp switch park lamps ON signal circuit is grounded, indicating that the park lamps have been requested. When the headlamp switch is in the HEADLAMP position, both the headlamp switch park lamps ON signal circuit and the headlamps ON signal circuit are grounded. The BCM responds to these inputs by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp low beam control circuits, illuminating the low beam headlamps. When the Lighting Control Module commands the low beam headlamps ON, the operator will notice the interior backlighting for the instrument cluster and the various other switches dim to the level of brightness selected by the instrument panel dimmer switch.

High Beam Headlamps

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

Animation Lighting

Animation lighting illuminates in the front and rear lamps of the vehicle anytime the vehicle is unlocked during dark ambient light conditions. Animation lighting is commanded on with a pulse width modulated (PWM) signal voltage from the K219 Lighting Control Module through signal circuit 2024. The front and rear lamps have a separate B+ supply voltage used for controlling the animation lighting feature.

Flash to Pass

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

Automatic Headlamp Control

The K9 Body Control Module (BCM) monitors three signal circuits from the headlamp switch located on the S78 Turn Signal Switch. When the headlamp switch is in the AUTO position, the three signal circuits are unaffected (open) and the BCM relies on the B10D Sun Load and Ambient Light and Security Indicator Sensor input to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. During automatic lamp control, the headlamps will be off during daylight conditions but will turn on when the ambient light sensor detects low ambient light conditions. The ambient light sensor is a light sensitive transistor that varies the voltage signal to the BCM. The BCM provides a 5 volt reference signal and a low reference ground to the ambient light sensor. During low light conditions the BCM will request the low beam

headlamps ON by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying pulse width modulated (PWM) voltage to both headlamp low beam control circuits, illuminating the low beam headlamps.

Automatic High Beam Control (TQ5/UVG)

Adaptive Headlamp System (UVG)

The Adaptive Headlamp System (AHS) is activated anytime the headlamp switch is in the AUTO position and the automatic high beam button on the turn signal/multifunction switch is pressed. The K9 Body Control Module (BCM) provides the turn signal/multifunction switch with a automatic high beam signal circuit. The AHS system uses data from the B174W Frontview Camera – Windshield 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 and sends this data to the K26 Headlamp Control Module through a serial data message. The headlamp control module responds by sending a serial data message to each headlamp assembly to turn off the appropriate high beam LEDs one at a time to reduce the glare coming from the high beam headlamps until the approaching vehicle is no longer seen by the frontview camera. The AHS system is turned off anytime the headlamp switch is moved out of the AUTO position.

Intellibeam – Automatic High Beam Assist (TQ5)

The Automatic High Beam Assist (AHBA) is activated anytime the headlamp switch is in the AUTO position and the automatic high beam button on the turn signal/multifunction switch is pressed. The K9 Body Control Module (BCM) provides the turn signal/multifunction switch with a automatic high beam signal circuit. The AHBA system uses data from the B174W Frontview Camera – Windshield 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 and sends this data to the K26 Headlamp Control Module through a serial data message. The headlamp control module responds by sending a private serial data message to each headlamp assembly to turn off the high beams. The headlamp assemblies respond by turning off their high beams. The AHBA system is turned off anytime the headlamp switch is moved out of the AUTO position.

Automatic High Beam 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 31 MPH (50 km/h)
- Automatic high beam indicator in the IPC is on by pressing the automatic high beam button on the turn signal/multifunction switch

Automatic High Beam Operation

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

- Ambient light level too high due to towns or twilight situations
- The vehicle's speed drops below 22 MPH (35 km/h)
- Delay

The following are conditions that will activate the automatic high beam system.

- The system detects approaching traffic headlamps
- The system detects preceding traffic tail lamps

Note: Automatic high beam assist 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 automatic high beam system.

Automatic High Beam Deactivation

- Manually operating the headlamp dimmer switch from neutral to high beam position
- Manually operating the adaptive headlamp button to the OFF position
- Automatic high beam assist is deactivated automatically when the front or rear fog lamps are turned ON

Automatic High Beam Indicator

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

Daytime Running Lamps

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

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

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

Control Module responds by applying pulse width modulated (PWM) voltage to both DRL control circuits, illuminating the DRLs. During low light conditions the Lighting Control Module will command the low beam headlamps ON.

Headlamp Leveling (TR7)

The automatic headlamp leveling system consists of the following components:

- K26 Headlamp Control Module
- E13LA Front Headlamp – Left
- E13RA Front Headlamp – Right
- (-F47) B152F Front Suspension Automatic Forward Lighting Position Sensor
- (-F47) B152R Rear Suspension Automatic Forward Lighting Position Sensor

Headlamp Leveling without F47

Each headlamp assembly contains a headlamp leveling actuator and an internal module that is controlled by the K26 Headlamp Control Module. The front and rear suspension position sensors provide the headlamp control module with suspension position information. Each sensor receives a 5 V reference, signal, and low reference circuits from the headlamp control module. The suspension position sensors are connected to the control arms of the front and rear suspension. As the vehicle travels, the suspension compresses and rebounds moving the suspension position sensor arms. This causes the signal output of the sensor to change. The headlamp control module responds to the suspension position sensors and adjusts the headlamps as needed. Each headlamp assembly performs an initialization procedure where the actuator within the headlamp assembly performs a leveling action from the nominal starting point to the maximum up position and back to the nominal position which is done after every ignition cycle. The headlamp control module communicates with the left and right headlamp assemblies through dedicated CAN serial data communication circuits.

Headlamp Leveling with F47

Each headlamp assembly contains a headlamp leveling actuator that is controlled by the K26 Headlamp Control Module. The front and rear suspension position sensors provide the K5 Automatic Level Control Module with suspension position information. Each sensor receives a 5 V reference, signal, and low reference circuits from the automatic level control module. The suspension position sensors are connected to the control arms of the front and rear suspension. As the vehicle travels, the suspension compresses and rebounds moving the suspension position sensor arms. This causes the signal output of the sensor to change. The automatic level control module responds to the suspension position sensors by sending the suspension information through serial data to the headlamp control module. The headlamp control module responds to the suspension information by sending a serial data message to each headlamp assembly to adjust the headlamps as needed. Each headlamp assembly performs an initialization procedure where the actuator within the headlamp assembly performs a leveling action from the nominal starting point to the maximum up position and back to the nominal position which is done after every ignition cycle. The headlamp control module communicates with the left and right headlamp assemblies through dedicated CAN serial data communication circuits.

Service Headlamp DIC Message

The “Service Headlamps” DIC message may come on for the following reasons:

- A circuit fault exists within the headlamp leveling system.
- A headlamp assembly has an over temperature condition.
- There is a loss of communication between the K26 Headlamp Control Module and the modules with each headlamp assembly.
- Invalid data is received from a headlamp control module.
- A fault is identified during the initialization procedure which is done after every ignition cycle.

Hazard Lamps

The hazard flashers may be activated in any power mode. The S26 Hazard Warning Switch signal circuit is momentarily grounded when the hazard switch is pressed. The K9 Body Control Module (BCM) responds to the hazard switch signal input by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by supplying battery voltage to all turn signal lamps in an ON and OFF duty cycle. When the hazard switch is activated, the BCM also sends a serial data message to the instrument cluster requesting both turn signal indicators to be cycled ON and OFF.

Park, Tail, and License Lamps

When the headlamp switch located on the S78 Turn Signal Switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the K9 Body Control Module (BCM). The BCM responds to the park lamp switch signal input by sending a serial data message to the K219 Lighting Control Module. The Lighting Control Module responds by applying battery voltage to the park lamps, tail lamps, and license lamps control circuits illuminating the park, tail, and license lamps.

Stop Lamps

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

been applied. If serial data communication is lost between all three modules, the Lighting Control Module also receives a hard wired voltage signal from the BCM to signal the brake lamps ON.

Turn Signal Lamps

Turn Signals

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

Turn Signal Outage Detection

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

Backup Lamps

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

Exterior Courtesy Lamps

The K9 Body Control Module (BCM) supplies battery voltage to each exterior door handle LED backlighting circuit, the LED lighting located under each outside rearview mirror for approach lighting, and both running board step courtesy lamps when equipped. When the keyless entry transmitter is operated to either the lock or unlock functions the LED lighting located under each outside rearview mirror, exterior door handles, and both running board steps are commanded ON for approach lighting.

Hands−Free Liftgate Sensor Lamp (TC2)

If equipped with a hands-free liftgate, a vehicle logo will be projected onto the ground near the rear bumper when:

- An RKE transmitter is detected within an area of approximately 2 m (6 ft) outside the liftgate
- A successful hands-free operation has occurred

The projected logo shows where the kicking motion is to take place. Once activated, the projected vehicle logo will remain active for one minute, unless one of these conditions is met:

- The vehicle battery is low
- The vehicle is not parked
- Hands Free Liftgate Operation is set to OFF in vehicle personalization

Projected logo will not be provided to the customer for this RKE transmitter again for an approach until it has not been detected in the authentication zone for at least 20 s. If an RKE transmitter is again detected within approximately 2 m (6 ft) of the liftgate, or another hands-free operation has been detected, the one-minute timer will be reset. If the vehicle remains parked for an extended period of time with no RKE transmitter use or Keyless Access operation, the projected vehicle logo will be disabled. The projected logo will be re-enabled when:

- Any button is pressed on the RKE transmitter
- One or all vehicle doors are opened and closed
- The liftgate is closed when all doors are opened

The projected logo will not work for a single RKE transmitter when a transmitter:

- Has been left within approximately 5 m (15 ft) of the liftgate for several minutes
- Has been left inside the vehicle and all vehicle doors are closed
- Has approached the area outside of the liftgate several times in a short period of time

Battery Run Down Protection/ Inadvertent Power

To provide battery run down protection, the exterior lamps will be deactivated automatically under certain conditions. The K9 Body Control Module (BCM) monitors the state of the headlamp switch located on the S78 Turn Signal Switch. If the headlamp switch is in the park or headlamp position when the ignition switch is ON and then the ignition switch is placed in the OFF position, the BCM initiates a 10 minutes timer. At the end of the 10 minutes, the BCM will send a serial data message to the K219 Lighting Control Module to deactivate the exterior lamps to prevent total battery discharge. This feature will be cancelled if any power mode other than OFF becomes active.

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

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

Interior Lighting Systems Description and Operation

Interior Lamps

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

- Dome/reading lamps
- Door Sill Plate Lamps (B7G/S0M)
- Instrument panel compartment lamp
- Instrument panel courtesy lamps
- Overhead console accent lamp
- Rear compartment courtesy lamp
- Sunshade mirror lamps

Dome Lamps

The dome lamps are controlled by door ajar inputs to the K9 Body Control Module (BCM). When any door is opened, the door ajar switch contacts close and the BCM receives a door-open input. The BCM 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. In the event that the dome lamp were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position, the BCM will deactivate the dome lamp control circuit to prevent total battery discharge. The dome lamps will turn OFF using the theater dimming feature when controlled by the BCM.

Door Sill Plate Lamps (B7G/S0M)

The Ambient Light Sensor provides a voltage signal that will vary between 0.2 and 4.9 V depending on outside lighting conditions. The door sill illumination lamps (B7G/S0M) become illuminated anytime the ignition is on during dark ambient light conditions.

Keyless Entry Interior Illumination

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

Instrument Panel Compartment Lamp

The inadvertent power supply voltage circuit from the K9 Body Control Module (BCM) provides battery voltage to the instrument panel compartment (glove box) lamp. When the instrument panel compartment is opened, the instrument panel compartment lamp switch contacts close providing a path to ground and the instrument panel compartment lamp illuminates. If the operator inadvertently leaves the instrument panel compartment door open with the instrument panel compartment lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed to prevent total battery discharge.

Reading Lamps

The inadvertent power supply voltage circuit from the K9 Body Control Module (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 to prevent total battery discharge.

Rear Compartment Courtesy Lamps

When the rear compartment is opened, the rear compartment lid latch opens providing a rear compartment open input signal to the K9 Body Control Module (BCM). The BCM responds by applying battery voltage to the rear compartment courtesy lamp control circuit illuminating the rear compartment courtesy lamps. If the operator inadvertently leaves the rear compartment lid open, the BCM will turn all interior lamps OFF after 10 minutes has passed to prevent total battery discharge.

Sunshade Mirror Lamp

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

Interior Lamps Dimming

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

- Audio/Video Input Adapter
- Door lock switch – driver
- Door lock switch – passenger
- Door handle switch – driver interior
- Door handle switch – passenger interior
- Hazard switch
- Hood/liftgate release switch
- HVAC control head assembly
- Ignition mode switch
- Instrument panel dimmer switch
- Multifunction switch – center console

- Multifunction switch – instrument panel
- Outside rearview mirror switch
- Park brake switch
- Radio
- Rear compartment lid unlatch switch
- Seat memory switch – driver
- Seat memory switch – passenger
- Steering wheel controls switch – left
- Steering wheel controls switch – radio presets
- Steering wheel controls switch – radio volume
- Window switch – driver
- Window switch – passenger

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

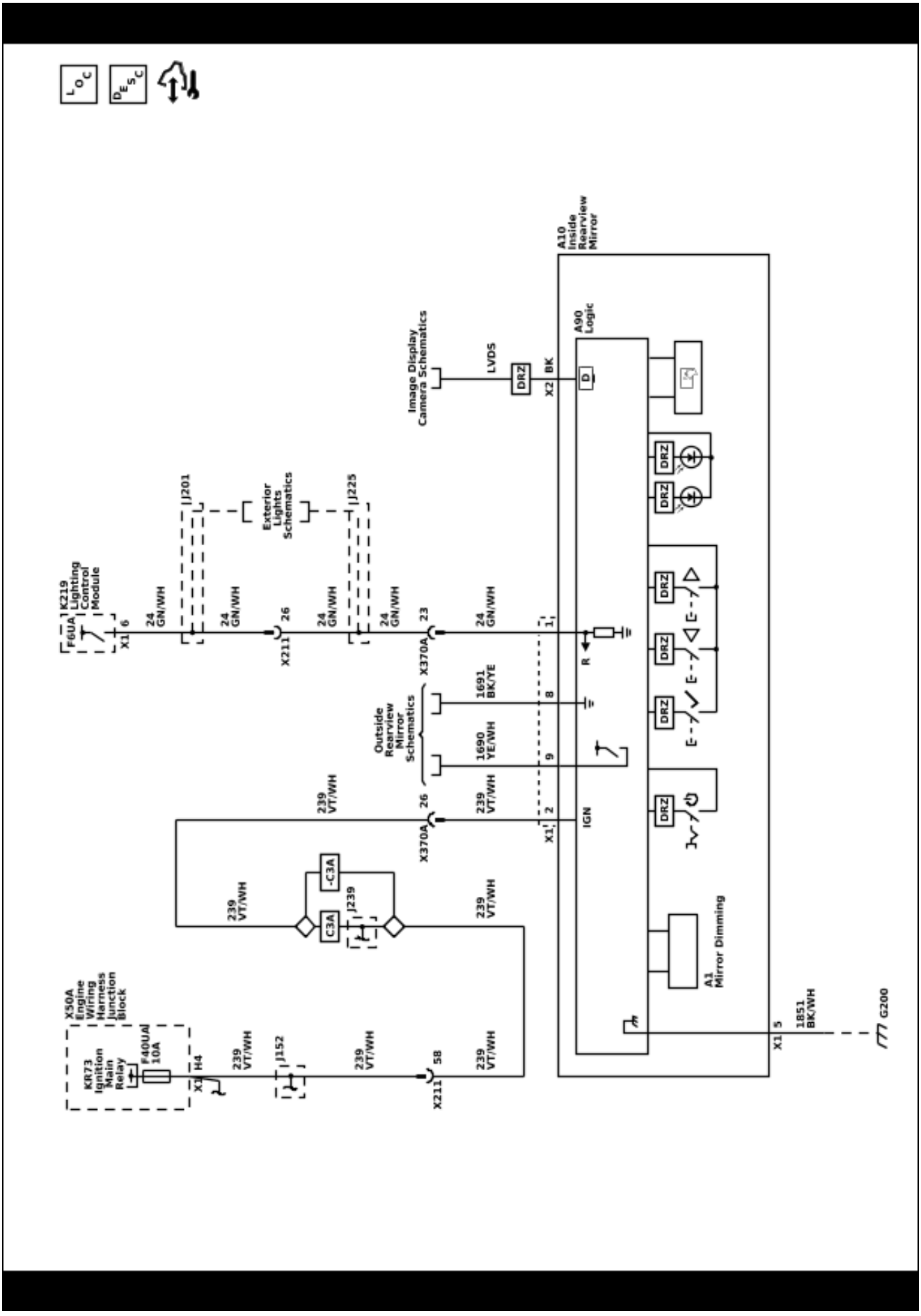
Battery Rundown Protection/ Inadvertent Power

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

Mirrors

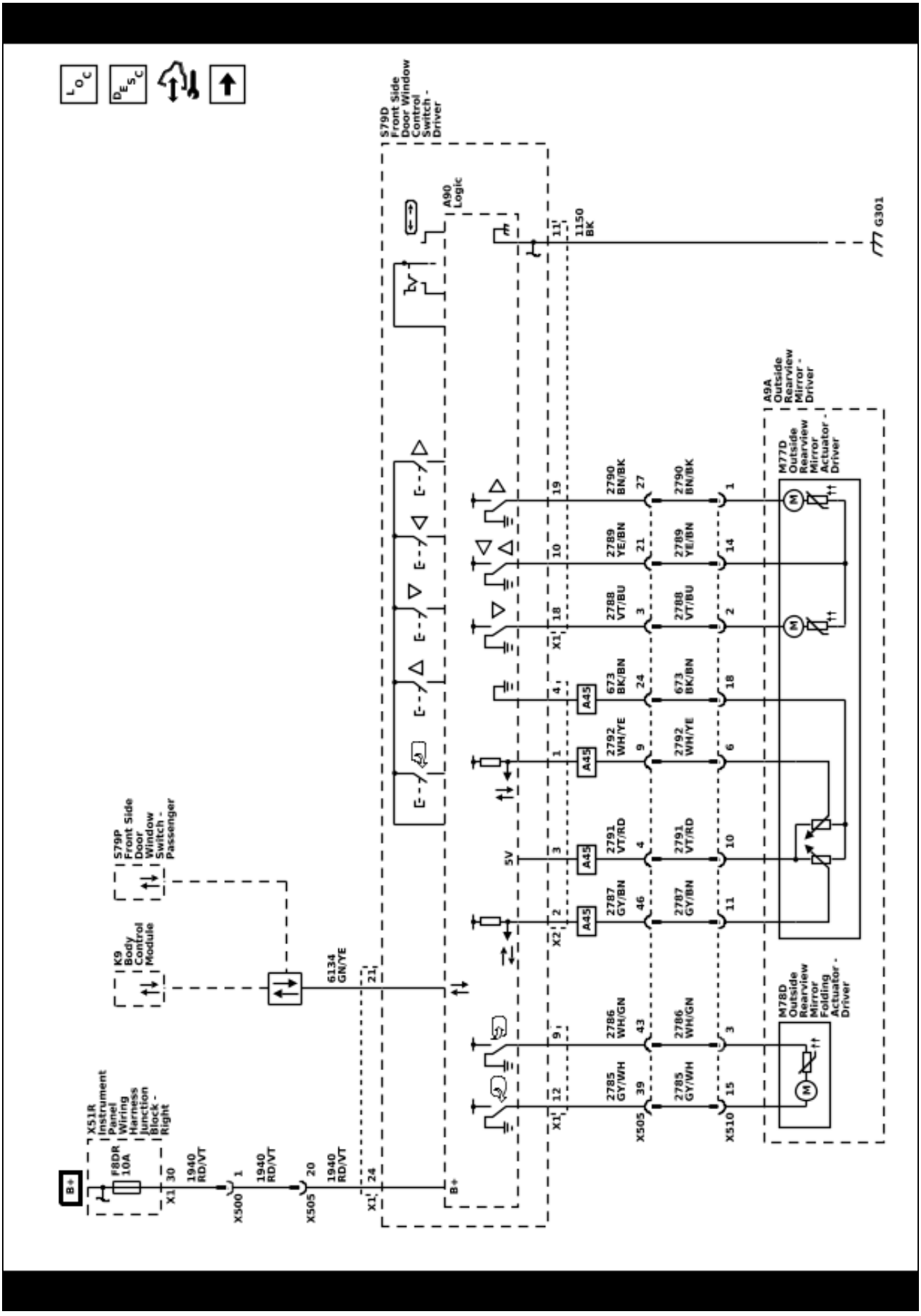
Schematic and Routing Diagrams

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

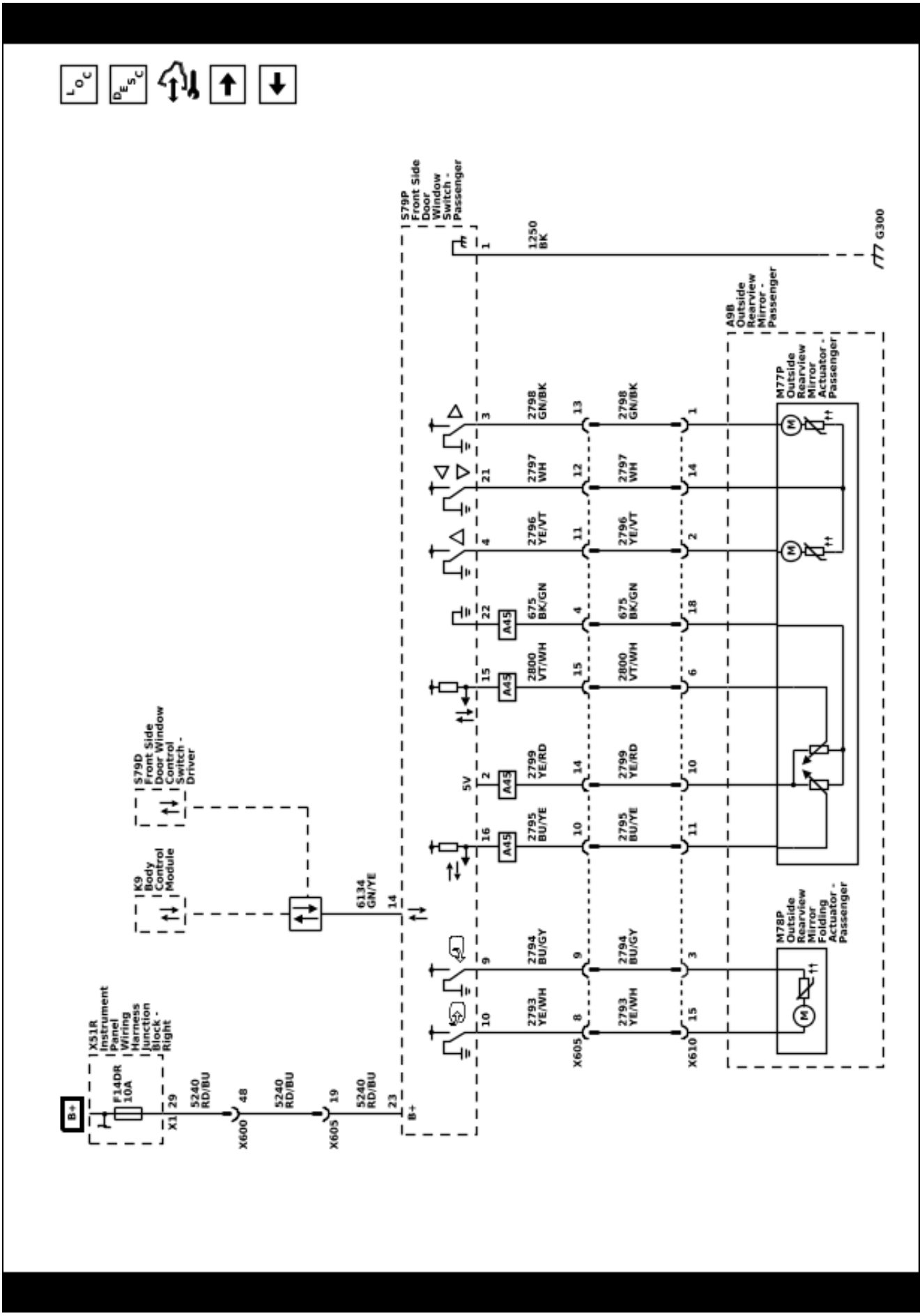


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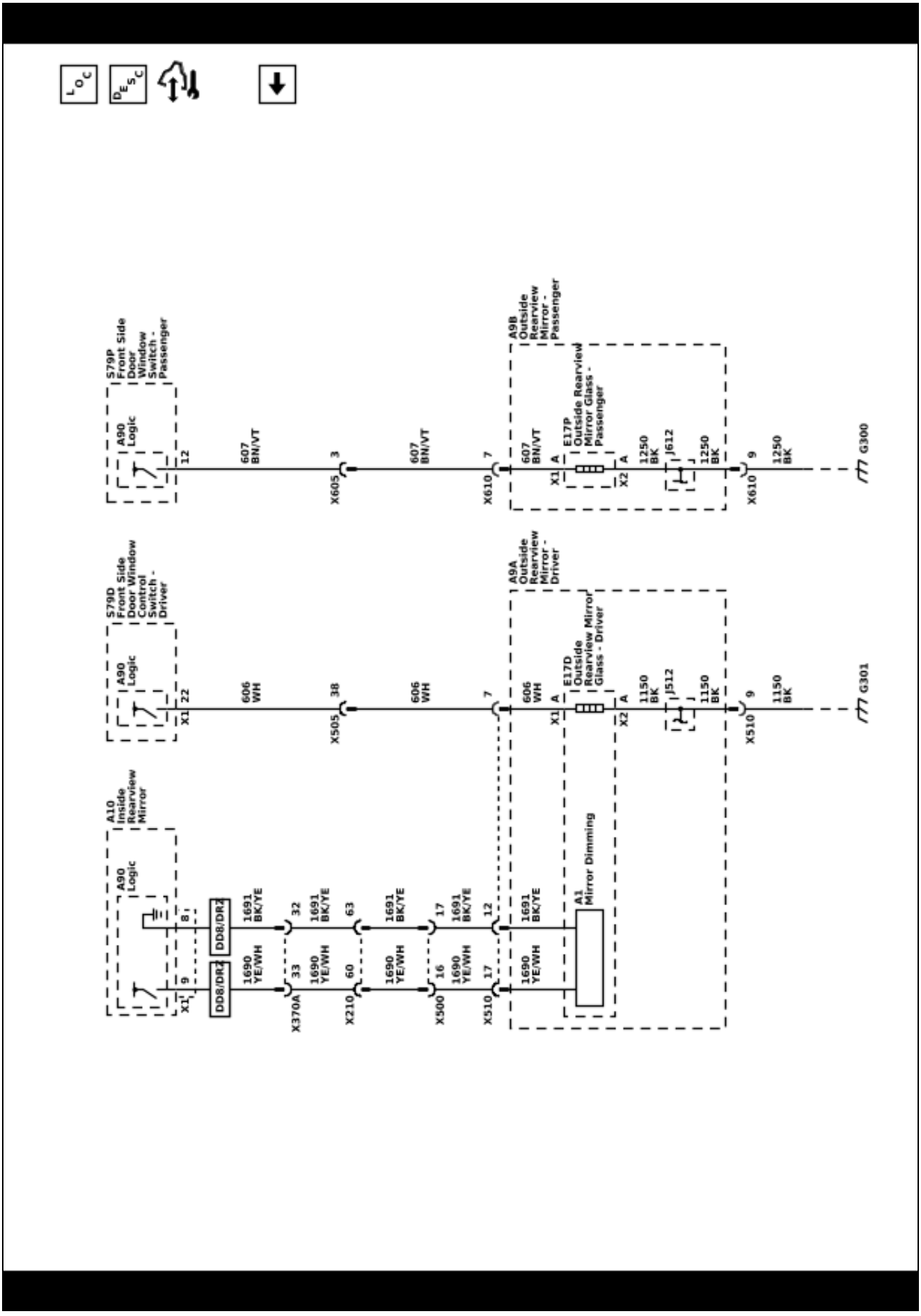
Outside Rearview Mirror Schematics (Driver Controls, Position and Folding)



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



Outside Rearview Mirror Schematics (Dimming and Heating)



Description and Operation

Automatic Day-Night Mirror Description and Operation

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

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

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

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

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

Outside Mirror Description and Operation

Power Mirror System Components

The power mirror system consists of the following components:

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

Power Mirror System Controls

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

Driver Mirror Controls

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

Passenger Mirror Controls

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

Mirror Position

Mirror position is determined by both horizontal and vertical position sensors in each of the power mirrors. Each S79 Front Side Door Window Control Switch supplies a 5 V reference, low reference, and horizontal and vertical position signal circuits to these sensors. The signal circuits are referenced from 5 V by the S79 Front Side Door Window Control Switch and the signal circuit voltage levels represent the mirror positions. The mirror positions are stored in each S79 Front Side Door Window Control Switch for memory mirror operation. When the memory seat module receives a memory recall command, the memory seat control module will send the go to position to the S79 Front Side Door Window Control Switch. The S79 Front Side Door Window Control Switches will then drive the appropriate mirror motors to the commanded position sensor settings.

Mirror Select

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

Folding Mirrors

The S79D Driver Front Side Door Window Control Switch sends the mirror fold/unfold inputs to the K9 Body Control Module (BCM) through serial data. When the BCM receives a fold/unfold signal it will send a fold/unfold command to the S79 Driver Front Side Door Window Control Switch which will send a serial data message to the S79P Passenger Front Side Door Window Control Switch. The outside mirrors will fold or

unfold depending on their current state. The BCM will also send a serial data message to unfold the mirrors when the vehicle is placed into gear. The S79 Front Side Door Window Control Switches control the fold/unfold motors through bi-directional control circuits

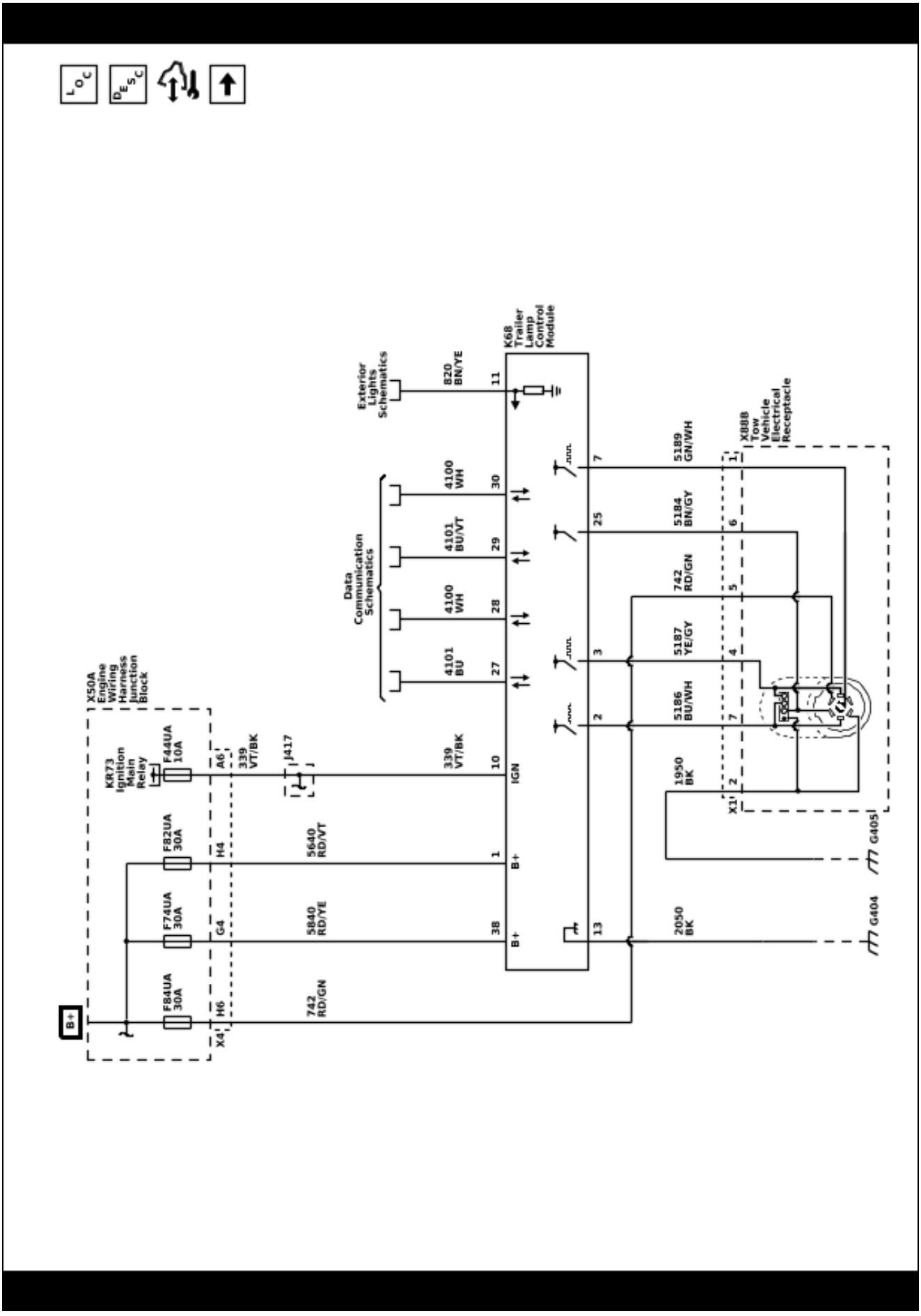
Heated Mirrors

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

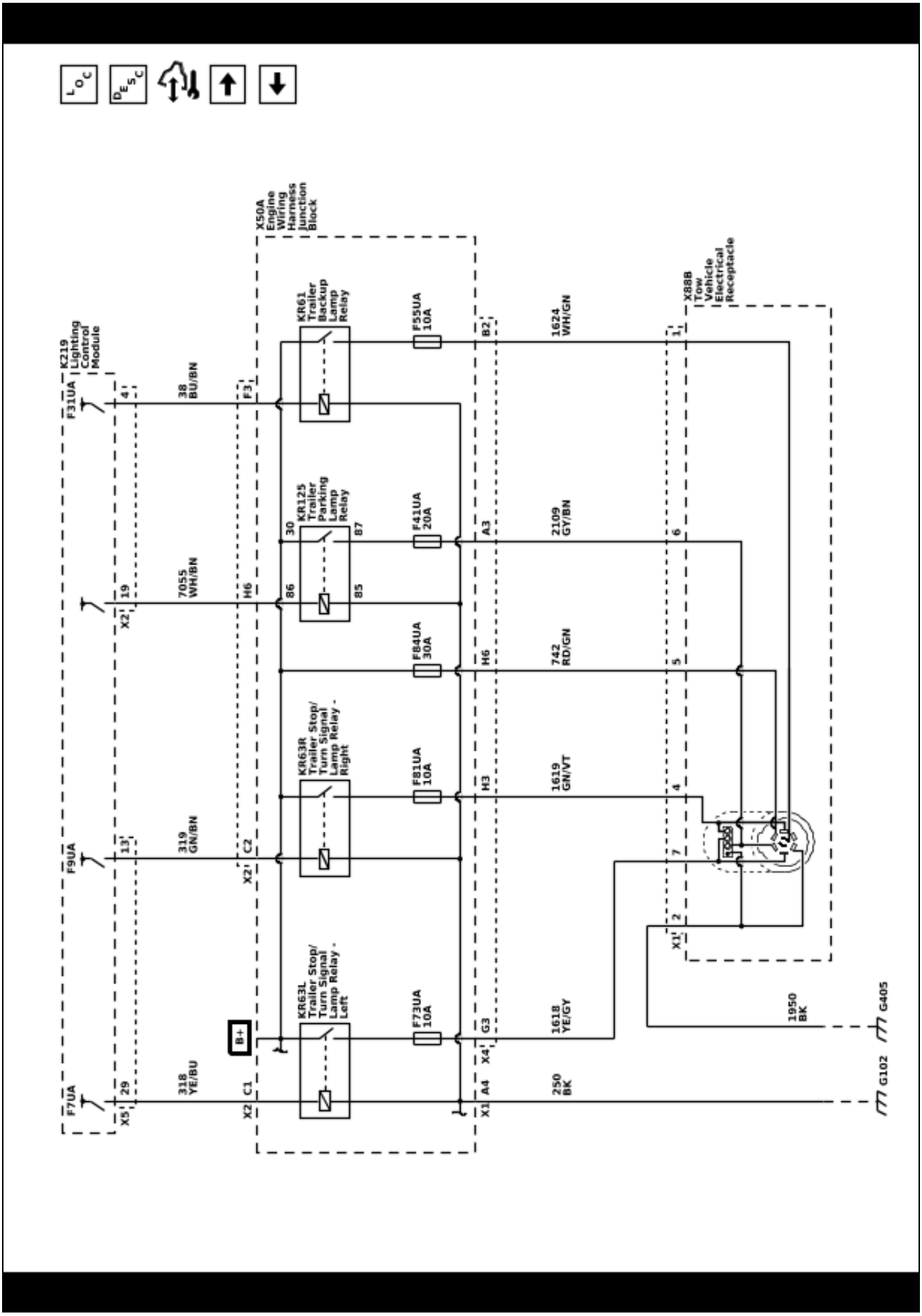
Trailering Systems

Schematic and Routing Diagrams

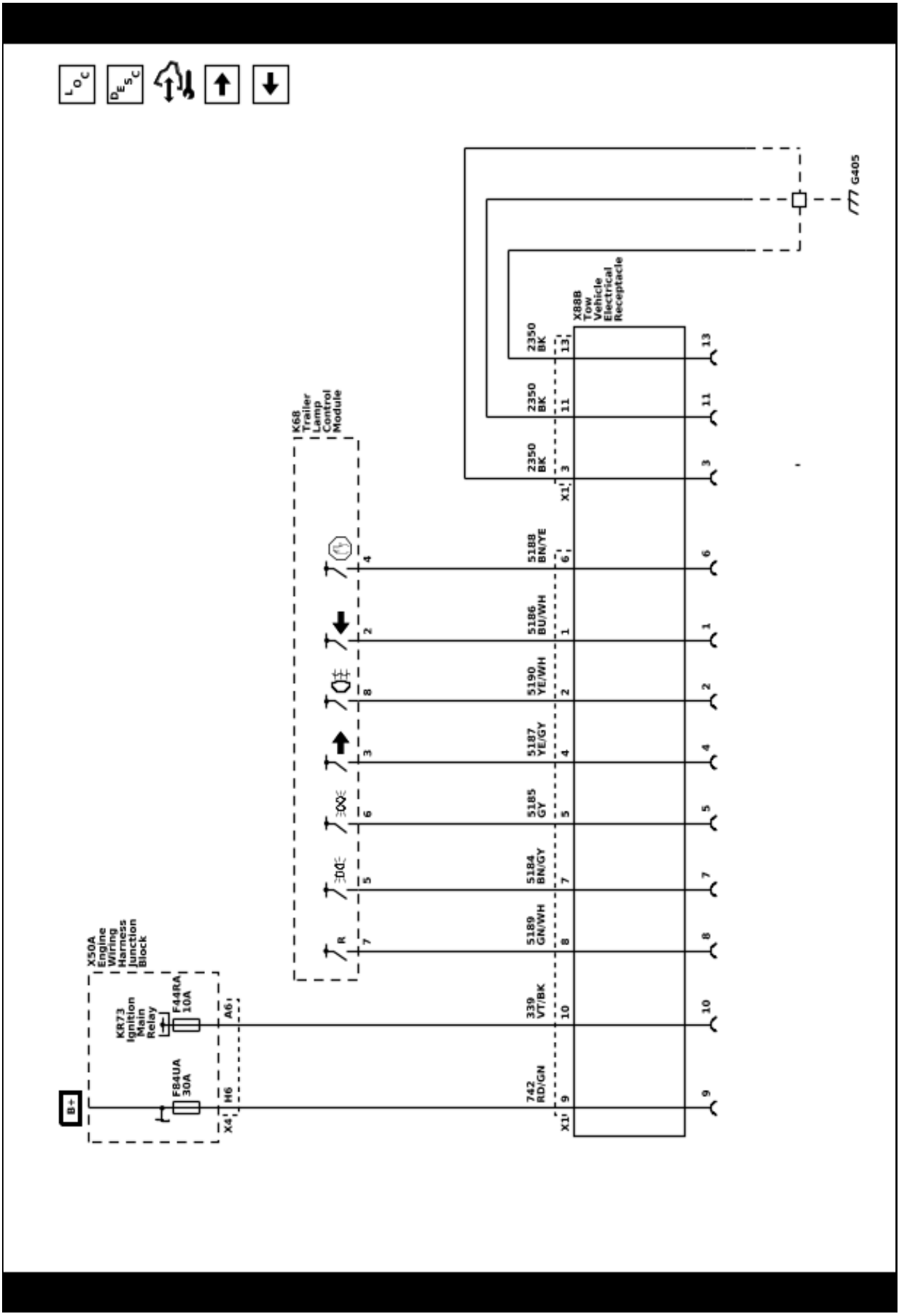
Trailering Systems Schematics (Trailer Lamp Control Module (UET))



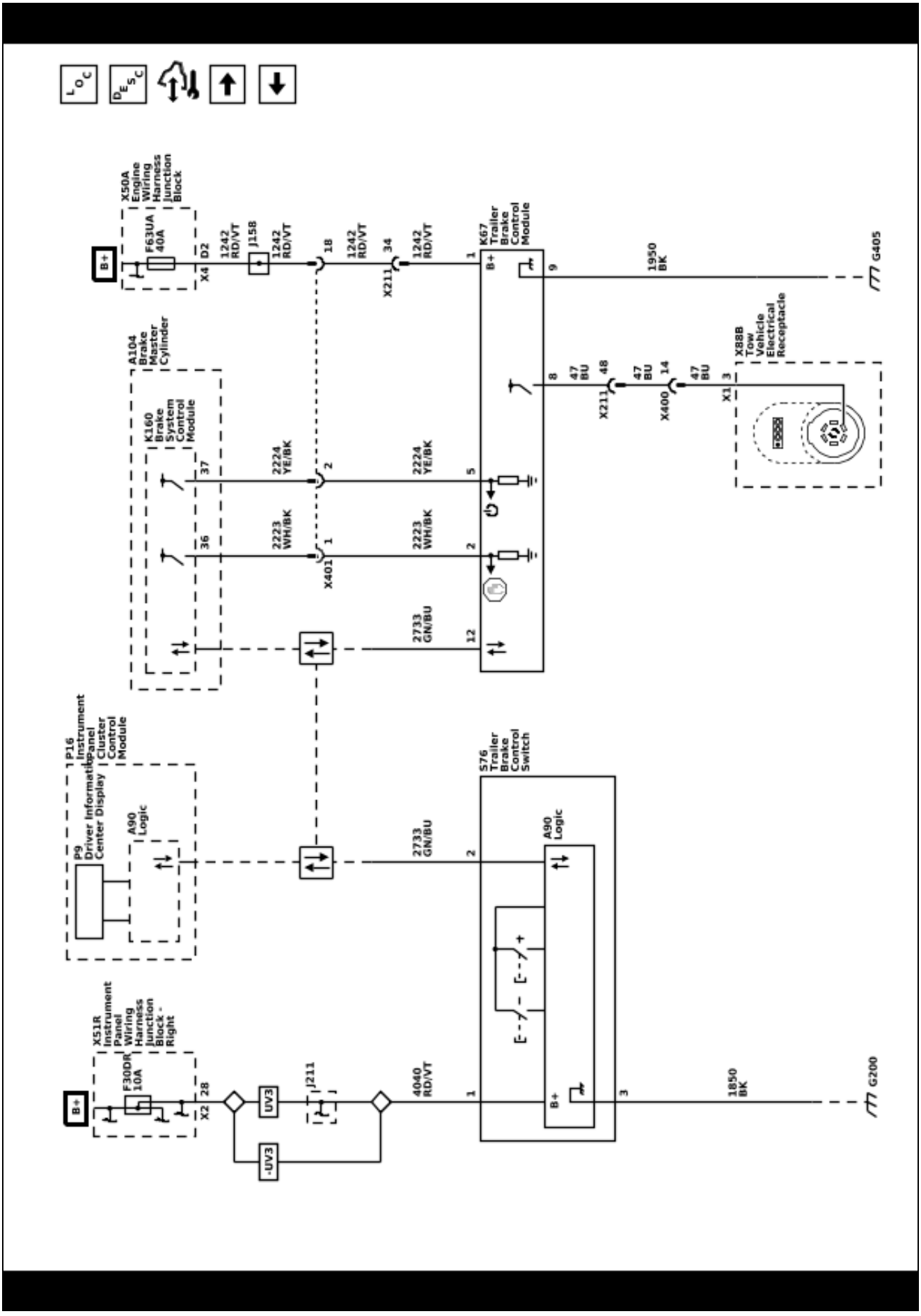
Trailering Systems Schematics (Tow Vehicle Receptacle Pins: A,B,D, E, F, G (Z82 - UET))



Trailering Systems Schematics (Tow Vehicle Receptacle and Trailer Connected Switch (UET + (MAS / MBM / MBR)))

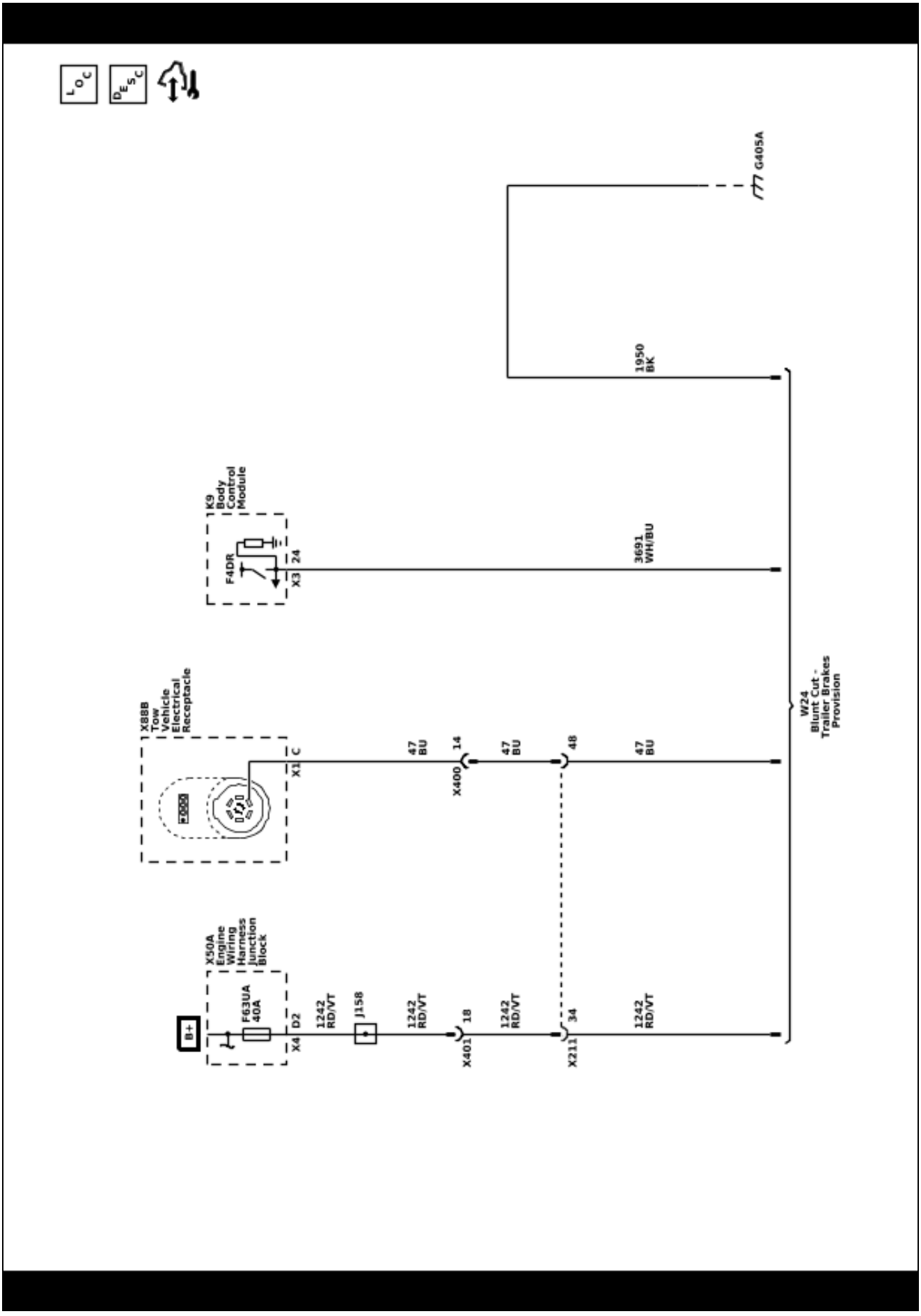


Trailering Systems Schematics (Trailer Brake (JL1))

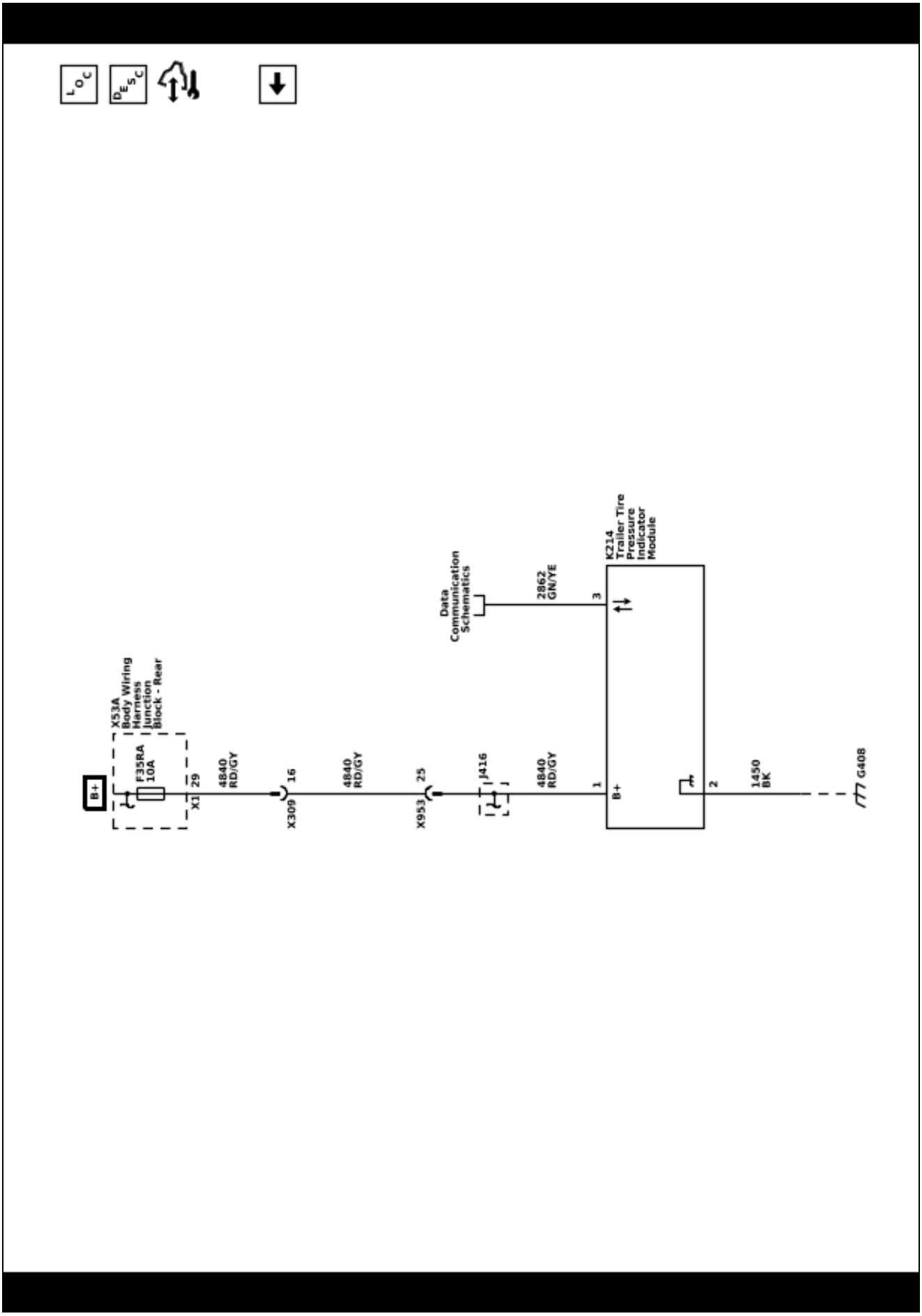


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Trailering Systems Schematics (Trailer Brakes Provision (Z82 - JL1))



Trailering Systems Schematics (Trailer Tire Pressure (UET))



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

The trailering system consists of the following:

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

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

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

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

13–Terminal Tow Vehicle Electrical Receptacle Pinout (Export)

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

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

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

Trailer Lighting and Detection With U1D/UET
Note:

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

North America (7-Terminal connector)

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

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

Export (13-Terminal connector)

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

Trailer Lighting Without U1D/UET

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

North America 7–Way Trailer Connector Trailer Messages

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

North America 7–Way Trailer Connector

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

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

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

Export 13–Way Trailer Connector Trailer Messages

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

Export 13–Way Trailer Connector

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

Trailer Theft Detection (With U1D/ UET Only)

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

Trailer Brakes (JL1)

The vehicle is equipped with the following trailer braking components:

- K160 Brake System Control Module
- K133 Trailer Brake Control Module
- S76 Trailer Brake Control Switch
- Manual Trailer Brake Apply
- Trailer Gain Adjustment
- Trailer Brake Driver Information Center Display

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

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

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

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

Trailer Brake Output Versus Trailer Brake Type

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

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

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

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

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

Trailer Brake Control Panel

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

Manual Trailer Brake Apply

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

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

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

Trailer Brake Gain Adjustment

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

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

Trailer Gain Adjustment Procedure

- Adjust trailer gain in 0.5 step increments up to 10 gain setting by using the gain adjustment +/− buttons on the trailer brake control panel switch. Pressing and holding a gain button will cause the trailer gain to continuously increment or decrement. To turn the output to the trailer off, set the gain to zero.
- Drive the tow vehicle and trailer combination on a level surface representative of the towing condition and free of traffic at approximately 32–40 km/h (20–25 mph) and fully apply the manual trailer brake apply lever mechanism located on the trailer brake control panel switch. Adjusting the trailer gain at slower speeds may result in an incorrect gain setting.
- Adjust the trailer gain to just below the threshold of trailer wheel lock-up . Trailer wheel lock-up may not occur if towing a heavily loaded trailer. In this case, adjust the trailer gain to the highest allowable setting for the towing condition.

Trailer Brake Gain and Output Display

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

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

Trailer Brake Driver Information Center Indicators and Messages

Trailer Brake Detection

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

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

Trailer Connected

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

Check Trailer Wiring

This message will be displayed if:

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

Service Trailer Brake System

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

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

Trailer Tire Pressure Monitoring

Special Tools

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

For equivalent regional tools, refer to Special Tools.

The Trailer Tire Pressure Monitor System is designed to monitor the pressure of the trailer tires, and warn the driver when a low pressure condition exists. Four Trailer Tire Pressure Monitor System sensors may be provided in the vehicle's glove box as an accessory when equipped. The system can accommodate a trailer with up to (6) tires if additional sensors are purchased from the dealership. Also, the system can be paired

with up to (5) individual trailers. The sensors must be mounted onto each tire and wheel assembly, and the sensors must be learned by the vehicle by following the learning procedure as shown in the Trailering App section of this manual. For sensor installation assistance, please contact your trailer service center or tire service center. The Trailer Tire Pressure Monitor System sensors monitor the air pressure in the trailer tires and transmit the trailer tire pressure readings to a receiver located in the vehicle. The trailer tire pressure sensors can transmit up to 23 feet (7 meters) from the hitch receiver of the vehicle. The tire pressure values can be viewed in the trailering app in the vehicle's center stack.

Trailering Diagnostic Tools

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

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

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

Available Trailer Presence Simulator Tool

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

Simulated Trailer Lighting

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

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

Creating a Simulated Trailer Lighting Tool

Parts needed:

- 7-way RV trailer connector Qty: 1

  Note: The combination trailer stop/turn, and backup lamps must draw at least 55mA of total current to be detected as a trailer. Some LED combination lamps will not draw enough current. If an LED combination lamp is used, make sure it draws at least 55mA. A load resistor can be added to the circuit if necessary to obtain the correct load.

- Combination trailer park/stop/turn lamp (greater than 55mA drawn when on) Qty: 2
- Reverse lamp Qty: 1
- 12 gauge wire and terminals/connectors Qty: As needed
- 18 gauge wire and terminals/connectors Qty: As needed
- Mounting board Qty: 1

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

   Note: A combination trailer lighting and trailer brake tool can be created on the same mounting board.

6. Mount the left combination trailer park/stop/turn lamp, right combination trailer park/stop/turn lamp, and reverse lamp to the mounting board.
7. Plug the 7-way RV trailer connector to the vehicle and verify functionality.

Simulated Trailer Brakes

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

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

The Trailer Brake Control Module continuously sends a test pulse out on the trailer brake control circuit (circuit 47) to determine if a trailer with trailer brakes has been connected. How the pulse reacts when a trailer is connected is how the Trailer Brake Control Module determines which type of braking system the trailer is equipped with.

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

Creating a Simulated Trailer Brake Tool

Parts needed:

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

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

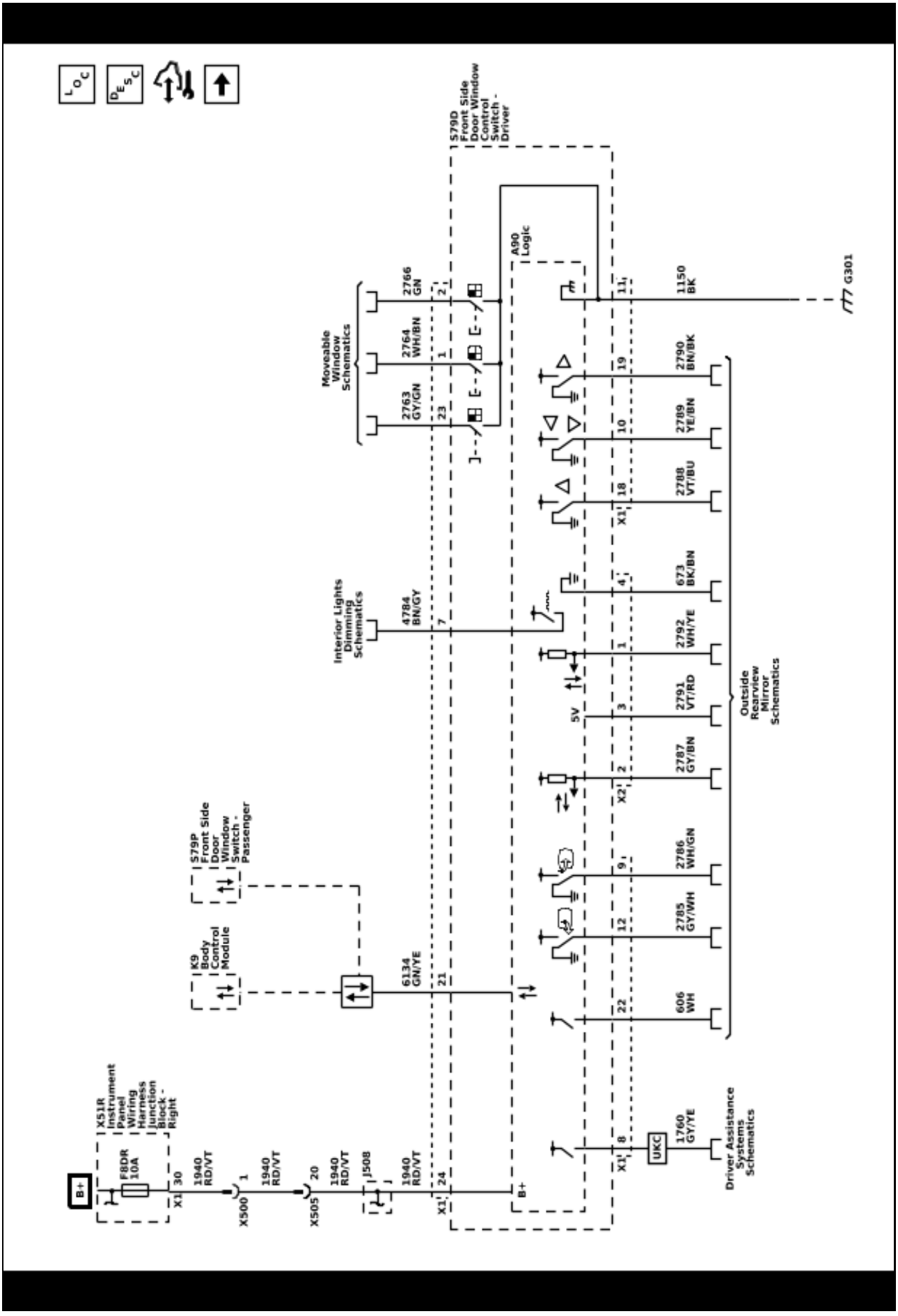
   Note: The trailer brake magnets must be connected in parallel. Connecting in series will create an excessive current draw and disable the trailer brake system.
3. Connect the trailer brake magnets to the 12 gauge wires from the 7-way trailer connector in parallel.

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

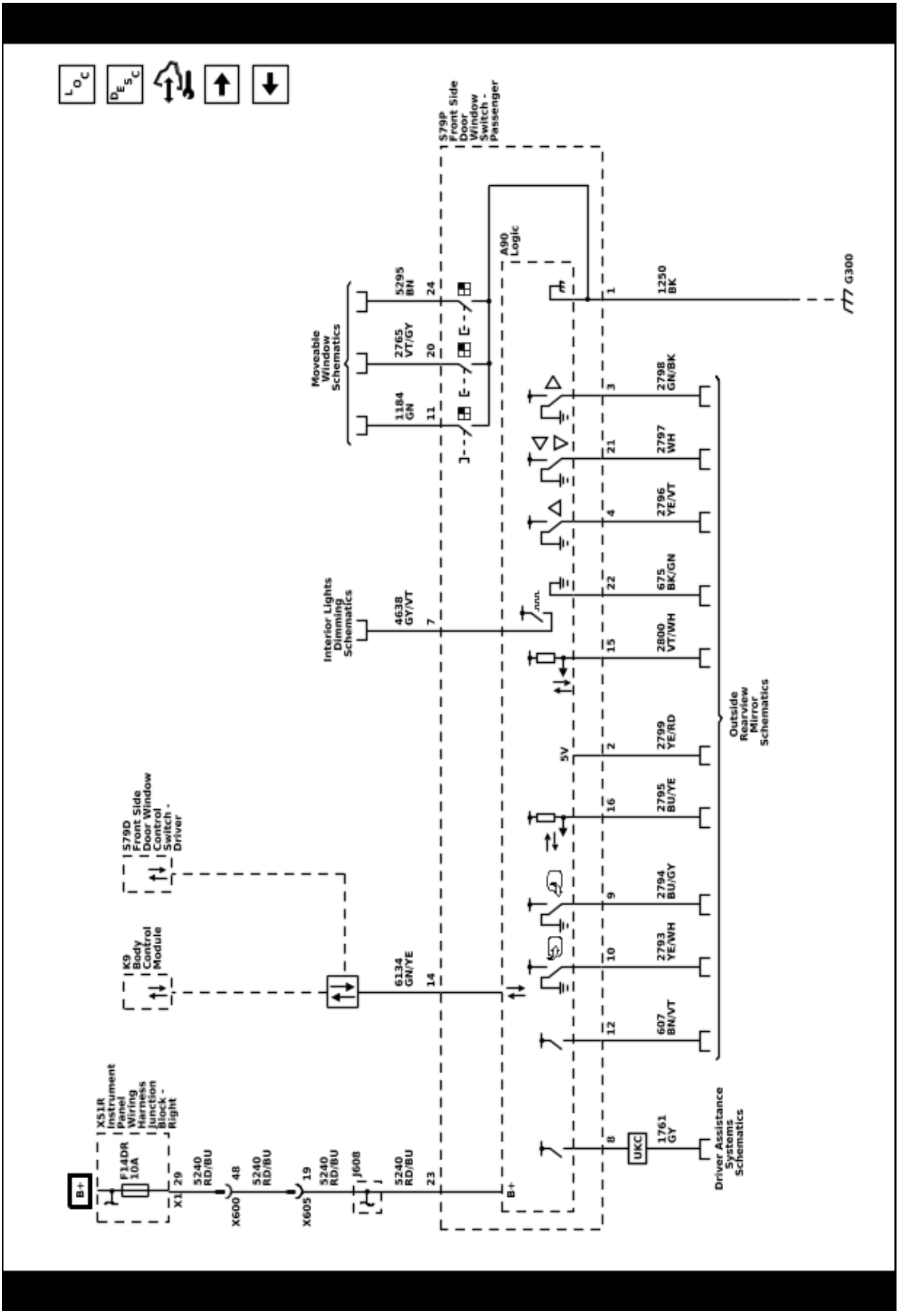
Vehicle Access

Schematic and Routing Diagrams

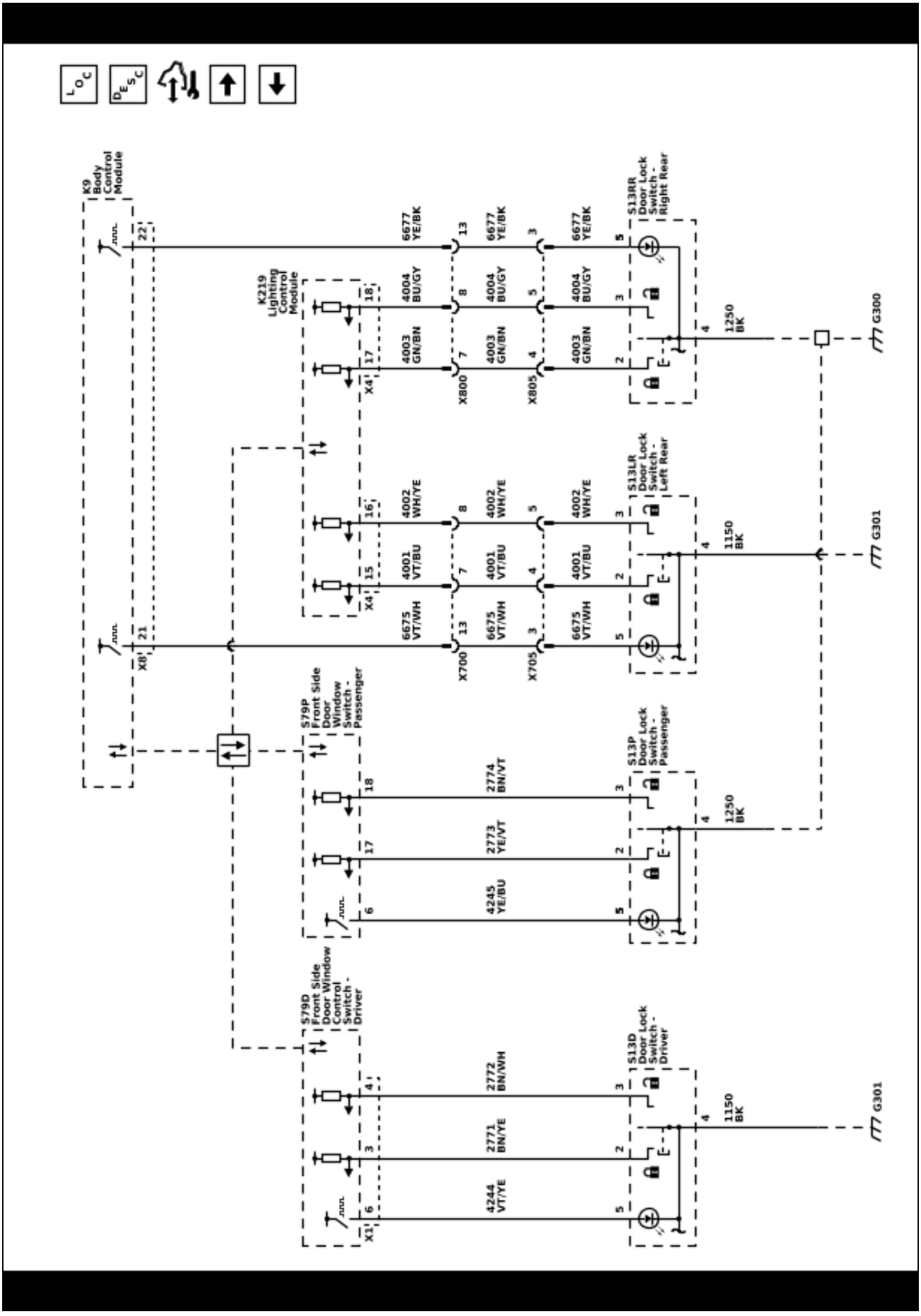
Door Lock/Indicator Schematics (Driver Door Control Switch Power, Ground, Serial Data and Subsystem Reference)



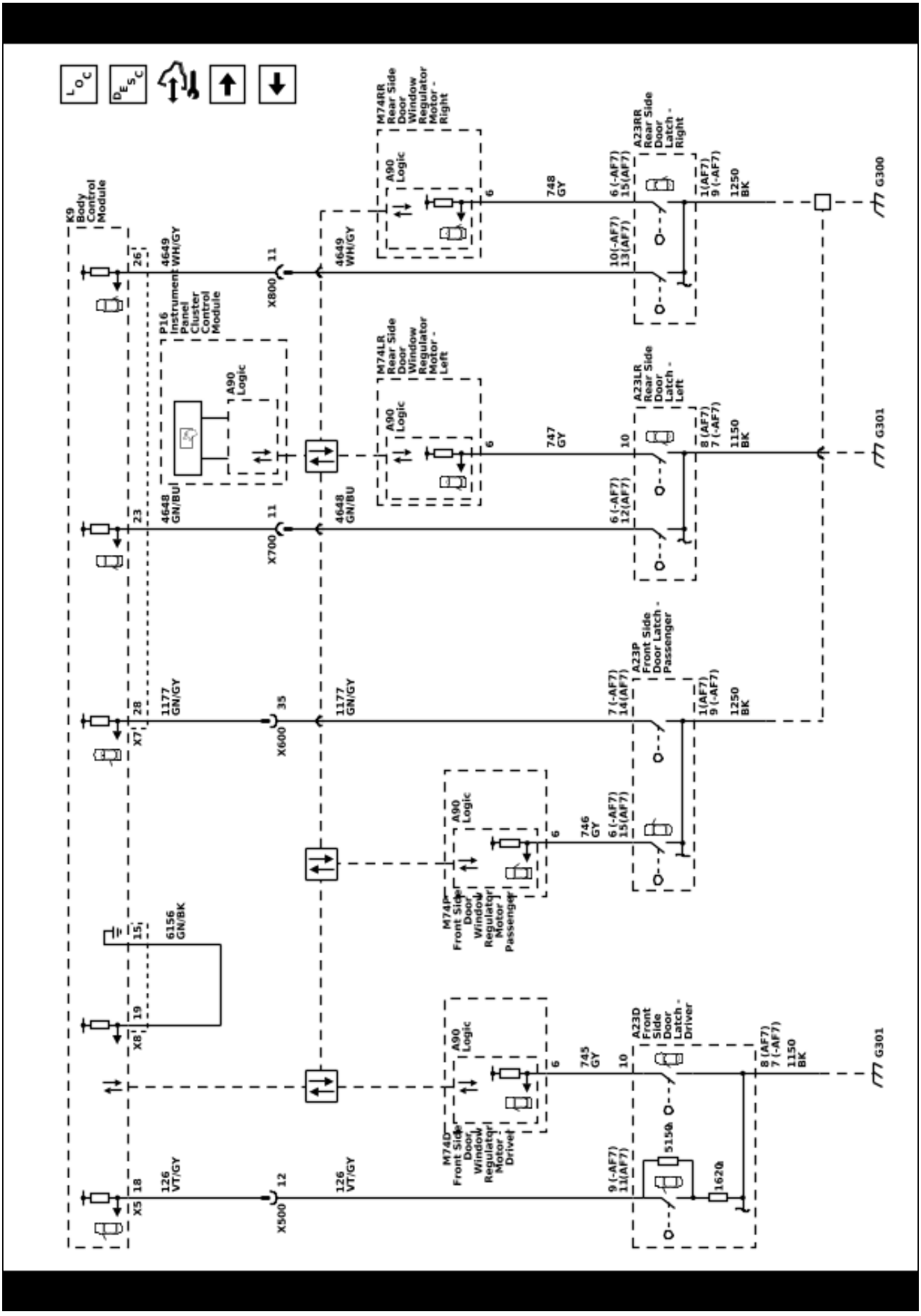
Door Lock/Indicator Schematics (Passenger Door Control Switch Power, Ground, Serial Data and Subsystem Reference)



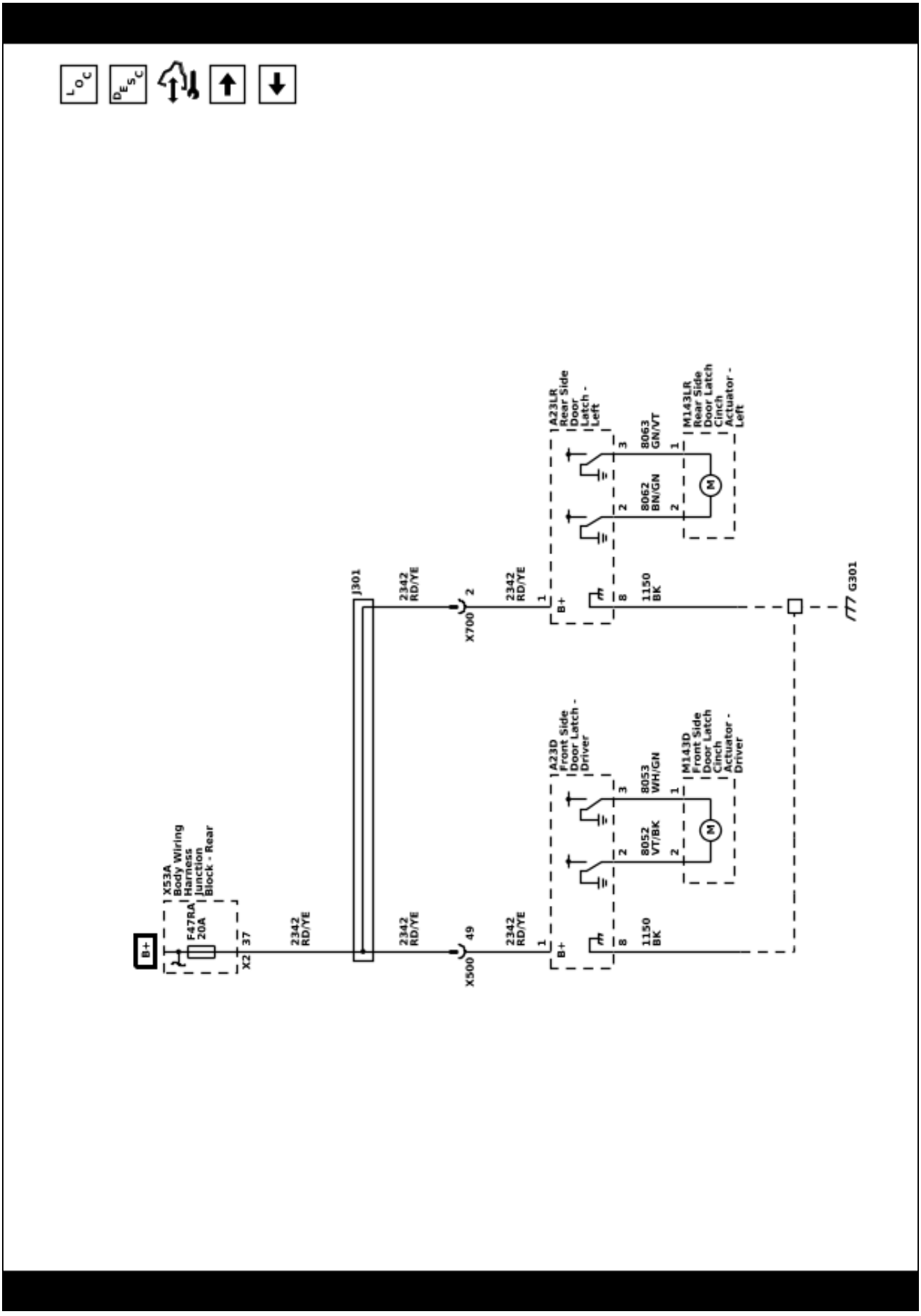
Door Lock/Indicator Schematics (Door Lock Switches and Indicators)



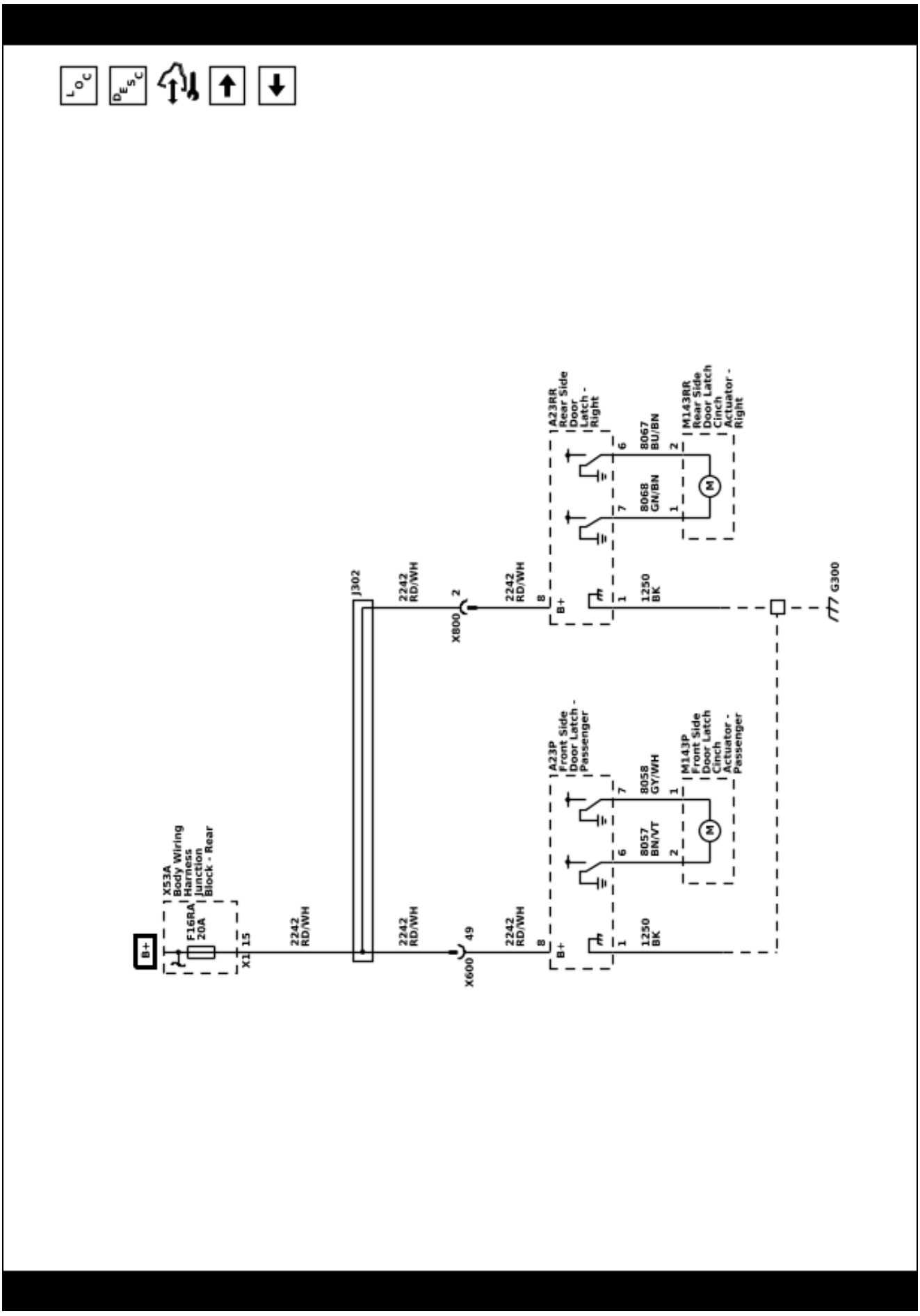
Door Lock/Indicator Schematics (Door Switches and Indicators)



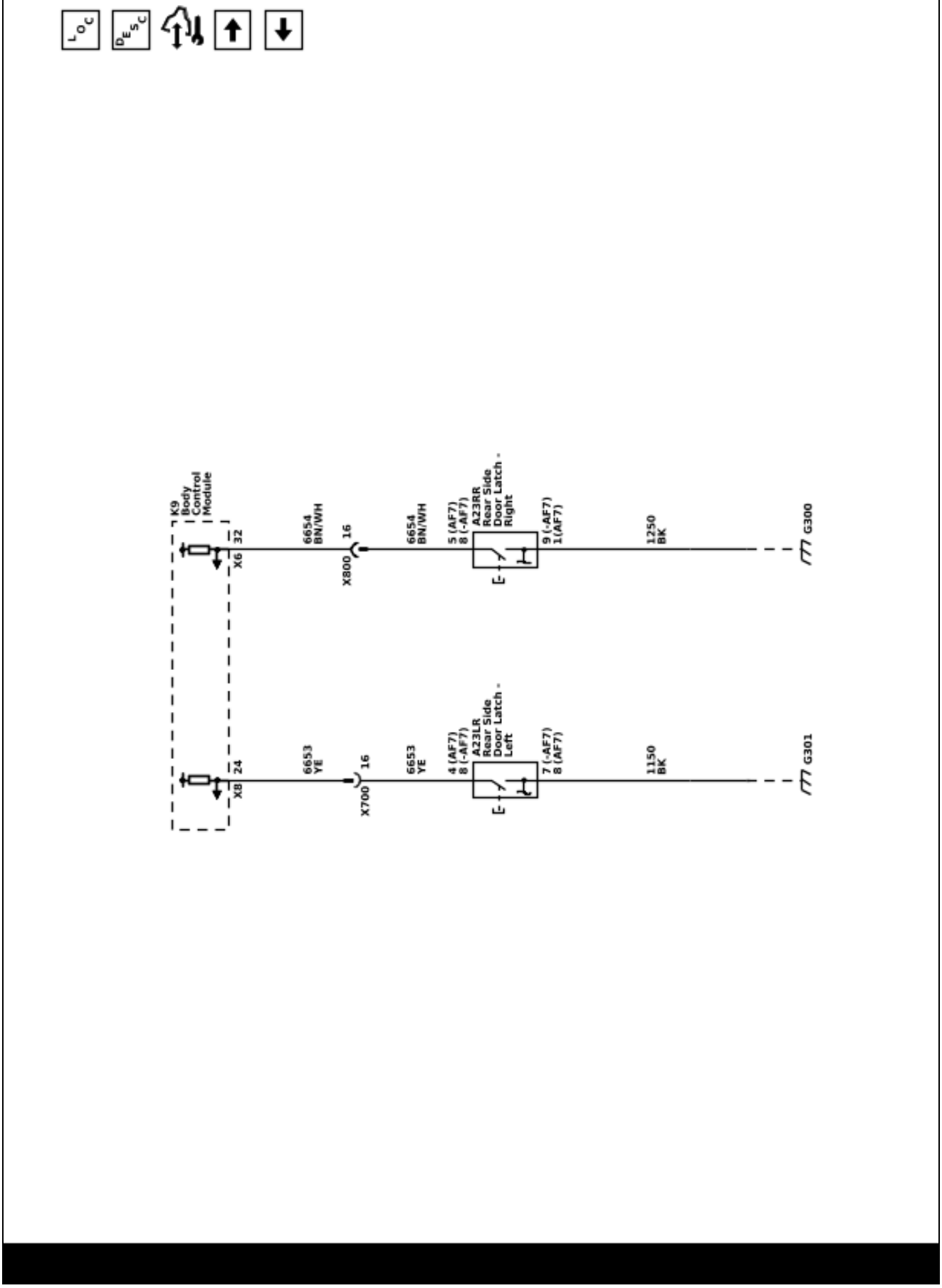
Door Lock/Indicator Schematics (Cinch Actuator (1 of 2) (AF7))



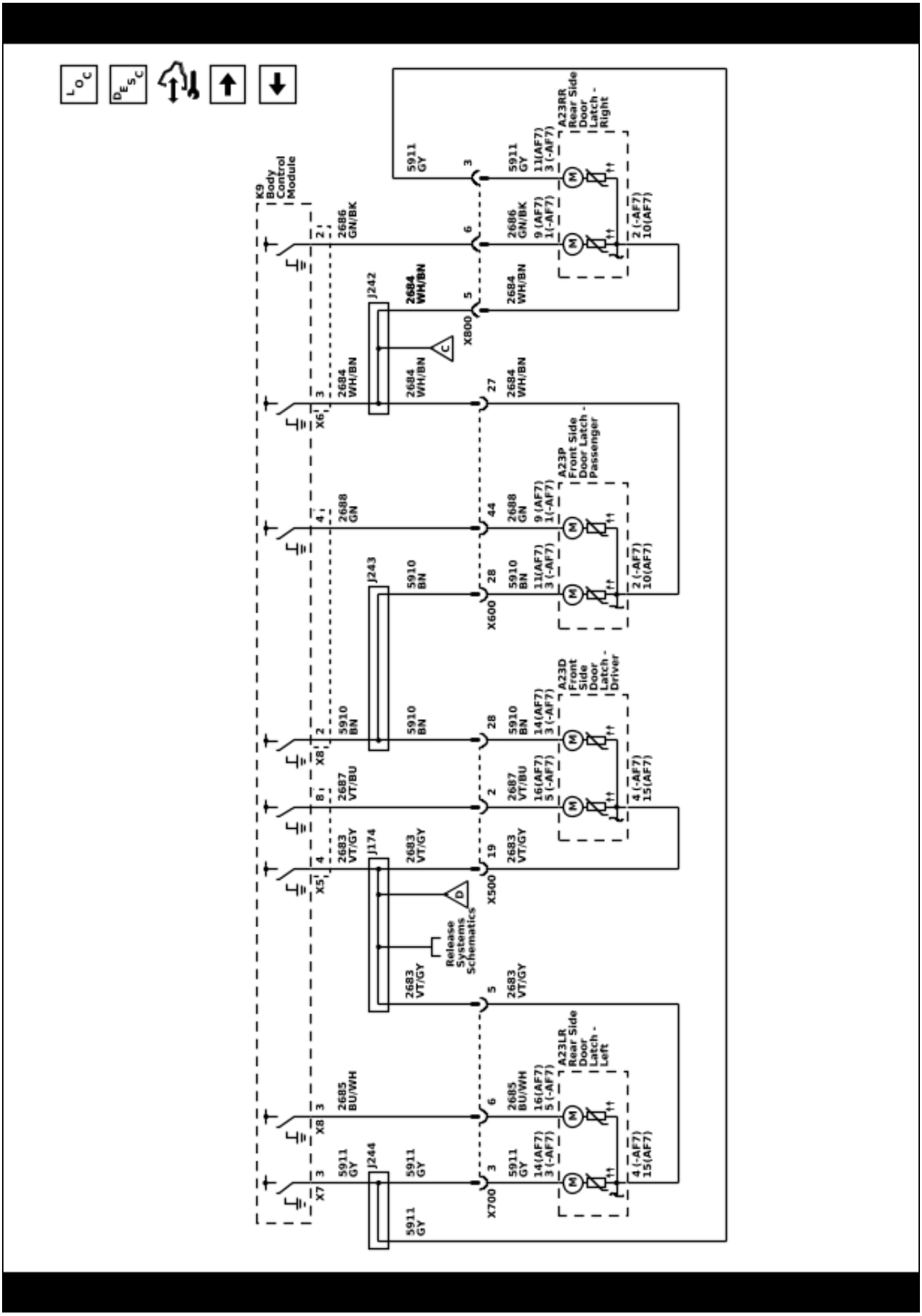
Door Lock/Indicator Schematics (Cinch Actuator (2 of 2) (AF7))



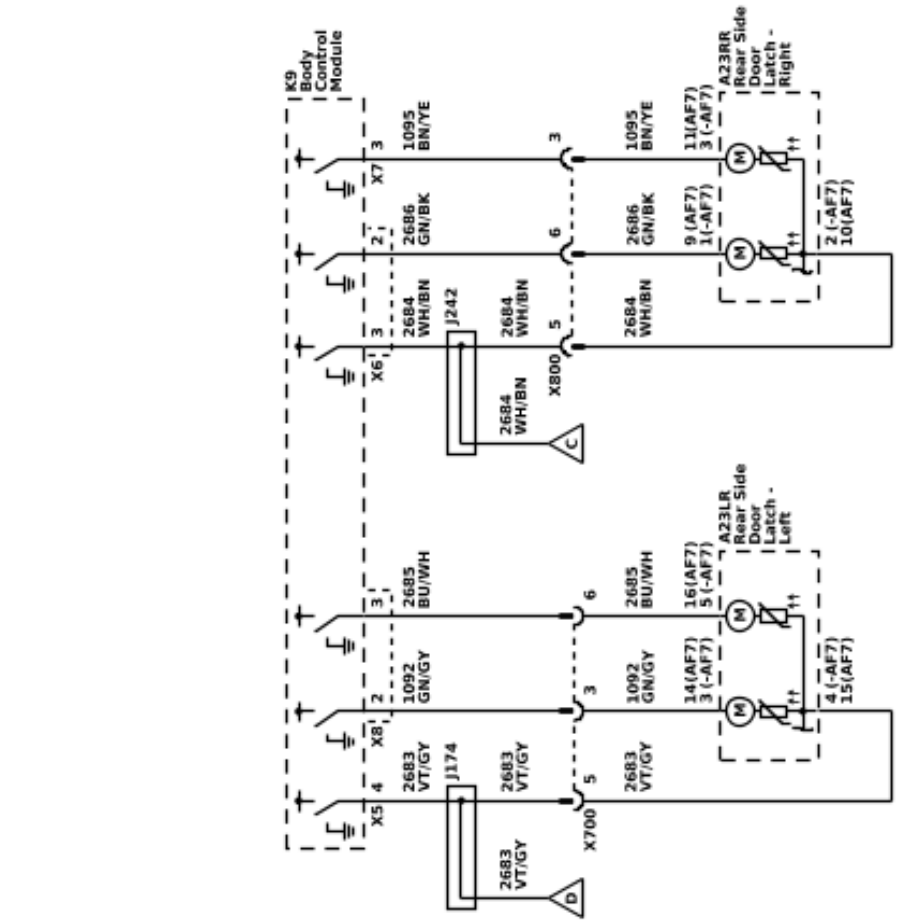
Door Lock/Indicator Schematics (Interior Door Latch Switches)



Door Lock/Indicator Schematics (Actuators (1 of 2))

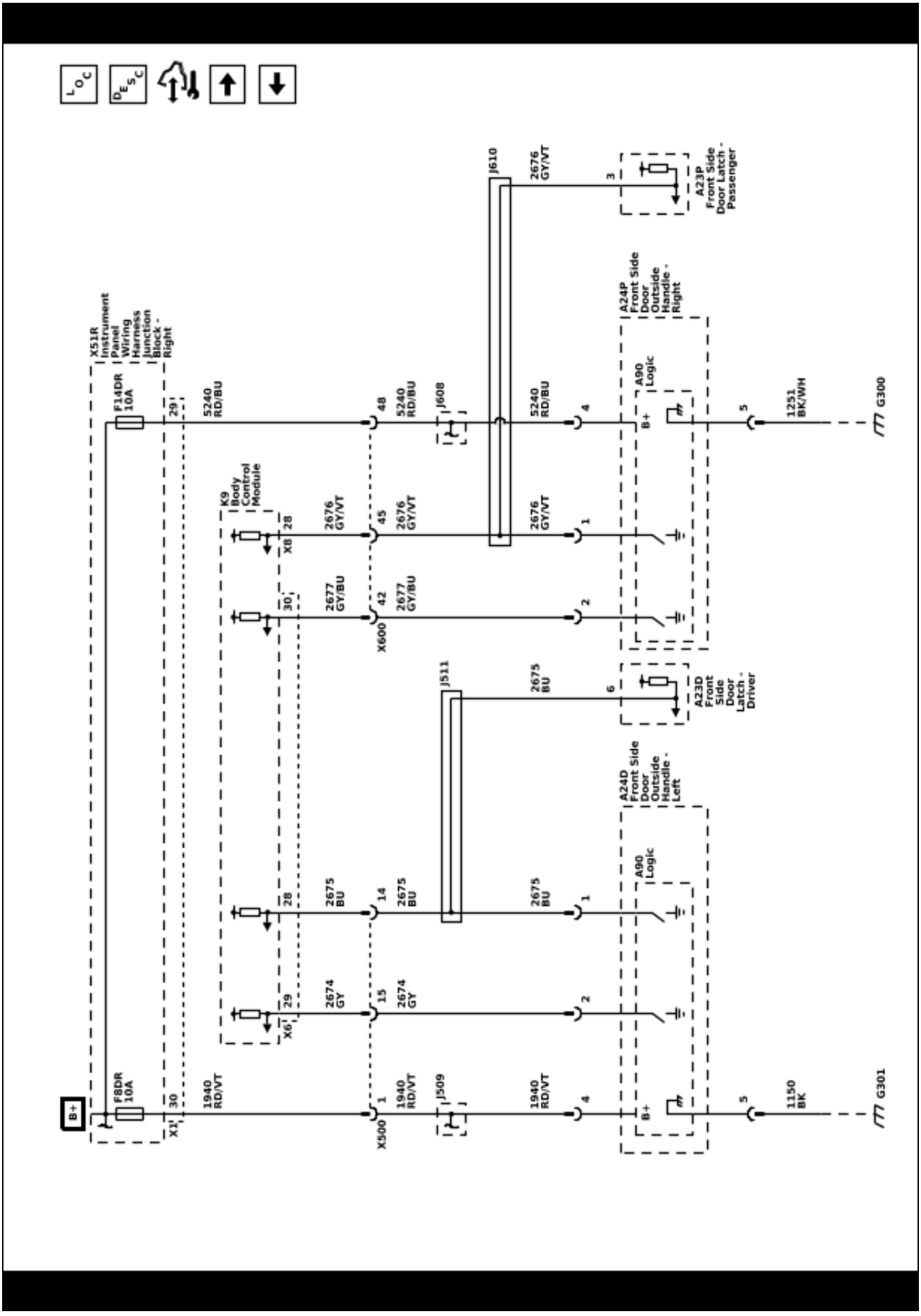


Door Lock/Indicator Schematics (Actuators (2 of 2))

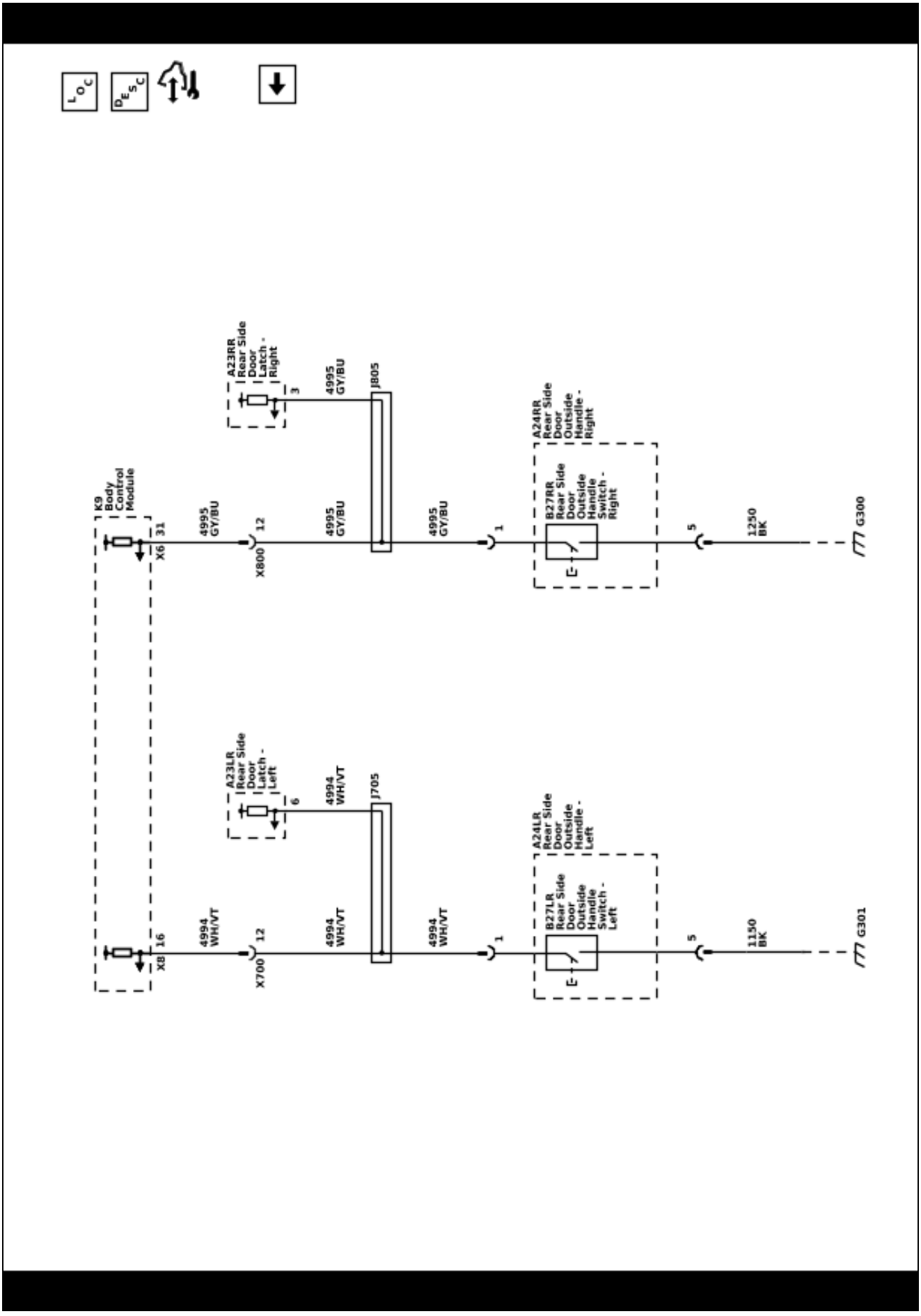


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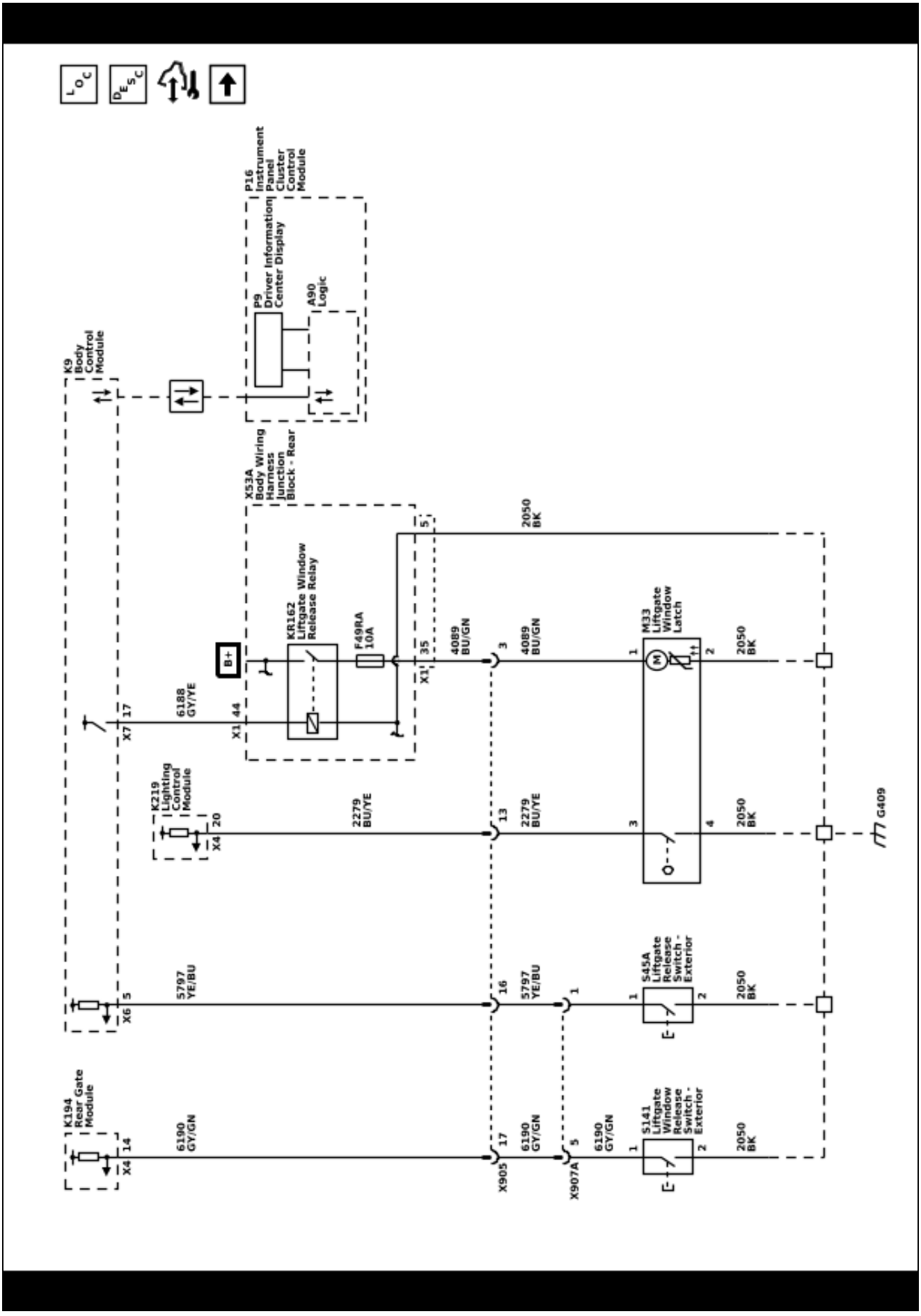
Door Lock/Indicator Schematics (Exterior Door Handle Switches (1 of 2))



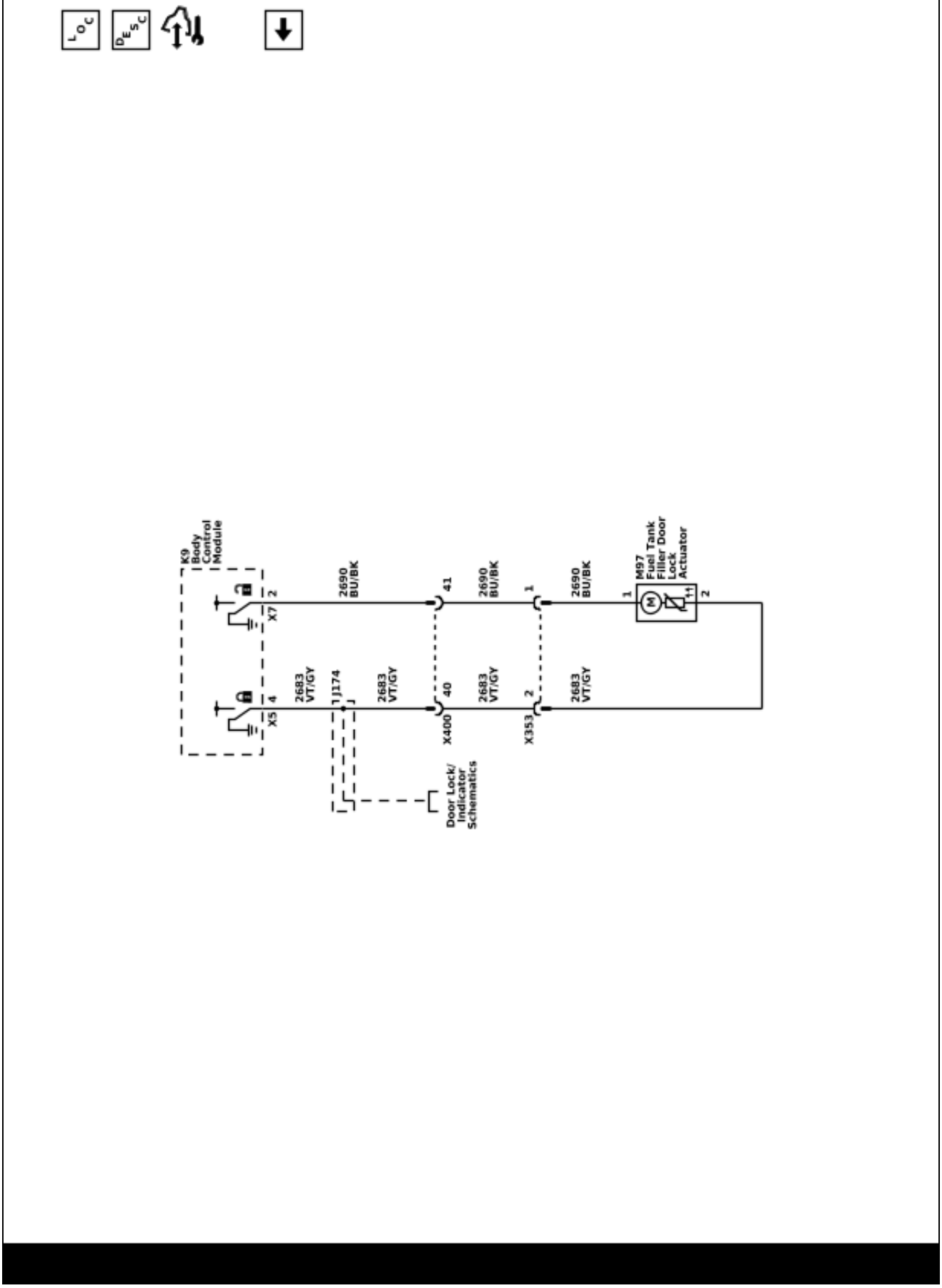
Door Lock/Indicator Schematics (Door Handle Switches (2 of 2))



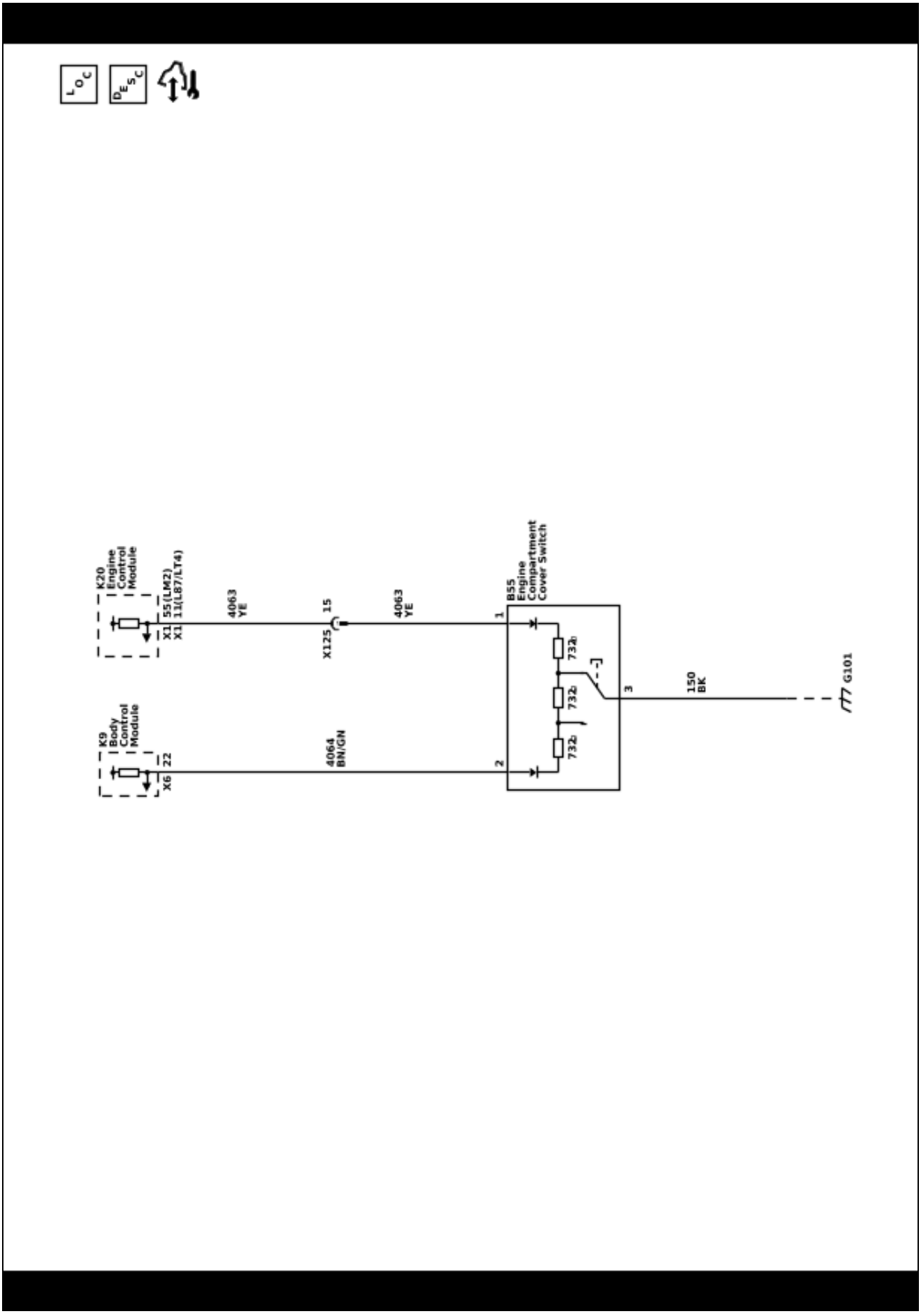
Release Systems Schematics (Liftgate Release)



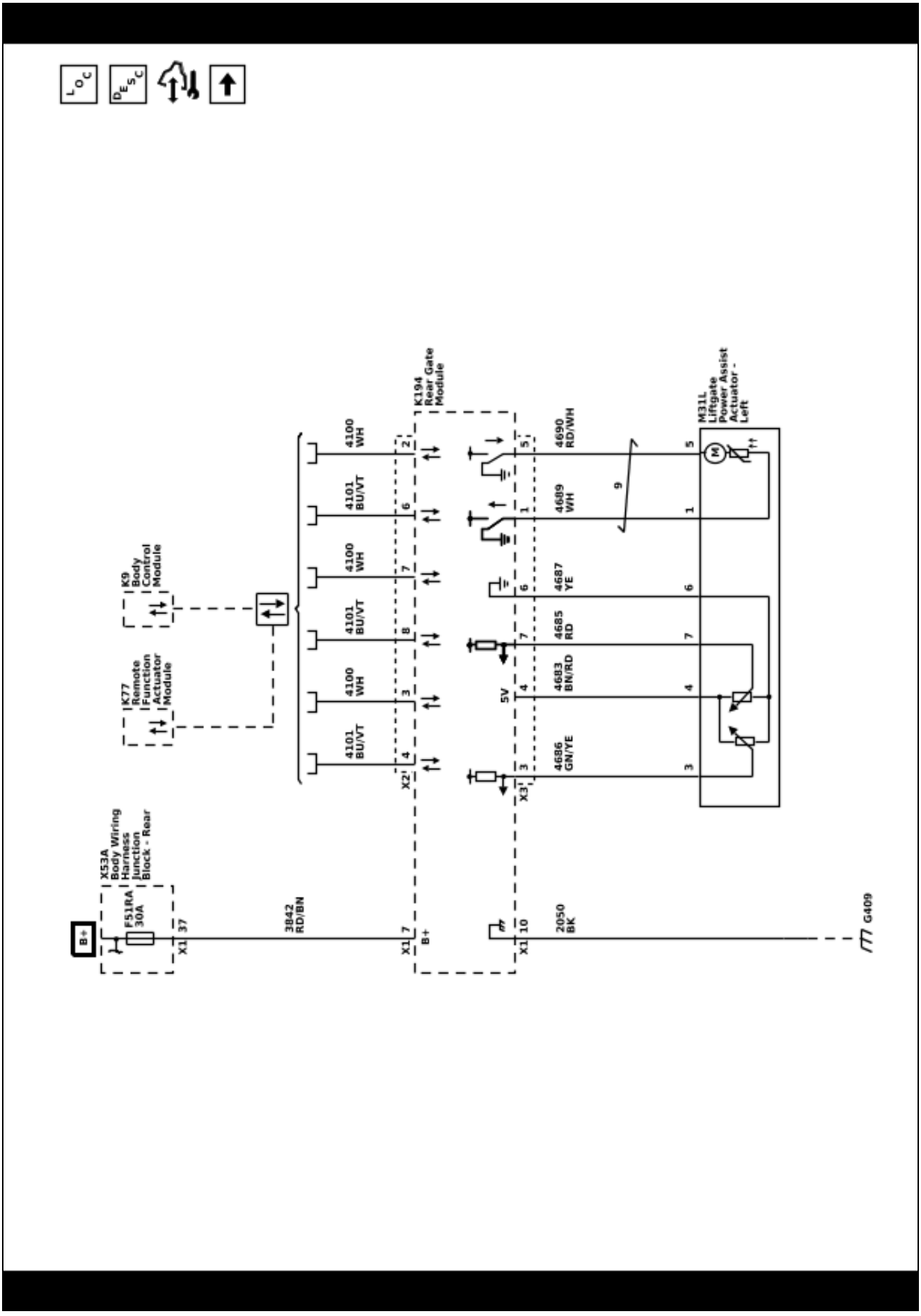
Release Systems Schematics (Fuel Door Lock)



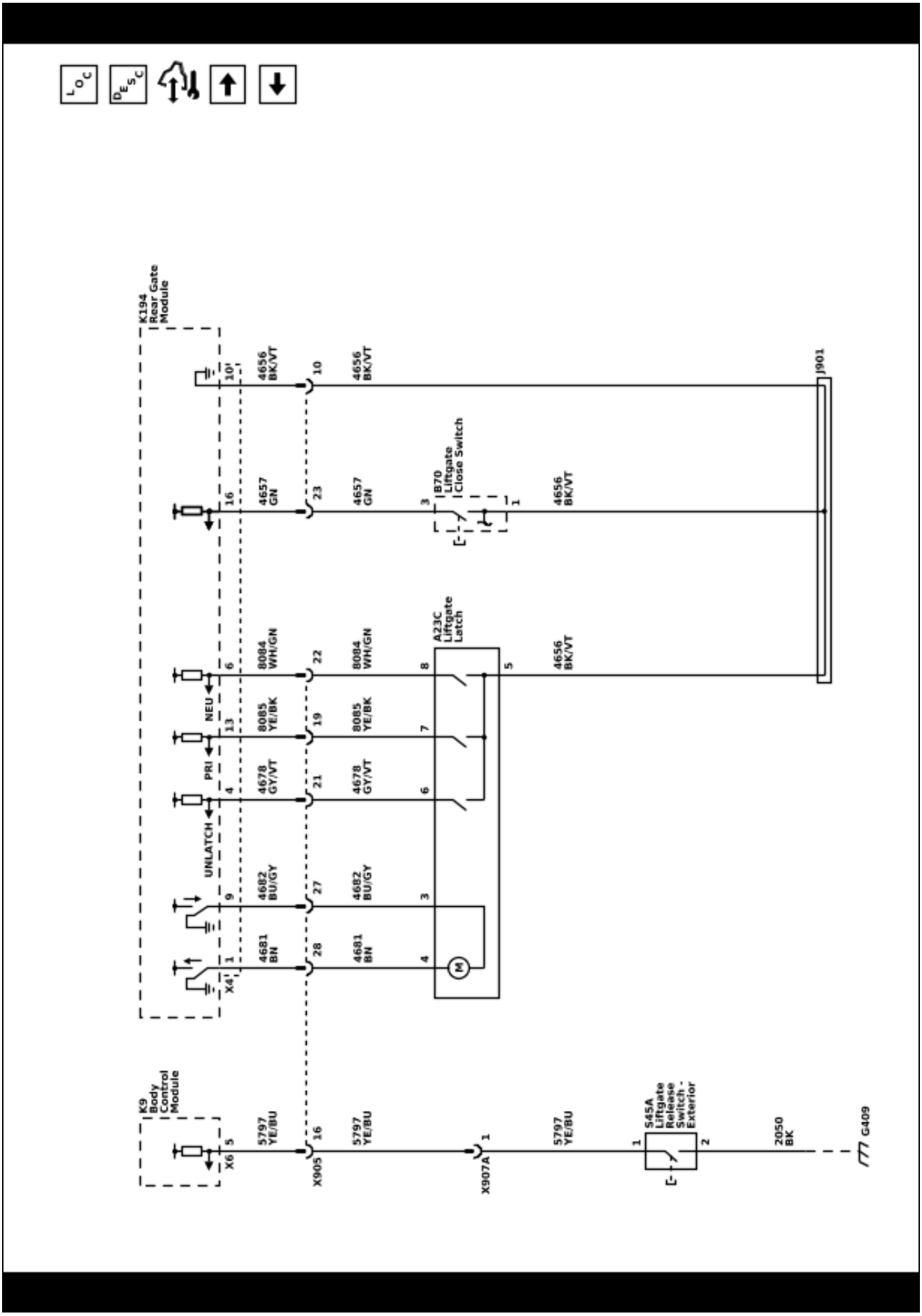
Hood Latch Schematics (Engine Compartment Cover Switch)



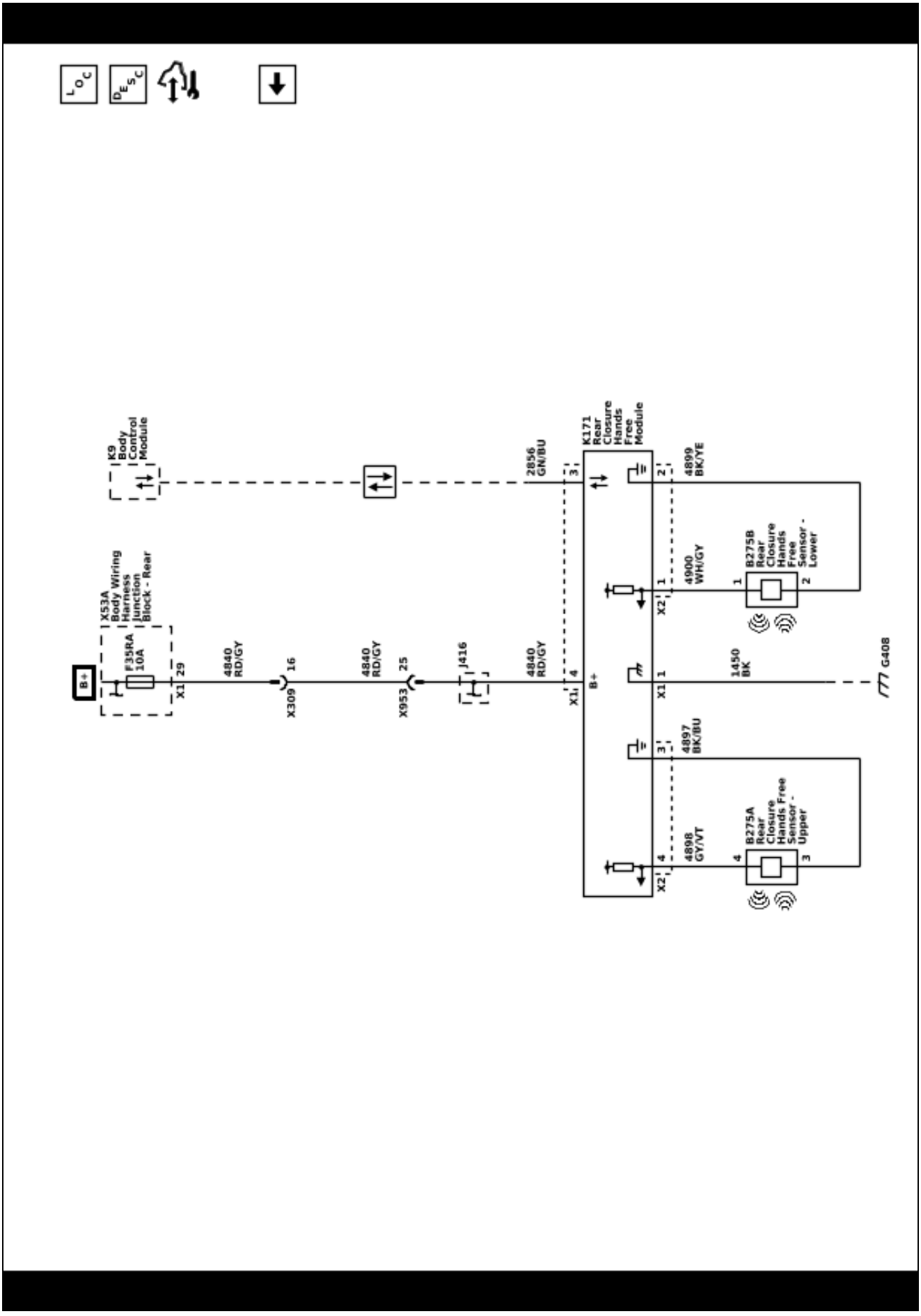
Liftgate Schematics (Rear Gate Module Power, Ground, Serial Data and Liftgate Actuator)



Liftgate Schematics (Liftgate Latch, Switches and Side Sensors)



Liftgate Schematics (Hands Free Liftgate Controls)



Description and Operation

Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

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

Driver, Passenger and Rear Door Ajar

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

Driver and Passenger Door Open

The body control module provides a 12V signal to the driver and passenger door open latches, when the driver or passenger door is open a switch inside the door latch will close providing a ground path for the signal circuit. The body control module will detect the voltage drop in the signal circuit and will send a serial data message to the modules that uses the door open or door close status to trigger the appropriate commands required for the normal operations of that system.

Fuel Fill Door Description and Operation

Fuel Door Release System Components

- Body control module (BCM)
- Fuel door release actuator

The locking and unlocking of the fuel door is a function of the power door lock system. The fuel door release actuator is supplied by the driver door lock control circuit and the fuel door unlock control circuit. The BCM, upon receipt of a lock switch lock or unlock signal, will supply battery voltage to the door lock actuator lock or fuel door unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the doors and fuel filler door will then lock or unlock as commanded.

Hood Ajar Indicator Description and Operation

Hood Ajar Switch

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

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

Hood Ajar Indicator/Message

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

Liftgate Ajar Indicator Description and Operation

Rear Access Open

Manual Liftgate

The driver information center will display the Rear Access Open message when the body control module (BCM) detects that the liftgate is open. The instrument panel cluster receives a serial data message from the BCM requesting illumination. If the vehicle is in the forward or reverse gear position, the BCM activates an audible warning.

Power Liftgate

The rear gate module detects the rear gate latch unlatch switch is closed to ground indicating the liftgate is open. The driver information center receives a serial data message from the rear gate module indicating the liftgate ajar status and the driver information center display the Rear Access Open message

Rear Liftglass Open

Liftgate Window

The lighting control module will monitor the voltage on the liftglass ajar signal circuit, when the ajar switch is open, the voltage level within the signal circuit will be greater than 7 volts indicating the liftgate window is in the closed position. When the liftgate window is open or ajar, the ajar switch will close providing a ground path for the signal circuit, the lighting control module will detect the drop in voltage and will send a serial data message to the driver information center to display the Rear Liftglass Open message.

Liftgate Description and Operation

System Description

The power liftgate system consists of the following components:

- Rear gate module
- Body control module
- Liftgate position sensor (part of the power assist actuator)
- Interior liftgate rotary switch
- Exterior liftgate release switch
- Liftgate close switch
- Liftgate latch
- Liftgate power assist actuator
- Left and right liftgate object sensors
- Rear closure hands free module
- Upper and lower rear closure hands free sensors
- Keyless entry transmitter

Operation

The power liftgate operations will be suspended if the rear wiper motor has been activated and wiping the liftgate window, the transmission selector is not in P (park) or if the vehicle speed is above 3KPH

The tail lamps will then flash 3X to indicate that the body control module has received a request to power open or power close

The power liftgate can be commanded to power open and power close by the following methods:

- An open or close command from the interior liftgate rotary switch
- An open command from the exterior liftgate release switch
- A close command from the liftgate close switch
- An open or close request by pressing the appropriate button 2x quickly on the keyless entry transmitter (¾ or the MAX modes only)
- An open or closed commanded by a kicking motion of a foot and lower leg under the rear fascia – Sensor location may vary depending upon make and model, refer to owner's manual for the location of the sensors. (configured under personalization)
- The kick projected logo light shows where to perform the kicking motion (Diagnosed in the exterior lighting section)

The rear gate module will respond to a request by commanding the liftgate latch to release the liftgate and activate the liftgate motor in the liftgate power assist actuator and raise the liftgate to the open position or to lower and cinch the liftgate closed.

Power Liftgate System

The rear gate module continuously monitors power liftgate operation and calculates its location and direction of travel from an liftgate position sensor (part of the power assist actuator). One input returns the position of the liftgate relative to the x-axis and y-axis. The rear gate module then uses these 2 inputs together to calculate its angle relative to the liftgate. The interior liftgate rotary switch contains resistors which will incrementally drop the voltage level in the signal circuit as the switch rotated from the OFF position to the ¾ position or the MAX position, the front overhead console assembly will detect the change in voltage and will send a serial data message to the rear gate module which will monitor the x-axis and y-axis as the liftgate is in motion to stop the liftgate parallel to the vehicle roof if the rotary switch is in the ¾ setting or to open fully if the rotary switch is in the MAX setting.

The liftgate latch is a bi-directional motor and latch or unlatch operation is the result of the direction of the motor rotation. The rear gate module controls the liftgate latch through the control circuits by supplying power and ground in the appropriate polarity. The motor control circuits are monitored by the rear gate module prior to activation for a high or low condition and during motor operation for an insufficient current flow condition. The unlatch, primary, and neutral switches are part of the liftgate latch and are used by the rear gate module to determine the state of the latch during the process of latching or unlatching and will send the status of the latches to the body control module which is used to determine if the liftgate is closed or ajar. Each of the latch switch signal circuits are supplied battery voltage and monitored within the rear gate module. The latch switches share a common low reference circuit from the rear gate module and when the switch contacts close the signal circuit goes low and the rear gate module determines the switch to be active.

The exterior liftgate release switch circuit is supplied battery voltage by the body control module, when the switch is pressed the contacts close and the signal circuit goes low, the body control module will detect the voltage drop and will send a serial data message to the rear gate module requesting the rear gate open request (vehicle unlocked).

The liftgate close switch signal circuit is supplied battery voltage by the rear gate module. The switch shares a common low reference circuit from the rear gate module and when the switch is pressed the contacts close and the signal circuit goes low, the rear gate module will detect the voltage drop and will send a serial data message to the body control module requesting the rear gate close request.

For vehicles without the optional passive keyless entry, when the exterior liftgate release switch is pressed, the body control module will check the status of the vehicle door locks. If the vehicle doors are locked, the body control module will ignore the signal from the liftgate handle switch. If the vehicle doors are unlocked, the body control module will permit the liftgate to unlatch and power open when the exterior liftgate release switch is pressed.

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

Rear Closure Hands Free Sensor

The sensors are located behind the rear fascia (location may vary depending upon make and model, refer to owner's manual for the location of the sensors) and is designed to detect the motion of the operator's foot by way of a kicking motion. When the keyless entry transmitter is within 3 feet (1 meter) of the liftgate and the operator kicks his or her foot under the rear fascia, the sensors will detect the motion of the foot and the lower leg and if the procedure has been performed correctly the rear closure hands free module will send a serial data message to the body control module. The tail lamps will then flash 3x to indicate that the command has been received and the body control module and will allow the liftgate to perform the power open or power close function. The rear closure hands free functions can be modified within the Vehicle Personalization:

- Open and close with the kicking motion
- Open only with the kicking motion
- Hands free function disabled
- Keyless Access function disabled

Object Detection

The power liftgate system uses an object detection method which consists of liftgate side sensors fixed to both sides of the liftgate near the seal area. The liftgate side sensors consist of an internal fixed resistor and normally open switch contacts which when closed will bypass the resistor. The signal circuit is supplied 5 V through a resistor and monitored within the rear gate module, and during normal power liftgate operation the signal circuit should remain a fixed value. When an liftgate side sensor is presses one of the sensors the contacts close and the resistor is bypassed causing the signal circuit voltage at the module to go low. If the liftgate is being power closed at that time, the rear gate module will command the power liftgate to reverse direction. All power close liftgate operations will be suspended until the obstruction pressing on the liftgate side sensor is removed

The rear gate module continuously monitors power liftgate operation and calculates its location and direction of travel from an liftgate position sensor (part of the power assist actuator). One input returns the position of the liftgate relative to the x-axis and y-axis. The rear gate module then uses these 2 inputs together to calculate its position and motion, if the rear gate module detects a current spike and motion reduction in the liftgate position sensor during the power close operation, it will command the liftgate to reverse direction.

Manual Liftgate Operation

Note: The interior liftgate rotary switch must be in the ¾ position or the MAX position for the remote keyless entry transmitter (key fob) to command the liftgate, The OFF setting will disable the liftgate release of the remote keyless entry transmitter (key fob)

The operator has the option to disable the power liftgate operations by selecting the "OFF" position on the interior liftgate rotary switch. The releasing and cinching for the liftgate latch will function normally, however, the operator must use the exterior liftgate handle switch to activate the liftgate latch and manually pull the liftgate open and push the liftgate closed. All power liftgate operations will be suspended for as long as the liftgate rotary switch is in the "OFF" position.

Luggage Compartment Description and Operation

Liftgate Window Latch Assembly

Liftgate Window Unlatch Switch

The lighting control module (TB4) or the rear gate module (TB5) monitors supplies a 12 V signal to the liftgate window unlatch switch so that when the switch is pressed, the voltage within the signal circuit is pulled low and in response, the lighting control module (TB4) or the rear gate module (TB5) will detect the voltage drop and send a serial data message to the body control module to command the liftgate window to release.

Liftgate Window Latch

When body control module receives a liftgate window release command from the liftgate window unlatch switch, the body control module applies voltage to the liftgate window unlatch relay control circuit, which energizes the coil side of the relay. The switch side of the liftgate window unlatch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the liftgate window latch. The liftgate window latch is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the liftgate window so that it may be manually raised to an open position.

Power Door Latch Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch (contains lock indicator)
- Passenger door lock switch (contains lock indicator)
- Left rear door lock switch (contains lock indicator)
- Right rear door lock switch (contains lock indicator)
- Driver front side door window control switch
- Passenger front side door window control switch
- Driver front side door latch
- Driver door cinch latch motor (AF7)
- Passenger front side door latch
- Passenger door cinch latch motor (AF7)
- Left rear side door latch
- Left rear door cinch latch motor (AF7)
- Right rear side door latch
- Right rear door cinch latch motor (AF7)
- Exterior door handle switches
- Body control module
- Lighting control module

Door Lock System Controls

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

- Power door lock switch activation
- Exterior door handle switches
- Keyless entry lock or unlock command
- Delayed locking command
- Automatic door lock command

Door Lock and Unlock Operation

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

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

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

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

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

This sequence and be modified through the personalization settings

Driver/Passenger Door Lock Indicator Operation

The body control module will monitor the status of the front door latches, when the driver or passenger door lock switch is pressed to the lock position, the body control module with detect the lock status of the door latch and will send a serial data message to the appropriate front side door window control switch which will then apply voltage to the door lock indicator within the door lock switch.

Rear Door Lock Indicator Operation

When the left rear or right rear door lock switch is pressed to the lock position, the lighting control module will detect the voltage drop, it will send a serial data message to the body control module that a lock command has been requested. The body control module will use the rear door lock indicator signal circuit to determine the status of the door latch, if the door is locked, a switch within the door latch will close causing a drop in voltage in the signal circuit indicating the door is locked, the body control module will then illuminate the door lock indicator.

Passive Door Lock/Unlock Operation

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

Door Cinch/Release Operation

The ratchet, pawl, and sector switches are part of the door latch and is used to determine the state of the latch during the process of latching or unlatching. The ratchet and pawl switches will be inactive when the primary and secondary latches are latched, and the sector switch will be active during the power cinch function. Each of the latch switch signal circuits are supplied battery voltage through a resistor and monitored within the side door latch. When the switch contacts close the signal circuit goes low and the side door latch determines the switch to be active.

Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch (contains lock indicator)
- Passenger door lock switch (contains lock indicator)
- Left rear door lock switch (contains lock indicator)
- Right rear door lock switch (contains lock indicator)
- Driver front side door window control switch
- Passenger front side door window control switch
- Driver front side door latch
- Passenger front side door latch
- Left rear side door latch
- Right rear side door latch
- Exterior door handle switches
- Body control module
- Lighting control module

Door Lock System Controls

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

- Power door lock switch activation
- Exterior door handle switches

- Keyless entry lock or unlock command
- A door lock cylinder switch Unlock actuation
- Delayed locking command
- Automatic door lock command

Door Lock and Unlock Operation

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

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

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

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

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

This sequence and be modified through the personalization settings

Driver/Passenger Door Lock Indicator Operation

The body control module will monitor the status of the front door latches, when the driver or passenger door lock switch is pressed to the lock position, the body control module with detect the lock status of the door latch and will send a serial data message to the appropriate front side door window control switch which will then apply voltage to the door lock indicator within the door lock switch.

Rear Door Lock Indicator Operation

When the left rear or right rear door lock switch is pressed to the lock position, the lighting control module will detect the voltage drop, it will send a serial data message to the body control module that a lock command has been requested. The body control module will use the rear door lock indicator signal circuit to determine the status of the door latch, if the door is locked, a switch within the door latch will close causing a drop in voltage in the signal circuit indicating the door is locked, the body control module will then illuminate the door lock indicator.

Passive Door Lock/Unlock Operation

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

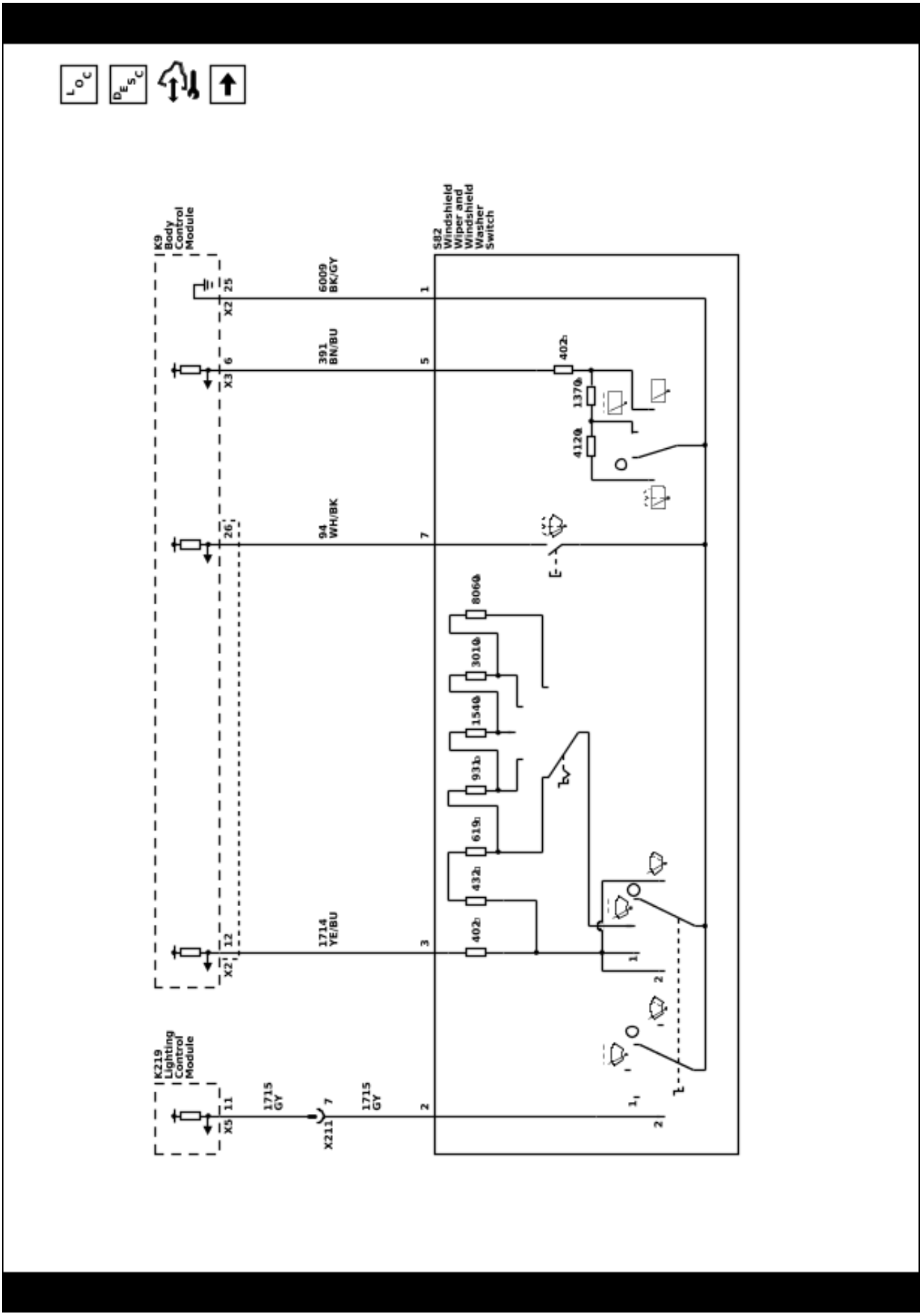
Power Door Dead Lock Operation

Vehicles equipped with the dead lock feature include an additional reversible dead lock motor contained within each door latch assembly. Each door latch assembly is wired to the body control module through 2 control circuits; the door lock dead lock control circuit and the door lock actuator unlock control circuit. To disable the interior door handles, the door locks are activated by momentarily applying voltage to the door lock dead lock control circuits, and ground to the door lock actuator unlock control circuits. Ground to the dead lock actuators is provided through the door lock actuator unlock control circuits. Once the doors are locked with dead lock, the mechanical lock/unlock linkage within the door lock actuator is physically disconnected so that the door cannot be opened by using the interior door handles. If the content theft feature is armed at the same time, the interior door lock switches will not operate the locks.

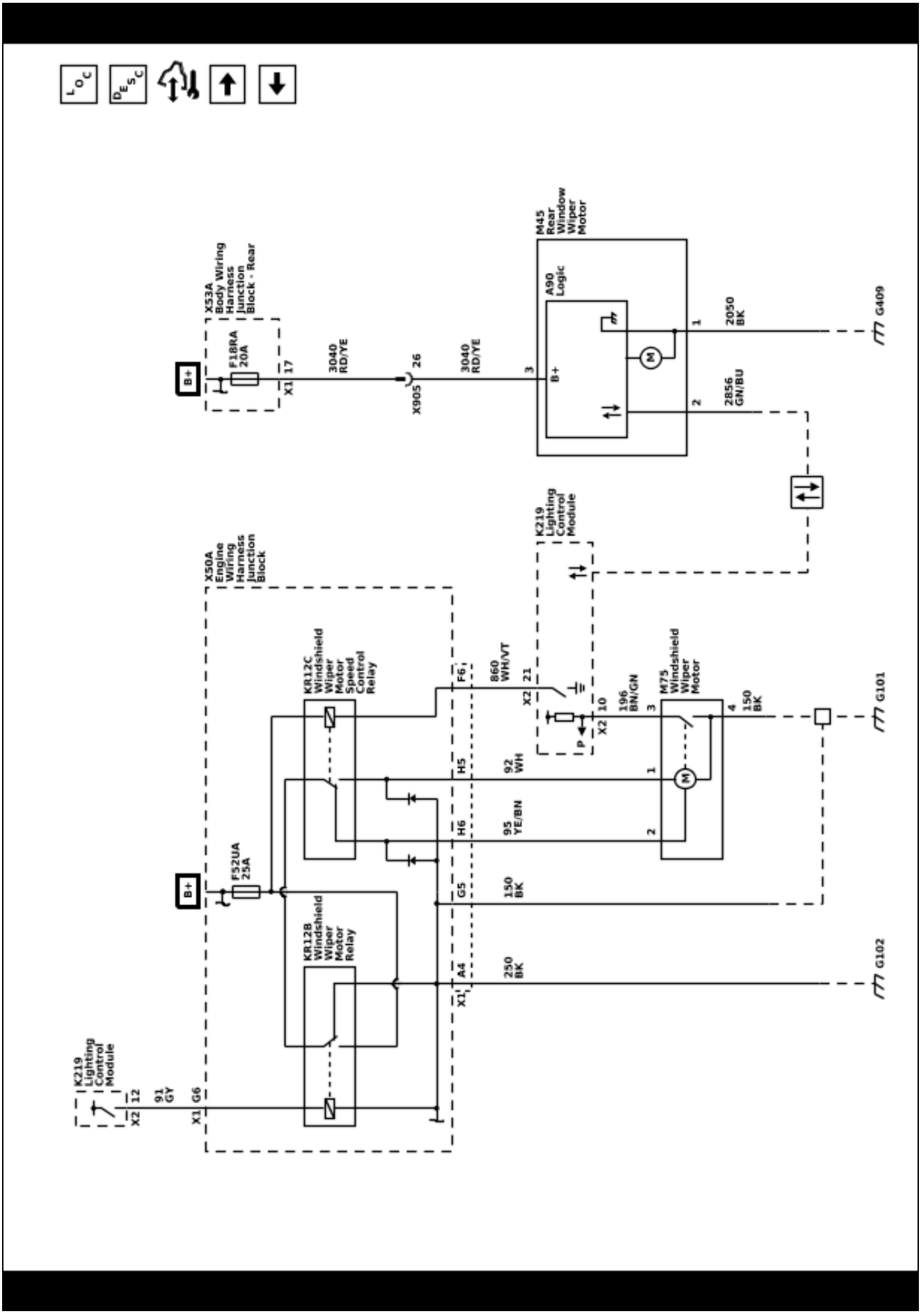
Wipers and Washers

Schematic and Routing Diagrams

Wiper/Washer Schematics (Controls)

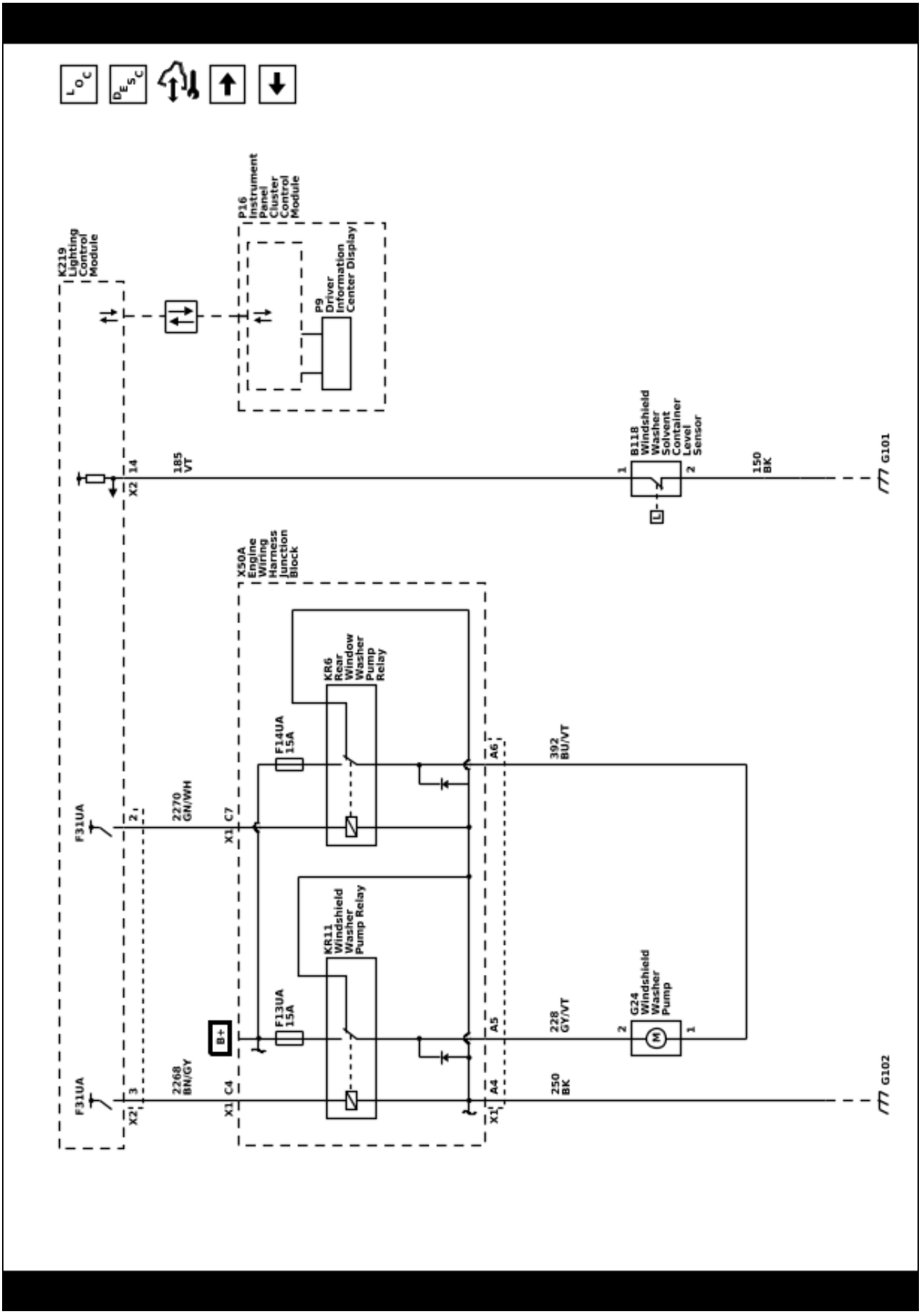


Wiper/Washer Schematics (Wiper Motor)

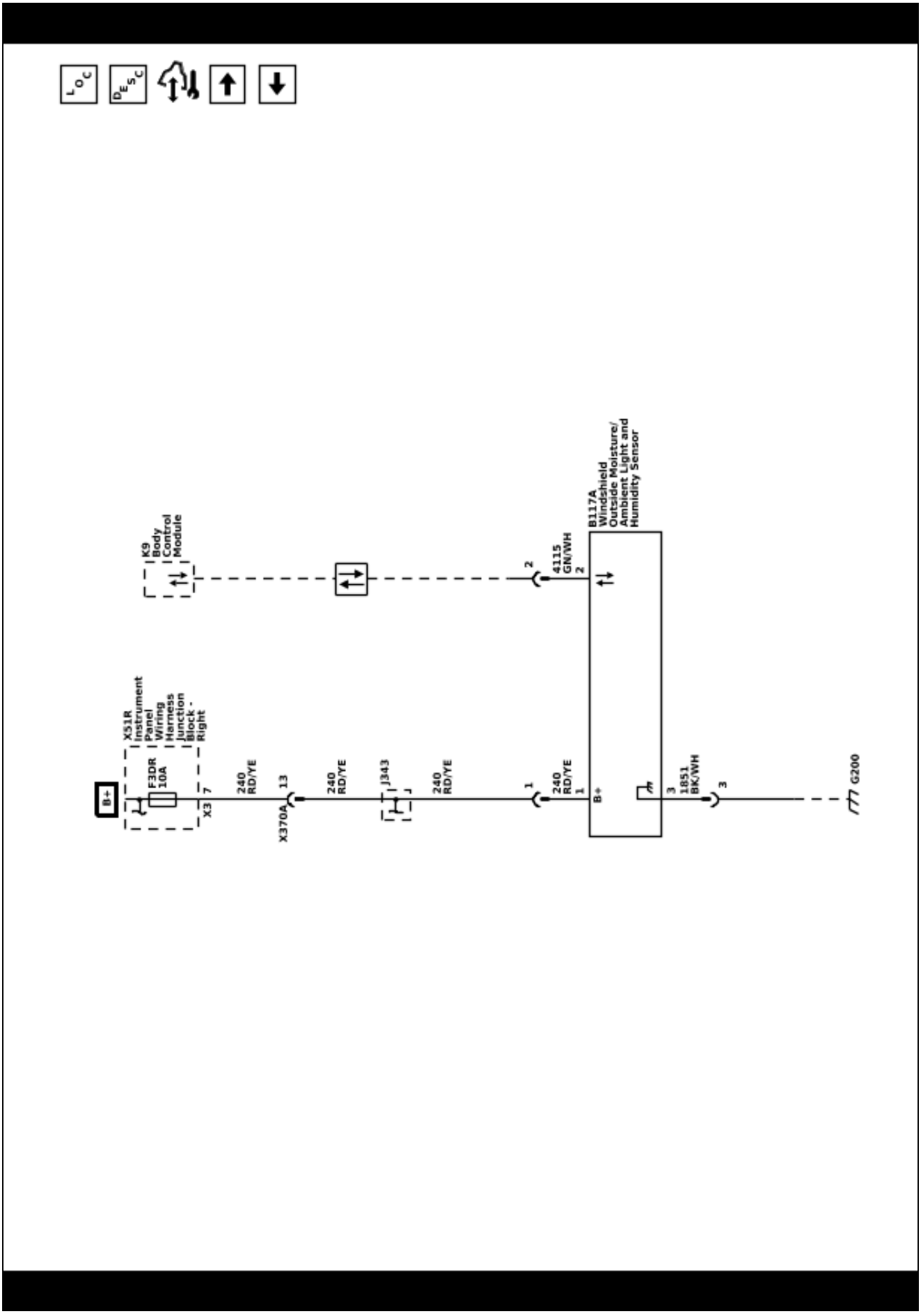


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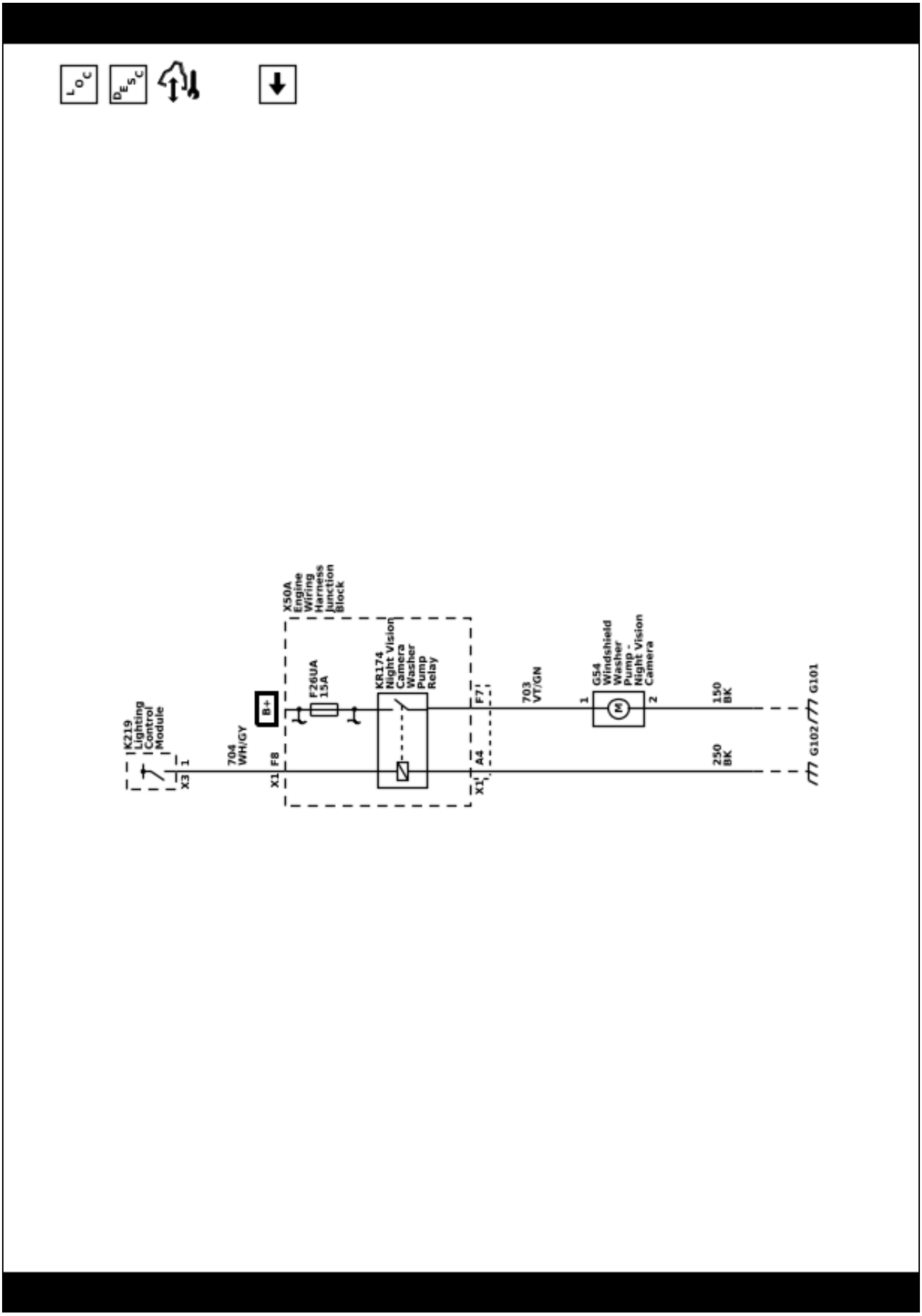
Wiper/Washer Schematics (Washer Pump)



Wiper/Washer Schematics (Outside Moisture Sensor)



Wiper/Washer Schematics (Night Vision Camera Washer Pump (UV3))



Description and Operation

Wiper/Washer System Description and Operation

Front Windshield Wiper Operation

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

Low Speed Wiper Operation

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

Intermittent Wiper Operation

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

High Speed Wiper Operation

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

Mist (Single Wipe) Operation

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

Wiper Park Operation

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

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

The windshield wiper system consists of the following electrical components:

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

Front Windshield Wiper Components

S82 Windshield Wiper/Washer Switch

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

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

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

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

K9 Body Control Module

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

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

K219 Lighting Control Module

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

KR12B Windshield Wiper Relay

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

KR12C Windshield Wiper Speed Control Relay

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

B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor

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

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

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

M75 Windshield Wiper Motor

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

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

Rear Window Wiper Operation

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

Low Speed Wiper Operation

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

Intermittent Wiper Operation

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

Mist (Single Wipe) Operation

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

Wiper Park Operation

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

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

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

Rear Window Wiper Components

S82 Windshield Wiper/Washer Switch

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

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

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

K9 Body Control Module

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

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

M45 Rear Wiper Motor

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

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

Windshield Washer Operation

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

The windshield wiper system consists of the following electrical components:

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

Windshield Washer Components

S82 Windshield Wiper/Washer Switch

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

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

K9 Body Control Module

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

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

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

K219 Lighting Control Module

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

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

KR12B Windshield Wiper Relay

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

KR6 Rear Window Washer Pump Relay

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

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

KR11 Windshield Washer Pump Relay

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

G24 Windshield Washer Pump

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

M45 Rear Window Wiper Motor

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

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

M75 Windshield Wiper Motor

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

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

B118B Windshield Washer Fluid Level Switch

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

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Section 3

Driver Information and Entertainment

Image Display Cameras 3-3
Schematic and Routing Diagrams 3-3
Image Display Camera Schematics 3-4
Description and Operation 3-9
Night Vision Camera Description and Operation 3-9
Rearview Camera Full Display Mirror Description and Operation 3-11
Rear Vision Camera Description and Operation 3-11
Surround Vision Camera Description and Operation (UXP) 3-11
Surround Vision Camera Description and Operation (Trailer Vision System (UXP with TRG)) 3-12

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Image Display Cameras

Schematic and Routing Diagrams

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

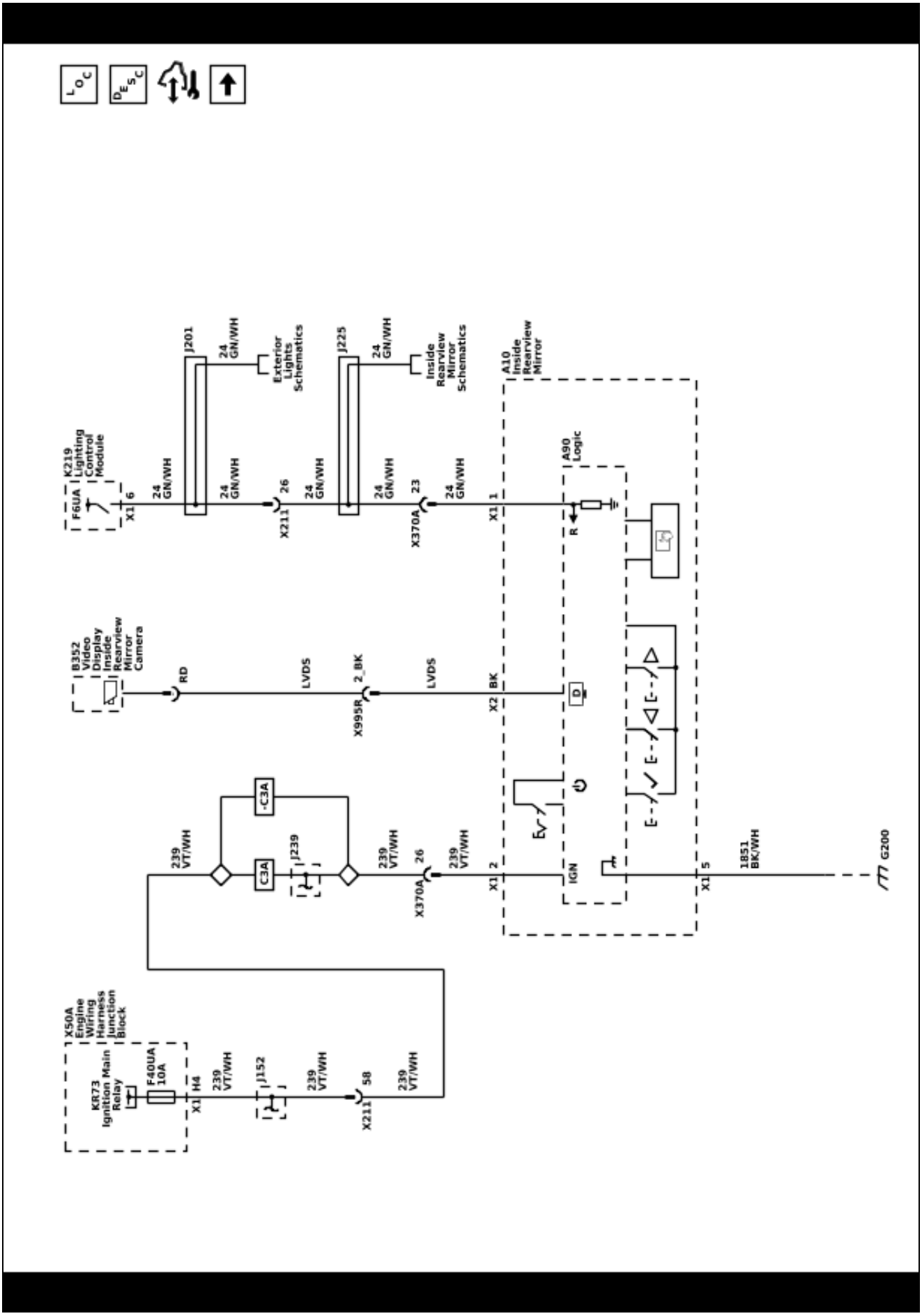


Image Display Camera Schematics (360 Degree Vision Module Power, Ground, Serial Data and Controls)

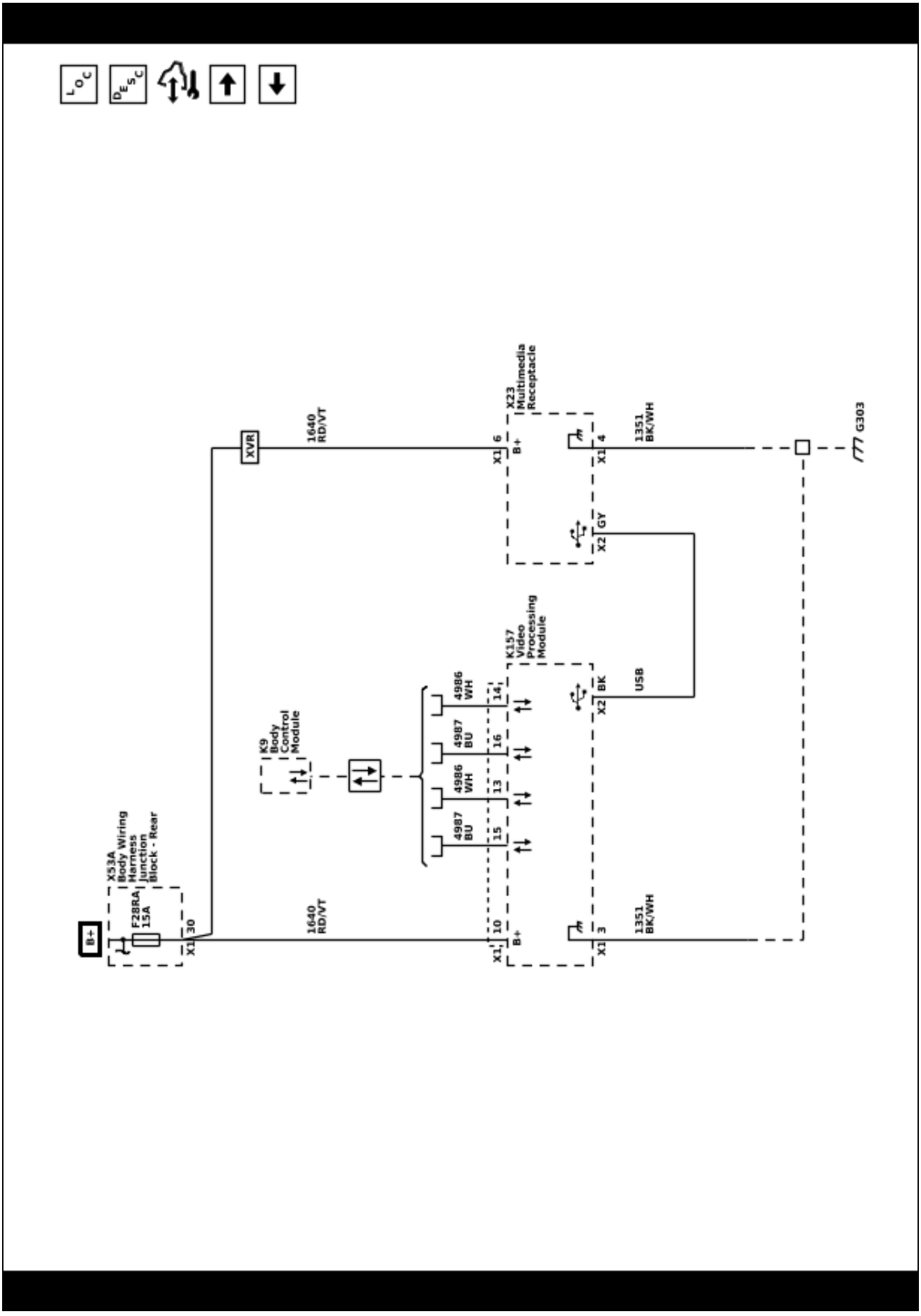
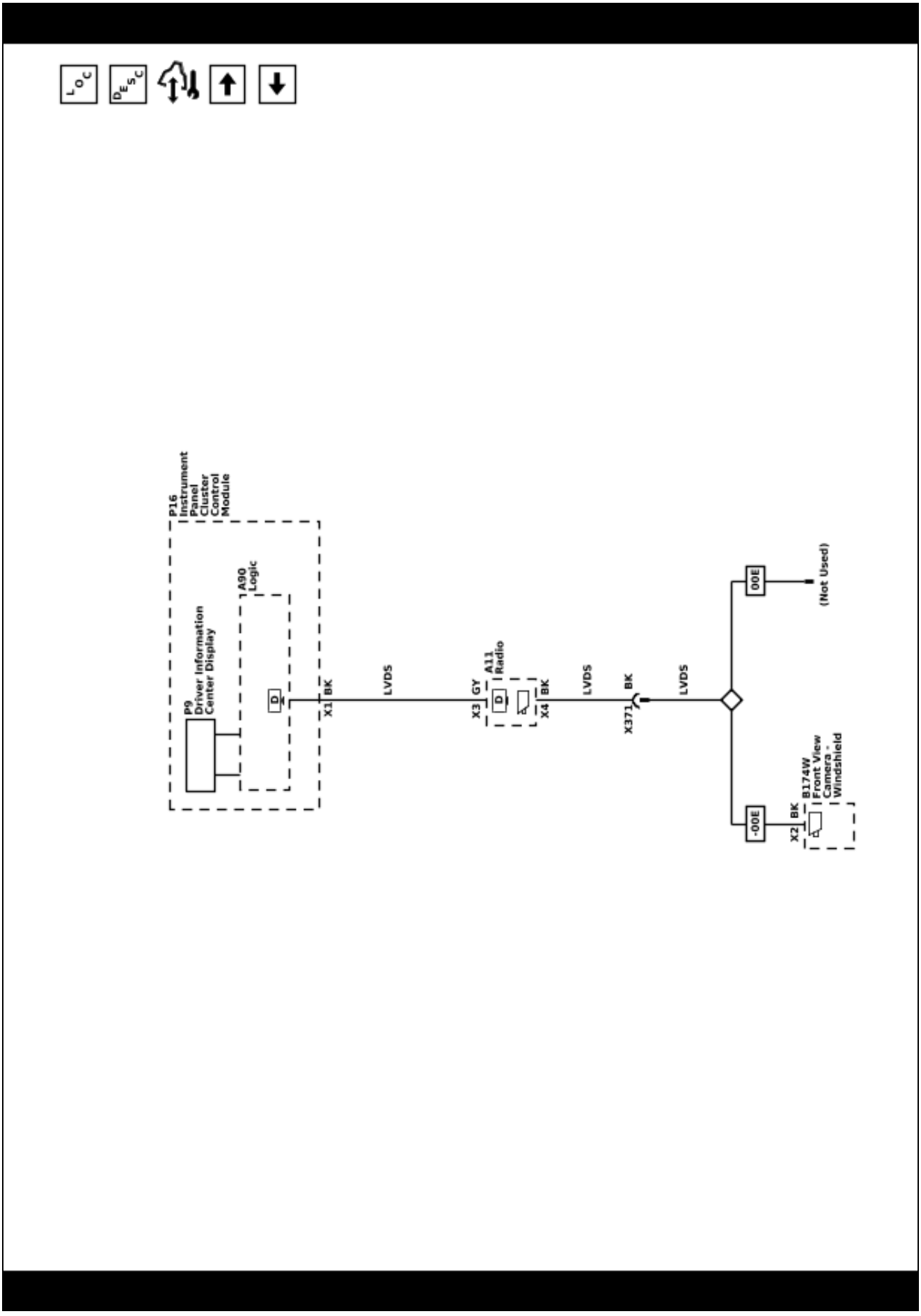


Image Display Camera Schematics (Augmented Reality Camera)



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Image Display Camera Schematics (360 Degree Vision - Cameras and Display)

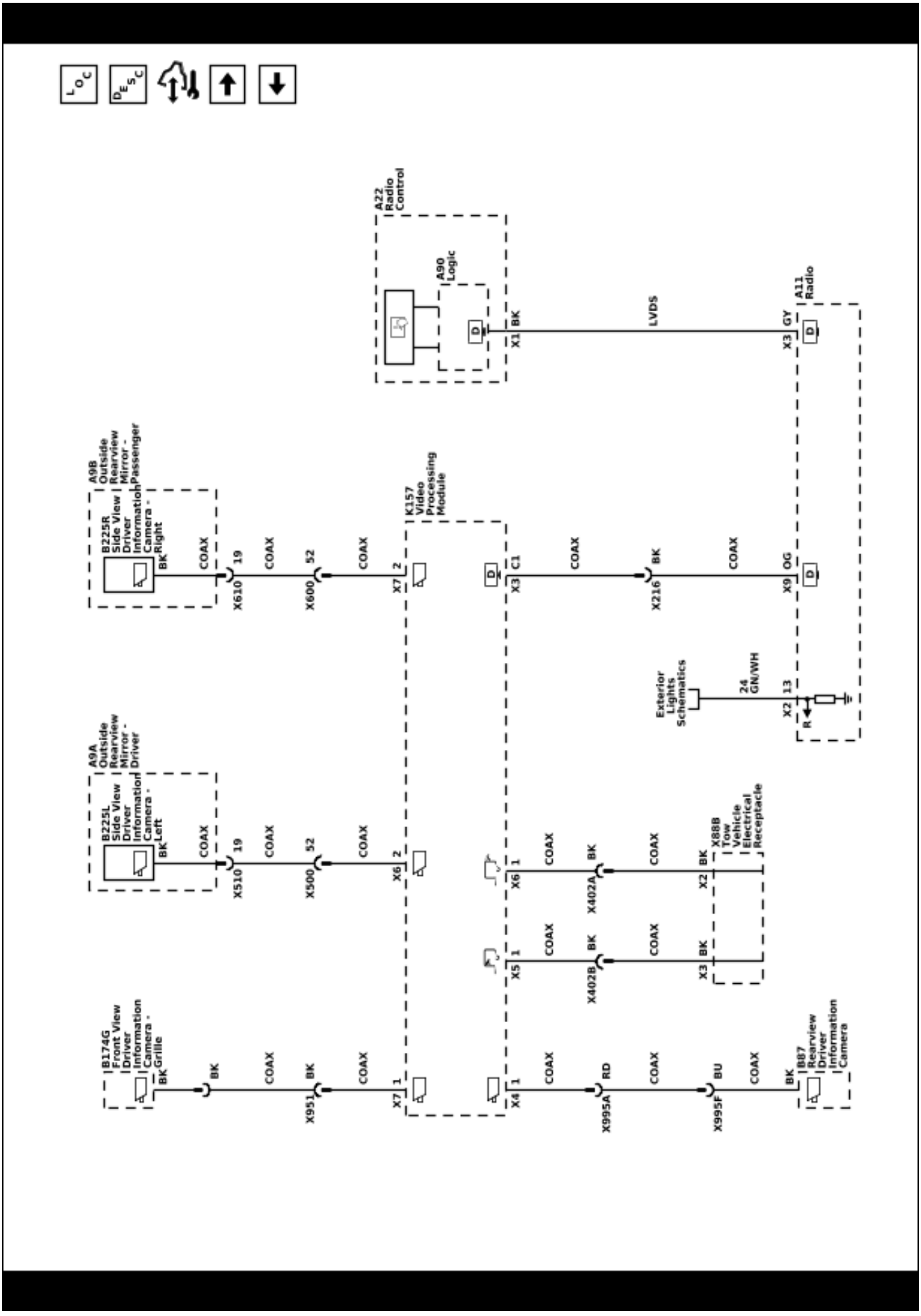
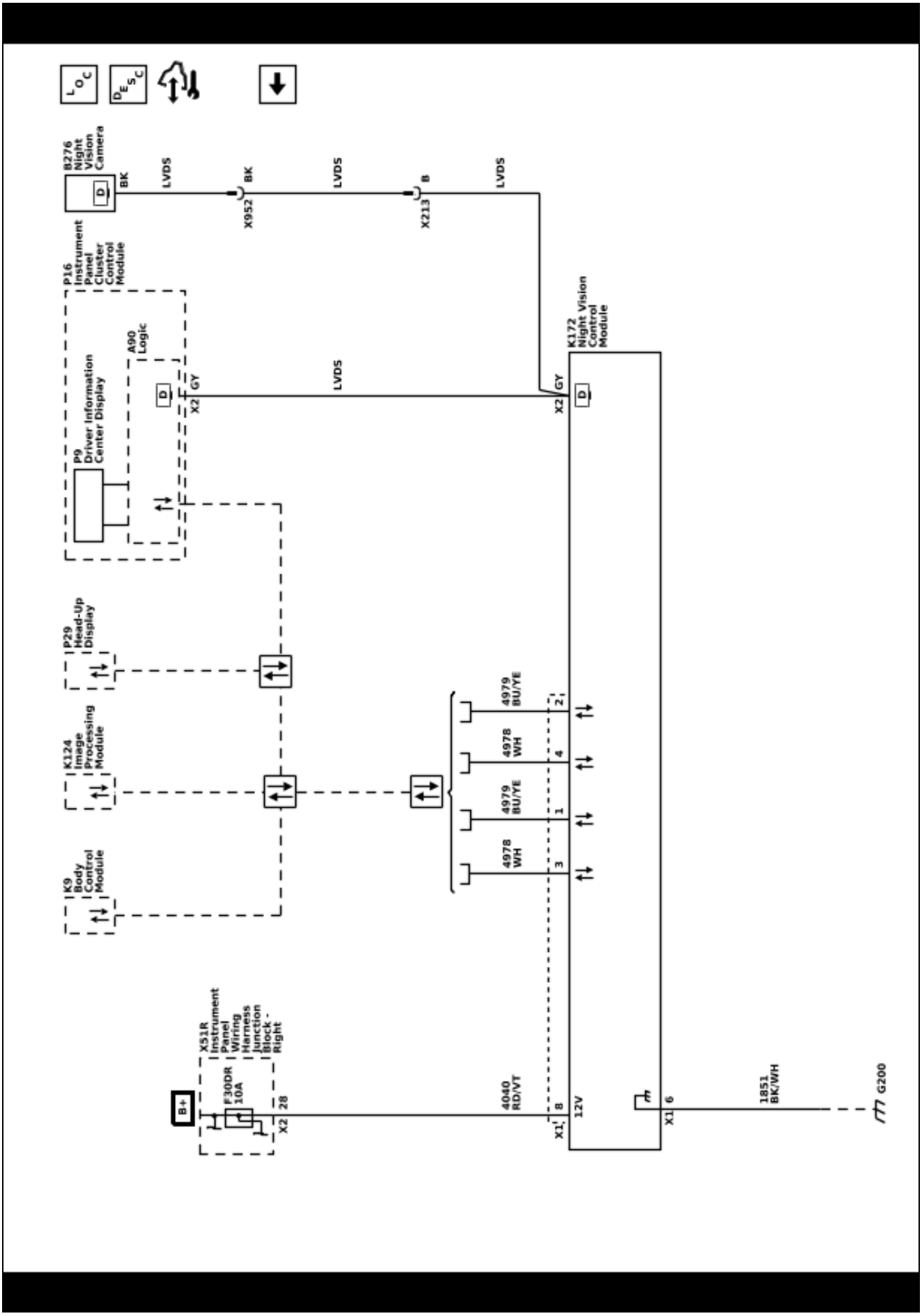


Image Display Camera Schematics (Night Vision Camera (UV3))



Description and Operation

Night Vision Camera Description and Operation

System Operation

The night vision module sends the processed image output directly to the cluster via a dedicated cable.

The active safety control module communicates via serial data to the night vision camera module from the BCM and Motion Sensor Manager which the night vision camera module uses to turn on if the conditions are correct (ambient light and temperature), and perform detections (vehicle path and speed). The night vision camera module will send a message to the active safety control module if a warning or alert is required. Warnings and alerts are posted on the cluster or Head-Up Display, depending on vehicle equipment.

System pedestrian icons, beeps, and (if equipped) Safety Alert Seat pulses can be set to Off through vehicle personalization by turning off the Front Pedestrian Braking system. If the personalization is set to Off, only highlighting will occur on night vision image. The night vision system does not automatically brake the vehicle.

Additionally, all the video signal circuits are twisted and shielded to prevent any interference that may lead to a loss of video signal resolution and cause a degraded video image. These circuits must not be spliced/ removed from shielding or will cause image degradation.

Night Vision Components

The night vision system consists of the following components:

- Night Vision Camera
- Night Vision Control Module
- Night Vision Cleaning System

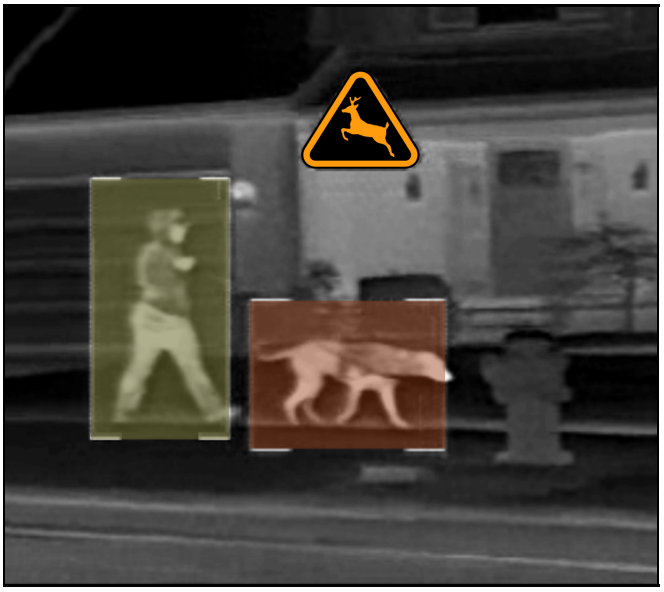
The system is displayed on the instrument cluster and head-up display.

Night Vision Operation

Warning: Do not stare at the image while driving as this might cause important objects ahead not to be seen. You could crash, and you or others could be injured.

Warning: The system does not detect all objects or the vehicle distance from objects. The system may not provide a warning with enough time to help avoid a crash.

Detections



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- Detections are outlined in yellow
- Warnings are red
- People or Pedestrians are yellow
- Animals are orange

If equipped, this system can help the driver see pedestrians or large animals ahead of the vehicle beyond the area lit by the headlights. A thermal heat image of the view ahead is displayed when it is dark enough outside. If a pedestrian or large animal is detected more than 25 m (82 ft) away, an amber pedestrian or animal icon displays and a box appears around the pedestrian or animal. When the system detects that the vehicle is approaching a pedestrian ahead much too quickly, the box changes to red.

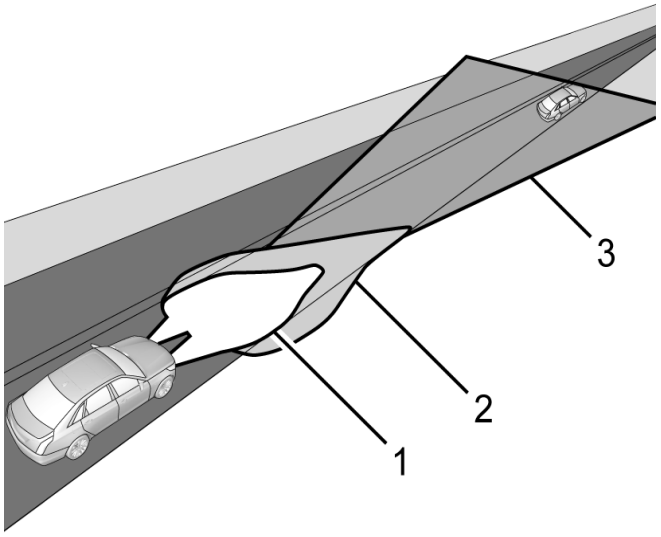


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Warm objects, such as pedestrians, animals, and other moving vehicles, should appear whiter on the Night Vision display. Cold objects, such as the sky, signs, and parked vehicles, should appear darker. Night Vision only shows objects that are warmer or colder than the

surroundings. It does not detect brake lamps, turn signals, emergency flashers, traffic lights, or sign information.

With the Front Pedestrian Braking system turned on, Night Vision provides a red Head-Up Display (HUD) alert when the system detects that the vehicle is approaching a pedestrian ahead much too quickly.



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By selecting a view on the instrument cluster, the night vision image can be displayed. See Instrument Cluster. The Night Vision system can operate only if:

- The ignition is on.
- The vehicle is in P (Park) or a forward gear.
- It is dark enough outside.
- The headlamps are on.

Adjust the instrument panel brightness to make the image no brighter than necessary. Turn the image off by selecting another view on the instrument cluster.

When a pedestrian or large animal is detected, an amber box displays around the pedestrian or animal on the Night Vision display and an amber pedestrian icon, or animal icon displays on the instrument cluster. This pedestrian icon is also shown on the Head-Up Display (HUD). When the system detects the vehicle is approaching a pedestrian much too quickly, the amber box turns red, and a red flashing icon displays on the Head-Up Display with rapid beeping or pulsing of the Safety Alert Seat, if equipped.

The system may not detect pedestrians, object, or animals:

- If they are less than 82 ft (25 m) away.
- If they are not directly ahead in the sensor coverage area, fully visible, standing upright, or part of a group.
- If the pedestrian or animal is moving too quickly through the field of view, such as a bicyclist.
- If the pedestrian is wearing certain types of clothing.
- If headlamps are off, except when parked.
- If the outside temperature is higher than 86 °F (30 °C).
- Due to poor visibility, including in heavy fog, rain, or snow.
- If the sensor is blocked by dirt, snow, rain, or ice.

The Night Vision System may have a poor camera image if:

- Ice, snow, or mud build up on the camera lens
- Damage to the front fascia or camera lens
- High ambient temperatures – the camera will not operate above outside temperatures higher than 86 °F (30 °C)

Night Vision messages:

- Several Night Vision related messages may be displayed on the Instrument Cluster to indicate system status and/or environmental issues that may be limiting Night Vision operation. The related messages include the following:

Message	Possible Cause
SERVICE NIGHT VISION SYSTEM	System malfunction detected— check for DTCs
NIGHT VISION SYSTEM AVAILABLE ONLY WHEN IT IS DARK	System is detecting ambient light sensor is detecting “day” mode.
NIGHT VISION SYSTEM TEMPORARILY UNAVAILABLE	• Excessive internal temperature detected. Environment conditions such as high ambient temperature or stop-and-go traffic can be the cause. • Blockage of camera • Supply voltage out of range • Missing or incorrect VIN
NIGHT VISION DETECTION UNAVAILABLE	**Note:** Video image may still be displayed, but object detections will not be displayed properly. • Outside air temperature exceeds 30°C (86°F) • Missing vehicle path information. Diagnose DTCs set in night vision and other systems.

Night Vision Cleaning System

The night vision cleaning system is controlled by the BCM and the Wiper/Washer system. Activating the rear window washer when it is dark enough for the night vision system to operate, will also activate the night vision camera window washer. Button presses must be long presses, a quick press may not be counted as a wash request. If the Night Vision image still looks blurry, use a soft wet cloth to gently clean the sensor camera lens and dry thoroughly.

Rearview Camera Full Display Mirror Description and Operation

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

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

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

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

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

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

Rear Vision Camera Description and Operation

Rear Vision Camera System Operation

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

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

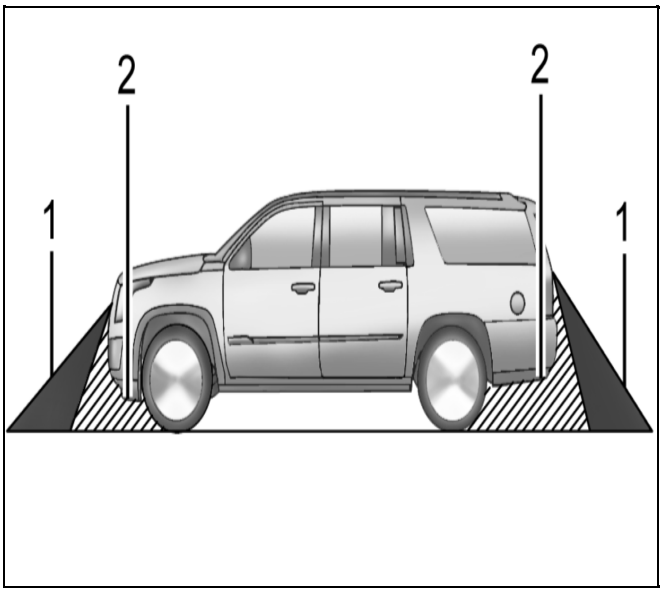
The following conditions may cause a degraded rear vision camera image:

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

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

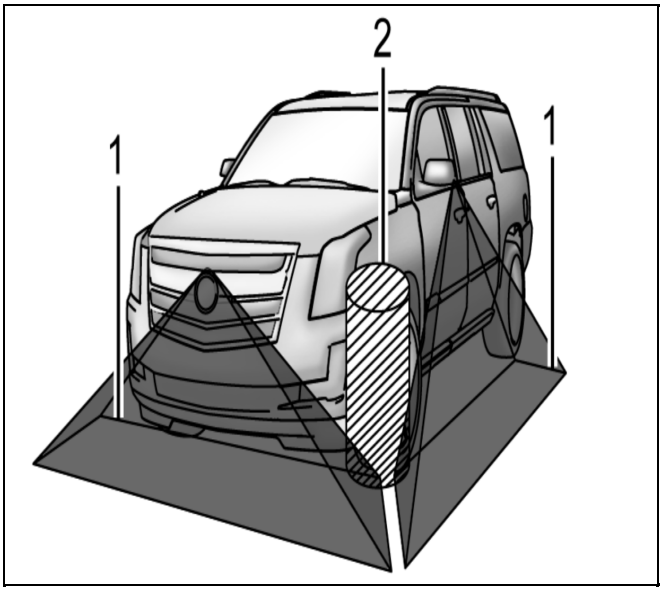
Surround Vision Camera Description and Operation (UXP)

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



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

The surround vision camera system consists of the following components:

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

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

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

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

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

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

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

Features of the Surround Vision System

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

System Operation

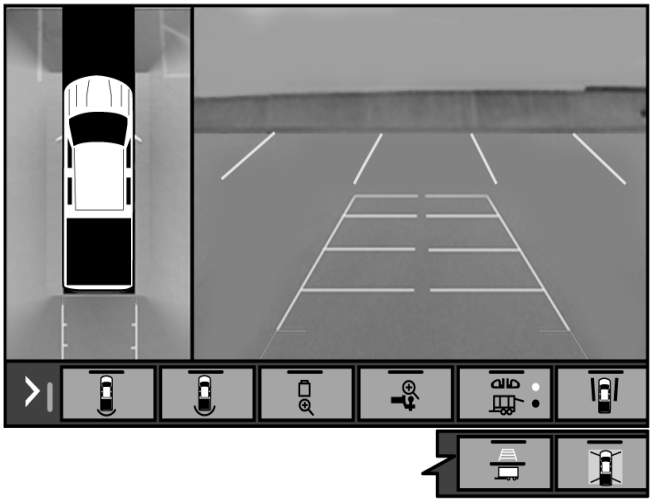
The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the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

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

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

Surround Vision Camera Description and Operation (Trailer Vision System (UXP with TRG))

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 (TRG) consists of the following components:

- K157 Video Processing Control Module
- A11 Radio
- A22 Radio Control
- B87 Rearview Driver Information Camera
- B225L Sideview Driver Information Camera – Left
- B225R Sideview Driver Information Camera – Right
- B174G Frontview Driver InformationCamera – Grille
- Trailer Rearview Camera (if customer installed)
- Trailer Interior Camera (if customer installed)

Features of the Surround Vision– Trailer Vision System

- Rear camera (B87 Rearview Camera) alongside overhead view is displayed in reverse
- Trailer Rearview Camera (if customer installed) and Trailer Interior Camera (if customer installed) view are displayed when selected via the Trailering application on the Infotainment screen. These cameras can also be configured to create a Transparent Trailer View when configured accordingly.
- 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.
- 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, the rear vision camera is above the license plate, a rearview trailer camera can be mounted on the rear of a trailer, and a trailer interior 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.

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.

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

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Section 4

Engine/Propulsion

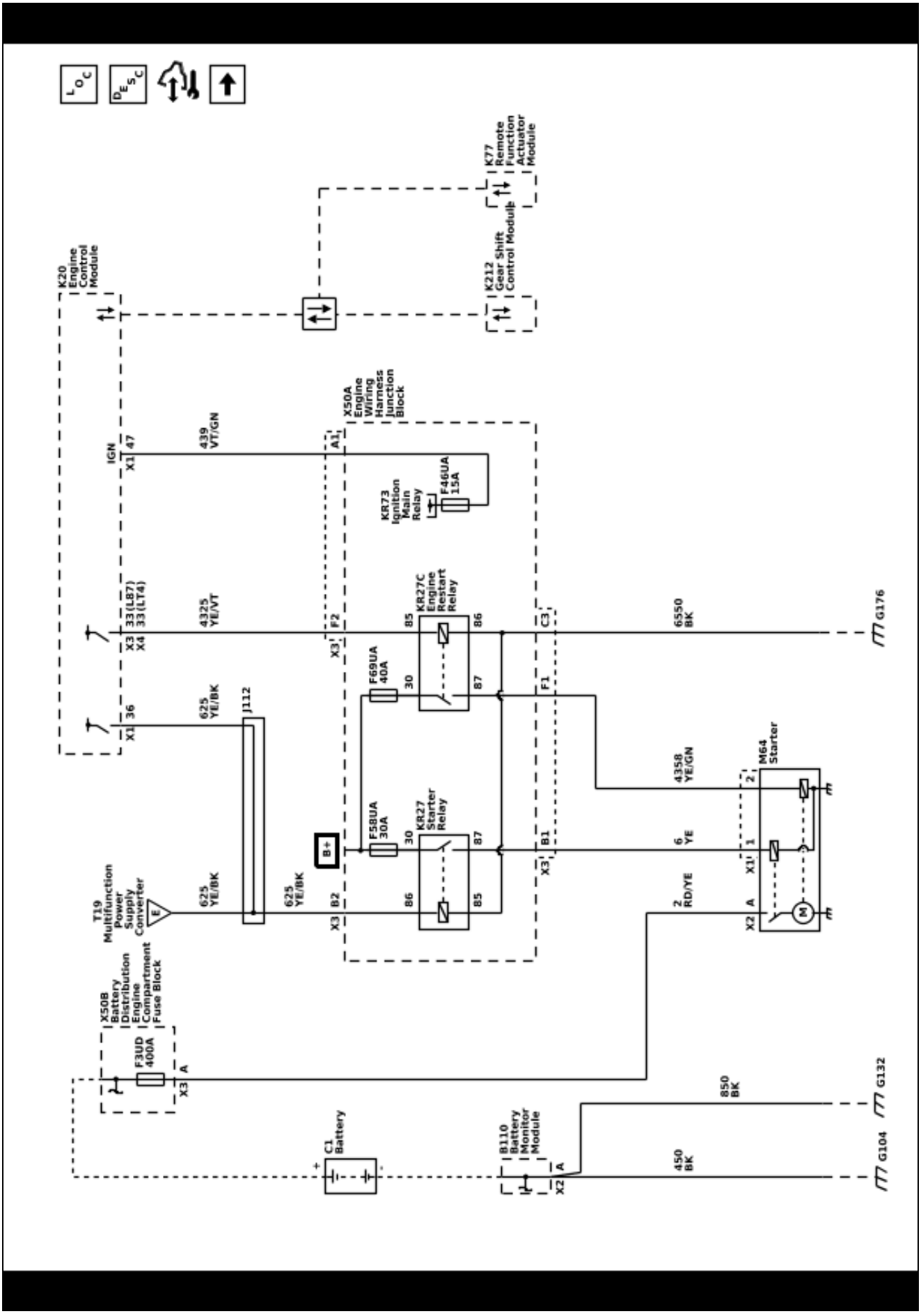
12 V Starting and Charging 4-3
Schematic and Routing Diagrams 4-3
Starting and Charging Schematics 4-4
Description and Operation 4-8
Battery Description and Operation 4-8
Charging System Description and Operation 4-8
Electrical Power Management Description and Operation 4-11
Starting System Description and Operation 4-13
Stop/Start System Description and Operation 4-14

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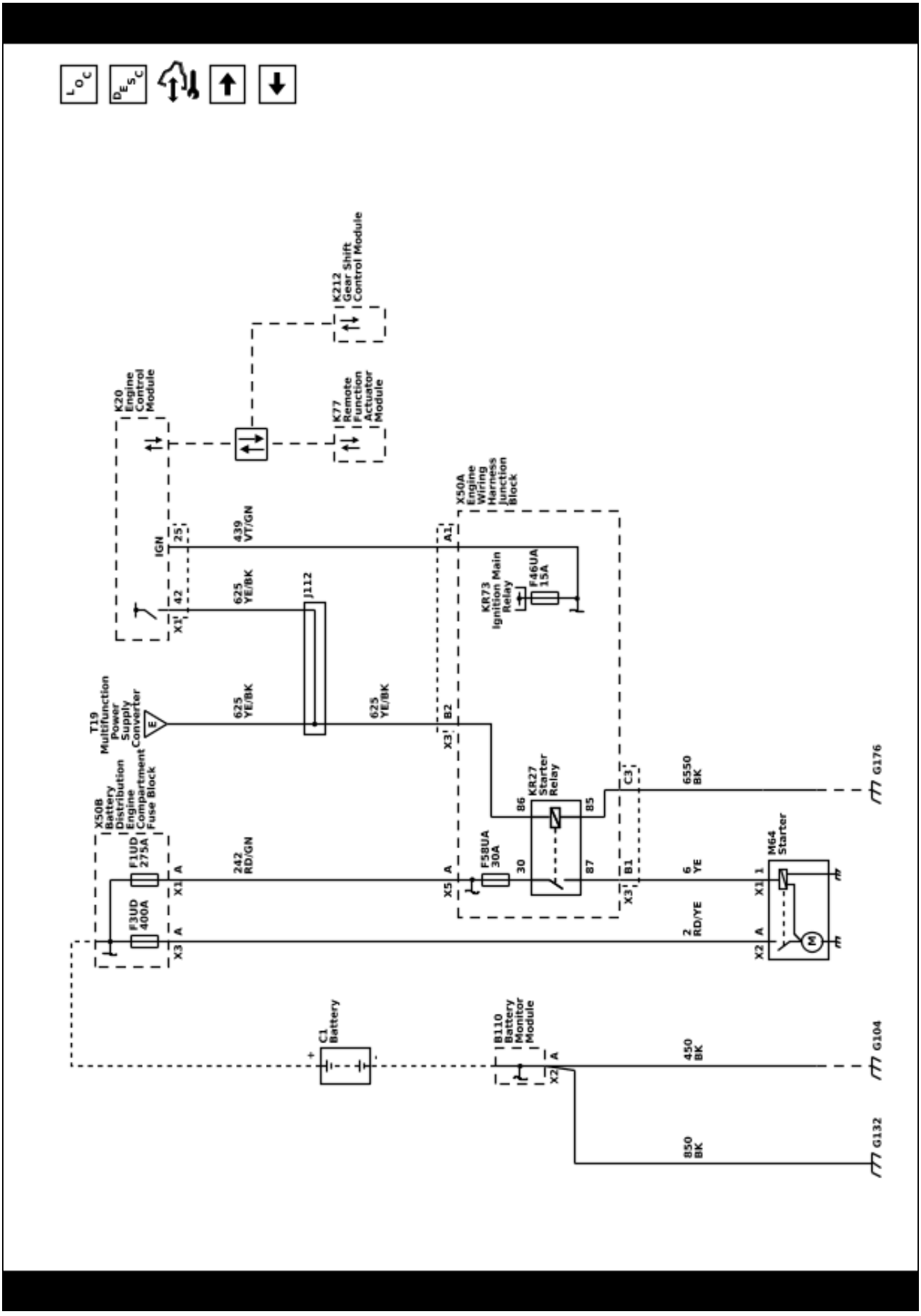
12 V Starting and Charging

Schematic and Routing Diagrams

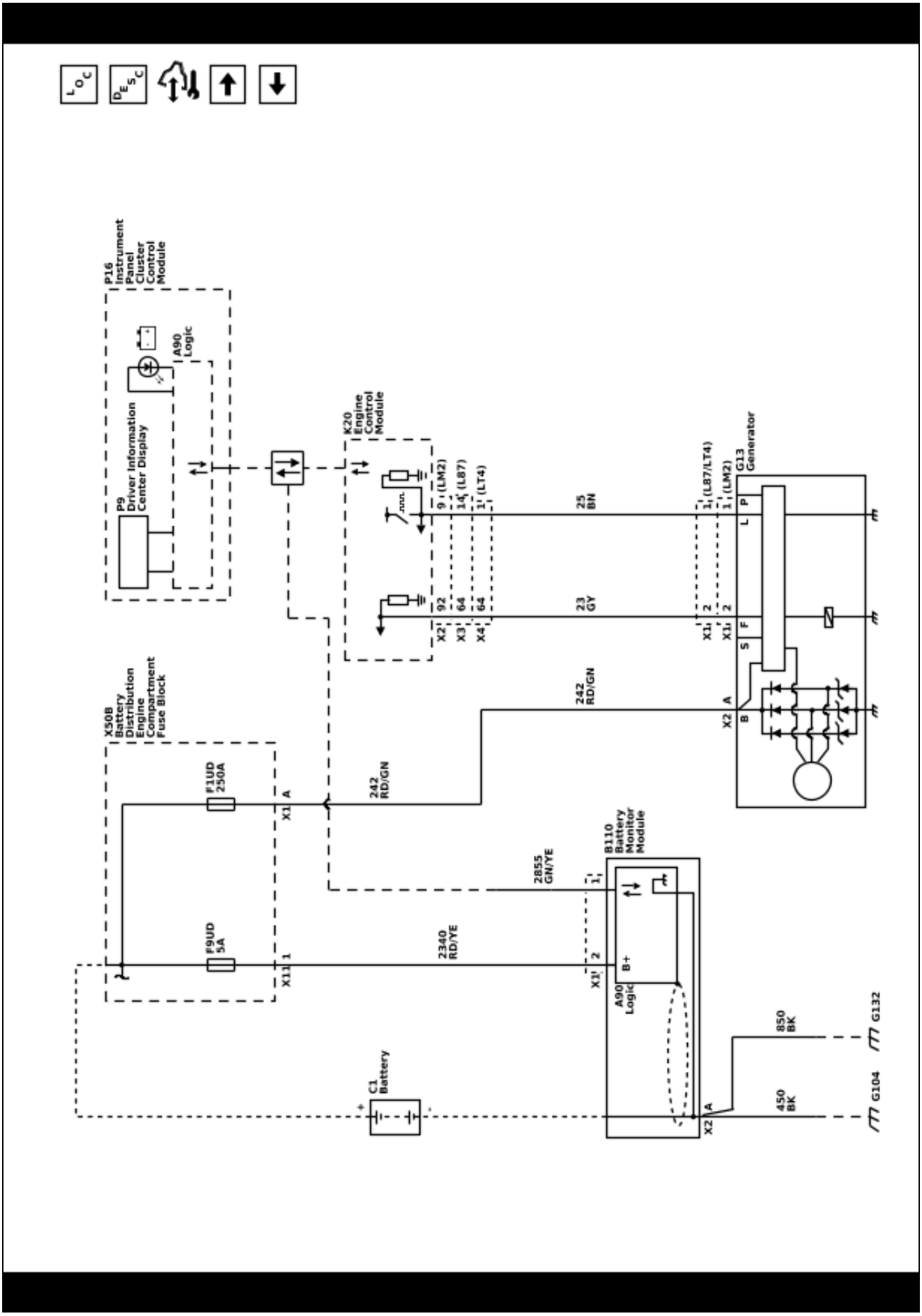
Starting and Charging Schematics (Starting (L87 / LT4))



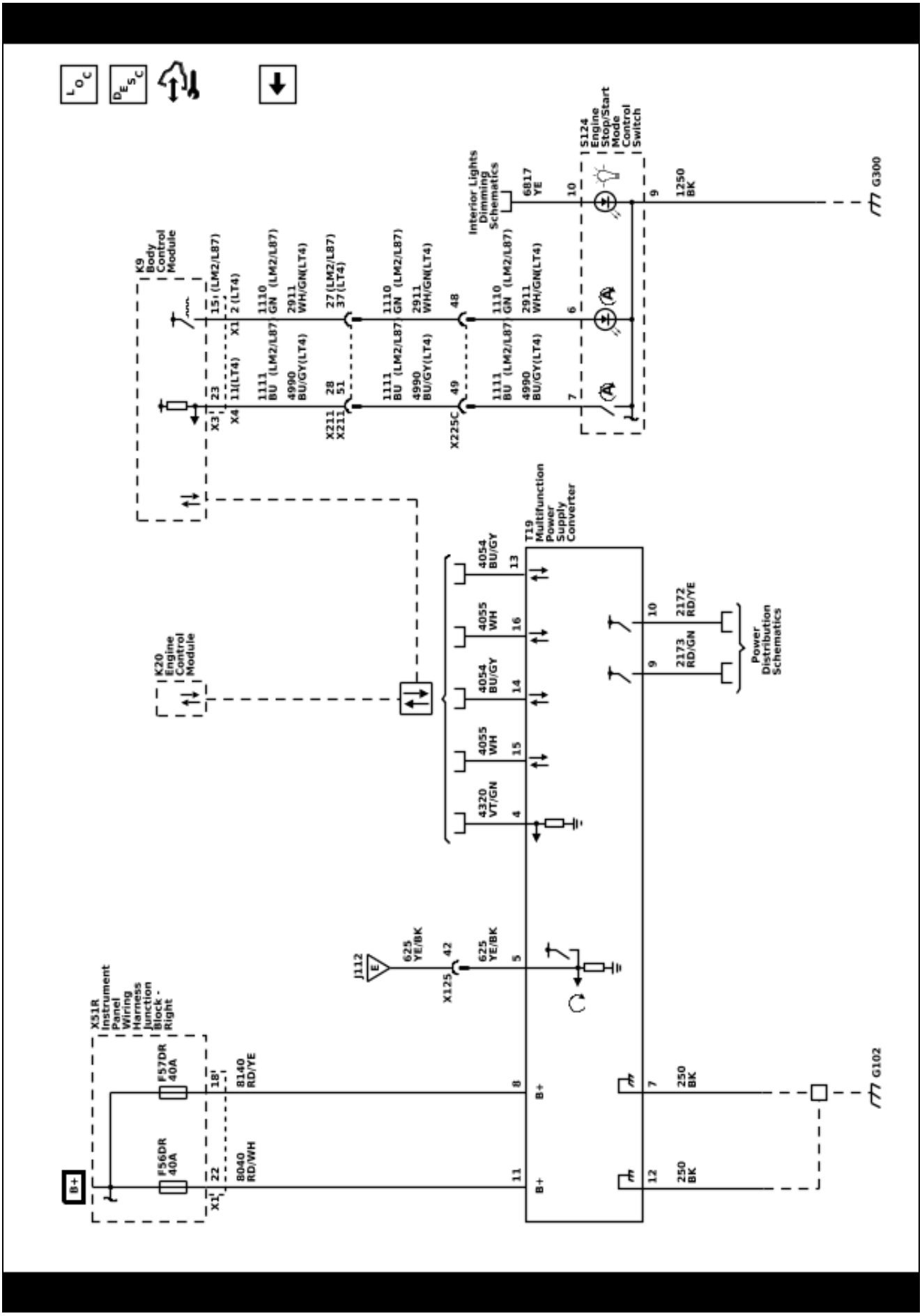
Starting and Charging Schematics (Starting (LM2))



Starting and Charging Schematics (Charging)



Starting and Charging Schematics (Stop/Start System)



Description and Operation

Battery Description and Operation

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

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

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

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

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

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

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

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

Battery Low Start Vehicle Message

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

Battery Ratings

A battery has 2 ratings:

- Cold cranking amperage
- Amperage hours

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

Amperage Hours

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

Cold Cranking Amperage

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

Charging System Description and Operation

Electrical Power Management Overview

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

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

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

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

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

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

Charging System Components

G13 Generator

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

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

Generator Pulley

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

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

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

K9 Body Control Module (BCM)

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

B110 Battery Monitor Module

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

K20 Engine Control Module (ECM)

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

P16 Instrument Cluster

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

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

Charging System Operation

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

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

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

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

Commanded Duty Cycle	Generator Output Voltage (+/- .25 V)
0–5%	13.8 V
10%	11 V
20%	11.56 V
30%	12.13 V
40%	12.69 V
50%	13.25 V
60%	13.81 V
70%	14.38 V
80%	14.94 V
90%	15.5 V
95–100%	13.8 V

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

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

Charging System Modes

Battery Sulfation Mode

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

Charge Mode

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

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

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

Fuel Economy Mode

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

Headlamp Mode

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

Start Up Mode

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

Tow/Haul Mode (if applicable)

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

Instrument Cluster Operation

Charge Indicator Operation

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

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

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

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

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

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

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

Electrical Power Management Description and Operation

Electrical Power Management

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

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

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

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

Idle Boost and Load Shed With Current Sensor

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

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

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

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

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

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

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

Starting System Description and Operation

Starter Motor Operation (Without KL9)

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

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

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

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

Enhanced Starter Motor Operation (KL9)

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

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

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

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

- KR27 Starter Motor Relay
- KR27C Starter Pinion Actuator Relay

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

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

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

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

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

Circuit Description

Keyless Start

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

Key Start

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

Stop/Start System Description and Operation

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

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

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

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

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

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

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

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

Likewise the engine will automatically restart if:

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

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

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

Autostop Criteria

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

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

Autostop Enable Ambient and Engine Coolant Temperature Table

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

Autostart Criteria

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

Driver Enabled Conditions that will engage Autostart:

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

System Enabled Conditions that will engage Autostart

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

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

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

System Components

Engine Control Module (ECM)

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

Transmission Control Module (TCM)

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

Engine Coolant Temperature sensor (ECT)

The ECT sensor is used to determine engine operating temperature.

Intake Air Temperature Sensor (IAT)

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

Inside air temperature sensor

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

Vehicle speed sensor

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

Hood Ajar Switch

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

Brake Booster Vacuum Sensor

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

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

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

Transmission Gear Shift Position Switch

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

Coolant Pump Motor

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

Body Control Module (BCM)

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

Battery Sensor Module

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

Autostop Disable Switch

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

Power Supply Transformer

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

Instrument Cluster

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

Section 5

HVAC

Heating, Ventilation, and Air Conditioning 5-3
Description and Operation 5-3
Heating and Air Conditioning System Description and Operation 5-3
HVAC - Automatic 5-4
Schematic and Routing Diagrams 5-4
HVAC Schematics 5-5
Description and Operation 5-16
Automatic HVAC Description and Operation 5-16

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Heating, Ventilation, and Air Conditioning

Description and Operation

Heating and Air Conditioning System Description and Operation

Engine Coolant

Engine coolant is the key element of the heating system. The engine thermostat controls the normal engine operating coolant temperature. Coolant pumped out of the engine enters the heater core through the inlet heater hose. The air flowing through the Heating, Ventilation, and Air Conditioning (HVAC) module absorbs the heat of the coolant flowing through the heater core. The coolant then exits the heater core through the heater outlet hose and returns back to the engine block.

Air Conditioning

Refrigerant is the key element in an air conditioning system. R–1234yf is a very low temperature gas that can transfer the undesirable heat from the passenger compartment to the outside air.

The air conditioning compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure in the air conditioning system. Compressing the refrigerant also adds heat to the refrigerant. The refrigerant is discharged from the compressor through the discharge hose, and forced to flow to the condenser and then through the rest of the air conditioning system. The air conditioning system is mechanically protected with the use of a high pressure relief valve. If the high pressure air conditioning switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief valve will pop open and release refrigerant from the system.

Compressed refrigerant enters the condenser in a high temperature, high pressure vapor state. As the refrigerant flows through the condenser, the heat of the refrigerant is transferred to the ambient air passing through the condenser. Cooling the refrigerant causes the refrigerant to condense and change from a vapor to a liquid state.

The condenser is located in front of the radiator for maximum heat transfer. The condenser is made of aluminum tubing and aluminum cooling fins, which allows rapid heat transfer for the refrigerant. The semi-cooled liquid refrigerant exits the condenser and flows through the liquid line, to the Thermal Expansion Valve (TXV).

The TXV is located at the evaporator inlet. The TXV is the dividing point for the high and the low side refrigerant pressures of the air conditioning system. As the refrigerant passes through the TXV, the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to boil at the TXV. The TXV also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the TXV flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the HVAC module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant to boil inside the evaporator core.

The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator. The refrigerant exits the evaporator through the suction line and back to the compressor, in a vapor state. This completes the air conditioning cycle of heat removal. At the compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

Vehicles equipped with R-1234yf may utilize an integral heat exchanger in the air conditioning line set. An integral heat exchanger transfers heat between liquid line and the suction line. It uses the cold vapor from the evaporator to cool the warm liquid refrigerant before it enters the TXV, resulting in increased cooling and higher efficiency.

The conditioned air is distributed through the HVAC module for passenger comfort. The moisture removed from the passenger compartment will also change form, or condense, and is discharged from the HVAC module as water.

Air Conditioning Cycling with Auxiliary

The auxiliary A/C system operates from the vehicles primary A/C system. The front or primary A/C system must be ON to allow the rear A/C system to function.

The liquid refrigerant, flows from the front system to the rear A/C system into the rear thermal expansion valve (TXV). The rear TXV is located at the rear evaporator inlet. The TXV is the dividing point for the high and the low pressure sides of the rear A/C system. As the refrigerant passes through the TXV, the pressure on the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to boil at the expansion device. The TXV also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the TXV flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the rear A/C module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant to boil inside of the evaporator core. The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator.

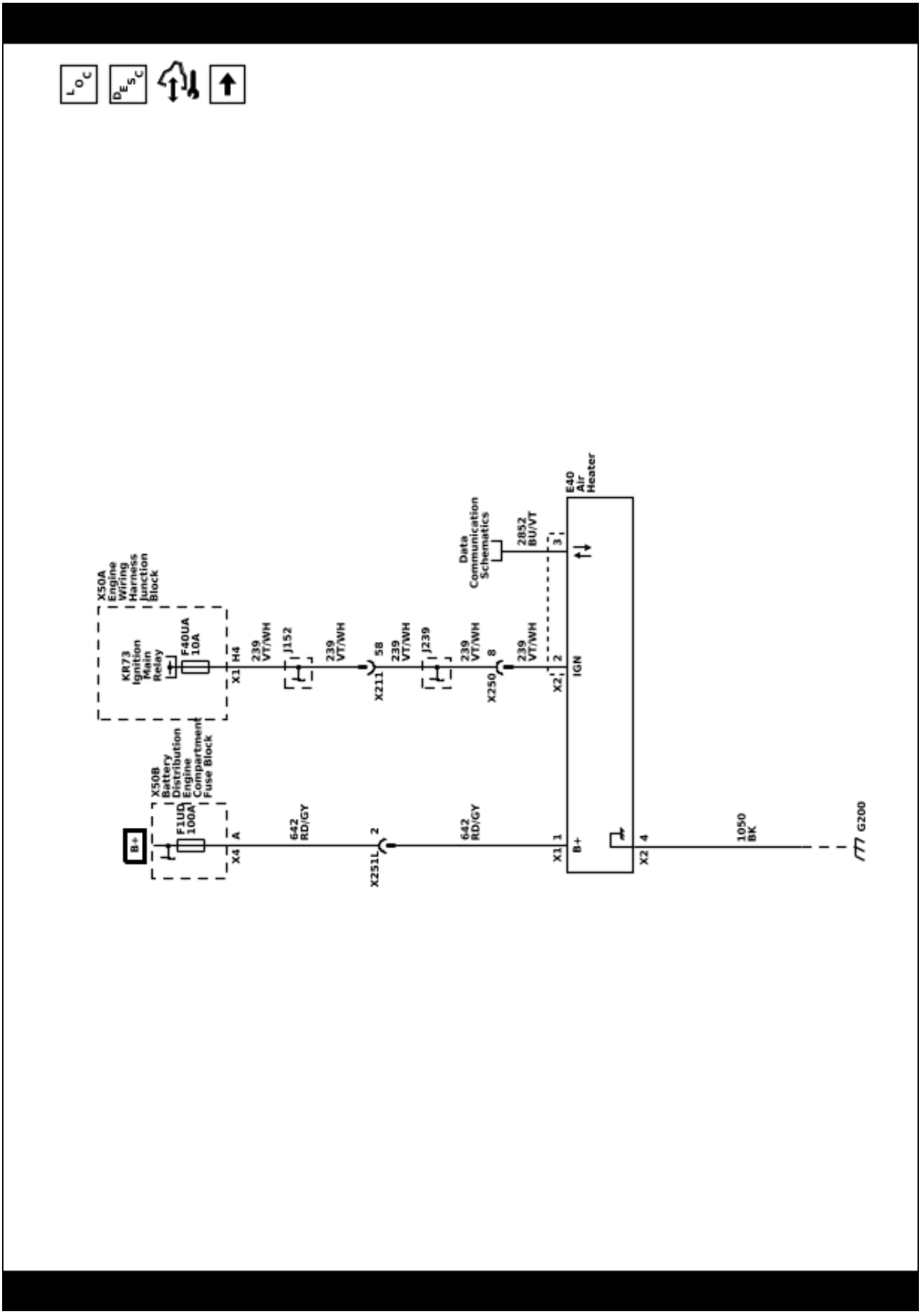
The refrigerant exits the evaporator through the suction line and back to the primary A/C systems suction line. Refrigerant in the primary A/C system suction line flows back to the compressor, in a vapor state, and completes the A/C cycle of heat removal. At the compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

The conditioned air is distributed through the rear A/C module for passenger comfort. The heat and moisture removed from the rear passenger compartment will also change form, or condense, and is discharged from the rear A/C module as water.

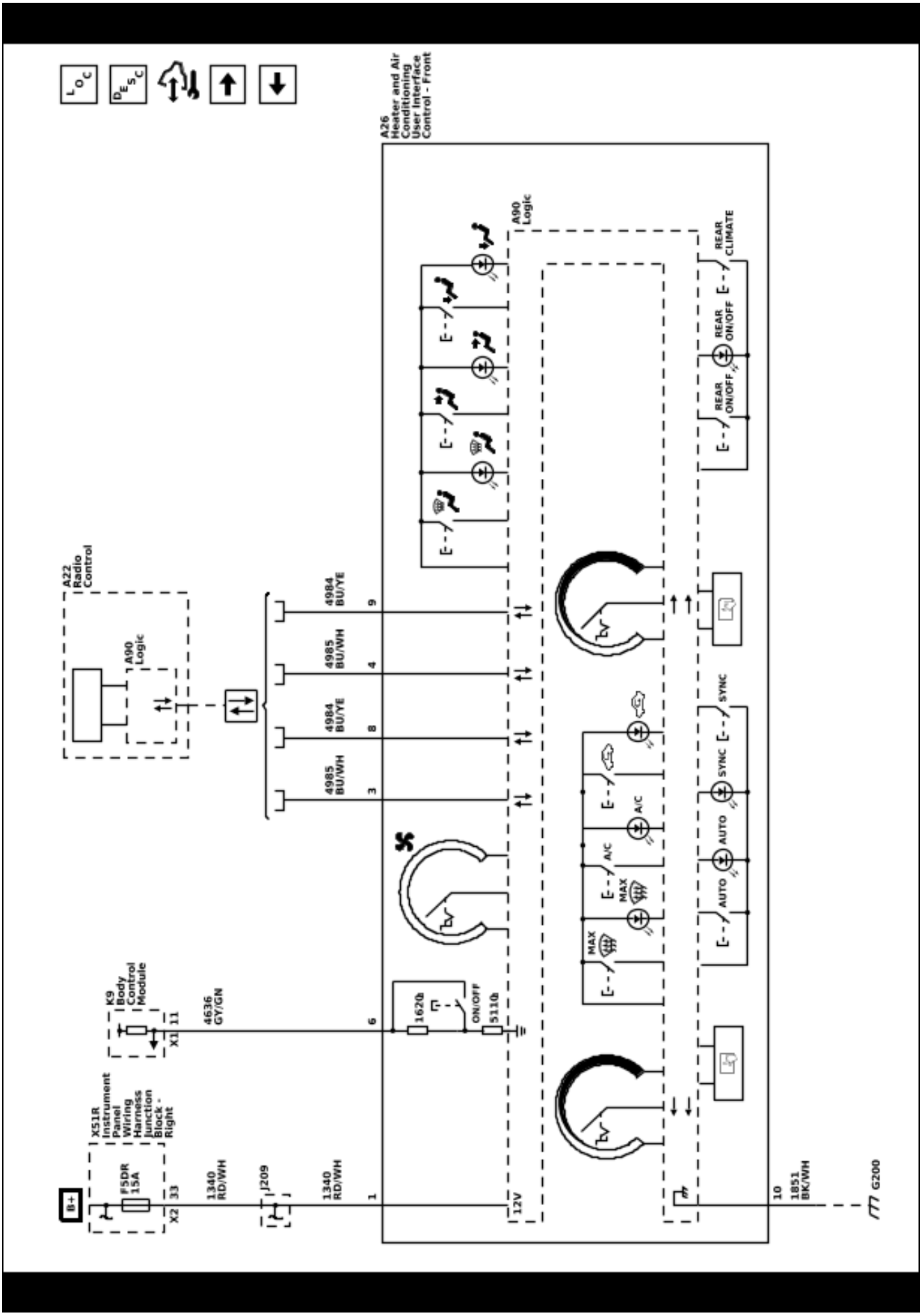
HVAC - Automatic

Schematic and Routing Diagrams

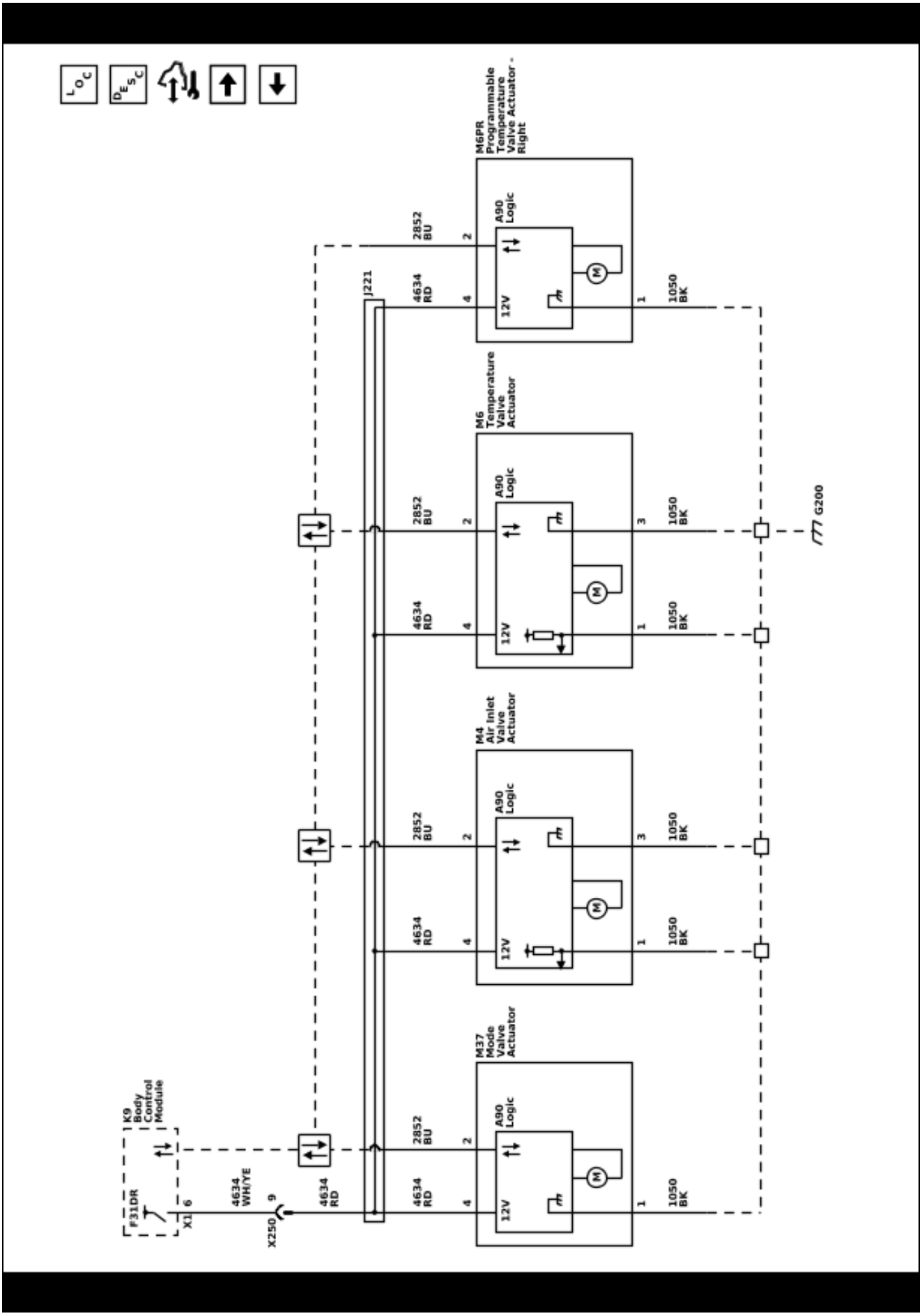
HVAC Schematics (Electric Auxiliary Heater (C3A))



HVAC Schematics (HVAC Controls)

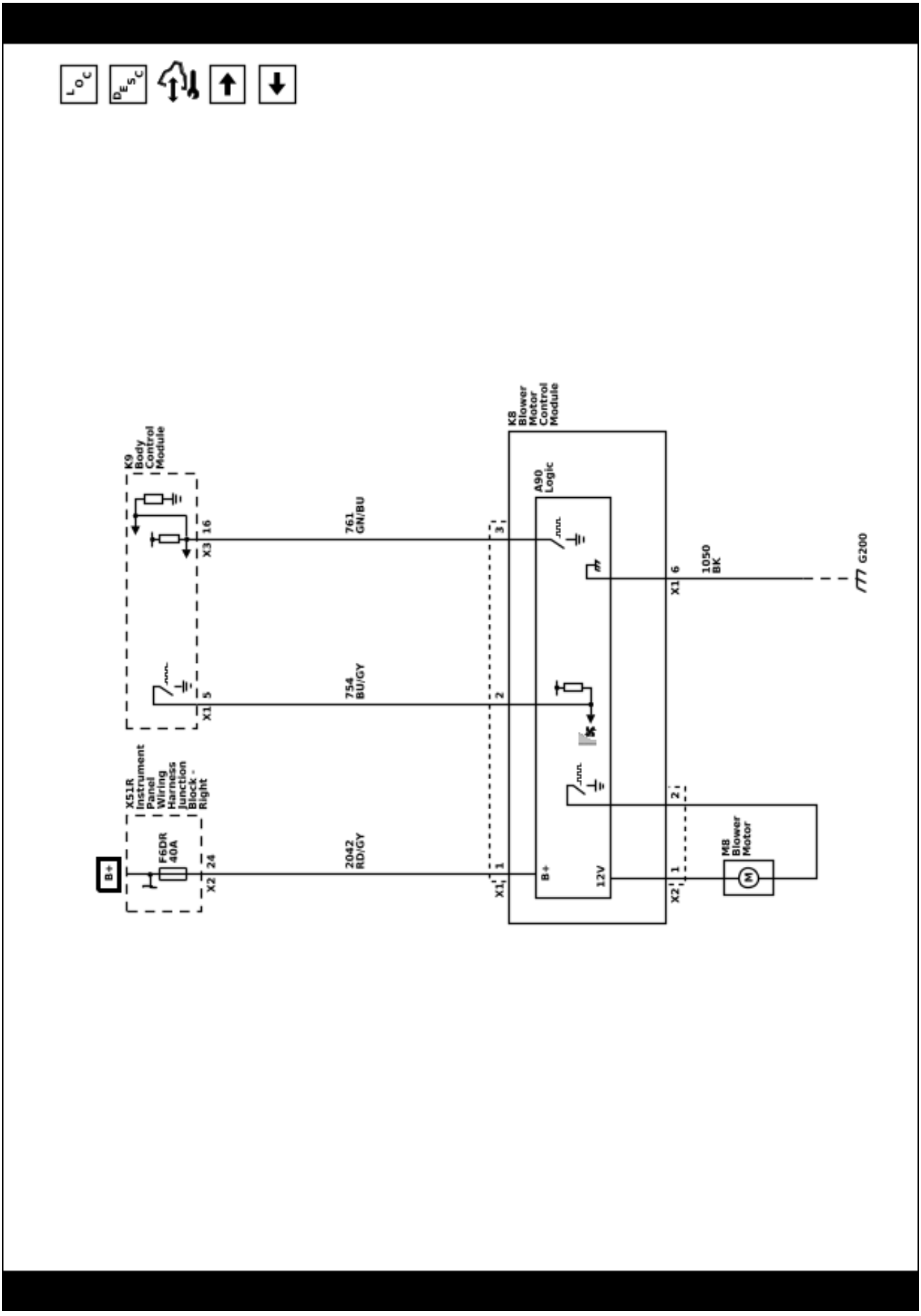


HVAC Schematics (Actuators)

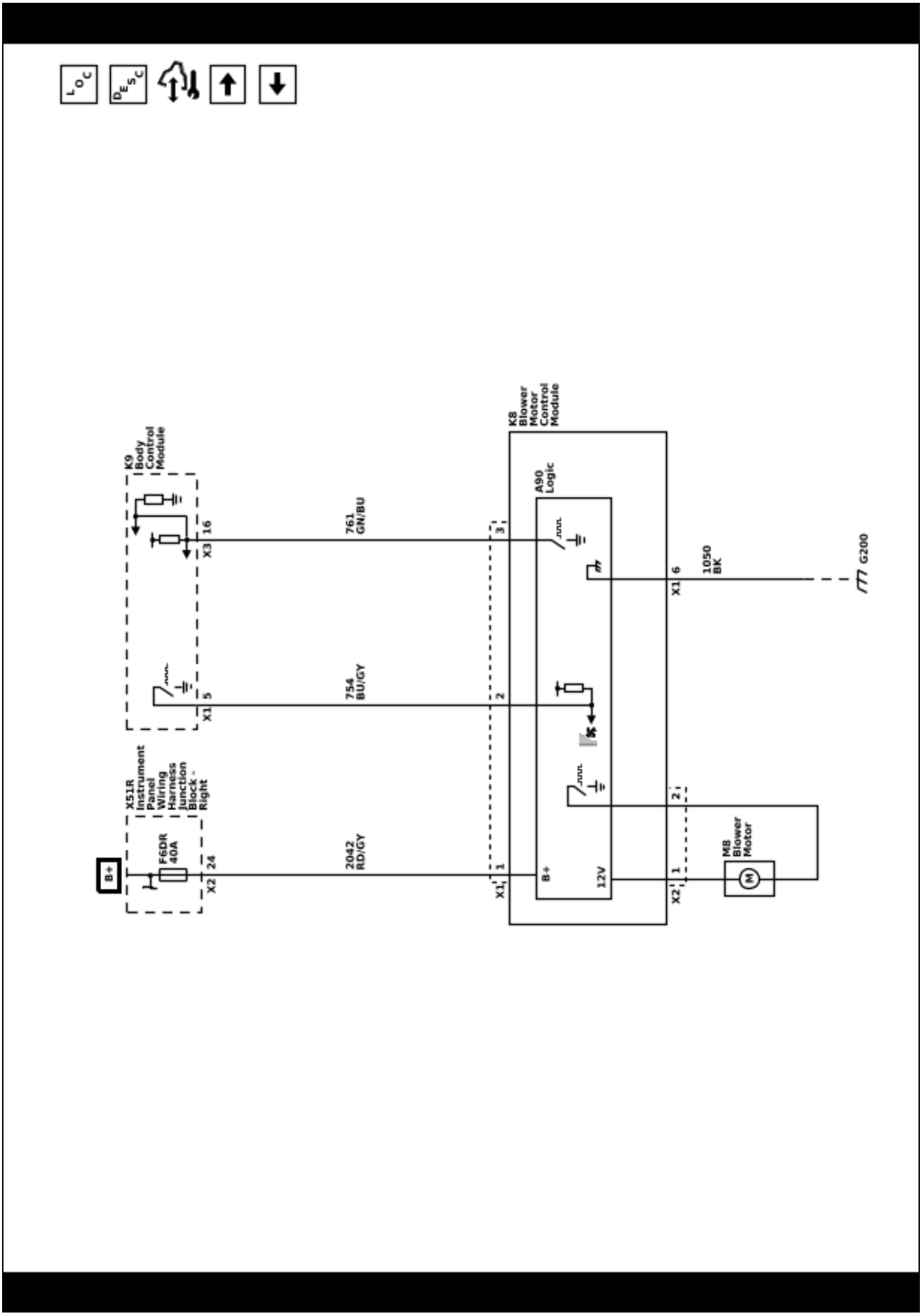


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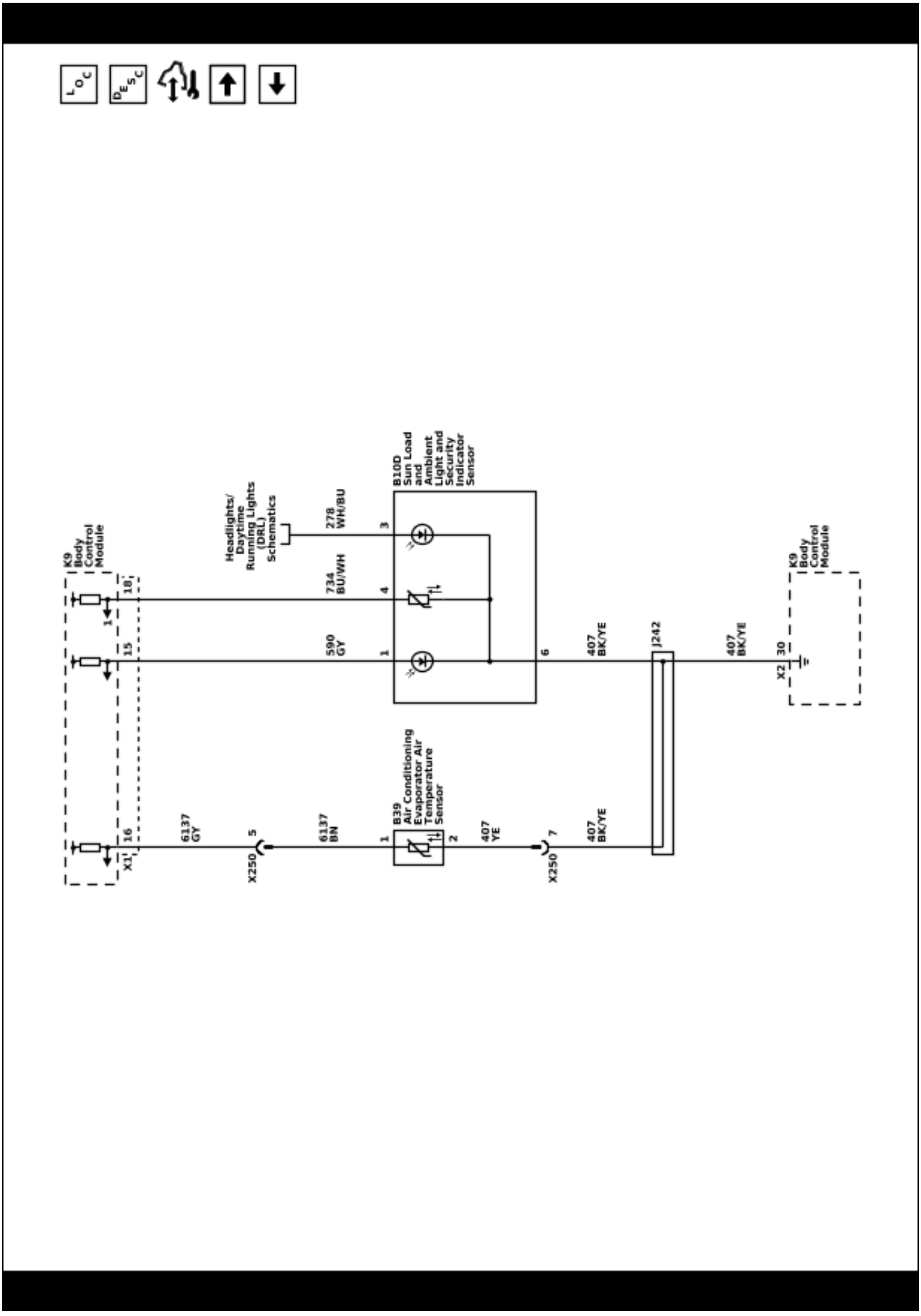
HVAC Schematics (Blower Motor (- 00H))



HVAC Schematics (Blower Motor (00H))

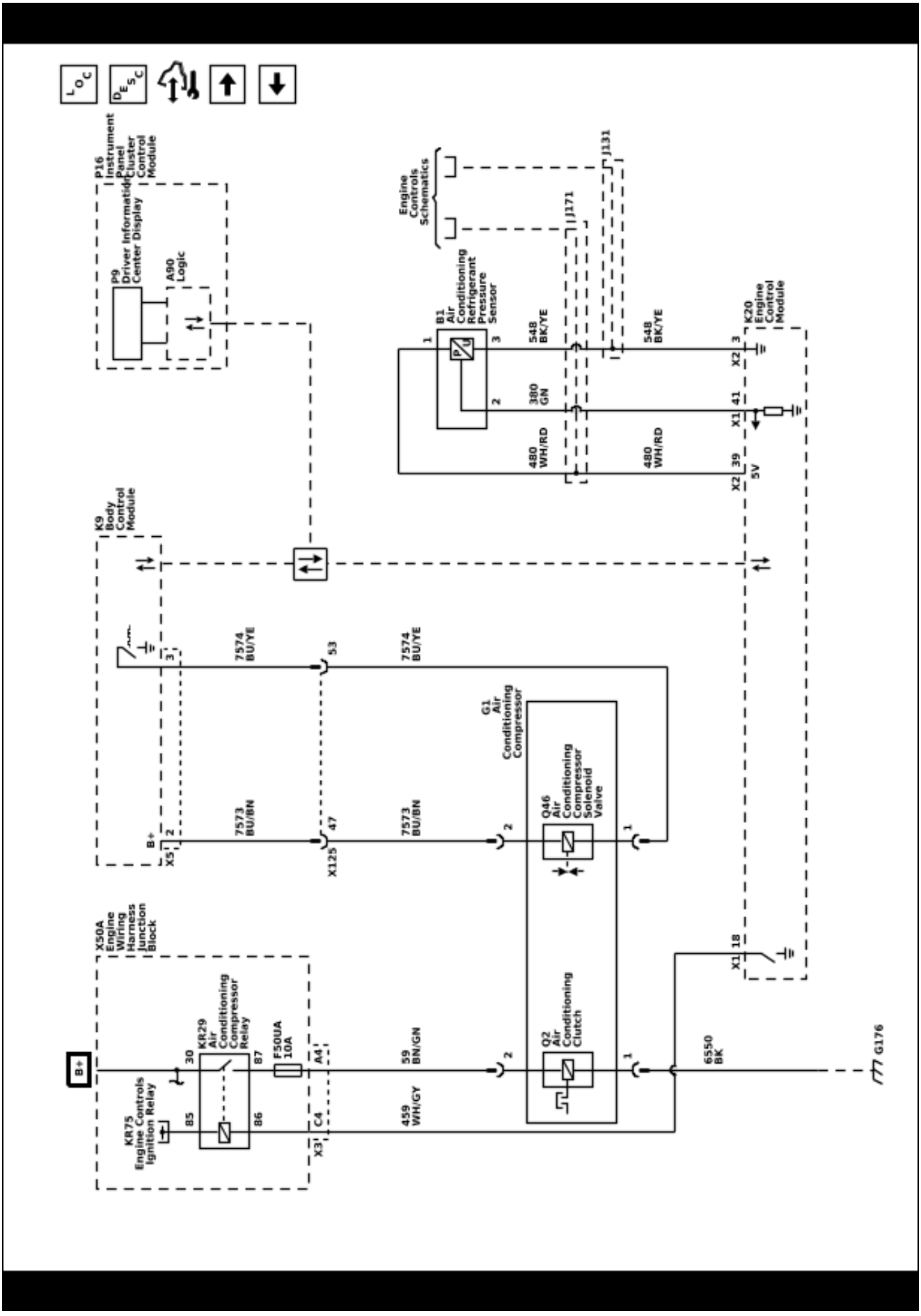


HVAC Schematics (Moisture/Ambient Light Sensor and Air Conditioning Evaporative Temperature Sensor)

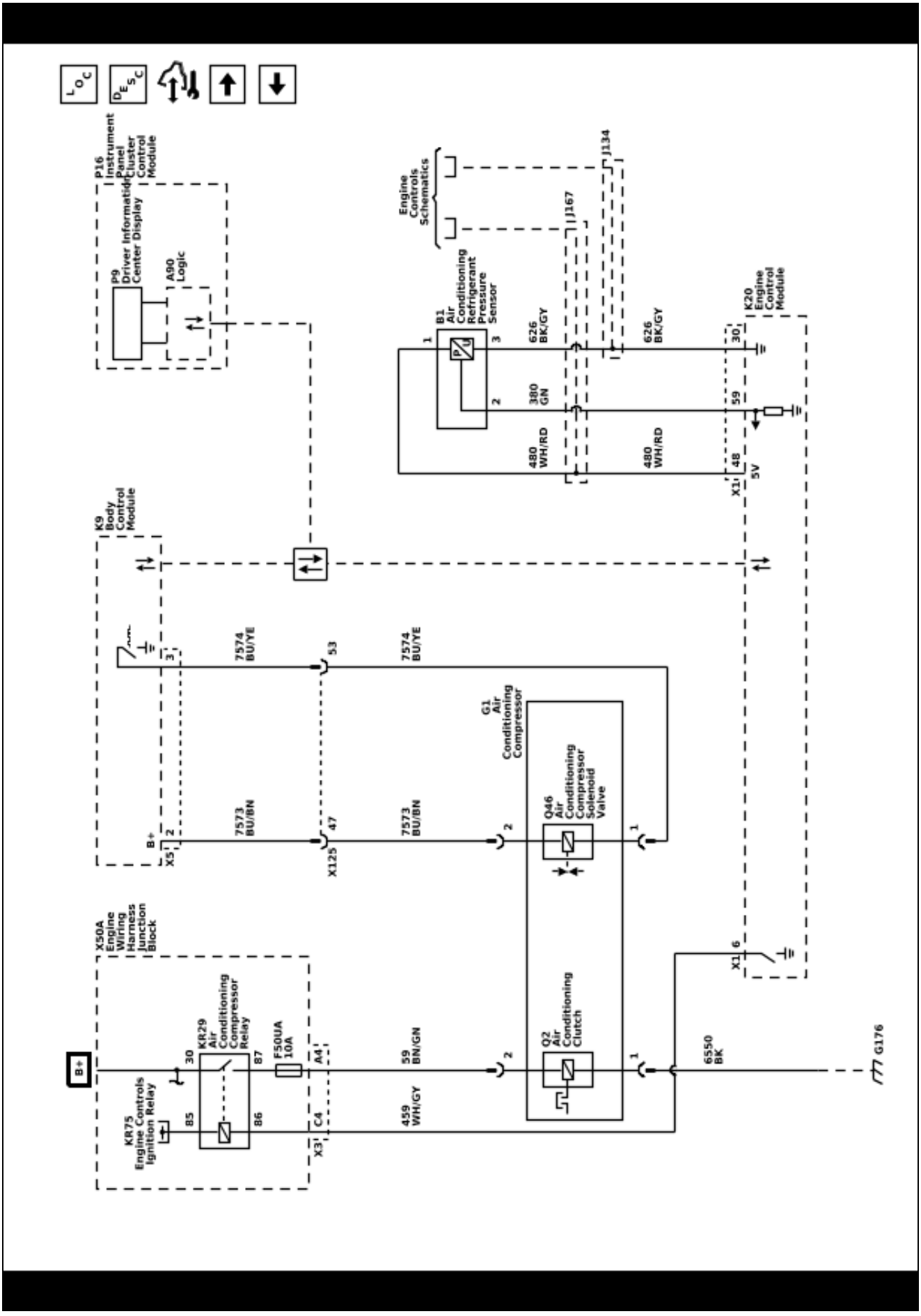


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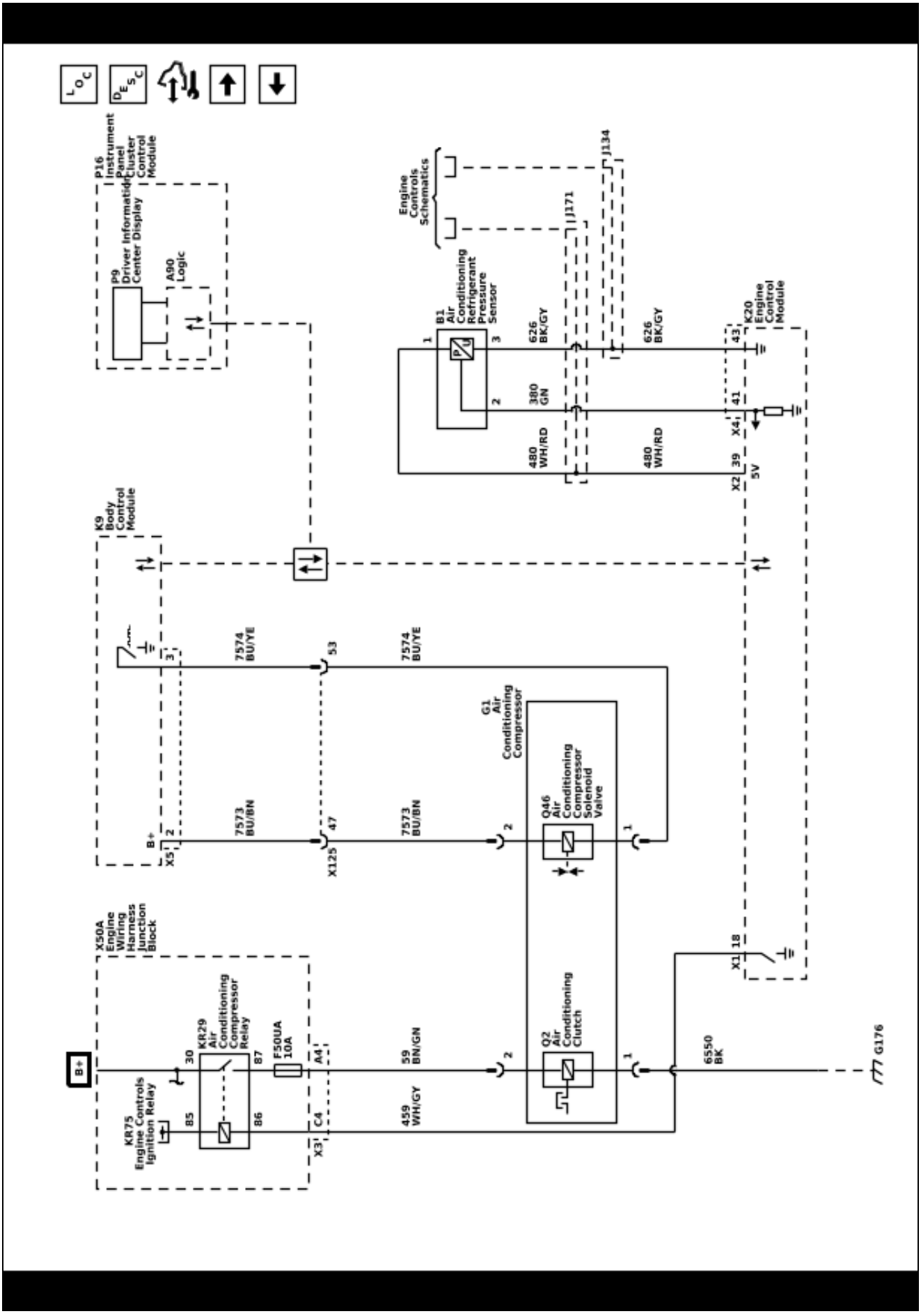
HVAC Schematics (Air Conditioning Compressor Controls (L87))



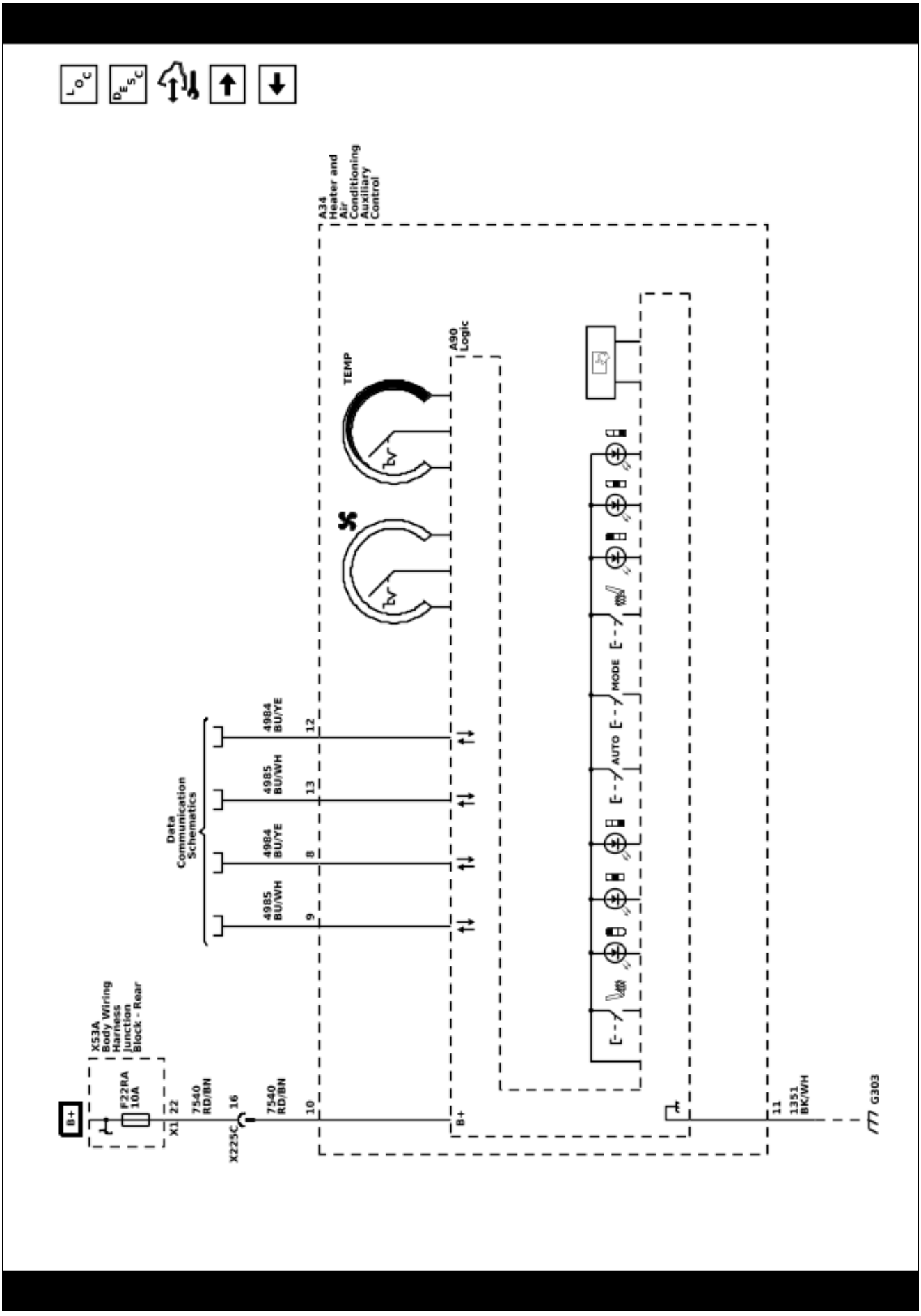
HVAC Schematics (Air Conditioning Compressor Controls (LM2))



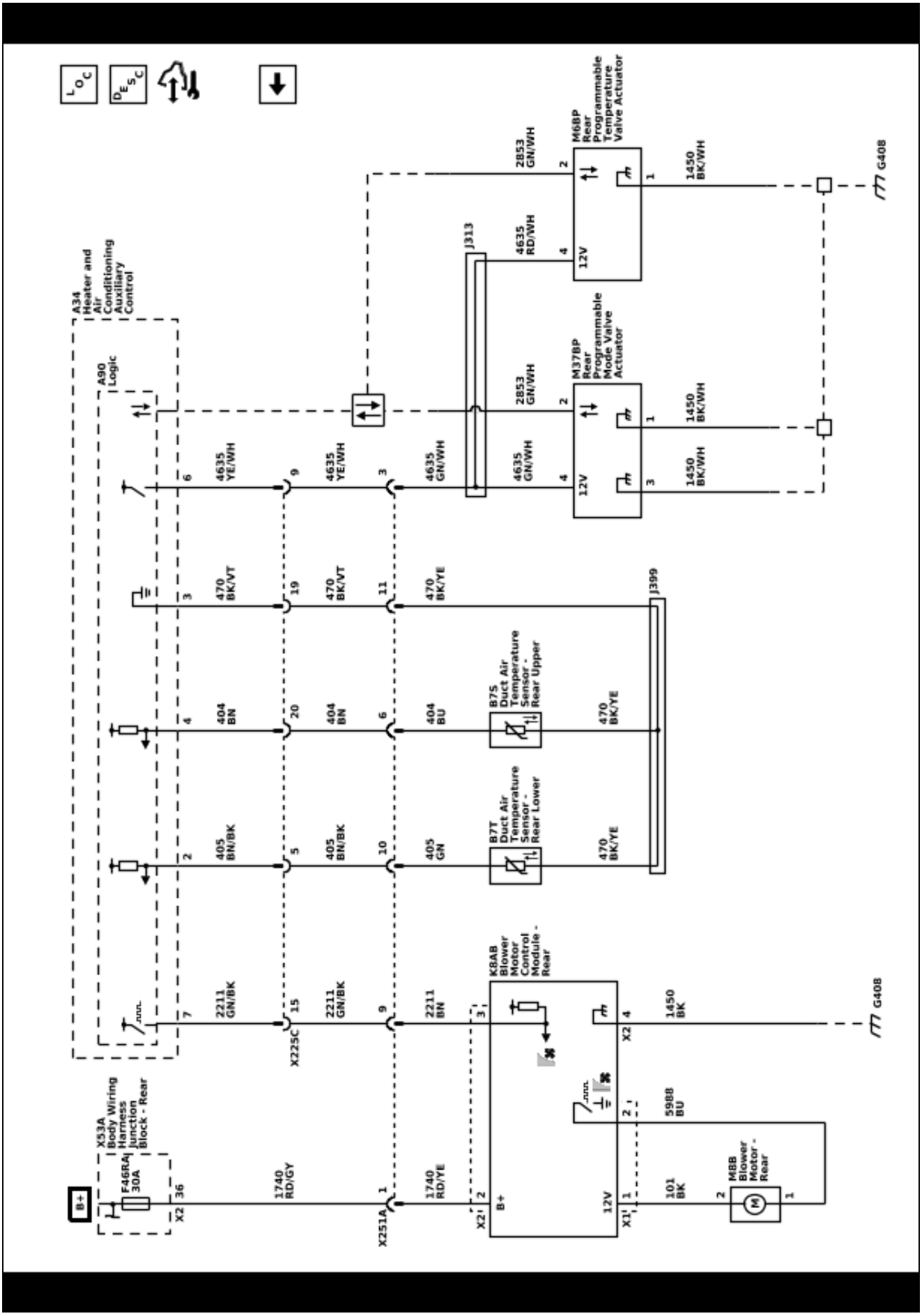
HVAC Schematics (Air Conditioning Compressor Controls (LT4))



HVAC Schematics (Auxiliary HVAC Control Power, Ground and Serial Data)



HVAC Schematics (Auxiliary HVAC Air Speed, Delivery and Temperature)



Description and Operation

Automatic HVAC Description and Operation

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

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

HVAC Control Components

K9 Body Control Module

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

A26 Heater and Air Conditioning User Interface Control - Front

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

A34 HVAC Controls – Auxiliary (C69)

The HVAC controls – auxiliary contains all switches, buttons, and dials which are required to control the functions of the rear HVAC system and serve as interface between the operator and the BCM. Mode and temperature selections are passed to the BCM via serial data. Rear blower motor speed is controlled via a signal circuit from the HVAC controls – auxiliary to the blower motor control module- auxiliary.

Actuators (Front)

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

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

Actuators Rear (C69)

Two additional actuators are added to the system to control the airflow and temperature for the rear seat passengers: rear temperature, and a rear mode.

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

Air Speed and M8 Blower Motor (Front)

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

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

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

Afterblow

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

Air Speed and Blower Motor — Rear (C69)

An auxiliary blower motor is used to regulate the air speed from the rear passenger ducts. The rear blower speed may be selected from the front or rear HVAC controls. The selected value is sent to the A34 HVAC Controls – Auxiliary via serial data.

The K8 Blower Motor Control Module — Auxiliary controls the speed of the rear blower motor by increasing or decreasing the voltage drop on the ground side of the blower motor. The A34 HVAC Controls – Auxiliary provides a low side pulse width modulation (PWM) signal to the blower motor control module — auxiliary via the blower motor speed control circuit. As the requested blower speed increases, the HVAC controls — auxiliary increases the amount of time that the speed signal is modulated to ground. As the requested blower speed decreases, the amount of time that the signal is modulated to ground decreases.

Duct Air Temperature (Front)

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

Duct Temperature Sensors– Rear (C69)

The air temperature sensors are 2-wire negative temperature co-efficient thermistors. The sensors operate within a temperature range of −40 to +85°C (−40 to +185°F). The sensors are installed in the air distribution ducts and measure the temperature of the air that streams from the ducts. The HVAC control module uses these values to calculate the mixed air door position.

A signal circuit to each sensor and a common low reference circuit is provided by the A34 HVAC Controls – Auxiliary.

B39 Air Conditioning Evaporator Air Temperature Sensor

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

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

B1 Air Conditioning Refrigerant Pressure Sensor

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

G1 Air Conditioning Compressor

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

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

B160 Inside Air Moisture and Windshield Temperature Sensor

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

This sensor assembly provides information about:

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

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

The sensor is part of a LIN windshield sensor array, and the windshield temperature and humidity values are transmitted to the BCM via serial data.

B10B Sunload, Temperature and Ambient Light and Security Sensor

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

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

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

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

E40 Air Heater (C3A)

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

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

Air Delivery (Front)

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

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

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

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

Recirculation Operation

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

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

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

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

Air Delivery — Rear (C69)

The BCM control module controls the distribution of air by the mode door actuator – auxiliary. The modes that may be selected are:

- AUTO
- Floor
- Bi-Level
- Vent

The desired rear air distribution mode can be selected with the Mode switch at the HVAC control – auxiliary. The HVAC control – auxiliary delivers the values to the BCM via serial data. The BCM controls the mode door actuator – auxiliary via LIN bus to move the door to the calculated position. Depending on the position of the door, air is distributed through various ducts.

Heating and A/C Operation

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

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

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

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

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

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM

- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

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

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

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

Automatic Operation

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

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

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

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

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

- Monitors the following:
  - Ambient (outside) air temperature sensor
  - Passenger compartment temperature sensor
  - Calculated front duct air temperatures
  - Auxiliary duct air temperature sensors (C69)
  - Windshield temperature and inside moisture sensor
  - Evaporator temperature sensor
  - Ambient light/sunload sensor
- Regulate the blower motor speed
- Regulate the rear blower motor speed (C69)
- Position the air temperature actuators
- Position the mode door actuators
- Position the recirculation actuator
- Control of the A/C compressor solenoid

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

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

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

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

Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to *Heating and Air Conditioning System Description and Operation on page 5-3*.

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Section 6

Power and Signal Distribution

Data Communications 6-3
Schematic and Routing Diagrams 6-3
Data Communication Schematics 6-4
Body Control System Schematics 6-28
Description and Operation 6-31
Data Link Communications Description and Operation 6-31

Electrical Component and Inline Harness Connector End Views 6-34
Component Locator 6-34
Electrical Center Identification Views 6-34
Component Connector End Views 6-78
Inline Harness Connector End Views 6-835

Power Outlets 6-987
Schematic and Routing Diagrams 6-987
Cigar Lighter/Power Outlet Schematics 6-988
Description and Operation 6-994
Mobile Device Wireless Charger Description and Operation 6-994
Power Outlets Description and Operation 6-994

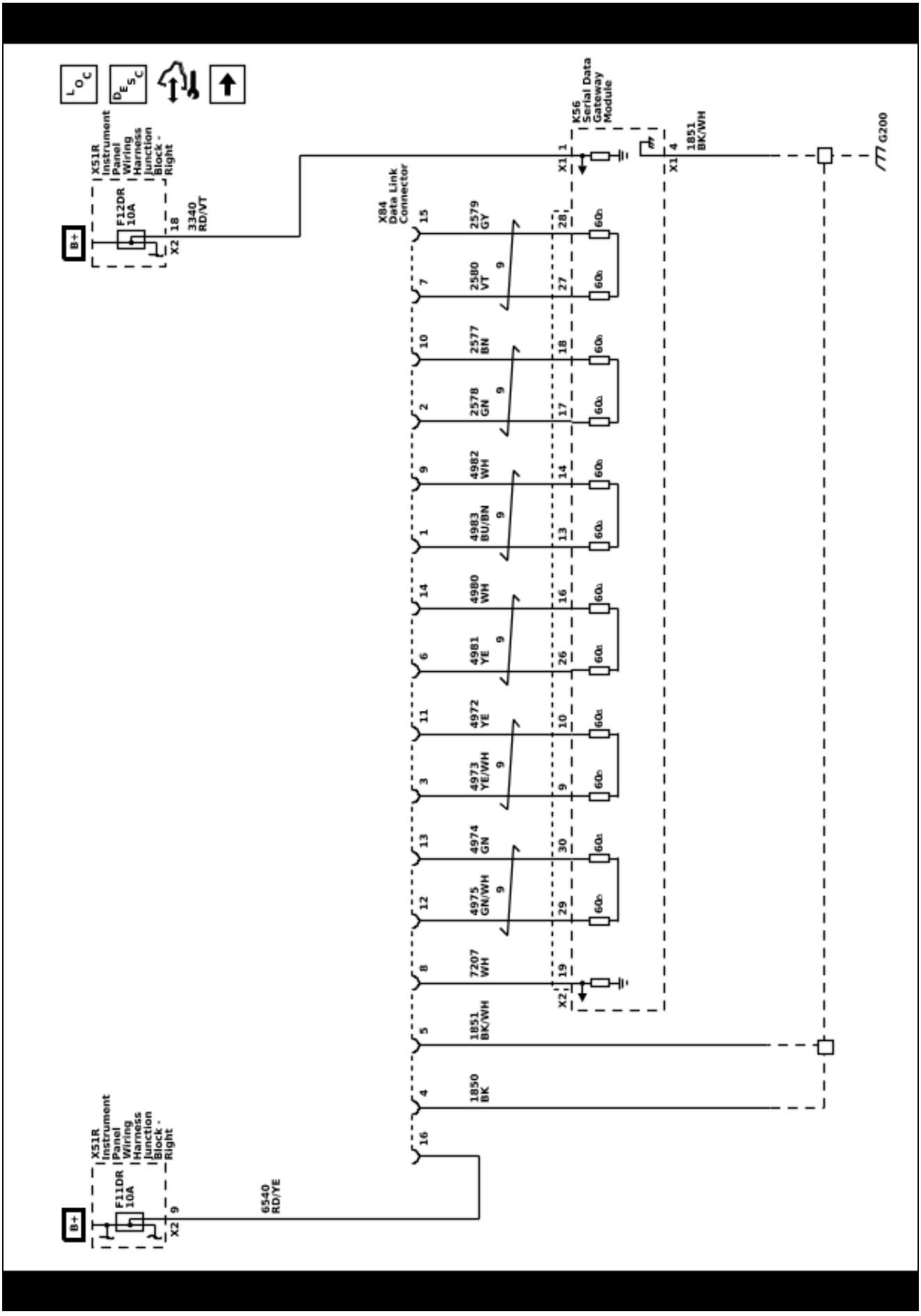
Wiring Systems and Power Management 6-997
Schematic and Routing Diagrams 6-997
Power Distribution Schematics 6-998
Power Moding Schematics 6-1026
Ground Distribution Schematics 6-1028
Description and Operation 6-1051
Power Mode Description and Operation 6-1051
Retained Accessory Power Description and Operation 6-1055

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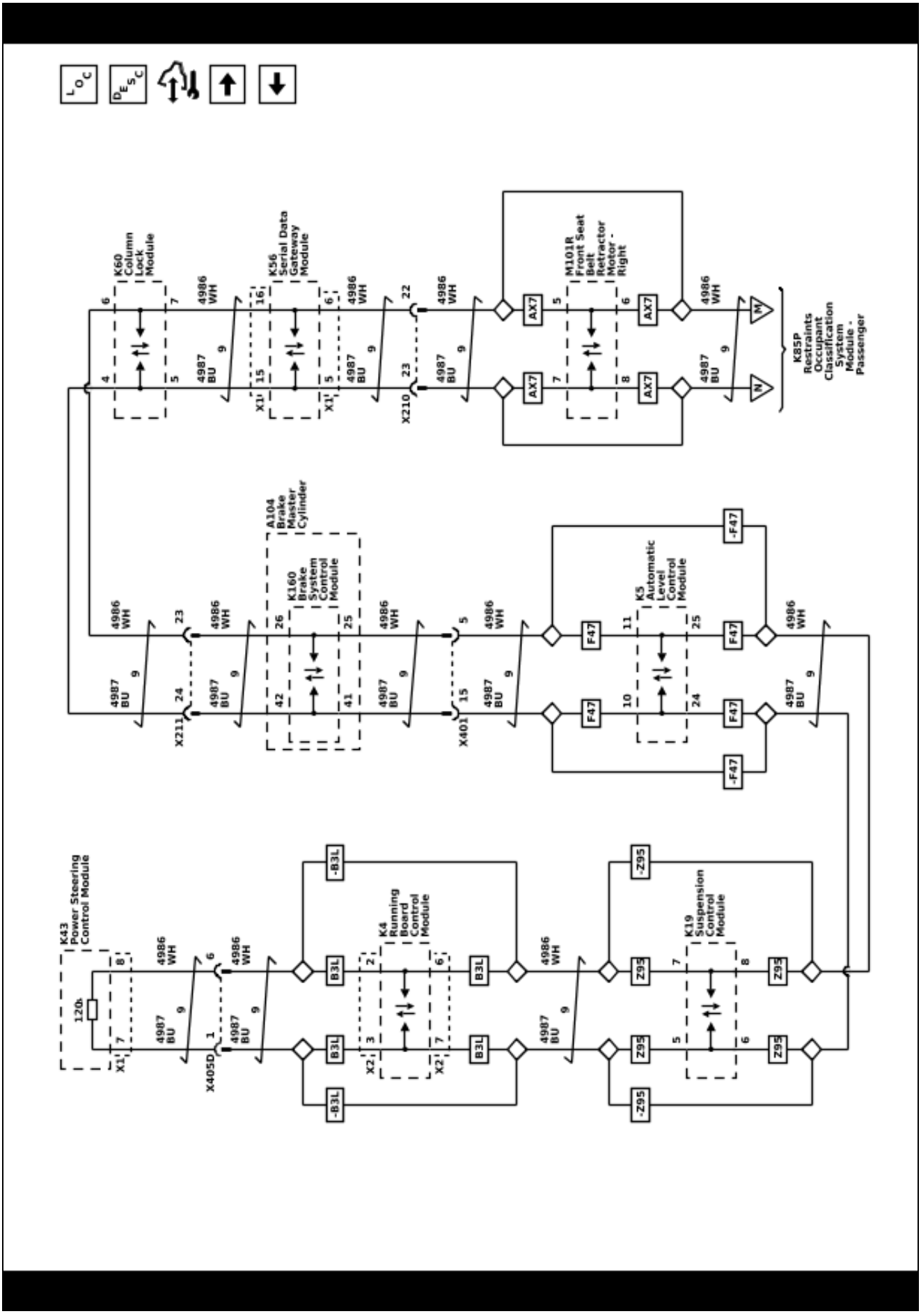
Data Communications

Schematic and Routing Diagrams

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

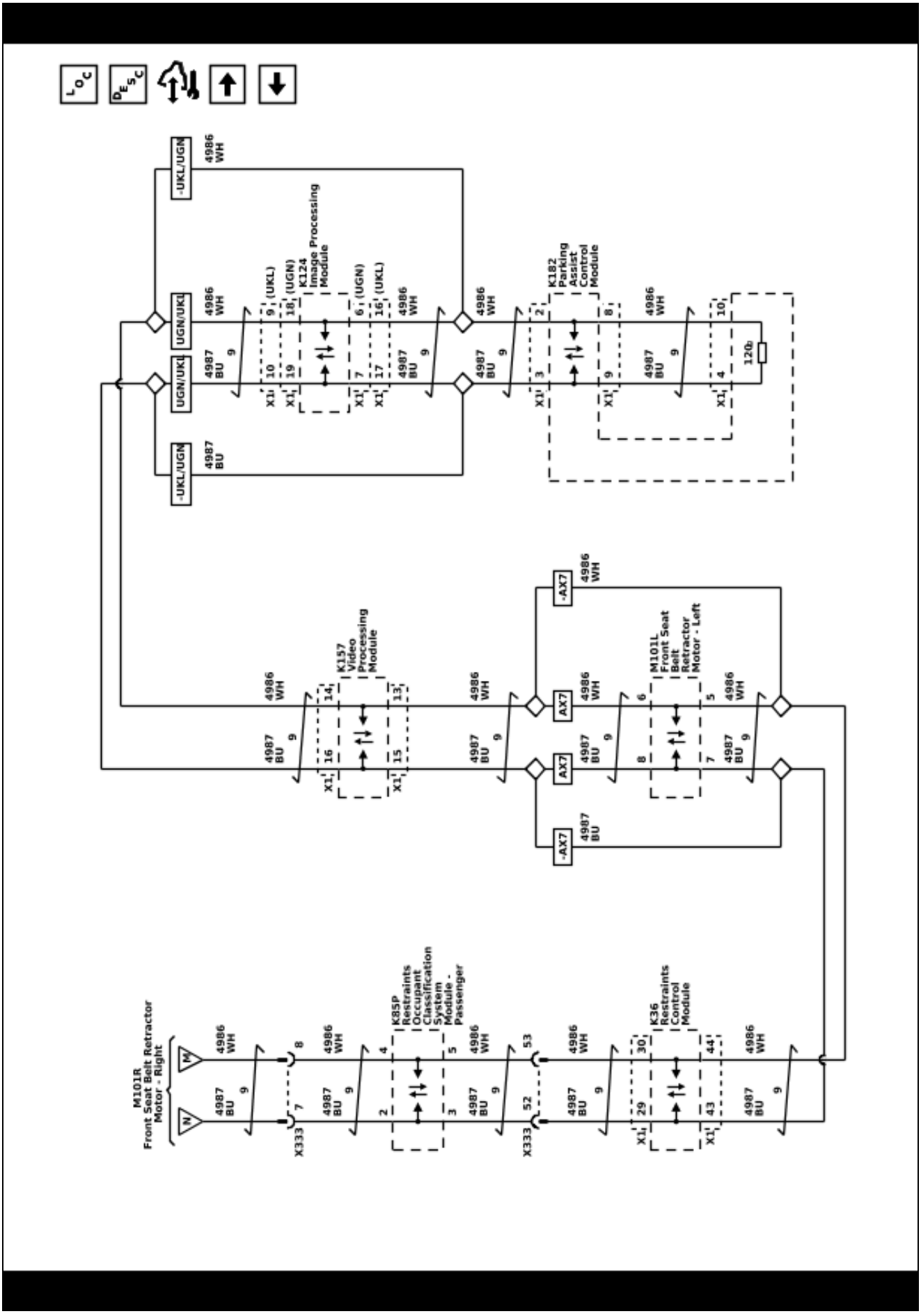


Data Communication Schematics (CAN 1 (1 of 2))

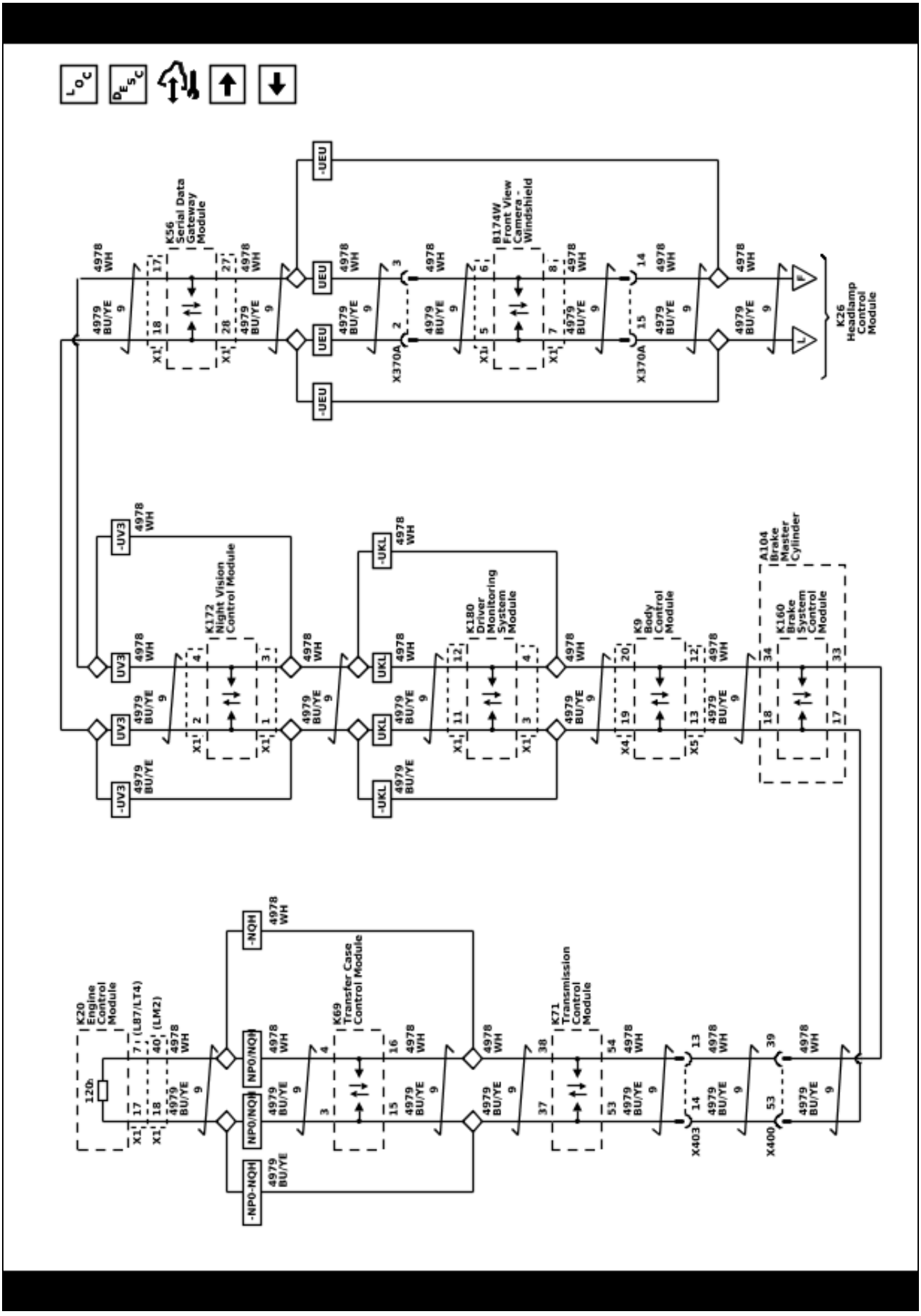


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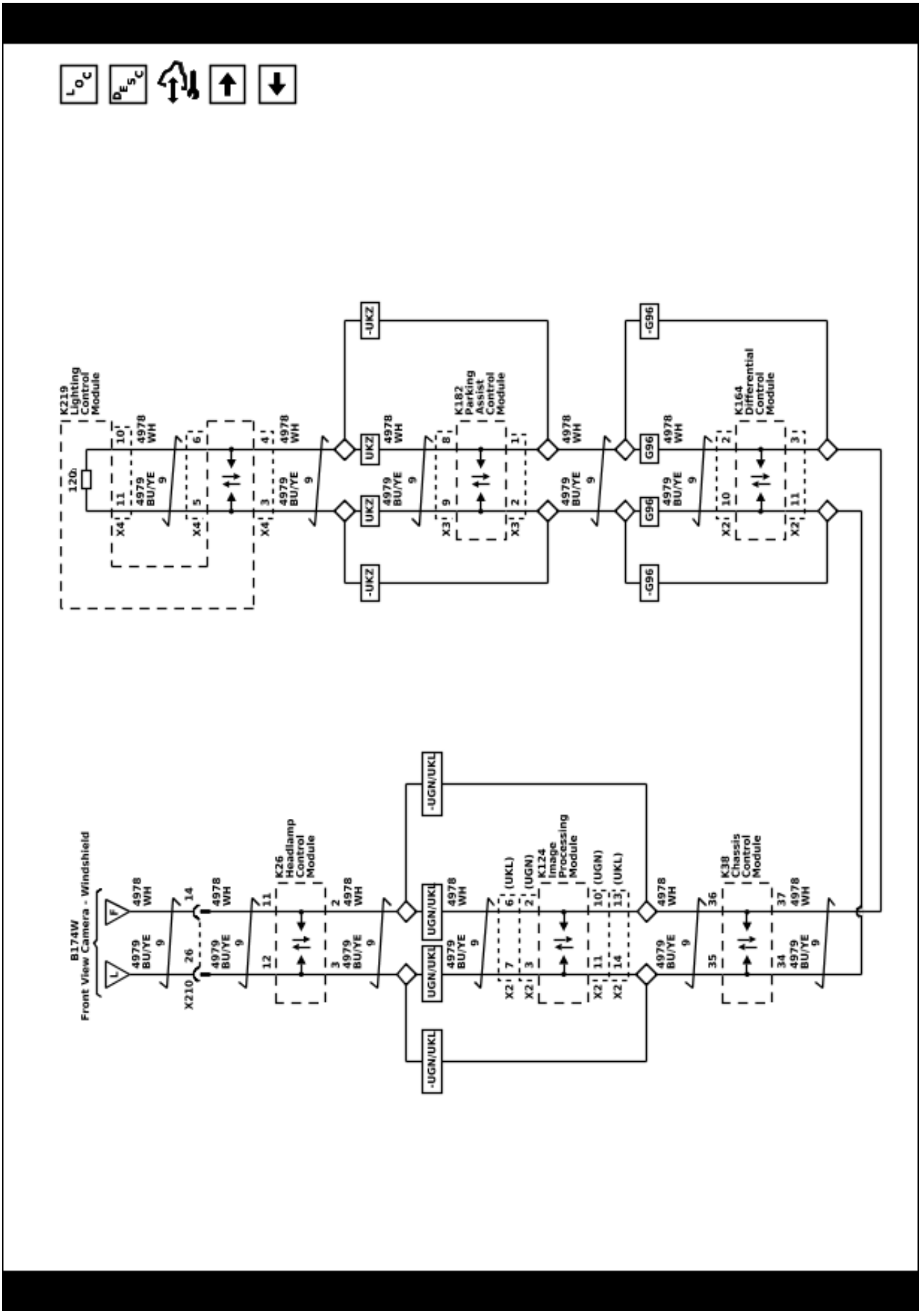
Data Communication Schematics (CAN 1 (2 of 2))



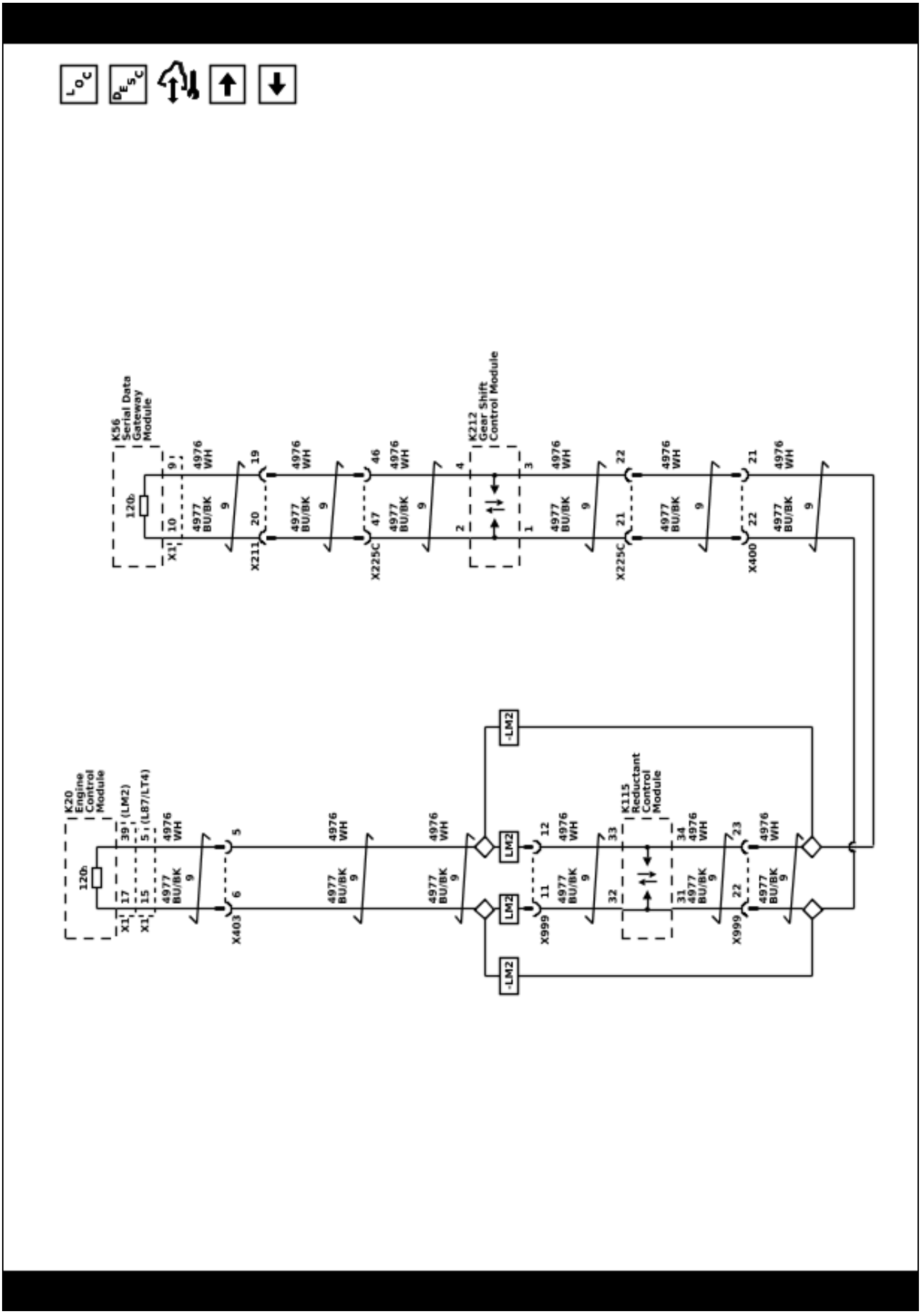
Data Communication Schematics (CAN 2 (1 of 2))



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

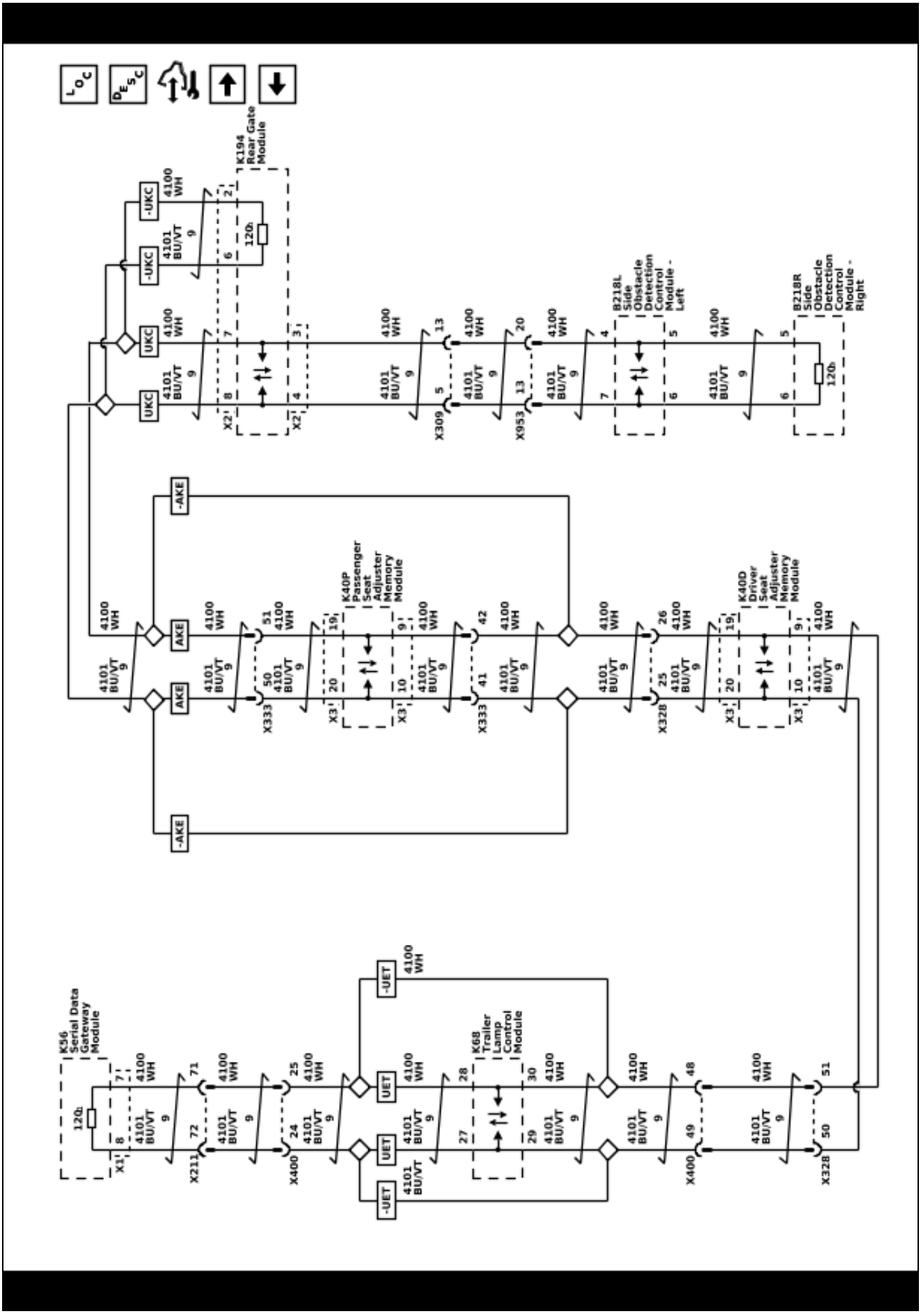


Data Communication Schematics (CAN 3)

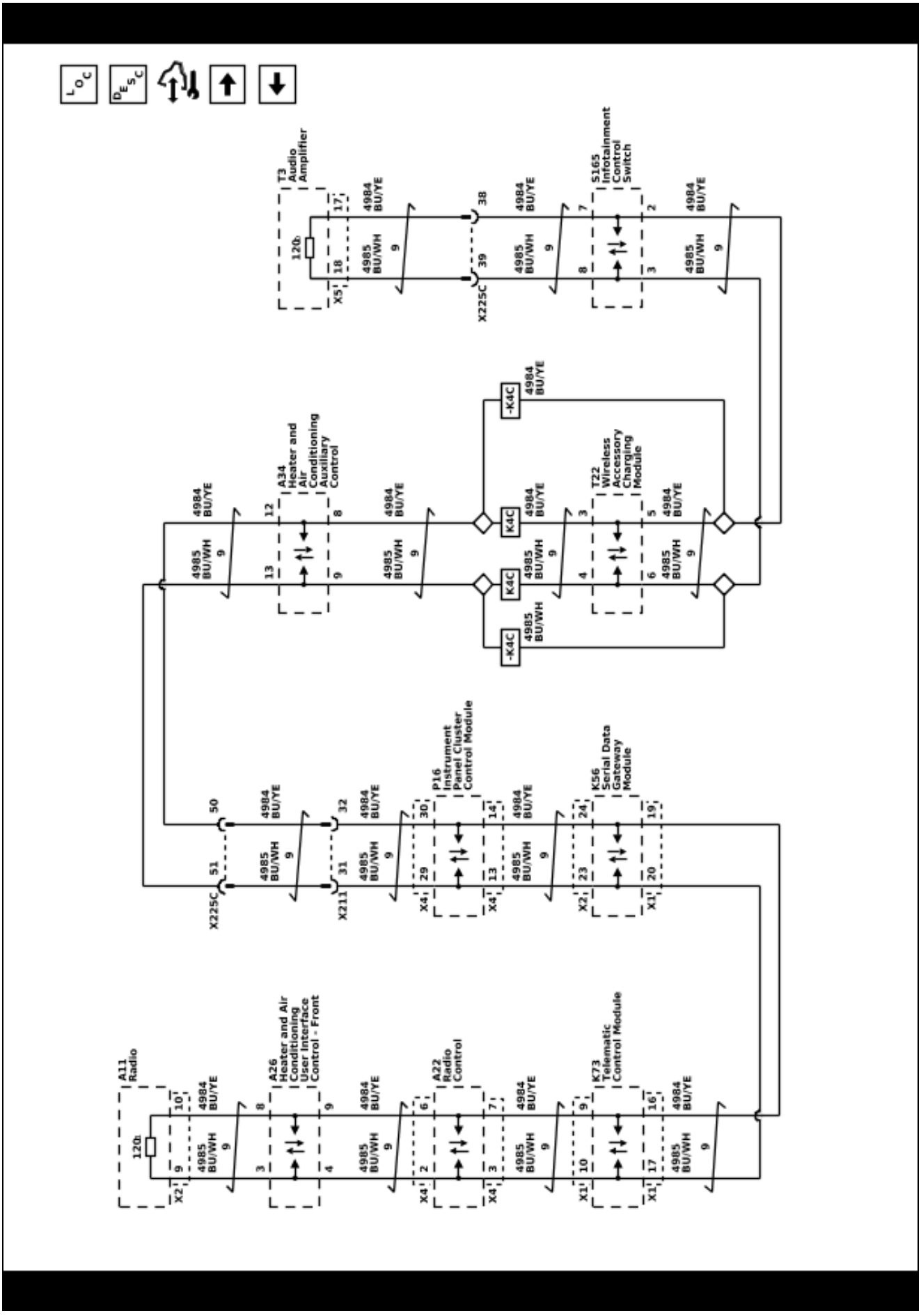


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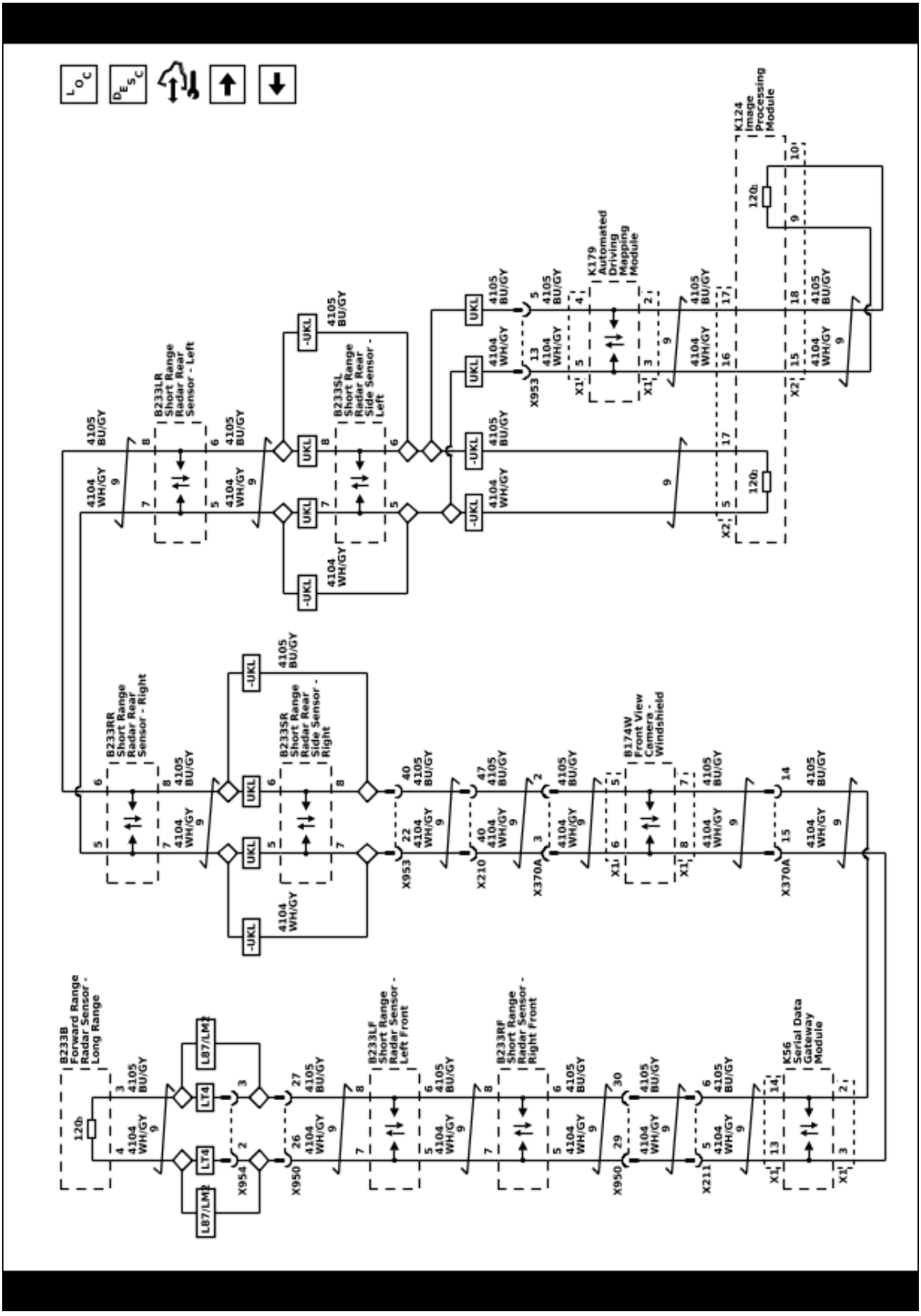
Data Communication Schematics (CAN 4)



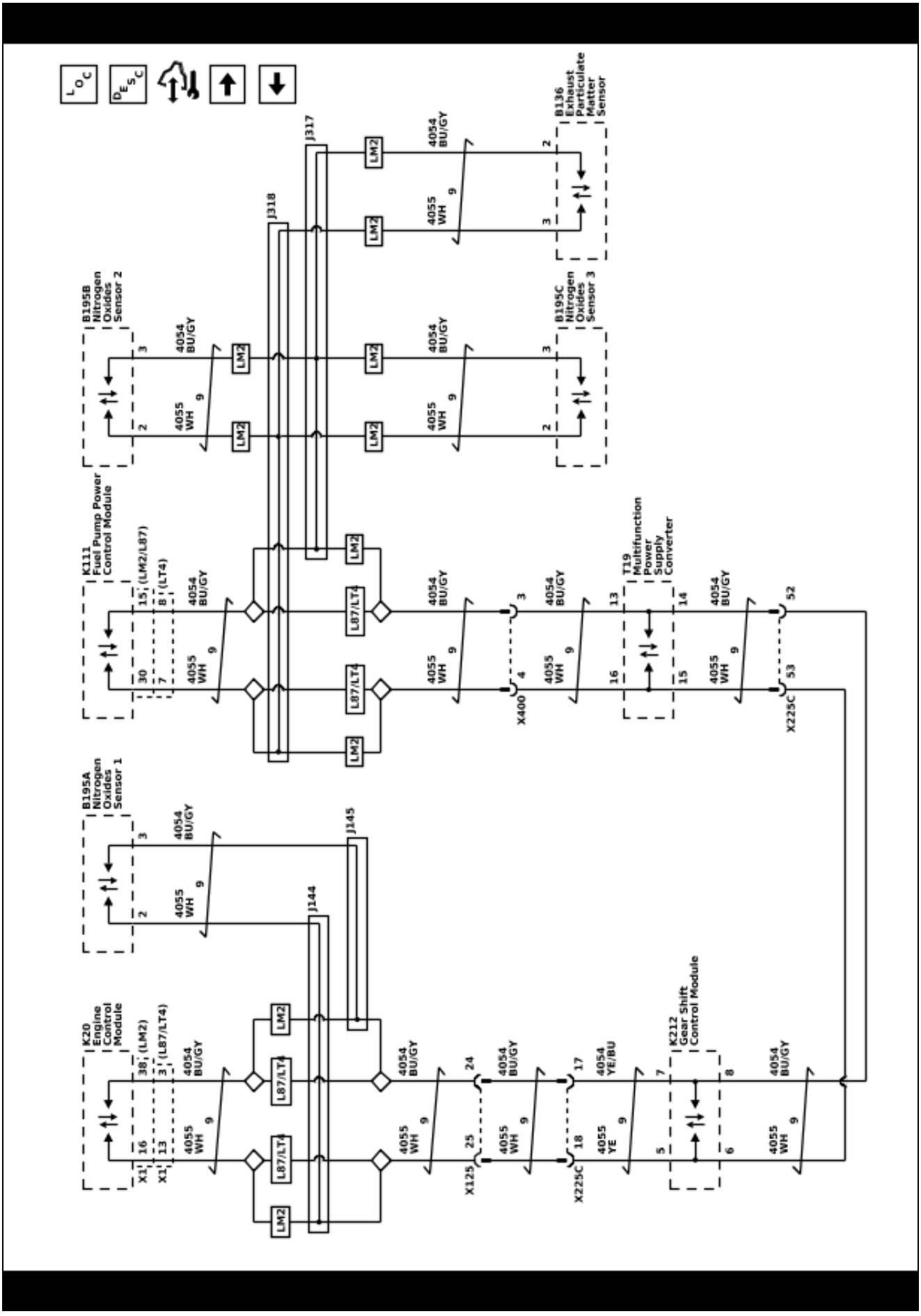
Data Communication Schematics (CAN 5)



Data Communication Schematics (CAN 8 (UGN / UKL))

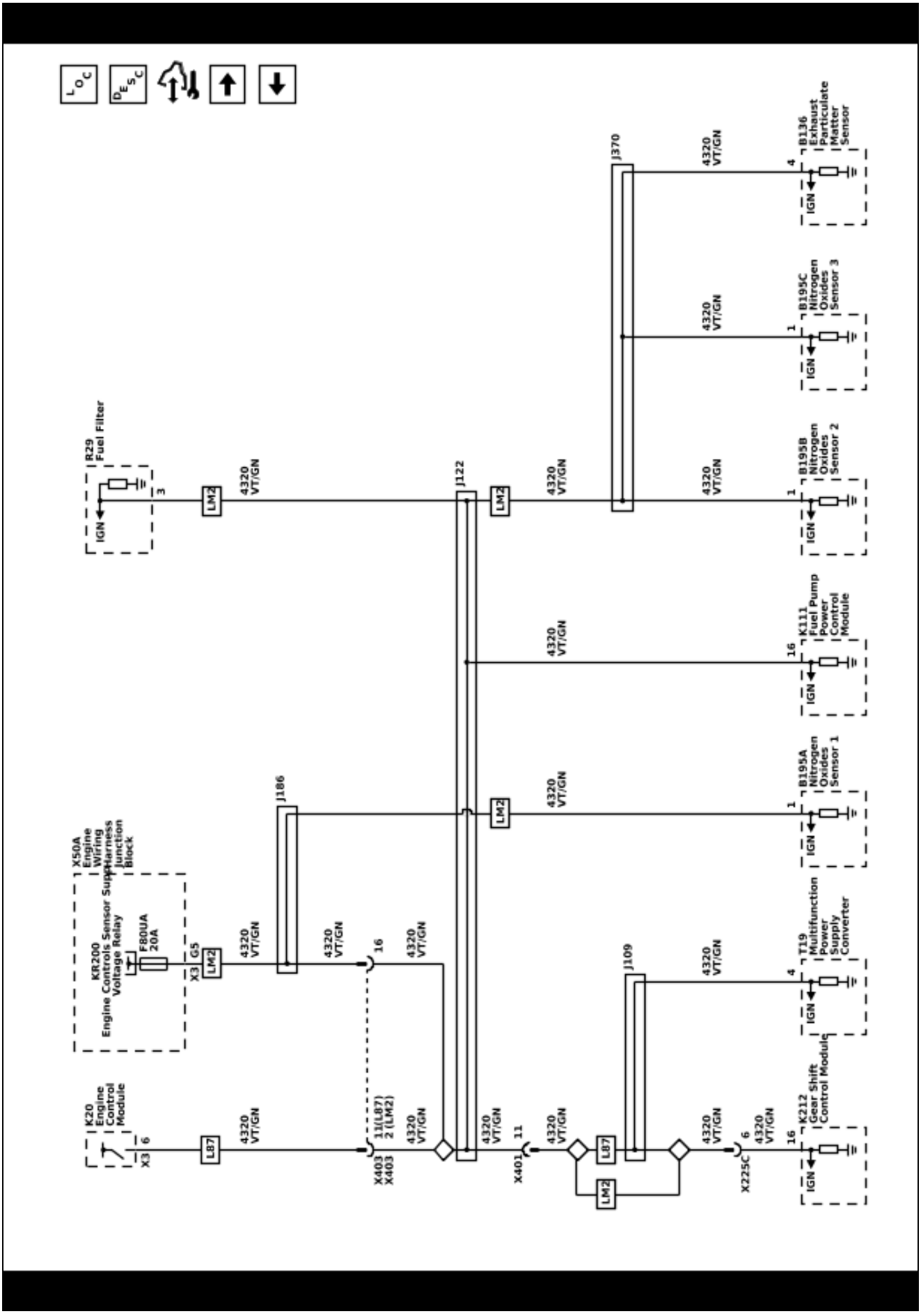


Data Communication Schematics (Powertrain CAN)



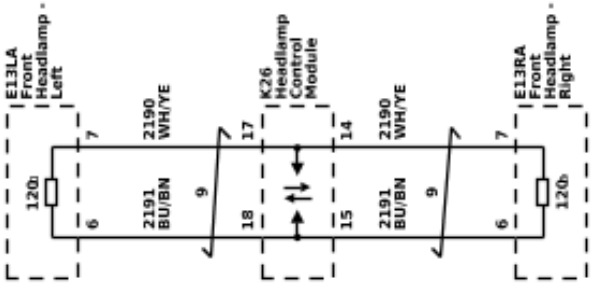
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Data Communication Schematics (Powertrain CAN Enable)



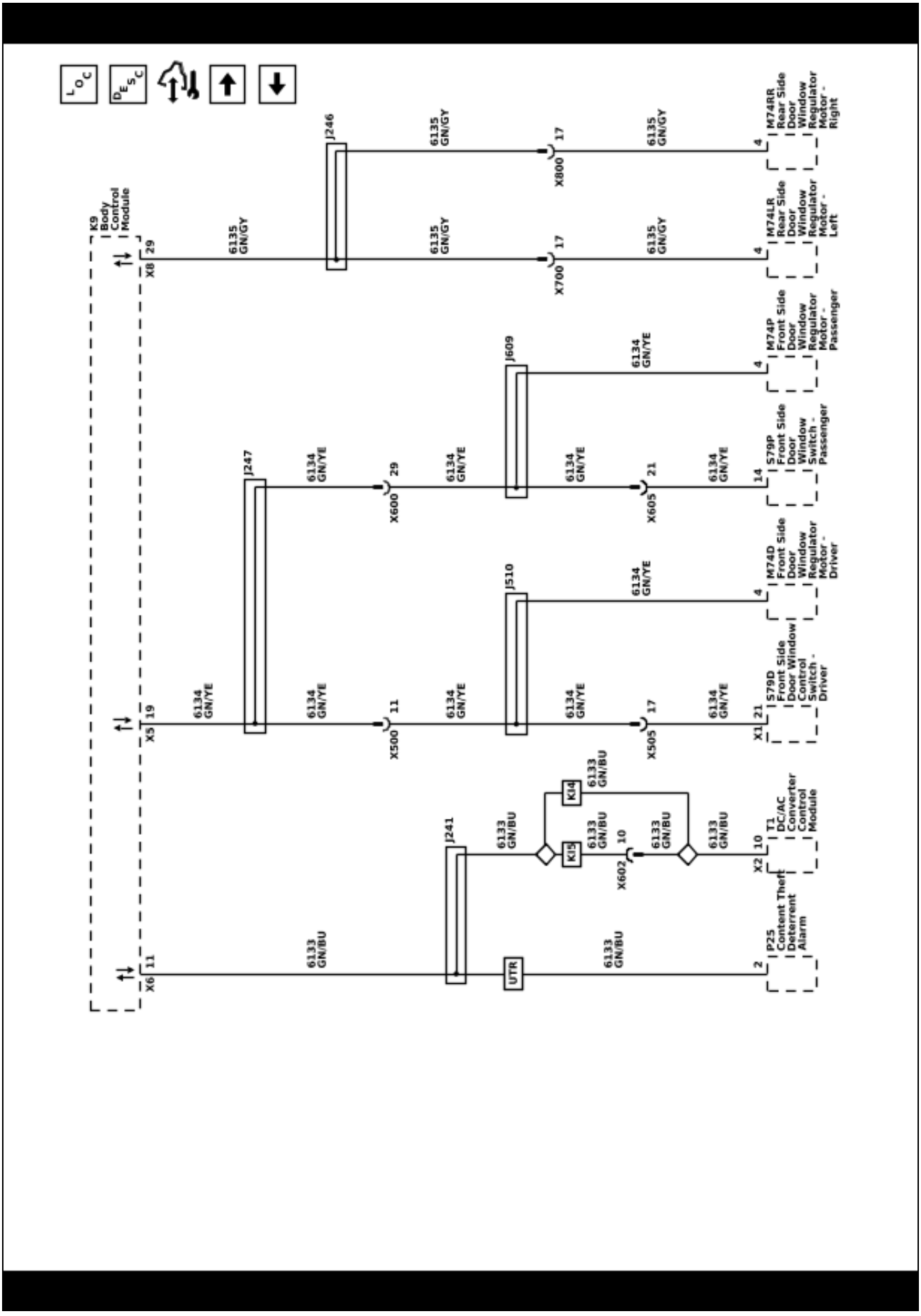
Data Communication Schematics (Headlamps Leveling CAN (UVG))





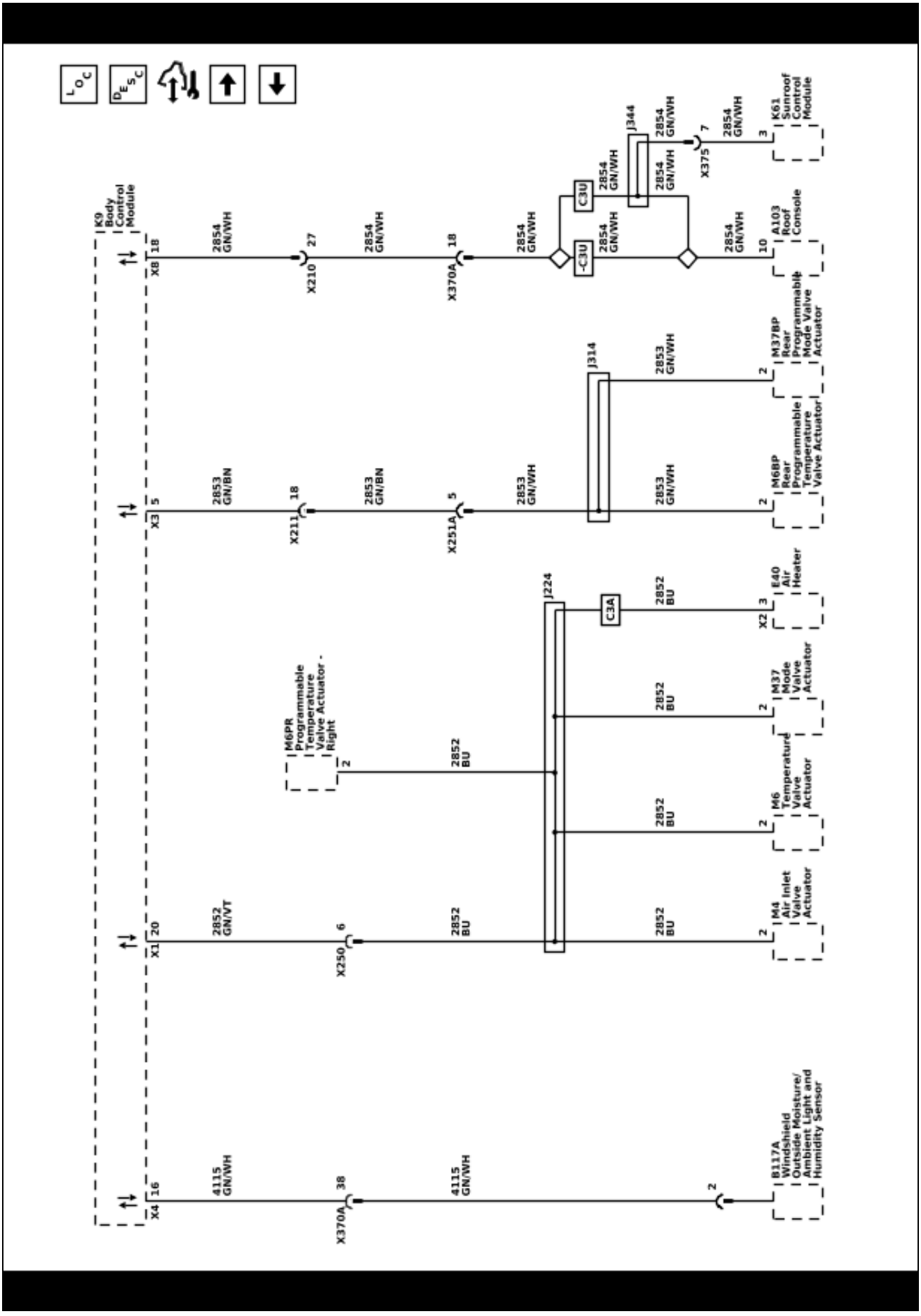
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Data Communication Schematics (Body Control Module Local Interconnect Network (LIN) Busses 1, 2, 3 and 4)

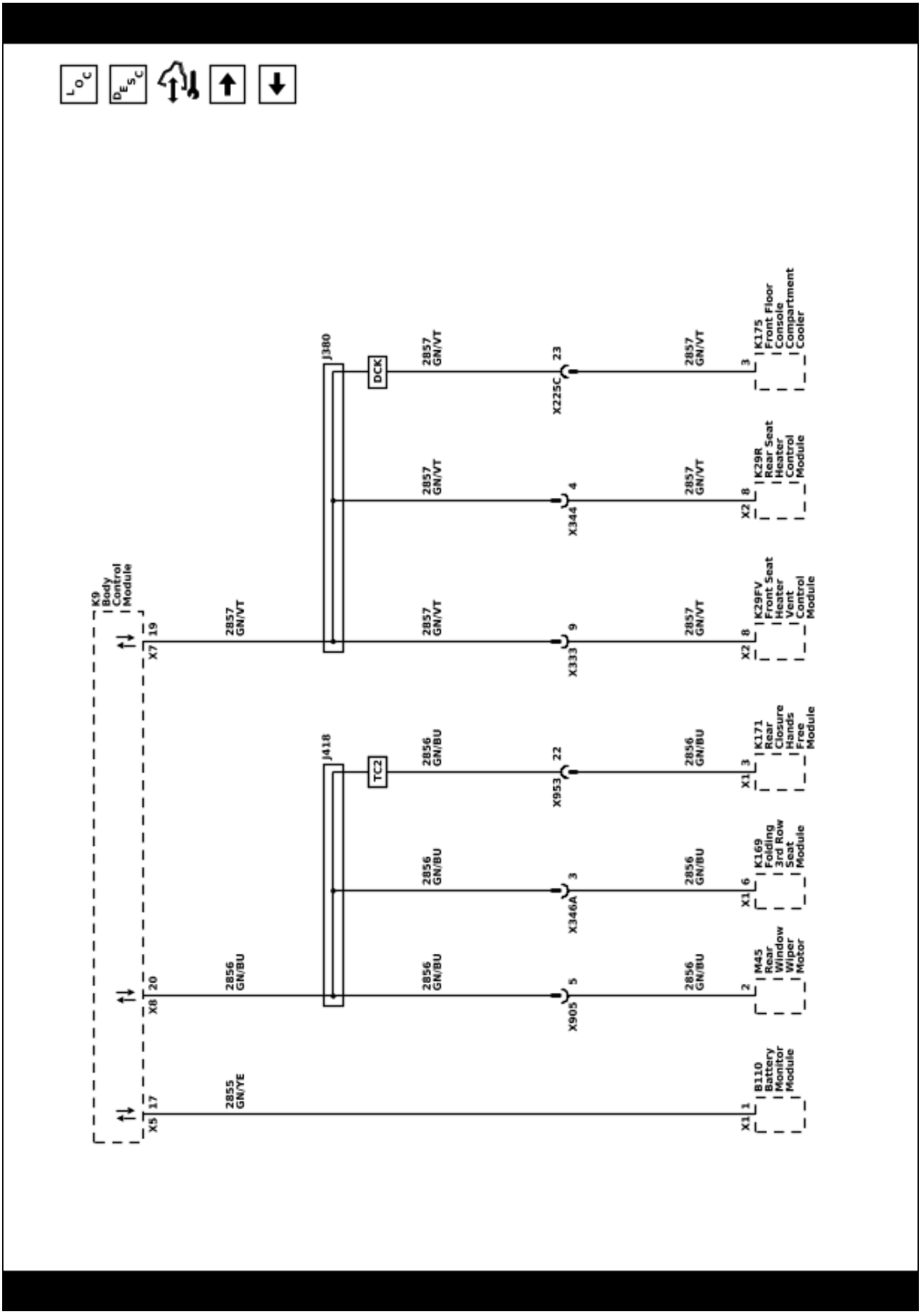


5997689

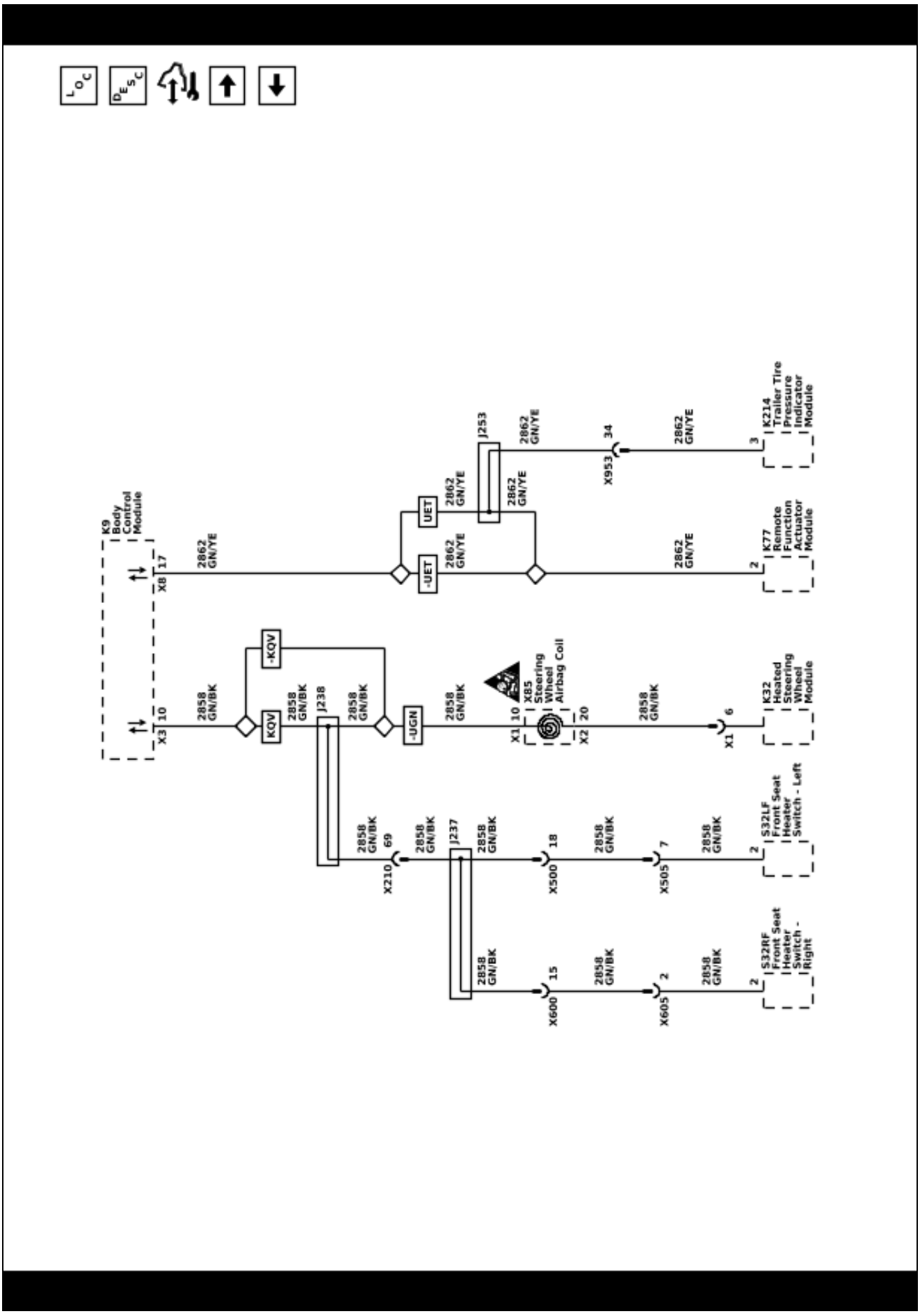
Data Communication Schematics (Body Control Module Local Interconnect Network (LIN) Busses 5, 6, 7 and 8)



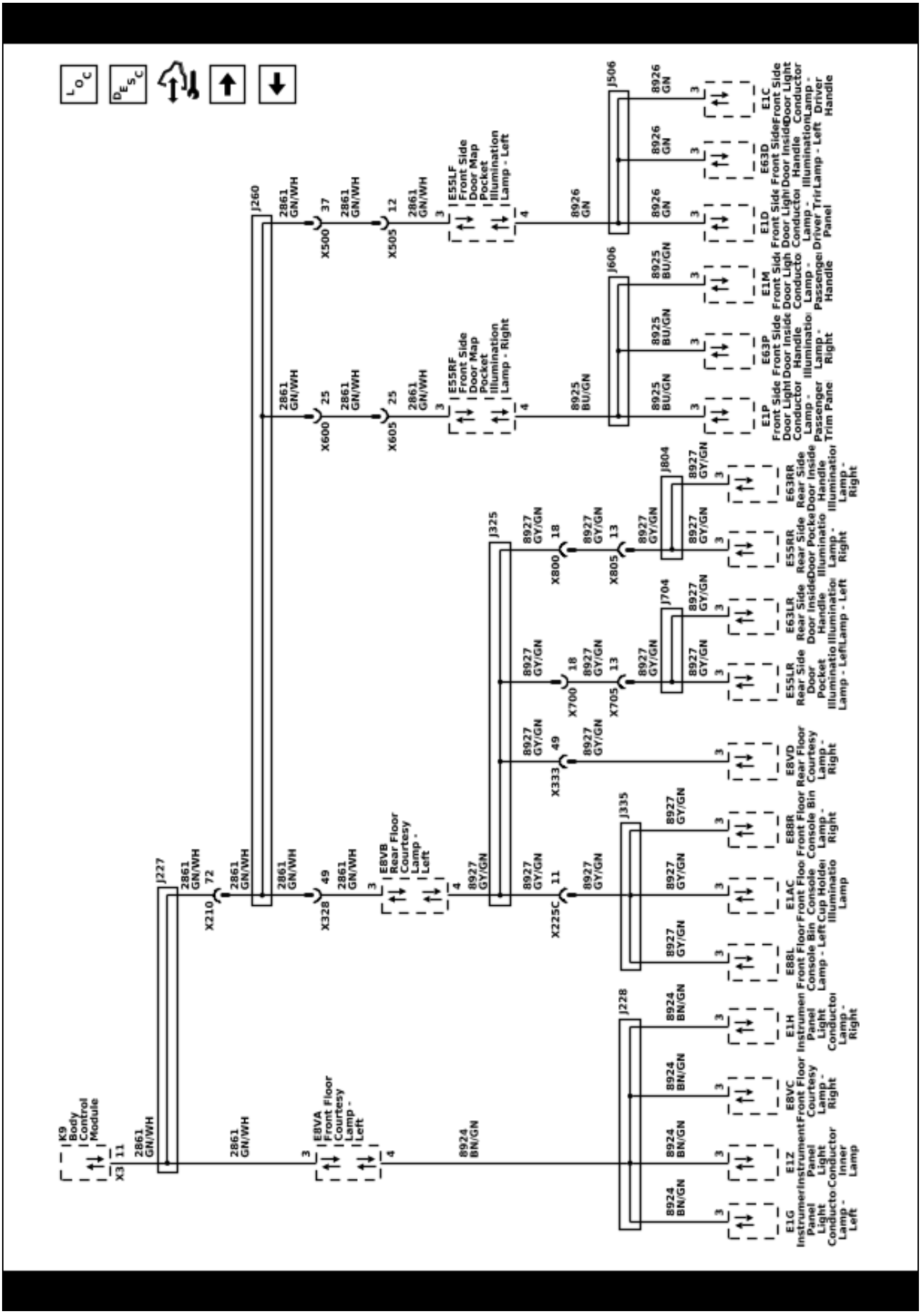
Data Communication Schematics (Body Control Module Local Interconnect Network (LIN) Busses 9, 10 and 11)



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

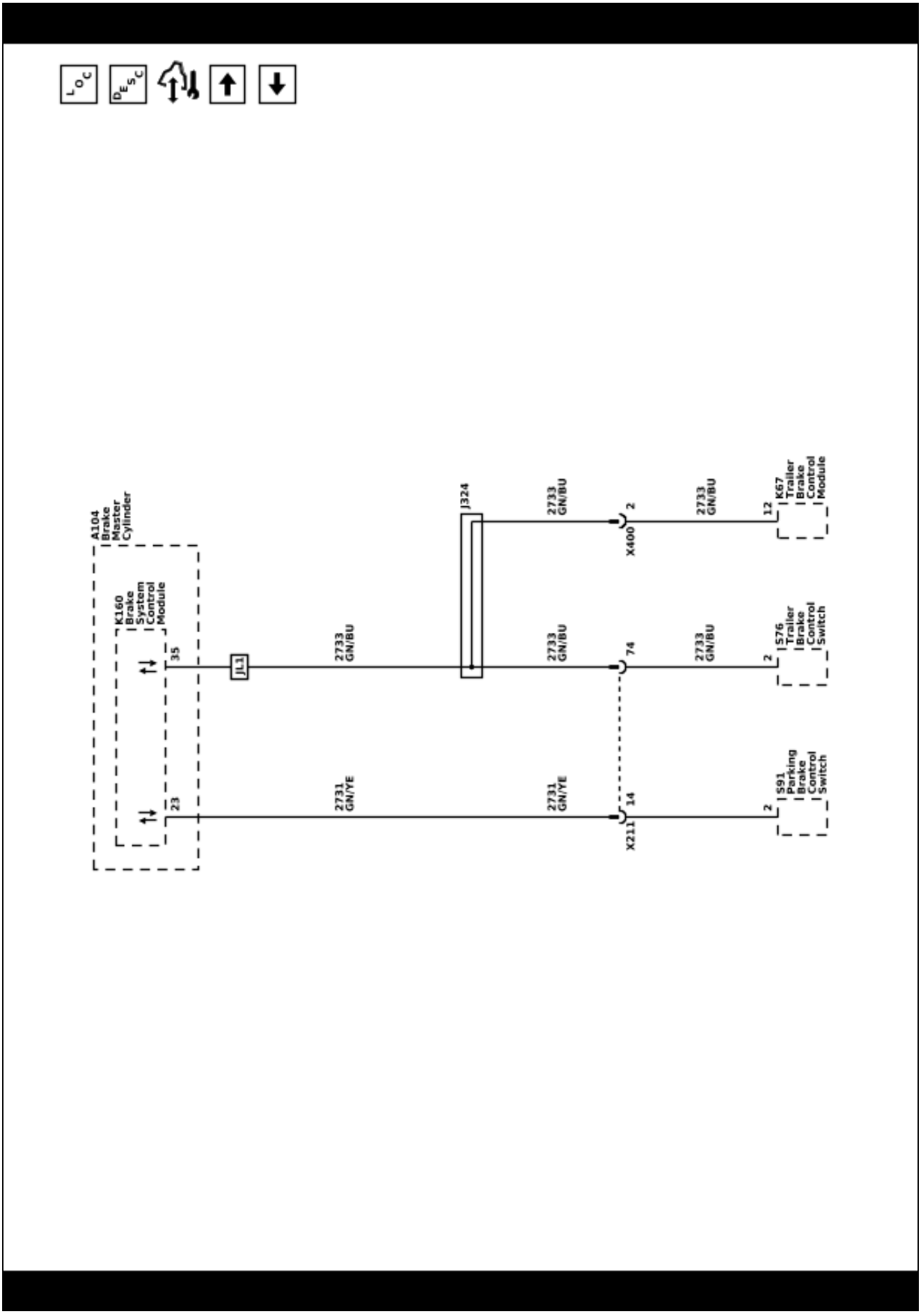


Data Communication Schematics (Body Control Module Local Interconnect Network (LIN) Bus 15)

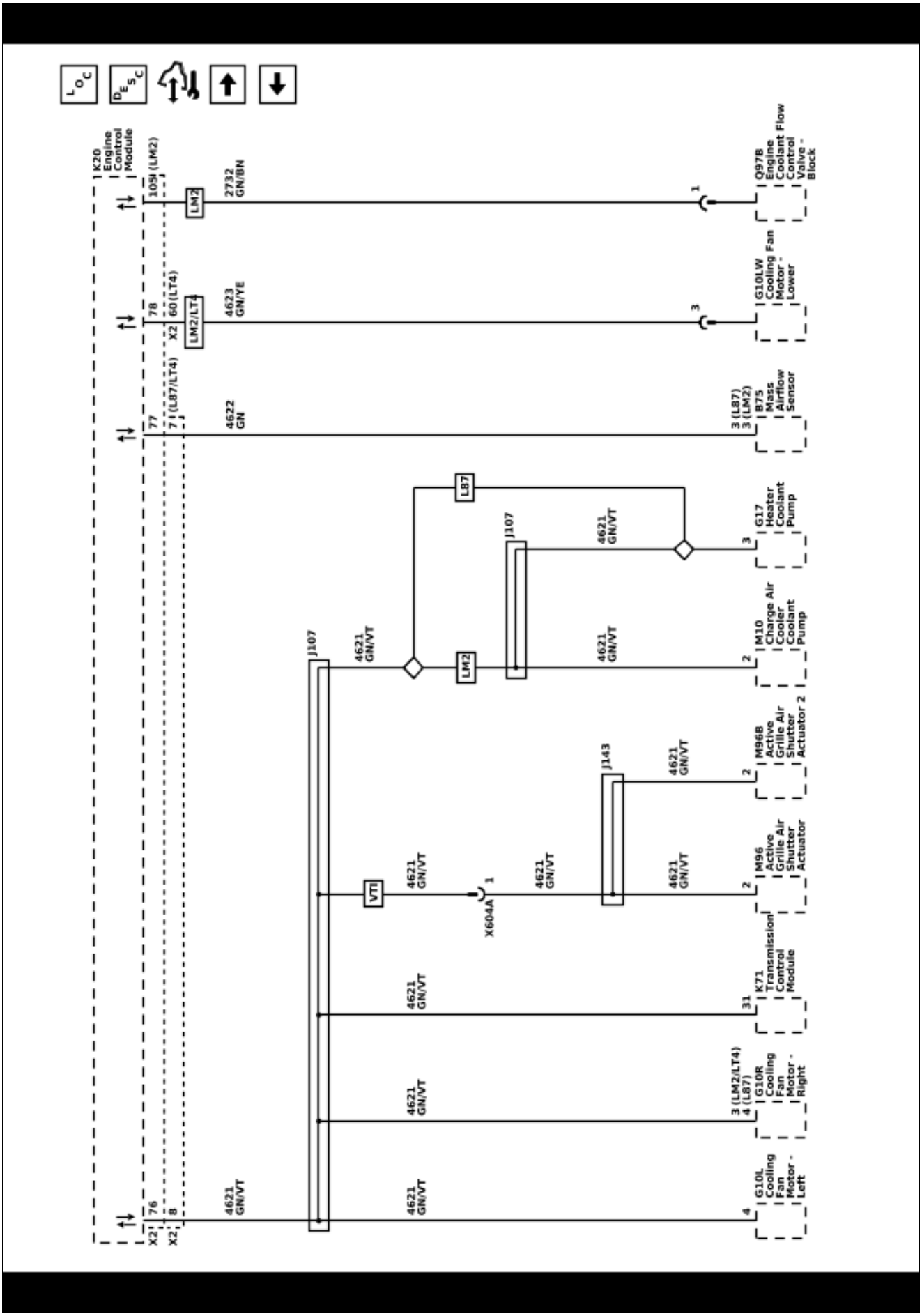


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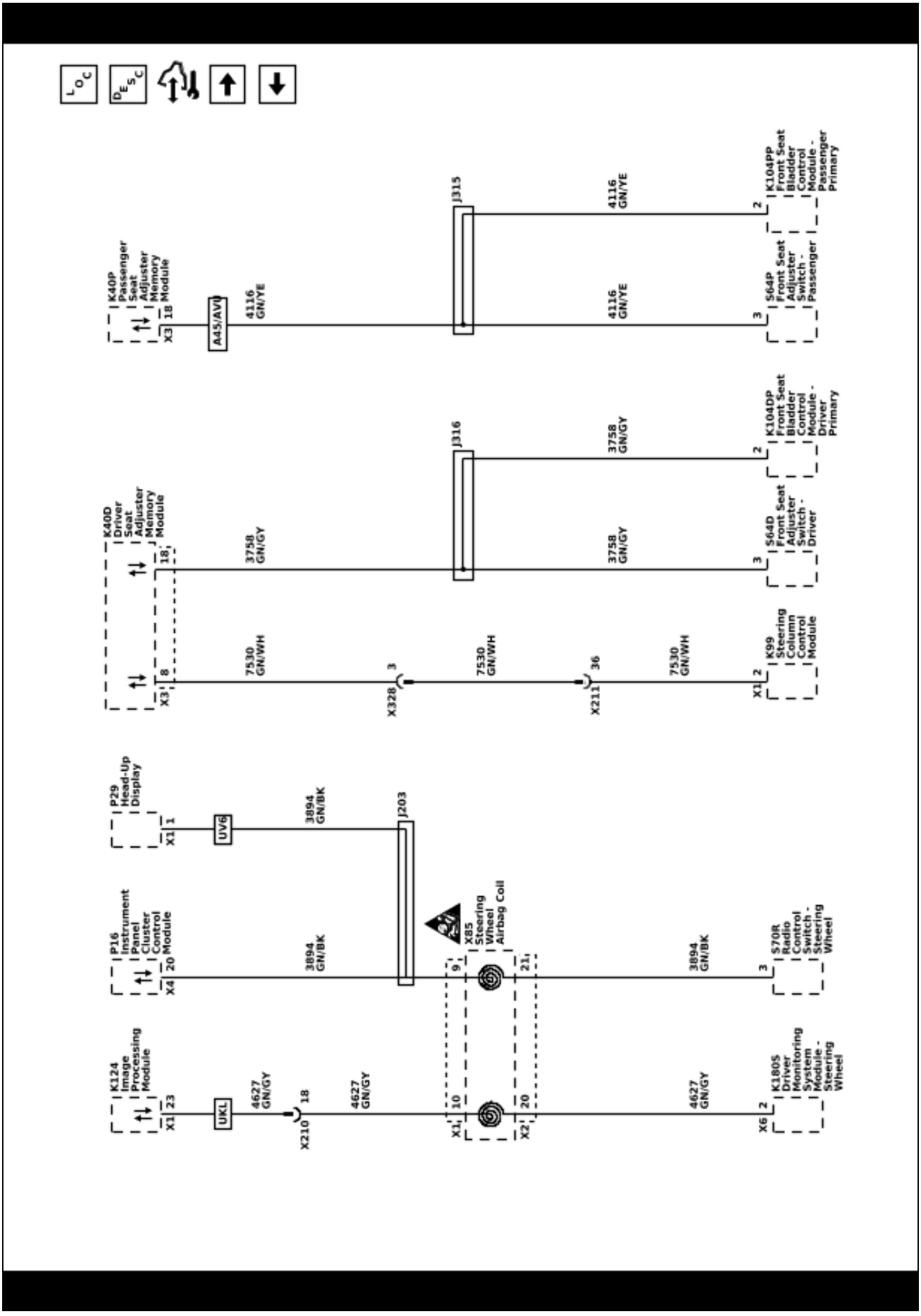
Data Communication Schematics (Brake System Control Module Local Interconnect Network (LIN) Busses)



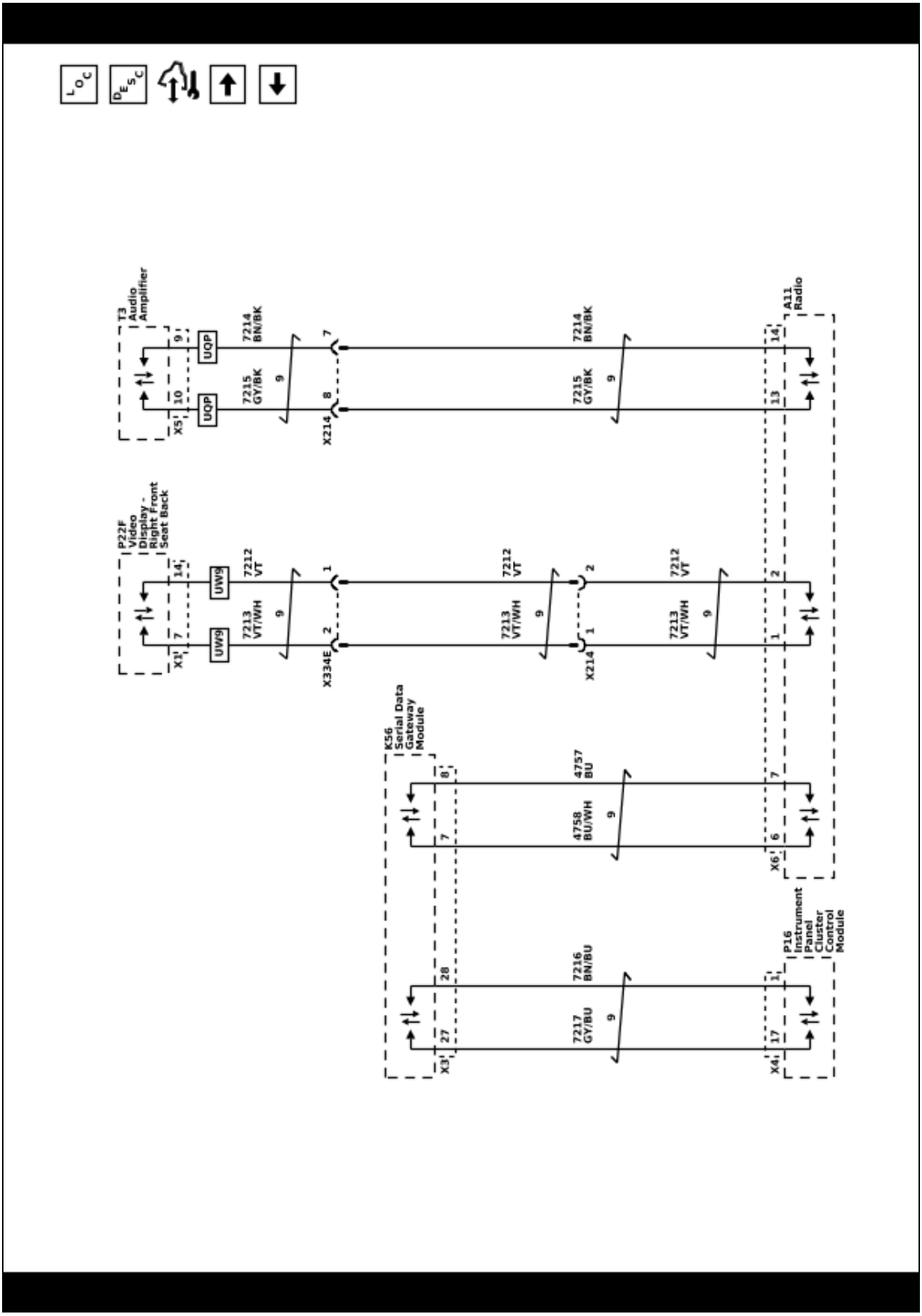
Data Communication Schematics (Engine Control Module Local Interconnect Network (LIN) Busses)



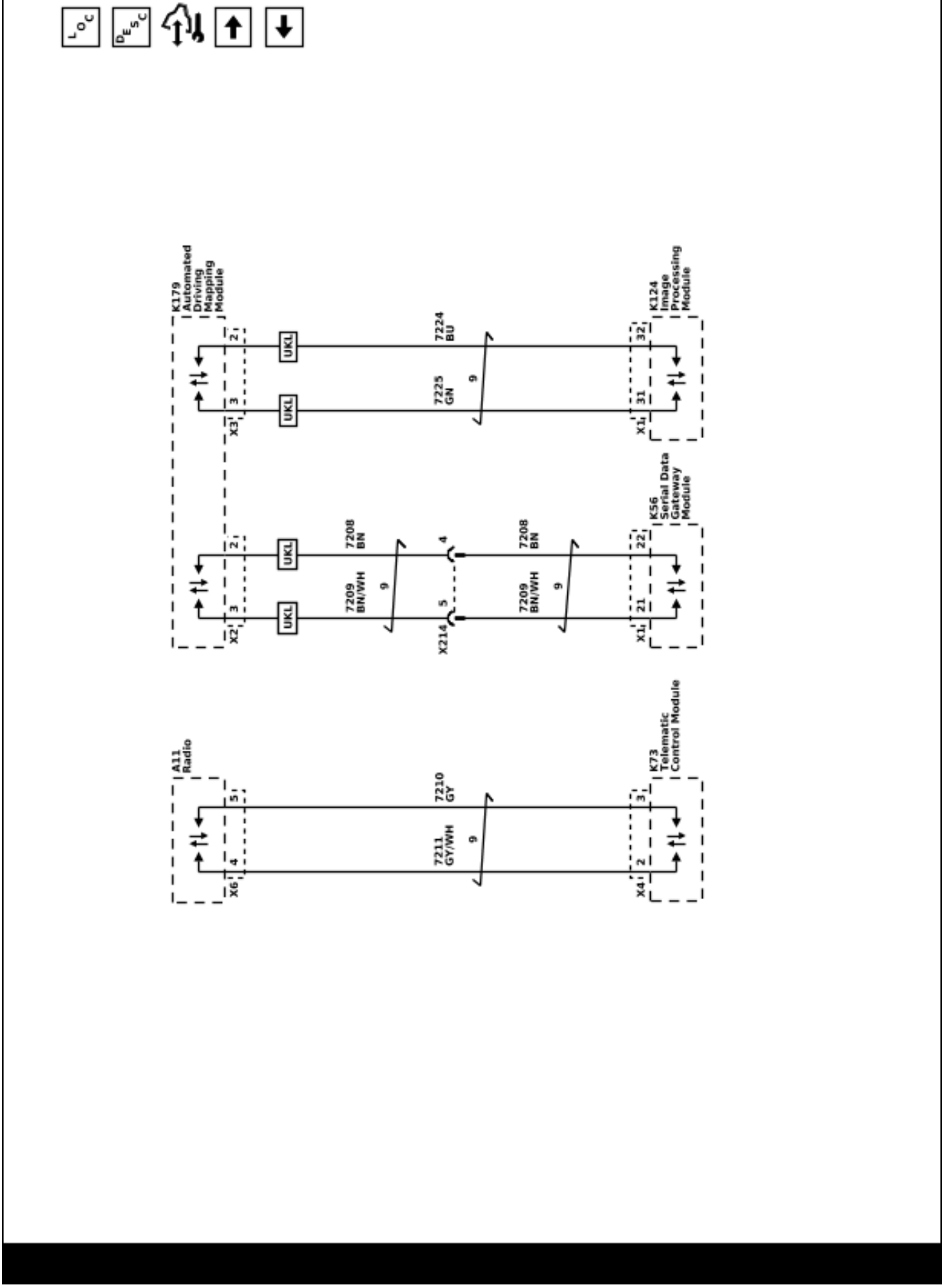
Data Communication Schematics (Local Interconnect Network (LIN))



Data Communication Schematics (Ethernet Bus (1 of 2))

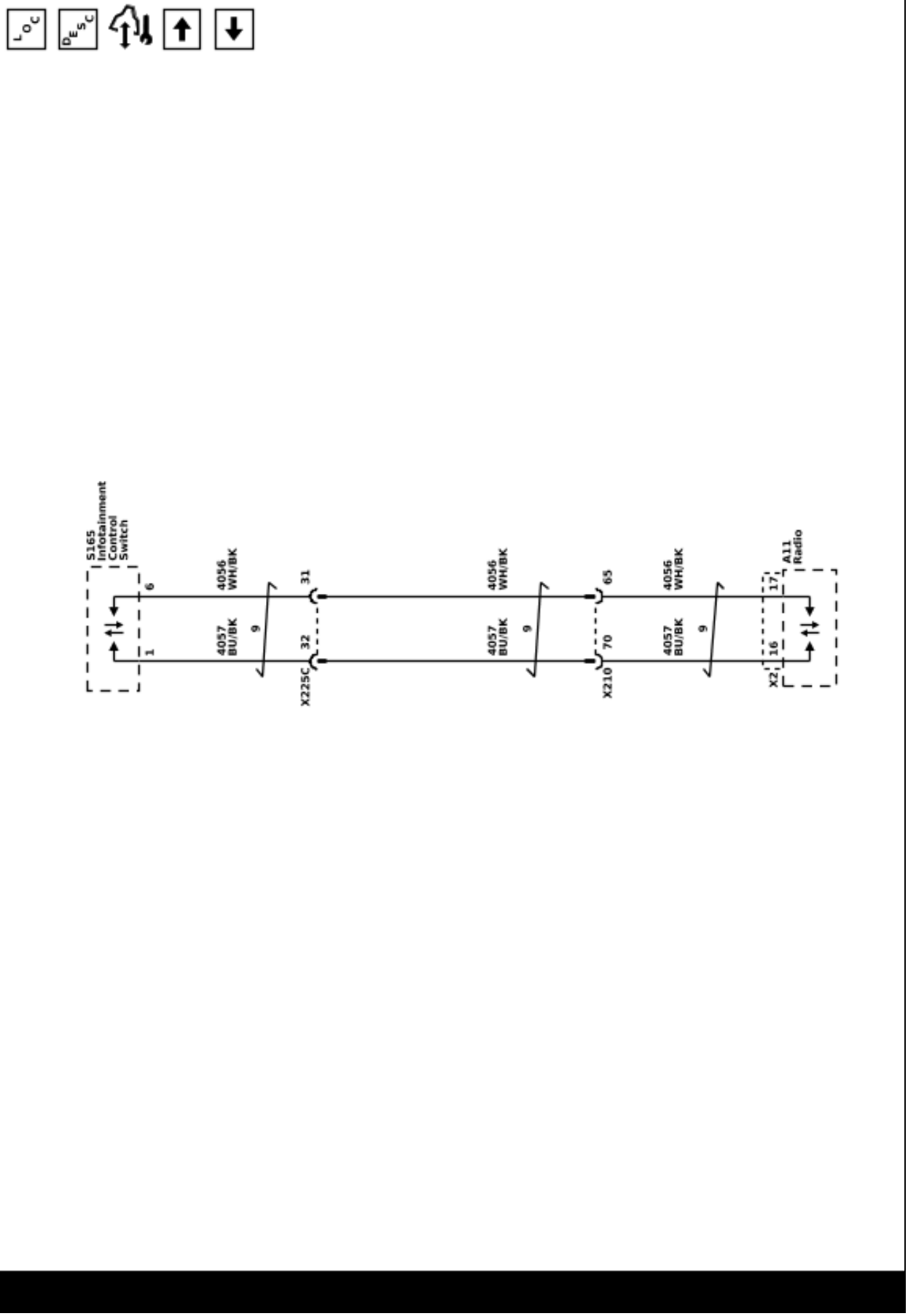


Data Communication Schematics (Ethernet Bus (2 of 2))

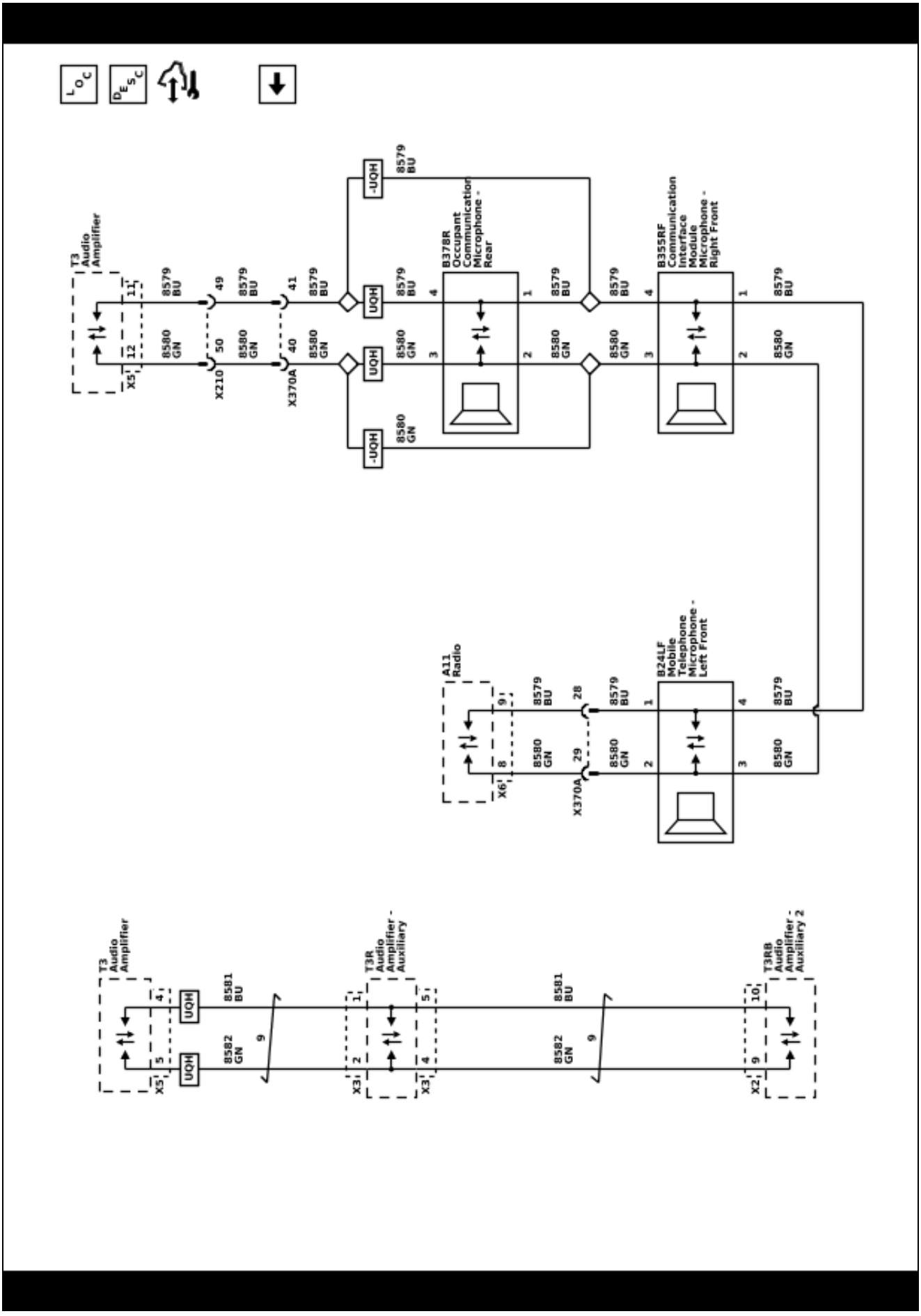


5997698

Data Communication Schematics (Infotainment CAN)

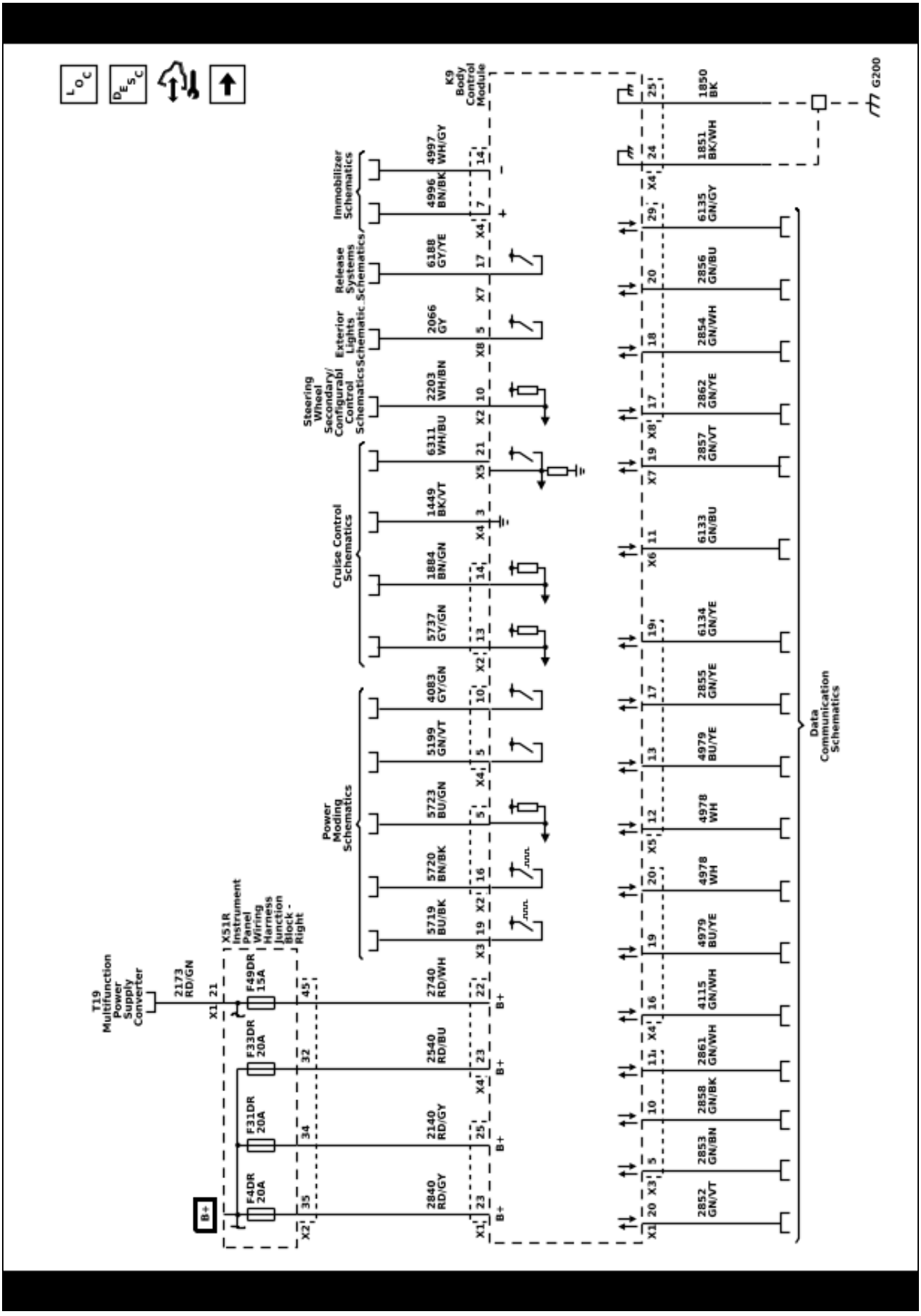


Data Communication Schematics (Automotive Audio Bus A2B)

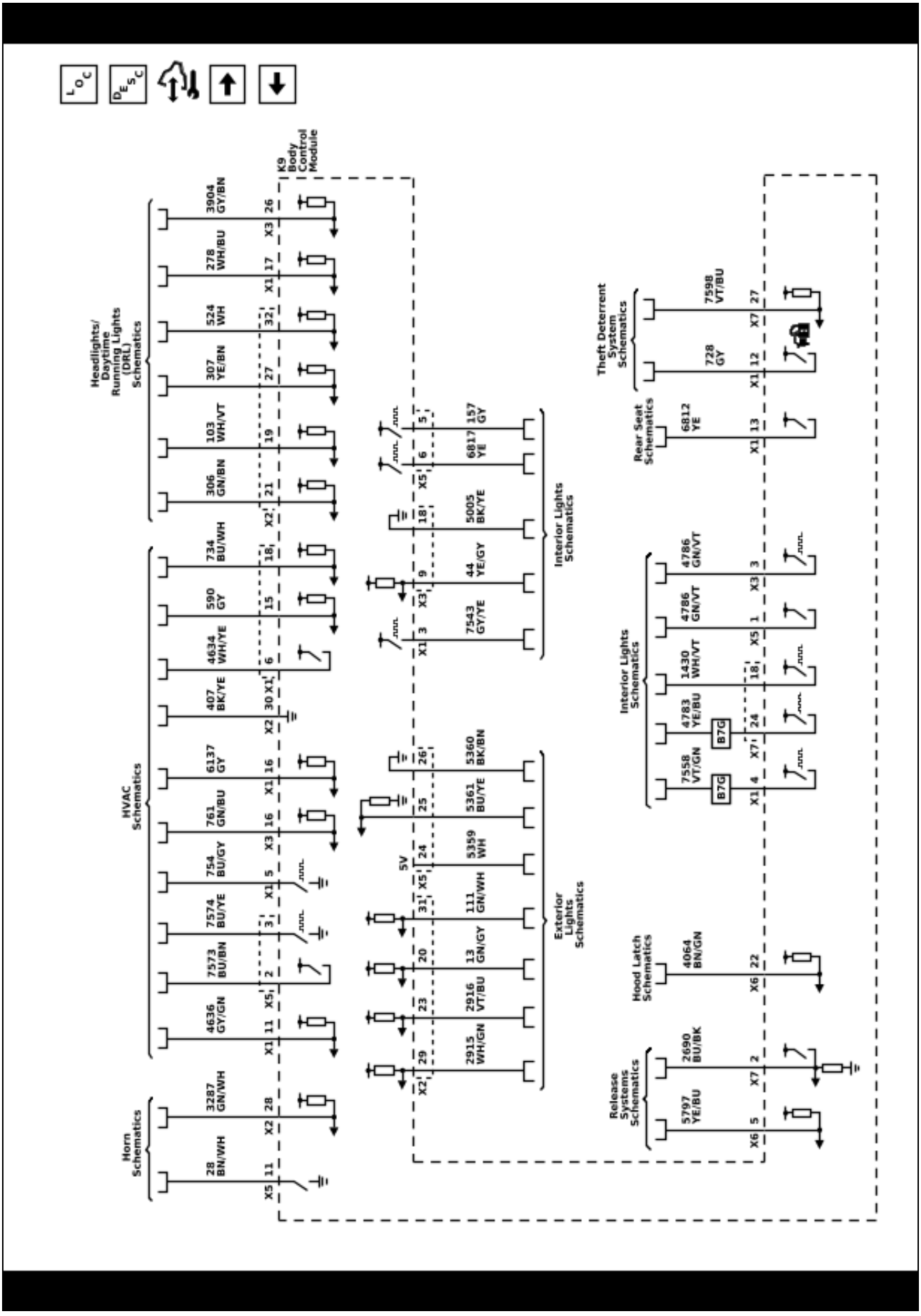


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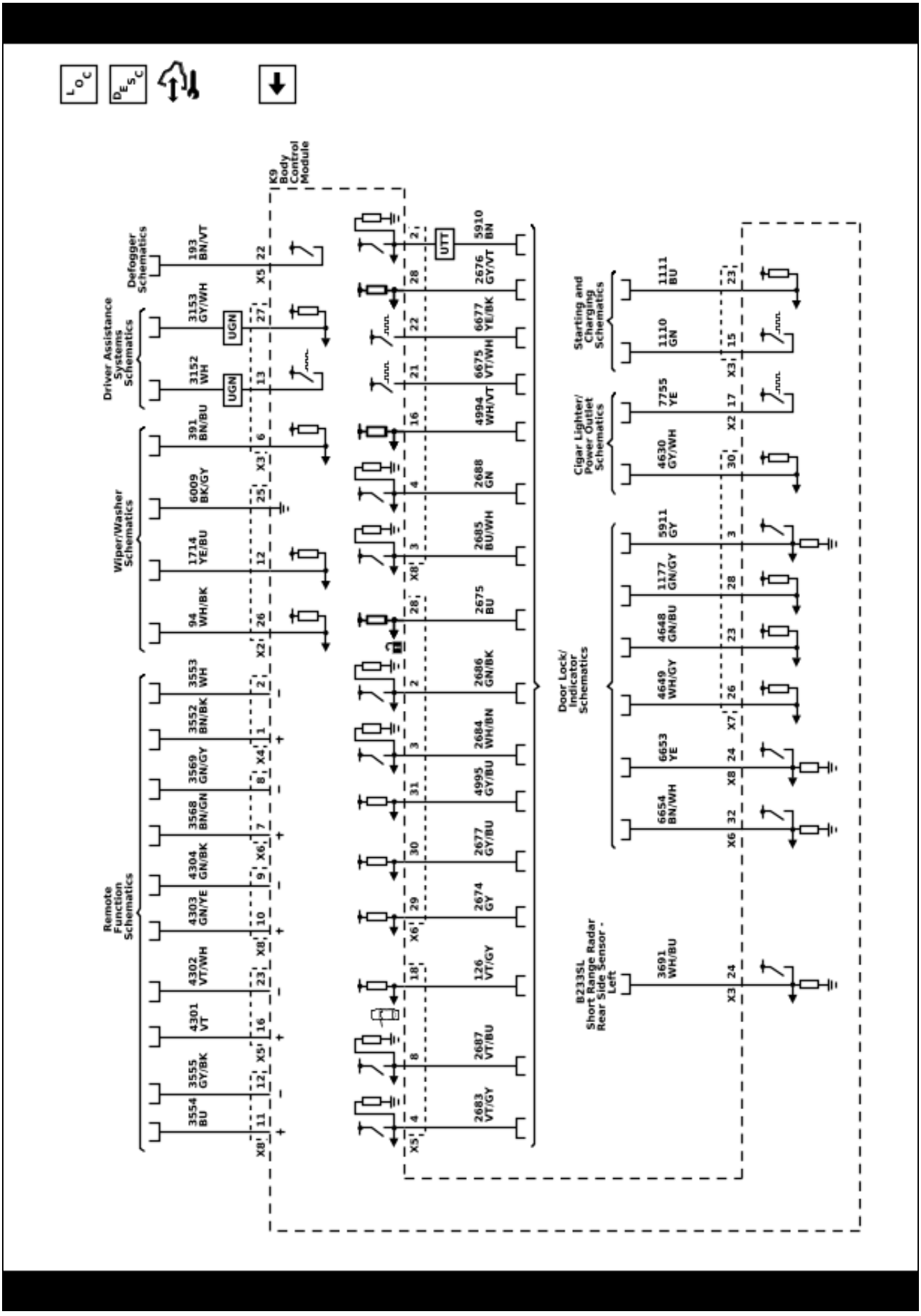
Body Control System Schematics (Power, Ground, Serial Data and Subsystem Reference (1 of 3))



Body Control System Schematics (Subsystem Reference (2 of 3))



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



Description and Operation

Data Link Communications Description and Operation

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

Data Link Communications Overview

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

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

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

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

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

K9 Body Control Module (BCM)

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

The various K9 Body Control Module input and output circuits are illustrated in the corresponding functional areas on the K9 Body Control Module electrical schematics. Refer to the *Body Control System Schematics on page 6-28* for more detailed information.

K56 Serial Data Gateway Module

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

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

Controller Area Network (CAN) Bus Description

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

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

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

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

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

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

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

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

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

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

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

Private Powertrain CAN Bus Description

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

Local Interconnect Network (LIN) Bus Description

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

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

Ethernet Bus Description

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

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

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

Ethernet 1

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

Ethernet 2

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

Ethernet 3

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

Ethernet 4

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

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

Ethernet 5

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

Ethernet 6

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

Ethernet 7

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

Ethernet 11

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

Ethernet 14

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

Ethernet 15

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

X84 Data Link Connector (DLC)

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

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

Serial Data Reference

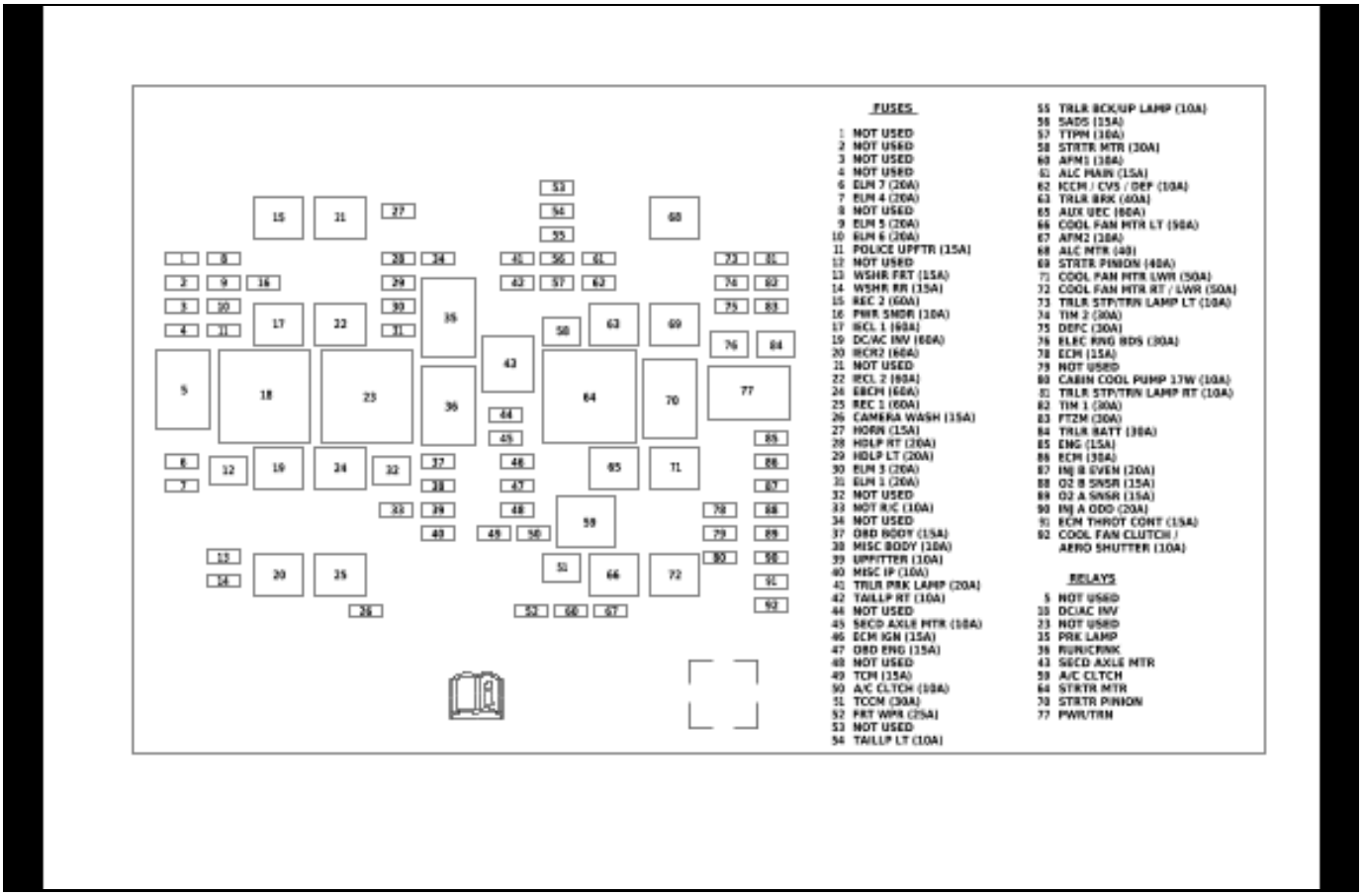
The scan tool communicates over the various buses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every control module that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Communication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

Electrical Component and Inline Harness Connector End Views

Component Locator

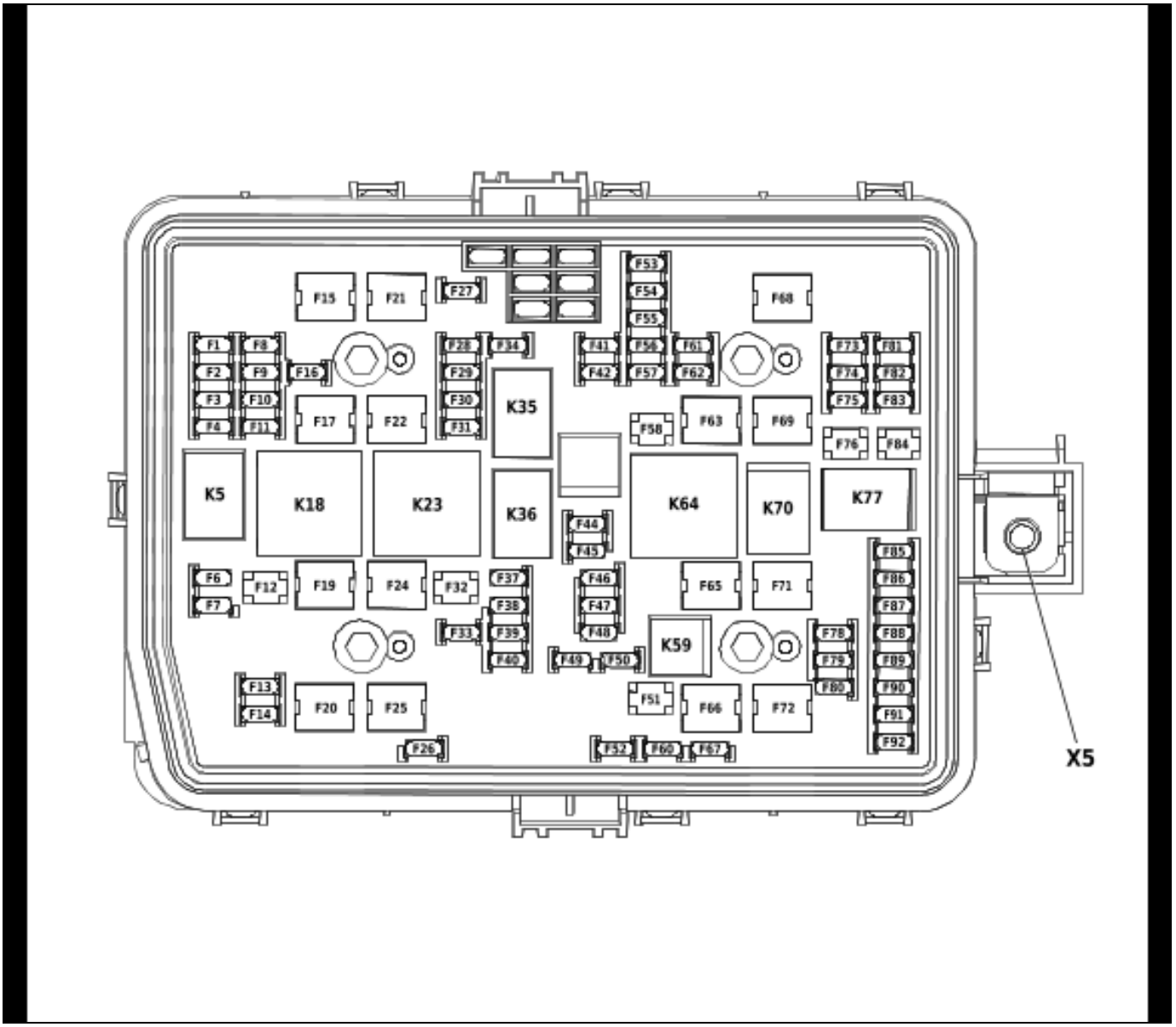
Electrical Center Identification Views

X50A Engine Wiring Harness Junction Block - Label



5614954

X50A Engine Wiring Harness Junction Block - Top View



5614955

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	NOT USED	F1UA	10A	• Not Used
F2	NOT USED	F2UA	10A	• Not Used
F3	NOT USED	F3UA	20A	• Not Used
F4	NOT USED	F4UA	20A	• Not Used
F6	ELM 7	F6UA	20A	• K219 Lighting Control Module
F7	ELM 4	F7UA	20A	• K219 Lighting Control Module
F8	NOT USED	F8UA	15A	• Not Used
F9	ELM 5	F9UA	20A	• K219 Lighting Control Module
F10	ELM 6	F10UA	20A	• K219 Lighting Control Module

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F11	LRR FRT SRR	F11UA	15A	• B233LF Short Range Radar Sensor - Left Front (UKL) • B233RF Short Range Radar Sensor - Right Front (UKL) • B233B Forward Range Radar Sensor - Long Range (UGN)
F12	NOT USED	F12UA	30A	• Not Used
F13	WSHR FRT	F13UA	15A	• KR11 Windshield Washer Pump Relay
F14	WSHR RR	F14UA	15A	• KR6 Rear Window Washer Pump Relay
F15	REC 2	F15UA	60A	• X53A Body Wiring Harness Junction Block - Rear
F16	PWR SNDR	F16UA	10A	• P25 Content Theft Deterrent Alarm
F17	EBCM	F17UA	60A	• K160 Brake System control Module • X400
F19	DC/AC INV	F19UA	60A	• T1 Accessory AC and DC Power Control Module
F20	IECR2	F20UA	60A	• X51R Instrument Panel Wiring Harness Junction Block - Right
F21	NOT USED	F21UA	40A	• Not Used
F22	IECL 2	F22UA	60A	• Not Used
F24	FUEL HEATER	F24UA	60A	• KR22 Fuel Heater Relay (LM2)
F25	REC 1	F25UA	60A	• X53A Body Wiring Harness Junction Block - Rear
F26	CAMERA WASH	F26UA	15A	• KR174 Nigh Vision Camera Washer Pump Relay (UV3)
F27	HORN	F27UA	15A	• P13 Horn
F28	HDLP RT	F28UA	20A	• E13RA Front Headlamp - Right • E4D Daytime Running Lamp - Right
F29	HDLP LT	F29UA	20A	• E13LA Front Headlamp - Left • E4C Daytime Running Lamp - Left
F30	ELM 3	F30UA	20A	• K219 Lighting Control Module
F31	ELM 1	F31UA	20A	• K219 Lighting Control Module
F32	NOT USED	F32UA	30A	• Not Used
F33	NOT R/C	F33UA	10A	• K60 Column Lock Module
F34	NOT USED	F34UA	15A	• Not Used
F37	OBD BODY	F37UA	15A	• K38 Chassis Control Module (G96) • K160 Brake System Control Module • K212 Gear Shift Control Module • P16 Instrument Panel Cluster Control Module • P43 Forward Collision Alert Display (UEU-UV6)
F38	MISC BODY	F38UA	10A	• K219 Lighting Control Module • M73A Front Seat back Ventilation blower - Driver (KQV) • M73B Front Seat Back Ventilation Blower - Passenger (KQV) • M73D Front Seat Cushion Ventilation Blower Driver (KQV) • M73P Front Seat Cushion Ventilation Blower - Passenger (KQV) • T1 AC/AC Converter Control Module (KI4/KI5)
F39	UPFITTER	F39UA	10A	• Not Used

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F40	MISC IP	F40UA	10A	• A10 Inside Rearview Mirror (DD8/DRZ) • E40 Air Heater (C3A) • K36 Restraint Control Module
F41	TRLR PRK LAMP	F41UA	20A	• X88B Tow Vehicle Electrical Receptacle (Z82-UET)
F42	TAILP RT	F42UA	10A	• E42R Rear Body Structure Lamp - Right
F44	TRLR TOW	F44UA	15A	• K68 Trailer Lamp Control Module • X88B Tow Vehicle Electrical Receptacle
F45	SECD AXLE MTR	F45UA	10A	• M26 Front Drive Axle Actuator (NP0/NQH)
F46	ECM IGN	F46UA	15A	• K20 Engine Control Module
F47	OBD ENG	F47UA	15A	• K69 Transfer Case Control Module (NP0/NQH) • K71 Transmission Control Module • K115 Reductant Control Module (LM2) • M106S Exhaust Control Valve Actuator - Sound Quality (LT4) • M106SB Exhaust Control Valve 2 Actuator - Sound Quality (LT4)
F48	NOT USED	F48UA	10A	• Not Used
F49	TCM	F49UA	15A	• T12 Automatic Transmission Assembly
F50	A/C CLTCH	F50UA	10A	• Q2 Air Conditioning Clutch
F51	TCCM	F51UA	30A	• K69 Transfer Case Control Module (NP0/NQH)
F52	FRT WPR	F52UA	25A	• KR12B Windshield Wiper Motor Relay • KR12C Windshield Wiper Motor Speed Control Relay
F53	NOT USED	F53UA	10A	• Not Used
F54	TAILLP LT	F54UA	10A	• E42L Rear body Structure Stop Lamp - Left
F55	TRLR BCK/UP LAMP	F55UA	10A	• X88B Tow Vehicle Electrical Receptacle (Z82-UET)
F56	SADS	F56UA	15A	• K19 Suspension Control Module (Z95)
F57	NOT USED	F57UA	10A	• Not Used
F58	STRTR MTR	F58UA	30A	• KR27 Starter Relay
F60	AFM1	F60UA	10A	• Not Used
F61	ALC MAIN	F61UA	15A	• K5 Automatic Level Control Module (F47)
F62	ICCM/CVS/DEF	F62UA	10A	• K115 Reductant Control Module (LM2) • Q13 Evaporative Emission Canister Vent Solenoid Valve (L87/LT4)
F63	TRLR BRK	F63UA	40A	• K67 Trailer Brake Control Module (JL1) • W24 Blunt Cut - Trailer Brakes Provision (Z82-JL1)
F65	AUX UEC	F65UA	60A	• Not Used
F66	COOL FAN MTR LT	F66UA	50A	• G10L Engine Cooling Fan Motor - Left
F67	AFM2	F67UA	10A	• Not Used
F68	ALC MTR	F68UA	40A	• K5 Automatic Level Control Module (F47)
F69	STRTR PINION LD	F69UA	40A	• KR27C Engine Restart Relay (L87/LT4)
F71	COOL FAN MTR LWR	F71UA	50A	• G10LW Engine Cooling Fan Motor - Lower (LM2/LT4)
F72	COOL FAN MTR RT/LWR	F72UA	50A	• G10R Engine Cooling Fan Motor - Right (L87)
F73	TRLR STP/TRN LAMP LT	F73UA	10A	• X88B Tow Vehicle Electrical Receptacle (Z82-UET)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F74	TIM 2	F74UA	30A	• K68 Trailer Lamp Control Module (UET)
F75	DEFC	F75UA	30A	• K115 Reductant Control Module (LM2)
F76	ELEC RNG BDS	F76UA	30A	• K4 Running Board Control Module (B3L)
F78	ECM	F78UA	15A	• K20 Engine Control Module
F79	HEATER COOLANT PUMP	F79UA	10A	• G17 Heater Coolant Pump (LM2)
F80	DEISEL	F80UA	20A	• B195A Nitrogen Oxides Sensor 1 (LM2) • B195B Nitrogen Oxides Sensor 2 (LM2) • B195C Nitrogen Oxides Sensor 3 (LM2) • B136 Exhaust Particulate Sensor (LM2) • R29 Fuel Filter (LM2) • G17 Heater Coolant Pump (L87/LM2) • K111 Fuel Pump Power Control Module
F81	TRLR STP/TRN LAMP RT	F81UA	10A	• X88B Tow Vehicle Electrical Receptacle (Z82-UET)
F82	TIM 1	F82UA	30A	• K68 Trailer Lamp Control Module (UET)
F83	FTZM	F83UA	30A	• K111 Fuel Pump Control Module
F84	TRLR BATT	F84UA	30A	• X88B Tow Vehicle Electrical Receptacle (Z82)
F85	ENG	F85UA	15A	• Not Used
F86	ECM	F86UA	30A	• K20 Engine Control Module
F87	INJ B EVEN	F87UA	20A	• K20 Engine Control Module (L87/LT4) • T8B Ignition Coil 2 (L87/LT4) • T8D Ignition Coil 4 (L87/LT4) • T8F Ignition Coil 6 (L87/LT4) • T8H Ignition Coil 8 (L87/LT4)
F88	O2 B SNSR	F88UA	15A	• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L87/LT4) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT4) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L87/LT4) • B75 Mass Airflow Sensor (L87/LT4) • K20 Engine Control Module (L87/LT4) • M10 Charge Air Cooler Coolant Pump (LM2/LT4) • Q97 Engine Coolant Flow Control Valve (LM2)
F89	O2 A SNSR	F89UA	15A	• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L87/LT4) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L87) • Q12 Evaporative Emission Canister Purge Solenoid Valve (L87/LT4) • Q44 Engine Oil Pressure Control Solenoid Valve (L87/LT4)
F90	INJ A ODD	F90UA	20A	• K20 Engine Control Module (L87/LT4) • T8A Ignition Coil 1 (L87/LT4) • T8C Ignition Coil 3 (L87/LT4) • T8E Ignition Coil 5 (L87/LT4) • T8G Ignition Coil 7 (L87/LT4)
F91	ECM2	F91UA	15A	• K20 Engine Control Module (L87)
F92	COOL FAN CLUTCH/AERO SHUTTER	F92UA	10A	• M96 Active Grille Air Shutter Actuator (VTI/WMI) • M96B Active Grille Air Shutter Actuator 2 (WMI)

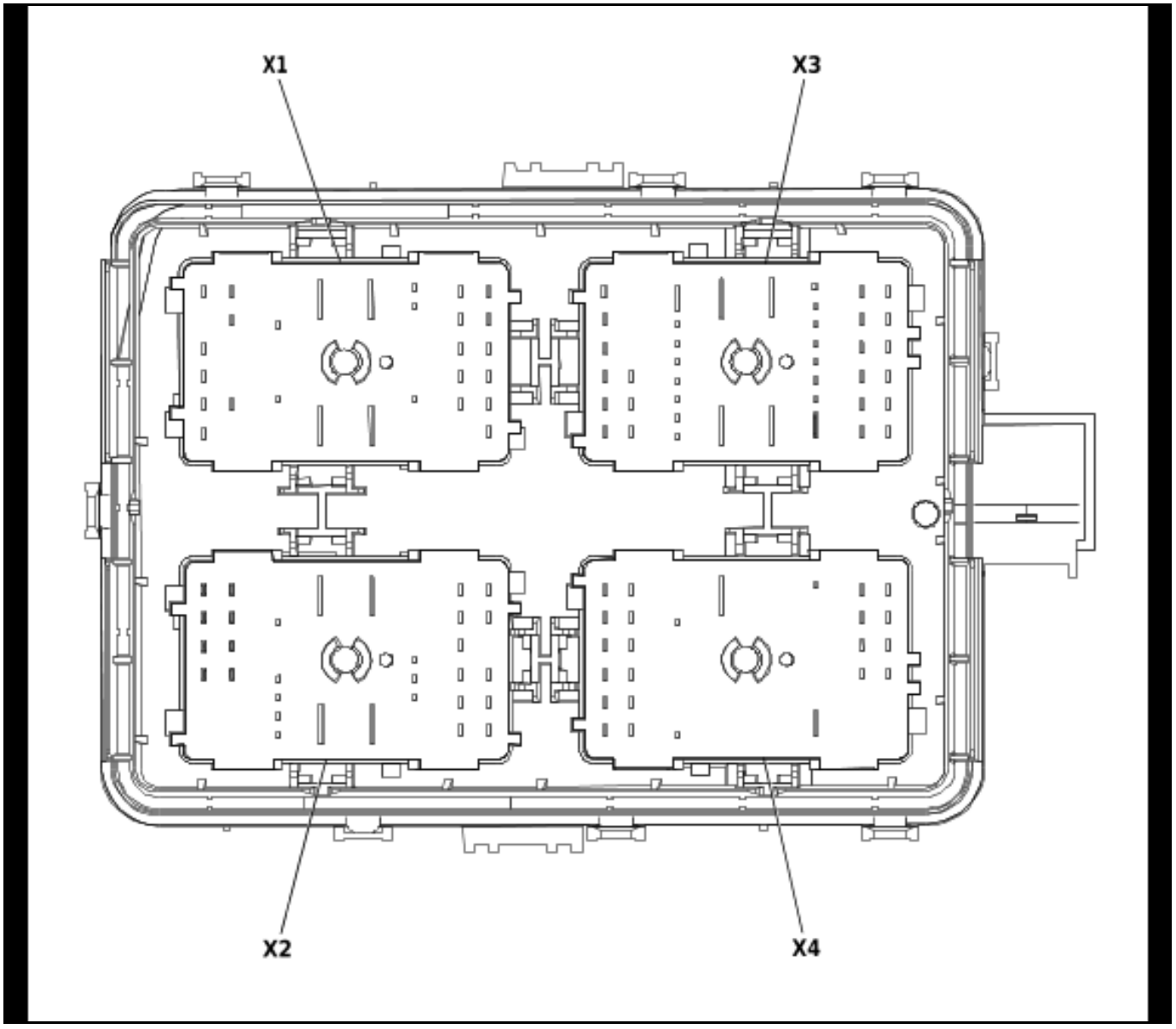
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
Relays				
K5	NOT USED	—	—	• Not Used
K18	DC/AC INV	KR202 Accessory AC and DC Power Control Module Relay	—	• F19UA
K23	DEFOGGER	—	—	• Not Used
K35	PRK LAMP	KR125 Trailer Parking Lamps Relay	—	• F41UA
K36	RUN/CRNK	KR73 Ignition Main Relay	—	• F33UA • F37UA • F38UA • F39UA • F40UA • F44UA • F46UA • F47UA • F48UA
K43	SECD AXLE MTR	KR203 Front Drive Axle Actuator	—	• F45UA
K59	A/C CLTCH	KR29 Air Conditioning Compressor Relay	—	• F50UA
K64	STRTR MTR	KR27 Starter Motor	—	• M64 Starter Motor
K70	STRTR PINION	KR27C Engine Restart Relay	—	• M64 Starter Motor
K77	PWR/TRN	KR75 Engine Controls Ignition Relay	—	• F60UA • F67UA • F80UA • F85UA • F86UA • F87UA • F88UA • F89UA • F90UA • F91UA • F92UA • KR29 Air Conditioning Compressor Relay • KR33 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	—	• G24 Windshield Washer Pump
—	—	KR11 Windshield Washer Pump Relay	—	• G24 Windshield Washer Pump
—	—	KR12B Windshield Wiper Motor Relay	—	• M75 Windshield Wiper Motor
—	—	KR12C Windshield Wiper Motor Speed Control Relay	—	• M75 Windshield Wiper Motor

Usage Table (cont'd)

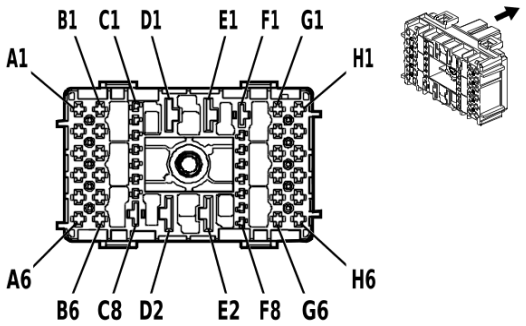
No.	Device Label Name	Device Assigned Name	Rating	Description
—	—	KR33 Heater Coolant Pump Relay	—	• G17 Heater Coolant Pump (L87LT4)
—	—	KR61 Trailer Backup Lamps Relay	—	• F55UA
—	—	KR63L Trailer Stop/Turn Signal Lamp Relay - Left	—	• F73UA
—	—	KR63R Trailer Stop/Turn Signal Lamp Relay - Right	—	• F81UA
—	—	KR174 Night Vision Camera Washer Pump Relay	—	• G54 Windshield Washer Pump - Night Vision Camera (UV3)

X50A Engine Wiring Harness Junction Block - Underhood Bottom View



5614956

X50A Engine Wiring Harness Junction Block X1



4994109

Connector Part Information

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

Terminal Part Information

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

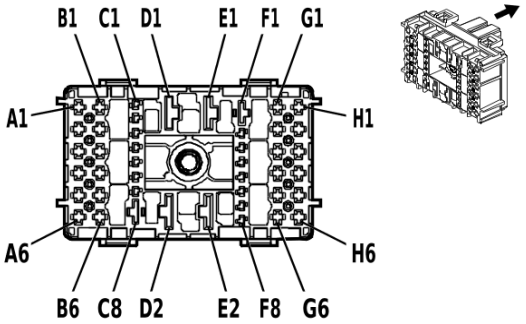
X50A Engine Wiring Harness Junction Block X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	1	RD / VT	7140	Battery Positive Voltage	II	—
A2	0.75	RD / BU	540	Battery Positive Voltage	II	—
A3	—	—	—	Not Occupied	—	—
A4	0.75	BK	250	Ground	II	—
A5	0.75	GY / VT	228	Windshield Washer Pump Control	II	—
A6	0.75	BU / VT	392	Rear Window Washer Pump Control	II	—
B1 - C2	—	—	—	Not Occupied	—	—
C3	0.5	WH / GN	4628	DC/AC Inverter Relay Control	I	—
C4	0.35	BN / GY	2268	Windshield Washer Relay Control	I	—
C5 - C6	—	—	—	Not Occupied	—	—
C7	0.35	GN / WH	2270	Rear Window Washer Relay Control	I	—
C8	—	—	—	Not Occupied	—	—
D1	5	BN / BK	4629	DC/AC Inverter Control	III	—
D2	10	RD / WH	342	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	10	RD / GN	1942	Battery Positive Voltage	III	—
F1 - F5	—	—	—	Not Occupied	—	—
F6	0.35	WH / VT	860	Windshield Wiper Switch High Signal	I	—
F7	0.75	VT / GN	703	Camera Washer Pump Control	I	—
F8	0.35	WH / GY	704	Camera Washer Relay Control	I	—

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G1 - G2	—	—	—	Not Occupied	—	—
G3	0.35	BU / VT	807	Ignition Off/Accessory Ignition Voltage	II	—
G4	0.5	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	0.5	VT / WH	639	Run/Crank Ignition 1 Voltage	II	—
H2	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	II	—
H3	—	—	—	Not Occupied	—	—
H4	0.5	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 Engine Wiring Harness Junction Block X2



4994132

Connector Part Information

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

Terminal Part Information

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

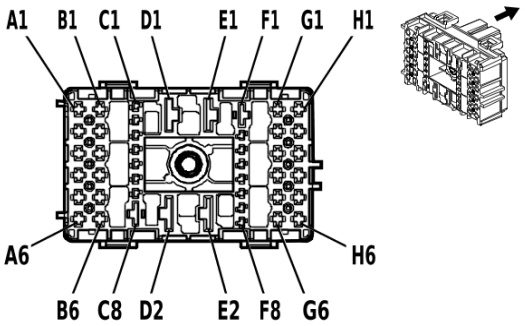
X50A Engine Wiring Harness Junction Block X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - B3	—	—	—	Not Occupied	—	—
B4	0.75	RD / GN	7740	Battery Positive Voltage	II	—
B5	0.75	RD / BU	840	Battery Positive Voltage	II	—
B6	0.5	RD / GN	3140	Battery Positive Voltage	II	—
C1	0.35	YE / BU	318	Left Rear Trailer Stop/Turn Lamp Control	I	—
C2	0.35	GN / BN	319	Right Rear Trailer Stop/Turn Lamp Control	I	—
C3 - C6	—	—	—	Not Occupied	—	—
C7	0.5	RD / YE	2340	Battery Positive Voltage	I	—
C8	—	—	—	Not Occupied	—	—
D1	10	RD / WH	2942	Battery Positive Voltage	III	—
D2	10	RD / YE	442	Battery Positive Voltage	III	—
E1 - F2	—	—	—	Not Occupied	—	—
F3	0.35	BU / BN	38	Backup Lamp Relay Control	I	—
F4	0.35	BN / WH	28	Horn Relay Control	I	—
F5 - F8	—	—	—	Not Occupied	—	—
G1	0.75	BN / GY	29	Horn Control	II	—
G2	—	—	—	Not Occupied	—	—
G3	1.5	RD / YE	740	Battery Positive Voltage	II	—
G4	1.5	RD / WH	640	Battery Positive Voltage	II	—
G5	0.75	RD / BN	1440	Battery Positive Voltage	II	—

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G6	0.75	RD / BN	1140	Battery Positive Voltage	II	—
H1 - H5	—	—	—	Not Occupied	—	—
H6	0.35	WH / BN	7055	Auxiliary Park Lamp Relay Control	II	—

X50A Engine Wiring Harness Junction Block X3 (L87)



4992608

Connector Part Information

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

Terminal Part Information

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

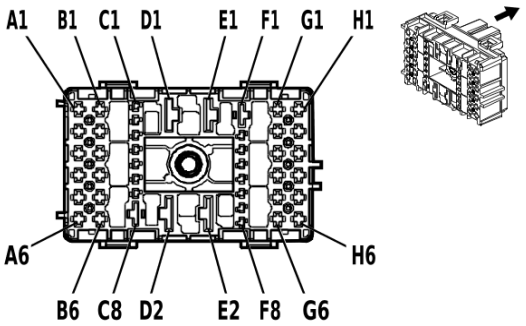
X50A Engine Wiring Harness Junction Block X3 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	IV	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	IV	—
A3	—	—	—	Not Occupied	—	—
A4	0.75	BN / GN	59	A/C Compressor Clutch Control	IV	—
A5	0.75	RD / VT	7940	Battery Positive Voltage	IV	—
A6	0.75	GN	8016	Secondary Axle Motor Control	IV	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	IV	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	IV	—
B3	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	IV	—
B4 - B5	—	—	—	Not Occupied	—	—
B6	2.5	RD / GY	1342	Battery Positive Voltage	IV	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.75	BK	6550	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	5	RD / BU	1842	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	5	RD / BN	1742	Battery Positive Voltage	III	—
F1	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	II	—

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F2	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	I	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5	0.5	RD / BN	5940	Battery Positive Voltage	I	—
F6	—	—	—	Not Occupied	—	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8 - G5	—	—	—	Not Occupied	—	—
G6	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	IV	—
H1	2	VT	5290	Powertrain Main Relay Fused Supply Voltage 1	IV	—
H2	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	IV	—
H3	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	IV	—
H4	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	IV	—
H5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	IV	—
H6	0.75	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	IV	—

X50A Engine Wiring Harness Junction Block X3 (LM2)



4992608

Connector Part Information

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

Terminal Part Information

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

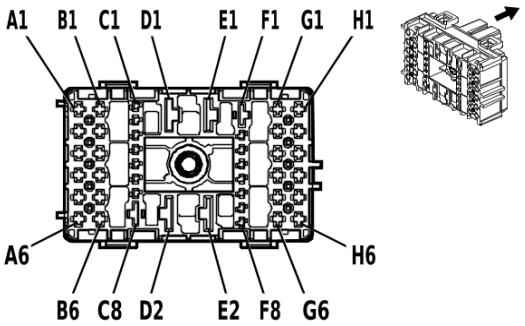
X50A Engine Wiring Harness Junction Block X3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	III	—
A3	—	—	—	Not Occupied	—	—
A4	0.75	BN / GN	59	A/C Compressor Clutch Control	III	—
A5	0.75	RD / VT	7940	Battery Positive Voltage	III	—
A6	0.75	GN	8016	Secondary Axle Motor Control	III	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	III	—
B3	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	III	—
B4 - B5	—	—	—	Not Occupied	—	—
B6	2.5	RD / GY	1342	Battery Positive Voltage	III	—
C1	0.5	BU	3017	Fuel Heater Relay 1 Control	I	—
C2	—	—	—	Not Occupied	—	—
C3	0.5	BK	6550	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5	0.5	GN / BU	3889	Powertrain Sensor Bus Relay Control	I	—
C6	1	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
C7 - D1	—	—	—	Not Occupied	—	—
D2	5	RD / BU	1842	Battery Positive Voltage	II	—
E1	5	RD / BU	1542	Battery Positive Voltage	II	—

X50A Engine Wiring Harness Junction Block X3 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
E2 - F2	—	—	—	Not Occupied	—	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—
F5	0.5	RD / BN	5940	Battery Positive Voltage	I	—
F6	—	—	—	Not Occupied	—	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8	—	—	—	Not Occupied	—	—
G1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
G2 - G4	—	—	—	Not Occupied	—	—
G5	1	VT / GN	4320	Powertrain Sensor Bus Enable	III	—
G6	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
H1	2	VT	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
H2	—	—	—	Not Occupied	—	—
H3	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
H4 - H6	—	—	—	Not Occupied	—	—

X50A Engine Wiring Harness Junction Block X3 (LT4)



4992608

Connector Part Information

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

Terminal Part Information

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

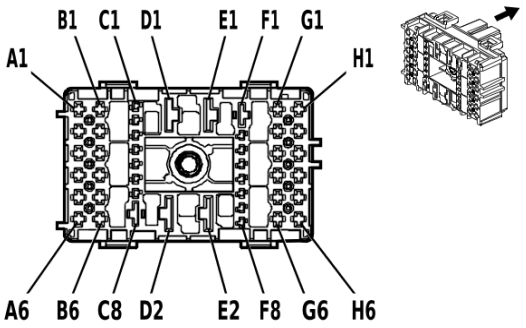
X50A Engine Wiring Harness Junction Block X3 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	III	—
A2	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	III	—
A3	—	—	—	Not Occupied	—	—
A4	0.75	BN / GN	59	A/C Compressor Clutch Control	III	—
A5	0.75	RD / VT	7940	Battery Positive Voltage	III	—
A6	0.75	GN	8016	Secondary Axle Motor Control	III	—
B1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
B2	0.5	YE / BK	625	Starter Enable Relay Control	III	—
B3	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	III	—
B4 - B5	—	—	—	Not Occupied	—	—
B6	2.5	RD / GY	1342	Battery Positive Voltage	III	—
C1 - C2	—	—	—	Not Occupied	—	—
C3	0.75	BK	6550	Ground	I	—
C4	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C5 - D1	—	—	—	Not Occupied	—	—
D2	5	RD / BU	1842	Battery Positive Voltage	II	—
E1	5	RD / BU	1542	Battery Positive Voltage	II	—
E2 - F2	—	—	—	Not Occupied	—	—
F3	0.5	RD / BN	440	Battery Positive Voltage	I	—
F4	0.5	YE	5991	Powertrain Relay Coil Control	I	—

X50A Engine Wiring Harness Junction Block X3 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F5 - F6	—	—	—	Not Occupied	—	—
F7	0.5	VT / BU	5705	Powertrain Main Relay Control	I	—
F8	—	—	—	Not Occupied	—	—
G1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
G2 - G5	—	—	—	Not Occupied	—	—
G6	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
H1	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
H2	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	III	—
H3	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	III	—
H4	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	III	—
H5	1	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	III	—
H6	—	—	—	Not Occupied	—	—

X50A Engine Wiring Harness Junction Block X4



4993031

Connector Part Information

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

Terminal Part Information

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

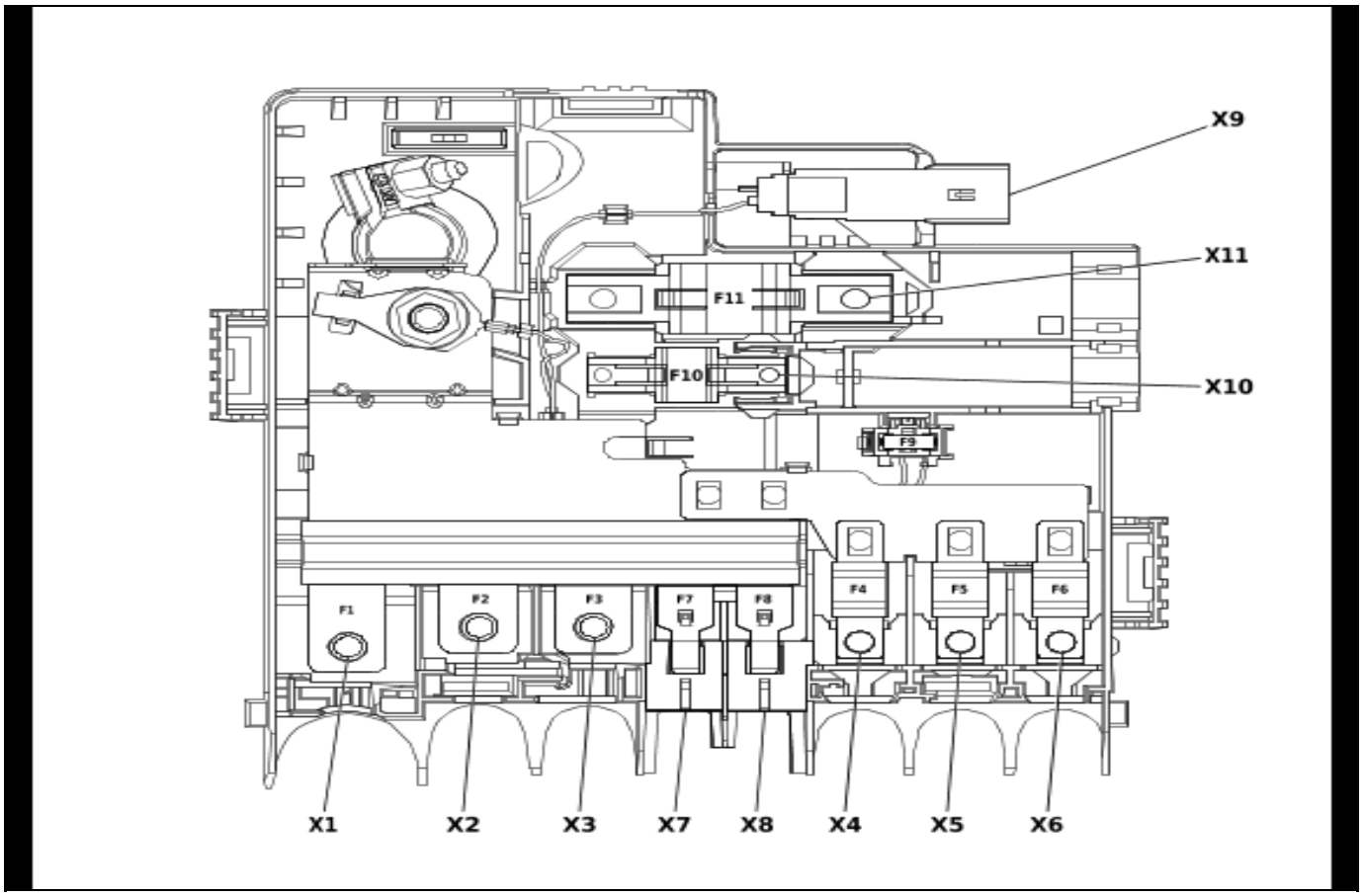
X50A Engine Wiring Harness Junction Block X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	1	GY / BN	2109	Trailer Park Lamp Control	IV	—
A4	0.75	RD / BU	11340	Secondary Fused Battery Positive Voltage	IV	—
A5	—	—	—	Not Occupied	—	—
A6	0.75 1	VT / BK VT / BK	339 339	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV IV	(MAS/ MBM/ MBR) - (MAS/ MBM/ MBR)
B1	0.75	RD / GY	11240	Secondary Fused Battery Positive Voltage	IV	—
B2	0.75	WH / GN	1624	Trailer Backup Lamp Control	IV	—
B3	0.75	RD / GN	2440	Battery Positive Voltage	IV	—
B4 - B6	—	—	—	Not Occupied	—	—
C1	0.75	RD / BN	2940	Battery Positive Voltage	I	—
C2 - C6	—	—	—	Not Occupied	—	—
C7	0.5	RD / WH	2040	Battery Positive Voltage	I	—
C8	3	BN / YE	2996	Fuel Heater Control 1	II	—
D1	—	—	—	Not Occupied	—	—
D2	6	RD / VT	1242	Battery Positive Voltage	III	—
E1 - E2	—	—	—	Not Occupied	—	—
F1	3	RD / BU	7640	Battery Positive Voltage	II	—

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F2 - G2	—	—	—	Not Occupied	—	—
G3	0.75	YE / GY	1618	Left Rear Trailer Stop/Turn Lamp Control	IV	—
G4	2	RD / YE	5840	Battery Positive Voltage	IV	—
G5	2.5	BU	3921	Diesel Exhaust Fluid Heater Control 1	IV	—
G6	2.5	RD / YE	1142	Battery Positive Voltage	IV	—
H1 - H2	—	—	—	Not Occupied	—	—
H3	0.75	GN / VT	1619	Right Rear Trailer Stop/Turn Lamp Control	IV	—
H4	3	RD / VT	5640	Battery Positive Voltage	IV	—
H5	2.5	RD / VT	1940	Battery Positive Voltage	IV	—
H6	4	RD / GN	742	Battery Positive Voltage	IV	—

X50B Battery Distribution Engine Compartment Fuse Block - Top View

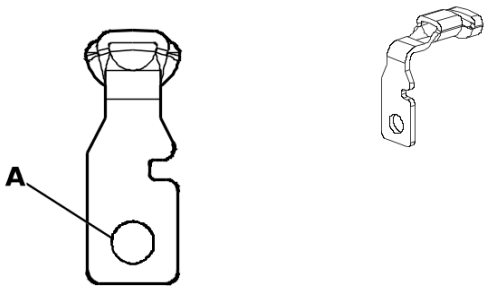


5614953

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	—	F1UD	250A (L87) 275A (LM2/LT4)	• G13 Generator • X50A Engine Wiring Harness Junction Block
F2	—	F2UD	175A	• K43 Power Steering Control Module
F3	—	F3UD	400A	• M64 Starter
F4	—	F4UD	150A	• E40 Air Heater (C3A)
F5	—	F5UD	100A	• K20 Engine Control Module (LM2)
F6	—	F6UD	80A	• G10R Engine Cooling Fan Motor - Right (LM2/LT4)
F7	—	F7UD	60A	• X51R Instrument Panel Wiring Harness Junction Block - Right
F8	—	F8UD	60A	• K160 Brake System Control Module
F9	—	F9UD	5A	• B110 Battery Monitor Module
F10	—	F10UD	—	• Not Used
F11	—	F11UD	—	• Not Used

X50B Battery Distribution Engine Compartment Fuse Block X4



5194789

Connector Part Information

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

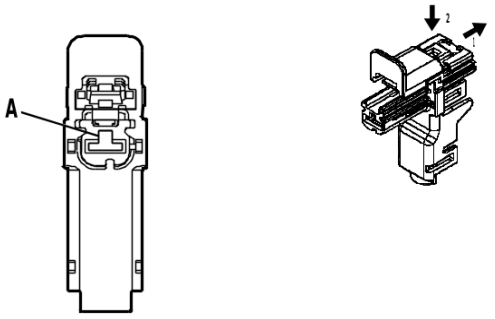
Terminal Part Information

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

X50B Battery Distribution Engine Compartment Fuse Block X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	16	RD / GY	642	Battery Positive Voltage	I	—

X50B Battery Distribution Engine Compartment Fuse Block X5



4994183

Connector Part Information

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

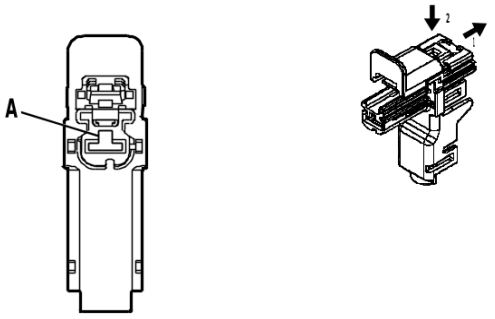
Terminal Part Information

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

X50B Battery Distribution Engine Compartment Fuse Block X5

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

X50B Battery Distribution Engine Compartment Fuse Block X6



4994171

Connector Part Information

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

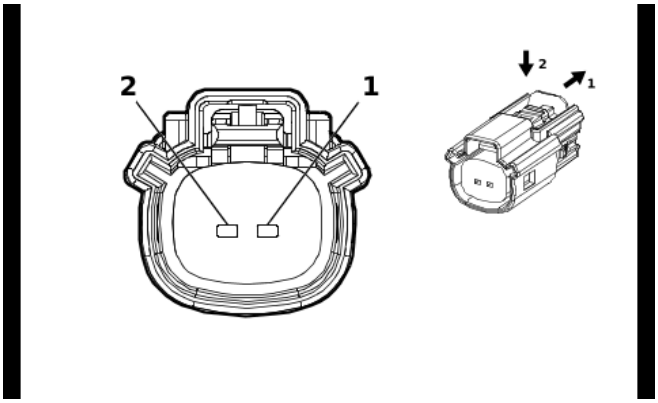
Terminal Part Information

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

X50B Battery Distribution Engine Compartment Fuse Block X6

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

X50B Battery Distribution Engine Compartment Fuse Block X11



2474713

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 1.5 MX Series, Sealed(BK)

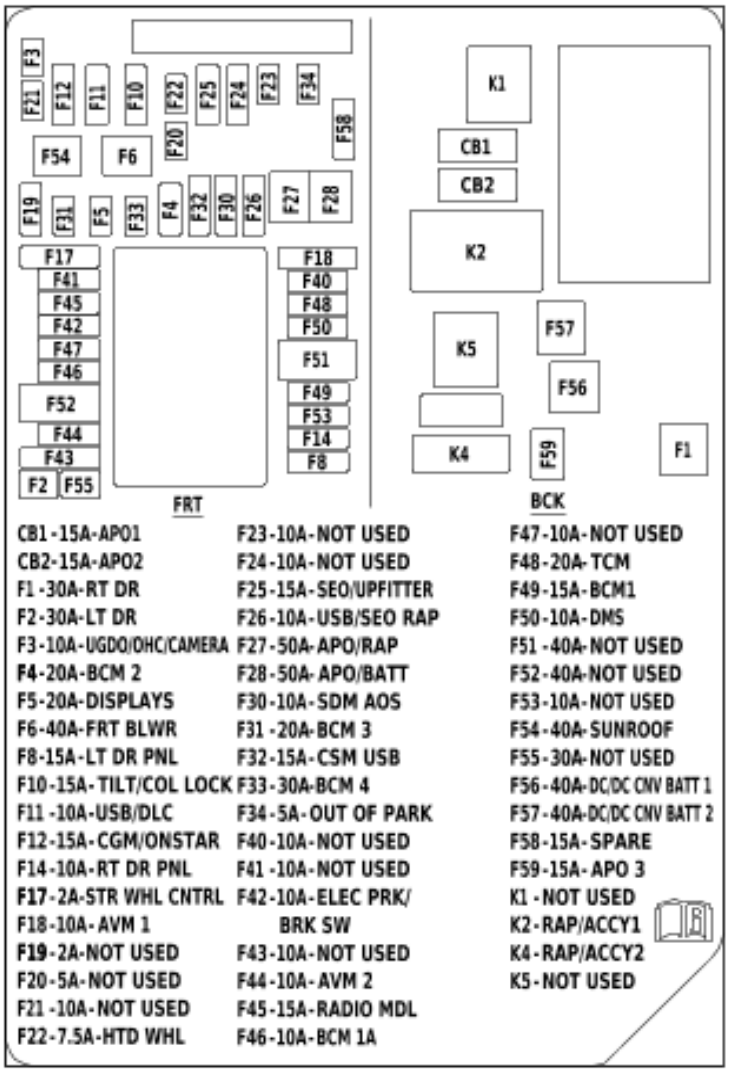
Terminal Part Information

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

X50B Battery Distribution Engine Compartment Fuse Block X11

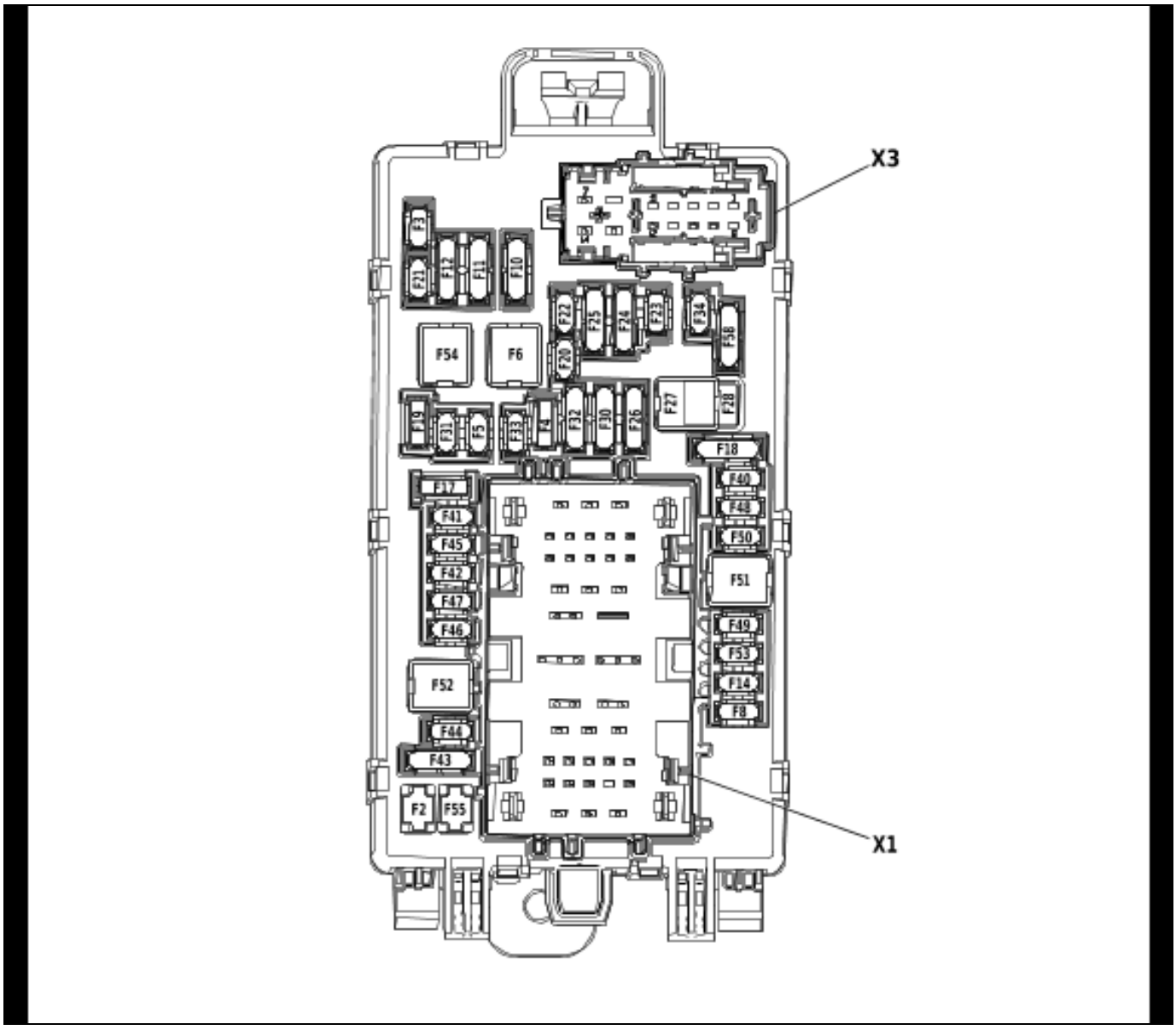
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—

X51R Instrument Panel Wiring Harness Junction Block - Right Label



5789420

X51R Instrument Panel Wiring Harness Junction Block - Right Top View



5651975

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	RT DR	F1DR	30A	• M74P Front Side Door Window Regulator Motor - Passenger • M74RR Rear side Door Window Regulator Motor - Right
F2	LT DR	F2DR	30A	• M74D Front Side Door Window Regulator Motor - Driver • M74LR Rear Side Door Window Regulator Motor - Left
F3	UGDO/OHC/CAM-ERA	F3DR	10A	• A103 Roof Console • B174W Front View Camera - Windshield (UEU) • B117A Windshield Outside Moisture/Ambient Light and umidity Sensor
F4	BCM 2	F4DR	20A	• K9 Body Control Module

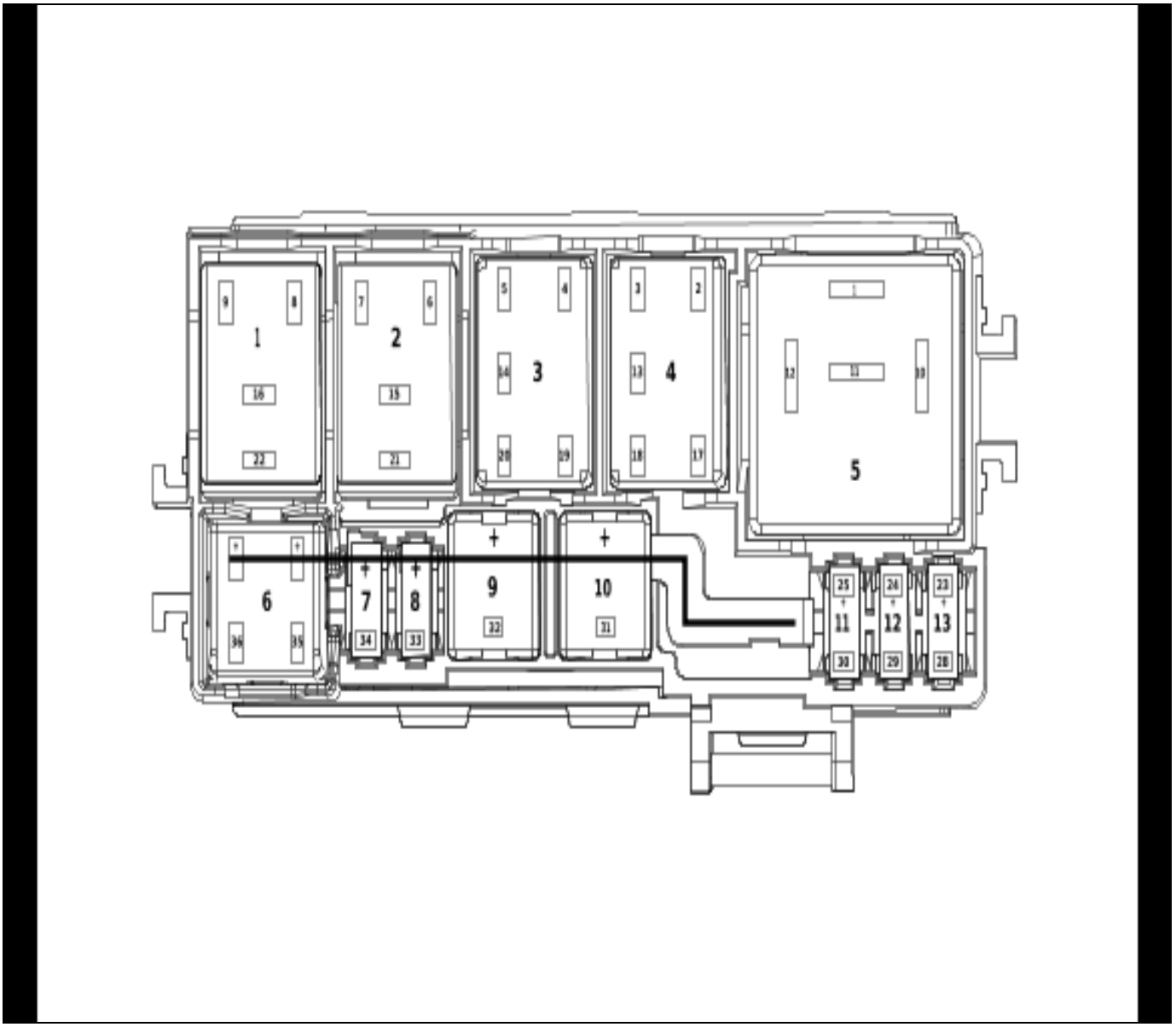
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F5	DISPLAYS	F5DR	20A	• A26 Heater and Air Conditioning User Interface Control - Front • P16 Instrument Panel Cluster Control Module • A22 Radio Controls • P29 Head-Up Display (UV6)
F6	FRT BLWR	F6DR	40A	• K8 Blower Motor Control Module
F8	LT DR PNL	F8DR	15A	• S79D Front Side Door Window Control Switch - Driver • A24D Front Side Door Outside Handle - Left
F10	TILT/COL LOCK	F10DR	15A	• K99 Steering Column Control Module
F11	USB/DLC	F11DR	10A	• K60 Column Lock Module • X84 Data Link Connector
F12	CGM/ONSTAR	F12DR	15A	• K56 Serial Data Gateway Module • K73 Telematic Control Module
F14	RT DR PNL	F14DR	10A	• S79P Front Side Door Window Switch - Passenger • A24P Front Side Door Handle - Right
F17	STR WHL CNTRL	F17DR	2A	• S70L Cruise Control Switch • S70R Radio Control Switch - Steering Wheel
F18	AVM 1	F18DR	10A	• Not Used
F19	NOT USED	F19DR	2A	• Not Used
F20	NOT USED	F20DR	5A	• Not Used
F21	NOT USED	F21DR	10A	• Not Used
F22	HTD WHL	F22DR	7.5A	• K32 Heated steering Wheel Module (KI3) • K180S Driver Monitoring System Module - Steering Wheel (UKL)
F23	NOT USED	F23DR	10A	• Not Used
F24	NOT USED	F24DR	10A	• Not Used
F25	SEO/UPFITTER	F25DR	15A	• Not Used
F26	USB/SEO RAP	F26DR	10A	• X81AC Accessory Power Receptacle - Floor Console 110VAC (KI4) • X83B Audio/Video Receptacle • X92BCL USB Receptacle - 3rd Row Seat Left • X92BCR USB Receptacle - 3rd Row Seat Right • X92CD Dual Charge Only Receptacle - Floor Console Rear
F27	APO/RAP	F27DR	50A	• F55DR • CB2DR
F28	APO/BATT	F28DR	50A	• CB1DR • F27DR
F30	SDM AOS	F30DR	10A	• K36 Restraints Control Module • K85P Restraints Occupant Classification System Module - Passenger • K180 Driver Monitoring System Module • K157 Video Processing Module • K172 Night Vision Control Module • S76 Trailer Brake Control Switch (JL1)
F31	BCM 3	F31DR	20A	• K9 Body Control Module
F32	CSM USB	F32DR	15A	• A11 Radio • X92G USB 2 Port Receptacle
F33	BCM 4	F33DR	30A	• K9 Body Control Module

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F34	OUT OF PARK	F34DR	5A	• KR87 Transmission Park Position Relay
F40	NOT USED	F40DR	10A	• Not Used
F41	NOT USED	F41DR	10A	• Not Used
F42	ELEC PRK/BRK SW	F42DR	10A	• S91 Parking Brake Control Switch • K212 Gear Shift Control Module
F43	RSI	F43DR	10A	• X23 Multimedia Receptacle • X83B Audio/Video Receptacle • S165 Infotainment Control Switch • P22E Video Display - Left Front Seat Back • P22F Video Display - Right front Seat Back
F44	AVM 2	F44DR	10A	• Not Used
F45	RADIO MDL	F45DR	15A	• Not Used
F46	BCM 1A	F46DR	10A	• Not Used
F47	NOT USED	F47DR	10A	• Not Used
F48	TCM	F48DR	20A	• K71 Transmission Control Module
F49	BCM 1	F49DR	15A	• K9 Body Control Module
F50	DMS	F50DR	10A	• Not Used
F51	NOT USED	F51DR	40A	• Not Used
F52	NOT USED	F52DR	40A	• Not Used
F53	NOT USED	F53DR	10A	• Not Used
F54	SUNROOF	F54DR	40A	• K61 Sunroof Control Module (C3U)
F55	AP0 3	F55DR	15A	• E32 Cigarette Lighter Receptacle (DT4)
F56	DC/DC CNV BATT1	F56DR	40A	• T19 Multifunction Power Supply Converter
F57	DC/DC CNV BATT2	F57DR	40A	• T19 Multifunction Power Supply Converter
F58	NOT USED	F58DR	15A	• Not Used
F59	APO 3	F59DR	15A	• Not Used
Circuit Breakers				
CB1	APO 1	CB1DR	15A	• X80H Accessory Power Receptacle - Floor Console Front
CB2	APO 2	CB2DR	15A	• X80D Accessry Power Receptacle - Floor Console Compartment • E32 Cigarette Lighter Receptacle (DT4)
Relays				
K1	NOT USED	—	—	• Not Used
K2	RAP/ACCY 1	KR76A Accessory Time Delay Cutoff Relay 1	—	• F26DR • CB1DR
K4	RAP/ACCY 2	—	—	• Not Used
K5	NOT USED	—	—	• Not Used
Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
—	—	KR87 Transmis-sion Park Position Relay	—	• S143L Rear Seat Back Folding Switch - 2nd Row Left • S143R Rear Seat Back Folding Switch - 2nd Row Right • S144A Rear Seat Back Folding Switch - 2nd Row Rear Compartment

X51R Instrument Panel Wiring Harness Junction Block - Right Bottom View



5614960

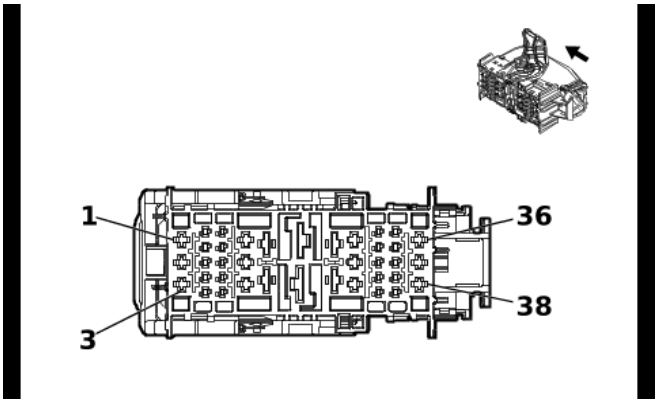
Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Circuit Breakers				
CB1	APO2	CB1DR	15A	• X80H Accessory Power Receptacle - Floor Console Front
CB2	APO1/LTR	CB2DR	15A	• X80D Accessory Power Receptacle - Floor Console Compartment • E32 Cigarette Lighter Receptacle (DT4)
CB3	APO3	CB3DR	15A	• Not Used
CB4	APO4	CB4DR	15A	• Not Used
Fuses				
F2	LT DR	F2DR	30A	• M74D Front Side Door Window Regulator Motor - Drive • S79LR Rear Side Door Window Switch - Left
F56	DC DC TRANS1	F56DR	40A	• T19 Multifunction Power Supply Converter

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F57	DC DC TRANS2	F57DR	40A	• T19 Multifunction Power Supply Converter
Relays				
K1	RUN CRANK	KR73 Ignition Main Relay	—	• F20DR • F21DR • F22DR • F23DR • F24DR • F25DR
K2	RAP/ACCY1	KR76A Accessory Time Delay Cutoff Relay 1	—	• F26DR
K4	RAP/ACCY2	KR76B Retained Accessory Power Relay 2	—	• CB3DR • CB4DR
K5	NOT USED	—	—	• Not Used

X51R Instrument Panel Wiring Harness Junction Block - Right X1



5402140

Connector Part Information

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

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332366	J-35616-35 (VT)	J-38125-212
II	19371175	J-35616-2A (GY)	EL-38125-560A
III	84764078	J-35616-42 (RD)	J-38125-215A
IV	Not required	No Tool Required	No Tool Required

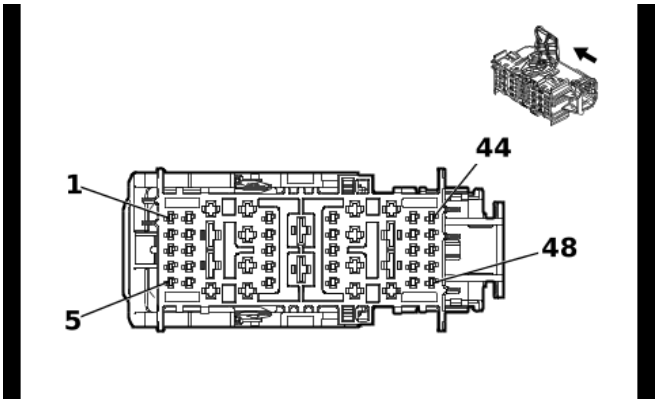
X51R Instrument Panel Wiring Harness Junction Block - Right X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	RD / GN	1840	Battery Positive Voltage	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	RD / GN	4440	Battery Positive Voltage	II	—
6	0.5	VT	4701	Retained Accessory Power Control	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	VT	4701	Retained Accessory Power Control	II	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY / GN	4083	Retained Accessory Power Relay 2 Coil Control	II	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	YE / BK	5813	Park Enable Control	II	—
14 - 15	—	—	—	Not Occupied	—	—
16	1.5	VT	1301	Retained Accessory Power Control	I	—
17	2.5	RD / YE	2172	12V Regulated Supply Voltage 1	III	—
18	2.5	RD / YE	8140	Battery Positive Voltage	III	—
19	5	RD / YE	1442	Battery Positive Voltage	IV	—
20	10	RD / WH	342	Battery Positive Voltage	IV	—
21	2.5	RD / GN	2173	12V Regulated Supply Voltage 2	III	—
22	2.5	RD / WH	8040	Battery Positive Voltage	III	—

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	2.5	RD / BN	4240	Battery Positive Voltage	I	—
24	2.5	RD / BN	4240	Battery Positive Voltage	I	—
25	2.5	RD / GY	3540	Battery Positive Voltage	I	—
26	0.5	RD / BN	3640	Battery Positive Voltage	II	—
27 - 28	—	—	—	Not Occupied	—	—
29	0.5	RD / BU	5240	Battery Positive Voltage	II	—
30	0.5	RD / VT	1940	Battery Positive Voltage	II	—
31	0.35	RD / WH	7240	Battery Positive Voltage	II	—
32	0.5	YE	6812	Out of Park Signal	II	—
33	0.35	GY / GN	4083	Retained Accessory Power Relay 2 Coil Control	II	—
34 - 35	—	—	—	Not Occupied	—	—
36	1.5	VT	1701	Retained Accessory Power Control	I	—
37	2.5	RD / GY	3540	Battery Positive Voltage	I	—
38	—	—	—	Not Occupied	—	—

X51R Instrument Panel Wiring Harness Junction Block - Right X2



5403539

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35264616
Service Connector: 19371180
Description: 48-Way F 1.5, 2.8, 6.3 CTS Series(GN)

Terminal Part Information

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

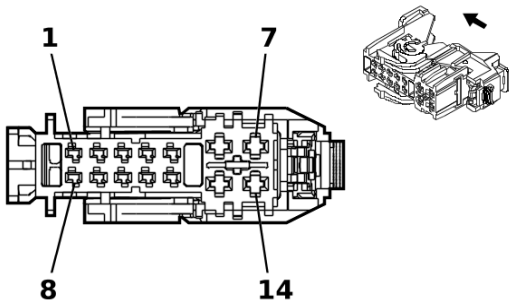
X51R Instrument Panel Wiring Harness Junction Block - Right X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1050	Ground	I	—
2 - 8	—	—	—	Not Occupied	—	—
9	0.5	RD / YE	6540	Battery Positive Voltage	I	—
10 - 13	—	—	—	Not Occupied	—	—
14	0.5	RD / BU	3240	Battery Positive Voltage	III	—
15	0.35	RD / BN	10040	Secondary Fused Battery Positive Voltage	III	—
16	1	RD / VT	4640	Battery Positive Voltage	III	—
17	0.35	RD / GY	4140	Battery Positive Voltage	III	—
18	0.35	RD / VT	3340	Battery Positive Voltage	III	—
19 - 23	—	—	—	Not Occupied	—	—
24	5	RD / GY	2042	Battery Positive Voltage	II	—
25	2.5	RD / BU	4540	Battery Positive Voltage	II	—
26	—	—	—	Not Occupied	—	—
27	0.5	RD / YE	2340	Battery Positive Voltage	I	—
28	0.35	RD / VT	4040	Battery Positive Voltage	I	—
29 - 30	—	—	—	Not Occupied	—	—
31	1.5	VT	1001	Retained Accessory Power Ignition Voltage	III	—
32	1.5	RD / BU	2540	Battery Positive Voltage	III	—
33	0.75	RD / WH	1340	Battery Positive Voltage	III	—
34	0.75	RD / GY	2140	Battery Positive Voltage	III	—

X51R Instrument Panel Wiring Harness Junction Block - Right X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
35	1	RD / GY	2840	Battery Positive Voltage	III	—
36 - 40	—	—	—	Not Occupied	—	—
41	0.75	RD / GN	5140	Battery Positive Voltage	I	—
42	0.35	RD / GN	5140	Battery Positive Voltage	I	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	RD / WH	2740	Battery Positive Voltage	I	—
46 - 48	—	—	—	Not Occupied	—	—

X51R Instrument Panel Wiring Harness Junction Block - Right X3



5190115

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33377074
Service Connector: 13525315
Description: 14-Way F 1.5, 2.8 MCP Series(GY)

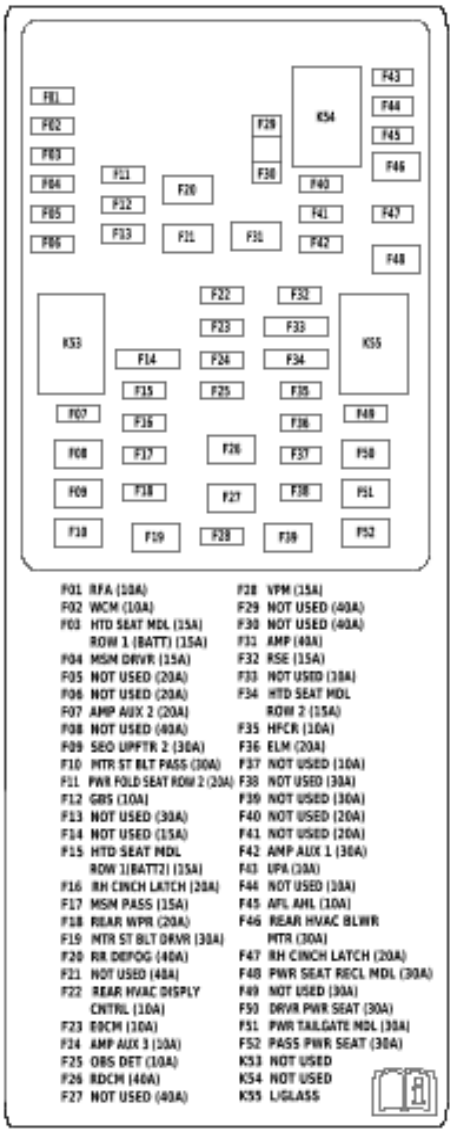
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332366	J-35616-35 (VT)	J-38125-212

X51R Instrument Panel Wiring Harness Junction Block - Right X3

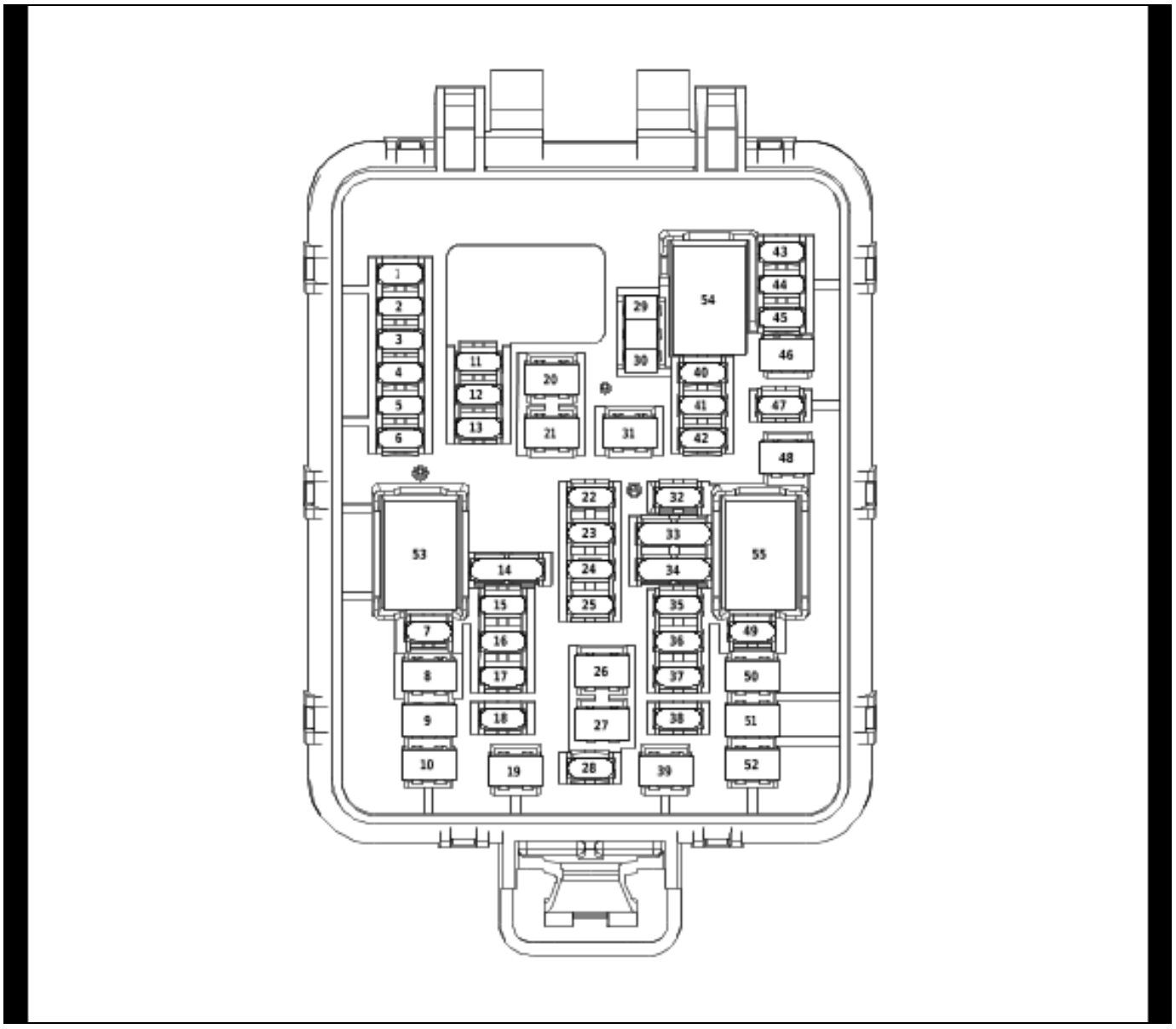
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	1	RD / YE	240	Battery Positive Voltage	I	—
8 - 14	—	—	—	Not Occupied	—	—

X53A Body Wiring Harness Junction Block - Rear Label



5789317

X53A Body Wiring Harness Junction Block - Rear Top View



5614965

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F01	RFA	F1RA	10A	• K77 Remote Function Actuator Module
F02	WCM	F2RA	10A	• T22 Wireless Accessory Charging Module • K175 Front Floor Console Compartment Cooler (DCK)
F03	DRVR HTD/SEAT	F3RA	15A	• K29FV Front Seat Heater Vent Control Module
F04	MSM DRVR	F4RA	15A	• K40D Driver Seat Adjuster Memory Module • S64D Front Seat Adjuster Switch - Driver • K104DP Front Seat Bladder Module - Driver Primary (AF6) • K104DS Front Seat Bladder Control Module - Driver Secondary (AF6)
F05	Not Used	F5RA	—	• Not Used

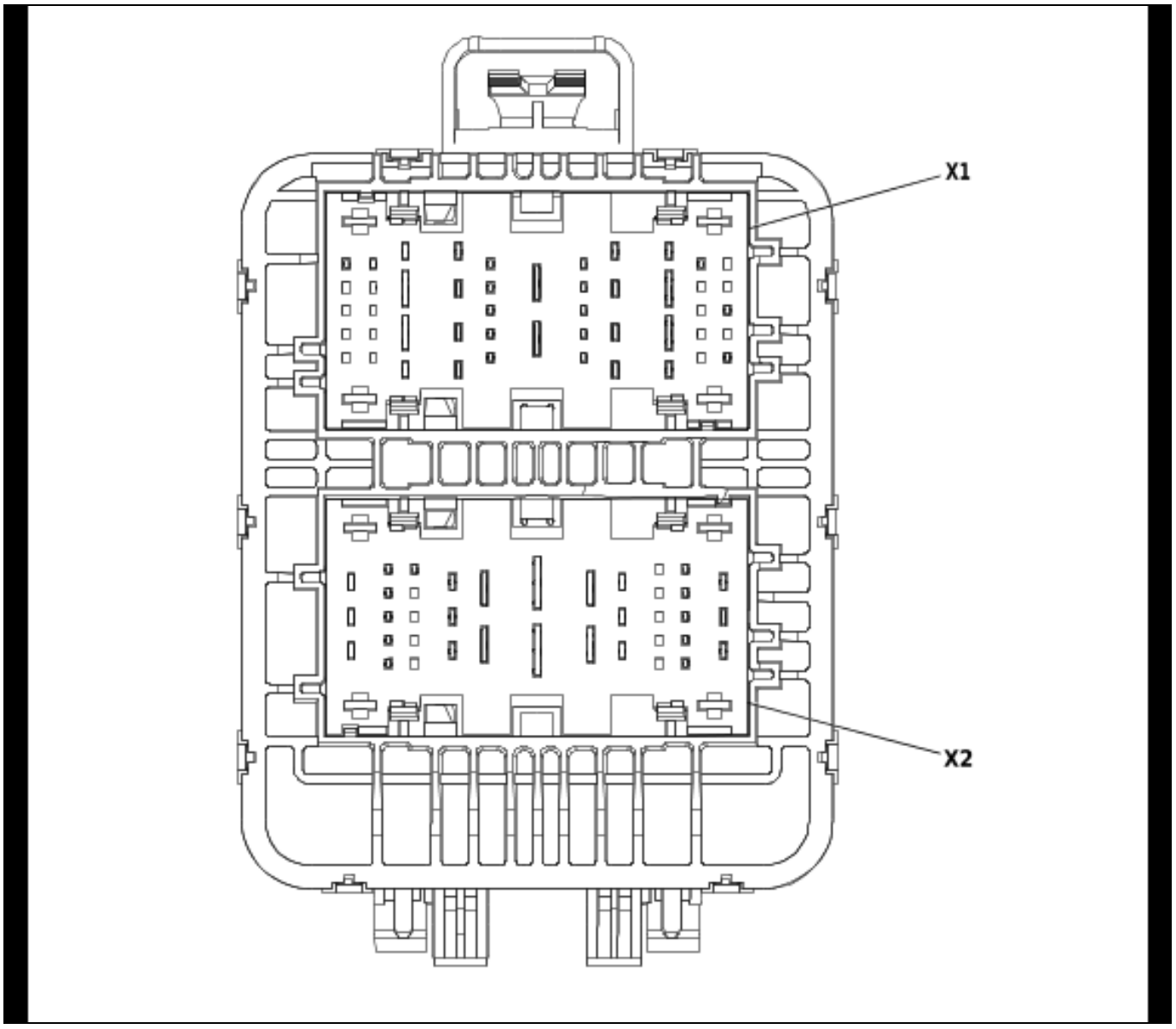
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F06	Not Used	F6RA	—	• Not Used
F07	AMP AUX	F7RA	20A	• T3RB Audio Amplifier - Auxiliary2 (UQH)
F08	Not Used	F8RA	—	• Not Used
F09	Not Used	F9RA	—	• Not Used
F10	MTR ST BLT PASS	F10RA	30A	• M101R Front Seat Belt Retractor Motor - Right (AX7)
F11	PWR FOLD SEAT ROW 2	F11RA	20A	• M107LR Folding Rear Seat Back Actuator - Left • M107RR Folding Rear seat Actuator - Right
F12	GBS	F12RA	10A	• B159BL Body Side Rear Window Glass Breakage Sensor - Left (TUV) • B159BR Body Side Rear Window Glass Breakage Sensor - Right (UTV)
F13	Not Used	F13RA	—	• Not Used
F14	Not Used	F14RA	—	• Not Used
F15	HTD SEAT MDL ROW1 (BATT2)	F15RA	15A	• Not Used
F16	RH CINCH LATCH	F16RA	20A	• A23P Front Side Door Latch - Passenger (AF7) • A23RR Rear Side Door Latch - Right (AF7)
F17	MSM PASS	F17RA	15A	• K40P Passenger Seat Adjuster Memory Module • S64P Front Seat Adjuster Switch - Passenger • K104PP Front Seat Bladder Control Module - Passenger Primary • K104PS Front Seat Bladder Control Module - Passenger Secondary
F18	REAR WPR	F18RA	20A	• M45 Rear Window Wiper Motor
F19	MTR ST BLT DRVR	F19RA	30A	• M101L Front Seat Belt Retractor Motor - Left (AX7)
F20	RR DEFOG	F20RA	40A	• E18 Rear Window Defogger Grid
F21	Not Used	F21RA	40A	• Not Used
F22	REAR HVAC DISPLAY CNTRL	F22RA	10A	• A34 Heater and Air Conditioning Auxiliay Control
F23	EOCM	F23RA	10A	• B233SL Short Range Radar Rear Side Sensor - Left (UKL) • B233SR Short Range Radar Rear Side Sensor - Right (UKL) • B233LR Short Range Radar Rear Sensor - Left (UKL) • B233RR Short Range Radar Rear Sensor - Right (UKL) • B233LF Short Range Radar Sensor - Left Front (UKL) • B233RF Short Range Radar Sensor - Right Front (UKL) • B233B Forward Rangen Radar Sensor - Long Range • K124 Image Processing Module • K179 Automated Driving Mapping Module (UKL)
F24	LOW PWR AMP	F24RA	10A	• Not Used
F25	OBS DET	F25RA	10A	• B218L Side Obstacle Detection Control Module - Left (UKC) • B218R Side Obstacle Detection Control Module - Right (UKC) • B233LR Short Range Radar Rear Sensor - Left (UKL) • B233SL Short Range Radar Rear Side Sensor - Left (UKL)

Usage Table (cont'd)

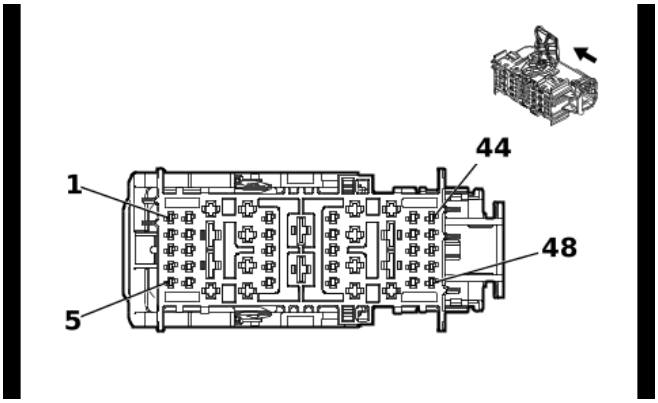
No.	Device Label Name	Device Assigned Name	Rating	Description
F26	DIFFERENTIAL CNTRL	F26RA	40A	• K164 Differential Control Module (G46)
F27	AMP AUX 1	F27RA	40A	• T3R Audio Amplifier - Auxiliary (UQH)
F28	VPM	F28RA	15A	• K157 Video Processing Module • X23 Multimedia Receptacle
F29	Not Used	F29RA	—	• Not Used
F30	Not Used	F30RA	10A	• Not Used
F31	AMP	F31RA	40A	• T3 Audio Amplifier (UQP)
F32	TREC	F32RA	15A	• Not Used
F33	ICCM	F33RA	10A	• Not Used
F34	HTD SEAT MDL ROW 2	F34RA	15A	• K29R Rear Seat Heater Control Module
F35	HANDSFREE L/ GATE MDL	F35RA	10A	• K171 Rear Closure Hands Free Module • K214 Trailer Tire Pressure Indicator Module (UET)
F36	ELM 2	F36RA	20A	• K219 Lighting Control Module
F37	LIFTGATE	F37RA	10A	• KR162 Liftgate Window Release Relay
F38	PWR SLIDE CNSL	F38RA	15A	• Not Used
F39	RF/RR WINDW	F39RA	30A	• Not Used
F40	Not Used	F40RA	—	• Not Used
F41	Not Used	F41RA	—	• Not Used
F42	Not Used	F42RA	—	• Not Used
F43	PRK ASSIST MDL	F43RA	10A	• K182 Parking Assist Control Module
F44	Not Used	F44RA	—	• Not Used
F45	AFL AHL	F45RA	10A	• K26 Headlamp Control Module
F46	REAR HVACBLWR MTR	F46RA	30A	• K8AB Blower Motor Control Module - Rear
F47	LH CINCH LATCH	F47RA	20A	• A23D Front Side Door Latch - Driver (AF7) • A23LR Rear Side Door Latch - Left (AF7)
F48	PWR SEAT RECL MDL	F48RA	30A	• K169 Folding 3rd Row Seat Module
F49	LGLASS	F49RA	10A	• M33 Liftgate Window Assembly
F50	DRVR SEAT	F50RA	30A	• K40D Driver Seat Adjuster Memory Module
F51	POWER TAIL-GATE	F51RA	30A	• K194 Rear Gate Module
F52	PASS SEAT	F52RA	30A	• K40P Passenger Seat Adjuster Memory Module • S64P Front Seat Adjuster Switch - Passenger
Relays				
K53	Not Used	—	—	• Not Used
K54	Not Used	—	—	• Not Used
K55	L/GLASS	—	KR162 Liftgate Window Release Relay	• M33 Liftgate Window Assembly
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
—	—	KR5 Rear Window Defogger Relay	—	• F20RA • F12RA

X53A Body Wiring Harness Junction Block - Rear Bottom View



5614967

X53A Body Wiring Harness Junction Block - Rear X1



5403539

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35264616
Service Connector: 19371180
Description: 48-Way F 1.5, 2.8, 6.3 CTS Series(GN)

Terminal Part Information

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

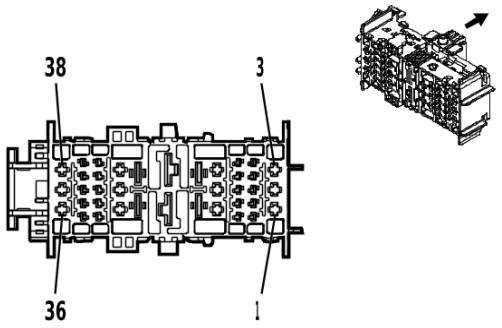
X53A Body Wiring Harness Junction Block - Rear X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	BK	2050	Ground	I	—
6 - 10	—	—	—	Not Occupied	—	—
11	0.75	RD / BU	6040	Battery Positive Voltage	III	—
12 - 13	—	—	—	Not Occupied	—	—
14	2.5	RD / GY	1042	Battery Positive Voltage	III	—
15	1	RD / WH	2242	Battery Positive Voltage	III	—
16	0.75	RD / BU	3940	Battery Positive Voltage	III	—
17	0.75	RD / YE	3040	Battery Positive Voltage	III	—
18	2.5	RD / WH	4042	Battery Positive Voltage	III	—
19	0.75	RD / GN	6140	Battery Positive Voltage	I	—
20	—	—	—	Not Occupied	—	—
21	0.5 1	RD / BN RD / GN	4940 3140	Battery Positive Voltage Battery Positive Voltage	I I	UFG+ UKC UKL
22	0.5	RD / BN	7540	Battery Positive Voltage	I	—
23	0.35 1	RD / GN RD / GN	3140 3140	Battery Positive Voltage Battery Positive Voltage	I I	UFG+ UKC UKL
24	3	RD / GY	5540	Battery Positive Voltage	II	—
25	4	RD / GN	3840	Battery Positive Voltage	II	—
26	0.75	RD / WH	5740	Battery Positive Voltage	I	—

X53A Body Wiring Harness Junction Block - Rear X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27 - 28	—	—	—	Not Occupied	—	—
29	0.5	RD / GY	4840	Battery Positive Voltage	I	—
30	0.5	RD / VT	1640	Battery Positive Voltage	I	—
31	1	RD / GN	1540	Battery Positive Voltage	III	—
32 - 34	—	—	—	Not Occupied	—	—
35	0.35	BU / GN	4089	Rear Closure Motor Control	III	—
36	2.5	RD / YE	5040	Battery Positive Voltage	II	—
37	2.5	RD / BN	3842	Battery Positive Voltage	II	—
38	2.5	RD / YE	7440	Battery Positive Voltage	III	—
39 - 42	—	—	—	Not Occupied	—	—
43	0.75	RD / BU	6740	Battery Positive Voltage	I	—
44	0.35	GY / YE	6188	Liftgate Window/Rear Compartment Lid Motor Unlatch Control	I	—
45	—	—	—	Not Occupied	—	—
46	0.5	RD / GN	2642	Battery Positive Voltage	I	—
47 - 48	—	—	—	Not Occupied	—	—

X53A Body Wiring Harness Junction Block - Rear X2



4994230

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35473802
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5, 2.8, 6.3 CTS Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579915	J-35616-40 (BU)	J-38125-556
II	19332366	J-35616-35 (VT)	J-38125-212
III	19367600	J-35616-40 (BU)	J-38125-556
IV	19371175	J-35616-2A (GY)	J-38125-11A
V	Not required	J-35616-22 (RD)	No Tool Required

X53A Body Wiring Harness Junction Block - Rear X2

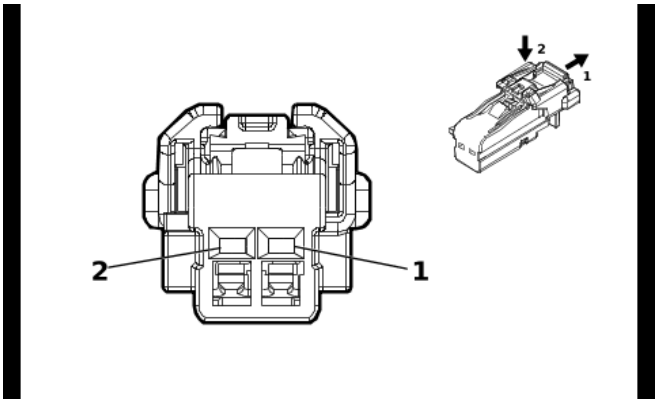
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / BN	2240	Battery Positive Voltage	II	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.75	RD / BN	6640	Battery Positive Voltage	IV	—
5	0.5	RD / VT	2640	Battery Positive Voltage	IV	—
6	0.75	RD / VT	6340	Battery Positive Voltage	IV	—
7	0.35	BN / VT	193	Rear Defogger Relay Control	IV	—
8 - 13	—	—	—	Not Occupied	—	—
14	0.75	RD / GY	6240	Battery Positive Voltage	II	—
15	0.5	YE / BK	2930	Glass Breakage Sensor Supply Voltage	II	—
16	—	—	—	Not Occupied	—	—
17	2.5	BN / VT	293	Rear Defogger Grid Control	I	—
18	—	—	—	Not Occupied	—	—
19	10	RD / GN	1942	Battery Positive Voltage	V	—
20	10	RD / WH	2942	Battery Positive Voltage	V	—
21	—	—	—	Not Occupied	—	—
22	3	RD / YE	3740	Battery Positive Voltage	III	—
23 - 30	—	—	—	Not Occupied	—	—
31	0.5	RD / WH	4740	Battery Positive Voltage	IV	—

X53A Body Wiring Harness Junction Block - Rear X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
32	—	—	—	Not Occupied	—	—
33	0.5	RD / VT	5340	Battery Positive Voltage	IV	—
34 - 35	—	—	—	Not Occupied	—	—
36	3	RD / GY	1740	Battery Positive Voltage	II	—
37	1	RD / YE	2342	Battery Positive Voltage	II	—
38	2.5	RD / GY	7840	Battery Positive Voltage	II	—

Component Connector End Views

A3L Sunshade - Left



5377746

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327306
Service Connector: 84867147
Description: 2-Way F 1.2 MCON Series(BN)

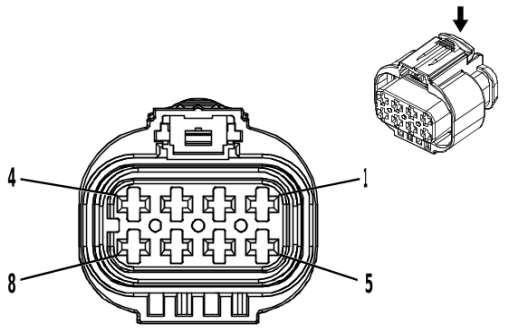
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

A3L Sunshade - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GN	4785	Interior Lamp Overhead Enable Signal	I	—
2	0.5	BK	1850	Ground	I	—

A7 Fuel Tank Fuel Pump Module



3749582

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33180742
Service Connector: 19354078
Description: 8-Way F 2.8 Series, Sealed(L-GY)

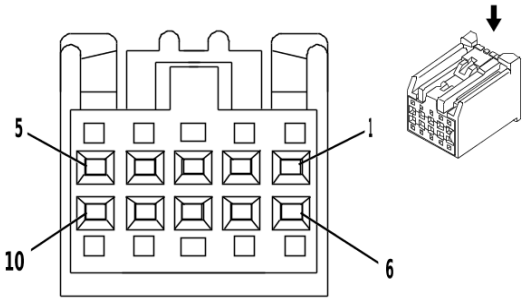
Terminal Part Information

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

A7 Fuel Tank Fuel Pump Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	120	Fuel Pump Control	I	—
2	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	I	—
3	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	I	—
4	0.5	BK	7444	Fuel Pump Assembly Shield Ground	I	—
5	0.5	BU / GN	1936	Primary Fuel Level Sensor Signal	I	—
6	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	I	—
7 - 8	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror X1



2180211

Connector Part Information

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

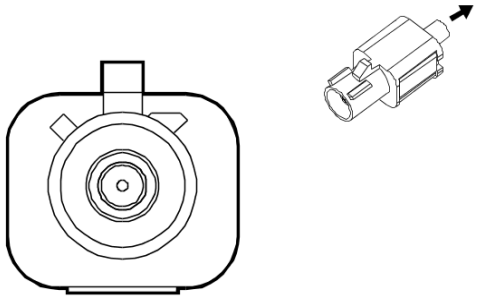
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (L-BU)	J-38125-215A

A10 Inside Rearview Mirror X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / WH	24	Backup Lamp Control	I	—
2	0.5	VT / WH	239	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	Mirror Dimming Signal	I	—
10	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror X2 (DRZ)



4496217

Connector Part Information

Harness Type: Inside Rearview Mirror LVDS
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way

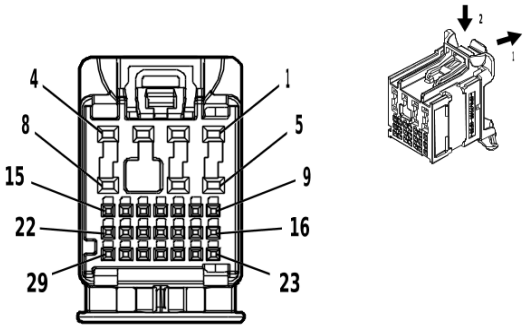
Terminal Part Information

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

A10 Inside Rearview Mirror X2 (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

A11 Radio X1



4496253

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364134
Service Connector: 13534974
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(BK)

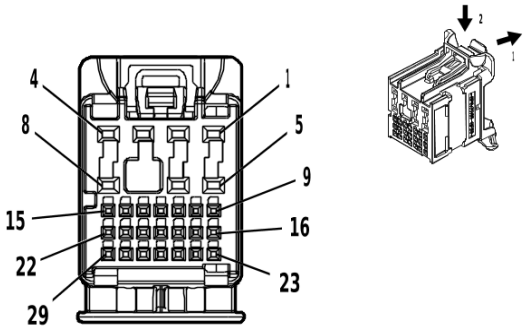
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

A11 Radio X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / YE	2340	Battery Positive Voltage	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / WH	1451	Signal Ground	II	—
4 - 8	—	—	—	Not Occupied	—	—
9	0.35 0.35	BU GY / YE	655 5149	Cellular Telephone Microphone Signal Voice Recognition Audio Signal	I I	(- (UDA/ UE1/ UER)) UDA/ UE1/ UER
10	0.35 0.35	BK / BN BK / GY	654 5152	Cellular Telephone Microphone Low Reference Voice Recognition Audio [-] Control	I I	(- (UDA/ UE1/ UER)) UDA/ UE1/ UER
11 - 29	—	—	—	Not Occupied	—	—

A11 Radio X2



4578560

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364137
Service Connector: 13534971
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(GY)

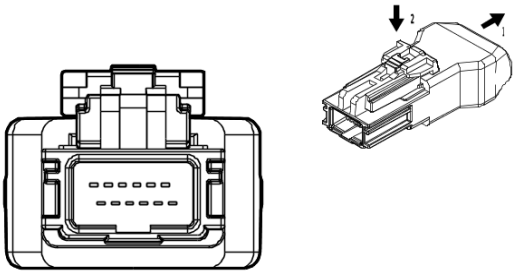
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

A11 Radio X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 8	—	—	—	Not Occupied	—	—
9	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
10	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	GN / WH	24	Backup Lamp Control	I	—
14	0.35	GN / YE	7066	Entertainment Remote Enable Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	BU / BK	4057	Private Serial Data Infotainment CAN Bus [+] Serial Data	I	—
17	0.35	WH / BK	4056	Private Serial Data Infotainment CAN Bus [-] Serial Data	I	—
18 - 29	—	—	—	Not Occupied	—	—

A11 Radio X3



4584321

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33358812
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series(GY)

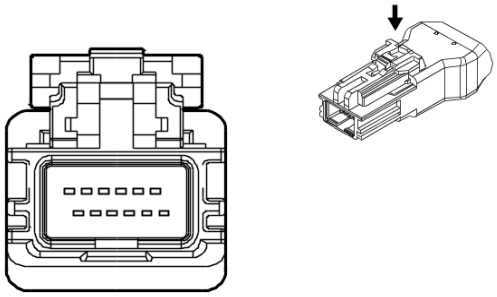
Terminal Part Information

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

A11 Radio X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	7853	Center Stack LVDS (Low Voltage Differential Signaling) Low Reference	I	—
2	—	—	7854	Center Stack LVDS (Low Voltage Differential Signaling) Signal [+]	I	—
3	—	—	7855	Center Stack LVDS (Low Voltage Differential Signaling) Signal [-]	I	—
4	—	—	7847	Center Stack LVDS (Low Voltage Differential Signaling) 2 Low Reference	I	—
5	—	—	7848	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [+]	I	—
6	—	—	7849	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [-]	I	—
7	—	—	8045	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [+]	I	—
8	—	—	8046	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [-]	I	—
9	—	—	8044	Center Stack LVDS (Low Voltage Differential Signaling) 2 Low Reference	I	—
10	—	—	8048	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal [+] 2	I	—
11	—	—	8049	Center Stack LVDS (Low Voltage Differential Signaling) 2 Signal 2 [-]	I	—
12	—	—	8047	Center Stack LVDS (Low Voltage Differential Signaling) 2 Low Reference 2	I	—

A11 Radio X4



4527210

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33358813
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series(BK)

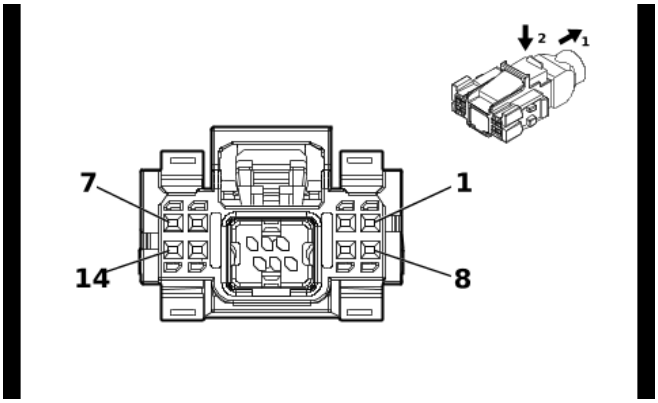
Terminal Part Information

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

A11 Radio X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	2532	Front Vision Camera LVDS (Low Voltage Differential Signaling) Low Reference	I	—
2	—	—	2536	Front Vision Camera LVDS (Low Voltage Differential Signaling) Signal [+]	I	—
3	—	—	2535	Front Vision Camera LVDS (Low Voltage Differential Signaling) Signal [-]	I	—
4	—	—	2533	Front Vision Camera LVDS (Low Voltage Differential Signaling) Ground	I	—
5	—	—	2537	Front Vision Camera Low Voltage Differential Signaling LVDS Supply Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	—	—	7899	Auxiliary Audio/Video Jack USB Serial Data Supply Voltage	I	—
8	—	—	7897	Auxiliary Audio/Video Jack USB [-] Serial Data	I	—
9	—	—	7896	Auxiliary Audio/Video Jack USB [+] Serial Data	I	—
10	—	—	7898	Auxiliary Audio/Video Jack USB Low Reference	I	—
11 - 12	—	—	—	Not Occupied	—	—

A11 Radio X6



5404342

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 201274-1019
Service Connector: Service by Cable - See Part Catalog
Description: 14-Way F 0.5 MQS, High Speed Autolink Series(BK)

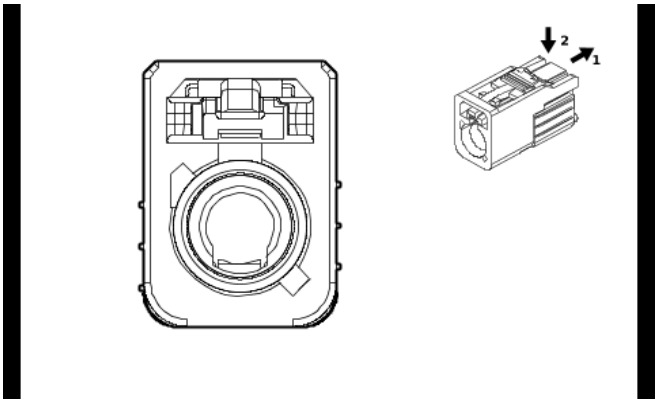
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Service by Cable	EL-35616-58 (BK)	J-38125-12A

A11 Radio X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / WH	7213	Ethernet Bus 5 [+]	II	—
2	0.35	VT	7212	Ethernet Bus 5 [-]	II	—
3	—	—	—	Not Occupied	—	—
4	0.35	GY / WH	7211	Ethernet Bus 4 [+]	I	—
5	0.35	GY	7210	Ethernet Bus 4 [-]	I	—
6	0.35	BU / WH	4758	Ethernet Bus 2 [+]	II	—
7	0.35	BU	4757	Ethernet Bus 2 [-]	II	—
8	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	II	—
9	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	II	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.35	GY / BK	7215	Ethernet Bus 6 [+]	II	—
14	0.35	BN / BK	7214	Ethernet Bus 6 [-]	II	—

A11 Radio X8



5518456

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340317
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BG)

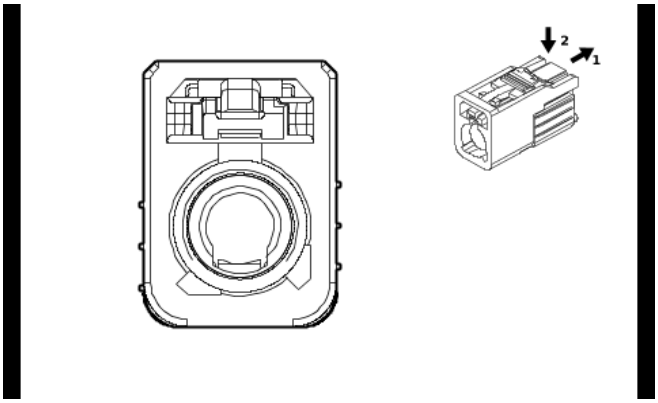
Terminal Part Information

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

A11 Radio X8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	WiFi Antenna Coaxial Signal	I	—

A11 Radio X9



5191842

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340320
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(OG)

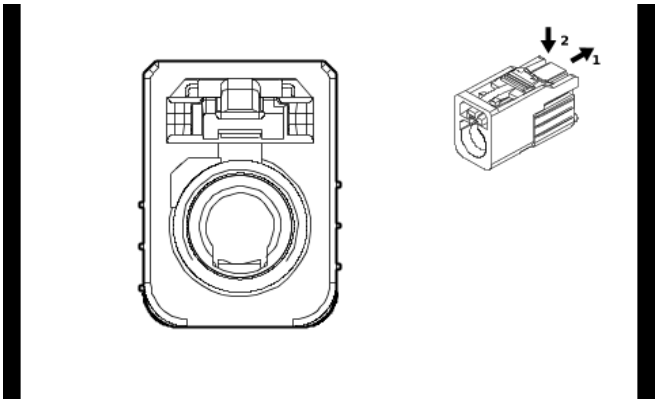
Terminal Part Information

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

A11 Radio X9

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Video Processing Module Coaxial Video Signal	I	—

A11 Radio X10



5519144

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340313
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(GN)

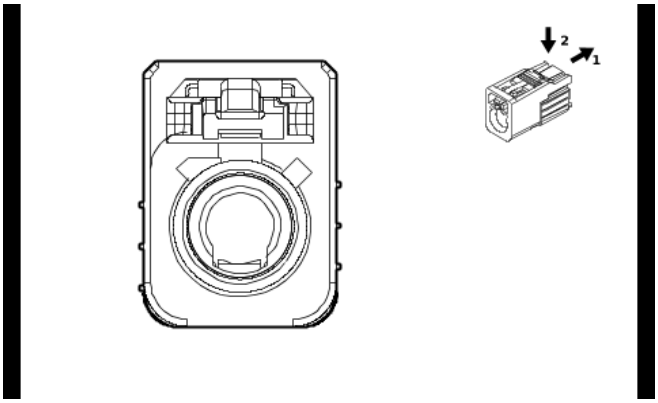
Terminal Part Information

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

A11 Radio X10

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(DAB/DMB) Coaxial Antenna DAB Signal	I	—

A11 Radio X11



5660978

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340309
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BK)

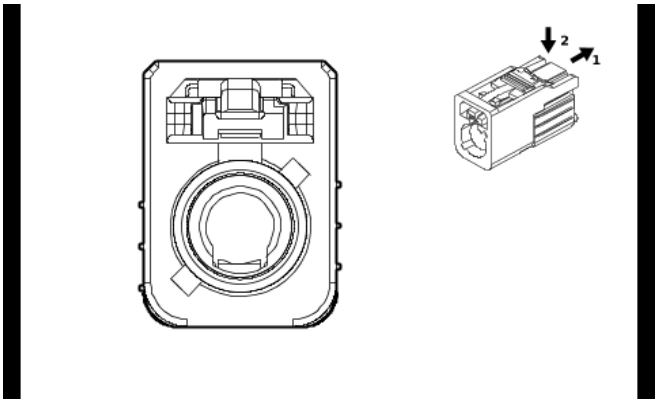
Terminal Part Information

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

A11 Radio X11

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

A11 Radio X12



5793980

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340311
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BU)

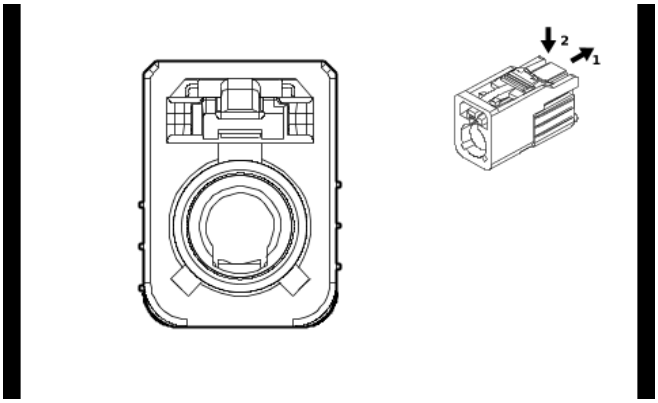
Terminal Part Information

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

A11 Radio X12

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

A11 Radio X13



5794617

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340318
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(CU)

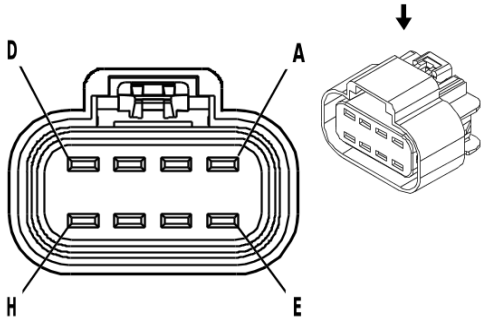
Terminal Part Information

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

A11 Radio X13

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

A16 Transfer Case Four Wheel Drive Actuator (NP0/NQH)



646372

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13538370
Service Connector: 19369184
Description: 8-Way F 280 GT Series, Sealed(BK)

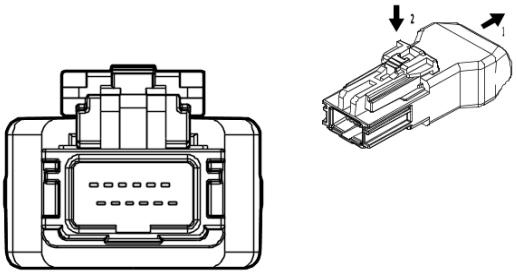
Terminal Part Information

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

A16 Transfer Case Four Wheel Drive Actuator (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2.5	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—
B	0.5	BU	8013	Transfer Case Lock Solenoid Control 2	I	—
C	0.5	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	I	—
D	2.5	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	I	—
E	0.5	YE	7474	Incremental Encoder Direction Signal	I	—
F	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	I	—
G	0.5	WH / GN	7475	Incremental Encoder Sensor Voltage Reference	I	—
H	0.5	VT	7476	Incremental Encoder Sensor Low Reference	I	—

A22 Radio Control X1



4584321

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: VP000124
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series(GY)

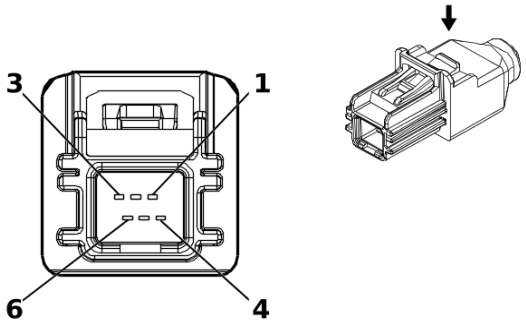
Terminal Part Information

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

A22 Radio Control X1

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

A22 Radio Control X2



5278781

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: VP000212
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(GY)

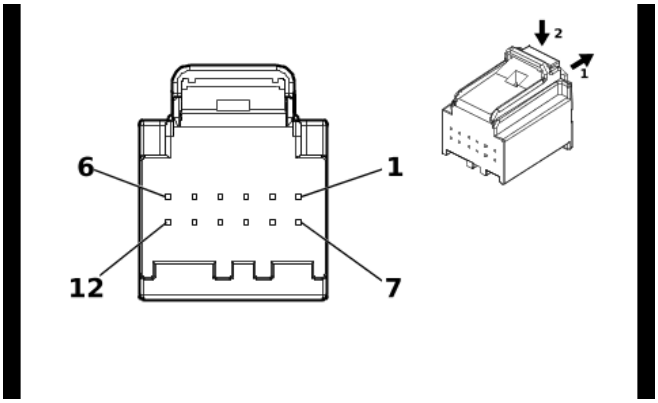
Terminal Part Information

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

A22 Radio Control X2

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

A22 Radio Control X3



5491073

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35248101
Service Connector: 13525989
Description: 12-Way F 0.64 Series(BN)

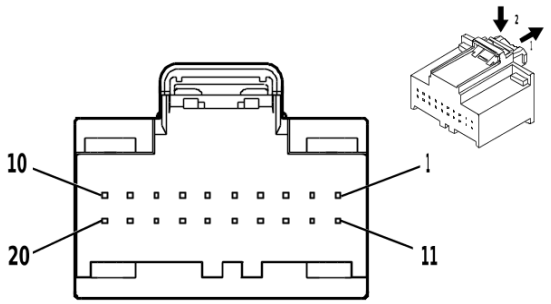
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

A22 Radio Control X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / RD	8080	Auxiliary Center Stack Display Supply Voltage	I	—
2	0.35	BK / YE	10129	Auxiliary Center Stack Display Low Reference	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	VT / GN	10130	Auxiliary Center Stack Display Backlight Dimming Control	I	—
5	0.35	BK / WH	1451	Signal Ground	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	GY / RD	10128	Auxiliary Center Stack Display Supply Voltage 2	I	—
8 - 12	—	—	—	Not Occupied	—	—

A22 Radio Control X4



5109514

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35162720
Service Connector: 13525992
Description: 20-Way F 0.64 Series(BN)

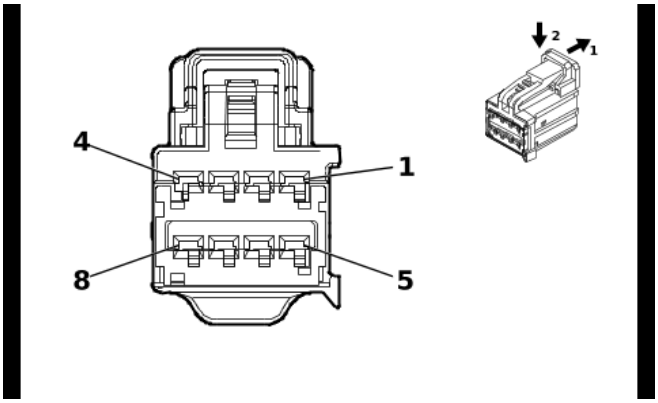
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

A22 Radio Control X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / WH	1340	Battery Positive Voltage	I	—
2	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
3	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	BK / WH	1451	Signal Ground	I	—
6	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
7	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	OG / BN	358	Air Bag Indicator Control	I	—
10	0.35	GN / BK	875	ABS Indicator Control	I	—
11	0.35	YE / WH	33	Brake Warning Indicator Control	I	—
12	0.35	YE / VT	1877	Brake Warning Indicator Control 2	I	—
13	0.35	GN / BN	507	Wait To Start Indicator Control	I	—
14	0.35	YE / WH	234	Seat Belt Indicator Control	I	—
15	0.35	BN / WH	419	Check Engine Indicator Control	I	—
16	0.35	GN / WH	1084	Low Tire Pressure Indicator Control	I	—
17	0.35	VT / BK	8082	Stability Off Indicator Control	I	—
18	0.35	WH / BU	8081	Stability Active Indicator Control	I	—
19	0.35	YE / RD	8083	Auxiliary Display Supply Voltage	I	—
20	—	—	—	Not Occupied	—	—

A23C Liftgate Latch



5377684

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 15509366
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 Kaizen Series(BK)

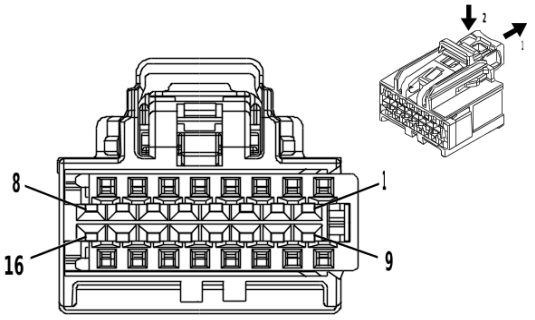
Terminal Part Information

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

A23C Liftgate Latch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	1	BU / GY	4682	Rear Closure Cinch Latch Motor Release Control	I	—
4	1	BN	4681	Rear Closure Cinch Latch Motor Cinch Control	I	—
5	0.35	BK / VT	4656	Rear Closure Object Sensor Low Reference	I	—
6	0.35	GY / VT	4678	Rear Closure Latch Unlatch Status	I	—
7	0.35	YE / BK	8085	Rear Closure Latch Primary Status	I	—
8	0.35	WH / GN	8084	Rear Closure Latch Neutral Status	I	—

A23D Front Side Door Latch - Driver (AF7)



4256181

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35016345
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BN)

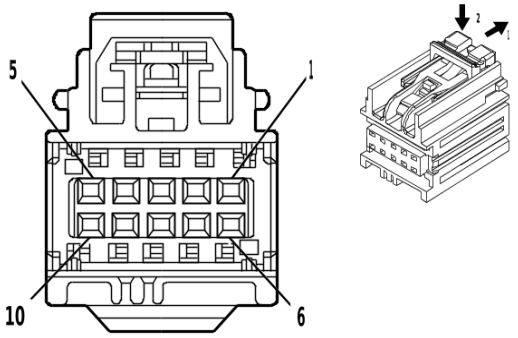
Terminal Part Information

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

A23D Front Side Door Latch - Driver (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2342	Battery Positive Voltage	I	—
2	0.75	VT / BK	8052	Left Front Door Cinch Latch Motor High Control	I	—
3	0.75	WH / GN	8053	Left Front Door Cinch Latch Motor Low Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	BU	2675	Left Front Exterior Door Handle Switch Unlock Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.75	BK	1150	Ground	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	745	Left Front Door Ajar Switch Signal	I	—
11	0.35	VT / GY	126	Left Front Door Open Switch Signal	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.5	BN	5910	Door Dead Lock Actuator Lock Control	I	—
15	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
16	0.75	VT / BU	2687	Left Front Door Unlatch Actuator Unlatch Control	I	—

A23D Front Side Door Latch - Driver (-AF7)



4891168

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

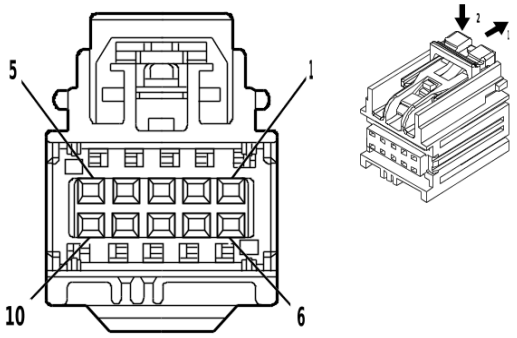
Terminal Part Information

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

A23D Front Side Door Latch - Driver (-AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	BN	5910	Door Dead Lock Actuator Lock Control	I	—
4	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
5	0.75	VT / BU	2687	Left Front Door Unlatch Actuator Unlatch Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK	1150	Ground	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	VT / GY	126	Left Front Door Open Switch Signal	I	—
10	0.35	GY	745	Left Front Door Ajar Switch Signal	I	—

A23LR Rear Side Door Latch - Left (-(AF7/MAH/MBC/MBX))



4891168

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

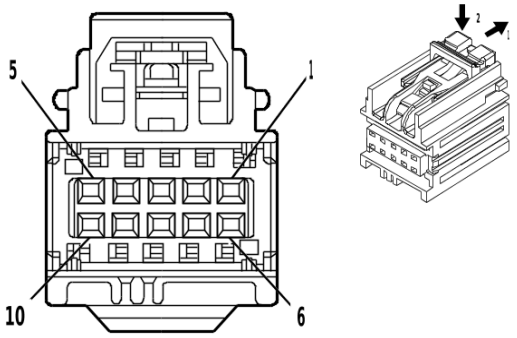
Terminal Part Information

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

A23LR Rear Side Door Latch - Left (-(AF7/MAH/MBC/MBX))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
4	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
5	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK	1150	Ground	I	—
8	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	—

A23LR Rear Side Door Latch - Left (-(AF7/MAH/MBC/MCX))



4891168

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

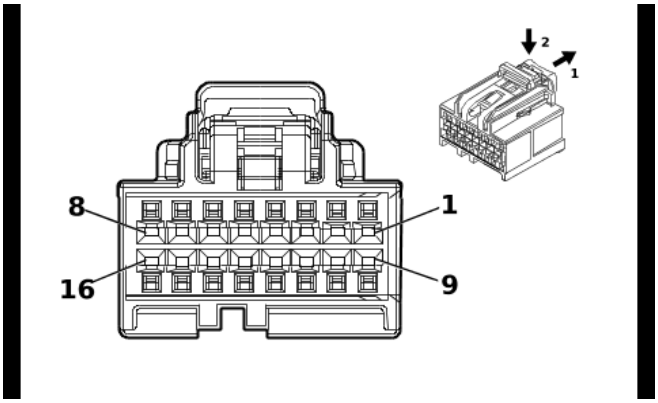
Terminal Part Information

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

A23LR Rear Side Door Latch - Left (-(AF7/MAH/MBC/MCX))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
4	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
5	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK	1150	Ground	I	—
8	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	—

A23LR Rear Side Door Latch - Left ((MAH/MBC/MCX)&AF7)



5492898

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35016346
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(GN)

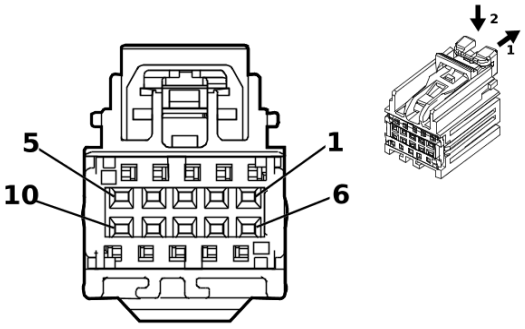
Terminal Part Information

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

A23LR Rear Side Door Latch - Left ((MAH/MBC/MCX)&AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2342	Battery Positive Voltage	I	—
2	0.35	BN / GN	8062	Left Rear Door Cinch Latch Motor High Control	I	—
3	0.35	GN / VT	8063	Left Rear Door Cinch Latch Motor Low Control	I	—
4	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	WH / VT	4994	Left Rear Door Exterior Switch Unlock Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BK	1150	Ground	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.35	GN / BU	4648	Left Rear Door Lock Status Signal	I	—
13	—	—	—	Not Occupied	—	—
14	0.75	GN / GY	1092	Left Rear Door Lock Actuator Unlock Control	I	—
15	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
16	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	I	—

A23LR Rear Side Door Latch - Left ((MAH/MBC/MCX)-AF7)



4622549

Connector Part Information

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

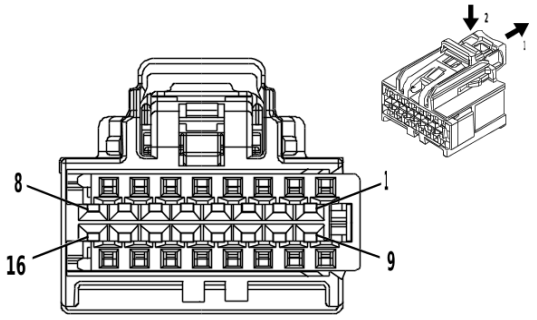
Terminal Part Information

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

A23LR Rear Side Door Latch - Left ((MAH/MBC/MCX)-AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.75	GN / GY	1092	Left Rear Door Lock Actuator Unlock Control	I	—
4	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
5	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	I	—
6	0.35	GN / BU	4648	Left Rear Door Lock Status Signal	I	—
7	0.75	BK	1150	Ground	I	—
8	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	—

A23LR Rear Side Door Latch - Left (AF7-(MAH/MBC/MCX))



4256181

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35016345
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BN)

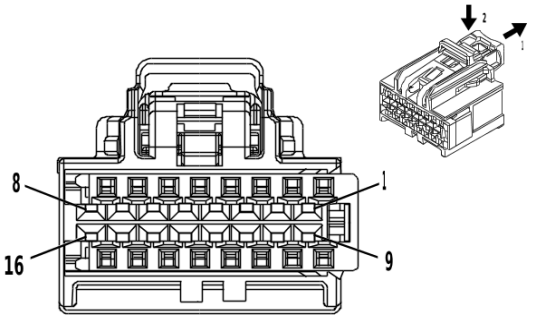
Terminal Part Information

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

A23LR Rear Side Door Latch - Left (AF7-(MAH/MBC/MCX))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / YE	2342	Battery Positive Voltage	I	—
2	0.35	BN / GN	8062	Left Rear Door Cinch Latch Motor High Control	I	—
3	0.35	GN / VT	8063	Left Rear Door Cinch Latch Motor Low Control	I	—
4	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	WH / VT	4994	Left Rear Door Exterior Switch Unlock Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BK	1150	Ground	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	—
11 - 13	—	—	—	Not Occupied	—	—
14	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
15	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—
16	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	I	—

A23P Front Side Door Latch - Passenger (AF7)



4256181

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35016345
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BN)

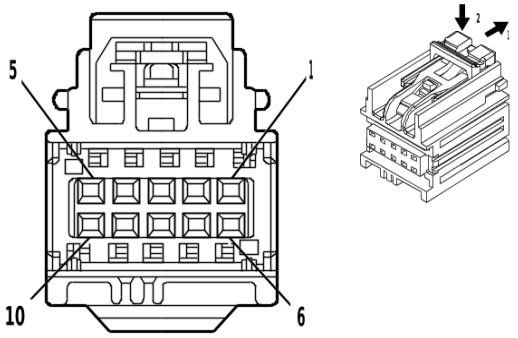
Terminal Part Information

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

A23P Front Side Door Latch - Passenger (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GY / VT	2676	Right Front Door Exterior Switch Unlock Signal	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.75	BN / VT	8057	Right Front Door Cinch Latch Motor High Control	I	—
7	0.75	GY / WH	8058	Right Front Door Cinch Latch Motor Low Control	I	—
8	0.75	RD / WH	2242	Battery Positive Voltage	I	—
9	0.75	GN	2688	Right Front Door Unlatch Actuator Unlatch Control	I	—
10	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
11	0.5	BN	5910	Door Dead Lock Actuator Lock Control	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.35	GN / GY	1177	Right Front Door Open Switch Signal	I	—
15	0.35	GY	746	Right Front Door Ajar Switch Signal	I	—
16	—	—	—	Not Occupied	—	—

A23P Front Side Door Latch - Passenger (-AF7)



4891168

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

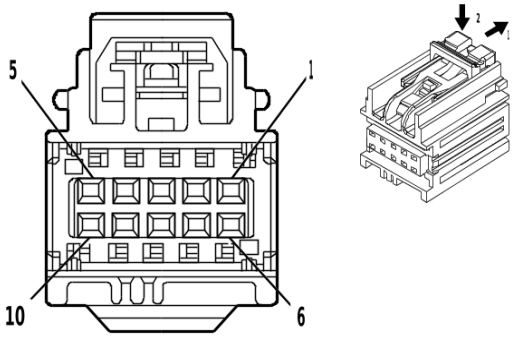
Terminal Part Information

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

A23P Front Side Door Latch - Passenger (-AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN	2688	Right Front Door Unlatch Actuator Unlatch Control	I	—
2	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
3	0.75	BN	5910	Door Dead Lock Actuator Lock Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	GY	746	Right Front Door Ajar Switch Signal	I	—
7	0.35	GN / GY	1177	Right Front Door Open Switch Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.75	BK	1250	Ground	I	—
10	—	—	—	Not Occupied	—	—

A23RR Rear Side Door Latch - Right (-(AF7/MAH/MBC/MCX))



4891168

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

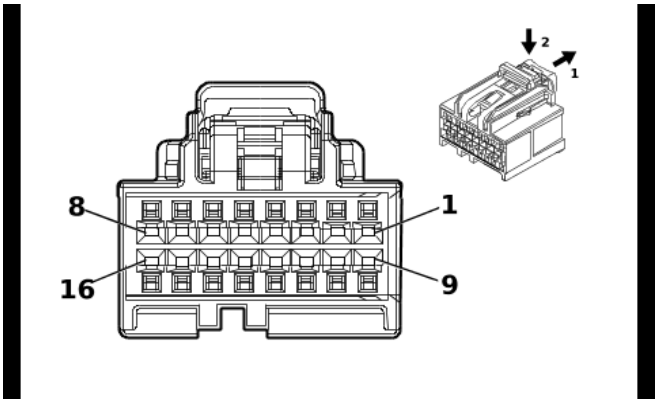
Terminal Part Information

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

A23RR Rear Side Door Latch - Right (-(AF7/MAH/MBC/MCX))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BK	2686	Right Rear Door Unlatch Actuator Unlatch Control	I	—
2	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
3	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BN / WH	6654	Right Rear Door Handle Switch Signal 2	I	—
9	0.75	BK	1250	Ground	I	—
10	—	—	—	Not Occupied	—	—

A23RR Rear Side Door Latch - Right ((MAH/MBC/MCX)&AF7)



5492898

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35016346
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(GN)

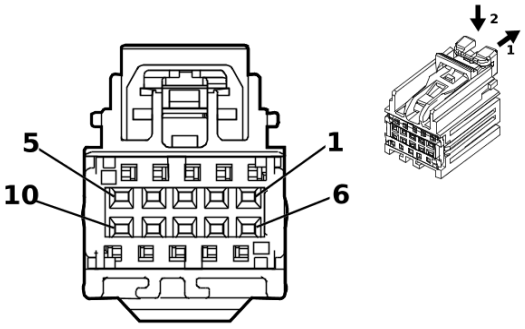
Terminal Part Information

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

A23RR Rear Side Door Latch - Right ((MAH/MBC/MCX)&AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY / BU	4995	Right Rear Door Exterior Switch Unlock Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	BN / WH	6654	Right Rear Door Handle Switch Signal 2	I	—
6	0.5	BU / BN	8067	Right Rear Door Cinch Latch Motor High Control	I	—
7	0.5	GN / BN	8068	Right Rear Door Cinch Latch Motor Low Control	I	—
8	0.75	RD / WH	2242	Battery Positive Voltage	I	—
9	0.75	GN / BK	2686	Right Rear Door Unlatch Actuator Unlatch Control	I	—
10	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
11	0.75	BN / YE	1095	Right Rear Door Lock Actuator Unlock Control	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	WH / GY	4649	Right Rear Door Lock Status Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	—
16	—	—	—	Not Occupied	—	—

A23RR Rear Side Door Latch - Right ((MAH/MBC/MCX)-AF7)



4622549

Connector Part Information

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

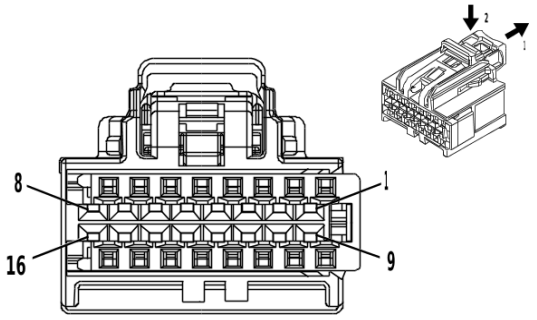
Terminal Part Information

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

A23RR Rear Side Door Latch - Right ((MAH/MBC/MCX)-AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BK	2686	Right Rear Door Unlatch Actuator Unlatch Control	I	—
2	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
3	0.75	BN / YE	1095	Right Rear Door Lock Actuator Unlock Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BN / WH	6654	Right Rear Door Handle Switch Signal 2	I	—
9	0.75	BK	1250	Ground	I	—
10	0.35	WH / GY	4649	Right Rear Door Lock Status Signal	I	—

A23RR Rear Side Door Latch - Right (AF7-(MAH/MBC/MCX))



4256181

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35016345
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BN)

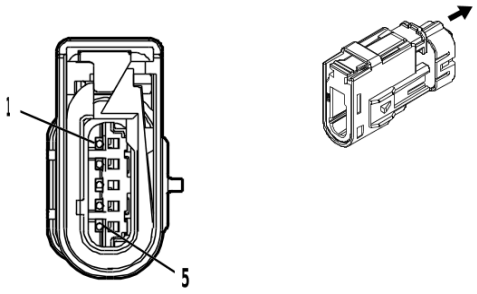
Terminal Part Information

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

A23RR Rear Side Door Latch - Right (AF7-(MAH/MBC/MCX))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY / BU	4995	Right Rear Door Exterior Switch Unlock Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	BN / WH	6654	Right Rear Door Handle Switch Signal 2	I	—
6	0.5	BU / BN	8067	Right Rear Door Cinch Latch Motor High Control	I	—
7	0.5	GN / BN	8068	Right Rear Door Cinch Latch Motor Low Control	I	—
8	0.75	RD / WH	2242	Battery Positive Voltage	I	—
9	0.75	GN / BK	2686	Right Rear Door Unlatch Actuator Unlatch Control	I	—
10	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	I	—
11	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	—
16	—	—	—	Not Occupied	—	—

A24D Front Side Door Outside Handle - Left



4808321

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35028910
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed(GY)

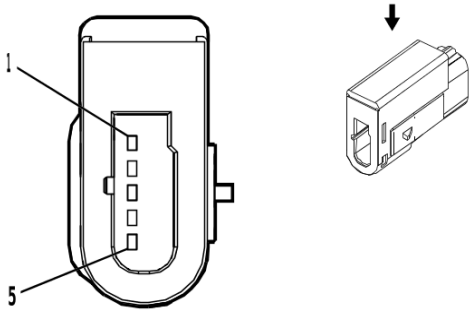
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

A24D Front Side Door Outside Handle - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	2675	Left Front Exterior Door Handle Switch Unlock Signal	II	—
2	0.35	GY	2674	Left Front Door Exterior Switch Lock Signal	I	—
3	0.35	YE / GN	4733	Exterior Door Handle Lamp Control	I	—
4	0.35	RD / VT	1940	Battery Positive Voltage	I	—
5	0.5	BK	1150	Ground	II	—

A24LR Rear Side Door Outside Handle - Left



3277923

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35028908
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed(BN)

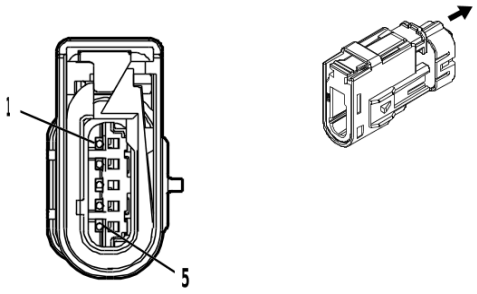
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

A24LR Rear Side Door Outside Handle - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / VT	4994	Left Rear Door Exterior Switch Unlock Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	YE / GN	4733	Exterior Door Handle Lamp Control	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	BK	1150	Ground	II	—

A24P Front Side Door Outside Handle - Right



4808321

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35028910
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed(GY)

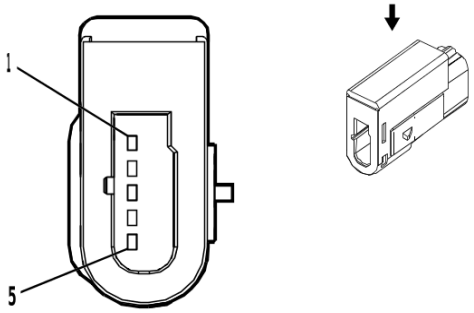
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

A24P Front Side Door Outside Handle - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / VT	2676	Right Front Door Exterior Switch Unlock Signal	I	AF7
	0.5	GY / VT	2676	Right Front Door Exterior Switch Unlock Signal	II	- AF7
2	0.35	GY / BU	2677	Right Front Door Exterior Switch Lock Signal	I	—
3	0.5	YE / GN	4733	Exterior Door Handle Lamp Control	II	—
4	0.35	RD / BU	5240	Battery Positive Voltage	I	—
5	0.5	BK / WH	1251	Signal Ground	II	—

A24RR Rear Side Door Outside Handle - Right



3277923

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35028908
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed(BN)

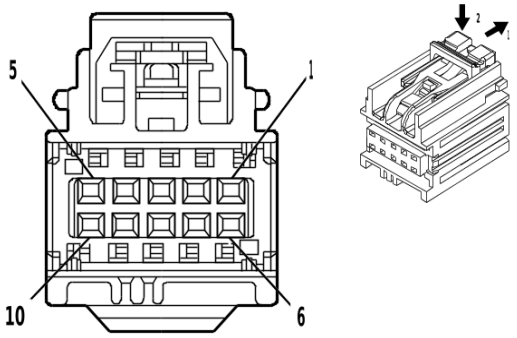
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

A24RR Rear Side Door Outside Handle - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / BU	4995	Right Rear Door Exterior Switch Unlock Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	YE / GN	4733	Exterior Door Handle Lamp Control	II	—
4	—	—	—	Not Occupied	—	—
5	0.35	BK	1250	Ground	I	—

A26 Heater and Air Conditioning User Interface Control - Front



4891168

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33315379
Service Connector: 13509649
Description: 10-Way F 0.64 Kaizen Series(NA)

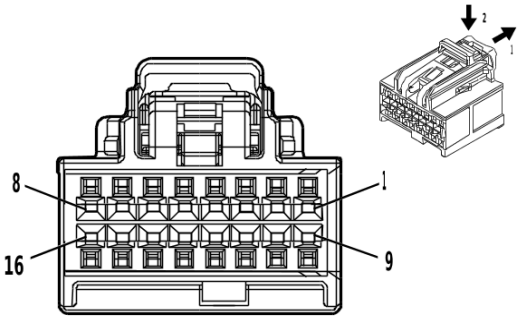
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300629	J-35616-64B (L-BU)	J-38125-215A

A26 Heater and Air Conditioning User Interface Control - Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	1340	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
4	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	GY / GN	4636	HVAC System Enable Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
9	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
10	0.5	BK / WH	1851	Signal Ground	I	—

A34 Heater and Air Conditioning Auxiliary Control



4873243

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BK)

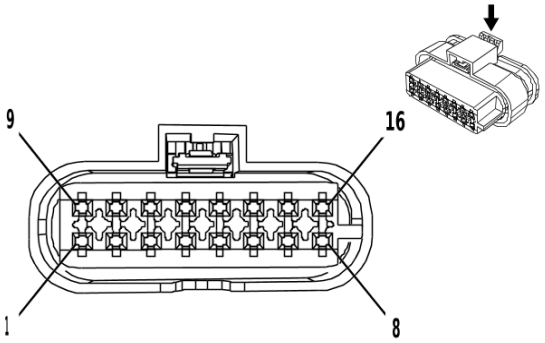
Terminal Part Information

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

A34 Heater and Air Conditioning Auxiliary Control

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BN / BK	405	Lower Duct Air Temperature Sensor Signal	I	—
3	0.75	BK / VT	470	Sensor Low Reference	I	—
4	0.35	BN	404	Upper Duct Air Temperature Sensor Signal	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	YE / WH	4635	HVAC Remote Enable 2 Signal	I	—
7	0.5	GN / BK	2211	Rear Blower Motor Speed Control	I	—
8	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
9	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
10	0.5	RD / BN	7540	Battery Positive Voltage	I	—
11	0.5	BK / WH	1351	Signal Ground	I	—
12	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
13	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
14 - 16	—	—	—	Not Occupied	—	—

A38 Reductant Tank Fluid Supply Pump Module (LM2)



4259227

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13935934
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 Multilock Series(BK)

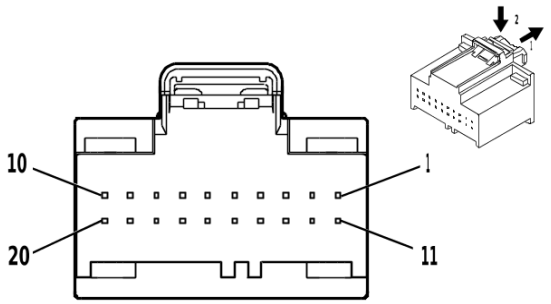
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

A38 Reductant Tank Fluid Supply Pump Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE	3244	Diesel Exhaust Fluid Tank Temperature Sensor Signal	I	—
2	—	YE / GN	3245	Diesel Exhaust Fluid Tank Temperature Sensor Low Reference	I	—
3	—	BK / GN	3107	Diesel Exhaust Fluid Pressure Sensor Low Reference	I	—
4	—	BN / YE	3108	Diesel Exhaust Fluid Pressure Sensor Signal	I	—
5	—	YE / RD	3106	Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference	I	—
6	—	—	—	Not Occupied	—	—
7	—	GY	3103	Diesel Exhaust Fluid Smart Pump Control	I	—
8	—	VT	3875	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2	I	—
9	—	WH / BN	3677	Diesel Exhaust Fluid Reservoir Heater Control	I	—
10	—	VT / WH	3676	Diesel Exhaust Fluid Heating Tank 2 Heater Control	I	—
11	—	BU / BK	4318	Diesel Exhaust Fluid Tank Heater Low Control	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	—	GY / BK	2937	Diesel Exhaust Fluid Pump Motor Stator Low Reference	I	—
15	—	BN / GY	2936	Diesel Exhaust Fluid Heating Tank 2 Heater Control Low	I	—
16	—	VT / WH	3876	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3	I	—

A98 Front Overhead Console Assembly



5112891

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35160140
Service Connector: 13525990
Description: 20-Way F 0.64 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

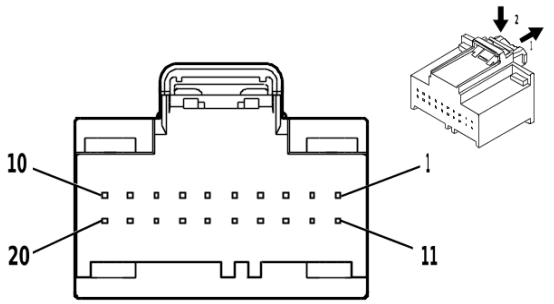
A98 Front Overhead Console Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / YE	240	Battery Positive Voltage	I	—
2	0.5	BU / GN	4785	Interior Lamp Overhead Enable Signal	I	—
3	0.5	GY / WH	2369	Interior Lamp Overhead 2 Enable Signal	I	—
4	0.35	GN / YE	2903	Row 2 Dome Reading Lamp Interior Lamp Control	I	—
5	0.35	BN / BU	2905	Row 2 Dome Reading Lamp 2 Interior Lamp Control	I	—
6	0.35	WH / BN	2904	Row 2 Dome Reading Lamp Switch Signal	I	—
7	0.35	VT / GY	2906	Row 2 Dome Reading Lamp 2 Switch Signal	I	—
8	0.35	VT / YE	2908	Row 3 Dome Reading Lamp Switch Signal	I	—
9	0.35	YE / GY	2910	Row 3 Dome Reading Lamp 2 Switch Signal	I	—
10	0.35	GN / WH	2854	Body Control Module LIN Bus 8	I	—
11	0.35	BU / WH	2907	Row 3 Dome Reading Lamp Interior Lamp Control	I	—
12	0.35	BN / VT	2909	Row 3 Dome Reading Lamp 2 Interior Lamp Control	I	—
13	0.5	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
14	0.5	BU	655	Cellular Telephone Microphone Signal	I	—
15	0.35	GN / BK	2515	Telematics Switch Supply Voltage	I	—
16	0.35	GN / WH	2514	Telematics Switch Signal	I	—
17	0.35	YE / VT	2516	Telematics Switch Green LED Indicator Control	I	—
18	0.35	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
19	—	—	—	Not Occupied	—	—

A98 Front Overhead Console Assembly (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.35	BK	1850	Ground	I	—

A103 Roof Console



5112891

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35160140
Service Connector: 13525990
Description: 20-Way F 0.64 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

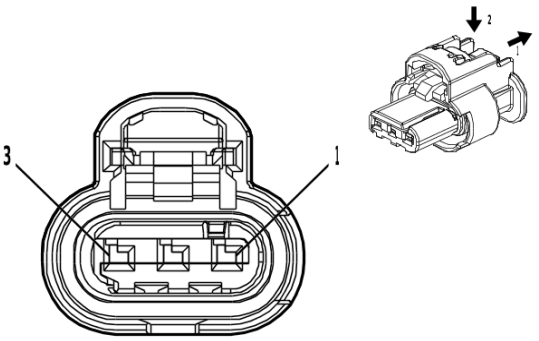
A103 Roof Console

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / YE	240	Battery Positive Voltage	I	—
2	0.5	BU / GN	4785	Interior Lamp Overhead Enable Signal	I	—
3	0.5	GY / WH	2369	Interior Lamp Overhead 2 Enable Signal	I	—
4	0.35	GN / YE	2903	Row 2 Dome Reading Lamp Interior Lamp Control	I	—
5	0.35	BN / BU	2905	Row 2 Dome Reading Lamp 2 Interior Lamp Control	I	—
6	0.35	WH / BN	2904	Row 2 Dome Reading Lamp Switch Signal	I	—
7	0.35	VT / GY	2906	Row 2 Dome Reading Lamp 2 Switch Signal	I	—
8	0.35	VT / YE	2908	Row 3 Dome Reading Lamp Switch Signal	I	—
9	0.35	YE / GY	2910	Row 3 Dome Reading Lamp 2 Switch Signal	I	—
10	0.35	GN / WH	2854	Body Control Module LIN Bus 8	I	—
11	0.35	BU / WH	2907	Row 3 Dome Reading Lamp Interior Lamp Control	I	—
12	0.35	BN / VT	2909	Row 3 Dome Reading Lamp 2 Interior Lamp Control	I	—
13	0.5	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
14	0.5	BU	655	Cellular Telephone Microphone Signal	I	—
15	0.35	GN / BK	2515	Telematics Switch Supply Voltage	I	—
16	0.35	GN / WH	2514	Telematics Switch Signal	I	—
17	0.35	YE / VT	2516	Telematics Switch Green LED Indicator Control	I	—
18	0.35	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
19	—	—	—	Not Occupied	—	—

A103 Roof Console (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.35	BK	1850	Ground	I	—

B1 Air Conditioning Refrigerant Pressure Sensor



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

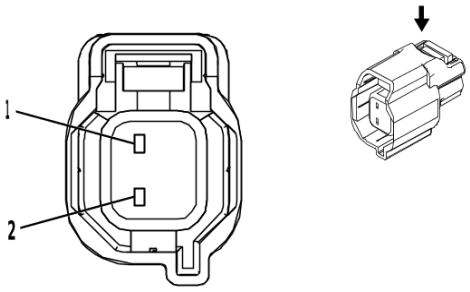
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B1 Air Conditioning Refrigerant Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5 0.5	BK / YE BK / GY	548 626	Engine Control Sensors Low Reference 1 Engine Control Vehicle Sensors Low Reference 1	I I	CJ2+ (L84/ L87) CJ2+ LM2

B5LF Front Wheel Speed Sensor - Left



2900396

Connector Part Information

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

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LF Front Wheel Speed Sensor - Left

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

B5LR Rear Wheel Speed Sensor - Left

—

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 86807479
Service Connector: Service by Harness - See Part Catalog
Description: Wheel Speed Sensor

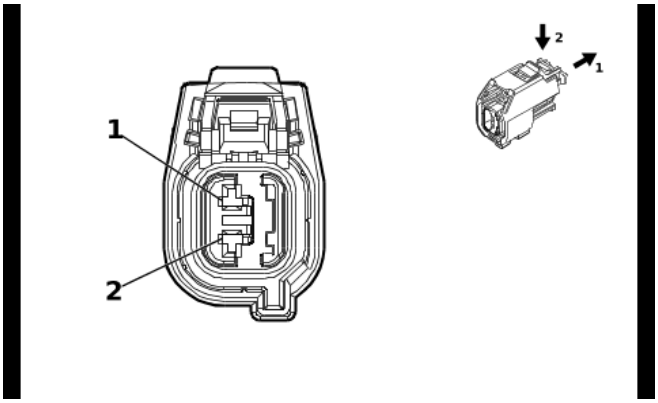
Terminal Part Information

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

B5LR Rear Wheel Speed Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	884	Left Rear Wheel Speed Sensor Signal	I	—
2	0.75	GY / BK	7127	Left Rear Wheel Speed Sensor Control	I	—

B5RF Front Wheel Speed Sensor - Right



5666214

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33189092
Service Connector: 85526683
Description: 2-Way F 1.5 OCS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RF Front Wheel Speed Sensor - Right

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

B5RR Rear Wheel Speed Sensor - Right

—

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 86807480
Service Connector: Service by Harness - See Part Catalog
Description: Wheel Speed Sensor

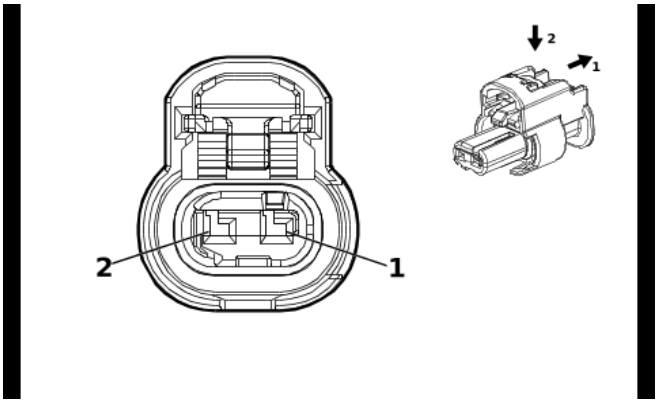
Terminal Part Information

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

B5RR Rear Wheel Speed Sensor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT	882	Right Rear Wheel Speed Sensor Signal	I	—
2	0.75	GY / YE	7128	Right Rear Wheel Speed Sensor Control	I	—

B9 Ambient Air Temperature Sensor



4649903

Connector Part Information

Harness Type: Active Grille Air Shutter
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

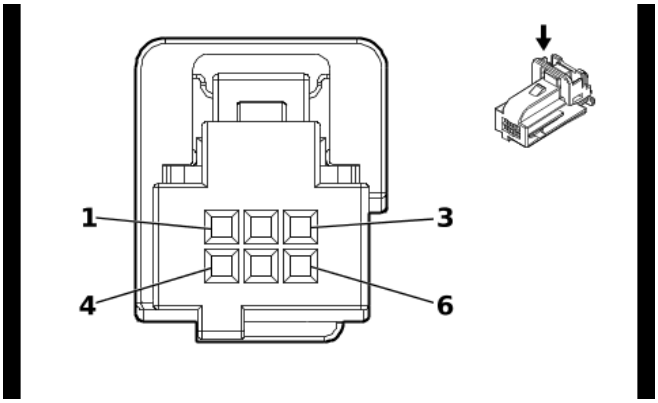
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B9 Ambient Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	— —	BK / YE BK / GY	548 626	Engine Control Sensors Low Reference 1 Engine Control Vehicle Sensors Low Reference 1	I I	L87 LM2
2	—	BU / GY	636	Ambient Air Temperature Sensor Signal	I	—

B10D Sun Load and Ambient Light and Security Indicator Sensor



2282896

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15338980
Service Connector: 85587649
Description: 6-Way F 0.64 Micro-Quadlock Series(BK)

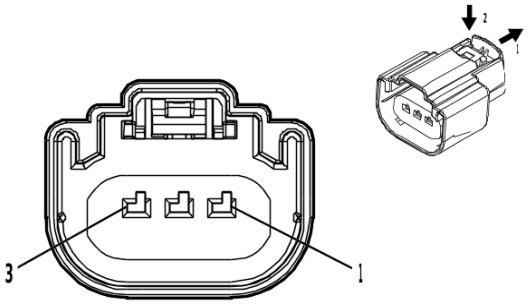
Terminal Part Information

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

B10D Sun Load and Ambient Light and Security Indicator Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	590	Driver Solar Sensor Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	WH / BU	278	Ambient Light Sensor Signal	I	—
4	0.35	BU / WH	734	Inside Air Temperature Sensor Signal	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	BK / YE	407	Sensor Low Reference	I	—

B11LF Front Suspension 4 Corner Leveling System Position Sensor - Left (F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

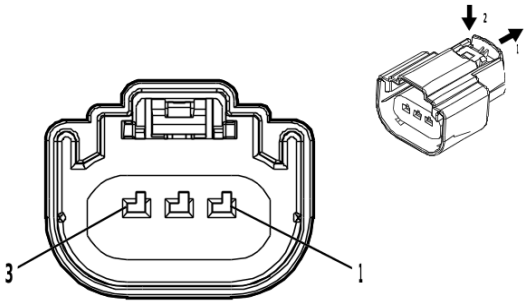
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B11LF Front Suspension 4 Corner Leveling System Position Sensor - Left (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / RD	1205	Left Front Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / BU	1206	Left Front Suspension Position Sensor Low Reference	I	—
3	0.5	BN / WH	1207	Left Front Suspension Position Sensor Signal	I	—

B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

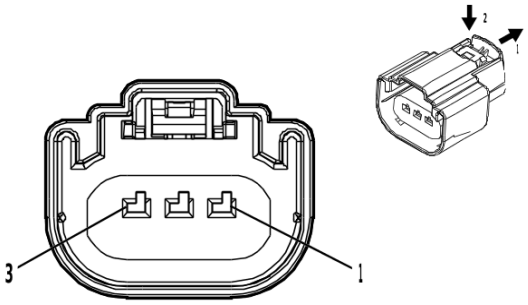
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	I	—
3	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	I	—

B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (-F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

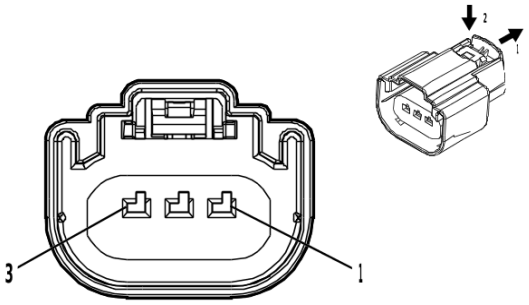
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B11LR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Left (-F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	I	—
3	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	I	—

B11RF Front Suspension 4 Corner Leveling System Position Sensor - Right (F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

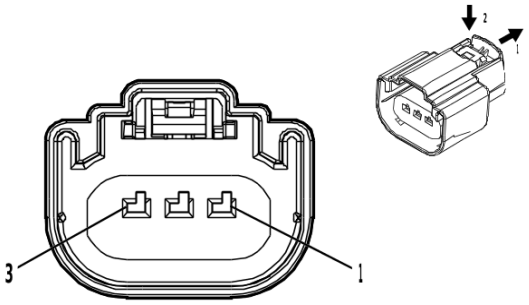
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B11RF Front Suspension 4 Corner Leveling System Position Sensor - Right (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	1211	Right Front Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / GY	1212	Right Front Suspension Position Sensor Low Reference	I	—
3	0.5	YE / WH	1213	Right Front Suspension Position Sensor Signal	I	—

B11RR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Right (F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

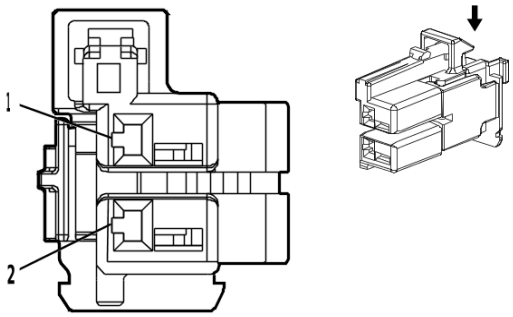
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B11RR Rear Suspension 2 or 4 Corner Air Leveling Position Sensor - Right (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / RD	1214	Right Rear Suspension Position Sensor Voltage Reference	I	—
2	0.5	BK / YE	1215	Right Rear Suspension Position Sensor Low Reference	I	—
3	0.5	GN / GY	1216	Right Rear Suspension Position Sensor Signal	I	—

B13 Automatic Transmission Fluid Temperature Sensor



4672650

Connector Part Information

Harness Type: Transmission Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

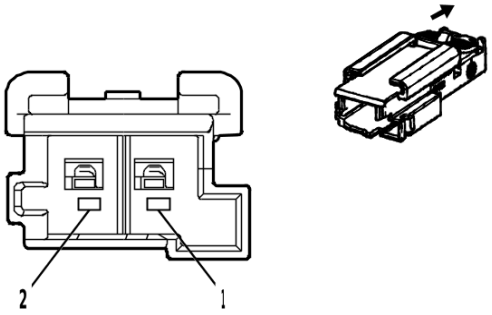
Terminal Part Information

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

B13 Automatic Transmission Fluid Temperature Sensor

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

B14A Automatic Transmission Output Speed Sensor



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)

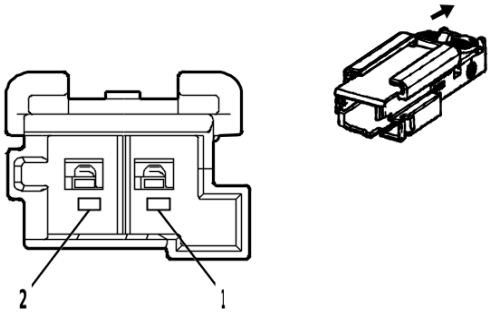
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14A Automatic Transmission Output Speed Sensor

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

B14C Automatic Transmission Input Speed Sensor



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)

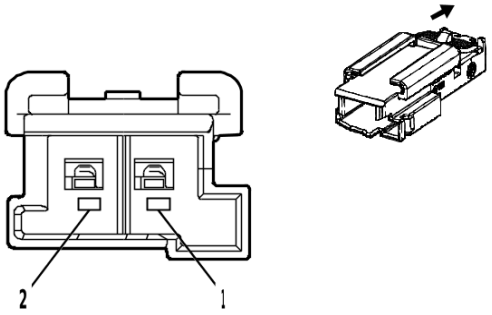
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14C Automatic Transmission Input Speed Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / VT	6353	Input Speed Signal	I	—
2	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—

B14DA Automatic Transmission Intermediate Speed Sensor 1



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)

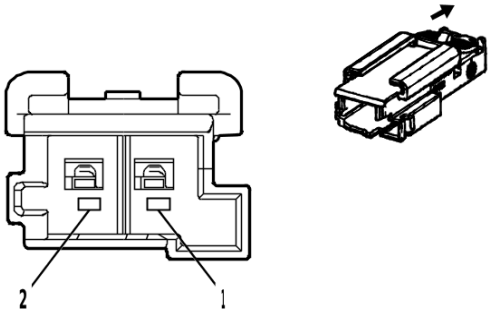
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14DA Automatic Transmission Intermediate Speed Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / GN	4510	Transmission Intermediate Speed Signal	I	—
2	0.5	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—

B14DB Automatic Transmission Intermediate Speed Sensor 2



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)

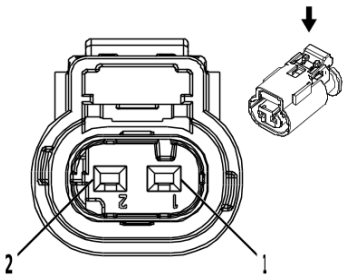
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B14DB Automatic Transmission Intermediate Speed Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	4510	Transmission Intermediate Speed Signal	I	—
2	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—

B20A Brake Fluid Level Indicator Switch



2717066

Connector Part Information

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

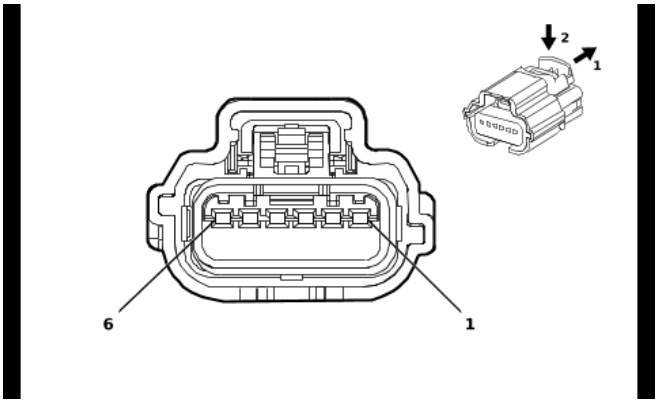
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B20A Brake Fluid Level Indicator Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / GY	333	Brake Fluid Level Signal	I	—
2	0.5	BK / WH	1151	Signal Ground	I	—

B22 Brake Pedal Position Sensor



4773396

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35199160
Service Connector: 84683650
Description: 6-Way F 64 Series, Sealed(NA)

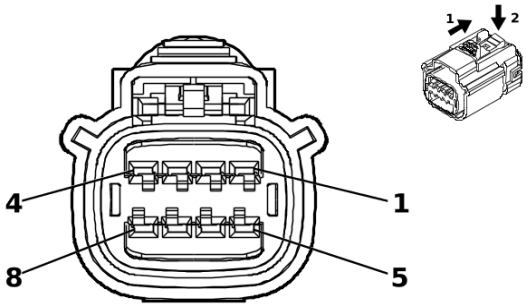
Terminal Part Information

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

B22 Brake Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / BN	5360	Brake Apply Sensor Low Reference	I	—
2	0.35	WH	5359	Brake Apply Sensor Control	I	—
3	0.35	BU / YE	5361	Brake Apply Sensor Signal	I	—
4	0.5	WH / GN	5380	Brake Position Sensor Signal	I	—
5	0.5	BK / YE	5382	Brake Position Sensor Low Reference	I	—
6	0.5	WH / RD	5381	Brake Position Sensor 5V Reference	I	—

B23 Camshaft Position Sensor (L87/LT4)



5253496

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15514667
Service Connector: 84766296
Description: 8-Way F 1.5 OCS Series, Sealed(BK)

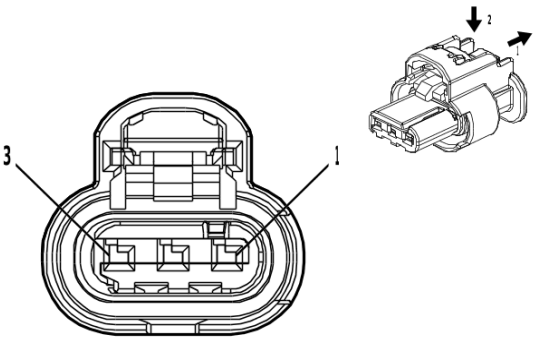
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

B23 Camshaft Position Sensor (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
2	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
3	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	I	—
4	0.5	BU	179	Engine Oil Pump Control	I	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—
6	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—
7	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	II	—
8	—	—	—	Not Occupied	—	—

B23E Camshaft Position Sensor - Exhaust (LM2)



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

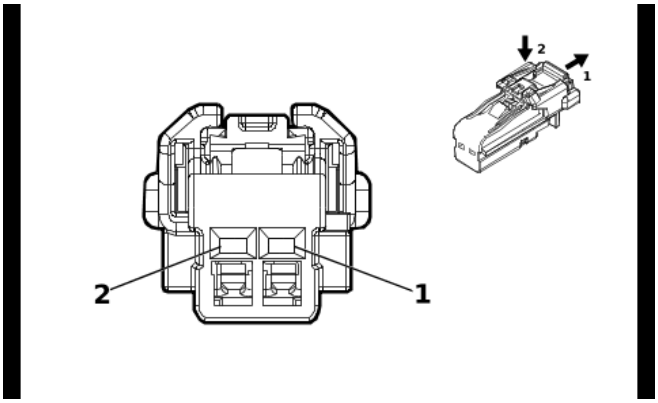
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B23E Camshaft Position Sensor - Exhaust (LM2)

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

B24D Mobile Telephone Microphone - Driver



4115691

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

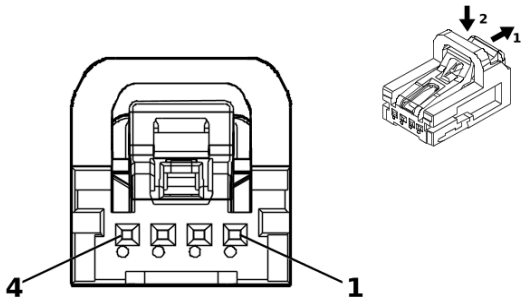
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B24D Mobile Telephone Microphone - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
2	0.5	BU	655	Cellular Telephone Microphone Signal	I	—

B24LF Mobile Telephone Microphone - Left Front



5200696

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068218
Service Connector: 84769202
Description: 4-Way F Mini 50 Series(BK)

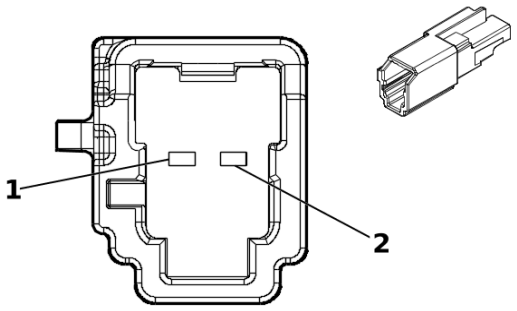
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

B24LF Mobile Telephone Microphone - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—
2	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
3	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
4	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—

B24P Mobile Telephone Microphone - Passenger



5360948

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35264701
Service Connector: 84847259
Description: 2-Way M 1.2 MCON Series(GY)

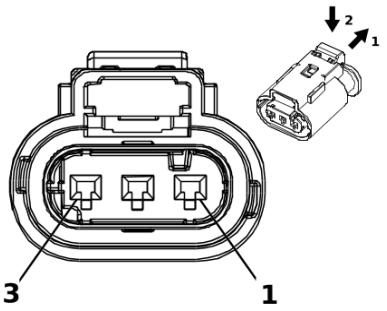
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B24P Mobile Telephone Microphone - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / BK	7044	Microphone [-] Signal	I	—
2	0.5	VT / YE	7043	Microphone [+] Signal	I	—

B26 Crankshaft Position Sensor (L87/LT4)



2717069

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

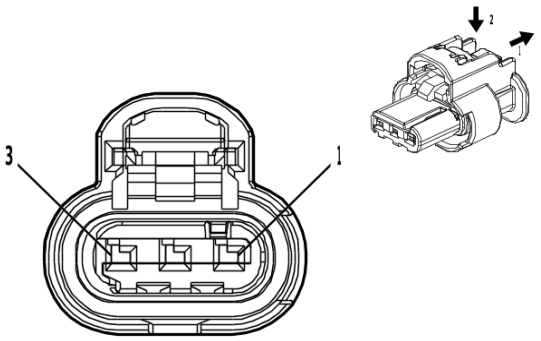
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B26 Crankshaft Position Sensor (L87/LT4)

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

B26 Crankshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

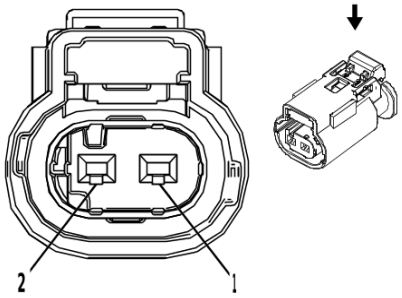
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B26 Crankshaft Position Sensor (LM2)

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

B34 Engine Coolant Temperature Sensor (LM2)



2830969

Connector Part Information

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

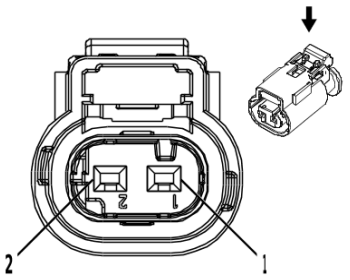
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B34 Engine Coolant Temperature Sensor (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 / YE	548	Engine Control Sensors Low Reference 1	I	—

B34 Engine Coolant Temperature Sensor (LT4)



2717066

Connector Part Information

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

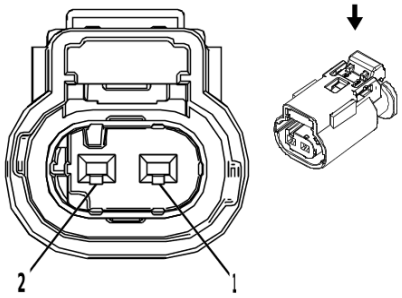
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B34 Engine Coolant Temperature Sensor (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B34B Engine Coolant Temperature Sensor 2 (LM2)



2830969

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Harness
OEM Connector: 13503568
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed(D-GY)

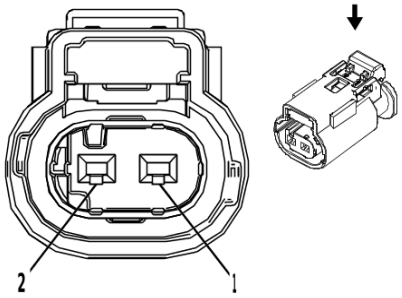
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool 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 / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B34E Engine Coolant Temperature Sensor 5 (LM2)



2830969

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Harness
OEM Connector: 13503568
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed(D-GY)

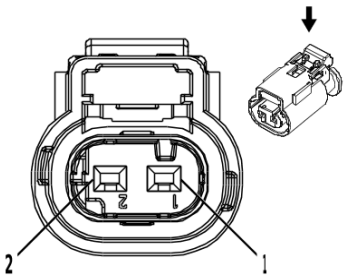
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B34E Engine Coolant Temperature Sensor 5 (LM2)

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 / GN	580	Engine Control Sensors Low Reference 2	I	—

B34K Charge Air Cooler Coolant Temperature Sensor - Inlet (LM2)



2717066

Connector Part Information

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

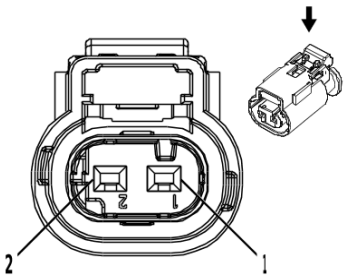
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B34K Charge Air Cooler Coolant Temperature Sensor - Inlet (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / BK	1422	Engine Water Charge Air Coolant Temperature Signal	I	—
2	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B35 Engine Oil Level Indicator Switch (L87)



2717066

Connector Part Information

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

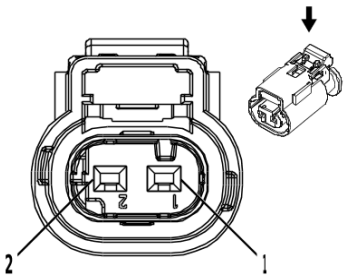
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

B35 Engine Oil Level Indicator Switch (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	1174	Oil Level Switch Signal	I	—
2	1	BK / WH	6151	Engine Control Module Ground	II	—

B35 Engine Oil Level Indicator Switch (LT4)



2717066

Connector Part Information

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

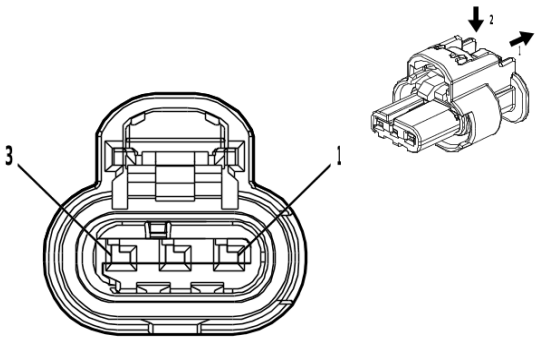
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

B35 Engine Oil Level Indicator Switch (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	1174	Oil Level Switch Signal	I	—
2	1	BK / WH	6151	Engine Control Module Ground	II	—

B36 Engine Oil Temperature Sensor



4994602

Connector Part Information

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

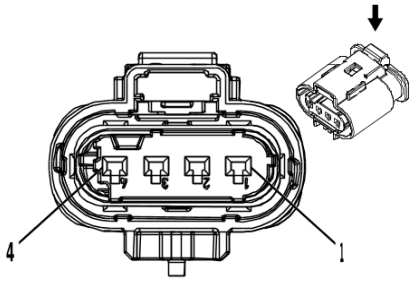
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

B36 Engine Oil Temperature Sensor

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

B37B Engine Oil Pressure Sensor (L87/LT4)



2717079

Connector Part Information

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

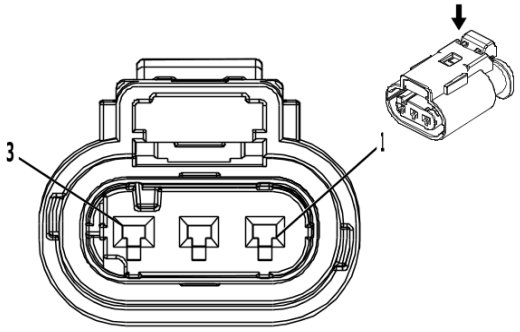
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B37B Engine Oil Pressure Sensor (L87/LT4)

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 Vehicle Sensors 5 Volt Reference 1	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 Wiring Harness
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

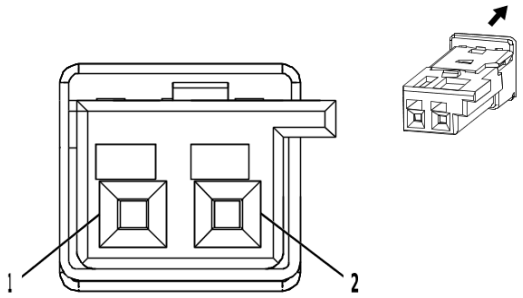
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B37B Engine Oil Pressure Sensor (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	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B39 Air Conditioning Evaporator Air Temperature Sensor



2780265

Connector Part Information

Harness Type: HVAC
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

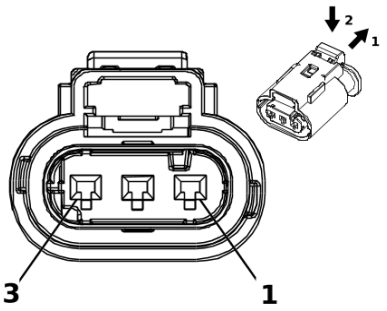
Terminal Part Information

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

B39 Air Conditioning Evaporator Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	6137	A/C Evaporator Temperature Sensor Signal	I	—
2	—	BK / YE	407	Sensor Low Reference	I	—

B47 Fuel Pressure Sensor (L87/LT4)



2717069

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

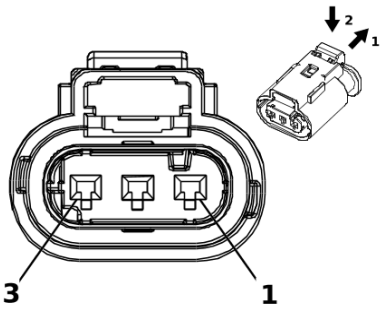
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B47 Fuel Pressure Sensor (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
2	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
3	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—

B47 Fuel Pressure Sensor (LM2)



2717069

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

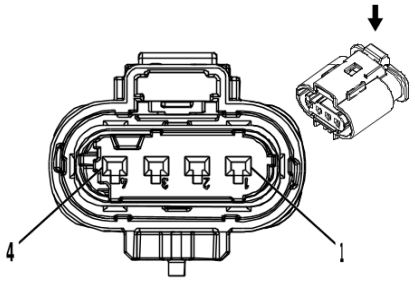
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool 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 Pressure Sensor Low Reference	I	—
3	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—

B47B Fuel Rail Pressure Sensor (LM2)



2717079

Connector Part Information

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

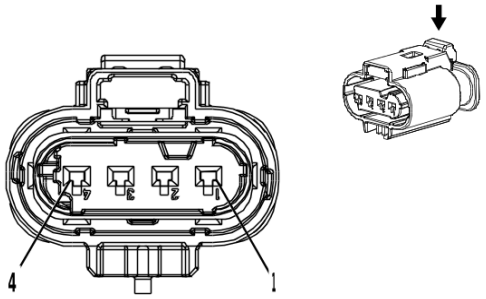
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B47B Fuel Rail Pressure Sensor (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	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L87)



4381050

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed(BK)

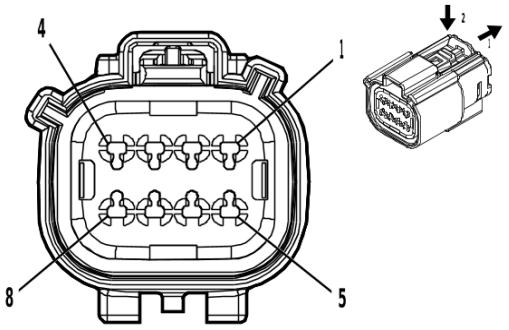
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
2	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	I	—
4	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LT4)



4846378

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35037830
Service Connector: 19371225
Description: 8-Way F 1.5 MX Series, Sealed(GY)

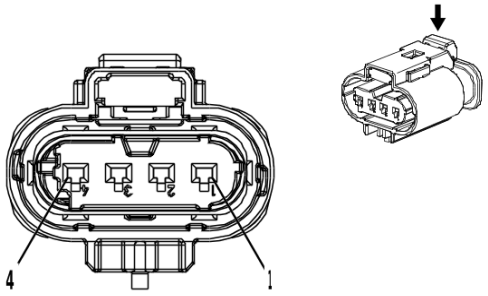
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6934	HO2S Ground	I	—
2	0.5	YE / GY	6936	HO2S Signal	I	—
3	0.5	BN / WH	6933	HO2S Pump Current Signal	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
7	0.5	GN	6935	HO2S Pump Current Trim Signal	II	—
8	—	—	—	Not Occupied	—	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L87)



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

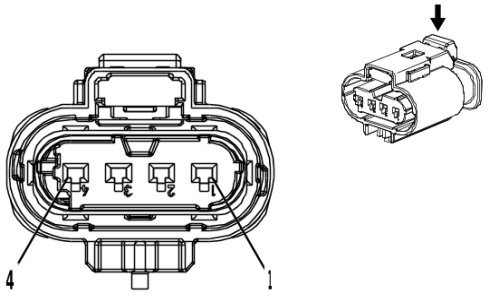
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LT4)



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

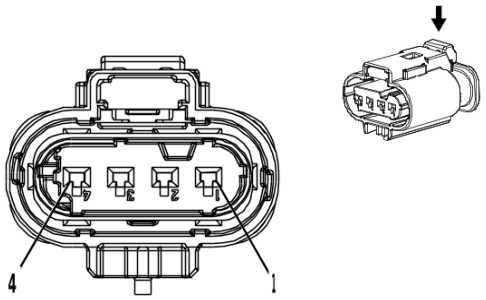
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L87)



4381050

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed(BK)

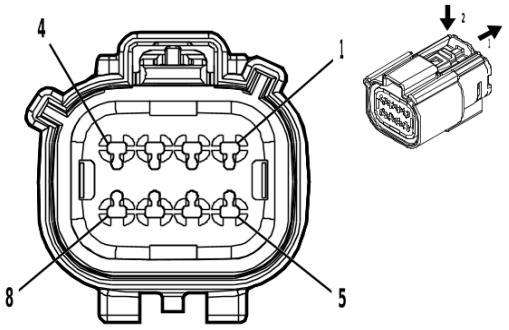
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
2	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	I	—
4	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT4)



4846378

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35037830
Service Connector: 19371225
Description: 8-Way F 1.5 MX Series, Sealed(GY)

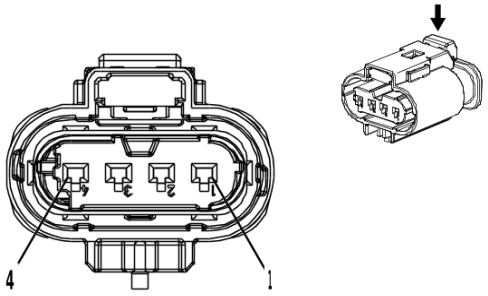
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	2571	Heated Oxygen Sensor 2 Common Bank 2 Sensor 1 Signal	I	—
2	0.5	BN / GY	2573	Heated Oxygen Sensor 2 Collector Signal	I	—
3	0.5	YE / WH	2570	Heated Oxygen Sensor 2 Pump Current Signal	II	—
4	—	—	—	Not Occupied	—	—
5	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
6	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
7	0.5	BU	2572	Heated Oxygen Sensor 2 Current Adjust Signal	II	—
8	—	—	—	Not Occupied	—	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L87)



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

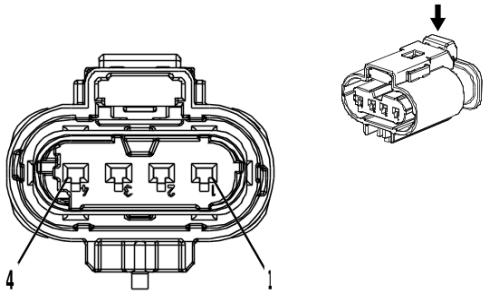
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LT4)



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

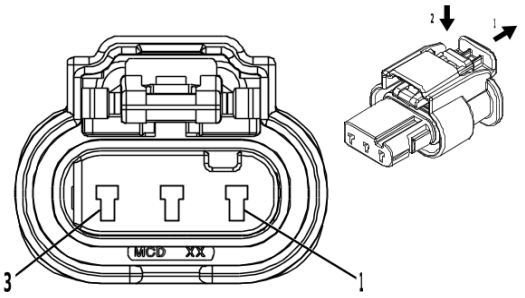
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
2	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
3	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—

B55 Engine Compartment Cover Switch



4421568

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33320864
Service Connector: 19368220
Description: 3-Way F 1.2 MCON-LL Series, Sealed(BK)

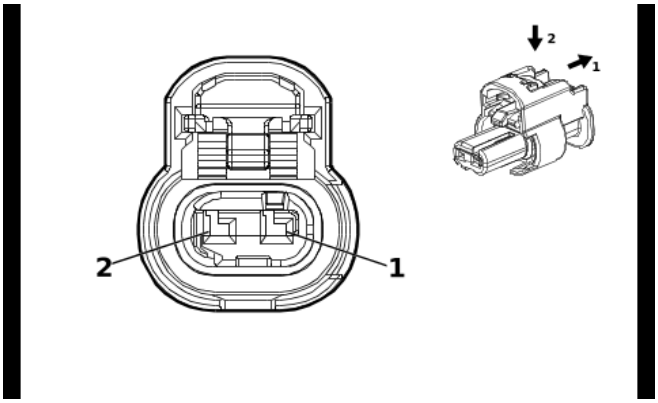
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B55 Engine Compartment Cover Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	4063	Hood Status A Signal	I	—
2	0.35	BN / GN	4064	Hood Status B Signal	I	—
3	0.75	BK	150	Ground	I	—

B58L Airbag Front End Discriminating Sensor - Left



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

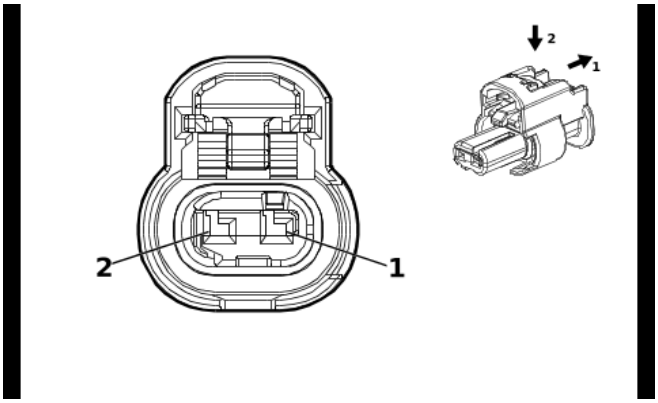
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B58L Airbag Front End Discriminating Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / YE	354	Left Front Impact Discriminating Sensor Signal	I	—
2	0.5	BK / OG	5045	Left Front Impact Discriminating Sensor Low Reference	I	—

B58R Airbag Front End Discriminating Sensor - Right



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

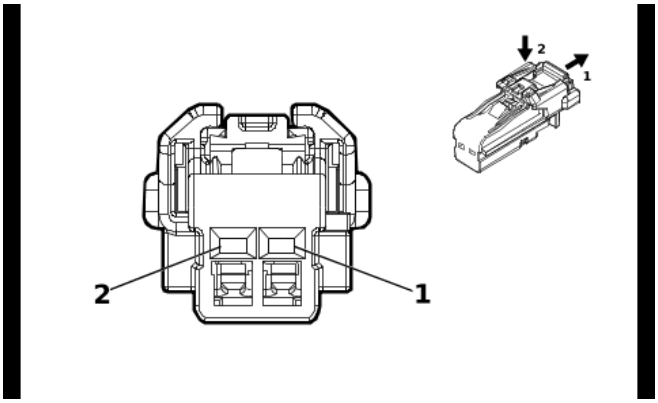
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B58R Airbag Front End Discriminating Sensor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	1409	Right Front Impact Discriminating Sensor Signal	I	—
2	0.5	BK / OG	5600	Right Front Impact Discriminating Sensor Low Reference	I	—

B61P Seat Belt Tension Sensor - Passenger



4115691

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

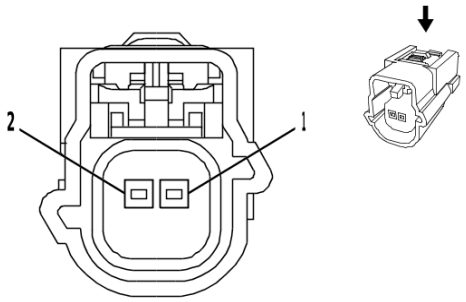
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B61P Seat Belt Tension Sensor - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / OG	3946	Passenger Automatic Locking Retractor Switch Low Reference	I	—
2	0.5	OG / BN	3947	Passenger Automatic Locking Retractor Switch Signal	I	—

B63LF Airbag Side Impact Sensor - Left Front Door



2179777

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

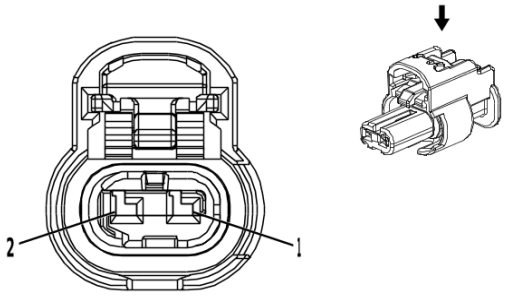
Terminal Part Information

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

B63LF Airbag Side Impact Sensor - Left Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	2132	Left Front Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6628	Left Front Side Impact Sensor Low Reference	I	—

B63LR Airbag Side Impact Rear Sensor - Left Door



4335931

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

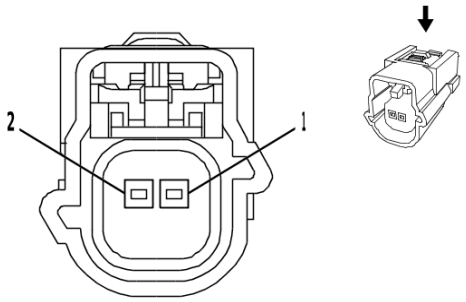
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B63LR Airbag Side Impact Rear Sensor - Left Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BU	6622	Left Rear Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6623	Left Rear Side Impact Sensor Low Reference	I	—

B63RF Airbag Side Impact Sensor - Right Front Door



2179777

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

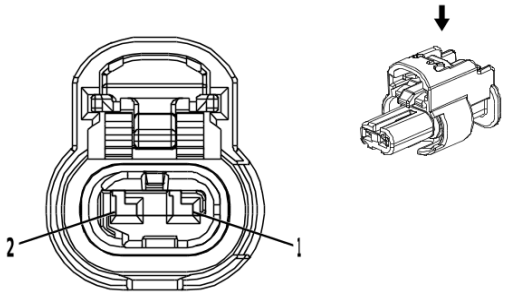
Terminal Part Information

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

B63RF Airbag Side Impact Sensor - Right Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / OG	2134	Right Front Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6629	Right Front Side Impact Sensor Low Reference	I	—

B63RR Airbag Side Impact Rear Sensor - Right Door



4335931

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

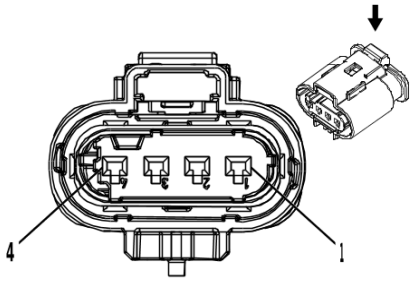
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B63RR Airbag Side Impact Rear Sensor - Right Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / WH	6626	Right Rear Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6627	Right Rear Side Impact Sensor Low Reference	I	—

B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LM2)



2717079

Connector Part Information

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

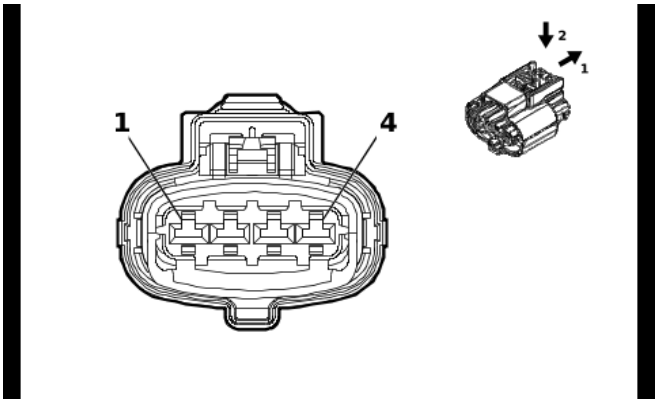
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	7329	Pre-Throttle Air Temperature Signal	I	—
2	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
4	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LT4)



5869064

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133588
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed(BK)

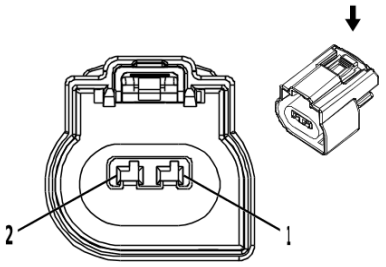
Terminal Part Information

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

B65 Manifold Absolute Pressure and Intake Air Temperature Sensor (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
2	0.5	WH / BU	7329	Pre-Throttle Air Temperature Signal	I	—
3	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
4	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B68A Knock Sensor 1 (L87)



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

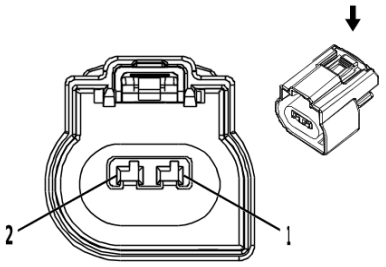
Terminal Part Information

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

B68A Knock Sensor 1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK / YE	1716	Knock Sensor Low Reference 1	I	—
2	0.75	VT / GY	496	Knock Sensor 1 Signal	I	—

B68A Knock Sensor 1 (LT4)



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

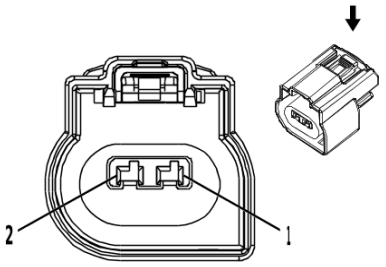
Terminal Part Information

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

B68A Knock Sensor 1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	1716	Knock Sensor Low Reference 1	I	—
2	0.5	VT / GY	496	Knock Sensor 1 Signal	I	—

B68B Knock Sensor 2 (L87)



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

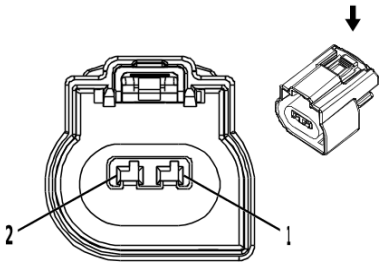
Terminal Part Information

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

B68B Knock Sensor 2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / GY	1876	Knock Sensor 2 Signal	I	—
2	0.75	BK / GY	2303	Knock Sensor Low Reference 2	I	—

B68B Knock Sensor 2 (LT4)



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

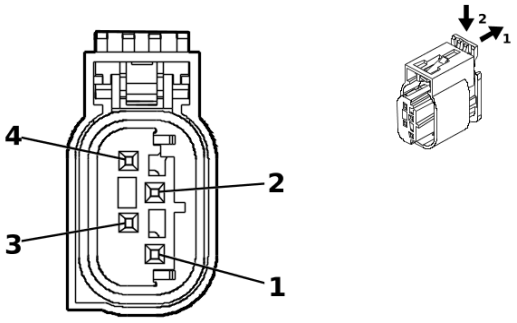
Terminal Part Information

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

B68B Knock Sensor 2 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	2303	Knock Sensor Low Reference 2	I	—
2	0.5	WH / GY	1876	Knock Sensor 2 Signal	I	—

B70 Liftgate Close Switch



5215490

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 13655424
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 MTS Series, Sealed(BK)

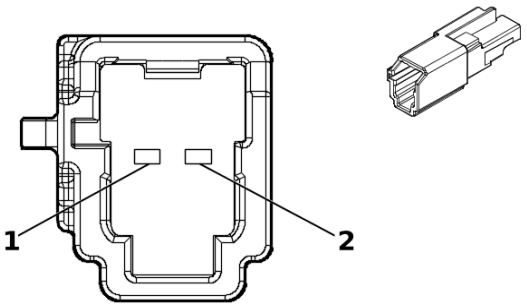
Terminal Part Information

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

B70 Liftgate Close Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / VT	4656	Rear Closure Object Sensor Low Reference	I	—
2	0.35	GY / WH	4658	Rear Closure Switch LED Control	I	—
3	0.35	GN	4657	Rear Closure Switch Signal	I	—
4	—	—	—	Not Occupied	—	—

B71L Liftgate Side Sensor - Left



5355341

Connector Part Information

Harness Type: Liftgate Harness
OEM Connector: 35258943
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(BK)

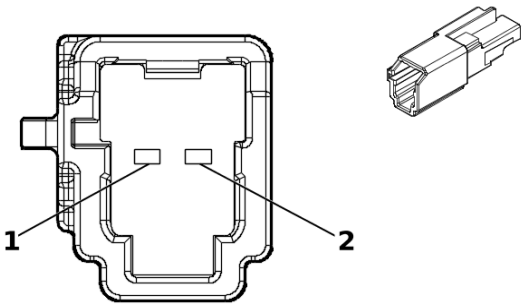
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B71L Liftgate Side Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / BK	4654	Rear Closure Object Sensor Signal	I	—
2	—	WH / BK	4655	Rear Closure Object Sensor 2 Signal	I	—

B71R Liftgate Side Sensor - Right



5355341

Connector Part Information

Harness Type: Liftgate Harness
OEM Connector: 35258943
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(BK)

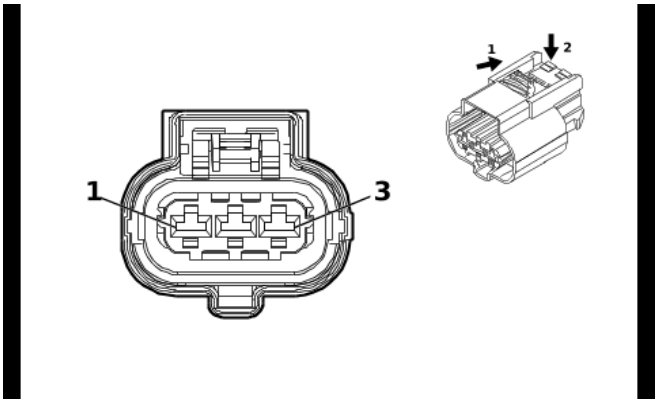
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

B71R Liftgate Side Sensor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / BK	4655	Rear Closure Object Sensor 2 Signal	I	—
2	—	BK / VT	4656	Rear Closure Object Sensor Low Reference	I	—

B74 Manifold Absolute Pressure Sensor (L87)



4900977

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133579
Service Connector: 84815530
Description: 3-Way F 2.8 CTS Series, Sealed(BK)

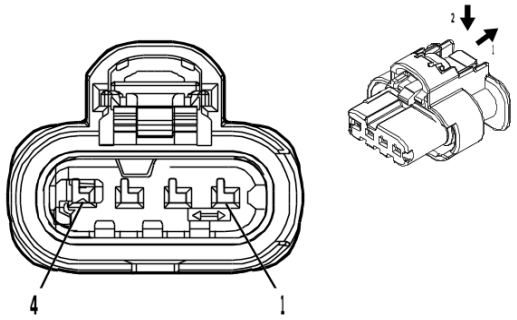
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

B74 Manifold Absolute Pressure Sensor (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
2	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
3	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B75 Mass Airflow Sensor



4934614

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

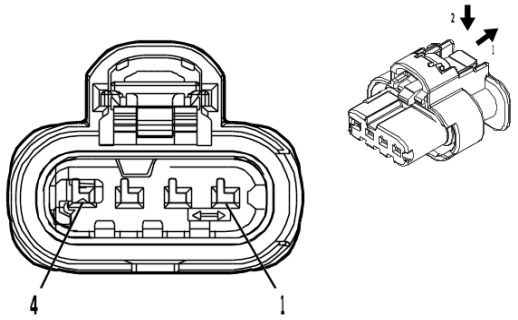
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B75 Mass Airflow Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / WH	492	Mass Air Flow Sensor Signal	I	—
3	0.5	GN	4622	Engine Control Module LIN Bus 2	I	—
4	1	BK / WH	6151	Engine Control Module Ground	I	—

B75C Multifunction Intake Air Sensor



4934614

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

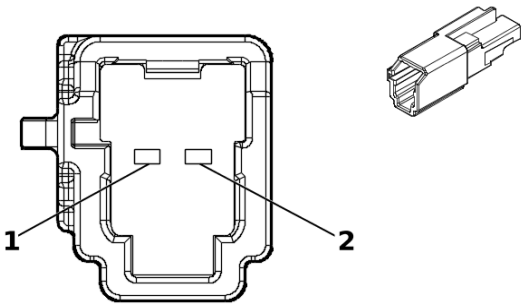
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B75C Multifunction Intake Air Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / WH	492	Mass Air Flow Sensor Signal	I	—
3	0.5	GN	4622	Engine Control Module LIN Bus 2	I	—
4	1	BK / WH	6151	Engine Control Module Ground	I	—

B77LF Radio Volume Compensator Interior Noise Microphone - Left Front



5355341

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35258943
Service Connector: 84815531
Description: 2-Way M 1.2 MCON Series(BK)

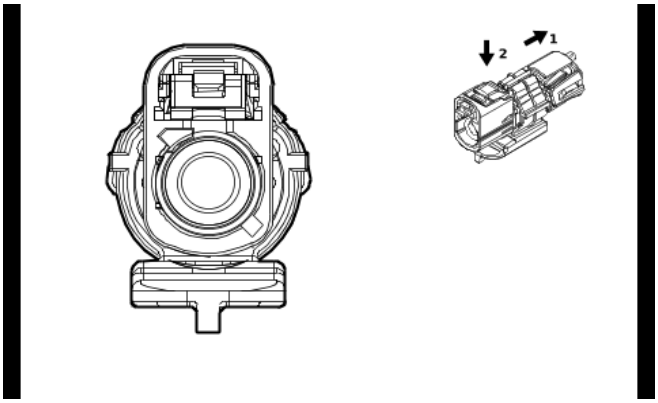
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B77LF Radio Volume Compensator Interior Noise Microphone - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BK	3008	Active Noise Cancellation Microphone 1 Feedback Signal	I	—
2	0.5	GN / BN	3005	Active Noise Cancellation Microphone 1 Signal	I	—

B87 Rearview Driver Information Camera (DRZ&UV2-UVB)



5873717

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness COAX
OEM Connector: 35187053
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type, Sealed(BU)

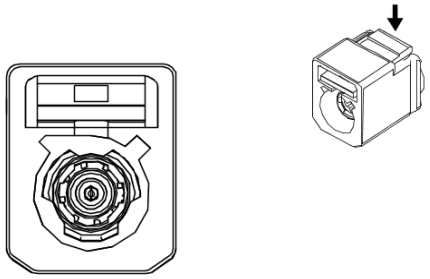
Terminal Part Information

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

B87 Rearview Driver Information Camera (DRZ&UV2-UVB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B87 Rearview Driver Information Camera (UV2)



3293633

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness COAX
OEM Connector: 13519801
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BK)

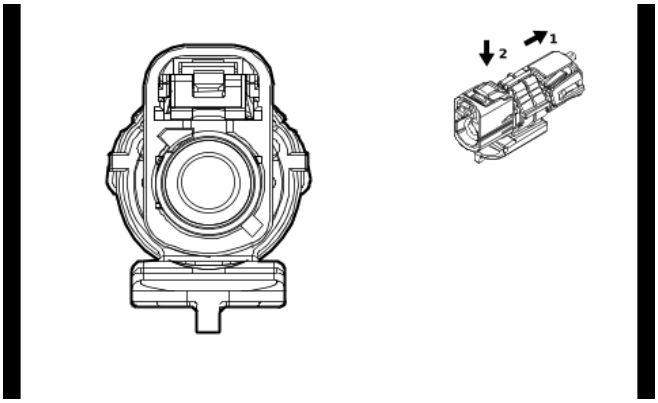
Terminal Part Information

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

B87 Rearview Driver Information Camera (UV2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B87 Rearview Driver Information Camera (UV2-DRZ-UVB)



5873717

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness COAX
OEM Connector: 35187053
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type, Sealed(BU)

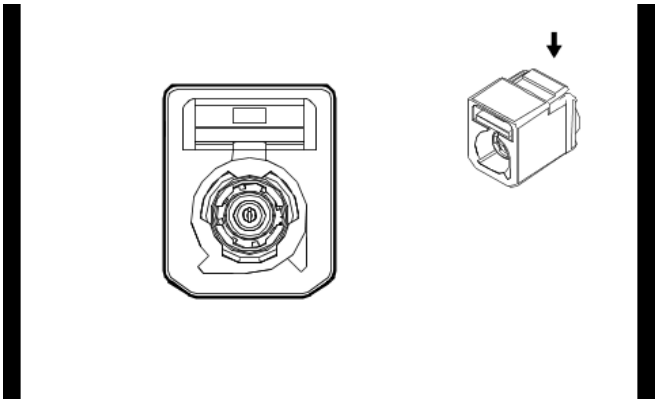
Terminal Part Information

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

B87 Rearview Driver Information Camera (UV2-DRZ-UVB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B87 Rearview Driver Information Camera (UVB)



4895598

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness COAX
OEM Connector: 35082723
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(OG)

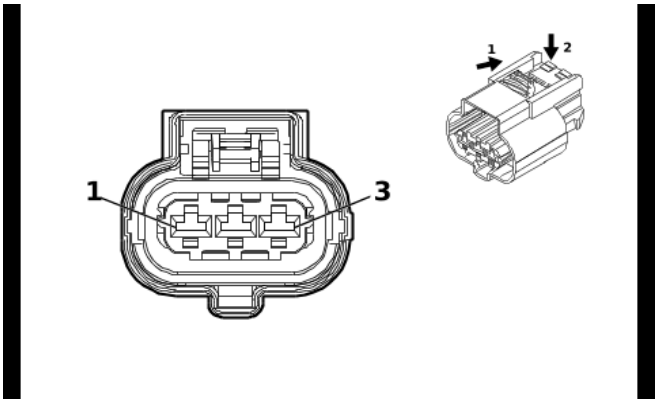
Terminal Part Information

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

B87 Rearview Driver Information Camera (UVB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B105 Supercharger Air Inlet Pressure Sensor (LT4)



4900977

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133579
Service Connector: 84815530
Description: 3-Way F 2.8 CTS Series, Sealed(BK)

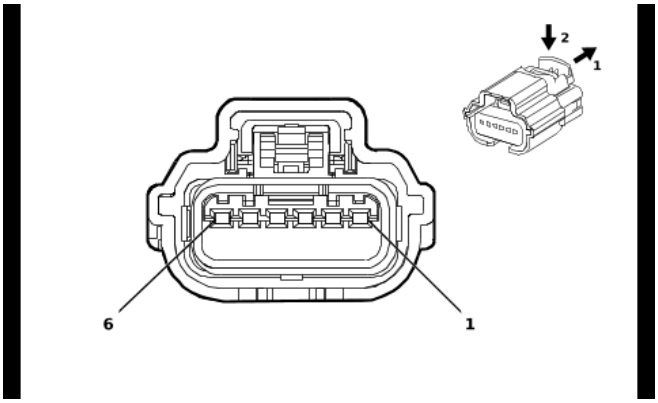
Terminal Part Information

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

B105 Supercharger Air Inlet Pressure Sensor (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.5	BN	7123	Supercharger Inlet Air Pressure Sensor Signal	I	—

B107 Accelerator Pedal Position Sensor



5157678

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35199156
Service Connector: 84773558
Description: 6-Way F 64 Series, Sealed(BK)

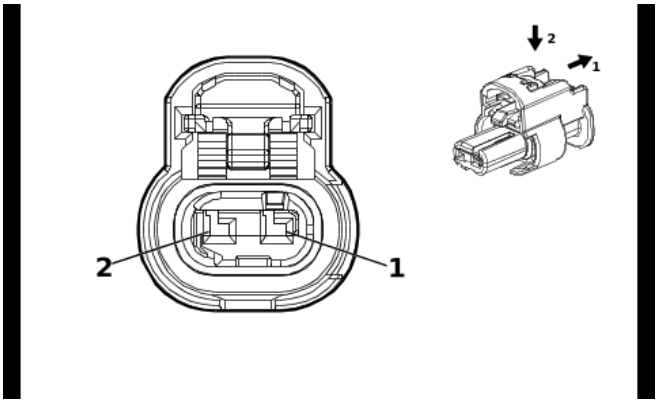
Terminal Part Information

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

B107 Accelerator Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
2	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	I	—
3	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	I	—
4	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	I	—
5	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	I	—
6	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	I	—

B110 Battery Monitor Module X1



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

B110 Battery Monitor Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	2855	Body Control Module LIN Bus 9	II	—
2	0.75	RD / YE	2340	Battery Positive Voltage	I	—

B110 Battery Monitor Module X2

—

Connector Part Information

Harness Type: Negative Cable
OEM Connector: 84335255
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

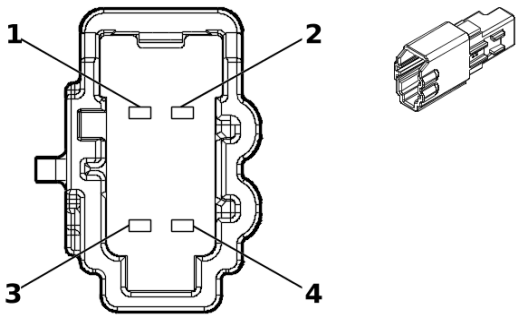
Terminal Part Information

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

B110 Battery Monitor Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	450	Ground	I	—
	—	BK	850	Ground		—

B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor



5360963

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35264699
Service Connector: 84847258
Description: 4-Way M 1.2 MCON Series(BK)

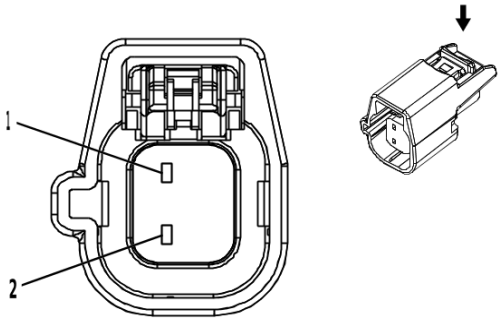
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B117A Windshield Outside Moisture/Ambient Light and Humidity Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / YE	240	Battery Positive Voltage	I	—
2	0.5	GN / WH	4115	Body Control Module LIN Bus 5	I	—
3	0.5	BK / WH	1851	Signal Ground	I	—
4	—	—	—	Not Occupied	—	—

B118 Windshield Washer Solvent Container Level Sensor



3958652

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33113086
Service Connector: 13593220
Description: 2-Way F 1.5 Series, Sealed(L-GY)

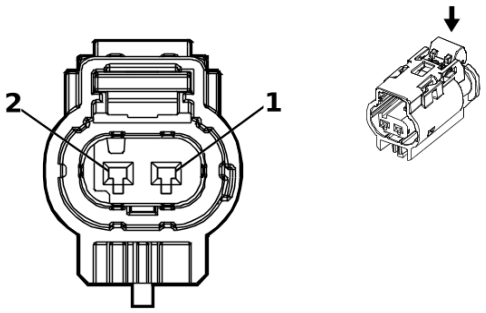
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B118 Windshield Washer Solvent Container Level Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
2	0.75	BK	150	Ground	I	—

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)



5207726

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33180624
Service Connector: 19332628
Description: 2-Way F 1.2 Multilock Series, Sealed(GY)

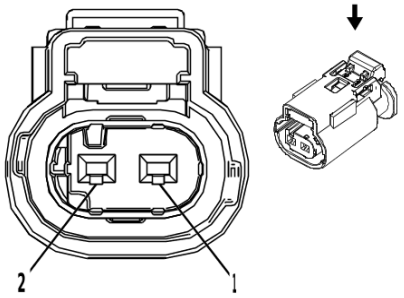
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / BU	6274	Exhaust Gas Recirculation Temperature Sensor Low Reference	I	—
2	0.5	WH / BN	3237	Exhaust Gas Recirculation Temperature Sensor Signal	I	—

B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)



2830969

Connector Part Information

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

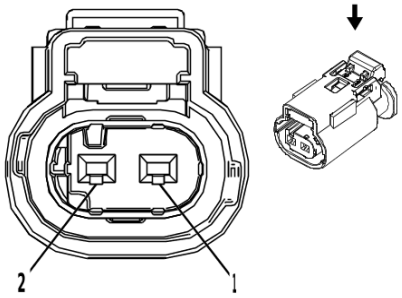
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B130C Exhaust Gas Recirculation Temperature Sensor 3 (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	—

B131A Exhaust Gas Temperature Sensor 1 (LM2)



2830969

Connector Part Information

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

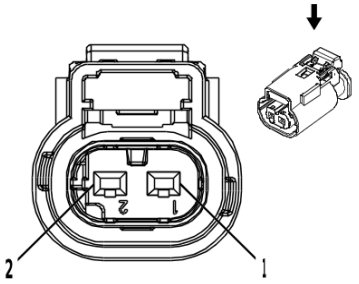
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B131A Exhaust Gas Temperature Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / WH	5277	Exhaust Gas Temperature Sensor 1 Signal	I	—
2	0.5	BK / BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—

B131B Exhaust Gas Temperature Sensor 2 (LM2)



2717037

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed(L-GY)

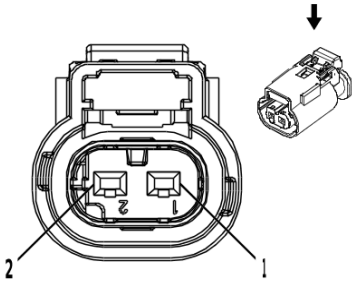
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B131B Exhaust Gas Temperature Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GN	5377	Exhaust Gas Temperature Sensor 2 Signal	I	—
2	0.5	BK / BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—

B131C Exhaust Gas Temperature Sensor 3 (LM2)



2717037

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed(L-GY)

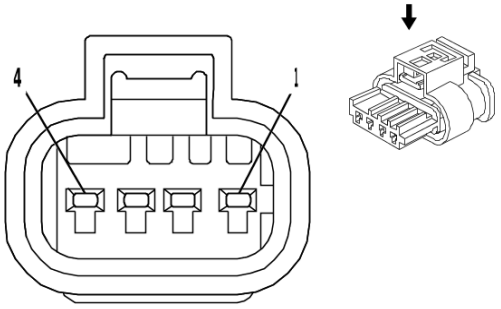
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B131C Exhaust Gas Temperature Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / GN	5378	Exhaust Gas Temperature Sensor 3 Signal	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 Wiring Harness
OEM Connector: 13781047
Service Connector: 13581092
Description: 4-Way F 1.2 Series, Sealed(BK)

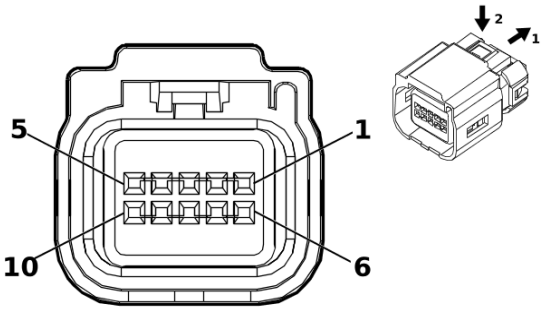
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B136 Exhaust Particulate Matter Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK / WH	6151	Engine Control Module Ground	I	—
2	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
3	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
4	1	VT / GN	4320	Powertrain Sensor Bus Enable	I	—

B137B Power Steering Shaft Torque/Position Sensor



3608469

Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 13817799
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed(GY)

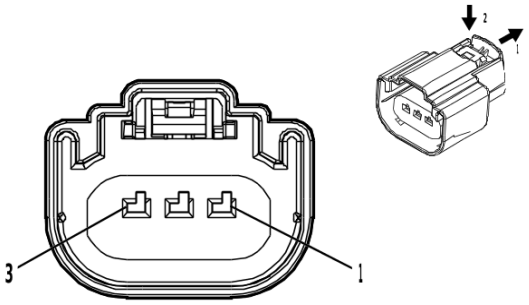
Terminal Part Information

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

B137B Power Steering Shaft Torque/Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	8367	Handwheel Channel A Torque Pressure Sensor 1 SENT Signal	I	—
2	0.5	RD	8366	Handwheel Channel A High Reference	I	—
3	0.5	BK	8370	Handwheel Channel A Low Reference	I	—
4	0.5	WH / RD	8371	Handwheel Channel B High Reference	I	—
5	0.5	WH / BU	8372	Handwheel Channel B Torque Pressure Sensor 1 SENT Signal	I	—
6	0.5	VT	8368	Handwheel Channel A Torque Pressure Sensor 2 SENT Signal	I	—
7	0.5	OG	8369	Handwheel Channel A Angle Position Sensor SENT Signal	I	—
8	0.5	GY	8375	Handwheel Channel B Low Reference	I	—
9	0.5	YE	8374	Handwheel Channel B Angle Position Sensor SENT Signal	I	—
10	0.5	GN	8373	Handwheel Channel B Torque Pressure Sensor 2 SENT Signal	I	—

B139 Transfer Case Two/Four Wheel Drive Actuator Position Sensor (NP0/NQH)



4569745

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

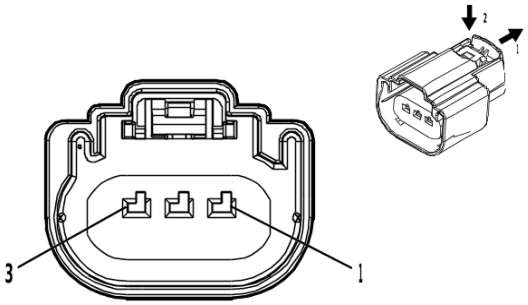
Terminal Part Information

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

B139 Transfer Case Two/Four Wheel Drive Actuator Position Sensor (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	I	—
2	0.5	WH / GN	7479	Rotary Position Sensor Signal	I	—
3	0.5	YE / BK	7478	Gear Position Sensor Low Reference	I	—

B150 Fuel Tank Pressure Sensor (L87/LT4)



4589538

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343864
Service Connector: 84569854
Description: 3-Way F 1.5 MX Series, Sealed(GY)

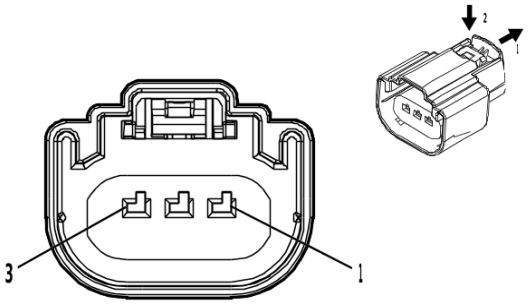
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B150 Fuel Tank Pressure Sensor (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	890	Fuel Tank Pressure Sensor Signal	I	—
2	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
3	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—

B152F Front Suspension Automatic Forward Lighting Position Sensor (-F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

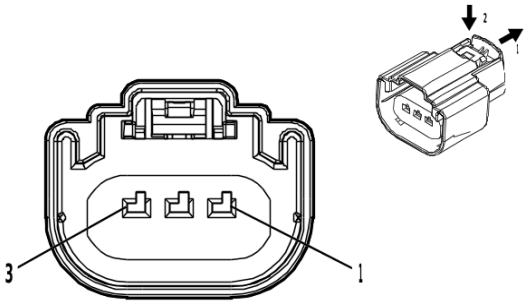
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B152F Front Suspension Automatic Forward Lighting Position Sensor (-F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / RD	7524	Front Vehicle Level Sensor 5V Reference	I	—
2	0.5	BK / GY	7526	Front Axle Level Sensor Low Reference	I	—
3	0.5	BN / WH	7525	Front Vehicle Level Sensor Signal	I	—

B152R Rear Suspension Automatic Forward Lighting Leveling Position Sensor (-F47)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

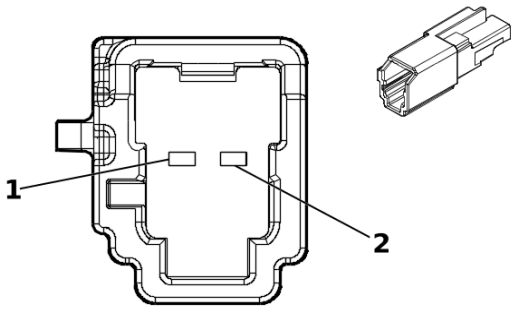
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B152R Rear Suspension Automatic Forward Lighting Leveling Position Sensor (-F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	2165	Vehicle Level Control Position Sensor 5V Reference	I	—
2	0.5	BK / BN	2185	Vehicle Level Control Position Sensor Low Reference	I	—
3	0.5	BN	2184	Vehicle Level Control Position Sensor Signal	I	—

B153CL 3rd Row Seat Belt Buckle - Left



5360948

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-9073
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(GY)

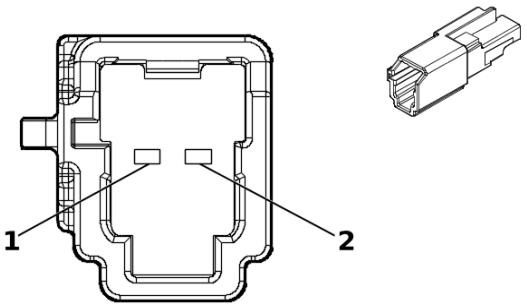
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153CL 3rd Row Seat Belt Buckle - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	GN / OG	3516	3rd Row Left Seat Belt Switch Signal	I	—

B153CM 3rd Row Seat Belt Buckle - Middle



5355341

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-9070
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(BK)

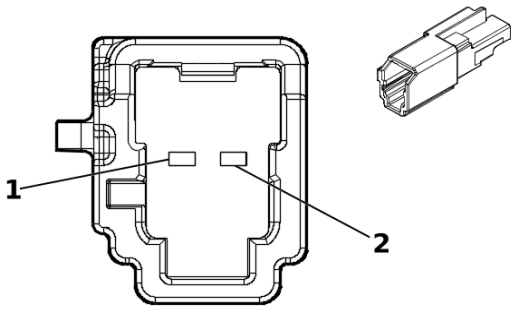
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153CM 3rd Row Seat Belt Buckle - Middle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	OG / GN	3700	3rd Row Center Seat Belt Switch Signal	I	—

B153CR 3rd Row Seat Belt Buckle - Right



5360948

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-9073
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(GY)

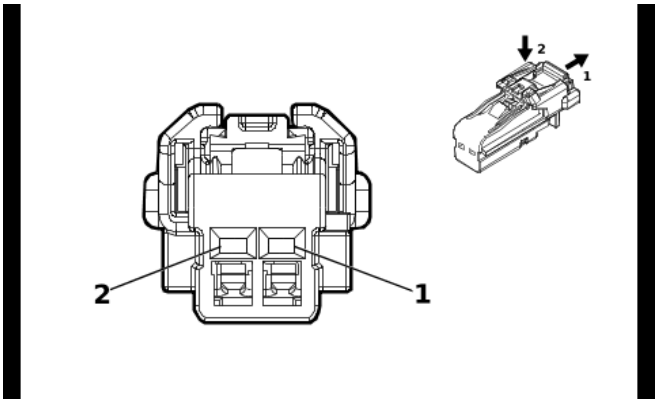
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153CR 3rd Row Seat Belt Buckle - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	VT / OG	3517	3rd Row Right Seat Belt Switch Signal	I	—

B153D Front Seat Belt Buckle - Driver



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

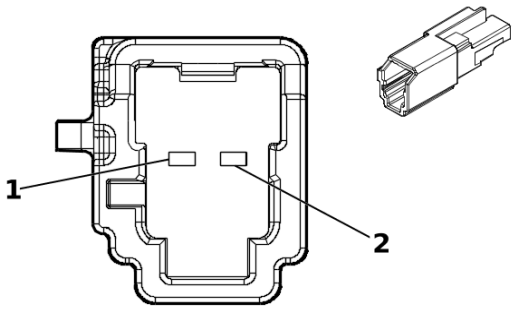
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B153D Front Seat Belt Buckle - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	OG / GY	2652	Driver Seat Belt Sensor Signal	I	—

B153LR Rear Seat Belt Buckle - Left



5360948

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-9073
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(GY)

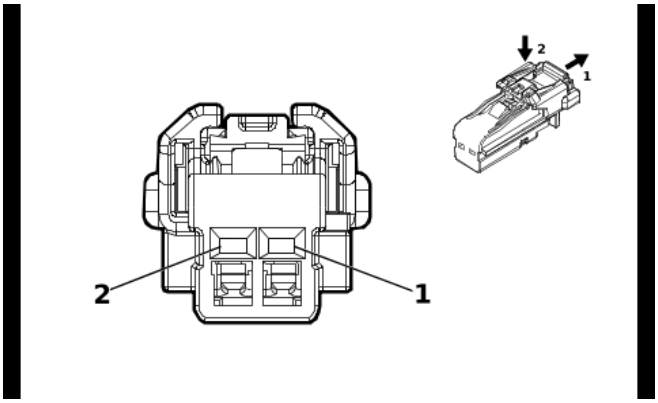
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153LR Rear Seat Belt Buckle - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	YE / OG	5161	Left Rear Seat Belt Switch Signal	I	—

B153P Front Seat Belt Buckle - Passenger



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

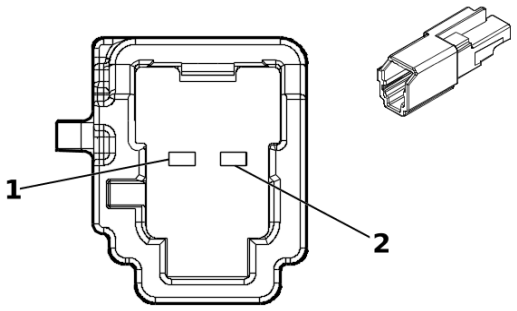
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B153P Front Seat Belt Buckle - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	OG / VT	1362	Passenger Seat Belt Switch Signal	I	—

B153RM Rear Center Seat Belt Buckle



5360948

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-9073
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(GY)

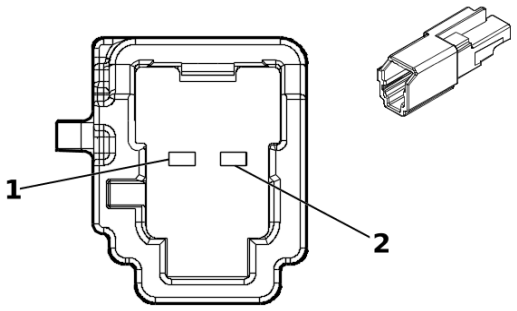
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153RM Rear Center Seat Belt Buckle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	BU / OG	5163	Rear Center Seat Belt Switch Signal	I	—

B153RR Rear Seat Belt Buckle - Right



5360948

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-9073
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series(GY)

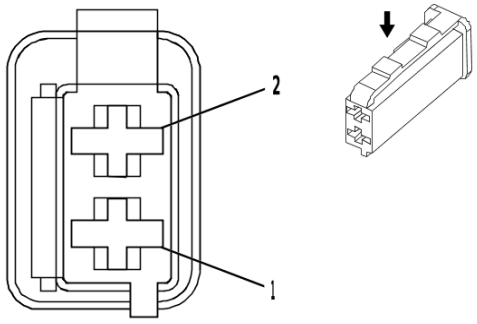
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

B153RR Rear Seat Belt Buckle - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	BN / OG	5162	Right Rear Seat Belt Switch Signal	I	—

B159BL Body Side Rear Window Glass Breakage Sensor - Left (UTV)



2339593

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13670097
Service Connector: 13580951
Description: 2-Way F 1.6 Timer Series(BK)

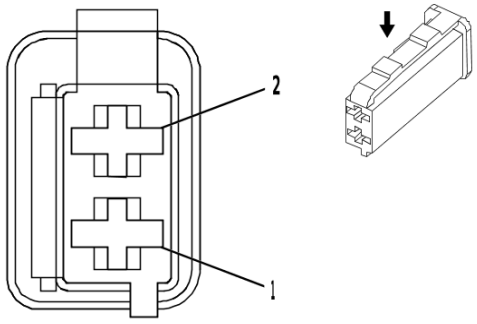
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B159BL Body Side Rear Window Glass Breakage Sensor - Left (UTV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / VT	7597	Glass Breakage Sensor Signal	I	—
2	0.35	VT / BU	7598	Glass Breakage Sensor 2 Signal	I	—

B159BR Body Side Rear Window Glass Breakage Sensor - Right (UTV)



2339593

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13670097
Service Connector: 13580951
Description: 2-Way F 1.6 Timer Series(BK)

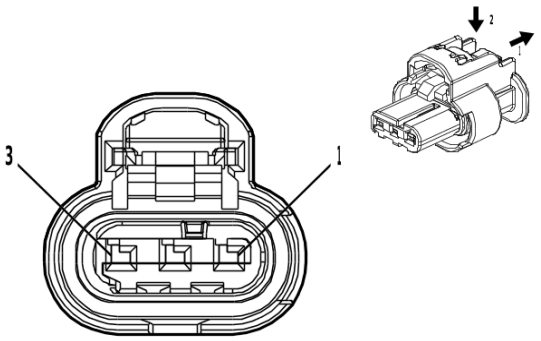
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B159BR Body Side Rear Window Glass Breakage Sensor - Right (UTV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BK	2930	Glass Breakage Sensor Supply Voltage	I	—
2	0.5	BU / VT	7597	Glass Breakage Sensor Signal	I	—

B161LF Electronic Suspension Wheel Front Vertical Accelerometer - Left (Z95)



4778903

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

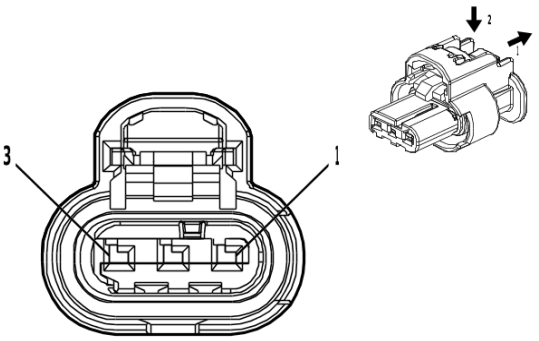
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B161LF Electronic Suspension Wheel Front Vertical Accelerometer - Left (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / RD	1817	Left Front Vertical Suspension Acceleration Sensor Voltage Reference	I	—
2	0.5	BK / BN	1099	Left Front Vertical Suspension Acceleration Sensor Low Reference	I	—
3	0.5	WH	1100	Left Front Vertical Suspension Acceleration Sensor Signal	I	—

B161RF Electronic Suspension Wheel Front Vertical Accelerometer - Right (Z95)



4778903

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B161RF Electronic Suspension Wheel Front Vertical Accelerometer - Right (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	1819	Right Front Vertical Suspension Acceleration Sensor Voltage Reference	I	—
2	0.5	BK / GN	1105	Right Front Vertical Suspension Acceleration Sensor Low Reference	I	—
3	0.5	WH	1106	Right Front Vertical Suspension Acceleration Sensor Signal	I	—

B162LR Electronic Suspension Rear Vertical Accelerometer - Left (Z95)

—

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 84237878
Service Connector: Service by Harness - See Part Catalog
Description: Accelerometer

Terminal Part Information

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

B162LR Electronic Suspension Rear Vertical Accelerometer - Left (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / RD	1818	Left Rear Vertical Suspension Acceleration Sensor Voltage Reference	I	—
2	0.75	BK / VT	1833	Left Rear Vertical Suspension Acceleration Sensor Low Reference	I	—
3	0.75	YE / BN	1103	Left Rear Vertical Suspension Acceleration Sensor Signal	I	—

B162RR Electronic Suspension Rear Vertical Accelerometer - Right (Z95)

—

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 84237879
Service Connector: Service by Harness - See Part Catalog
Description: Accelerometer

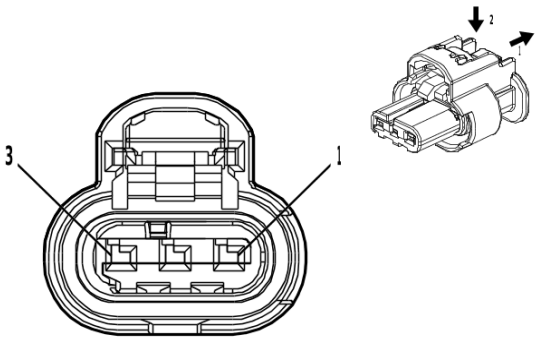
Terminal Part Information

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

B162RR Electronic Suspension Rear Vertical Accelerometer - Right (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / RD	1820	Right Rear Vertical Suspension Acceleration Sensor Voltage Reference	I	—
2	0.75	BK / BU	1108	Right Rear Vertical Suspension Acceleration Sensor Low Reference	I	—
3	0.75	YE / BU	1109	Right Rear Vertical Suspension Acceleration Sensor Signal	I	—

B166LF Advanced Parking Assist Alarm Sensor - Left Front (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

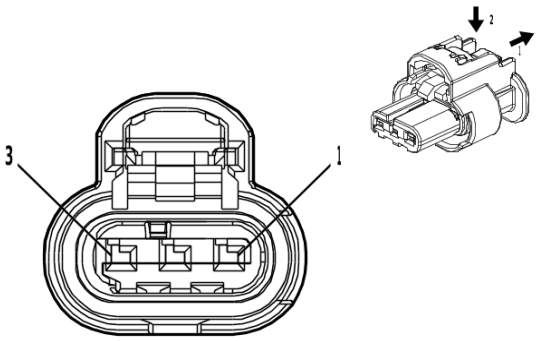
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B166LF Advanced Parking Assist Alarm Sensor - Left Front (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	GY	3154	Left Front Advanced Parking Assist Side Object Sensor Signal	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B166LR Advanced Parking Assist Alarm Sensor - Left Rear (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

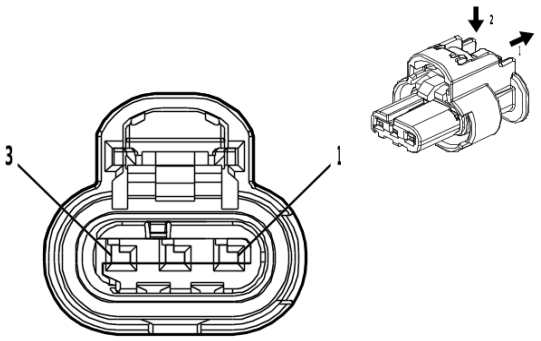
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B166LR Advanced Parking Assist Alarm Sensor - Left Rear (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	GN	3156	Left Rear Advanced Parking Assist Side Object Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B166RF Advanced Parking Assist Alarm Sensor - Right Front (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

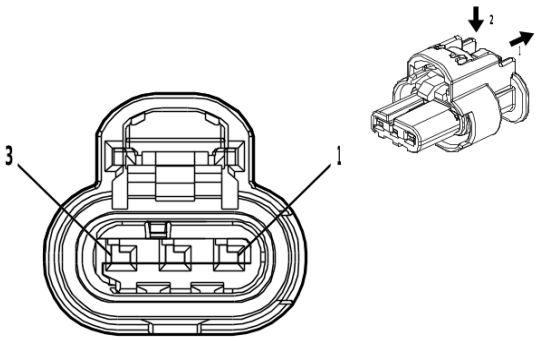
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B166RF Advanced Parking Assist Alarm Sensor - Right Front (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	GN	3155	Right Front Advanced Parking Assist Side Object Sensor Signal	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B166RR Advanced Parking Assist Alarm Sensor - Right Rear (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

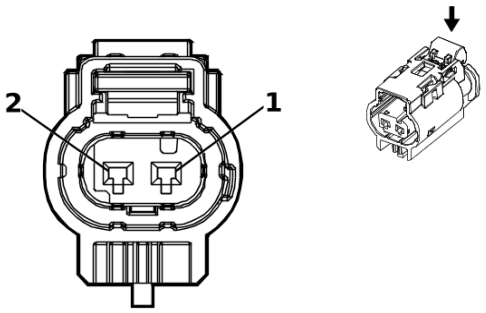
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B166RR Advanced Parking Assist Alarm Sensor - Right Rear (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	BU	3157	Right Rear Advanced Parking Assist Side Object Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B172LF Front Disc Brake Pad Wear Sensor - Left



3747581

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

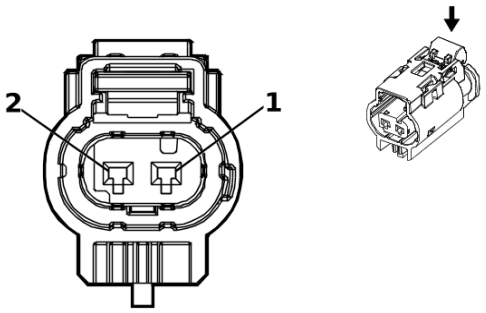
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

B172LF Front Disc Brake Pad Wear Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	1602	Front Brake Pad Wear Sensor Signal	II	—
2	0.5	BK	2050	Ground	I	—

B172LR Rear Disc Brake Pad Wear Sensor - Left



3747581

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 10094234
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

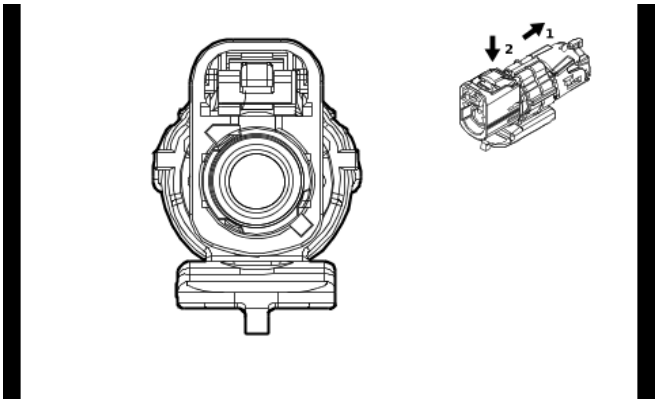
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B172LR Rear Disc Brake Pad Wear Sensor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / YE	1616	Rear Brake Pad Wear Sensor Signal	I	—
2	0.75	BK	2050	Ground	I	—

B174G Front View Driver Information Camera - Grille



6049855

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness COAX
OEM Connector: 35399254
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type, Sealed(BK)

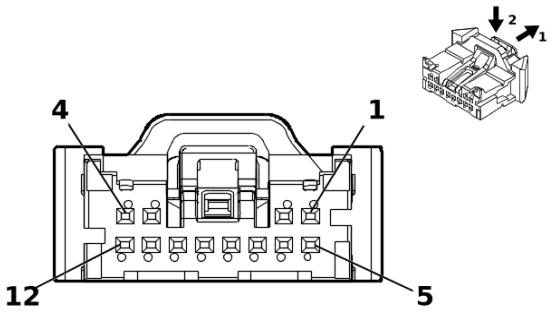
Terminal Part Information

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

B174G Front View Driver Information Camera - Grille

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Front Vision Camera 1 Coaxial Video Signal	I	—

B174W Front View Camera - Windshield X1



5360826

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068239
Service Connector: 13529935
Description: 12-Way F 050 CTS Series(BK)

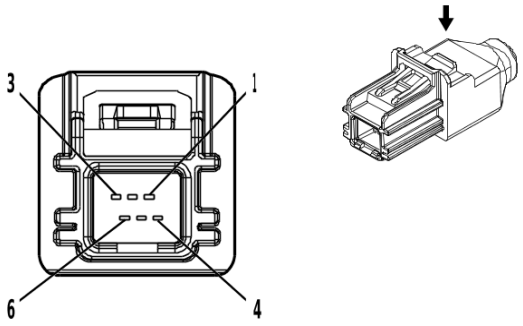
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84944580	EL-35616-58 (BK)	EL-38125-58

B174W Front View Camera - Windshield X1

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 / YE	240	Battery Positive Voltage	I	—
4	—	—	—	Not Occupied	—	—
5	0.35 0.35	BU / GY BU / YE	4105 4979	AUTOSAR CAN Bus [+] 8 Serial Data AUTOSAR CAN Bus [+] 2 Serial Data	I I	(UGN/ UVZ) UHY
6	0.35 0.35	WH / GY WH	4104 4978	AUTOSAR CAN Bus [-] 8 Serial Data AUTOSAR CAN Bus [-] 2 Serial Data	I I	(UGN/ UVZ) UHY
7	0.35 0.35	BU / GY BU / YE	4105 4979	AUTOSAR CAN Bus [+] 8 Serial Data AUTOSAR CAN Bus [+] 2 Serial Data	I I	(UGN/ UVZ) UHY
8	0.35 0.35	WH / GY WH	4104 4978	AUTOSAR CAN Bus [-] 8 Serial Data AUTOSAR CAN Bus [-] 2 Serial Data	I I	(UGN/ UVZ) UHY
9 - 12	—	—	—	Not Occupied	—	—

B174W Front View Camera - Windshield X2



4806625

Connector Part Information

Harness Type: Headlining Trim Panel Harness LVDS
OEM Connector: 35311049
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(BK)

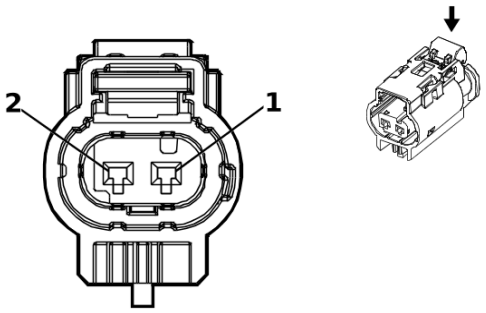
Terminal Part Information

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

B174W Front View Camera - Windshield X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

B193A Charge Air Cooler Air Temperature Sensor - Inlet (LM2)



3747581

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

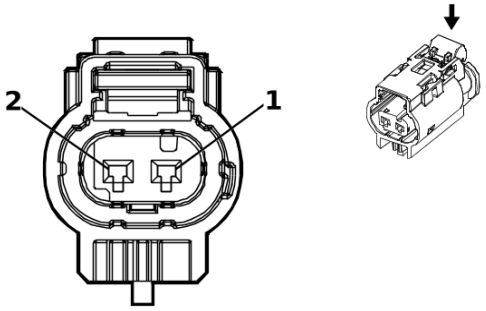
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B193A Charge Air Cooler Air Temperature Sensor - Inlet (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—
2	0.5	GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—

B193B Charge Air Cooler Air Temperature Sensor - Outlet (LM2)



3747581

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33226772
Service Connector: 84727362
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

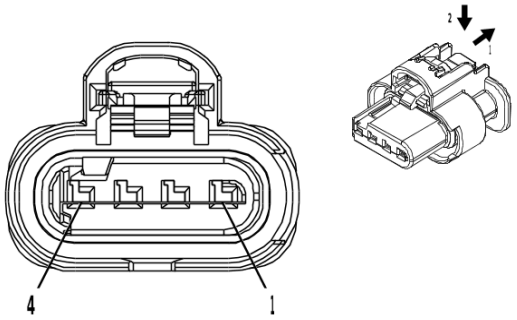
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B193B Charge Air Cooler Air Temperature Sensor - Outlet (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—
2	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—

B195A Nitrogen Oxides Sensor 1 (LM2)



4210809

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33390897
Service Connector: 85518225
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

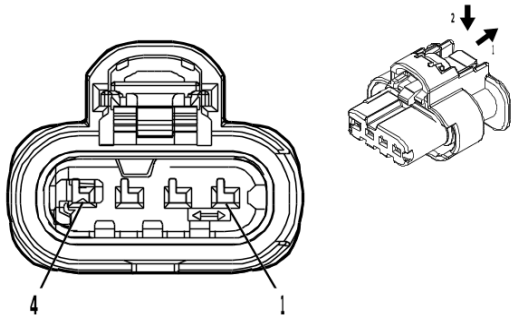
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B195A Nitrogen Oxides Sensor 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
2	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
3	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
4	1	BK / WH	6151	Engine Control Module Ground	I	—

B195B Nitrogen Oxides Sensor 2 (LM2)



4934614

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33367416
Service Connector: 85519071
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

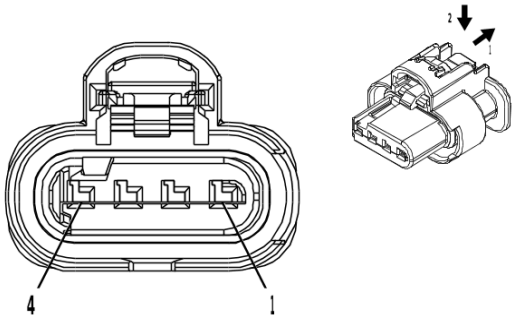
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B195B Nitrogen Oxides Sensor 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
2	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
3	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
4	1	BK / WH	6151	Engine Control Module Ground	I	—

B195C Nitrogen Oxides Sensor 3 (LM2)



4210809

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33390897
Service Connector: 85518225
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

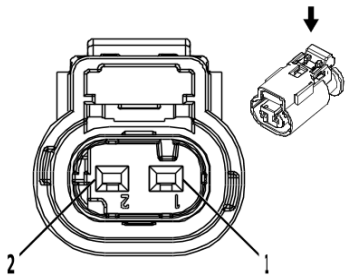
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B195C Nitrogen Oxides Sensor 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
2	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
3	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
4	1	BK / WH	6151	Engine Control Module Ground	I	—

B203 Radiator Coolant Temperature Sensor (LM2)



2717066

Connector Part Information

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

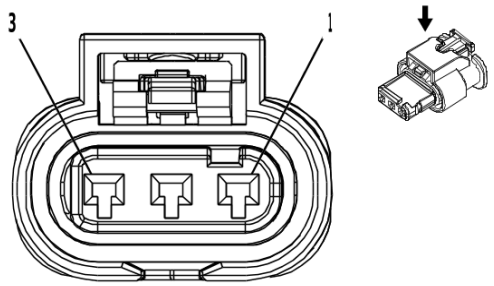
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B203 Radiator Coolant Temperature Sensor (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	—

B212 Reductant Tank Fluid Sensor (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)

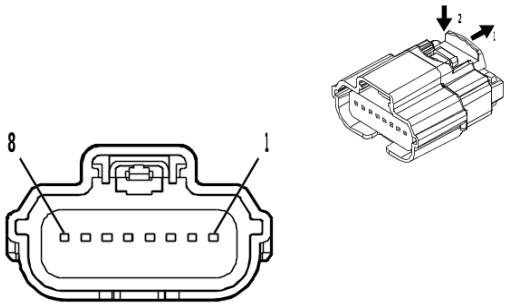
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B212 Reductant Tank Fluid Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT	7290	Diesel Exhaust Fluid Sensor Voltage Reference 1	I	—
2	—	YE / GN	7284	Diesel Exhaust Fluid Liquid Quality Temperature Signal	I	—
3	—	BK / YE	8434	Diesel Exhaust Fluid Sensor Low Reference	I	—

B218L Side Obstacle Detection Control Module - Left (UKC/UKV)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

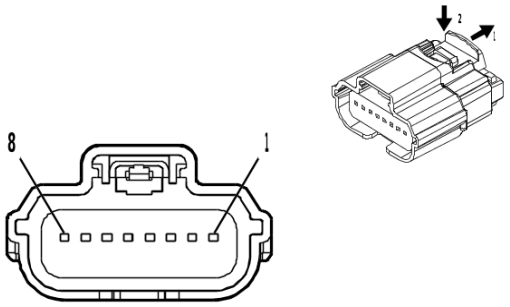
Terminal Part Information

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

B218L Side Obstacle Detection Control Module - Left (UKC/UKV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	4087	Private Serial Data Side Obstacle Detection CAN Bus [-] Serial Data	I	—
2	0.5	BU / VT	4088	Private Serial Data Side Obstacle Detection CAN Bus [+] Serial Data	I	—
3	0.5	BK	1450	Ground	I	—
4	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
5	0.5	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
6	0.5	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
7	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
8	0.5	RD / BN	4940	Battery Positive Voltage	I	—

B218R Side Obstacle Detection Control Module - Right (UKC/UKV)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200888
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

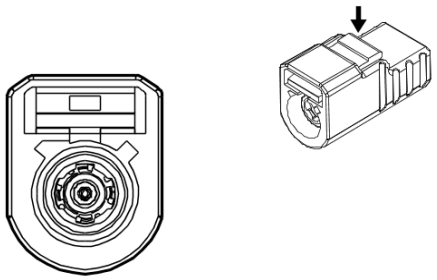
Terminal Part Information

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

B218R Side Obstacle Detection Control Module - Right (UKC/UKV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	4087	Private Serial Data Side Obstacle Detection CAN Bus [-] Serial Data	I	—
2	0.5	BU / VT	4088	Private Serial Data Side Obstacle Detection CAN Bus [+] Serial Data	I	—
3	0.5	BK	1450	Ground	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
6	0.5	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	RD / BN	4940	Battery Positive Voltage	I	—

B225L Side View Driver Information Camera - Left



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)

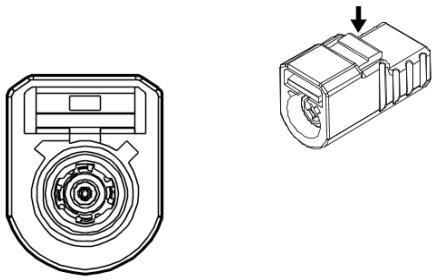
Terminal Part Information

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

B225L Side View Driver Information Camera - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B225R Side View Driver Information Camera - Right



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)

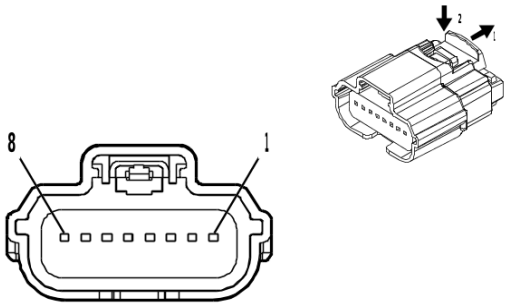
Terminal Part Information

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

B225R Side View Driver Information Camera - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

B233B Forward Range Radar Sensor - Long Range (LT4&UGN/UKL)



4708234

Connector Part Information

Harness Type: Forward Range Radar Sensor Wiring Harness
OEM Connector: 35211138
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

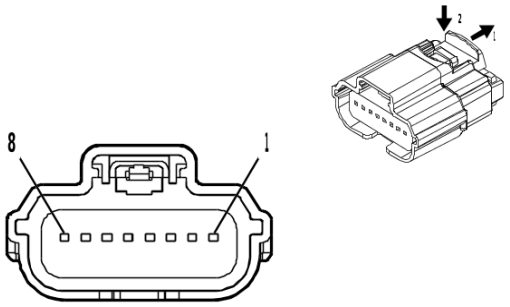
Terminal Part Information

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

B233B Forward Range Radar Sensor - Long Range (LT4&UGN/UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
4	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
5	0.5	RD / GN	3140	Battery Positive Voltage	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK / WH	251	Signal Ground	I	—

B233B Forward Range Radar Sensor - Long Range (UGN/UKL-LT4)



4708234

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35211138
Service Connector: 84677313
Description: 8-Way F 64 Series, Sealed(BK)

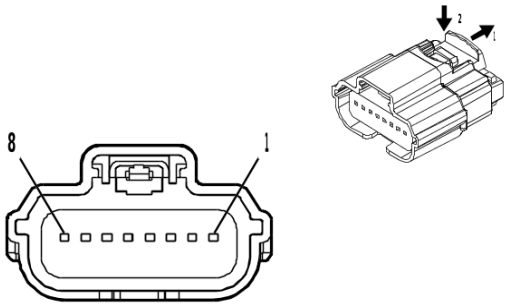
Terminal Part Information

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

B233B Forward Range Radar Sensor - Long Range (UGN/UKL-LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
4	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
5	0.5	RD / GN	3140	Battery Positive Voltage	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK / WH	251	Signal Ground	I	—

B233LF Short Range Radar Sensor - Left Front (UKL/UVZ)



4708234

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 31404-9111
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

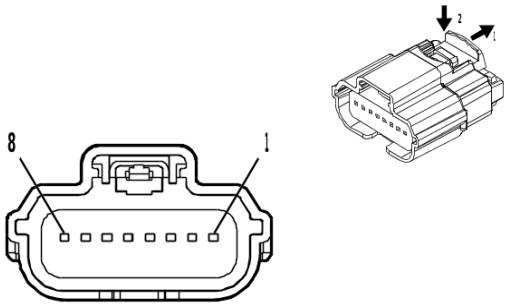
Terminal Part Information

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

B233LF Short Range Radar Sensor - Left Front (UKL/UVZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	251	Signal Ground	I	—
2	0.5	BK / WH	251	Signal Ground	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	RD / GN	3140	Battery Positive Voltage	I	—
5	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
8	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—

B233LR Short Range Radar Rear Sensor - Left (UKL/UVZ)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200889
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

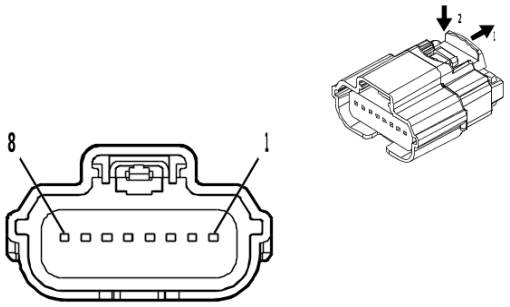
Terminal Part Information

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

B233LR Short Range Radar Rear Sensor - Left (UKL/UVZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.75	RD / GN	3140	Battery Positive Voltage	I	—
5	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
8	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—

B233RF Short Range Radar Sensor - Right Front (UKL/UVZ)



4708234

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 31404-9171
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

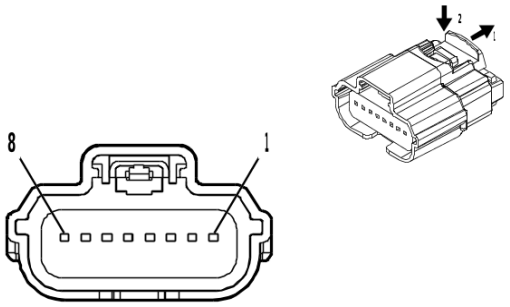
Terminal Part Information

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

B233RF Short Range Radar Sensor - Right Front (UKL/UVZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	251	Signal Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / WH	251	Signal Ground	I	—
4	0.5	RD / GN	3140	Battery Positive Voltage	I	—
5	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
8	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—

B233RR Short Range Radar Rear Sensor - Right (UKL)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

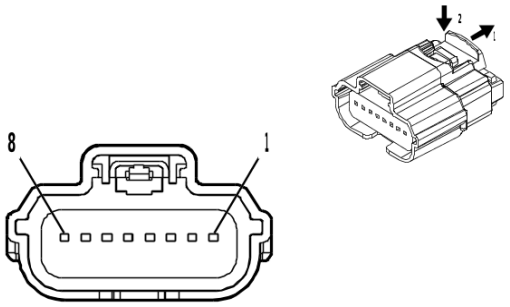
Terminal Part Information

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

B233RR Short Range Radar Rear Sensor - Right (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2	0.5	BK	1450	Ground	I	—
3	0.5	BK	1450	Ground	I	—
4	0.75	RD / GN	3140	Battery Positive Voltage	I	—
5	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
8	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—

B233RR Short Range Radar Rear Sensor - Right (UKL/UVZ)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35192853
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

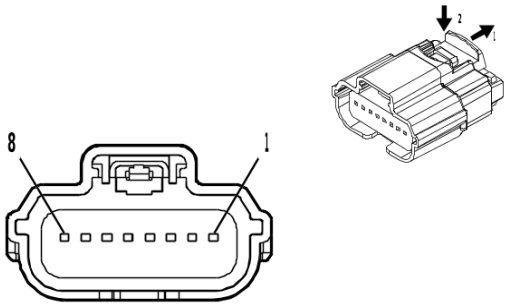
Terminal Part Information

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

B233RR Short Range Radar Rear Sensor - Right (UKL/UVZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2	0.5	BK	1450	Ground	I	—
3	0.5	BK	1450	Ground	I	—
4	0.75	RD / GN	3140	Battery Positive Voltage	I	—
5	0.5	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.5	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.5 0.35	WH / GY WH / GY	4104 4104	AUTOSAR CAN Bus [-] 8 Serial Data AUTOSAR CAN Bus [-] 8 Serial Data	I I	(UVZ- UKL) UKL
8	0.5 0.35	BU / GY BU / GY	4105 4105	AUTOSAR CAN Bus [+] 8 Serial Data AUTOSAR CAN Bus [+] 8 Serial Data	I I	(UVZ- UKL) UKL

B233SL Short Range Radar Rear Side Sensor - Left (UKL)



4708234

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 35200889
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

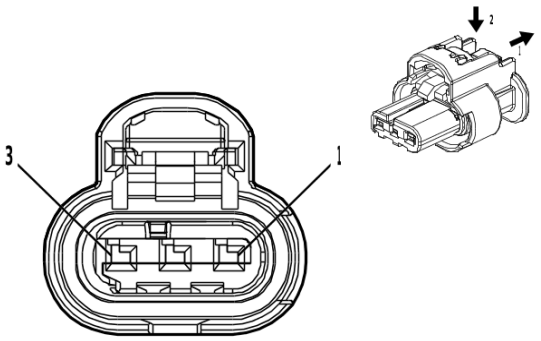
Terminal Part Information

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

B233SL Short Range Radar Rear Side Sensor - Left (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.75	RD / GN	3140	Battery Positive Voltage	I	—
5	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
7	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
8	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—

B271 Engine Metal Temperature Sensor (LM2)



4994602

Connector Part Information

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

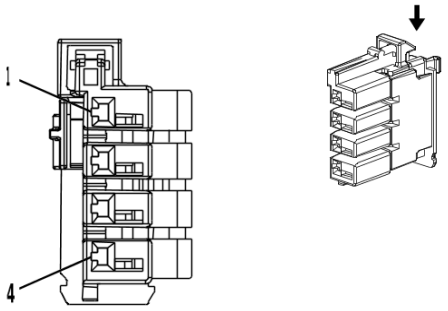
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B271 Engine Metal Temperature Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
2	0.5	GN / YE	37	Engine Block Temperature Sensor Signal	I	—
3	0.5	BN / YE	1372	Engine Metal Temperature Sensor Signal 2	I	—

B275A Rear Closure Hands Free Sensor - Upper



4364148

Connector Part Information

Harness Type: Transmission Harness
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series(BN)

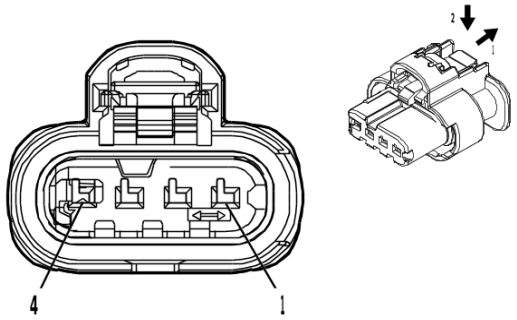
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B275A Rear Closure Hands Free Sensor - Upper

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	BK / BU	4897	Hands Free Closure Release Sensor Low Reference 1	I	—
4	—	GY / VT	4898	Hands-Free Liftgate Sensor Signal 1	I	—

B275B Rear Closure Hands Free Sensor - Lower



4934614

Connector Part Information

Harness Type: Rear Closure Hands Free Module
OEM Connector: 13514087
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

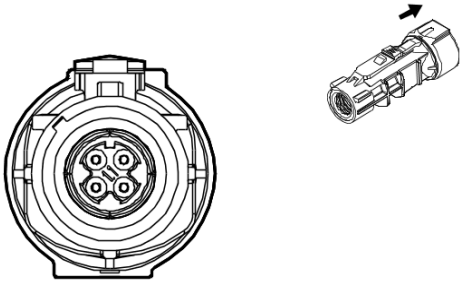
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B275B Rear Closure Hands Free Sensor - Lower

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / GY	4900	Hands-Free Liftgate Sensor Signal 2	I	—
2	—	BK / YE	4899	Hands Free Closure Release Sensor Low Reference 2	I	—
3 - 4	—	—	—	Not Occupied	—	—

B276 Night Vision Camera (UV3)



4650424

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness LVDS
OEM Connector: 13591409
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way F High Speed Data Series, Sealed(BK)

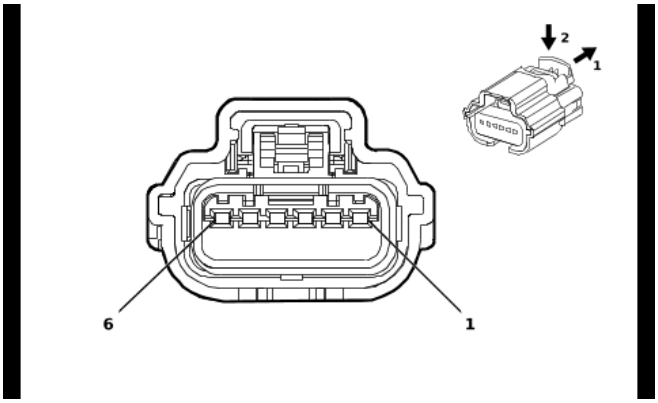
Terminal Part Information

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

B276 Night Vision Camera (UV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Night Vision Signal	I	—

B284 Vehicle Dynamics Sensor (UKL)



5157678

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35199156
Service Connector: 84773558
Description: 6-Way F 64 Series, Sealed(BK)

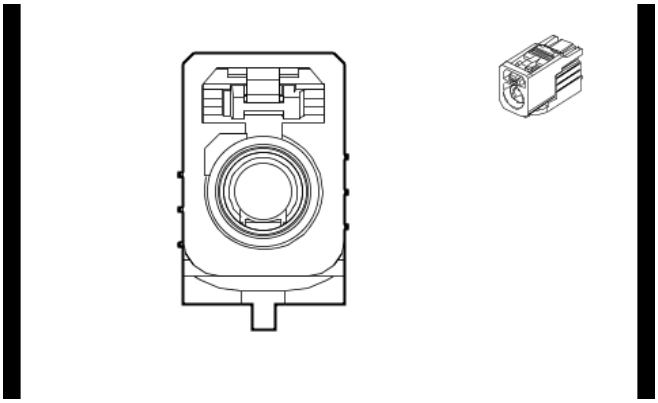
Terminal Part Information

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

B284 Vehicle Dynamics Sensor (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / GY	8978	Inertial Sensor Supply Voltage	I	—
2	0.35	GN	8977	Private Serial Data Active Safety CAN Bus [+] Serial Data	I	—
3	0.35	BU	8976	Private Serial Data Active Safety CAN Bus [-] Serial Data	I	—
4	0.75	BK	9000	—	I	—
5	0.75	BK	9000	—	I	—
6	0.35	BK / WH	1351	Signal Ground	I	—

B292 Driver Monitoring Camera (UKL)



5633912

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33351016
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(GN)

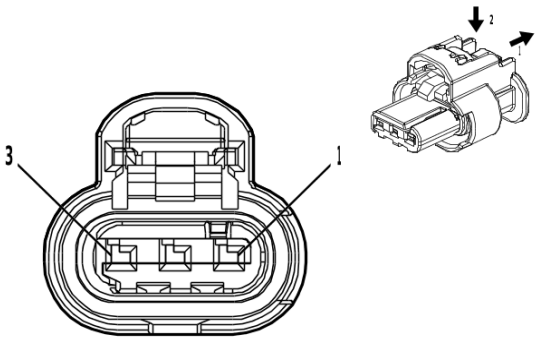
Terminal Part Information

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

B292 Driver Monitoring Camera (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

B306A Parking Assist Alarm Sensor - Front Left Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

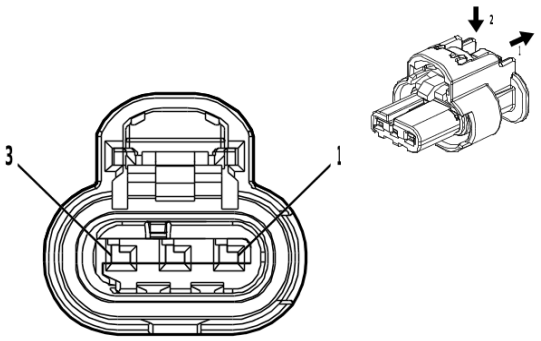
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306A Parking Assist Alarm Sensor - Front Left Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	VT / WH	5215	Left Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306A Parking Assist Alarm Sensor - Front Left Outer (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

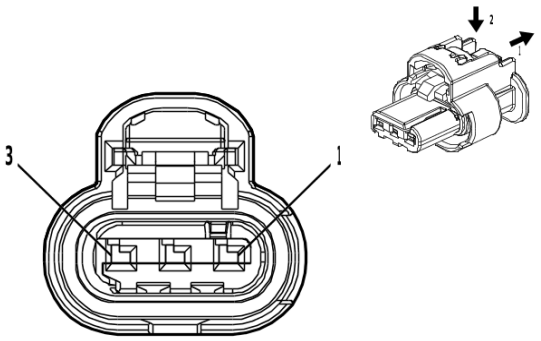
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306A Parking Assist Alarm Sensor - Front Left Outer (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	VT / WH	5215	Left Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306B Parking Assist Alarm Sensor - Front Left Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

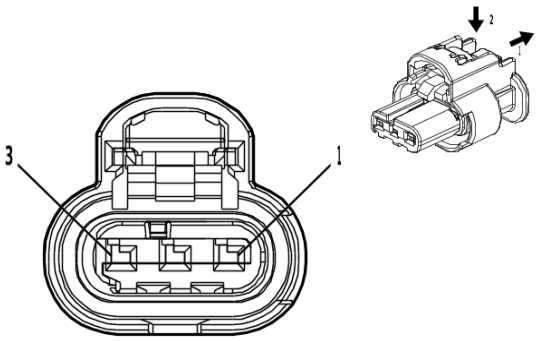
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306B Parking Assist Alarm Sensor - Front Left Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	YE / GY	5216	Left Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306B Parking Assist Alarm Sensor - Front Left Middle (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

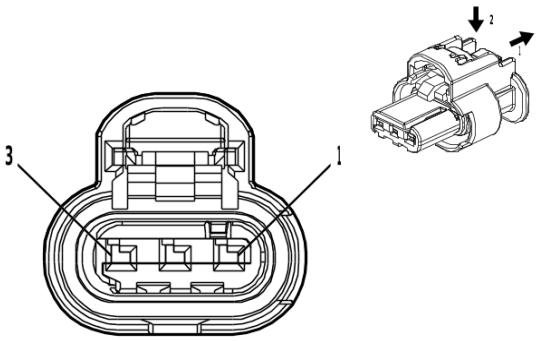
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306B Parking Assist Alarm Sensor - Front Left Middle (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	YE / GY	5216	Left Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306C Parking Assist Alarm Sensor - Front Right Middle (UD5)



4581126

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

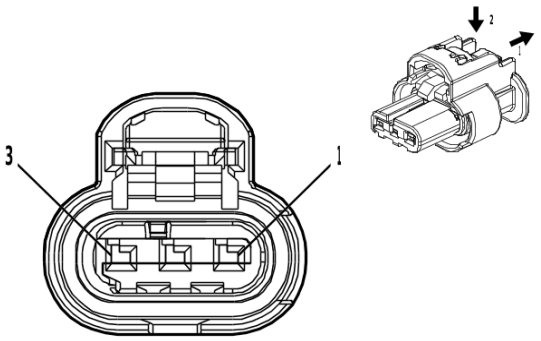
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306C Parking Assist Alarm Sensor - Front Right Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	VT / GY	5218	Right Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306C Parking Assist Alarm Sensor - Front Right Middle (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

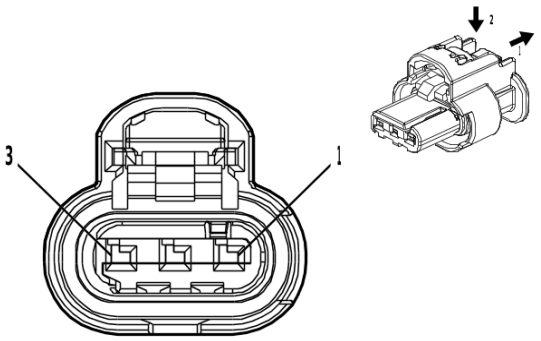
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306C Parking Assist Alarm Sensor - Front Right Middle (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	VT / GY	5218	Right Front Middle Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306D Parking Assist Alarm Sensor - Front Right Outer (UD5)



4581126

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

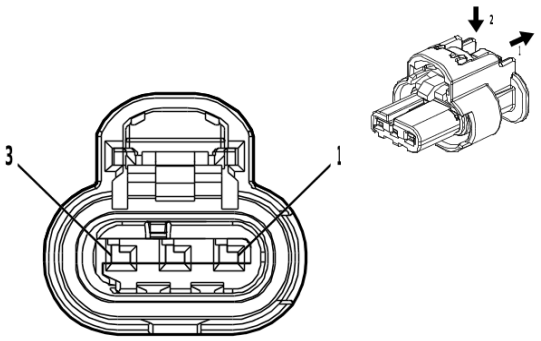
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306D Parking Assist Alarm Sensor - Front Right Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	WH / GY	5217	Right Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306D Parking Assist Alarm Sensor - Front Right Outer (UKZ)



4994602

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296695-3
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

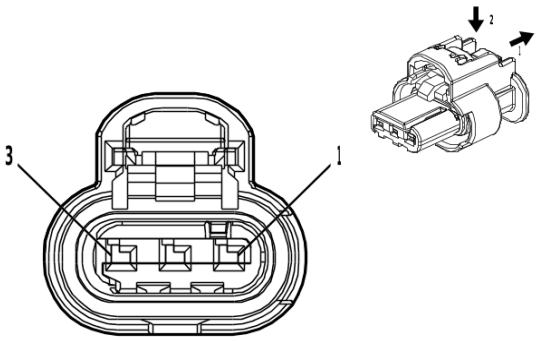
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306D Parking Assist Alarm Sensor - Front Right Outer (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6581	Front Parking Assist Display Control	I	—
2	0.5	WH / GY	5217	Right Front Outer Parking Assist Sensor	I	—
3	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

B306E Parking Assist Alarm Sensor - Rear Left Outer (UD5)



4581126

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

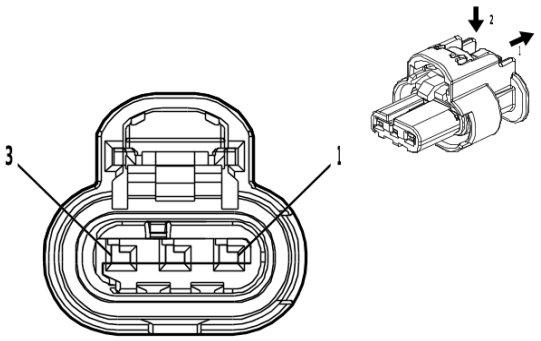
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306E Parking Assist Alarm Sensor - Rear Left Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306E Parking Assist Alarm Sensor - Rear Left Outer (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

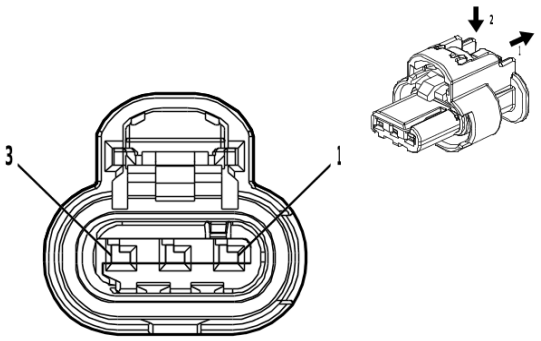
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306E Parking Assist Alarm Sensor - Rear Left Outer (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306F Parking Assist Alarm Sensor - Rear Left Middle (UD5)



4581126

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

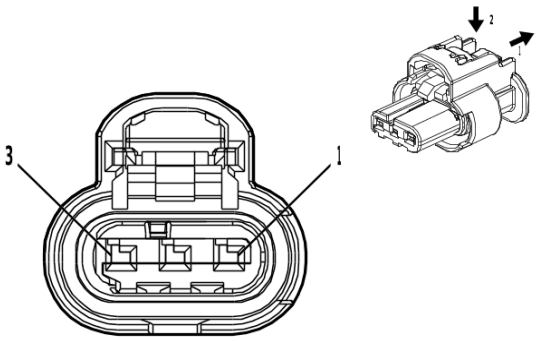
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306F Parking Assist Alarm Sensor - Rear Left Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306F Parking Assist Alarm Sensor - Rear Left Middle (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

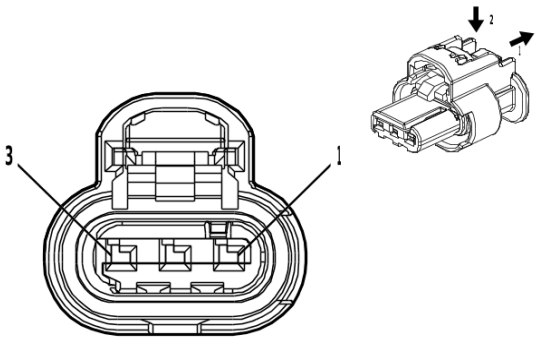
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306F Parking Assist Alarm Sensor - Rear Left Middle (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306G Parking Assist Alarm Sensor - Rear Right Middle (UD5)



4581126

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

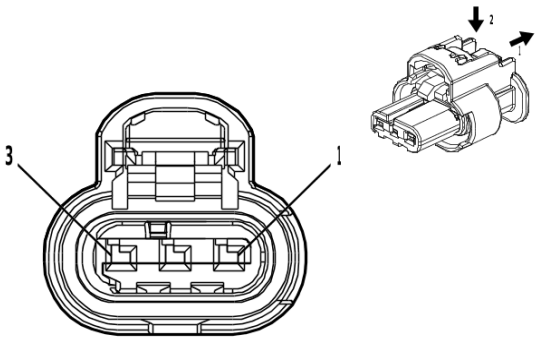
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306G Parking Assist Alarm Sensor - Rear Right Middle (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306G Parking Assist Alarm Sensor - Rear Right Middle (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

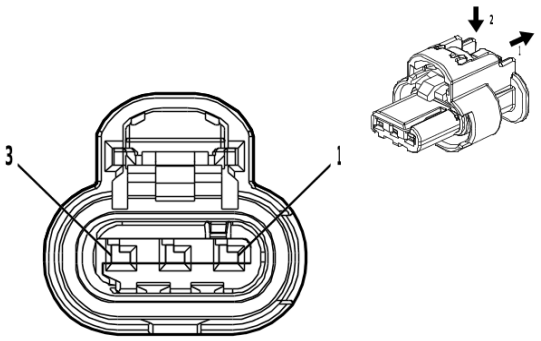
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306G Parking Assist Alarm Sensor - Rear Right Middle (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306H Parking Assist Alarm Sensor - Rear Right Outer (UD5)



4581126

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

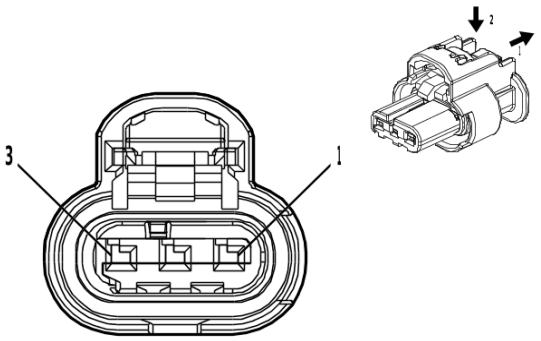
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306H Parking Assist Alarm Sensor - Rear Right Outer (UD5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B306H Parking Assist Alarm Sensor - Rear Right Outer (UKZ)



4994602

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33358809
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

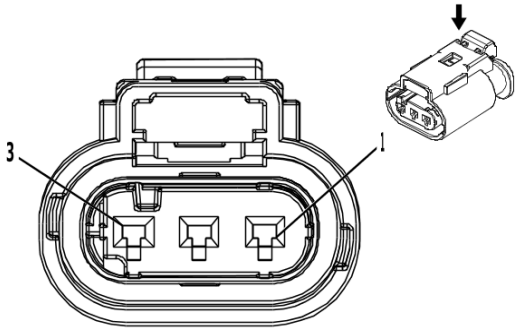
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B306H Parking Assist Alarm Sensor - Rear Right Outer (UKZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
2	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
3	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

B310 Fuel Pressure and Temperature Sensor (L87/LT4)



3240107

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 172007659
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

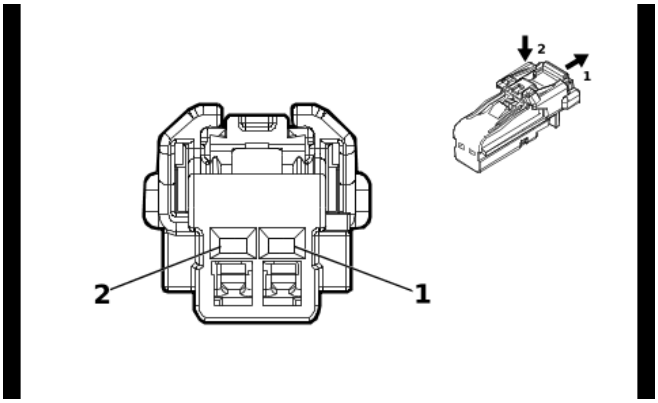
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B310 Fuel Pressure and Temperature Sensor (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / GN	548	Engine Control Sensors Low Reference 1	I	L87
	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	LT4
2	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B312LF Active Noise Cancellation Microphone - Left Front



4115691

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

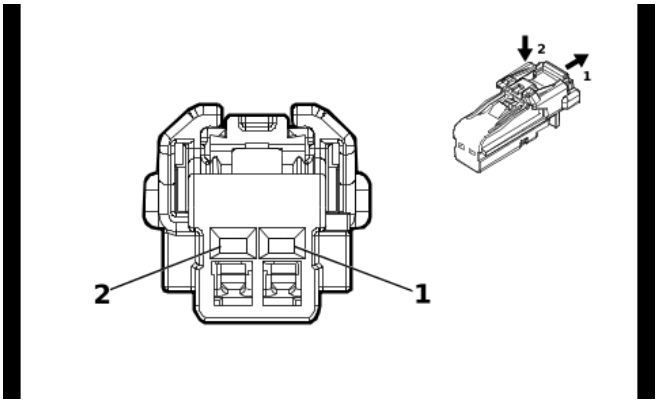
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B312LF Active Noise Cancellation Microphone - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / BK	3008	Active Noise Cancellation Microphone 1 Feedback Signal	I	—
2	0.35	GN / BN	3005	Active Noise Cancellation Microphone 1 Signal	I	—

B312R Active Noise Cancellation Microphone - Rear



4115691

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

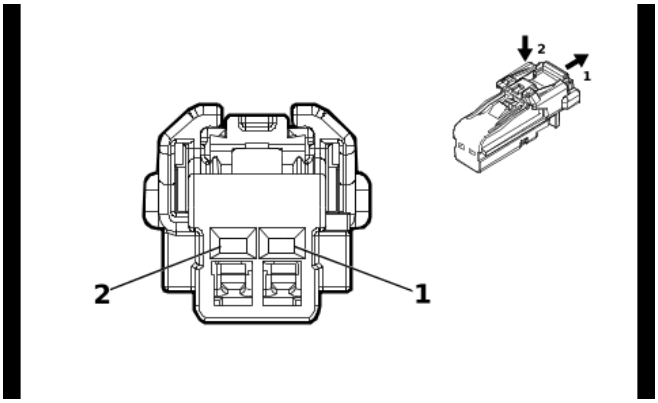
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B312R Active Noise Cancellation Microphone - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / BN	3010	Active Noise Cancellation Microphone 3 Feed-back SIgnal	I	—
2	0.35	GY / BU	3007	Active Noise Cancellation Microphone 3 Signal	I	—

B312RR Active Noise Cancellation Microphone - Right Rear



4115691

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

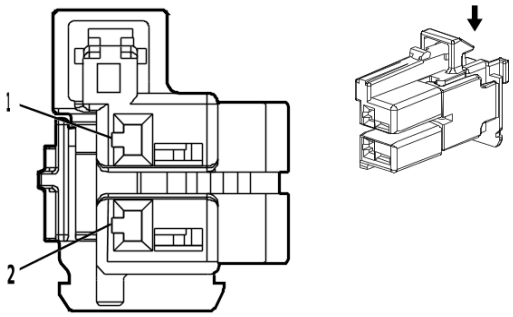
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B312RR Active Noise Cancellation Microphone - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / GN	1776	Active Noise Cancellation Microphone 4 Low Reference	I	—
2	0.35	VT / BU	1775	Active Noise Cancellation Microphone 4 Signal	I	—

B315A Transmission Range Control Valve 1 Position Switch



4672650

Connector Part Information

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

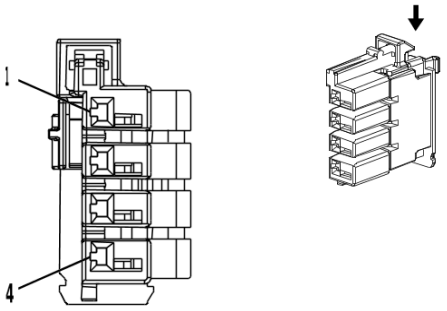
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B315A Transmission Range Control Valve 1 Position Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	3706	Electronic Transmission Range Select Switch Analog Signal 1	I	—
2	—	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—

B316 Transmission Park Valve Position Switch



4364148

Connector Part Information

Harness Type: Transmission Harness
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series(BN)

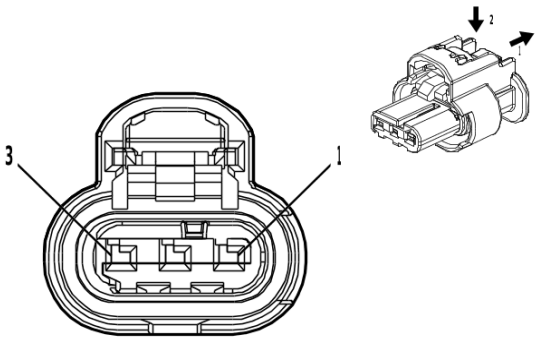
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B316 Transmission Park Valve Position Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—
3	—	YE	6317	Electronic Transmission Range Select Out of Park Switch Signal	I	—
4	—	YE / GY	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	I	—

B321 Crankcase Pressure Sensor



4778903

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

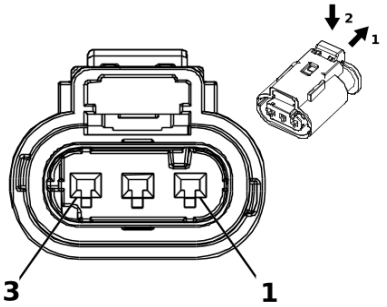
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B321 Crankcase Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	YE / GY	3926	Crankcase Differential Pressure Sensor Signal	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B345P Exhaust Pressure Differential Sensor - Particulate Filter (LM2)



2717069

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

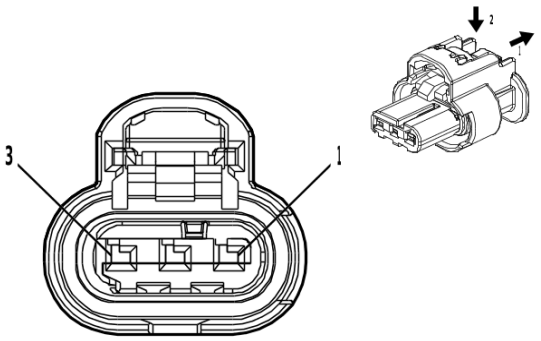
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B345P Exhaust Pressure Differential Sensor - Particulate Filter (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	BU	6053	Exhaust Pressure Sensor 1 Signal	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)



4778903

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

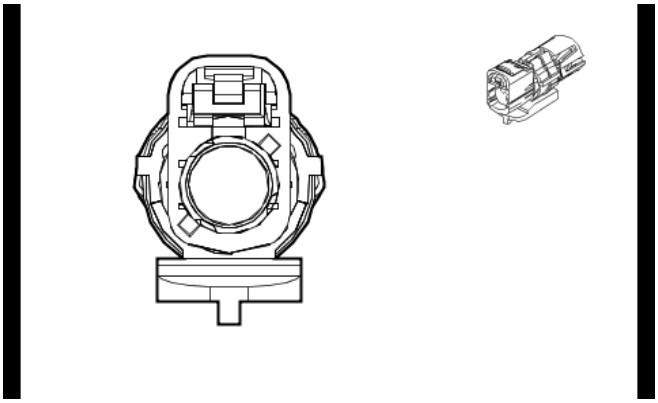
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool 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 Vehicle Sensors 5 Volt Reference 1	I	—
2	0.5	VT / GY	7246	Exhaust Gas Recirculation Differential Pressure Signal 1	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B352 Video Display Inside Rearview Mirror Camera (DRZ)



5633894

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness LVDS
OEM Connector: 35187049
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type, Sealed(BU)

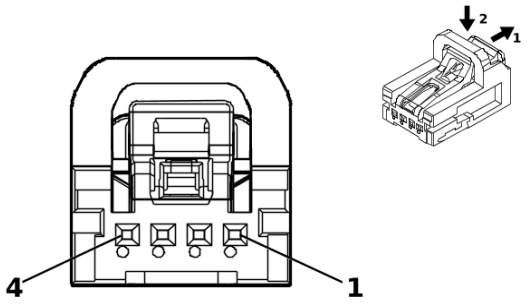
Terminal Part Information

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

B352 Video Display Inside Rearview Mirror Camera (DRZ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

B355RF Communication Interface Module Microphone - Right Front (UQH)



5200696

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068218
Service Connector: 84769202
Description: 4-Way F Mini 50 Series(BK)

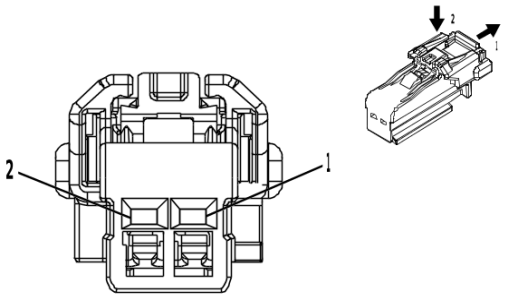
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

B355RF Communication Interface Module Microphone - Right Front (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—
2	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
3	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
4	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—

B377LL 3rd Row Seat Back Latch Unlatched Switch - Left Seat Left Side



4373379

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8989
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(GY)

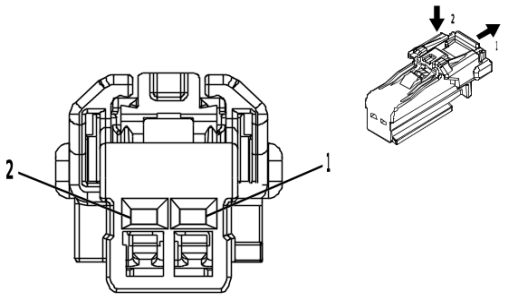
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B377LL 3rd Row Seat Back Latch Unlatched Switch - Left Seat Left Side

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	2694	Left 3rd Row Seat Left Latch Signal	I	—
2	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—

B377LR 3rd Row Seat Back Latch Unlatched Switch - Left Seat Right Side



4373379

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8989
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(GY)

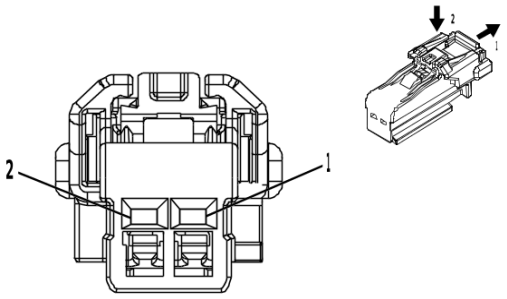
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B377LR 3rd Row Seat Back Latch Unlatched Switch - Left Seat Right Side

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	2695	Left 3rd Row Seat Right Latch Signal	I	—
2	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—

B377RL 3rd Row Seat Back Latch Unlatched Switch - Right Seat Left Side



4373379

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8989
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(GY)

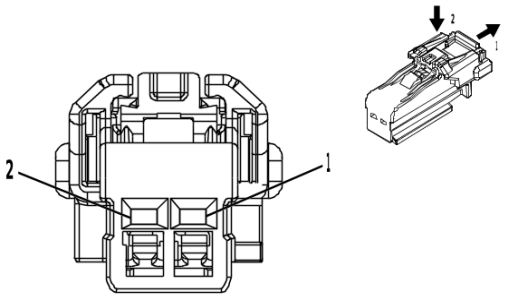
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B377RL 3rd Row Seat Back Latch Unlatched Switch - Right Seat Left Side

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BN	2696	Right 3rd Row Seat Left Latch Signal	I	—
2	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—

B377RR 3rd Row Seat Back Latch Unlatched Switch - Right Seat Right Side



4373379

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8989
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(GY)

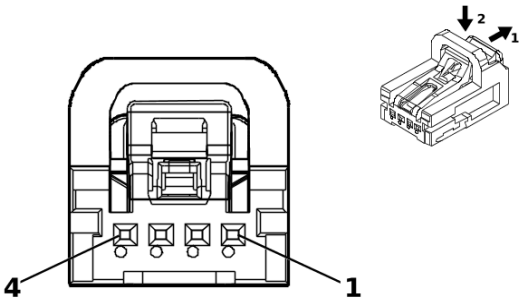
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

B377RR 3rd Row Seat Back Latch Unlatched Switch - Right Seat Right Side

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BK	2697	Right 3rd Row Seat Right Latch Signal	I	—
2	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—

B378R Occupant Communication Microphone - Rear



5200696

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068218
Service Connector: 84769202
Description: 4-Way F Mini 50 Series(BK)

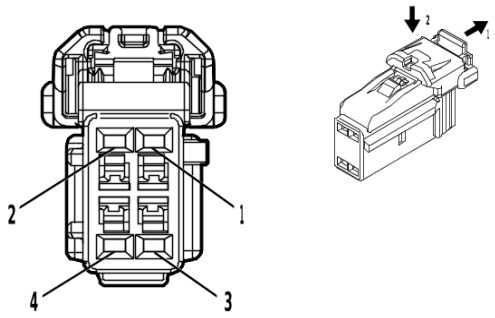
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

B378R Occupant Communication Microphone - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—
2	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
3	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
4	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—

E1AC Front Floor Console Cup Holder Illumination Lamp



4872683

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

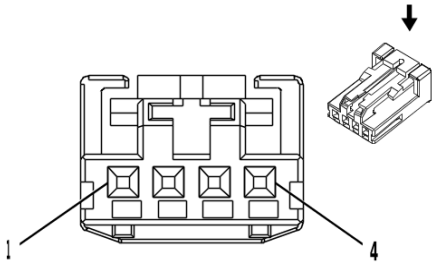
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E1AC Front Floor Console Cup Holder Illumination Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	II	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1C Front Side Door Light Conductor Lamp - Driver Handle



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

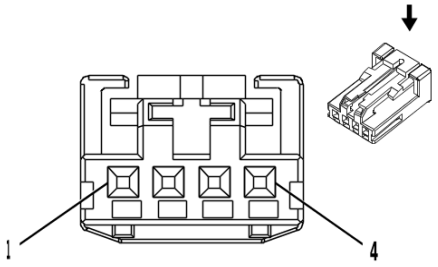
Terminal Part Information

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

E1C Front Side Door Light Conductor Lamp - Driver Handle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN	8926	Ambient Light Device 3 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1D Front Side Door Light Conductor Lamp - Driver Trim Panel



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

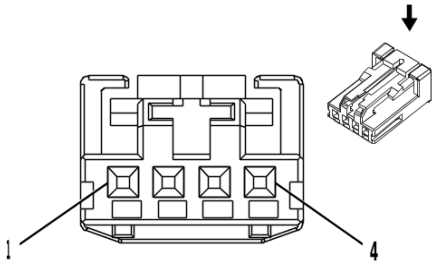
Terminal Part Information

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

E1D Front Side Door Light Conductor Lamp - Driver Trim Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN	8926	Ambient Light Device 3 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1G Instrument Panel Light Conductor Lamp - Left



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

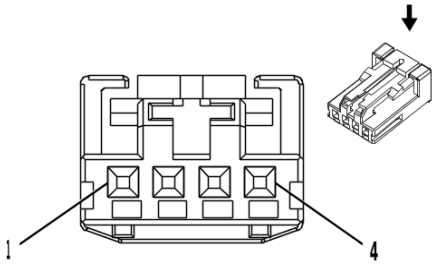
Terminal Part Information

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

E1G Instrument Panel Light Conductor Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1850	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BN / GN	8924	Ambient Light Device 1 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1H Instrument Panel Light Conductor Lamp - Right



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

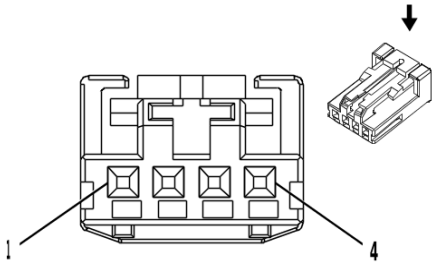
Terminal Part Information

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

E1H Instrument Panel Light Conductor Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1050	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BN / GN	8924	Ambient Light Device 1 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1M Front Side Door Light Conductor Lamp - Passenger Handle



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

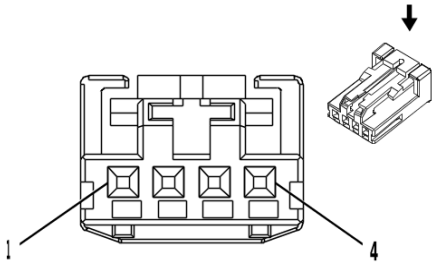
Terminal Part Information

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

E1M Front Side Door Light Conductor Lamp - Passenger Handle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BU / GN	8925	Ambient Light Device 2 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1P Front Side Door Light Conductor Lamp - Passenger Trim Panel



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

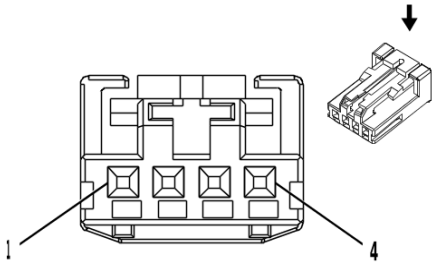
Terminal Part Information

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

E1P Front Side Door Light Conductor Lamp - Passenger Trim Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BU / GN	8925	Ambient Light Device 2 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E1Z Instrument Panel Light Conductor Inner Lamp



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

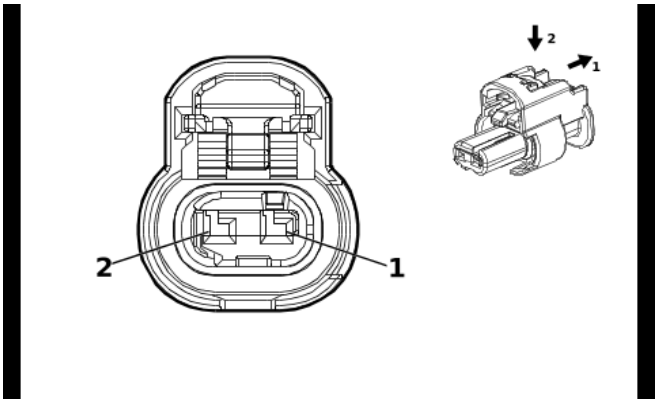
Terminal Part Information

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

E1Z Instrument Panel Light Conductor Inner Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1050	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BN / GN	8924	Ambient Light Device 1 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E2LF Front Side Marker Lamp - Left



4649903

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296694-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

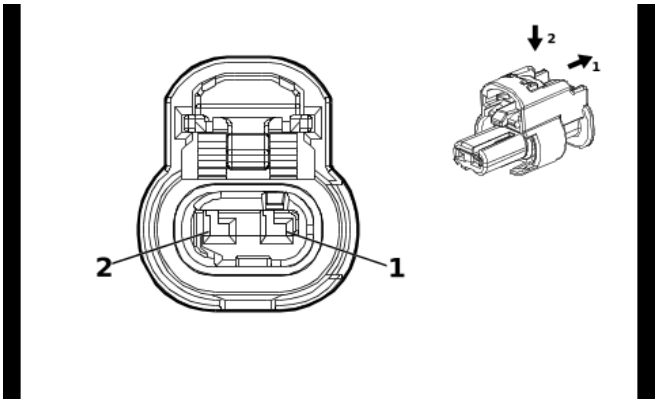
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E2LF Front Side Marker Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / YE	1254	Left Front Park Lamp Control	I	—
2	0.5	BK	150	Ground	I	—

E2RF Front Side Marker Lamp - Right



4649903

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 1-2296694-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

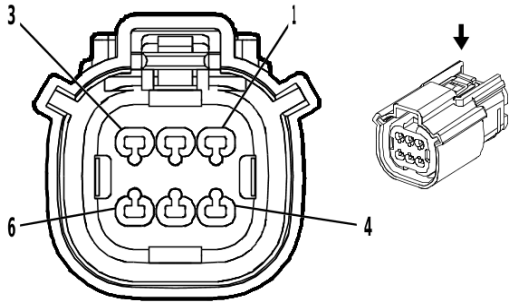
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E2RF Front Side Marker Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GN	1253	Right Front Park Lamp Control	I	—
2	0.5	BK	250	Ground	I	—

E4C Daytime Running Lamp - Left



1986157

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33472-0606
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed(BK)

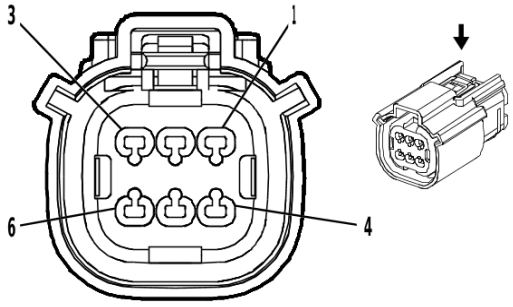
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

E4C Daytime Running Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	150	Ground	II	—
2	0.75	RD / WH	640	Battery Positive Voltage	II	—
3	0.5	GY / BU	7538	Left Front DRL Control	I	—
4	0.5	BU / WH	1314	Left Front Turn Signal Lamp Control	I	—
5	0.5	VT / BK	6568	Front Turn Signal Lamp Feedback Signal	I	—
6	0.5	YE / GN	2024	Animation Lighting Control	I	—

E4D Daytime Running Lamp - Right



1986157

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 33472-0606
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed(BK)

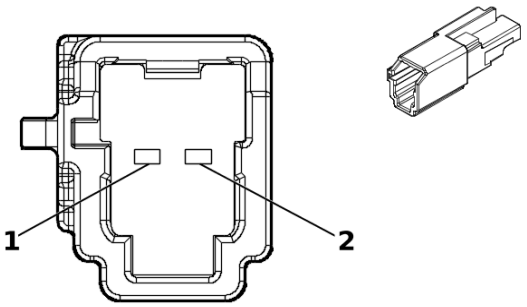
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

E4D Daytime Running Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	II	—
2	0.75	RD / YE	740	Battery Positive Voltage	II	—
3	0.5	BU / BN	7539	Right Front DRL Control	I	—
4	0.5	GN / VT	1315	Right Front Turn Signal Lamp Control	I	—
5	0.5	WH / YE	7545	Right Front Turn Signal Lamp Feedback Signal	I	—
6	0.5	YE / GN	2024	Animation Lighting Control	I	—

E6 High Mount Stop Lamp



5355341

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35258943
Service Connector: 84815531
Description: 2-Way M 1.2 MCON Series(BK)

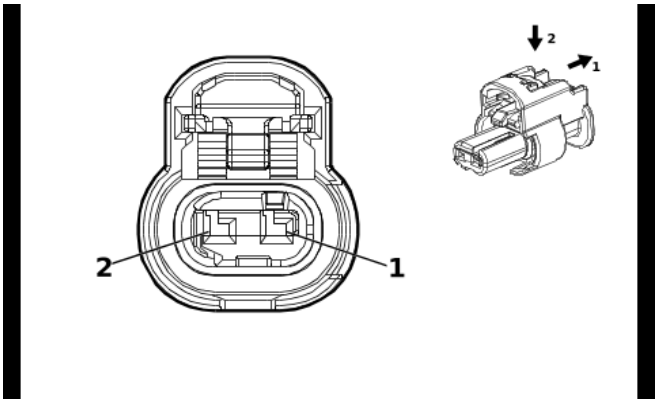
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

E6 High Mount Stop Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2050	Ground	I	—
2	0.5	BN / YE	820	Center High Mounted Stop Lamp Supply Voltage	I	—

E7 Rear License Plate Lamp



4649903

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

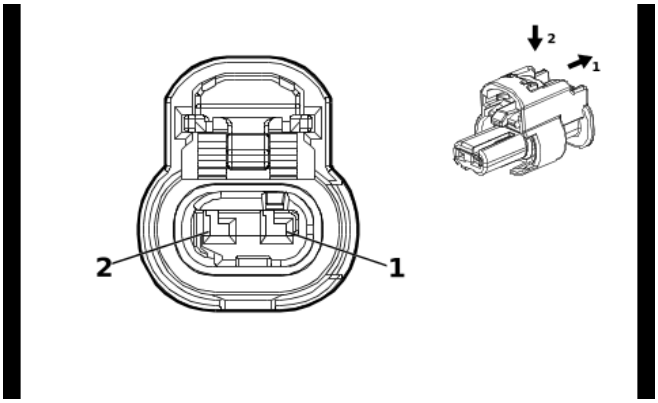
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E7 Rear License Plate Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	2050	Ground	I	—
2	0.35	GN / YE	6846	Rear License Plate Lamp Control	I	—

E8A Front Side Door Sill Plate Illumination Lamp - Left (B7G)



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

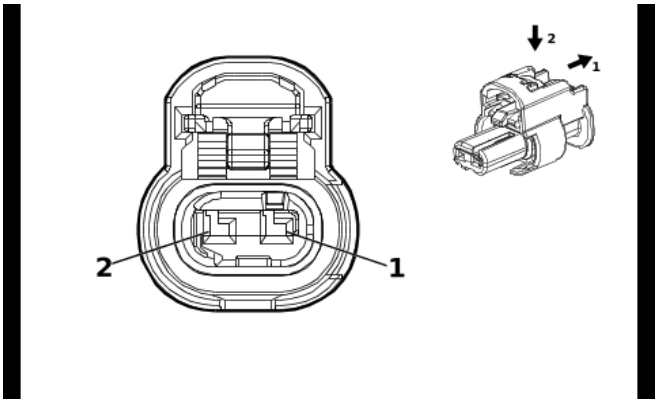
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E8A Front Side Door Sill Plate Illumination Lamp - Left (B7G)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / GN	7558	Front Footwell Accent Lighting Control	II	—
2	0.5	BK	1150	Ground	I	—

E8B Front Side Door Sill Plate Illumination Lamp - Right (B7G)



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

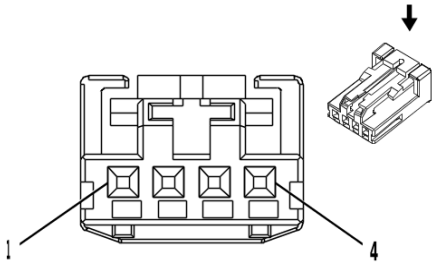
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E8B Front Side Door Sill Plate Illumination Lamp - Right (B7G)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / GN	7558	Front Footwell Accent Lighting Control	II	—
2	0.75	BK	1250	Ground	I	—

E8D Front Side Door Courtesy Lamp - Driver



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

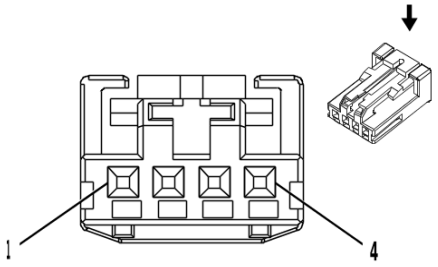
Terminal Part Information

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

E8D Front Side Door Courtesy Lamp - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY	157	Interior Lamp Control	I	—
4	—	—	—	Not Occupied	—	—

E8LR Rear Side Door Courtesy Lamp - Left



2717162

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

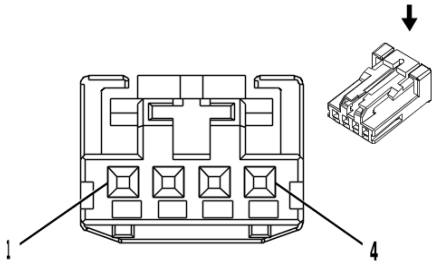
Terminal Part Information

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

E8LR Rear Side Door Courtesy Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY	157	Interior Lamp Control	I	—
4	—	—	—	Not Occupied	—	—

E8P Front Side Door Courtesy Lamp - Passenger



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

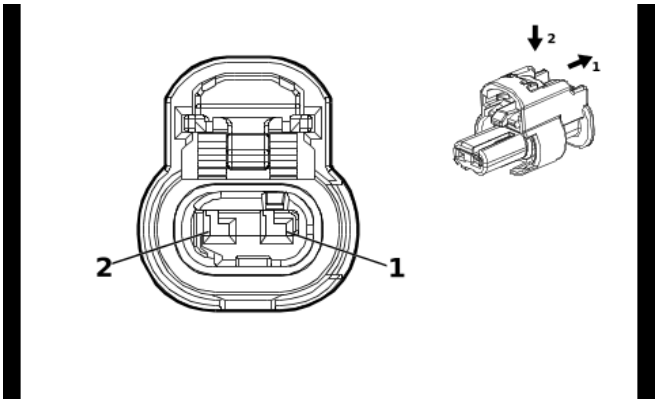
Terminal Part Information

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

E8P Front Side Door Courtesy Lamp - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY	157	Interior Lamp Control	I	—
4	—	—	—	Not Occupied	—	—

E8Q Rear Side Door Sill Plate Illumination Lamp - Left (B7G)



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

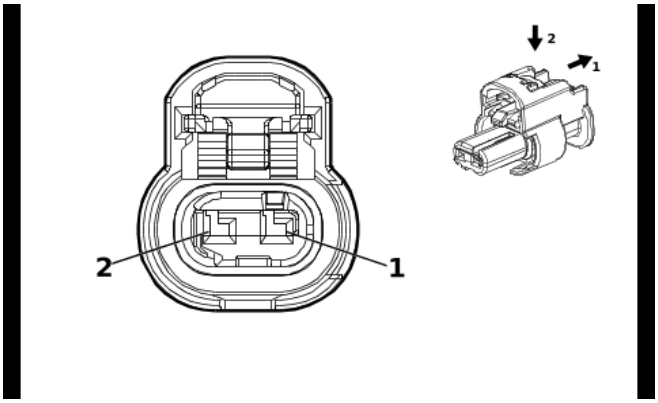
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E8Q Rear Side Door Sill Plate Illumination Lamp - Left (B7G)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / BU	4783	Rear Footwell Accent Lighting Control	II	—
2	0.5	BK	1150	Ground	I	—

E8R Rear Side Door Sill Plate Illumination Lamp - Right (B7G)



4649903

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

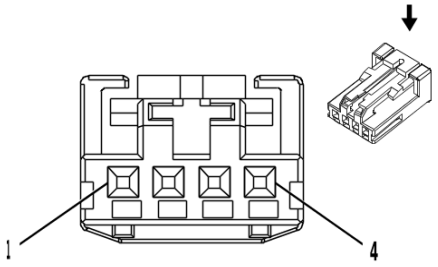
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E8R Rear Side Door Sill Plate Illumination Lamp - Right (B7G)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / BU	4783	Rear Footwell Accent Lighting Control	II	—
2	0.75	BK	1250	Ground	I	—

E8RR Rear Side Door Courtesy Lamp - Right



2717162

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

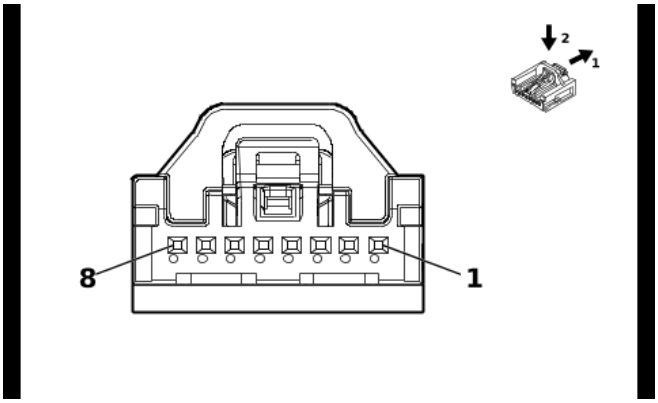
Terminal Part Information

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

E8RR Rear Side Door Courtesy Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GY	157	Interior Lamp Control	I	—
4	—	—	—	Not Occupied	—	—

E8SR Cargo Center Courtesy Lamp



5810859

Connector Part Information

Harness Type: Roof Wiring Harness
OEM Connector: 35068230
Service Connector: 87822422
Description: 8-Way F Mini 50 Series(GY)

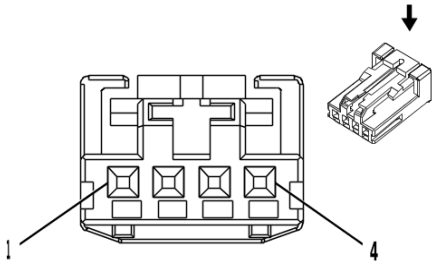
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E8SR Cargo Center Courtesy Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BK	2050	Ground	I	—
4 - 8	—	—	—	Not Occupied	—	—

E8VA Front Floor Courtesy Lamp - Left



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

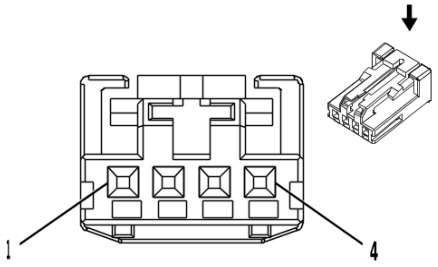
Terminal Part Information

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

E8VA Front Floor Courtesy Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1850	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN / WH	2861	Body Control Module LIN Bus 15	I	—
4	0.35	BN / GN	8924	Ambient Light Device 1 LIN Bus 1	I	—

E8VB Rear Floor Courtesy Lamp - Left



2717162

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

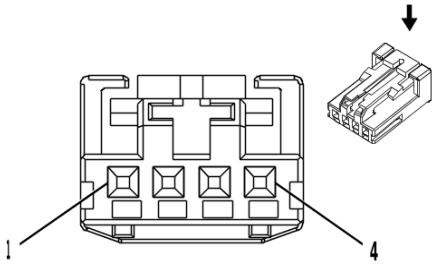
Terminal Part Information

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

E8VB Rear Floor Courtesy Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	—	WH / VT	4849	LED Ambient Lighting Enable Signal	II	—
3	— 0.5	GN / WH GN / WH	2861 2861	Body Control Module LIN Bus 15 Body Control Module LIN Bus 15	II I	— —
4	—	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	II	—

E8VC Front Floor Courtesy Lamp - Right



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

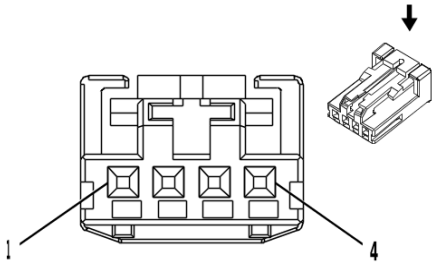
Terminal Part Information

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

E8VC Front Floor Courtesy Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1050	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BN / GN	8924	Ambient Light Device 1 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E8VD Rear Floor Courtesy Lamp - Right



2717162

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

Terminal Part Information

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

E8VD Rear Floor Courtesy Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	I	—
2	—	WH / VT	4849	LED Ambient Lighting Enable Signal	II	—
3	— 0.5	GY / GN GY / GN	8927 8927	Ambient Light Device 4 LIN Bus 1 Ambient Light Device 4 LIN Bus 1	II I	— —
4	—	—	—	Not Occupied	—	—

E8ZL Assist Step Lamp - Left (B3L)

—

Connector Part Information

Harness Type: Assist Step
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
I	Not required	No Tool Required	No Tool Required

E8ZL Assist Step Lamp - Left (B3L)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1650	Ground	I	—
2	—	RD	4748	Left Running Board Step Courtesy Lamp Control	I	—

E8ZR Assist Step Lamp - Right (B3L)

—

Connector Part Information

Harness Type: Assist Step
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

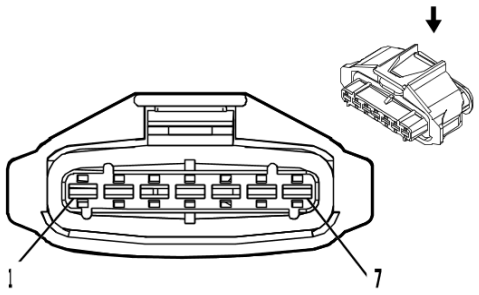
Terminal Part Information

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

E8ZR Assist Step Lamp - Right (B3L)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1650	Ground	I	—
2	—	RD	4749	Right Running Board Step Courtesy Lamp Control	I	—

E11A Fuel Heater/Water in Fuel Sensor (LM2)



2537256

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 10774827
Service Connector: 19354080
Description: 7-Way F 2.8 Junior Power Timer Series, Sealed(BK)

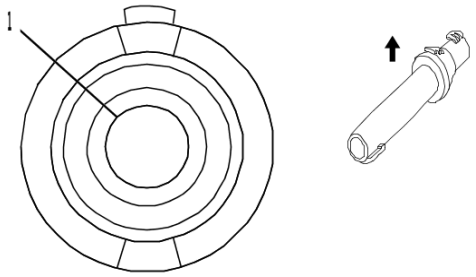
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

E11A Fuel Heater/Water in Fuel Sensor (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1950	Ground	I	—
2	2.5	BN / YE	2996	Fuel Heater Control 1	I	—
3	0.75	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
4	0.5	BK / BU	6863	Water In Fuel Sensor Low Reference	I	—
5	0.5	BU / YE	6861	Water In Fuel Sensor Signal	I	—
6	0.5	BN / GY	7072	Fuel Temperature Sensor 1 Signal	I	—
7	0.5	BN / WH	7073	Fuel Temperature Sensor 1 Low Reference	I	—

E12A Glow Plug 1 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

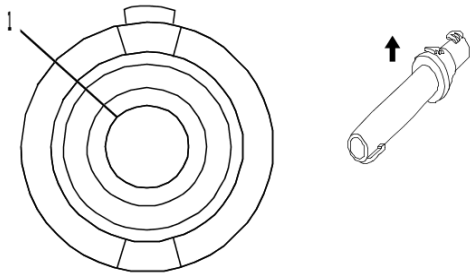
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12A Glow Plug 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / RD	1581	Glow Plug 1 Control	I	—

E12B Glow Plug 2 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

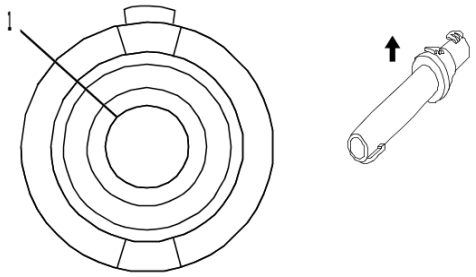
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12B Glow Plug 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / BK	1582	Glow Plug 2 Control	I	—

E12C Glow Plug 3 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

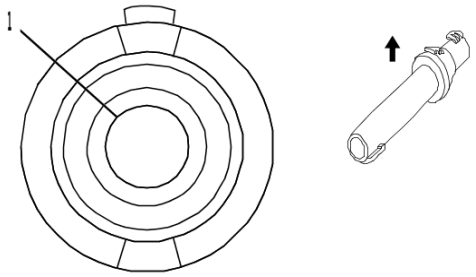
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12C Glow Plug 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / GN	1583	Glow Plug 3 Control	I	—

E12D Glow Plug 4 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

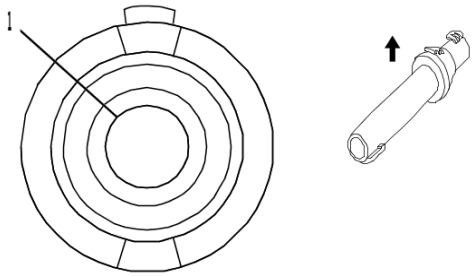
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12D Glow Plug 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / YE	1584	Glow Plug 4 Control	I	—

E12E Glow Plug 5 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

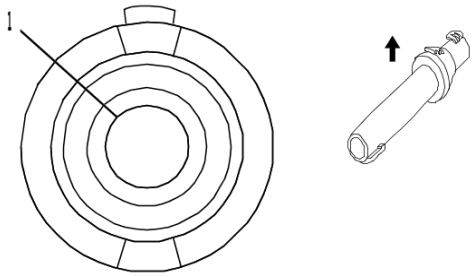
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12E Glow Plug 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / WH	1585	Glow Plug 5 Control	I	—

E12F Glow Plug 6 (LM2)



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

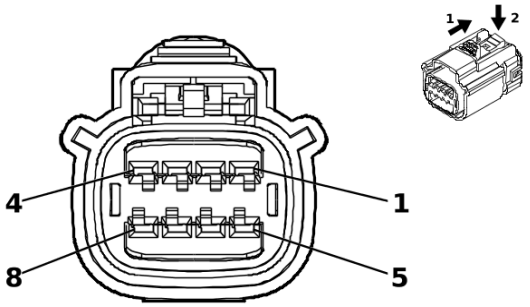
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12F Glow Plug 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	1586	Glow Plug 6 Control	I	—

E13LA Front Headlamp - Left



5253496

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15514667
Service Connector: 84766296
Description: 8-Way F 1.5 OCS Series, Sealed(BK)

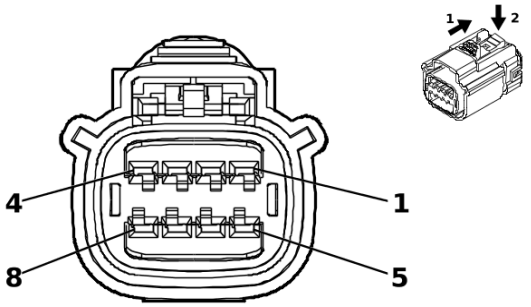
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

E13LA Front Headlamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	150	Ground	II	—
2	1.5	RD / WH	640	Battery Positive Voltage	I	—
3	0.5	YE	712	Left Headlamp Low Beam Control	II	—
4	0.35	WH	711	Left Headlamp High Beam Control	II	—
5	0.5	YE / GN	2024	Animation Lighting Control	II	—
6	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	II	—
7	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	II	—
8	0.35	WH / BU	10132	Headlamp Leveling CAN Bus Communication Enable	II	—

E13RA Front Headlamp - Right



5253496

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15514667
Service Connector: 84766296
Description: 8-Way F 1.5 OCS Series, Sealed(BK)

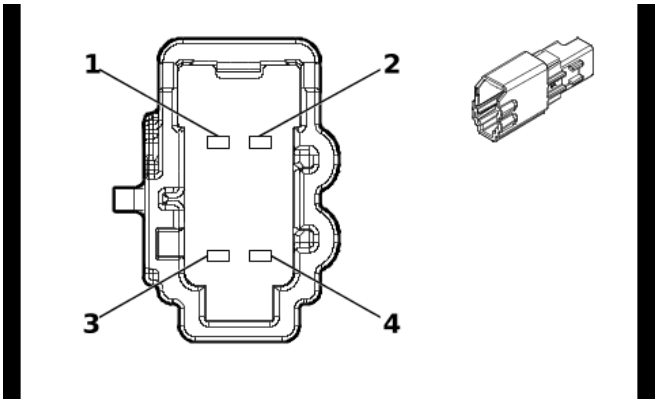
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required

E13RA Front Headlamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	II	—
2	1.5	RD / YE	740	Battery Positive Voltage	I	—
3	0.5	YE	312	Right Headlamp Low Beam Control	II	—
4	0.35	WH	311	Right Headlamp High Beam Control	II	—
5	0.5	YE / GN	2024	Animation Lighting Control	II	—
6	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	II	—
7	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	II	—
8	0.35	WH / BU	10132	Headlamp Leveling CAN Bus Communication Enable	II	—

E14A Front Seat Back Heater - Driver



5423974

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

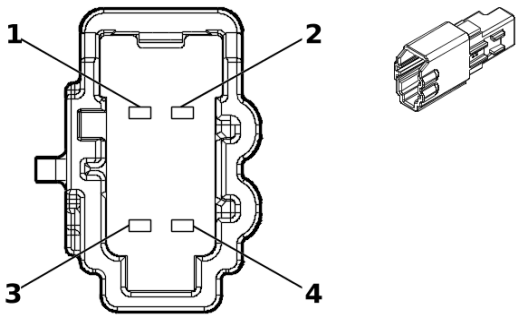
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14A Front Seat Back Heater - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	2432	Driver Seat Back Heating Element Control	I	—
2	0.5	BU	2425	Driver Seat Back Heating Temperature Sensor Signal	II	—
3	0.5	BK / YE	2080	Driver Heated Seat Thermistor Low Reference	II	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—

E14B Front Seat Cushion Heater - Driver



5360963

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(BK)

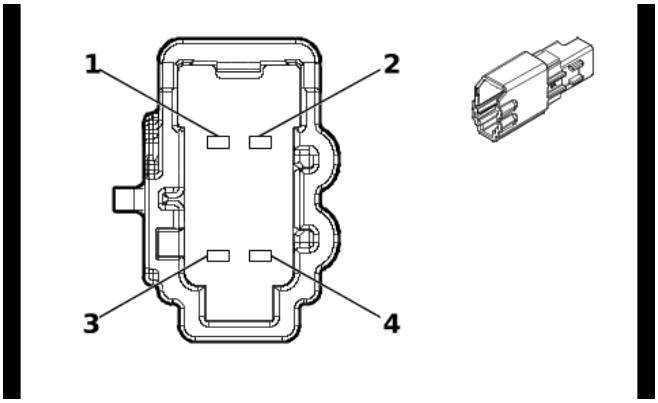
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14B Front Seat Cushion Heater - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / VT	2077	Driver Seat Heating Element Control	I	—
2	0.5	YE / GY	2079	Driver Seat Heating Temperature Sensor Signal	II	—
3	0.5	BK / YE	2080	Driver Heated Seat Thermistor Low Reference	II	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—

E14C Front Seat Back Heater - Passenger (KA1)



5423974

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

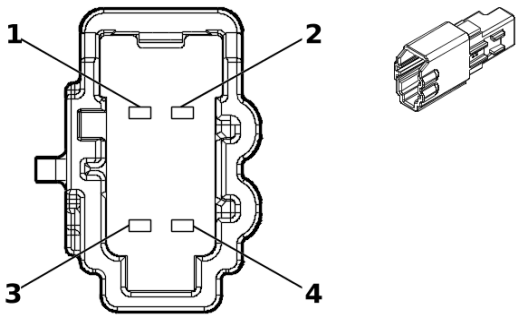
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14C Front Seat Back Heater - Passenger (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	2481	Passenger Seat Back Heating Element Control	I	—
2	0.5	WH / BU	2436	Passenger Seat Back Heating Temperature Sensor Signal	II	—
3	0.5	BK / GN	2482	Passenger Heated Back Thermistor Low Reference	II	—
4	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—

E14D Front Seat Cushion Heater - Passenger (KA1-KQV)



5360963

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(BK)

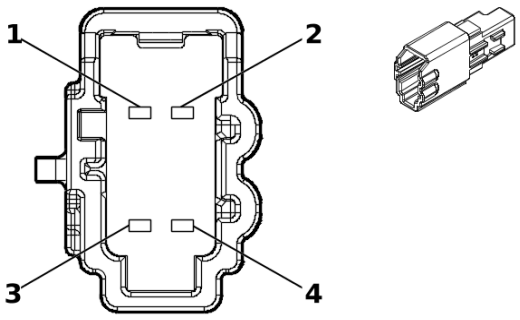
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14D Front Seat Cushion Heater - Passenger (KA1-KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	2479	Passenger Seat Heating Element Control	I	—
2	0.5	WH / GY	2434	Passenger Seat Heating Temperature Sensor Signal	II	—
3	0.5	BK / GY	2435	Passenger Heated Seat Thermistor Low Reference	II	—
4	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—

E14F Rear Seat Cushion Heater - Left Rear (KA6)



5360963

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(BK)

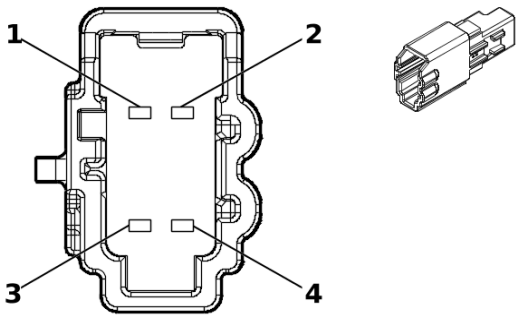
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14F Rear Seat Cushion Heater - Left Rear (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	2294	Left Rear Seat Cushion Heating Element Control	I	—
2	0.5	WH / BU	7047	Left Rear Seat Cushion Temperature Sensor Signal	II	—
3	0.5	BU / WH	7048	Left Rear Cushion Thermistor Feedback Signal	II	—
4	0.75	BU / BK	2446	Left Rear Seat Heating Element Low Reference	I	—

E14H Rear Seat Cushion Heater - Right Rear (KA6)



5360963

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-9046
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

E14H Rear Seat Cushion Heater - Right Rear (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BN	2296	Right Rear Seat Cushion Heating Element Control	I	—
2	0.5	YE / WH	7053	Right Rear Seat Cushion Temperature Sensor Signal	II	—
3	0.5	WH / BK	7054	Right Rear Cushion Thermistor Feedback Signal	II	—
4	0.75	GN / BK	2457	Right Rear Seat Heating Element Low Reference	I	—

E17D Outside Rearview Mirror Glass - Driver X1

—

Connector Part Information

Harness Type: Outside Rearview Mirror - Driver
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

Terminal Part Information

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

E17D Outside Rearview Mirror Glass - Driver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	WH	606	Left Outside Rearview Mirror Heater Control	I	—

E17D Outside Rearview Mirror Glass - Driver X2

—

Connector Part Information

Harness Type: Outside Rearview Mirror - Driver
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

Terminal Part Information

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

E17D Outside Rearview Mirror Glass - Driver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	1150	Ground	I	—

E17P Outside Rearview Mirror Glass - Passenger X1

—

Connector Part Information

Harness Type: Outside Rearview Mirror - Passenger
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

Terminal Part Information

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

E17P Outside Rearview Mirror Glass - Passenger X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BN / VT	607	Right Outside Rearview Mirror Heater Control	I	—

E17P Outside Rearview Mirror Glass - Passenger X2

—

Connector Part Information

Harness Type: Outside Rearview Mirror - Passenger
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

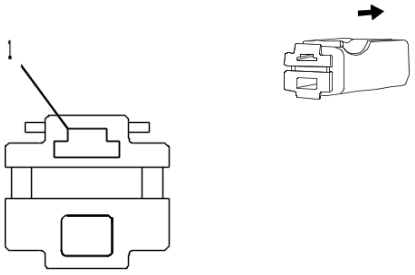
Terminal Part Information

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

E17P Outside Rearview Mirror Glass - Passenger X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	1250	Ground	I	—

E18 Rear Window Defogger Grid X1



1413086

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 13511619
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 250 Series(BK)

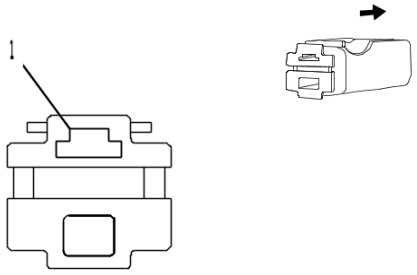
Terminal Part Information

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

E18 Rear Window Defogger Grid X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BN / VT	293	Rear Defogger Grid Control	I	—

E18 Rear Window Defogger Grid X2



1413086

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 13511619
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 250 Series(BK)

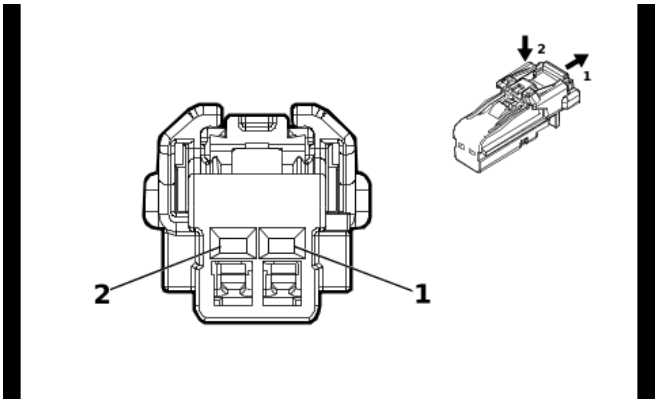
Terminal Part Information

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

E18 Rear Window Defogger Grid X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2050	Ground	I	—

E27 Instrument Panel Compartment Lamp



4115691

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

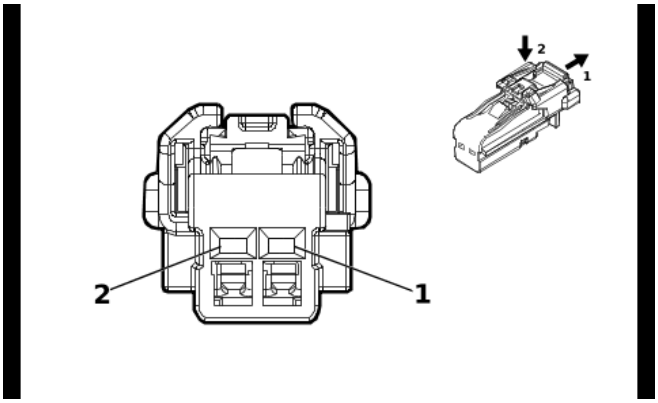
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E27 Instrument Panel Compartment Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1050	Ground	I	—
2	0.35	GN / VT	4786	Dome/Reading Lamp Enable Signal	I	—

E28 Front Floor Console Compartment Lamp



4115691

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

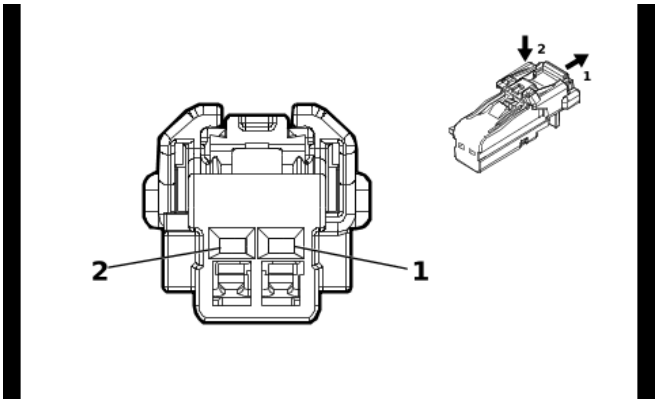
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E28 Front Floor Console Compartment Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1250	Ground	I	—
2	0.75	GN / VT	4786	Dome/Reading Lamp Enable Signal	I	—

E31L Sunshade Mirror Lamp - Left



5377746

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327306
Service Connector: 84867147
Description: 2-Way F 1.2 MCON Series(BN)

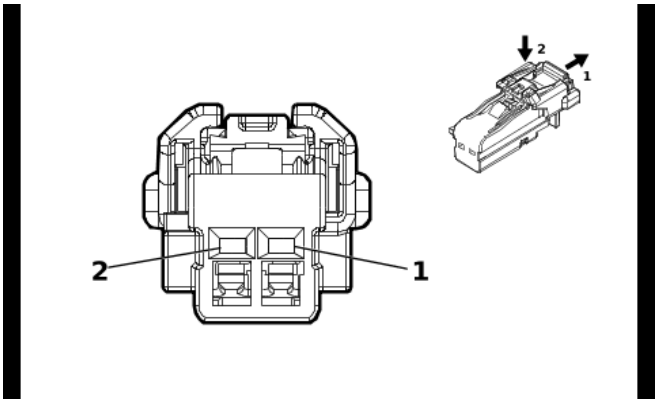
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E31L Sunshade Mirror Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GN	4785	Interior Lamp Overhead Enable Signal	I	—
2	0.5	BK	1850	Ground	I	—

E31R Sunshade Mirror Lamp - Right



5377746

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327306
Service Connector: 84867147
Description: 2-Way F 1.2 MCON Series(BN)

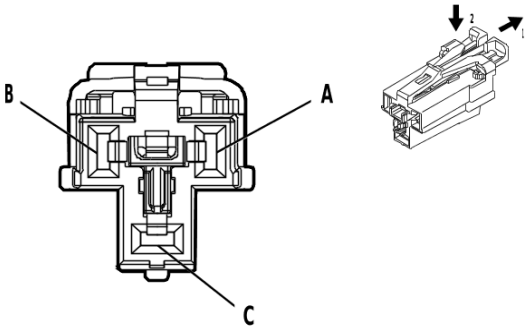
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E31R Sunshade Mirror Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	2369	Interior Lamp Overhead 2 Enable Signal	I	—
2	0.5	BK	1850	Ground	I	—

E32 Cigarette Lighter Receptacle (DT4)



4872413

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series(GY)

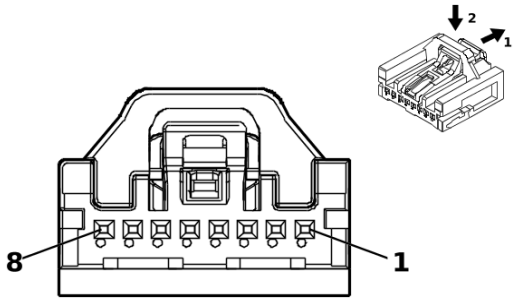
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required

E32 Cigarette Lighter Receptacle (DT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	VT	1701	Retained Accessory Power Control	II	—
B	—	—	—	Not Occupied	—	—
C	1	BK	1250	Ground	I	—

E37C Dome/Reading Lamps - 3rd Row



5200269

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series(BK)

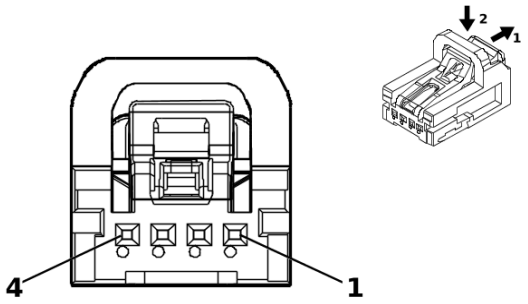
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E37C Dome/Reading Lamps - 3rd Row

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / WH	2907	Row 3 Dome Reading Lamp Interior Lamp Control	I	—
2	0.35	BN / VT	2909	Row 3 Dome Reading Lamp 2 Interior Lamp Control	I	—
3	0.35	BK	1850	Ground	I	—
4	0.35	VT / YE	2908	Row 3 Dome Reading Lamp Switch Signal	I	—
5	0.35	YE / GY	2910	Row 3 Dome Reading Lamp 2 Switch Signal	I	—
6 - 8	—	—	—	Not Occupied	—	—

E37H Roof Rail Rear Seat Position Reading and Courtesy Lamp - Left (C3U)



5200696

Connector Part Information

Harness Type: Headliner
OEM Connector: 35068218
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Mini 50 Series(BK)

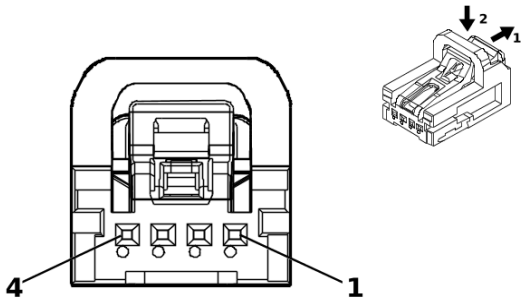
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E37H Roof Rail Rear Seat Position Reading and Courtesy Lamp - Left (C3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN / YE	2903	Row 2 Dome Reading Lamp Interior Lamp Control	I	—
2	—	—	—	Not Occupied	—	—
3	—	BK	1850	Ground	I	—
4	—	WH / BN	2904	Row 2 Dome Reading Lamp Switch Signal	I	—

E37J Roof Rail Rear Seat Position Reading and Courtesy Lamp - Right



5200696

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068218
Service Connector: 84769202
Description: 4-Way F Mini 50 Series(BK)

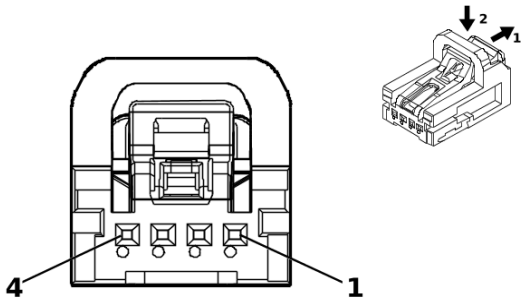
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E37J Roof Rail Rear Seat Position Reading and Courtesy Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / BU	2905	Row 2 Dome Reading Lamp 2 Interior Lamp Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BK	1850	Ground	I	—
4	0.35	VT / GY	2906	Row 2 Dome Reading Lamp 2 Switch Signal	I	—

E37SL Dome/Reading Lamps - 2nd Row Left



5200696

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068218
Service Connector: 84769202
Description: 4-Way F Mini 50 Series(BK)

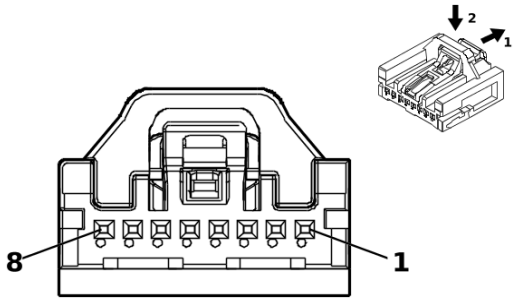
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E37SL Dome/Reading Lamps - 2nd Row Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	2903	Row 2 Dome Reading Lamp Interior Lamp Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BK	1850	Ground	I	—
4	0.35	WH / BN	2904	Row 2 Dome Reading Lamp Switch Signal	I	—

Rear Seat Position Center Reading and Courtesy Lamp - 2nd Row (- C3U)



5200269

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series(BK)

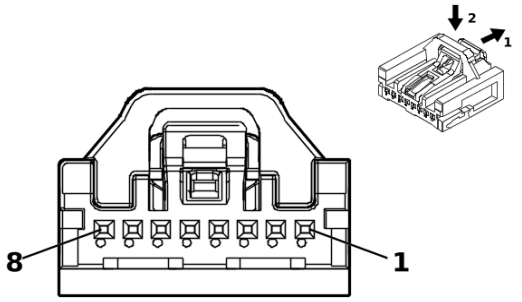
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

Rear Seat Position Center Reading and Courtesy Lamp - 2nd Row (- C3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	2903	Row 2 Dome Reading Lamp Interior Lamp Control	I	—
2	0.35	BN / BU	2905	Row 2 Dome Reading Lamp 2 Interior Lamp Control	I	—
3	0.35	BK	1850	Ground	I	—
4	0.35	WH / BN	2904	Row 2 Dome Reading Lamp Switch Signal	I	—
5	0.35	VT / GY	2906	Row 2 Dome Reading Lamp 2 Switch Signal	I	—
6 - 8	—	—	—	Not Occupied	—	—

E37SMB Rear Seat Position Center Reading and Courtesy Lamp - 3rd Row



5200269

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series(BK)

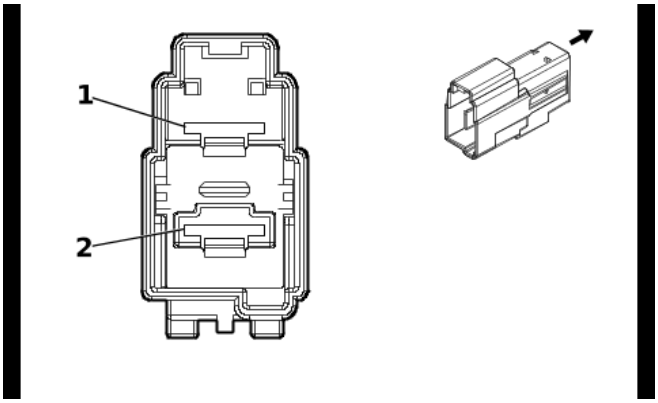
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

E37SMB Rear Seat Position Center Reading and Courtesy Lamp - 3rd Row

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / WH	2907	Row 3 Dome Reading Lamp Interior Lamp Control	I	—
2	0.35	BN / VT	2909	Row 3 Dome Reading Lamp 2 Interior Lamp Control	I	—
3	0.35	BK	1850	Ground	I	—
4	0.35	VT / YE	2908	Row 3 Dome Reading Lamp Switch Signal	I	—
5	0.35	YE / GY	2910	Row 3 Dome Reading Lamp 2 Switch Signal	I	—
6 - 8	—	—	—	Not Occupied	—	—

E40 Air Heater X1 (C3A)



5375411

Connector Part Information

Harness Type: Air Heater
OEM Connector: 13528404
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 9.5 Y-Type Series(BK)

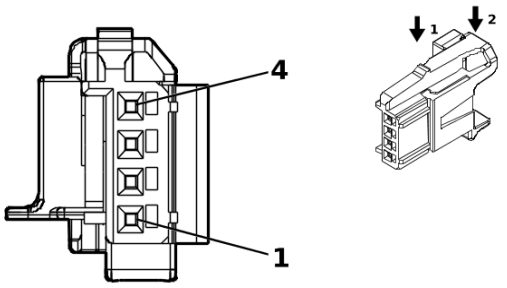
Terminal Part Information

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

E40 Air Heater X1 (C3A)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / GY	642	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—

E40 Air Heater X2 (C3A)



5191926

Connector Part Information

Harness Type: HVAC
OEM Connector: 13510940
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

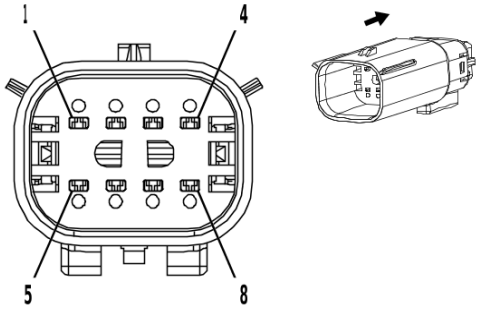
Terminal Part Information

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

E40 Air Heater X2 (C3A)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	VT / WH	239	Run/Crank Ignition 1 Voltage	I	—
3	—	BU / VT	2852	Body Control Module LIN Bus 6	I	—
4	—	BK	1050	Ground	I	—

E42L Rear Body Structure Stop Lamp - Left



2667653

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35043130
Service Connector: 19370460
Description: 8-Way M 1.5 MX Series, Sealed(BK)

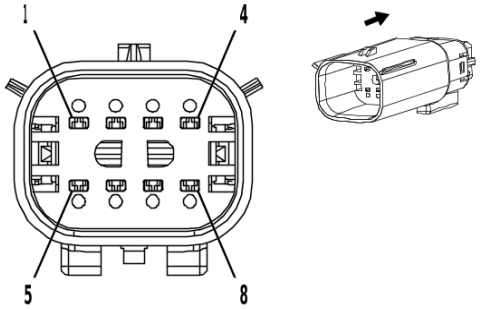
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E42L Rear Body Structure Stop Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	1950	Ground	I	—
2	0.5	GY / YE	7542	Left Rear Stop Lamp Control	I	—
3	0.5	BN / BU	6993	Left Rear Park Lamp Control	I	—
4	0.5	GN / WH	24	Backup Lamp Control	I	—
5	0.5	BU / WH	1334	Left Rear Turn Signal Lamp Control 2	I	—
6	0.5	WH / VT	6567	Rear Turn Signal Lamp Feedback Signal	I	—
7	0.5	YE / GN	2024	Animation Lighting Control	I	—
8	0.75	RD / GY	11240	Secondary Fused Battery Positive Voltage	I	—

E42R Rear Body Structure Stop Lamp - Right



2667653

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35043130
Service Connector: 19370460
Description: 8-Way M 1.5 MX Series, Sealed(BK)

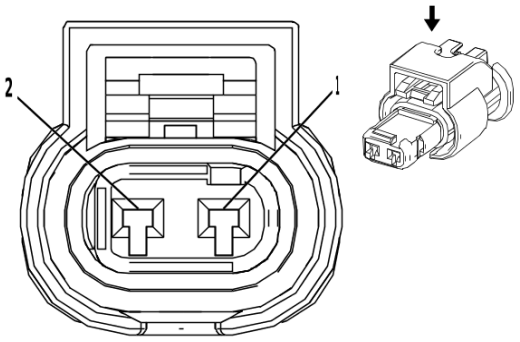
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

E42R Rear Body Structure Stop Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2050	Ground	I	—
2	0.5	WH / YE	7541	Right Rear Stop Lamp Control	I	—
3	0.5	BN / GY	6995	Right Rear Park Lamp Control	I	—
4	0.5	GN	1324	Backup Lamp Control	I	—
5	0.5	BU / VT	1335	Right Rear Turn Signal Lamp Control 2	I	—
6	0.5	WH / BK	7544	Right Rear Turn Signal Lamp Feedback Signal	I	—
7	0.5	YE / GN	2024	Animation Lighting Control	I	—
8	0.75	RD / BU	11340	Secondary Fused Battery Positive Voltage	I	—

E52 Reductant Heater 2 - Injector Supply Pipe (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 MCON Series, Sealed(BK with BK Inner Connector)

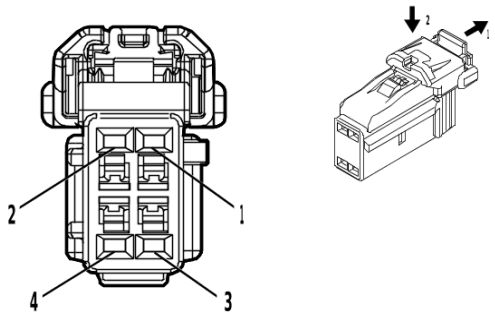
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E52 Reductant Heater 2 - Injector Supply Pipe (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / GY	3199	Diesel Exhaust Fluid Pressure Line Heater Control	I	—
2	—	GN / BK	4319	Diesel Exhaust Fluid Line Heater Low Control	I	—

E55LF Front Side Door Map Pocket Illumination Lamp - Left



4872683

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 35087798
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

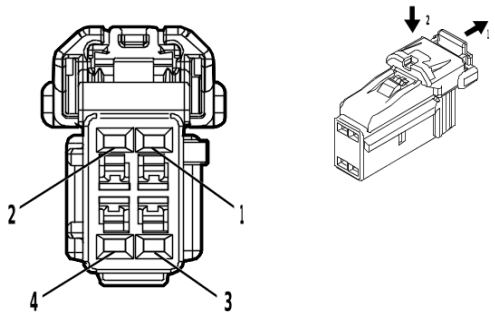
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E55LF Front Side Door Map Pocket Illumination Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN / WH	2861	Body Control Module LIN Bus 15	I	—
4	0.35	GN	8926	Ambient Light Device 3 LIN Bus 1	I	—

E55LR Rear Side Door Pocket Illumination Lamp - Left



4872683

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

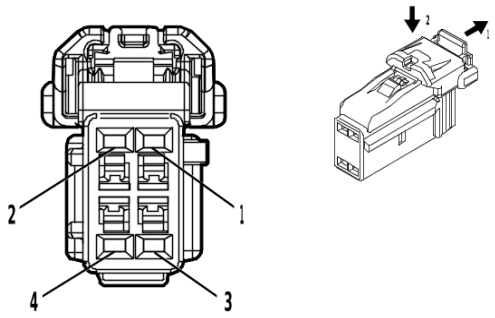
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E55LR Rear Side Door Pocket Illumination Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E55RF Front Side Door Map Pocket Illumination Lamp - Right



4872683

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 35087798
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

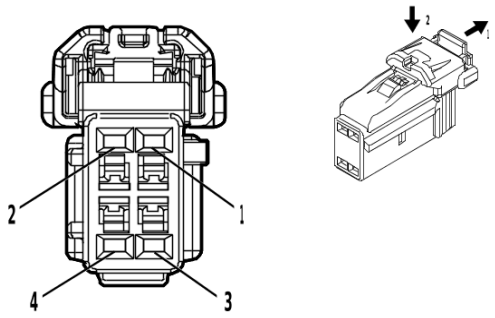
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E55RF Front Side Door Map Pocket Illumination Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN / WH	2861	Body Control Module LIN Bus 15	I	—
4	0.35	BU / GN	8925	Ambient Light Device 2 LIN Bus 1	I	—

E55RR Rear Side Door Pocket Illumination Lamp - Right



4872683

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

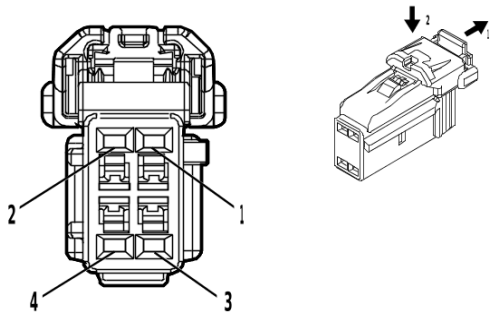
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E55RR Rear Side Door Pocket Illumination Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E63D Front Side Door Inside Handle Illumination Lamp - Left



4872683

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

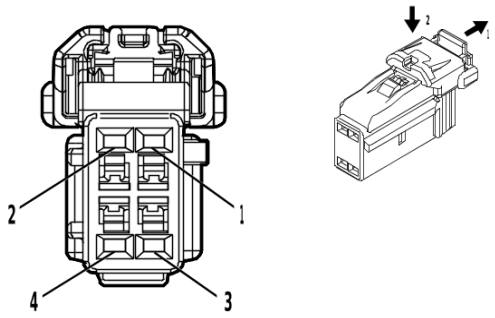
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E63D Front Side Door Inside Handle Illumination Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GN	8926	Ambient Light Device 3 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E63LR Rear Side Door Inside Handle Illumination Lamp - Left



4872683

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

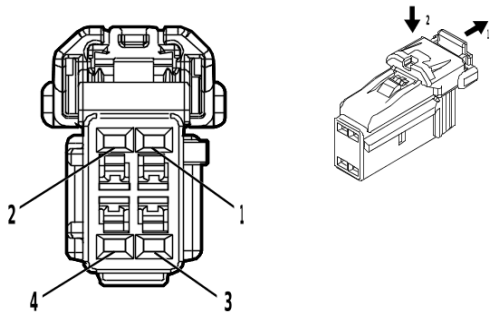
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E63LR Rear Side Door Inside Handle Illumination Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1150	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E63P Front Side Door Inside Handle Illumination Lamp - Right



4872683

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

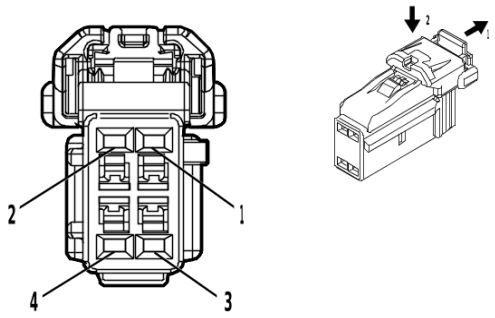
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E63P Front Side Door Inside Handle Illumination Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	BU / GN	8925	Ambient Light Device 2 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E63RR Rear Side Door Inside Handle Illumination Lamp - Right



4872683

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

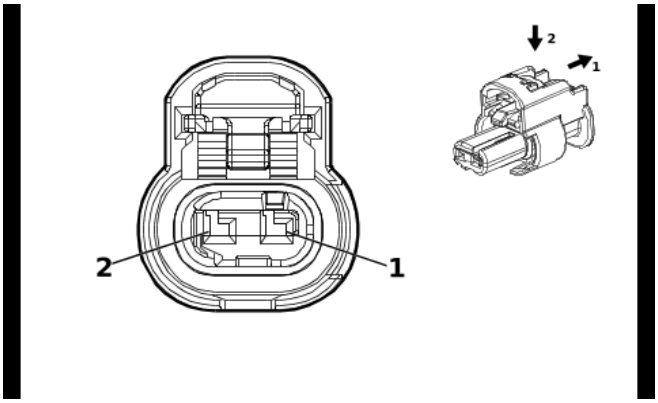
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

E63RR Rear Side Door Inside Handle Illumination Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1250	Ground	I	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E72 Rear Closure Hands Free Lamp



4649903

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

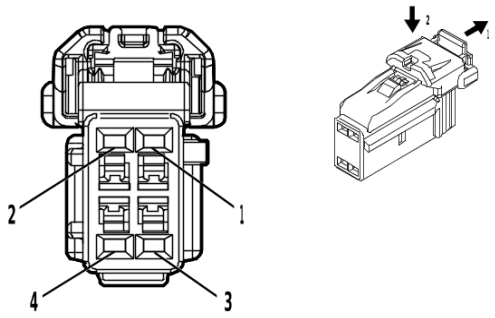
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

E72 Rear Closure Hands Free Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	2066	Hands-Free Liftgate Sensor Lamp Control	I	—
2	0.5	BK	1450	Ground	I	—

E88L Front Floor Console Bin Lamp - Left



4872683

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

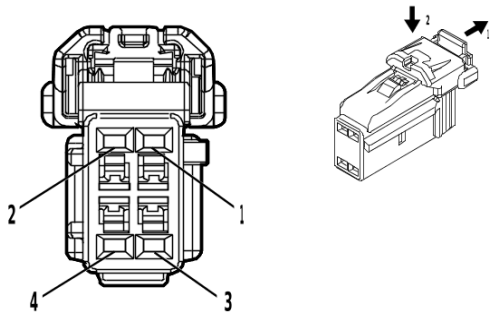
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E88L Front Floor Console Bin Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	II	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E88R Front Floor Console Bin Lamp - Right



4872683

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029308
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

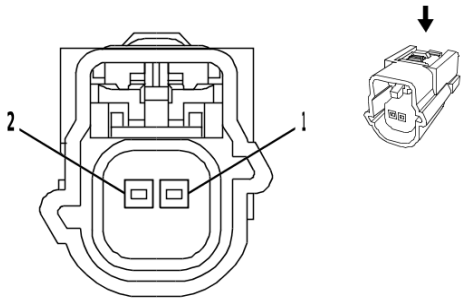
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

E88R Front Floor Console Bin Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	II	—
2	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—
3	0.35	GY / GN	8927	Ambient Light Device 4 LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

E93L Rear Fascia Lower Signal Lamp - Left (T79)



2179777

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

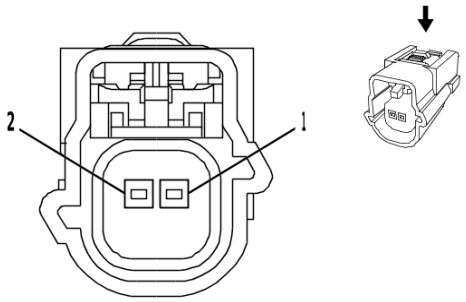
Terminal Part Information

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

E93L Rear Fascia Lower Signal Lamp - Left (T79)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	122	Rear Fog Lamp Control	I	—
2	0.5	BK	1450	Ground	I	—

E93R Rear Fascia Lower Signal Lamp - Right (T79)



2179777

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

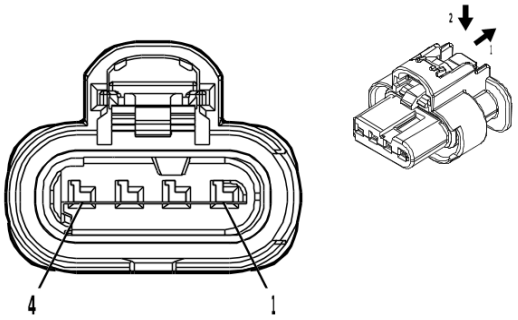
Terminal Part Information

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

E93R Rear Fascia Lower Signal Lamp - Right (T79)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	122	Rear Fog Lamp Control	I	—
2	0.5	BK	1450	Ground	I	—

F101 Instrument Panel Airbag



4900699

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35053710
Service Connector: 19371193
Description: 4-Way F 1.2 MCON-CB Series, Sealed(YE)

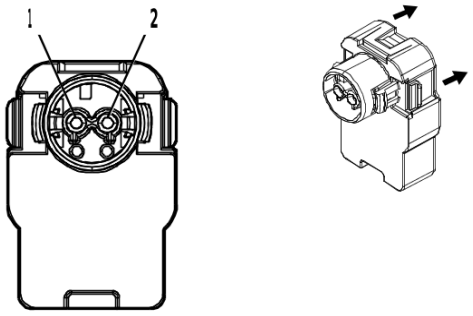
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F101 Instrument Panel Airbag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / OG	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
2	0.5	OG / WH	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—
3	0.5	GY / OG	3027	Passenger Instrument Panel Air Bag Stage 2 High Control	I	—
4	0.5	OG / VT	3026	Passenger Instrument Panel Air Bag Stage 2 Low Control	I	—

F101 Instrument Panel Airbag X1



4823732

Connector Part Information

Harness Type: Instrument Panel Airbag Jumper
OEM Connector: 13598467
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PK with YE Cover)

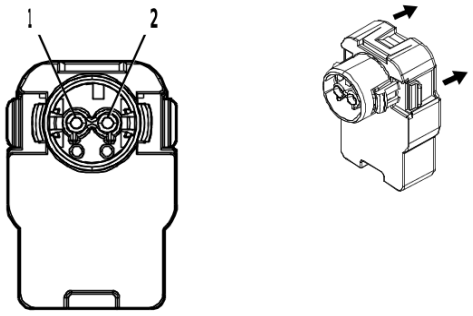
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F101 Instrument Panel Airbag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / OG	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
2	—	OG / WH	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—

F101 Instrument Panel Airbag X2



4772246

Connector Part Information

Harness Type: Instrument Panel Airbag Jumper
OEM Connector: 1-1801930-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PU with YE Cover)

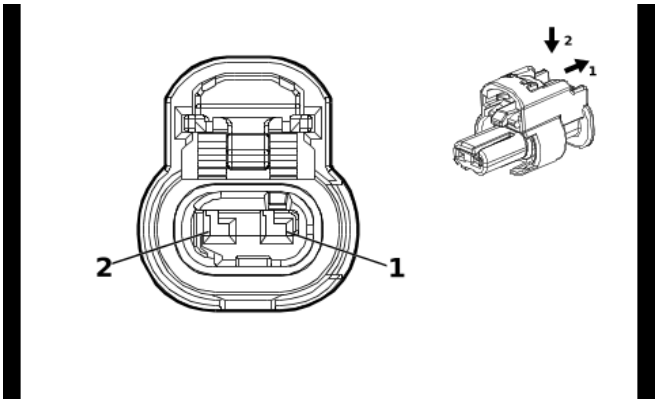
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F101 Instrument Panel Airbag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / OG	3027	Passenger Instrument Panel Air Bag Stage 2 High Control	I	—
2	—	OG / VT	3026	Passenger Instrument Panel Air Bag Stage 2 Low Control	I	—

F105LA Front and Rear and 3rd Row Roof Rail Airbag - Left



4036662

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33386204
Service Connector: 19369032
Description: 2-Way F 1.2 MCON-CB Series, Sealed(BK)

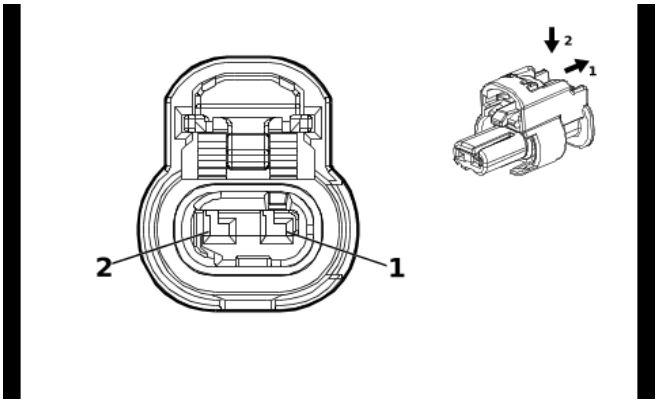
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F105LA Front and Rear and 3rd Row Roof Rail Airbag - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	5019	Left Front Roof Rail Air Bag High Control	I	—
2	0.5	VT / OG	5020	Left Front Roof Rail Air Bag Low Control	I	—

F105RA Front and Rear and 3rd Row Roof Rail Airbag - Right



4036662

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33386204
Service Connector: 19369032
Description: 2-Way F 1.2 MCON-CB Series, Sealed(BK)

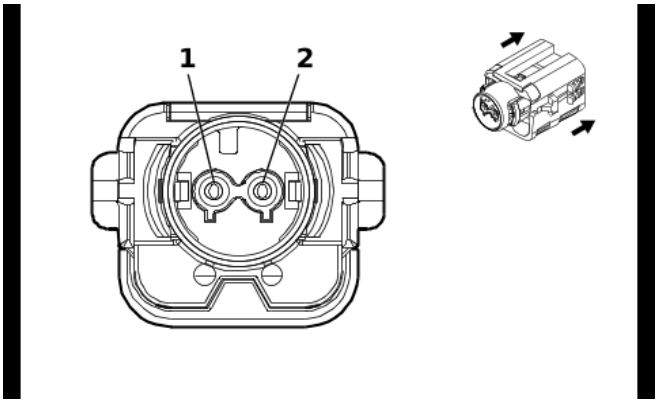
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F105RA Front and Rear and 3rd Row Roof Rail Airbag - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GY	5021	Right Front Roof Rail Air Bag High Control	I	—
2	0.5	WH / OG	5022	Right Front Roof Rail Air Bag Low Control	I	—

F106D Front Seat Outboard Seat Back Airbag - Driver



5499727

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 35212936
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PK with YE Cover)

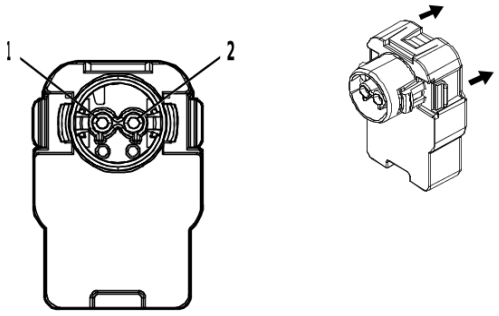
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F106D Front Seat Outboard Seat Back Airbag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BU	4962	Driver Seat Back Air Bag High Control	I	—
2	0.5	BK / OG	4963	Driver Seat Back Air Bag Low Control	I	—

F106DA Front Seat Inboard Seat Back Airbag - Driver



4823720

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 1-1802365-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(GY with YE Cover)

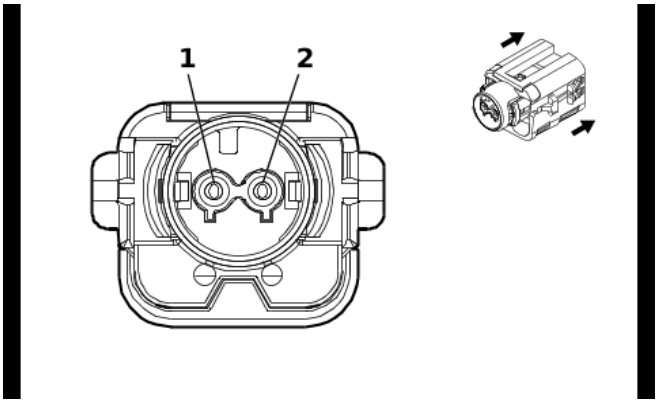
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F106DA Front Seat Inboard Seat Back Airbag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BN	4207	Driver Inboard Seat Side Air Bag High Control	I	—
2	0.5	GY / OG	4208	Driver Inboard Seat Side Air Bag Low Control	I	—

F106P Front Seat Outboard Seat Back Airbag - Passenger



5499727

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 35212936
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PK with YE Cover)

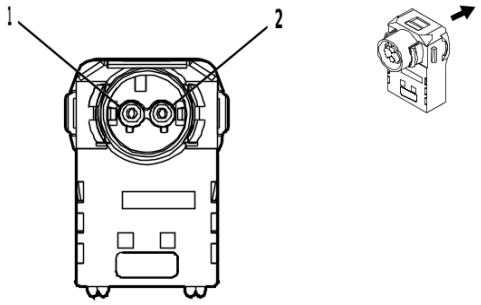
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F106P Front Seat Outboard Seat Back Airbag - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GY	4956	Passenger Seat Back Air Bag High Control	I	—
2	0.5	BU / OG	4957	Passenger Seat Back Air Bag Low Control	I	—

F107 Steering Wheel Airbag X1



4231869

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 33345777
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PK with YE Cover)

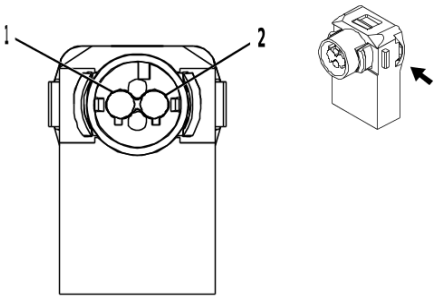
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F107 Steering Wheel Airbag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
2	—	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—

F107 Steering Wheel Airbag X2



4241364

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 33345778
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F ABX-5 Series(PU with YE Cover)

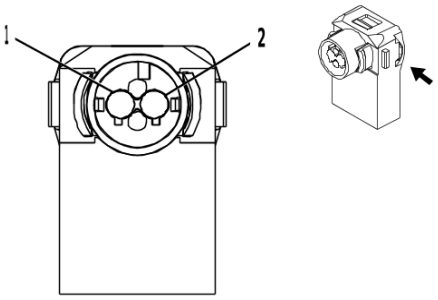
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-10 (GN)	No Tool Required

F107 Steering Wheel Airbag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
2	—	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—

F112D Front Seat Belt Retractor - Driver (AX7)



4241364

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series(PU with YE Cover)

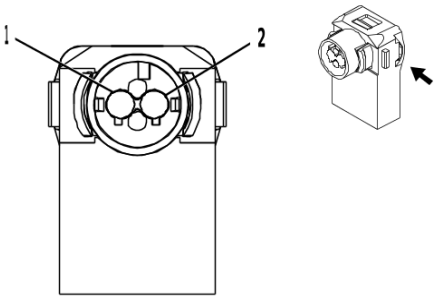
Terminal Part Information

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

F112D Front Seat Belt Retractor - Driver (AX7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	VT / OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—

F112D Front Seat Belt Retractor - Driver (-AX7)



4241364

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series(PU with YE Cover)

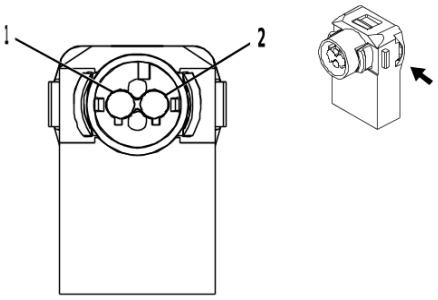
Terminal Part Information

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

F112D Front Seat Belt Retractor - Driver (-AX7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	VT / OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—

F112P Front Seat Belt Retractor - Passenger (AX7)



4241364

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series(PU with YE Cover)

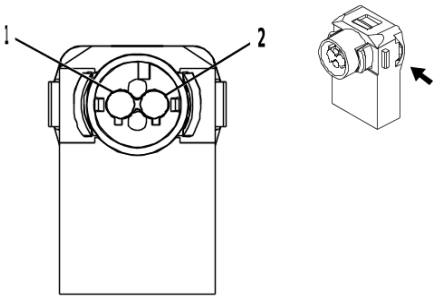
Terminal Part Information

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

F112P Front Seat Belt Retractor - Passenger (AX7)

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 Front Seat Belt Retractor - Passenger (-AX7)



4241364

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series(PU with YE Cover)

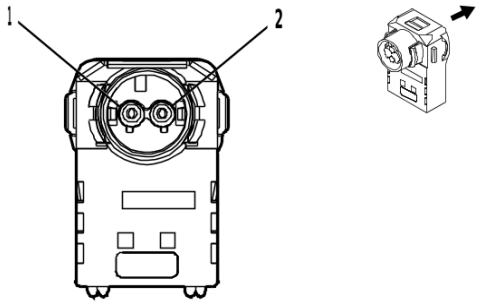
Terminal Part Information

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

F112P Front Seat Belt Retractor - Passenger (-AX7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
2	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—

F113D Front Seat Belt Anchor Plate Tensioner - Driver



4231869

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345777
Service Connector: 19355489
Description: 2-Way F ABX-5 Series(PK with YE Cover)

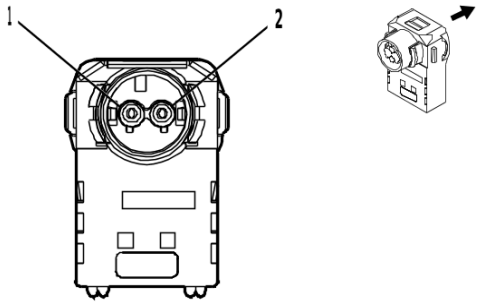
Terminal Part Information

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

F113D Front Seat Belt Anchor Plate Tensioner - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / YE	3481	Driver Seat Belt Anchor Pretensioner High Control	I	—
2	0.5	VT / OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	—

F113P Front Seat Belt Anchor Plate Tensioner - Passenger



4231869

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33345777
Service Connector: 19355489
Description: 2-Way F ABX-5 Series(PK with YE Cover)

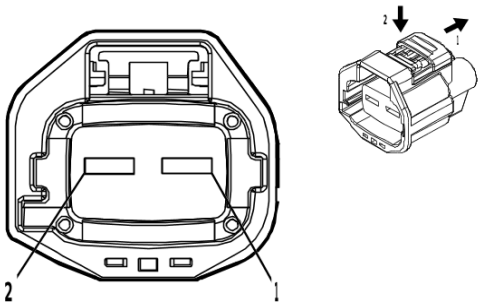
Terminal Part Information

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

F113P Front Seat Belt Anchor Plate Tensioner - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	I	—
2	0.5	GY / OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	I	—

G4 Automatic Level Control Air Compressor (F47)



4584202

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13888959
Service Connector: 19368222
Description: 2-Way F 6.3 Series, Sealed(D-GY)

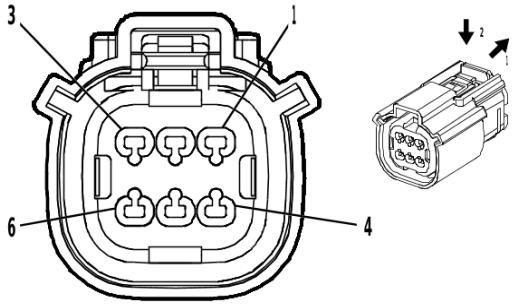
Terminal Part Information

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

G4 Automatic Level Control Air Compressor (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN / BN	2357	Vehicle Level Control Compressor Motor Control	I	—
2	2.5	GY / BN	2693	Leveling Compressor Motor Low Reference	I	—

G5 Automatic Transmission Auxiliary Fluid Pump



4574736

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 MX Series, Sealed(WH)

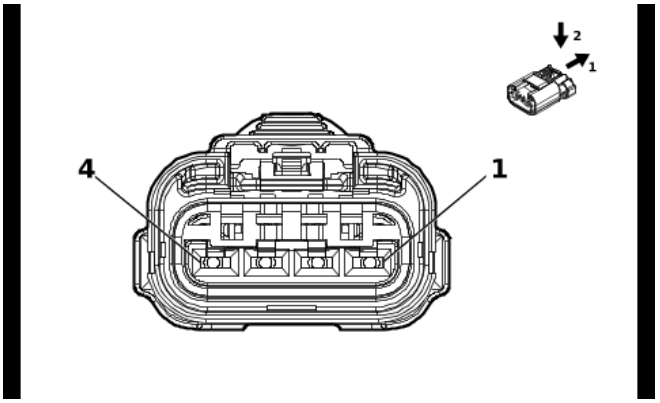
Terminal Part Information

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

G5 Automatic Transmission Auxiliary Fluid Pump

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 Control	I	—
4	0.5	GY / OG	2968	Transmission Auxiliary Fluid Pump Control	I	—
5	—	—	—	Not Occupied	—	—
6	1.5	BK / YE	6550	Ground	I	—

G10L Cooling Fan Motor - Left



5838592

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: 85563415
Description: 4-Way F 2.8 APEX Series, Sealed(BK)

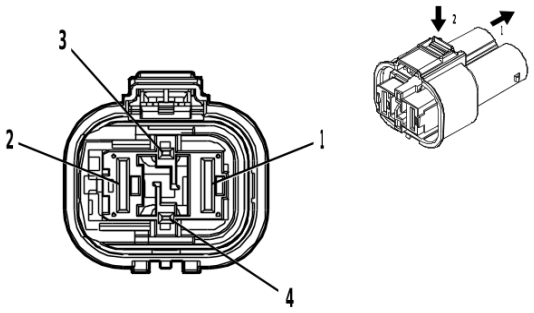
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10L Cooling Fan Motor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	450	Ground	II	—
2	5	RD / BU	1842	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10LW Cooling Fan Motor - Lower



4847569

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33376654
Service Connector: 84766431
Description: 4-Way F 1.2, 9.5 MCON Series, Sealed(BK)

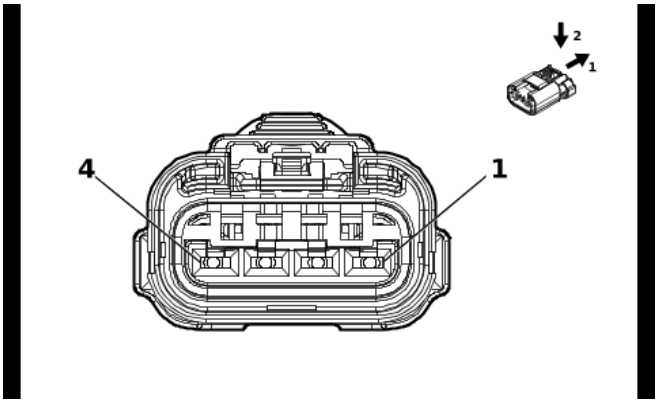
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G10LW Cooling Fan Motor - Lower

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD / BU	1542	Battery Positive Voltage	II	—
2	5	BK	450	Ground	II	—
3	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	I	—
4	—	—	—	Not Occupied	—	—

G10R Cooling Fan Motor - Right (L87)



5838592

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35243535
Service Connector: 85563415
Description: 4-Way F 2.8 APEX Series, Sealed(BK)

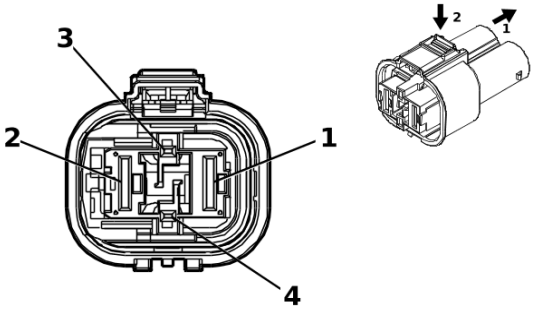
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

G10R Cooling Fan Motor - Right (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BK	450	Ground	II	—
2	5	RD / BN	1742	Battery Positive Voltage	II	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G10R Cooling Fan Motor - Right (LM2/LT4)



5187743

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35194180
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series(GY)

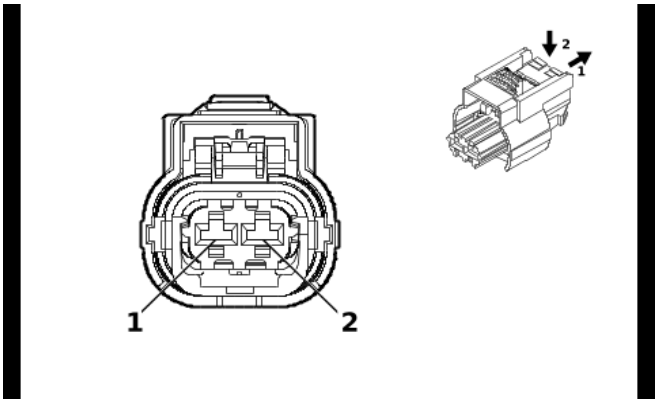
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-22 (RD)	No Tool Required

G10R Cooling Fan Motor - Right (LM2/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD / YE	1442	Battery Positive Voltage	II	—
2	8	BK	450	Ground	II	—
3	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
4	—	—	—	Not Occupied	—	—

G13 Generator X1 (L87)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

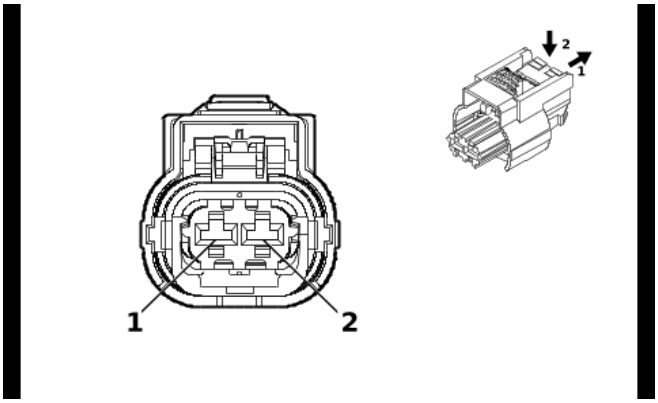
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (LM2)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

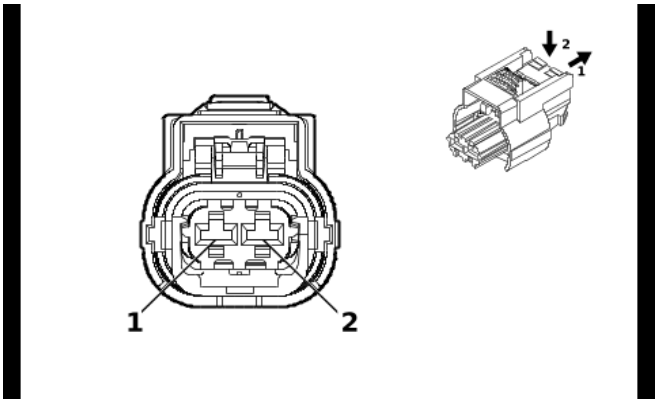
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (LT4)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

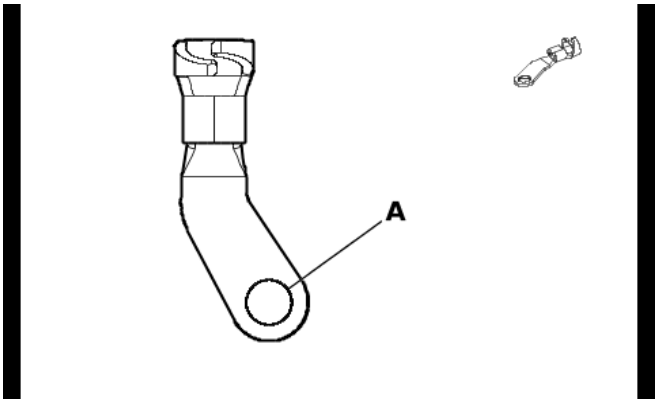
Terminal Part Information

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

G13 Generator X1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X2



5911279

Connector Part Information

Harness Type: Generator
OEM Connector: 84238913
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

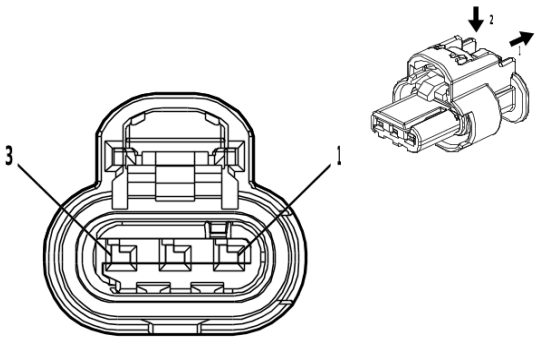
Terminal Part Information

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

G13 Generator X2

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

G17 Heater Coolant Pump



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

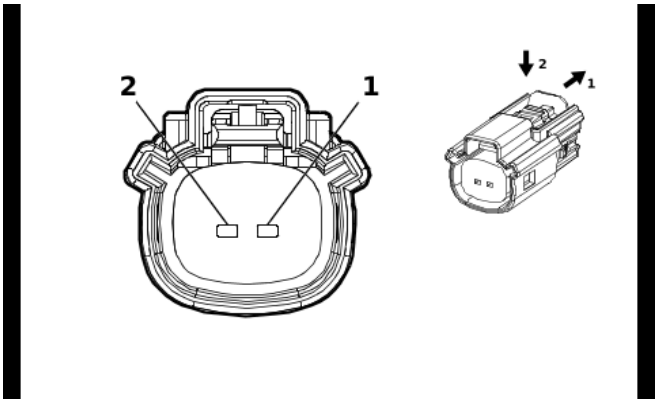
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

G17 Heater Coolant Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6550	Ground	I	L84/ L87
	0.5	BK	6550	Ground	I	LM2
2	0.5	RD / BN	5940	Battery Positive Voltage	I	—
3	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—

G18 Fuel Pump - High Pressure (L87/LT4)



2474713

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 33471-0206
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

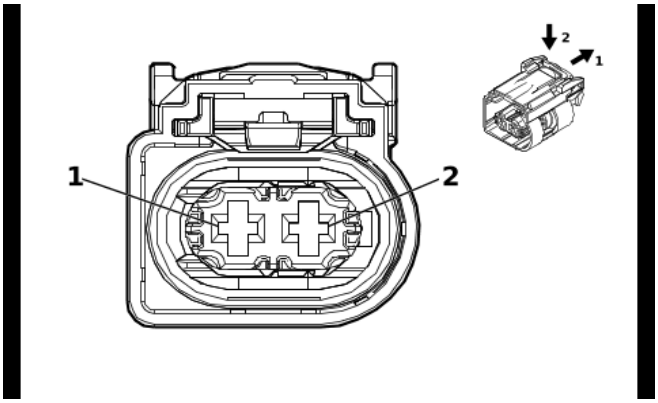
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

G18 Fuel Pump - High Pressure (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	VT / BK	7301	High Pressure Fuel Pump High Control	I	L87
	0.8	YE	7301	High Pressure Fuel Pump High Control	I	LT4
2	0.8	YE	7301	High Pressure Fuel Pump High Control	I	L87
	0.8	VT / BK	7300	High Pressure Fuel Pump Low Control	I	LT4

G24 Windshield Washer Pump



5580410

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35459954
Service Connector: 85005016
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

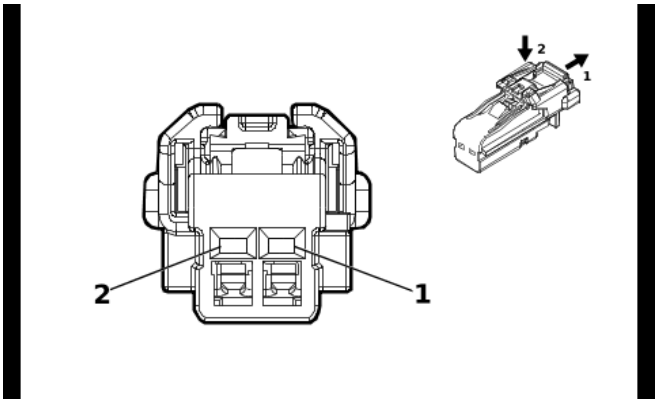
Terminal Part Information

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

G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / VT	392	Rear Window Washer Pump Control	I	—
2	0.75	GY / VT	228	Windshield Washer Pump Control	I	—

G31D Front Seat Back Lumbar Pump - Driver



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

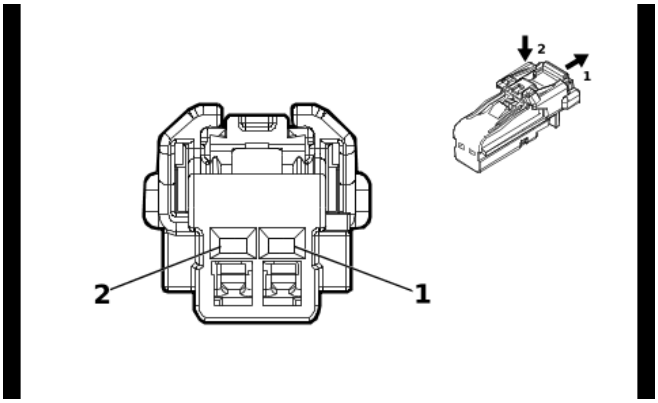
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

G31D Front Seat Back Lumbar Pump - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BU	4891	Driver Seat Lumbar/Bolster Pump Control	I	—
2	0.75	BN / BK	2305	Driver Seat Bolster Pump Low Reference	I	—

G31P Front Seat Back Lumbar Pump - Passenger (AVK-A45)



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

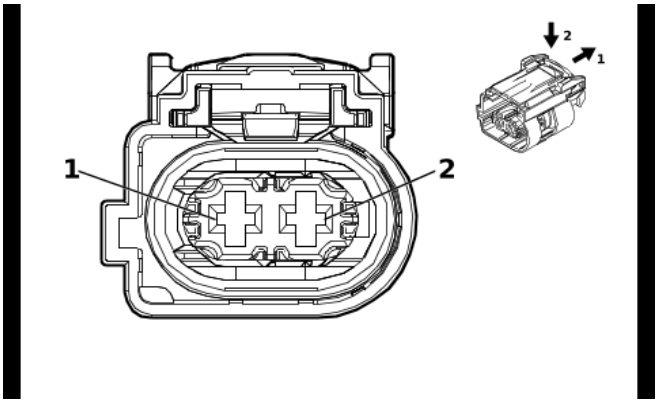
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

G31P Front Seat Back Lumbar Pump - Passenger (AVK-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / WH	4890	Passenger Seat Lumbar/Bolster Pump Control	I	—
2	0.75	BK	1250	Ground	I	—

G54 Windshield Washer Pump - Night Vision Camera (UV3)



5581744

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35570575
Service Connector: 85005017
Description: 2-Way F 2.8 MCP Series, Sealed(BU)

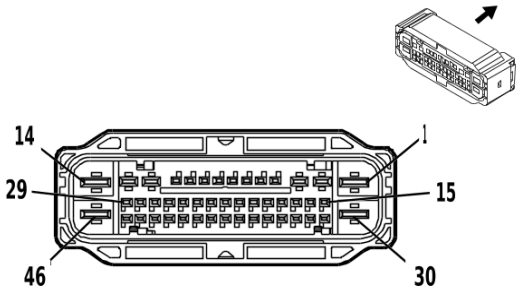
Terminal Part Information

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

G54 Windshield Washer Pump - Night Vision Camera (UV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / GN	703	Camera Washer Pump Control	I	—
2	0.75	BK	150	Ground	I	—

K3 Air Suspension Control Module (F47)



4162046

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35449380
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212

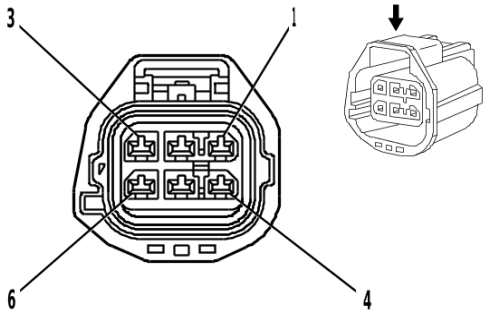
K3 Air Suspension Control Module (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / BU	7640	Battery Positive Voltage	III	—
2	0.75	RD / BN	2940	Battery Positive Voltage	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	0.5	WH / GN	320	Vehicle Level Control Exhaust Solenoid Valve Control	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	WH / BU	3261	Vehicle Level Control Exhaust Solenoid Valve Control	II	—
10	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
11	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
12	—	—	—	Not Occupied	—	—
13	0.75	BK	2150	Ground	I	—
14	3	BK	2150	Ground	III	—
15 - 17	—	—	—	Not Occupied	—	—
18	0.5	BK / BU	1206	Left Front Suspension Position Sensor Low Reference	II	—
19	0.5	BN / WH	1207	Left Front Suspension Position Sensor Signal	II	—
20	0.5	BU / RD	1205	Left Front Suspension Position Sensor Voltage Reference	II	—
21	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	II	—
22	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	II	—

K3 Air Suspension Control Module (F47) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	II	—
24	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
25	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
26 - 29	—	—	—	Not Occupied	—	—
30	2.5	GN / BN	2357	Vehicle Level Control Compressor Motor Control	III	—
31 - 33	—	—	—	Not Occupied	—	—
34	0.5	BK / GY	1212	Right Front Suspension Position Sensor Low Reference	II	—
35	0.5	YE / WH	1213	Right Front Suspension Position Sensor Signal	II	—
36	0.5	BN / RD	1211	Right Front Suspension Position Sensor Voltage Reference	II	—
37	0.5	GN / RD	1214	Right Rear Suspension Position Sensor Voltage Reference	II	—
38	0.5	GN / GY	1216	Right Rear Suspension Position Sensor Signal	II	—
39	0.5	BK / YE	1215	Right Rear Suspension Position Sensor Low Reference	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	2.5	GY / BN	2693	Leveling Compressor Motor Low Reference	III	—

K4 Running Board Control Module X1 (B3L / LWB)



1420587

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33334914
Service Connector: 19368306
Description: 6-Way F 2.8 Series, Sealed(GY)

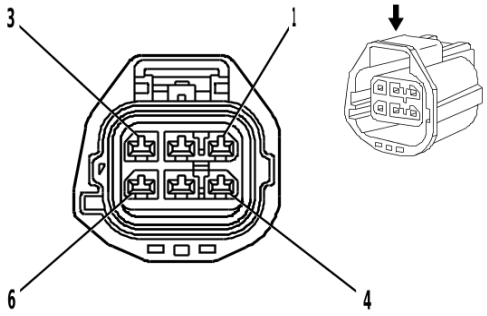
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

K4 Running Board Control Module X1 (B3L / LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / YE	1142	Battery Positive Voltage	I	—
2	2	GY	7472	Left Running Board Step Motor Control Retract	I	—
3	2	BU	7470	Right Running Board Step Motor Control Extend	I	—
4	2.5	BK	1650	Ground	I	—
5	2	WH / BN	7471	Left Running Board Step Motor Control Extend	I	—
6	2	GN	7469	Right Left Running Board Step Motor Control Retract	I	—

K4 Running Board Control Module X1 (B3L / SWB)



1420587

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33334914
Service Connector: 19368306
Description: 6-Way F 2.8 Series, Sealed(GY)

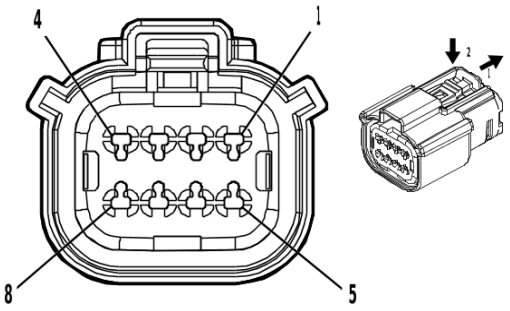
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

K4 Running Board Control Module X1 (B3L / SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / YE	1142	Battery Positive Voltage	I	—
2	2	GY	7472	Left Running Board Step Motor Control Retract	I	—
3	2	BU	7470	Right Running Board Step Motor Control Extend	I	—
4	2.5	BK	1650	Ground	I	—
5	2	WH / BN	7471	Left Running Board Step Motor Control Extend	I	—
6	2	GN	7469	Right Left Running Board Step Motor Control Retract	I	—

K4 Running Board Control Module X2 (B3L / LWB)



4846407

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35390555
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed(BK)

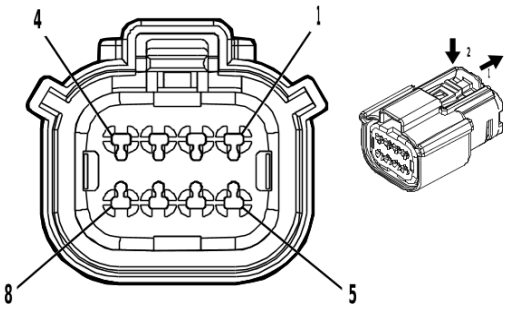
Terminal Part Information

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

K4 Running Board Control Module X2 (B3L / LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
3	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	—	—	—	Not Occupied	—	—

K4 Running Board Control Module X2 (B3L / SWB)



4846407

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35390555
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed(BK)

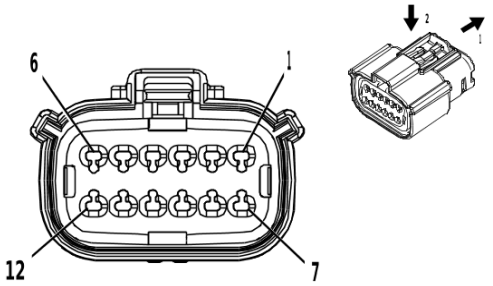
Terminal Part Information

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

K4 Running Board Control Module X2 (B3L / SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
3	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	—	—	—	Not Occupied	—	—

K4 Running Board Control Module X3 (B3L / LWB)



2871860

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35435906
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

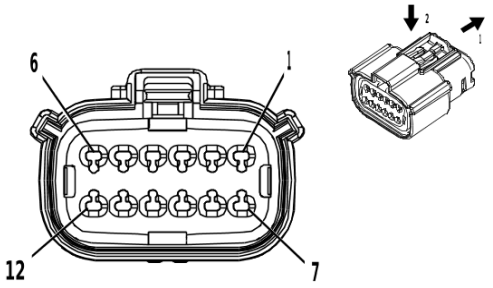
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217

K4 Running Board Control Module X3 (B3L / LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / RD	7464	Right Running Board Step Motor Hall Sensor 5V Reference	I	—
2	0.5	VT	7465	Right Running Board Step Motor Hall Sensor Signal	I	—
3	0.5	YE / BK	7463	Right Running Board Step Motor Hall Sensor Low Reference	I	—
4	0.5	BN	4748	Left Running Board Step Courtesy Lamp Control	I	—
5	0.5	GY / VT	4749	Right Running Board Step Courtesy Lamp Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	VT / RD	7468	Left Running Board Step Motor Hall Sensor 5V Reference	I	—
8	0.5	YE	7467	Left Running Board Step Motor Hall Sensor Signal	I	—
9	0.5	YE / BN	7466	Left Running Board Step Motor Hall Sensor Low Reference	I	—
10 - 12	—	—	—	Not Occupied	—	—

K4 Running Board Control Module X3 (B3L / SWB)



2871860

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35435906
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

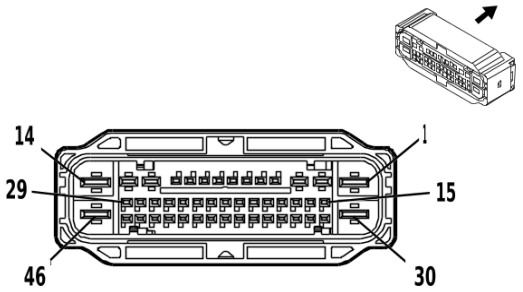
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217

K4 Running Board Control Module X3 (B3L / SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / RD	7464	Right Running Board Step Motor Hall Sensor 5V Reference	I	—
2	0.5	VT	7465	Right Running Board Step Motor Hall Sensor Signal	I	—
3	0.5	YE / BK	7463	Right Running Board Step Motor Hall Sensor Low Reference	I	—
4	0.5	BN	4748	Left Running Board Step Courtesy Lamp Control	I	—
5	0.5	GY / VT	4749	Right Running Board Step Courtesy Lamp Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	VT / RD	7468	Left Running Board Step Motor Hall Sensor 5V Reference	I	—
8	0.5	YE	7467	Left Running Board Step Motor Hall Sensor Signal	I	—
9	0.5	YE / BN	7466	Left Running Board Step Motor Hall Sensor Low Reference	I	—
10 - 12	—	—	—	Not Occupied	—	—

K5 Automatic Level Control Module



4162046

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35449380
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212

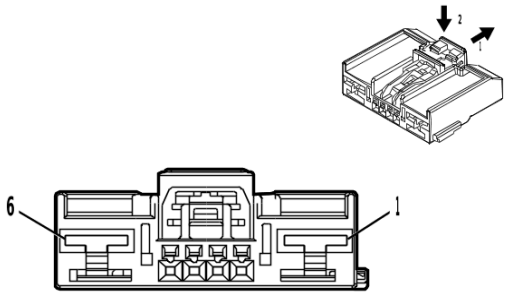
K5 Automatic Level Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / BU	7640	Battery Positive Voltage	III	—
2	0.75	RD / BN	2940	Battery Positive Voltage	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	0.5	WH / GN	320	Vehicle Level Control Exhaust Solenoid Valve Control	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	WH / BU	3261	Vehicle Level Control Exhaust Solenoid Valve Control	II	—
10	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
11	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
12	—	—	—	Not Occupied	—	—
13	0.75	BK	2150	Ground	I	—
14	3	BK	2150	Ground	III	—
15 - 17	—	—	—	Not Occupied	—	—
18	0.5	BK / BU	1206	Left Front Suspension Position Sensor Low Reference	II	—
19	0.5	BN / WH	1207	Left Front Suspension Position Sensor Signal	II	—
20	0.5	BU / RD	1205	Left Front Suspension Position Sensor Voltage Reference	II	—
21	0.5	YE / RD	1208	Left Rear Suspension Position Sensor Voltage Reference	II	—
22	0.5	GN / WH	1210	Left Rear Suspension Position Sensor Signal	II	—

K5 Automatic Level Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	0.5	BK / GN	1209	Left Rear Suspension Position Sensor Low Reference	II	—
24	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
25	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
26 - 29	—	—	—	Not Occupied	—	—
30	2.5	GN / BN	2357	Vehicle Level Control Compressor Motor Control	III	—
31 - 33	—	—	—	Not Occupied	—	—
34	0.5	BK / GY	1212	Right Front Suspension Position Sensor Low Reference	II	—
35	0.5	YE / WH	1213	Right Front Suspension Position Sensor Signal	II	—
36	0.5	BN / RD	1211	Right Front Suspension Position Sensor Voltage Reference	II	—
37	0.5	GN / RD	1214	Right Rear Suspension Position Sensor Voltage Reference	II	—
38	0.5	GN / GY	1216	Right Rear Suspension Position Sensor Signal	II	—
39	0.5	BK / YE	1215	Right Rear Suspension Position Sensor Low Reference	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	2.5	GY / BN	2693	Leveling Compressor Motor Low Reference	III	—

K8 Blower Motor Control Module



4650258

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33395154
Service Connector: 19356432
Description: 6-Way F 0.64, 6.3 Series(BK)

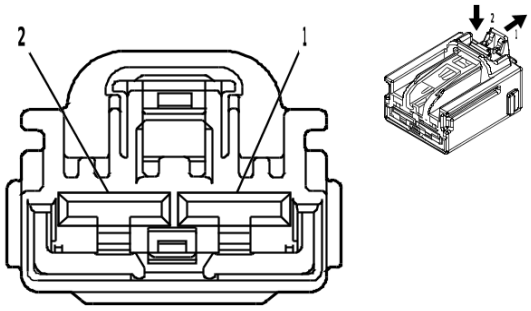
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

K8 Blower Motor Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD / GY	2042	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	5	BK	1050	Ground	I	—

K8AB Blower Motor Control Module - Rear X1



5116029

Connector Part Information

Harness Type: Rear Blower Motor
OEM Connector: 13514655
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 6.3 Series(GY)

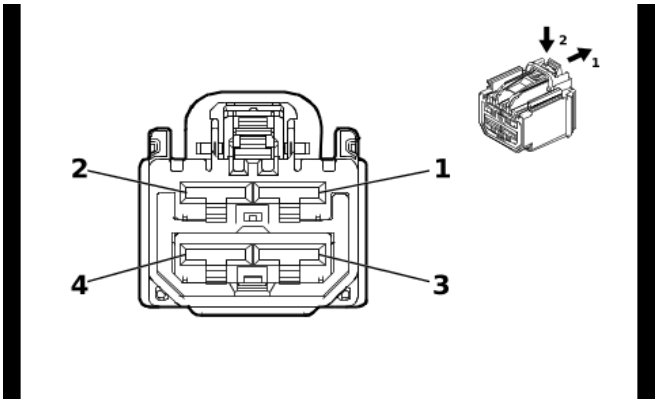
Terminal Part Information

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

K8AB Blower Motor Control Module - Rear X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	101	Blower Motor Control 2	I	—
2	—	BU	5988	Rear Blower Motor Low Reference	I	—

K8AB Blower Motor Control Module - Rear X2



5492913

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 13524647
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 6.3 YESC Series(GY)

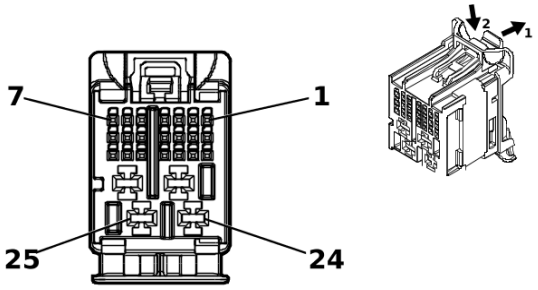
Terminal Part Information

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

K8AB Blower Motor Control Module - Rear X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	RD / YE	1740	Battery Positive Voltage	I	—
3	—	BN / BK	2211	Rear Blower Motor Speed Control	I	—
4	—	BK	1450	Ground	I	—

K9 Body Control Module X1



5203995

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392285
Service Connector: 13534967
Description: 25-Way F 0.5 MQS, 2.8 MCP Series(BK with GY Inner Connector)

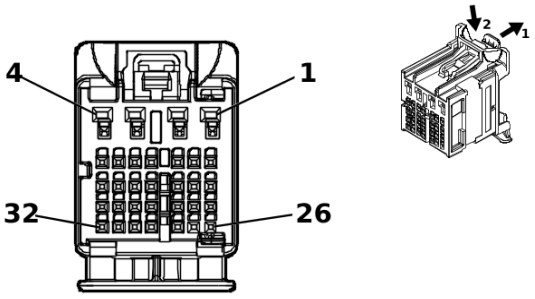
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	87814662	J-35616-4A (PU)	J-38125-557

K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	WH / GN	2911	Driver Mode 1 Indicator Control	I	LT4
3	0.35	GY / YE	7543	Hazard Warning Indicator LED Dimming Signal	I	—
4	0.35	VT / GN	7558	Front Footwell Accent Lighting Control	I	B7G
5	0.35	BU / GY	754	Blower Motor Speed Control	I	—
6	0.35	WH / YE	4634	HVAC Remote Enable Signal	I	—
7 - 10	—	—	—	Not Occupied	—	—
11	0.35	GY / GN	4636	HVAC System Enable Signal	I	—
12	0.35	GY	728	Security Indicator Control	I	—
13	0.35	YE	6812	Out of Park Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	GY	590	Driver Solar Sensor Signal	I	—
16	0.35	GY	6137	A/C Evaporator Temperature Sensor Signal	I	—
17	0.35	WH / BU	278	Ambient Light Sensor Signal	I	—
18	0.35	BU / WH	734	Inside Air Temperature Sensor Signal	I	—
19	0.35	YE / BN	1428	Automatic Vehicle Hold Switch Signal	I	—
20	0.35	GN / VT	2852	Body Control Module LIN Bus 6	I	—
21 - 22	—	—	—	Not Occupied	—	—
23	1	RD / GY	2840	Battery Positive Voltage	II	—
24	—	—	—	Not Occupied	—	—
25	0.75	RD / GY	2140	Battery Positive Voltage	II	—

K9 Body Control Module X2



5204222

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392289
Service Connector: 13534980
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(PK with GY Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

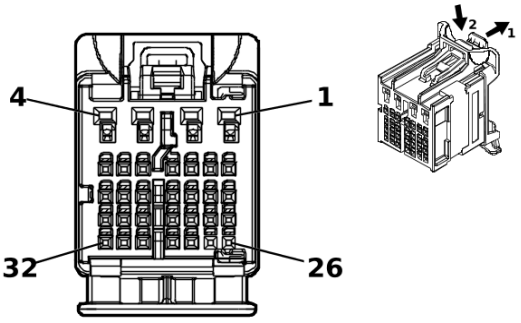
K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.35	BU / GN	5723	Ignition Mode Switch Mode Voltage	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.35	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—
10	0.35	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.35	YE / BU	1714	Windshield Wiper Switch Low Signal	I	—
13	0.35	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
14	0.35	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	BN / BK	5720	Ignition Mode Switch Accessory LED Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	GN / GY	2431	Automatic Vehicle Hold Indicator Control	I	—
19	0.35	WH / VT	103	Headlamp Switch On Signal	I	—
20	0.35	GN / GY	13	Headlamp Switch Park Lamp Signal	I	—
21	0.35	GN / BN	306	Headlamp Switch Off Signal	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	VT / BU	2916	Right Turn Signal Switch Signal	I	—
24	—	—	—	Not Occupied	—	—
25	0.35	BK / GY	6009	Windshield Wiper Switch Low Reference	I	—
26	0.35	WH / BK	94	Windshield Washer Switch Signal	I	—

K9 Body Control Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.35	YE / BN	307	Headlamp Switch Flash Signal	I	—
28	0.35	GN / WH	3287	Horn Switch Signal	I	—
29	0.35	WH / GN	2915	Left Turn Signal Switch Signal	I	—
30	0.35	BK / YE	407	Sensor Low Reference	I	—
31	0.35	GN / WH	111	Hazard Warning Switch Signal	I	—
32	0.35	WH	524	High Beam Select Switch High Beam Signal	I	—

K9 Body Control Module X3



5203925

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392288
Service Connector: 13534977
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(BU with GY Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

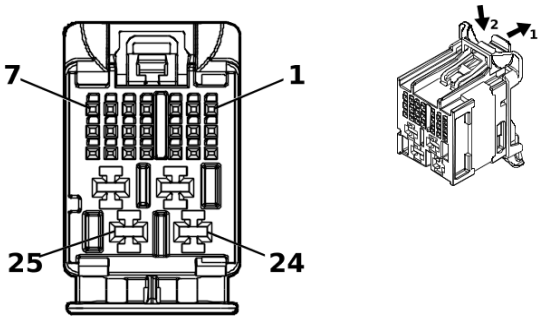
K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	GN / VT	4786	Dome/Reading Lamp Enable Signal	II	—
4	—	—	—	Not Occupied	—	—
5	0.35	GN / BN	2853	Body Control Module LIN Bus 7	I	—
6	0.35	BN / BU	391	Rear Window Wiper Switch Signal	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.35	YE / GY	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
10	0.35	GN / BK	2858	Body Control Module LIN Bus 12	I	—
11	0.35	GN / WH	2861	Body Control Module LIN Bus 15	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	WH	3152	Lane Departure Warning Indicator Control	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	GN	1110	Stop/Start Indicator Control	I	—
16	0.35	GN / BU	761	Blower Speed Feedback Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	BK / YE	5005	Instrument Panel Lamp Dimmer Switch Low Reference	I	—
19	0.35	BU / BK	5719	Ignition Mode Switch Start LED Signal	I	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	BU	1111	Stop/Start Switch Signal	I	—
24	0.35	WH / BU	3691	Trailer Brake Apply Signal	I	—

K9 Body Control Module X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.35	BU / GY	187	Rear Fog Lamp Switch Signal	I	T79
26	0.35	GY / BN	3904	Auto High Beam Assist Switch Signal	I	—
27	0.35	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	—
28 - 32	—	—	—	Not Occupied	—	—

K9 Body Control Module X4



5203893

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35392284
Service Connector: 13534970
Description: 25-Way F 0.5 MQS, 2.8 MCP Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	87814662	J-35616-4A (PU)	J-38125-557

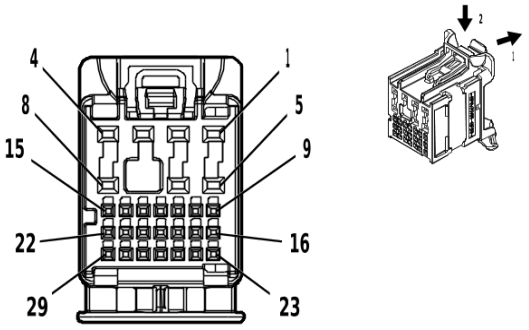
K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / BK	3552	Interior Passive Entry Antenna 1 High Signal	I	—
2	0.35	WH	3553	Interior Passive Entry Antenna 1 Low Signal	I	—
3	0.35	BK / VT	1449	Steering Wheel Resistor Ladder Low Reference	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	GN / VT	5199	Run/Crank Relay Coil Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BN / BK	4996	Immobilizer Antenna Signal [+]	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.35	GY / GN	4083	Retained Accessory Power Relay 2 Coil Control	I	—
11	0.35	BU / GY	4990	Driver Mode 1 Switch Signal	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.35	WH / GY	4997	Immobilizer Antenna Low Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	GN / WH	4115	Body Control Module LIN Bus 5	I	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
20	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
21	—	—	—	Not Occupied	—	—
22	0.5	RD / WH	2740	Battery Positive Voltage	II	—
23	1.5	RD / BU	2540	Battery Positive Voltage	II	—
24	2.5	BK / WH	1851	Signal Ground	II	—

K9 Body Control Module X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	2.5	BK	1850	Ground	II	—

K9 Body Control Module X5



4584346

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35364128
Service Connector: 13534972
Description: 29-Way F 0.5 NANO, 1.2 MCON Series(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

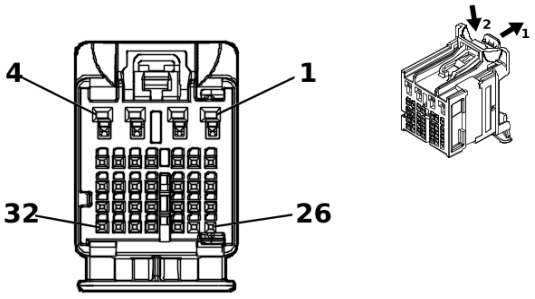
K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / VT	4786	Dome/Reading Lamp Enable Signal	II	—
2	0.5	BU / BN	7573	A/C Compressor Solenoid Valve Control	II	—
3	0.5	BU / YE	7574	A/C Compressor Solenoid Valve Control	II	—
4	0.75	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	II	—
5	0.5	GY	157	Interior Lamp Control	II	—
6	0.5	YE	6817	LED Backlight Dimming Control 1	II	—
7	—	—	—	Not Occupied	—	—
8	0.75	VT / BU	2687	Left Front Door Unlatch Actuator Unlatch Control	II	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	BN / WH	28	Horn Relay Control	I	—
12	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
13	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.35	VT	4301	Passive Entry Left Front Antenna Signal High	I	—
17	0.35	GN / YE	2855	Body Control Module LIN Bus 9	I	—
18	0.35	VT / GY	126	Left Front Door Open Switch Signal	I	—
19	0.35	GN / YE	6134	Body Control Module LIN Bus 3	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	WH / BU	6311	Cruise/ETC/TCC Brake Signal	I	—
22	0.35	BN / VT	193	Rear Defogger Relay Control	I	—
23	0.35	VT / WH	4302	Passive Entry Left Front Antenna Signal Low	I	—

K9 Body Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.35	WH	5359	Brake Apply Sensor Control	I	—
25	0.35	BU / YE	5361	Brake Apply Sensor Signal	I	—
26	0.35	BK / BN	5360	Brake Apply Sensor Low Reference	I	—
27	—	—	—	Not Occupied	—	—
28	0.35	GN / BK	394	Left Front Door Handle Switch Signal 1	I	—
29	0.35	WH / VT	4849	LED Ambient Lighting Enable Signal	I	—

K9 Body Control Module X6



5202291

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392287
Service Connector: 13534981
Description: 32-Way F 0.5 MQS, 1.2 OCS Series(BN with GY Inner Connector)

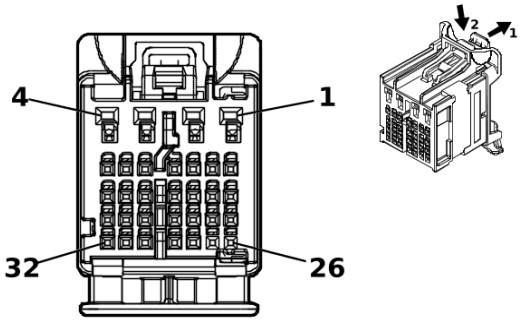
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN / BK	2686	Right Rear Door Unlatch Actuator Unlatch Control	II	—
3	0.75	WH / BN	2684	Unlatch Actuators Unlatch Low Reference 2	II	—
4	—	—	—	Not Occupied	—	—
5	0.35	YE / BU	5797	Rear Closure Handle Switch Open Signal	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BN / GN	3568	Rear Closure Passive Entry Antenna High Signal	I	—
8	0.35	GN / GY	3569	Rear Closure Passive Entry Antenna Low Signal	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	GN / BU	6133	Body Control Module LIN Bus 2	I	—
12 - 21	—	—	—	Not Occupied	—	—
22	0.35	BN / GN	4064	Hood Status B Signal	I	—
23 - 27	—	—	—	Not Occupied	—	—
28	0.35	BU	2675	Left Front Exterior Door Handle Switch Unlock Signal	I	—
29	0.35	GY	2674	Left Front Door Exterior Switch Lock Signal	I	—
30	0.35	GY / BU	2677	Right Front Door Exterior Switch Lock Signal	I	—
31	0.35	GY / BU	4995	Right Rear Door Exterior Switch Unlock Signal	I	—
32	0.35	BN / WH	6654	Right Rear Door Handle Switch Signal 2	I	—

K9 Body Control Module X7



5202294

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35397992
Service Connector: 13534979
Description: 32-Way F 0.5 MQS, 1.2 OCS Series(PU with GY Inner Connector)

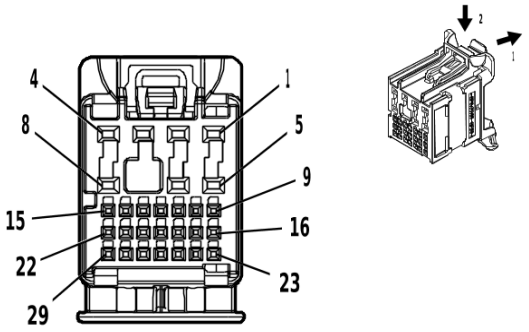
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	BU / BK	2690	Fuel Door Actuator Unlock Control	II	—
3	0.75 0.75	BN / YE GY	1095 5911	Right Rear Door Lock Actuator Unlock Control Door Lock Actuator Lock Control 2	II II	(MAH/ MAW/ MBC/ MCX) - AF7 (- MAH- MAW- MBC- MCX+ UTT)
4 - 16	—	—	—	Not Occupied	—	—
17	0.35	GY / YE	6188	Liftgate Window/Rear Compartment Lid Motor Unlatch Control	I	—
18	0.35	WH / VT	1430	Exterior Courtesy Lamp Control	I	—
19	0.35	GN / VT	2857	Body Control Module LIN Bus 11	I	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	GN / BU	4648	Left Rear Door Lock Status Signal	I	—
24	0.35	YE / BU	4783	Rear Footwell Accent Lighting Control	I	B7G
25	—	—	—	Not Occupied	—	—
26	0.35	WH / GY	4649	Right Rear Door Lock Status Signal	I	—
27	0.35	VT / BU	7598	Glass Breakage Sensor 2 Signal	I	UTV
28	0.35	GN / GY	1177	Right Front Door Open Switch Signal	I	—
29 - 32	—	—	—	Not Occupied	—	—

K9 Body Control Module X8



4578560

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35364137
Service Connector: 13534971
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

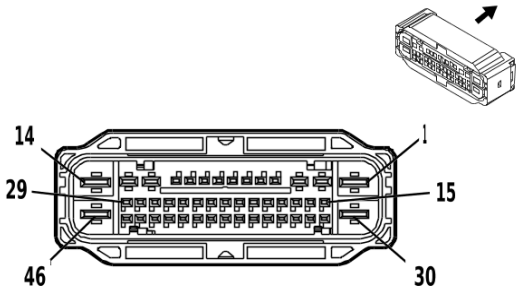
K9 Body Control Module X8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75 0.75	GN / GY BN	1092 5910	Left Rear Door Lock Actuator Unlock Control Door Dead Lock Actuator Lock Control	II II	MAS/ MAW/ MBC/ MCX UTT
3	0.75	BU / WH	2685	Left Rear Door Unlatch Actuator Unlatch Control	II	—
4	0.75	GN	2688	Right Front Door Unlatch Actuator Unlatch Control	II	—
5	0.35	GY	2066	Hands-Free Liftgate Sensor Lamp Control	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.35	GN / BK	4304	Passive Entry Right Front Door Antenna Signal Low	I	—
10	0.35	GN / YE	4303	Passive Entry Right Front Door Antenna Signal High	I	—
11	0.35	BU	3554	Interior Passive Entry Antenna 2 High Signal	I	—
12	0.35	GY / BK	3555	Interior Passive Entry Antenna 2 Low Signal	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.35	GN / BK	6156	Door Unlatch Motor Low Reference	I	—
16	0.35	WH / VT	4994	Left Rear Door Exterior Switch Unlock Signal	I	—
17	0.35	GN / YE	2862	Body Control Module LIN Bus 16	I	—
18	0.35	GN / WH	2854	Body Control Module LIN Bus 8	I	—
19	0.35	GN / BK	6156	Door Unlatch Motor Low Reference	I	—
20	0.35	GN / BU	2856	Body Control Module LIN Bus 10	I	—

K9 Body Control Module X8 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.35	VT / WH	6675	Left Rear Door Lock Indicator Control	I	—
22	0.35	YE / BK	6677	Right Rear Door Lock Indicator Control	I	—
23	—	—	—	Not Occupied	—	—
24	0.35	YE	6653	Left Rear Door Handle Switch Signal 2	I	—
25	—	—	—	Not Occupied	—	—
26	0.35	BU / YE	395	Right Front Door Handle Switch Signal 1	I	—
27	—	—	—	Not Occupied	—	—
28	0.35	GY / VT	2676	Right Front Door Exterior Switch Unlock Signal	I	—
29	0.35	GN / GY	6135	Body Control Module LIN Bus 4	I	—

K19 Suspension Control Module



4162046

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35435461
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-12 (BU)	J-38125-215A
II	84634921	J-35616-42 (RD)	J-38125-212

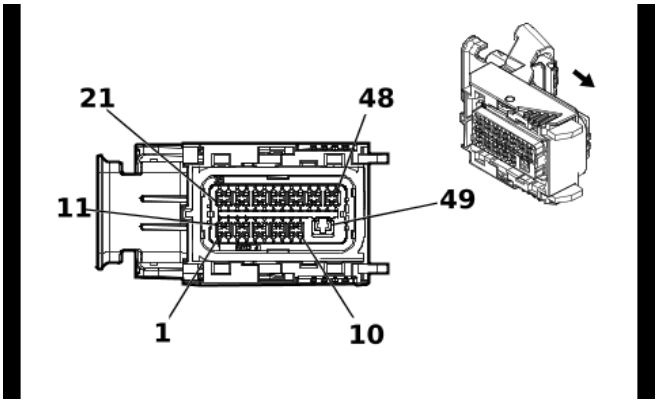
K19 Suspension Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / GN	2440	Battery Positive Voltage	II	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
6	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
7	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
8	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	BN / BU	1116	Right Front Shock Absorber Actuator Control	I	—
11	0.5	GY / WH	1117	Right Front Shock Absorber Actuator Control	I	—
12 - 13	—	—	—	Not Occupied	—	—
14	0.75	BK	2150	Ground	II	—
15	0.5	BN / WH	1107	Left Front Shock Absorber Actuator Control	I	—
16 - 21	—	—	—	Not Occupied	—	—
22	0.5	BU / GY	1114	Left Rear Shock Absorber Actuator Control	I	—
23	0.5	BK / BN	1099	Left Front Vertical Suspension Acceleration Sensor Low Reference	I	—
24	0.5	WH	1100	Left Front Vertical Suspension Acceleration Sensor Signal	I	—
25	0.5	YE / RD	1817	Left Front Vertical Suspension Acceleration Sensor Voltage Reference	I	—
26	0.5	VT / RD	1818	Left Rear Vertical Suspension Acceleration Sensor Voltage Reference	I	—

K19 Suspension Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.5	YE / BN	1103	Left Rear Vertical Suspension Acceleration Sensor Signal	I	—
28	0.5	BK / VT	1833	Left Rear Vertical Suspension Acceleration Sensor Low Reference	I	—
29	0.5	BN / GN	1118	Right Rear Shock Absorber Actuator Control	I	—
30	—	—	—	Not Occupied	—	—
31	0.5	GY / BU	1113	Left Front Shock Absorber Actuator Control	I	—
32 - 37	—	—	—	Not Occupied	—	—
38	0.5	GN / VT	1115	Left Rear Shock Absorber Actuator Control	I	—
39	0.5	BK / GN	1105	Right Front Vertical Suspension Acceleration Sensor Low Reference	I	—
40	0.5	WH	1106	Right Front Vertical Suspension Acceleration Sensor Signal	I	—
41	0.5	BN / RD	1819	Right Front Vertical Suspension Acceleration Sensor Voltage Reference	I	—
42	0.5	GY / RD	1820	Right Rear Vertical Suspension Acceleration Sensor Voltage Reference	I	—
43	0.5	YE / BU	1109	Right Rear Vertical Suspension Acceleration Sensor Signal	I	—
44	0.5	BK / BU	1108	Right Rear Vertical Suspension Acceleration Sensor Low Reference	I	—
45	0.5	GN / GY	1119	Right Rear Shock Absorber Actuator Control	I	—
46	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L87)



5663663

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35327567
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

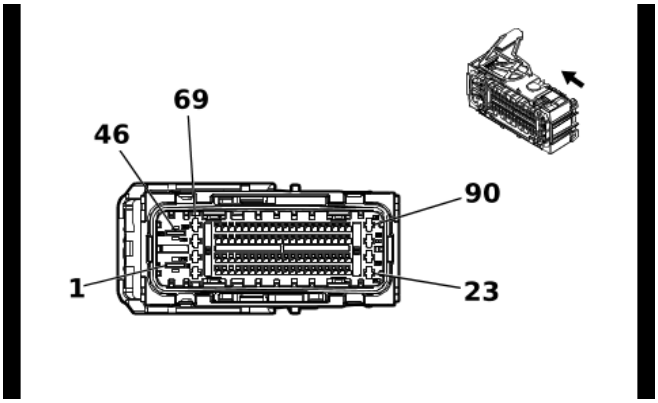
K20 Engine Control Module X1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	II	—
6	—	—	—	Not Occupied	—	—
7	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10	—	—	—	Not Occupied	—	—
11	0.5	YE	4063	Hood Status A Signal	II	—
12	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	II	—
14	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.75	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—

K20 Engine Control Module X1 (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22 - 23	—	—	—	Not Occupied	—	—
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 Voltage 2	II	—
33	—	—	—	Not Occupied	—	—
34	0.5	RD / BN	440	Battery Positive Voltage	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	—	—	—	Not Occupied	—	—
47	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.75	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—
49	2	VT	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X1 (LM2)



5492269

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35388154
Service Connector: 84941451
Description: 90-Way F 0.64 GEN-Y, 2.8, 6.3 MCP Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19367373	J-35616-64B (L-BU)	J-38125-215A
II	19371214	J-35616-4A (PU)	J-38125-215A
III	84616649	J-35616-42 (RD)	J-38125-556

K20 Engine Control Module X1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BN / BU	104	Glow Plug Control	III	—
2	2.5	GY / VT	1586	Glow Plug 6 Control	II	—
3 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
7	0.5	RD / BN	440	Battery Positive Voltage	I	—
8	0.5	GN / WH	492	Mass Air Flow Sensor Signal	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.5	GY	2973	Coolant Flow Control Valve Position Signal	I	—
12	0.5	GN / GY	7316	Intake Manifold Runner Valve Actuator Control	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	I	—
16	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
17	0.5	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
18	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
19	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
20	—	—	—	Not Occupied	—	—
21	0.75	GY / BK	1330	Variable Geometry Turbocharger Position Sensor Motor Close Control	I	—
22	0.75	WH / BN	1313	Variable Geometry Turbocharger Position Sensor Motor Open Control	I	—

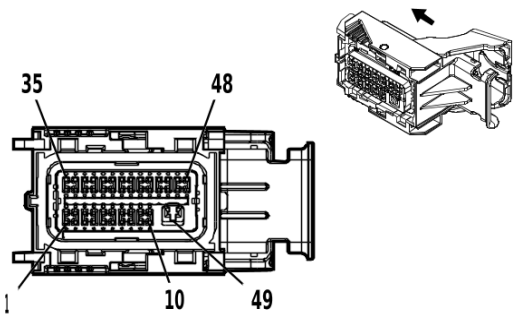
K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	2.5	GY / GN	1583	Glow Plug 3 Control	II	—
24	2.5	GY / WH	1585	Glow Plug 5 Control	II	—
25	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	I	—
26	0.5	YE	5991	Powertrain Relay Coil Control	I	—
27	—	—	—	Not Occupied	—	—
28	0.35	GN / BN	507	Wait To Start Indicator Control	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
31 - 33	—	—	—	Not Occupied	—	—
34	0.5	VT / YE	5947	Turbocharger Vane Position Sensor Signal	I	—
35	0.5	BN / WH	5763	Exhaust Gas Recirculation Position Signal	I	—
36	0.5	BU / GY	2978	Coolant Diverter Valve Position Signal	I	—
37	—	—	—	Not Occupied	—	—
38	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
39	0.5	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
40	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
41	—	—	—	Not Occupied	—	—
42	0.5	YE / BK	625	Starter Enable Relay Control	I	—
43	0.5	VT / BK	5746	Exhaust Gas Recirculation Valve Low Control	I	—
44	0.5	WH / VT	5764	Exhaust Gas Recirculation Valve High Control	I	—
45	2.5	GY / BN	1582	Glow Plug 2 Control	II	—
46	2.5	BK / WH	6151	Engine Control Module Ground	III	—
47	2.5	GY / YE	1584	Glow Plug 4 Control	II	—
48	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
49	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	I	—
50	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	I	—
51	0.5	BK / BU	1271	Accelerator Pedal Position Low Reference 1	I	—
52	0.5	WH / GN	5380	Brake Position Sensor Signal	I	—
53 - 54	—	—	—	Not Occupied	—	—
55	0.5	YE	4063	Hood Status A Signal	I	—
56 - 58	—	—	—	Not Occupied	—	—
59	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
60	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
61	0.5	YE / GY	3926	Crankcase Differential Pressure Sensor Signal	I	—
62 - 63	—	—	—	Not Occupied	—	—
64	0.5	GN / BU	3889	Powertrain Sensor Bus Relay Control	I	—
65	—	—	—	Not Occupied	—	—
66	0.5	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
67	0.5	YE / BN	1420	Exhaust Restrictor Motor Open Control	I	—
68	2.5	GY / BU	1581	Glow Plug 1 Control	II	—
69	0.75	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
70	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
71	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	I	—

K20 Engine Control Module X1 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
72	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
73	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	I	—
74	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	I	—
75	0.5	VT	7485	Engine Oil Temperature Sensor 2 Signal	I	—
76 - 77	—	—	—	Not Occupied	—	—
78	0.5	GY / VT	2404	Engine Block Coolant Temperature Signal	I	—
79 - 83	—	—	—	Not Occupied	—	—
84	0.5	VT / GY	7246	Exhaust Gas Recirculation Differential Pressure Signal 1	I	—
85	—	—	—	Not Occupied	—	—
86	0.5	GN / GY	465	Fuel Pump Primary Relay Control	I	—
87	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
88	0.75	GY / BN	2972	Coolant Flow Control Actuator Control Close	I	—
89	0.75	GY / BU	2971	Coolant Flow Control Actuator Control Open	I	—
90	2	VT	5290	Powertrain Main Relay Fused Supply Voltage 1	II	—

K20 Engine Control Module X1 (LT4)



4690155

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33257856
Service Connector: 19366870
Description: 49-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

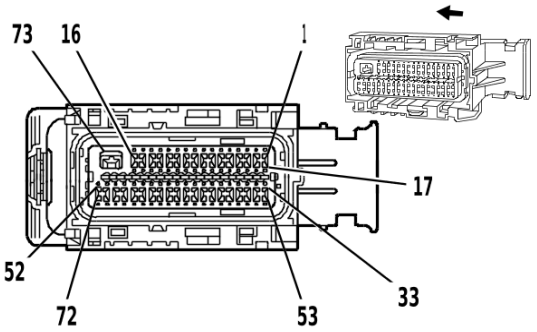
K20 Engine Control Module X1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	II	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	II	—
6	—	—	—	Not Occupied	—	—
7	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10	—	—	—	Not Occupied	—	—
11	0.5	YE	4063	Hood Status A Signal	II	—
12	0.5	BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	II	—
14	0.5	WH / GN	5380	Brake Position Sensor Signal	II	—
15	0.5	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	II	—

K20 Engine Control Module X1 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22 - 23	—	—	—	Not Occupied	—	—
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 Voltage 2	II	—
33	—	—	—	Not Occupied	—	—
34	0.5	RD / BN	440	Battery Positive Voltage	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41 - 43	—	—	—	Not Occupied	—	—
44	0.5	GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	—	—	—	Not Occupied	—	—
47	0.75	VT / GN	439	Run/Crank Ignition 1 Voltage	II	—
48	—	—	—	Not Occupied	—	—
49	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (L87)



1673472

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35327566
Service Connector: 19333090
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19354746	J-35616-64B (L-BU)	J-38125-215A

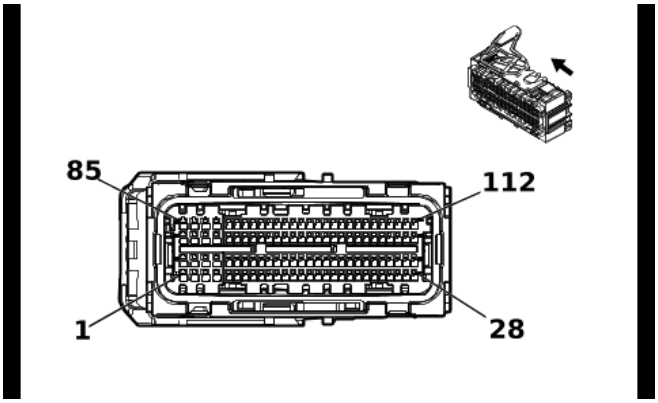
K20 Engine Control Module X2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	0.5	GY	5493	Cylinder Deactivation Solenoid Valve Control 3	II	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN	4622	Engine Control Module LIN Bus 2	II	—
8	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	II	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	II	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
15	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
16	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18	0.5	YE / GY	2493	Cylinder Shutoff Solenoid Enable Signal 3	II	—
19 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	II	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	II	—
28	0.5	GN / BU	2123	Ignition Control 3	II	—
29	0.5	BU / GY	2125	Ignition Control 5	II	—

K20 Engine Control Module X2 (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.75	BK / GY	2130	Ignition Control Low Reference Bank 2	II	—
31	0.5	BN	5496	Cylinder Deactivation Solenoid Valve Control 6	II	—
32	0.5	YE / BN	2496	Cylinder Shutoff Solenoid Enable Signal 6	II	—
33	0.75	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Engine Oil Pump Control	II	—
36	0.5	YE / GN	2494	Cylinder Shutoff Solenoid Enable Signal 4	II	—
37	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	II	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	II	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	II	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
53	0.75	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
54	0.5	VT	5495	Cylinder Deactivation Solenoid Valve Control 5	II	—
55	0.5	WH / VT	2495	Cylinder Shutoff Solenoid Enable Signal 5	II	—
56	0.5	YE / BU	5494	Cylinder Deactivation Solenoid Valve Control 4	II	—
57	0.5	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	II	—
58	0.5	WH / GN	2492	Cylinder Shutoff Solenoid Enable Signal 2	II	—
59 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	II	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	II	—
72	0.5	YE	581	Throttle Actuator Open Control	II	—
73	2.5	BK / WH	6151	Engine Control Module Ground	I	—

K20 Engine Control Module X2 (LM2)



5491584

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35403216
Service Connector: 84941452
Description: 112-Way F 0.64 GEN-Y, 1.2 MCON Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19367373	J-35616-64B (L-BU)	J-38125-215A
II	84963773	J-35616-12 (BU)	J-38125-215A

K20 Engine Control Module X2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
2	1.5	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
3	0.75	YE	2420	Fuel High Pressure Pump Low Enable Signal	II	—
4	0.75	YE / VT	7245	High Pressure Fuel Pump Low Enable Signal	II	—
5	0.5	GY / YE	5297	Exhaust Camshaft Position Sensor 1 Voltage Reference	I	—
6	0.5	GN	6271	Crankshaft Position Sensor Signal	I	—
7	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	BN	25	Charge Indicator Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.5	BK / GN	3235	Exhaust Gas Recirculation Temperature Sensor 3 Low Reference	I	—
12	0.5	YE / BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—
13	0.5	YE / BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—
14	0.5	BK / BU	6274	Exhaust Gas Recirculation Temperature Sensor Low Reference	I	—
15	—	—	—	Not Occupied	—	—
16	0.5	BK / GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—

K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
17	—	—	—	Not Occupied	—	—
18	0.5	BK / BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—
19	—	—	—	Not Occupied	—	—
20	0.5	BK / BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—
21 - 22	—	—	—	Not Occupied	—	—
23	0.75	BN / WH	3100	Diesel Exhaust Fluid Dosing Valve Low Control	I	—
24	0.5	BK / YE	2834	Fuel Rail Pressure Solenoid Valve Low Reference	I	—
25	0.5	BU	179	Engine Oil Pump Control	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
28	0.5	YE	581	Throttle Actuator Open Control	I	—
29	1.5	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
30	1.5	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
31	0.75	GY	2419	Fuel High Pressure Pump High Side Supply Voltage	II	—
32	0.75	GY / BN	7244	High Pressure Fuel Pump High Side Control	II	—
33	0.5	BK / GY	5296	Exhaust Camshaft Position Sensor Low Reference 1	I	—
34	0.5	VT / BK	5273	Exhaust Camshaft Position Sensor 1	I	—
35	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	3017	Fuel Heater Relay 1 Control	I	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / GY	3234	Exhaust Gas Recirculation Temperature Sensor 3 Signal	I	—
40	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—
41	0.5	GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—
42	0.5	WH / BN	3237	Exhaust Gas Recirculation Temperature Sensor Signal	I	—
43	—	—	—	Not Occupied	—	—
44	0.5	GY / GN	5378	Exhaust Gas Temperature Sensor 3 Signal	I	—
45	—	—	—	Not Occupied	—	—
46	0.5	BU / GN	5377	Exhaust Gas Temperature Sensor 2 Signal	I	—
47	—	—	—	Not Occupied	—	—
48	0.5	BU / WH	5277	Exhaust Gas Temperature Sensor 1 Signal	I	—
49 - 50	—	—	—	Not Occupied	—	—
51	0.75	BN	3099	Diesel Exhaust Fluid Dosing Valve High Control	I	—
52	0.5	BU / WH	2530	Fuel Rail Pressure Solenoid Valve Control	I	—
53	0.5	YE / BN	106	Oil Pump Motor Control	I	—
54	—	—	—	Not Occupied	—	—
55	0.75	BK / BU	1408	Variable Swirl Valve Close Control	I	—
56	0.75	BK / GN	1389	Variable Swirl Valve Open Control	I	—

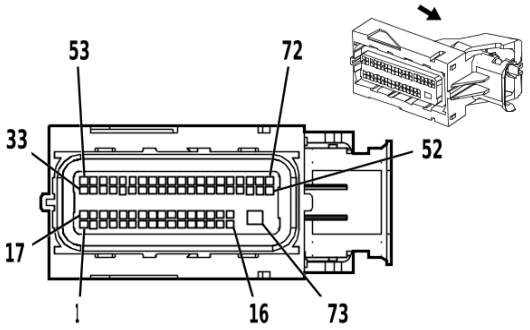
K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
57	1.5	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
58	1.5	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
59	1.5	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
60	1.5	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
61 - 65	—	—	—	Not Occupied	—	—
66	0.5	BN / RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—
67	0.5	BK / GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
68	—	—	—	Not Occupied	—	—
69	0.5	BN / BU	357	Oil Temperature Sensor Signal	I	—
70	0.5	YE / BK	3000	Coolant Temperature Sensor 2 Signal	I	—
71	—	—	—	Not Occupied	—	—
72	0.5	BN / YE	1372	Engine Metal Temperature Sensor Signal 2	I	—
73	0.5	WH / BU	7329	Pre-Throttle Air Temperature Signal	I	—
74	0.5	BU	6053	Exhaust Pressure Sensor 1 Signal	I	—
75	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
76	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
77	0.5	GN	4622	Engine Control Module LIN Bus 2	I	—
78	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	I	—
79 - 82	—	—	—	Not Occupied	—	—
83	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	I	—
84	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	I	—
85	1.5	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
86	1.5	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
87	1.5	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
88	1.5	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
89	—	—	—	Not Occupied	—	—
90	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
91	0.5	BU / GN	4012	Exhaust Gas Recirculation 2 Valve Position Sensor Signal	I	—
92	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
93	—	—	—	Not Occupied	—	—
94	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
95	0.5	YE / BU	2408	Engine Inlet Coolant Temperature Signal	I	—
96	0.5	BN / YE	2161	Fuel Rail Pressure Sensor 2 Signal	I	—
97	0.5	VT	2988	Engine Outlet Coolant Temperature Signal	I	—
98 - 100	—	—	—	Not Occupied	—	—
101	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—
102	0.5	GN / YE	37	Engine Block Temperature Sensor Signal	I	—
103	0.5	BU / BK	1422	Engine Water Charge Air Coolant Temperature Signal	I	—

K20 Engine Control Module X2 (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
104	—	—	—	Not Occupied	—	—
105	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
106 - 110	—	—	—	Not Occupied	—	—
111	0.5	BU / BN	4013	Exhaust Gas Recirculation 2 Valve Close Control	I	—
112	0.5	BU / WH	4014	Exhaust Gas Recirculation 2 Valve Open Control	I	—

K20 Engine Control Module X2 (LT4)



1968294

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13529937
Service Connector: 13574947
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19354746	J-35616-64B (L-BU)	J-38125-215A

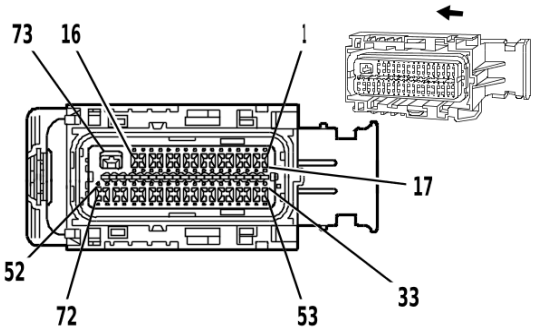
K20 Engine Control Module X2 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN	4622	Engine Control Module LIN Bus 2	II	—
8	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9 - 11	—	—	—	Not Occupied	—	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14 - 16	—	—	—	Not Occupied	—	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18 - 27	—	—	—	Not Occupied	—	—
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 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	BU	179	Engine Oil Pump Control	II	—
36	—	—	—	Not Occupied	—	—
37	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—

K20 Engine Control Module X2 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	II	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / BU	3221	HO2S Low Signal Bank 2 Sensor 2	II	—
47	0.5	VT / GN	3220	HO2S High Signal Bank 2 Sensor 2	II	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.5	BK / GY	2303	Knock Sensor Low Reference 2	II	—
51	0.5	BK / YE	1716	Knock Sensor Low Reference 1	II	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	II	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	II	—
54 - 59	—	—	—	Not Occupied	—	—
60	0.5	GN / YE	4623	Engine Control Module LIN Bus 3	II	—
61 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	II	—
67	0.5	VT / BU	3120	HO2S High Signal Bank 1 Sensor 2	II	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.5	WH / GY	1876	Knock Sensor 2 Signal	II	—
71	0.5	VT / GY	496	Knock Sensor 1 Signal	II	—
72	0.5	YE	581	Throttle Actuator Open Control	II	—
73	2.5	BK / WH	6151	Engine Control Module Ground	I	—

K20 Engine Control Module X3 (L87)



1673472

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35390027
Service Connector: 19333091
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19354746	J-35616-64B (L-BU)	J-38125-215A

K20 Engine Control Module X3 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	5497	Cylinder Deactivation Solenoid Valve Control 7	II	—
2	0.5	GN / GY	2497	Cylinder Shutoff Solenoid Enable Signal 7	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
6	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
9	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
10	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
11	—	—	—	Not Occupied	—	—
12	0.75	BU / WH	2122	Ignition Control 2	II	—
13	0.5	VT / WH	2128	Ignition Control 8	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—

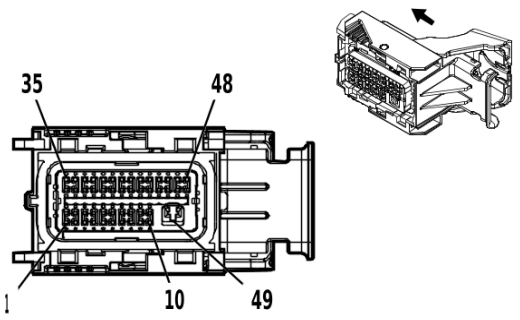
K20 Engine Control Module X3 (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
25	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	GN / GY	2127	Ignition Control 7	II	—
29	0.5	BU / VT	2121	Ignition Control 1	II	—
30	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
33	0.5	YE / VT	4325	Starter Pinion Solenoid Actuator Relay Control	II	—
34	0.5	WH / BU	2491	Cylinder Shutoff Solenoid Enable Signal 1	II	—
35	0.5	WH / YE	2498	Cylinder Shutoff Solenoid Enable Signal 8	II	—
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	II	—
37	0.5	BK / GN	469	Manifold Absolute Pressure Sensor Low Reference	II	—
38 - 39	—	—	—	Not Occupied	—	—
40	0.5	BN / BU	357	Oil Temperature Sensor Signal	II	—
41 - 43	—	—	—	Not Occupied	—	—
44	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
45	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
46	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
47	0.75	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
48	0.75	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
50	0.75	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
53	0.5	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	II	—
54	0.5	YE	5498	Cylinder Deactivation Solenoid Valve Control 8	II	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
58	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—

K20 Engine Control Module X3 (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
65	0.75	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
66	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—
67	0.75	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
68	0.75	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
69	0.75	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
70	0.75	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	II	—
71	0.75	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	II	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
73	2.5	BK / WH	6151	Engine Control Module Ground	I	—

K20 Engine Control Module X3 (LT4)



4690378

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33257855
Service Connector: 19366869
Description: 49-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

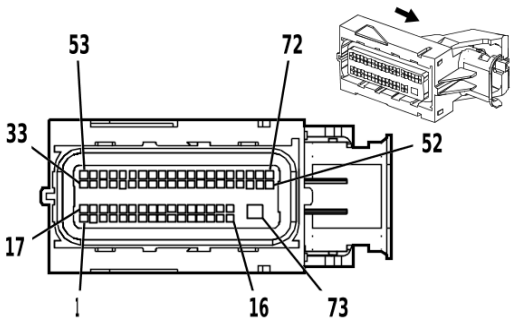
K20 Engine Control Module X3 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	GN	6935	HO2S Pump Current Trim Signal	II	—
6	0.5	BN / WH	6933	HO2S Pump Current Signal	II	—
7	0.5	BN	6934	HO2S Ground	II	—
8	0.5	YE / GY	6936	HO2S Signal	II	—
9 - 14	—	—	—	Not Occupied	—	—
15	0.5	BU	2572	Heated Oxygen Sensor 2 Current Adjust Signal	II	—
16	0.5	YE / WH	2570	Heated Oxygen Sensor 2 Pump Current Signal	II	—
17	0.5	WH	2571	Heated Oxygen Sensor 2 Common Bank 2 Sensor 1 Signal	II	—
18	0.5	BN / GY	2573	Heated Oxygen Sensor 2 Collector Signal	II	—
19 - 22	—	—	—	Not Occupied	—	—
23	0.5	WH / BU	7329	Pre-Throttle Air Temperature Signal	II	—
24 - 25	—	—	—	Not Occupied	—	—
26	0.5	WH	2590	Turbocharger Wastegate Motor Feedback Signal	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	WH / BU	2592	Turbocharger Wastegate Motor Close Control	II	—
29	0.5	WH / BN	2591	Turbocharger Wastegate Motor Open Control	II	—
30 - 31	—	—	—	Not Occupied	—	—
32	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
33	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—

K20 Engine Control Module X3 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
34	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
35 - 36	—	—	—	Not Occupied	—	—
37	0.5	BN / BU	357	Oil Temperature Sensor Signal	II	—
38 - 48	—	—	—	Not Occupied	—	—
49	2	VT / BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X4 (LT4)



2533189

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13529956
Service Connector: 13574948
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19354746	J-35616-64B (L-BU)	J-38125-215A

K20 Engine Control Module X4 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	II	—
6	0.5	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	II	—
9	0.5	GY / BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	II	—
10	0.5	GN	6271	Crankshaft Position Sensor Signal	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	BU / WH	2122	Ignition Control 2	II	—
13	0.5	VT / WH	2128	Ignition Control 8	II	—
14	0.5	BN	25	Charge Indicator Control	II	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	II	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	II	—
22 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK / GN	5301	Intake Camshaft Position Sensor Low Reference 1	II	—
25	0.5	VT / BU	6270	Crankshaft Position Sensor Voltage	II	—

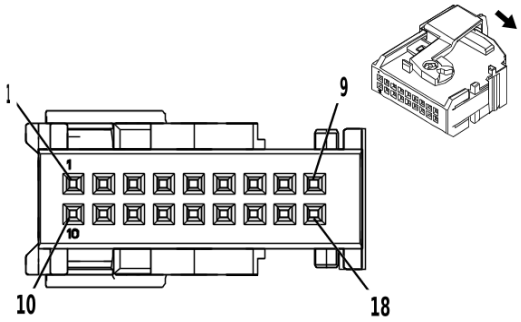
K20 Engine Control Module X4 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	GN / GY	2127	Ignition Control 7	II	—
29	0.5	BU / VT	2121	Ignition Control 1	II	—
30	0.5	BK / BU	2129	Ignition Control Low Reference Bank 1	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	II	—
33 - 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	0.5	BN	7123	Supercharger Inlet Air Pressure Sensor Signal	II	—
39 - 40	—	—	—	Not Occupied	—	—
41	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	II	—
44	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	II	—
45	0.75	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	II	—
46	0.75	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	II	—
47	0.75	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	II	—
48	0.75	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	II	—
49	0.75	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	II	—
50	0.75	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	II	—
51	0.75	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	II	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	II	—
53 - 54	—	—	—	Not Occupied	—	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	II	—
56	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	II	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	—
58	0.5	GN / WH	432	Manifold Absolute Pressure Sensor Signal	II	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	—
62	—	—	—	Not Occupied	—	—
63	0.5	BU / WH	2918	Fuel Rail Pressure Sensor Signal	II	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	II	—
65	0.75	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	II	—
66	0.75	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	II	—

K20 Engine Control Module X4 (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
67	0.75	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	II	—
68	0.75	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	II	—
69	0.75	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	II	—
70	0.75	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	II	—
71	0.75	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	II	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	II	—
73	2.5	BK / WH	6151	Engine Control Module Ground	I	—

K26 Headlamp Control Module (LWB)



4329088

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33168840
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series(BK)

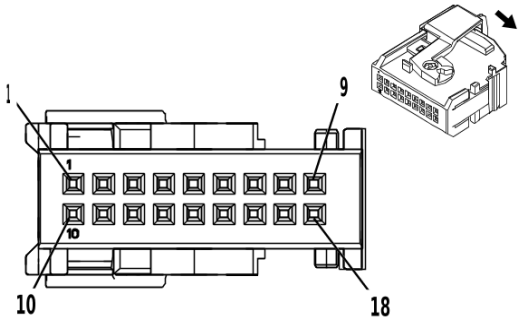
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

K26 Headlamp Control Module (LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
3	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH / RD	2165	Vehicle Level Control Position Sensor 5V Reference	I	—
6	0.5	BN	2184	Vehicle Level Control Position Sensor Signal	I	—
7	0.5	BK / GY	7526	Front Axle Level Sensor Low Reference	I	—
8	0.5	BN / WH	7525	Front Vehicle Level Sensor Signal	I	—
9	0.75	WH / RD	7524	Front Vehicle Level Sensor 5V Reference	I	—
10	0.5	RD / VT	5340	Battery Positive Voltage	I	—
11	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
12	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
13	—	—	—	Not Occupied	—	—
14	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	I	—
15	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	I	—
16	0.5	BK / BN	2185	Vehicle Level Control Position Sensor Low Reference	I	—
17	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	I	—
18	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	I	—

K26 Headlamp Control Module (SWB)



4329088

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35332167
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series(BK)

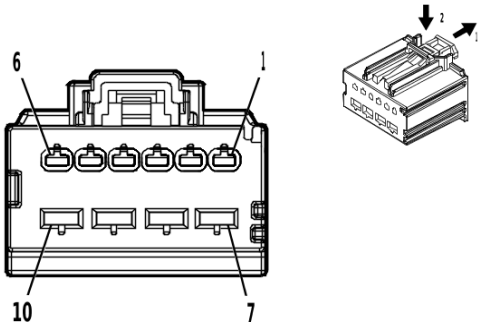
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

K26 Headlamp Control Module (SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
3	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	WH / RD	2165	Vehicle Level Control Position Sensor 5V Reference	I	—
6	0.5	BN	2184	Vehicle Level Control Position Sensor Signal	I	—
7	0.5	BK / GY	7526	Front Axle Level Sensor Low Reference	I	—
8	0.5	BN / WH	7525	Front Vehicle Level Sensor Signal	I	—
9	0.75	WH / RD	7524	Front Vehicle Level Sensor 5V Reference	I	—
10	0.5	RD / VT	5340	Battery Positive Voltage	I	—
11	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
12	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
13	—	—	—	Not Occupied	—	—
14	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	I	—
15	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	I	—
16	0.5	BK / BN	2185	Vehicle Level Control Position Sensor Low Reference	I	—
17	0.5	WH / YE	2190	Private Serial Data Headlamp Leveling CAN Bus [-] Serial Data	I	—
18	0.5	BU / BN	2191	Private Serial Data Headlamp Leveling CAN Bus [+] Serial Data	I	—

K29FV Front Seat Heater Vent Control Module X1 (KA1/KQV)



5035058

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 31372-1600
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(BK)

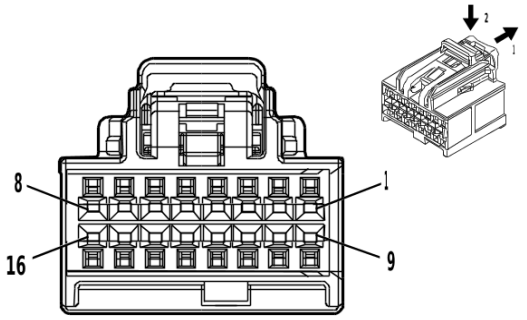
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K29FV Front Seat Heater Vent Control Module X1 (KA1/KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	2481	Passenger Seat Back Heating Element Control	I	—
2	0.75	BN / BU	2479	Passenger Seat Heating Element Control	I	—
3	0.75	GY / BK	2480	Passenger Seat Heating Element Low Reference	I	—
4	0.75	BN / BK	2078	Driver Seat Heating Element Low Reference	I	—
5	0.75	BN	2432	Driver Seat Back Heating Element Control	I	—
6	0.75	BN / VT	2077	Driver Seat Heating Element Control	I	—
7	0.75	RD / GN	6140	Battery Positive Voltage	II	—
8	1.5	BK	1250	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD / BN	6640	Battery Positive Voltage	II	—

K29FV Front Seat Heater Vent Control Module X2 (KA1/KQV)



4873243

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BK)

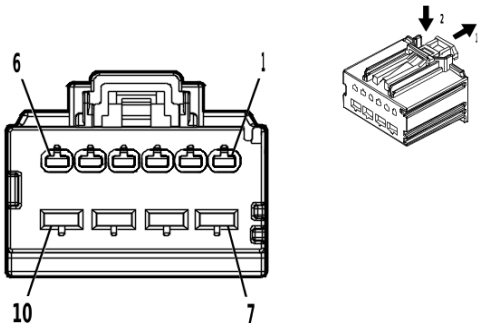
Terminal Part Information

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

K29FV Front Seat Heater Vent Control Module X2 (KA1/KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / YE	2080	Driver Heated Seat Thermistor Low Reference	I	—
2	0.5	BK / GY	2435	Passenger Heated Seat Thermistor Low Reference	I	—
3	0.5	BU	2425	Driver Seat Back Heating Temperature Sensor Signal	I	—
4	0.5	WH / BU	2436	Passenger Seat Back Heating Temperature Sensor Signal	I	—
5	0.5	WH / GY	2434	Passenger Seat Heating Temperature Sensor Signal	I	—
6	0.5	YE / GY	2079	Driver Seat Heating Temperature Sensor Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	GN / VT	2857	Body Control Module LIN Bus 11	I	—
9	0.5	GN / VT	5906	Driver Seat Blower Motor Control 1	I	—
10	0.5	VT / WH	5908	Passenger Seat Blower Motor Control 1	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	BK / GN	2482	Passenger Heated Back Thermistor Low Reference	I	—
13 - 16	—	—	—	Not Occupied	—	—

K29R Rear Seat Heater Control Module X1 (KA6)



5035058

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 31372-1600
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(BK)

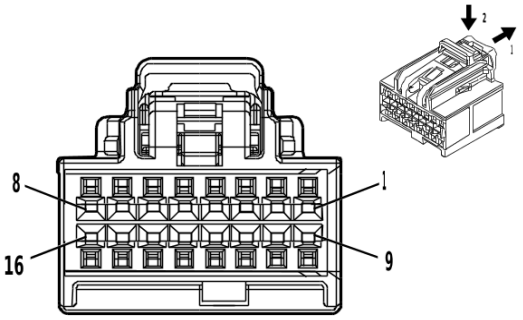
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K29R Rear Seat Heater Control Module X1 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	GN / BN	2296	Right Rear Seat Cushion Heating Element Control	I	—
3	0.75	GN / BK	2457	Right Rear Seat Heating Element Low Reference	I	—
4	0.75	BU / BK	2446	Left Rear Seat Heating Element Low Reference	I	—
5	—	—	—	Not Occupied	—	—
6	0.75	GY	2294	Left Rear Seat Cushion Heating Element Control	I	—
7	0.75	RD / BU	6740	Battery Positive Voltage	II	—
8	0.75	BK	1450	Ground	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	RD / WH	5740	Battery Positive Voltage	II	—

K29R Rear Seat Heater Control Module X2 (KA6)



4873243

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 35016343
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series(BK)

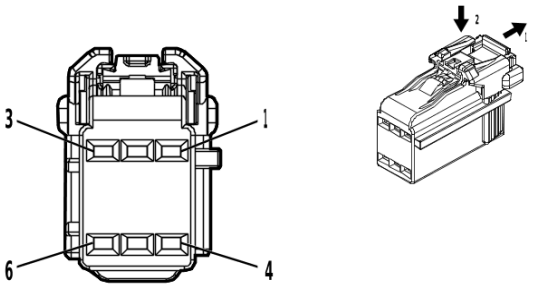
Terminal Part Information

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

K29R Rear Seat Heater Control Module X2 (KA6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / WH	7048	Left Rear Cushion Thermistor Feedback Signal	I	—
2	0.5	WH / BK	7054	Right Rear Cushion Thermistor Feedback Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	YE / WH	7053	Right Rear Seat Cushion Temperature Sensor Signal	I	—
6	0.5	WH / BU	7047	Left Rear Seat Cushion Temperature Sensor Signal	I	—
7	0.75	BK	1450	Ground	I	—
8	0.5	GN / VT	2857	Body Control Module LIN Bus 11	I	—
9 - 16	—	—	—	Not Occupied	—	—

K32 Heated Steering Wheel Module X1 (KI3)



4862126

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13517407
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series(BK)

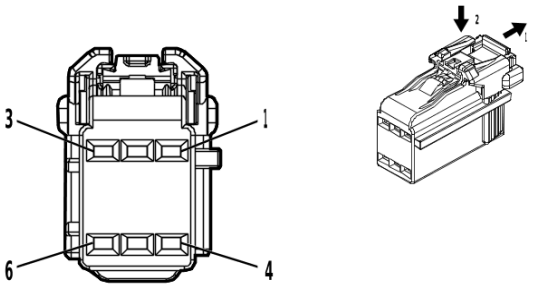
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K32 Heated Steering Wheel Module X1 (KI3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / GY	5883	Steering Wheel Heating Switch Signal	I	—
2	—	BN / WH	5884	Steering Wheel Heating Switch LED Control	I	—
3	—	RD / BN	10040	Secondary Fused Battery Positive Voltage	I	—
4	—	BK	6050	Steering Wheel Ground	I	—
5	—	BK / WH	6051	Steering Wheel Ground	I	—
6	—	GN / BK	2858	Body Control Module LIN Bus 12	I	—

K32 Heated Steering Wheel Module X2 (KI3)



4862126

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13517407
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series(BK)

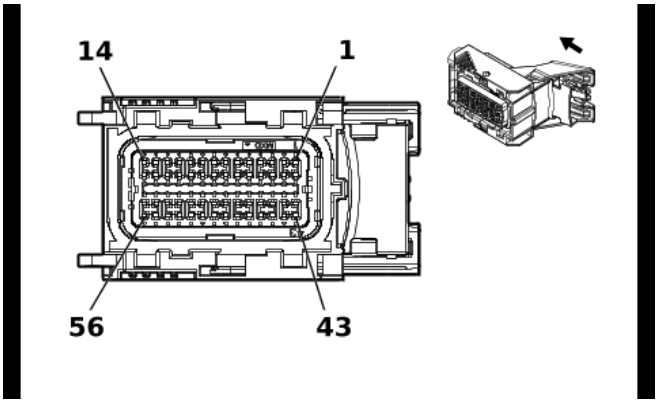
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K32 Heated Steering Wheel Module X2 (KI3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / YE	5888	Steering Wheel Heating High Control	I	—
2	—	GY / YE	5887	Steering Wheel Heating Low Control	I	—
3	—	VT / BU	5886	Steering Wheel Heating Temperature Sensor Signal	I	—
4	—	YE / RD	5885	Steering Wheel Heating Voltage Reference	I	—
5 - 6	—	—	—	Not Occupied	—	—

K36 Restraints Control Module X1



5377109

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35572538
Service Connector: 26314571
Description: 56-Way F 0.64 Series, Sealed(BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A

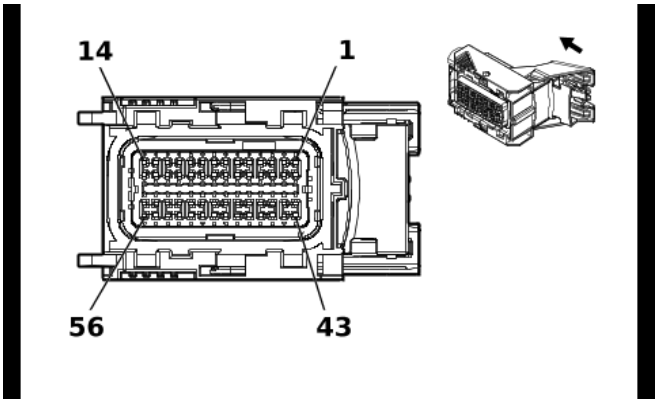
K36 Restraints Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	0.5	BK / OG	5045	Left Front Impact Discriminating Sensor Low Reference	I	—
8	0.5	OG / YE	354	Left Front Impact Discriminating Sensor Signal	I	—
9	0.5	OG / GN	1409	Right Front Impact Discriminating Sensor Signal	I	—
10	0.5	BK / OG	5600	Right Front Impact Discriminating Sensor Low Reference	I	—
11	0.5	WH / OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	—
12	0.5	OG / GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	—
13	0.5	YE / OG	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
14	0.5	OG / WH	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—
15 - 24	—	—	—	Not Occupied	—	—
25	0.5	VT / OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	—
26	0.5	OG / WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	—
27	0.5	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
28	0.5	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
29	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
30	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
31	—	—	—	Not Occupied	—	—

K36 Restraints Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
32	0.5	OG / BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	I	—
33	0.5	GY / OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	I	—
34 - 37	—	—	—	Not Occupied	—	—
38	0.5	OG / VT	3026	Passenger Instrument Panel Air Bag Stage 2 Low Control	I	—
39	0.5	GY / OG	3027	Passenger Instrument Panel Air Bag Stage 2 High Control	I	—
40 - 41	—	—	—	Not Occupied	—	—
42	0.75	BK / WH	1351	Signal Ground	I	—
43	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	AX7
	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	- AX7
44	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	AX7
	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	- AX7
45	—	—	—	Not Occupied	—	—
46	0.5	VT / OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	—
47	0.5	OG / YE	3481	Driver Seat Belt Anchor Pretensioner High Control	I	—
48 - 52	—	—	—	Not Occupied	—	—
53	0.5	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—
54	0.5	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
55	0.5	VT / WH	239	Run/Crank Ignition 1 Voltage	I	—
56	0.5	RD / GN	4440	Battery Positive Voltage	I	—

K36 Restraints Control Module X2



5377124

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35572539
Service Connector: 85004498
Description: 56-Way F 0.64 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A

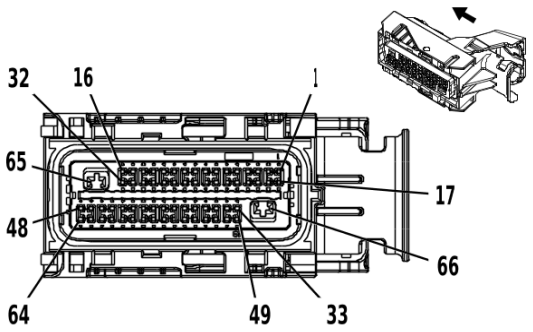
K36 Restraints Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT / OG	3517	3rd Row Right Seat Belt Switch Signal	I	—
10	0.5	BU / OG	5163	Rear Center Seat Belt Switch Signal	I	—
11	0.5	YE / OG	5161	Left Rear Seat Belt Switch Signal	I	—
12	0.5	OG / GY	2652	Driver Seat Belt Sensor Signal	I	—
13	0.5	BK / OG	6627	Right Rear Side Impact Sensor Low Reference	I	—
14	0.5	OG / WH	6626	Right Rear Side Impact Sensor Signal	I	—
15 - 20	—	—	—	Not Occupied	—	—
21	0.5	OG / GN	3700	3rd Row Center Seat Belt Switch Signal	I	—
22	0.5	GN / OG	3516	3rd Row Left Seat Belt Switch Signal	I	—
23	0.5	BK / OG	1363	Driver Seat Belt Switch Low Reference	I	—
24	0.5	BN / OG	5162	Right Rear Seat Belt Switch Signal	I	—
25	0.5	OG / VT	1362	Passenger Seat Belt Switch Signal	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BK / OG	6628	Left Front Side Impact Sensor Low Reference	I	—
28	0.5	OG / GN	2132	Left Front Side Impact Sensor Signal	I	—
29 - 36	—	—	—	Not Occupied	—	—
37	0.5	OG / GY	5021	Right Front Roof Rail Air Bag High Control	I	—
38	0.5	WH / OG	5022	Right Front Roof Rail Air Bag Low Control	I	—
39	0.5	BU / OG	4957	Passenger Seat Back Air Bag Low Control	I	—
40	0.5	OG / GY	4956	Passenger Seat Back Air Bag High Control	I	—
41	0.5	BK / OG	6629	Right Front Side Impact Sensor Low Reference	I	—

K36 Restraints Control Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
42	0.5	BN / OG	2134	Right Front Side Impact Sensor Signal	I	—
43 - 44	—	—	—	Not Occupied	—	—
45	0.5	GY / OG	4208	Driver Inboard Seat Side Air Bag Low Control	I	—
46	0.5	OG / BN	4207	Driver Inboard Seat Side Air Bag High Control	I	—
47 - 50	—	—	—	Not Occupied	—	—
51	0.5	OG / GN	5019	Left Front Roof Rail Air Bag High Control	I	—
52	0.5	VT / OG	5020	Left Front Roof Rail Air Bag Low Control	I	—
53	0.5	BK / OG	4963	Driver Seat Back Air Bag Low Control	I	—
54	0.5	OG / BU	4962	Driver Seat Back Air Bag High Control	I	—
55	0.5	BK / OG	6623	Left Rear Side Impact Sensor Low Reference	I	—
56	0.5	OG / BU	6622	Left Rear Side Impact Sensor Signal	I	—

K38 Chassis Control Module



3621452

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13965710
Service Connector: 19329822
Description: 66-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

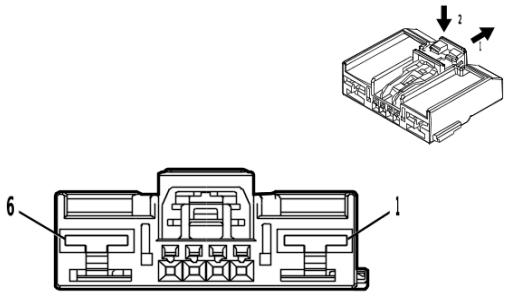
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

K38 Chassis Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 5	—	—	—	Not Occupied	—	—
6	0.5	VT / WH	639	Run/Crank Ignition 1 Voltage	II	—
7 - 33	—	—	—	Not Occupied	—	—
34	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
35	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
36	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
37	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
38 - 64	—	—	—	Not Occupied	—	—
65	0.5	BK	2050	Ground	I	—
66	0.5	RD / GN	2642	Battery Positive Voltage	I	—

K40D Driver Seat Adjuster Memory Module X1



4650258

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 7289-7139-30
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64, 6.3 Series(BK)

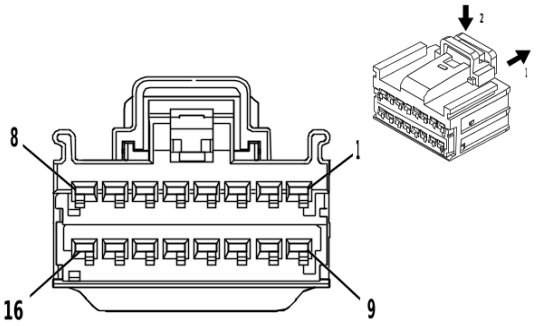
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

K40D Driver Seat Adjuster Memory Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	RD / BN	2240	Battery Positive Voltage	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	2.5	RD / YE	5040	Battery Positive Voltage	I	—

K40D Driver Seat Adjuster Memory Module X2



4332214

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 15512506
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.5 OCS Series(BK)

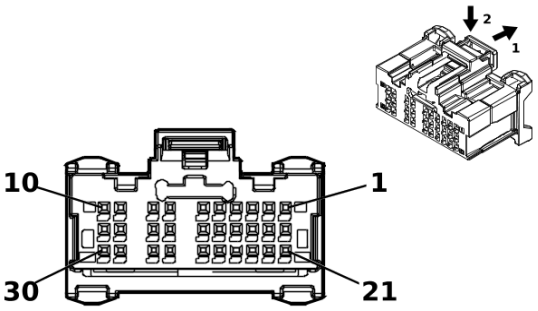
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

K40D Driver Seat Adjuster Memory Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—
7	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
8	—	—	—	Not Occupied	—	—
9	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
10	—	—	—	Not Occupied	—	—
11	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
12	—	—	—	Not Occupied	—	—
13	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—

K40D Driver Seat Adjuster Memory Module X3



5202284

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2309644-1
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 0.5 MQS Series(BK)

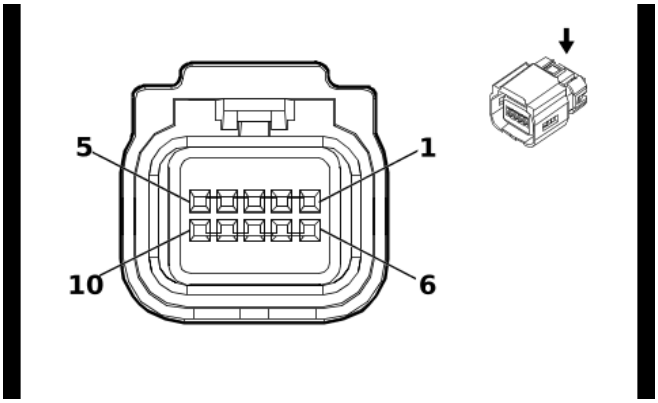
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K40D Driver Seat Adjuster Memory Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BU / GN	614	Seat Memory Switch Set Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	BN	3038	Driver Seat Right Rear Haptic Movement Motor Control	I	—
6	0.35	YE / BN	3037	Driver Seat Left Rear Haptic Movement Motor Control	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	GN / WH	7530	Driver Seat Adjuster Memory Module LIN Bus 1	I	—
9	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
10	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
11 - 15	—	—	—	Not Occupied	—	—
16	0.35	WH	615	Seat Memory Switch Signal 1	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	GN / GY	3758	Driver Seat Adjuster Memory Module LIN Bus 2	I	—
19	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
20	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
21 - 30	—	—	—	Not Occupied	—	—

K43 Power Steering Control Module X1



5924496

Connector Part Information

Harness Type: Power Steering Wiring Harness Extension Harness
OEM Connector: 35165618
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed(GN)

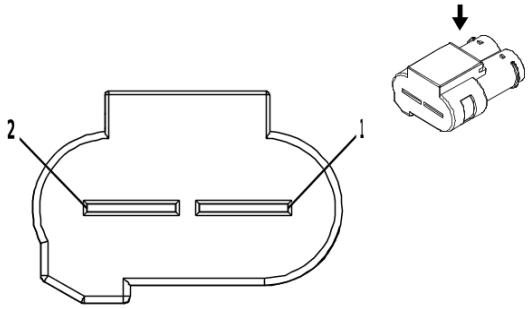
Terminal Part Information

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

K43 Power Steering Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
9 - 10	—	—	—	Not Occupied	—	—

K43 Power Steering Control Module X2



3608474

Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 19269000003
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2, 2.8 MAK Series, Sealed(BK)

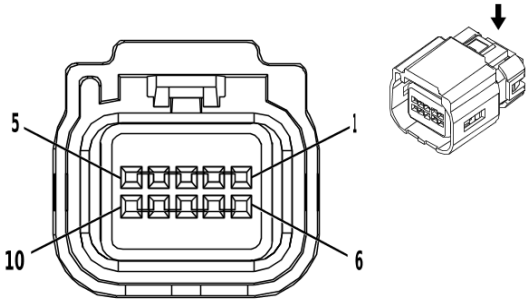
Terminal Part Information

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

K43 Power Steering Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	20	BK	350	Ground	I	—
2	20	RD	842	Battery Positive Voltage	I	—

K43 Power Steering Control Module X3



3608468

Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 13817800
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series, Sealed(BN)

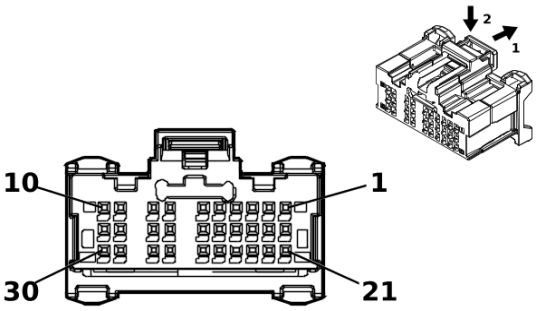
Terminal Part Information

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

K43 Power Steering Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	8367	Handwheel Channel A Torque Pressure Sensor 1 SENT Signal	I	—
2	0.5	RD	8366	Handwheel Channel A High Reference	I	—
3	0.5	BK	8370	Handwheel Channel A Low Reference	I	—
4	0.5	WH / RD	8371	Handwheel Channel B High Reference	I	—
5	0.5	WH / BU	8372	Handwheel Channel B Torque Pressure Sensor 1 SENT Signal	I	—
6	0.5	VT	8368	Handwheel Channel A Torque Pressure Sensor 2 SENT Signal	I	—
7	0.5	OG	8369	Handwheel Channel A Angle Position Sensor SENT Signal	I	—
8	0.5	GY	8375	Handwheel Channel B Low Reference	I	—
9	0.5	YE	8374	Handwheel Channel B Angle Position Sensor SENT Signal	I	—
10	0.5	GN	8373	Handwheel Channel B Torque Pressure Sensor 2 SENT Signal	I	—

K56 Serial Data Gateway Module X1



5202284

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35085331
Service Connector: 84766507
Description: 30-Way F 0.5 MQS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

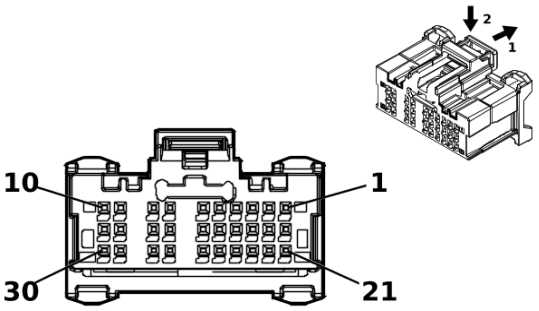
K56 Serial Data Gateway Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	3340	Battery Positive Voltage	I	—
2	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
3	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
4	0.35	BK / WH	1851	Signal Ground	I	—
5	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
8	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
9	0.35	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
10	0.35	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
14	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
15	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
16	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
17	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
18	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
19	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
20	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
21	0.35	BN / WH	7209	Ethernet Bus 3 [+]	I	—
22	0.35	BN	7208	Ethernet Bus 3 [-]	I	—
23 - 26	—	—	—	Not Occupied	—	—

K56 Serial Data Gateway Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
28	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
29 - 30	—	—	—	Not Occupied	—	—

K56 Serial Data Gateway Module X2



5203942

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35094158
Service Connector: 84766509
Description: 30-Way F 0.5 MQS Series(BK with L-GY Front Housing)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

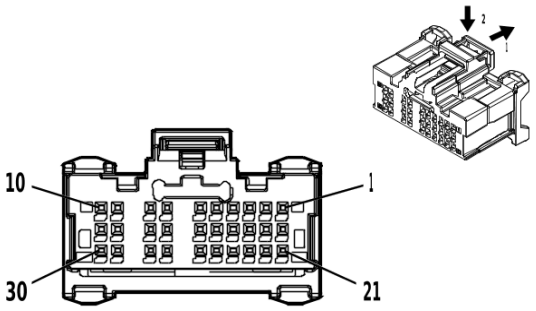
K56 Serial Data Gateway Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.35	BK / GY	3559	Passive Start Switch 2 Low Reference	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	GN / VT	5199	Run/Crank Relay Coil Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	YE / WH	4973	Ethernet Bus 1R [+]	I	—
10	0.35	YE	4972	Ethernet Bus 1R [-]	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	BU / BN	4983	AUTOSAR CAN Bus [+] 7 Serial Data	I	—
14	0.35	WH	4982	AUTOSAR CAN Bus [-] 7 Serial Data	I	—
15	0.35	GN / BK	3558	Passive Start Switch Signal 2	I	—
16	0.35	WH	4980	AUTOSAR CAN Bus [-] 6 Serial Data	I	—
17	0.35	GN	2578	Private Serial Data Presentation CAN Bus [+] 1 Serial Data	I	—
18	0.35	BN	2577	Private Serial Data Presentation CAN Bus [-] 1 Serial Data	I	—
19	0.35	WH	7207	Ethernet Bus 1 Enable Signal	I	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
24	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
25	—	—	—	Not Occupied	—	—
26	0.35	YE	4981	AUTOSAR CAN Bus [+] 6 Serial Data	I	—

K56 Serial Data Gateway Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.35	VT	2580	Private Serial Data Presentation CAN Bus [+] 2 Serial Data	I	—
28	0.35	GY	2579	Private Serial Data Presentation CAN Bus [-] 2 Serial Data	I	—
29	0.35	GN / WH	4975	Ethernet Bus 1T [+]	I	—
30	0.35	GN	4974	Ethernet Bus 1T [-]	I	—

K56 Serial Data Gateway Module X3



4900333

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35077574
Service Connector: 13519319
Description: 30-Way F 0.5 MQS Series(BK with D-GY Front Housing)

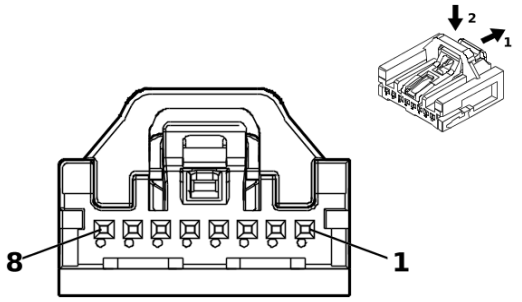
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

K56 Serial Data Gateway Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	0.35	BU / WH	4758	Ethernet Bus 2 [+]	I	—
8	0.35	BU	4757	Ethernet Bus 2 [-]	I	—
9 - 26	—	—	—	Not Occupied	—	—
27	0.35	GY / BU	7217	Ethernet Bus 7 [+]	I	—
28	0.35	BN / BU	7216	Ethernet Bus 7 [-]	I	—
29 - 30	—	—	—	Not Occupied	—	—

K60 Column Lock Module



5200269

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series(BK)

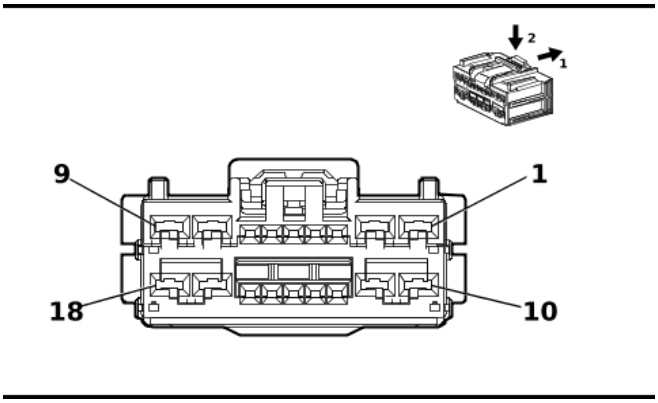
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K60 Column Lock Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GY	4140	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BK	1850	Ground	I	—
4	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
5	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
8	0.35	BU / VT	807	Ignition Off/Accessory Ignition Voltage	I	—

K61 Sunroof Control Module (C3U)



5671221

Connector Part Information

Harness Type: Sunroof
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 18-Way

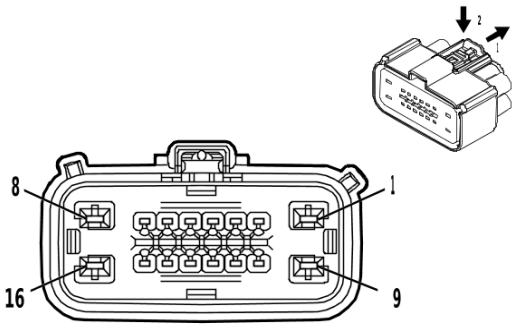
Terminal Part Information

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

K61 Sunroof Control Module (C3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1850	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	—	GN / WH	2854	Body Control Module LIN Bus 8	I	—
4 - 9	—	—	—	Not Occupied	—	—
10	—	BU / BN	3781	Front Sunroof Sunshade Motor Open Control	I	—
11	—	GN / VT	3782	Front Sunshade Motor Close Control	I	—
12 - 17	—	—	—	Not Occupied	—	—
18	—	RD / BU	4540	Battery Positive Voltage	I	—

K67 Trailer Brake Control Module (LWB)



4624589

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33297568
Service Connector: 13599889
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(GY)

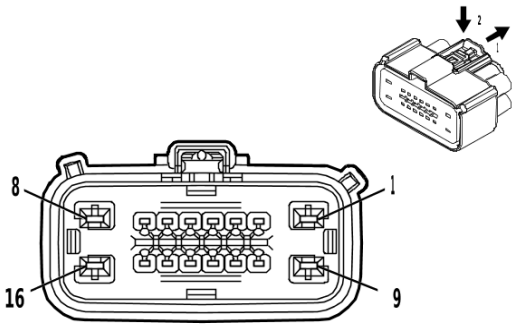
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217

K67 Trailer Brake Control Module (LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / VT	1242	Battery Positive Voltage	I	—
2	0.5	WH / BK	2223	Trailer Brake Apply Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	YE / BK	2224	Trailer Brake Enable Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	2.5	BU	47	Trailer Auxiliary Control	I	—
9	2.5	BK	1950	Ground	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.75	GN / BU	2733	Brake System Control Module LIN Bus 2	I	—
13 - 16	—	—	—	Not Occupied	—	—

K67 Trailer Brake Control Module (SWB)



4624589

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33297568
Service Connector: 13599889
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(GY)

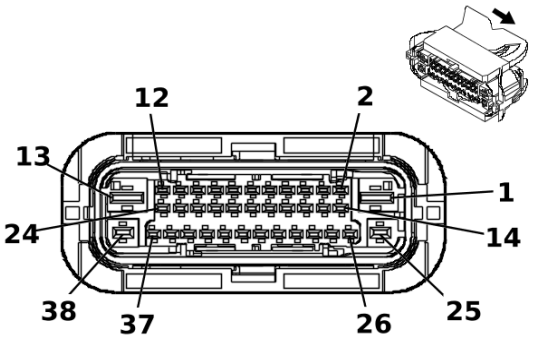
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217

K67 Trailer Brake Control Module (SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / VT	1242	Battery Positive Voltage	I	—
2	0.5	WH / BK	2223	Trailer Brake Apply Signal	II	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	YE / BK	2224	Trailer Brake Enable Signal	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	2.5	BU	47	Trailer Auxiliary Control	I	—
9	2.5	BK	1950	Ground	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.75	GN / BU	2733	Brake System Control Module LIN Bus 2	II	—
13 - 16	—	—	—	Not Occupied	—	—

K68 Trailer Lamp Control Module



5199340

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35497867
Service Connector: 86825458
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-212
II	19369235	J-35616-14 (GN)	EL-38125-560A
III	85158596	J-35616-40 (BU)	EL-38125-560A

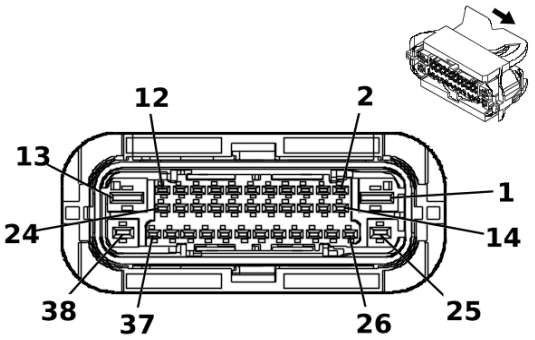
K68 Trailer Lamp Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD / VT	5640	Battery Positive Voltage	III	—
2	0.75 0.5	BU / WH BU / WH	5186 5186	Left Trailer Turn Signal Lamp Control Left Trailer Turn Signal Lamp Control	II II	(- MAS- MBM- MBR+ UET) UET+ (MAS/ MBR)
3	0.75 0.5	YE / GY YE / GY	5187 5187	Right Trailer Turn Signal Lamp Control Right Trailer Turn Signal Lamp Control	II II	(- MAS- MBM- MBR+ UET) UET+ (MAS/ MBR)
4	0.5	BN / YE	5188	Trailer Stop Lamp Control	II	—
5	0.5	BN / GY	5184	Left Trailer Park Lamp Control	II	—
6	0.5	GY	5185	Right Trailer Park Lamp Control	II	—
7	0.5 0.75	GN / WH GN / WH	5189 5189	Trailer Backup Lamp Control Trailer Backup Lamp Control	II II	(- MAS- MBM- MBR+ UET) UET+ (MAS/ MBR)
8	0.5	YE / WH	5190	Trailer Fog Lamp Control	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	VT / BK	339	Run/Crank Ignition 1 Voltage	II	—
11	0.5	BN / YE	820	Center High Mounted Stop Lamp Supply Voltage	II	—
12	—	—	—	Not Occupied	—	—
13	2.5	BK	2050	Ground	III	—
14 - 24	—	—	—	Not Occupied	—	—

K68 Trailer Lamp Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.75	BN / GY	5184	Left Trailer Park Lamp Control	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	II	—
28	0.5	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	II	—
29	0.5	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	II	—
30	0.5	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	II	—
31 - 37	—	—	—	Not Occupied	—	—
38	2	RD / YE	5840	Battery Positive Voltage	I	—

K69 Transfer Case Control Module (L87)



5199340

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35497867
Service Connector: 86825458
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-212
II	19369235	J-35616-14 (GN)	EL-38125-560A
III	85158596	J-35616-40 (BU)	EL-38125-560A

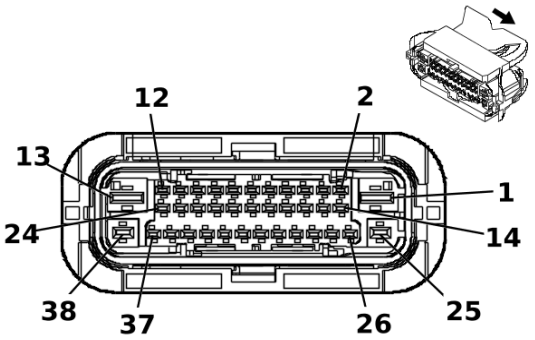
K69 Transfer Case Control Module (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / GY	1342	Battery Positive Voltage	III	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
4	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
5	0.5	WH / GN	7479	Rotary Position Sensor Signal	II	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE	7474	Incremental Encoder Direction Signal	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE / WH	1695	4WD Locked Range Indicator Control	II	—
10	—	—	—	Not Occupied	—	—
11	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	II	—
12	0.5	GY / BK	1570	Front Axle Actuator Control	II	—
13	2.5	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	III	—
14	—	—	—	Not Occupied	—	—
15	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
16	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
17	—	—	—	Not Occupied	—	—
18	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
19	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	II	—
20	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	II	—

K69 Transfer Case Control Module (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK	8015	Transfer Case Motor Low Reference	II	—
25	2.5	BK	6550	Ground	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BK	8014	Transfer Case Lock Solenoid Low Reference	II	—
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	YE / BK	7478	Gear Position Sensor Low Reference	II	—
31	0.5	WH / GN	7475	Incremental Encoder Sensor Voltage Reference	II	—
32	—	—	—	Not Occupied	—	—
33	0.5	BU	8013	Transfer Case Lock Solenoid Control 2	II	—
34	0.5	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	VT	7476	Incremental Encoder Sensor Low Reference	II	—
37	—	—	—	Not Occupied	—	—
38	2.5	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—

K69 Transfer Case Control Module (LM2)



5199340

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35497867
Service Connector: 86825458
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-212
II	19369235	J-35616-14 (GN)	EL-38125-560A
III	85158596	J-35616-40 (BU)	EL-38125-560A

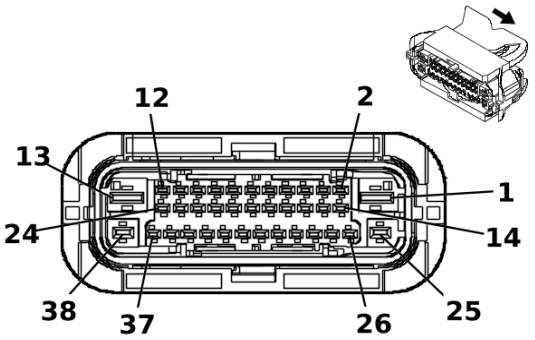
K69 Transfer Case Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / GY	1342	Battery Positive Voltage	III	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
4	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
5	0.5	WH / GN	7479	Rotary Position Sensor Signal	II	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE	7474	Incremental Encoder Direction Signal	II	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE / WH	1695	4WD Locked Range Indicator Control	II	—
10	—	—	—	Not Occupied	—	—
11	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	II	—
12	0.5	GY / BK	1570	Front Axle Actuator Control	II	—
13	2.5	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	III	—
14	—	—	—	Not Occupied	—	—
15	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
16	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
17	—	—	—	Not Occupied	—	—
18	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
19	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	II	—
20	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	II	—

K69 Transfer Case Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK	8015	Transfer Case Motor Low Reference	II	—
25	2.5	BK	6550	Ground	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BK	8014	Transfer Case Lock Solenoid Low Reference	II	—
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	YE / BK	7478	Gear Position Sensor Low Reference	II	—
31	0.5	WH / GN	7475	Incremental Encoder Sensor Voltage Reference	II	—
32	—	—	—	Not Occupied	—	—
33	0.5	BU	8013	Transfer Case Lock Solenoid Control 2	II	—
34	0.5	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	VT	7476	Incremental Encoder Sensor Low Reference	II	—
37	—	—	—	Not Occupied	—	—
38	2.5	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—

K69 Transfer Case Control Module (LT4)



5199340

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35497867
Service Connector: 86825458
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368624	J-35616-35 (VT)	J-38125-212

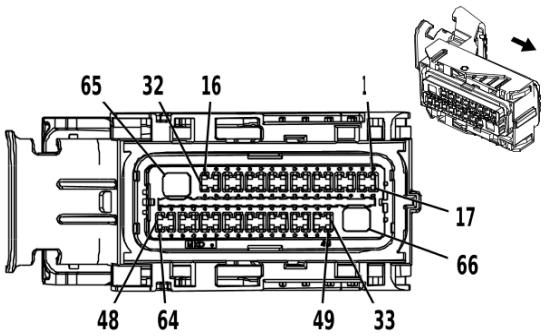
K69 Transfer Case Control Module (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / GY	1342	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
5	0.5	WH / GN	7479	Rotary Position Sensor Signal	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	YE	7474	Incremental Encoder Direction Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	YE / WH	1695	4WD Locked Range Indicator Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.5	VT / GY	8017	Secondary Axle Motor Relay Control	I	—
12	0.5	GY / BK	1570	Front Axle Actuator Control	I	—
13	2.5	YE / VT	1553	Transfer Case Motor Counter Clockwise Control	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
16	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
19	0.5	BU / GY	7473	Incremental Encoder Impulse Signal	I	—
20	0.5	WH / RD	7477	Gear Position Sensor 5V Reference	I	—
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK	8015	Transfer Case Motor Low Reference	I	—

K69 Transfer Case Control Module (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	2.5	BK	6550	Ground	I	—
26	—	—	—	Not Occupied	—	—
27	0.5	BK	8014	Transfer Case Lock Solenoid Low Reference	I	—
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	YE / BK	7478	Gear Position Sensor Low Reference	I	—
31	0.5	WH / GN	7475	Incremental Encoder Sensor Voltage Reference	I	—
32	—	—	—	Not Occupied	—	—
33	0.5	BU	8013	Transfer Case Lock Solenoid Control 2	I	—
34	0.5	YE / BN	1569	Transfer Case Lock Solenoid Valve Control	I	—
35	—	—	—	Not Occupied	—	—
36	0.5	VT	7476	Incremental Encoder Sensor Low Reference	I	—
37	—	—	—	Not Occupied	—	—
38	2.5	YE / GY	1552	Transfer Case Motor Clockwise Control	I	—

K71 Transmission Control Module (L87/LM2)



4024881

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35327565
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

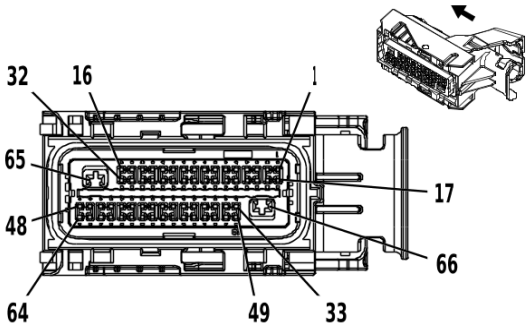
K71 Transmission Control Module (L87/LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
2	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	II	—
3	0.5	WH / BU	4507	Transmission Clutch H Control	II	—
4	0.5	WH	4508	Transmission Clutch G Control	II	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 11	—	—	—	Not Occupied	—	—
12	0.5	GN / YE	6353	Input Speed Signal	II	—
13	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / BU	6358	Output Speed Signal	II	—
15	0.5	BN / BU	6254	Transmission Input Speed Sensor Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
18	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT	4509	Transmission Clutch F Control	II	—
21	0.5	YE	2159	Park Inhibit Solenoid Assembly Control	II	—
22	0.5	GN / BK	7819	Default Disable Solenoid Control	II	—

K71 Transmission Control Module (L87/LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	—	—	—	Not Occupied	—	—
24	0.5	GN	2968	Transmission Auxiliary Fluid Pump Control	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 30	—	—	—	Not Occupied	—	—
31	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
32	—	—	—	Not Occupied	—	—
33	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
38	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50 - 52	—	—	—	Not Occupied	—	—
53	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
54	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
55 - 58	—	—	—	Not Occupied	—	—
59	0.5	VT / WH	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	II	—
60	—	—	—	Not Occupied	—	—
61	0.5	WH / YE	6317	Electronic Transmission Range Select Out of Park Switch Signal	II	—
62	0.5	BN	3706	Electronic Transmission Range Select Switch Analog Signal 1	II	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	—	—	—	Not Occupied	—	—
65	1	BK / WH	6151	Engine Control Module Ground	I	—
66	1	RD / GN	1840	Battery Positive Voltage	I	—

K71 Transmission Control Module (LT4)



3621452

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13965710
Service Connector: 19329822
Description: 66-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

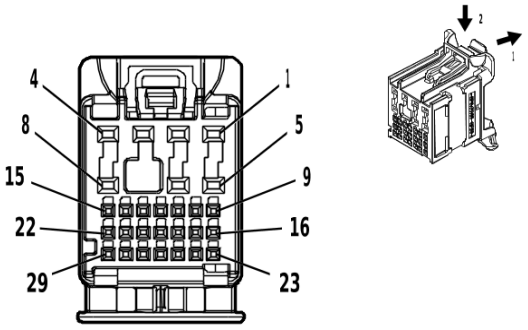
K71 Transmission Control Module (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
2	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	II	—
3	0.5	WH / BU	4507	Transmission Clutch H Control	II	—
4	0.5	WH	4508	Transmission Clutch G Control	II	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 11	—	—	—	Not Occupied	—	—
12	0.5	GN / YE	6353	Input Speed Signal	II	—
13	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / BU	6358	Output Speed Signal	II	—
15	0.5	BN / BU	6254	Transmission Input Speed Sensor Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
18	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT	4509	Transmission Clutch F Control	II	—
21	0.5	YE	2159	Park Inhibit Solenoid Assembly Control	II	—
22	0.5	GN / BK	7819	Default Disable Solenoid Control	II	—

K71 Transmission Control Module (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	—	—	—	Not Occupied	—	—
24	0.5	GN	2968	Transmission Auxiliary Fluid Pump Control	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 30	—	—	—	Not Occupied	—	—
31	0.75	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
32	—	—	—	Not Occupied	—	—
33	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
38	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50 - 52	—	—	—	Not Occupied	—	—
53	0.5	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
54	0.5	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
55 - 58	—	—	—	Not Occupied	—	—
59	0.5	VT / WH	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	II	—
60	—	—	—	Not Occupied	—	—
61	0.5	WH / YE	6317	Electronic Transmission Range Select Out of Park Switch Signal	II	—
62	0.5	BN	3706	Electronic Transmission Range Select Switch Analog Signal 1	II	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	—	—	—	Not Occupied	—	—
65	1	BK / WH	6151	Engine Control Module Ground	I	—
66	1	RD / GN	1840	Battery Positive Voltage	I	—

K73 Telematic Control Module X1



4496253

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35364134
Service Connector: 13534974
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

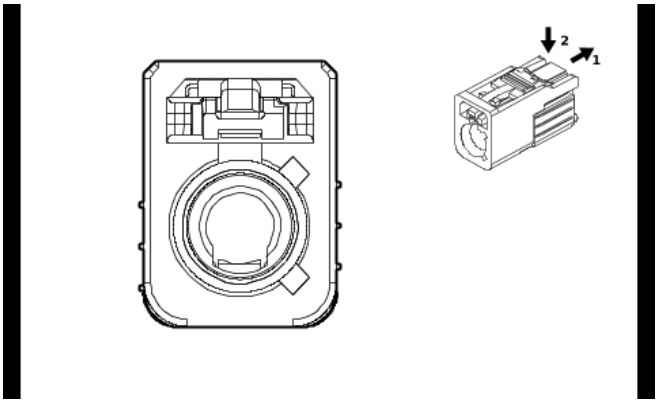
K73 Telematic Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / BU	3240	Battery Positive Voltage	II	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	1451	Signal Ground	II	—
5	—	—	—	Not Occupied	—	—
6	0.5	GN / BK	2515	Telematics Switch Supply Voltage	II	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
10	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
11	0.35	GN / WH	2514	Telematics Switch Signal	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	Bare	1792	Low Reference	I	—
14	0.35	BK / GY	5152	Voice Recognition Audio [-] Control	I	—
15	0.35	GY / YE	5149	Voice Recognition Audio Signal	I	—
16	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
17	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
18	0.35	WH / BK	4769	Emergency Call Backup Speaker [-] Control	I	—
19	0.35	YE / VT	2516	Telematics Switch Green LED Indicator Control	I	—
20	—	—	—	Not Occupied	—	—
21	0.35	BK / BN	654	Cellular Telephone Microphone Low Reference	I	—
22	0.35	BU	655	Cellular Telephone Microphone Signal	I	—
23 - 24	—	—	—	Not Occupied	—	—

K73 Telematic Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.35	GY / GN	4770	Emergency Call Backup Speaker [+] Control	I	—
26	0.35	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
27 - 29	—	—	—	Not Occupied	—	—

K73 Telematic Control Module X2



5630760

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340312
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(VT)

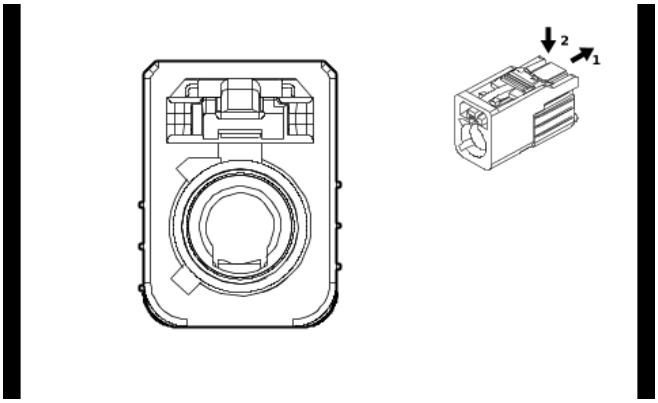
Terminal Part Information

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

K73 Telematic Control Module X2

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

K73 Telematic Control Module X3



5630785

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 33340314
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BN)

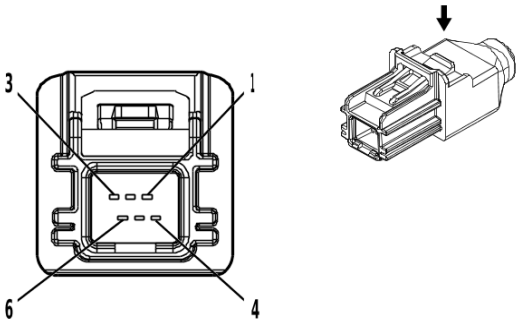
Terminal Part Information

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

K73 Telematic Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	—

K73 Telematic Control Module X4



4806625

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: VP000160
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(BK)

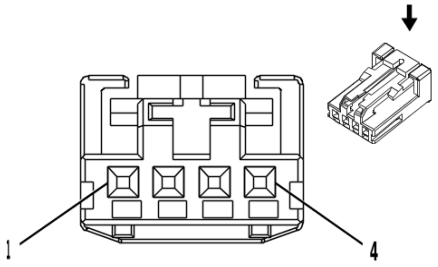
Terminal Part Information

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

K73 Telematic Control Module X4

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 - 6	—	—	—	Not Occupied	—	—

K77 Remote Function Actuator Module



2717162

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

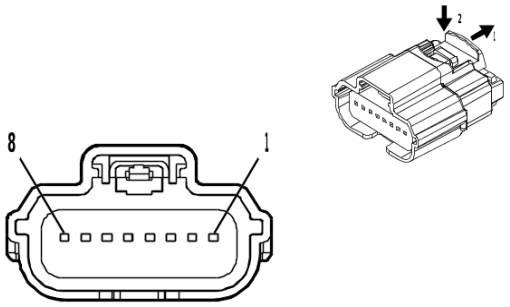
Terminal Part Information

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

K77 Remote Function Actuator Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / VT	2640	Battery Positive Voltage	I	—
2	0.5	GN / YE	2862	Body Control Module LIN Bus 16	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	1351	Signal Ground	I	—

K85P Restraints Occupant Classification System Module - Passenger



4708234

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 31404-9110
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed(BK)

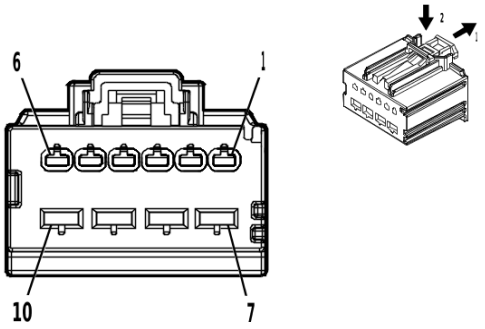
Terminal Part Information

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

K85P Restraints Occupant Classification System Module - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GN	4440	Battery Positive Voltage	I	—
2	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
3	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
4	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
5	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
6	0.35	BK / WH	1351	Signal Ground	I	—
7	0.35	OG / BN	3947	Passenger Automatic Locking Retractor Switch Signal	I	—
8	0.35	GY / OG	3946	Passenger Automatic Locking Retractor Switch Low Reference	I	—

K99 Steering Column Control Module X1



5035058

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35152553
Service Connector: 13525907
Description: 10-Way F 1.5, 2.8 MX Series(BK)

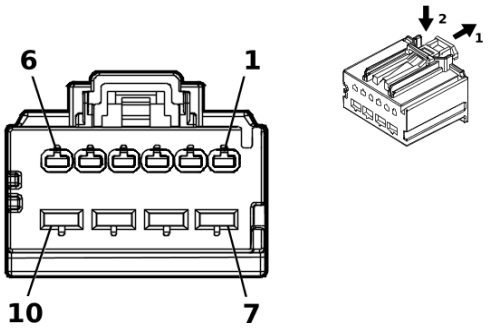
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300432	J-35616-2A (GY)	J-38125-557
II	85544080	J-35616-4A (PU)	J-38125-11A

K99 Steering Column Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT / BK	2020	Steering Column Tilt and Telescope Switch Feedback Signal	I	—
2	0.35	GN / WH	7530	Driver Seat Adjuster Memory Module LIN Bus 1	I	—
3	0.35	GN / BN	2095	Steering Column Tilt and Telescope Switch Rearward Signal	I	—
4	0.35	BN / GY	2096	Steering Column Tilt and Telescope Switch Up Signal	I	—
5	0.35	YE / BN	2097	Steering Column Tilt and Telescope Switch Down Signal	I	—
6	0.35	BU / YE	2094	Steering Column Tilt and Telescope Switch Forward Signal	I	—
7	1	RD / VT	4640	Battery Positive Voltage	II	—
8	1	BK	1850	Ground	II	—
9 - 10	—	—	—	Not Occupied	—	—

K99 Steering Column Control Module X2



5190551

Connector Part Information

Harness Type: Steering Column
OEM Connector: 31372-1400
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(GY)

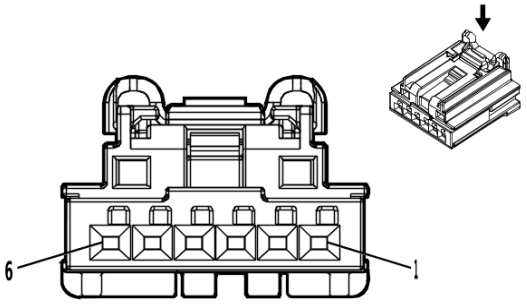
Terminal Part Information

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

K99 Steering Column Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE	2153	Steering Column Telescope Motor Signal	I	—
2	—	WH	2152	Steering Column Telescope Motor Low Reference	I	—
3	—	BN	2154	Steering Column Tilt Motor Signal	I	—
4	—	BU	2157	Steering Column Tilt Motor Low Reference	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	—	BK	2098	Steering Column Telescope Motor Forward Control	I	—
8	—	RD	2110	Steering Column Telescope Motor Rearward Control	I	—
9	—	GY	2112	Steering Column Tilt Motor Down Control	I	—
10	—	VT	2111	Steering Column Tilt Motor Up Control	I	—

K104DP Front Seat Bladder Control Module - Driver Primary



5020940

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2035363-6
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

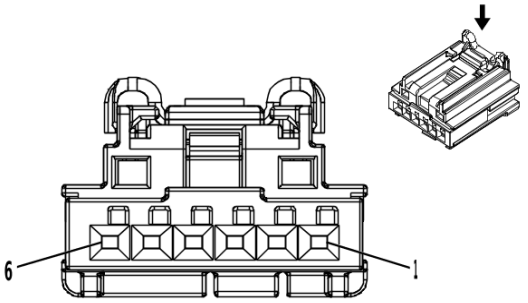
Terminal Part Information

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

K104DP Front Seat Bladder Control Module - Driver Primary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / BN	2240	Battery Positive Voltage	I	—
2	0.5	GN / GY	3758	Driver Seat Adjuster Memory Module LIN Bus 2	I	—
3	0.75	WH / BU	4891	Driver Seat Lumbar/Bolster Pump Control	I	—
4	0.75	BK	1150	Ground	I	—
5	0.75	BN / BK	2305	Driver Seat Bolster Pump Low Reference	I	—
6	—	GN / BK	2637	Front Seat Bolster Memory Module - Driver LIN Bus 1	II	—

K104P Front Seat Bladder Control Module - Passenger (AVK-A45)



3960313

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

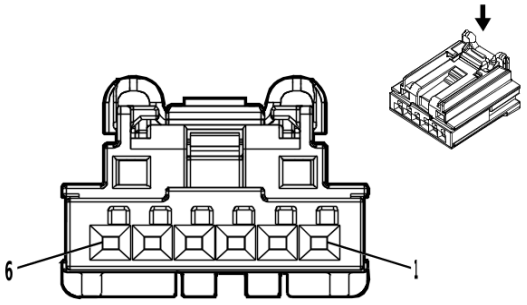
Terminal Part Information

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

K104P Front Seat Bladder Control Module - Passenger (AVK-A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / BU	3940	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.75	GY / WH	4890	Passenger Seat Lumbar/Bolster Pump Control	I	—
4	0.75	BK	1250	Ground	I	—
5	0.5	BK / BU	2194	Passenger Seat Position Switch Low Reference	I	—
6	0.5	YE / GN	1068	Passenger Seat Lumbar Support Switch Analog Signal	I	—

K104PS Front Seat Bladder Control Module - Passenger Secondary (AKE)



5020940

Connector Part Information

Harness Type: Passenger Seat Harness
OEM Connector: 2035363-6
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

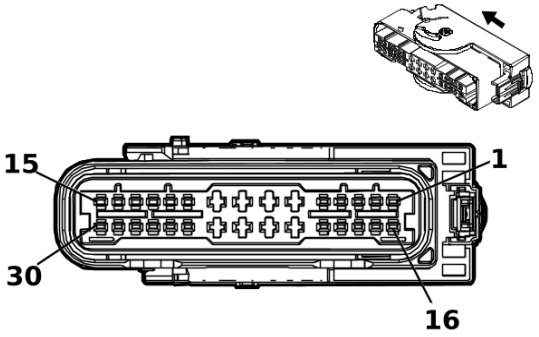
Terminal Part Information

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

K104PS Front Seat Bladder Control Module - Passenger Secondary (AKE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / BU	3940	Battery Positive Voltage	I	—
2	—	GN / BU	2638	Front Seat Bolster Memory Module - Passenger LIN Bus 1	I	—
3	—	—	—	Not Occupied	—	—
4	—	BK	1250	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

K111 Fuel Pump Power Control Module (L87)



3240109

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35449315
Service Connector: 85140064
Description: 30-Way F 1.5, 2.8 MCP Series, Sealed(GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19329958	J-35616-2A (GY)	J-38125-11A
II	19371214	J-35616-4A (PU)	J-38125-215A

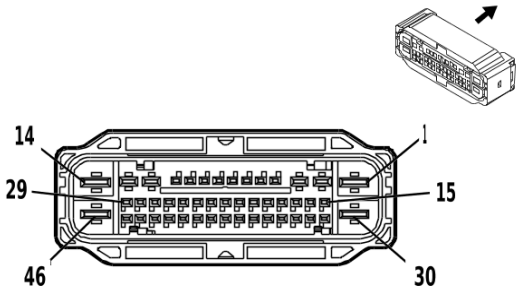
K111 Fuel Pump Power Control Module (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	BU / YE	6861	Water In Fuel Sensor Signal	I	—
3	0.5	BK / BU	6863	Water In Fuel Sensor Low Reference	I	—
4	0.5	BN / GY	7072	Fuel Temperature Sensor 1 Signal	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD / VT	1940	Battery Positive Voltage	II	—
8	2.5	GY	120	Fuel Pump Control	II	—
9	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	II	—
10	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
11	0.5	BU	890	Fuel Tank Pressure Sensor Signal	I	—
12	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
13	0.5	BU / GN	1936	Primary Fuel Level Sensor Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
16	0.75	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	GN / GY	465	Fuel Pump Primary Relay Control	I	—
19	0.5	BN / WH	7073	Fuel Temperature Sensor 1 Low Reference	I	—
20	—	—	—	Not Occupied	—	—
21	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—

K111 Fuel Pump Power Control Module (L87) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	2.5	BK	1950	Ground	II	—
23	0.5	BK	7444	Fuel Pump Assembly Shield Ground	II	—
24	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	II	—
25	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
26	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	I	—
27	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
28	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—

K111 Fuel Pump Power Control Module (LM2)



4162046

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212

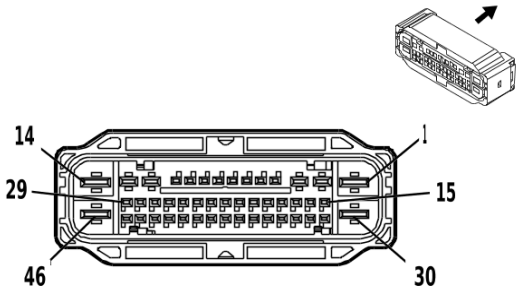
K111 Fuel Pump Power Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	III	—
2	2.5	GY	120	Fuel Pump Control	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	II	—
8	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
11	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
12 - 13	—	—	—	Not Occupied	—	—
14	2.5	BK	1950	Ground	III	—
15	0.5	BK	7444	Fuel Pump Assembly Shield Ground	II	—
16	0.5	BU / WH	4306	Exhaust Flow Control Valve 1 - Cylinder Deactivation Feedback Signal	II	—
17	0.5	VT / YE	4317	Exhaust Flow Control Valve 2 - Cylinder Deactivation Feedback Signal	II	—
18	—	—	—	Not Occupied	—	—
19	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	II	—
20	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
21	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	II	—

K111 Fuel Pump Power Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	—	—	—	Not Occupied	—	—
23	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	II	—
24 - 26	—	—	—	Not Occupied	—	—
27	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	II	—
28 - 29	—	—	—	Not Occupied	—	—
30	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	III	—
31 - 34	—	—	—	Not Occupied	—	—
35	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU / GN	1936	Primary Fuel Level Sensor Signal	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	II	—
40	0.5	BU / WH	890	Fuel Tank Pressure Sensor Signal	II	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—
44 - 45	—	—	—	Not Occupied	—	—
46	2.5	RD / VT	1940	Battery Positive Voltage	III	—

K111 Fuel Pump Power Control Module (LT4)



4162046

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212

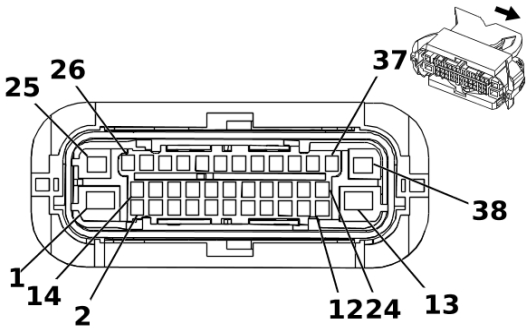
K111 Fuel Pump Power Control Module (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	III	—
2	2.5	GY	120	Fuel Pump Control	I	—
3 - 6	—	—	—	Not Occupied	—	—
7	0.5	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	II	—
8	0.5	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	II	—
9	—	—	—	Not Occupied	—	—
10	0.75	VT / GN	4320	Powertrain Sensor Bus Enable	II	—
11	0.5	GN / GY	465	Fuel Pump Primary Relay Control	II	—
12 - 13	—	—	—	Not Occupied	—	—
14	2.5	BK	1950	Ground	III	—
15	0.5	BK	7444	Fuel Pump Assembly Shield Ground	II	—
16	0.5	BU / WH	4306	Exhaust Flow Control Valve 1 - Cylinder Deactivation Feedback Signal	II	—
17	0.5	VT / YE	4317	Exhaust Flow Control Valve 2 - Cylinder Deactivation Feedback Signal	II	—
18	—	—	—	Not Occupied	—	—
19	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	II	—
20	0.5	BU / WH	7446	Fuel Pressure Sensor Signal	II	—
21	0.5	BK / GN	6281	Fuel Level Sensor Low Reference	II	—

K111 Fuel Pump Power Control Module (LT4) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	—	—	—	Not Occupied	—	—
23	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	II	—
24 - 26	—	—	—	Not Occupied	—	—
27	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	II	—
28 - 29	—	—	—	Not Occupied	—	—
30	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	III	—
31 - 34	—	—	—	Not Occupied	—	—
35	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU / GN	1936	Primary Fuel Level Sensor Signal	II	—
38	—	—	—	Not Occupied	—	—
39	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	II	—
40	0.5	BU / WH	890	Fuel Tank Pressure Sensor Signal	II	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—
44 - 45	—	—	—	Not Occupied	—	—
46	2.5	RD / VT	1940	Battery Positive Voltage	III	—

K115 Reductant Control Module (LM2)



3240110

Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13582126
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed(BK with BK Inner Connector)

Terminal Part Information

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

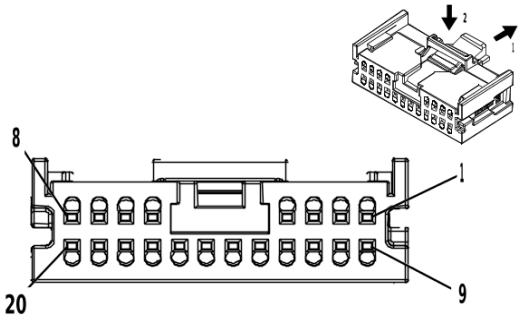
K115 Reductant Control Module (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	3921	Diesel Exhaust Fluid Heater Control 1	I	—
2	—	VT / WH	3676	Diesel Exhaust Fluid Heating Tank 2 Heater Control	I	—
3	—	—	—	Not Occupied	—	—
4	—	WH / BN	3677	Diesel Exhaust Fluid Reservoir Heater Control	I	—
5	—	—	—	Not Occupied	—	—
6	—	YE	3244	Diesel Exhaust Fluid Tank Temperature Sensor Signal	I	—
7	—	VT	7290	Diesel Exhaust Fluid Sensor Voltage Reference 1	I	—
8	—	YE / GN	7284	Diesel Exhaust Fluid Liquid Quality Temperature Signal	I	—
9	—	BK / YE	8434	Diesel Exhaust Fluid Sensor Low Reference	I	—
10	—	—	—	Not Occupied	—	—
11	—	VT / WH	3876	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 3	I	—
12	—	—	—	Not Occupied	—	—
13	—	BK	1650	Ground	I	—
14	—	BN / GY	2936	Diesel Exhaust Fluid Heating Tank 2 Heater Control Low	I	—
15	—	—	—	Not Occupied	—	—
16	—	BU / BK	4318	Diesel Exhaust Fluid Tank Heater Low Control	I	—
17	—	—	—	Not Occupied	—	—

K115 Reductant Control Module (LM2) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	—	YE / GN	3245	Diesel Exhaust Fluid Tank Temperature Sensor Low Reference	I	—
19	—	YE / RD	3106	Diesel Exhaust Fluid Pressure Sensor 5 Volt Reference	I	—
20	—	BN / YE	3108	Diesel Exhaust Fluid Pressure Sensor Signal	I	—
21	—	BK / GN	3107	Diesel Exhaust Fluid Pressure Sensor Low Reference	I	—
22 - 23	—	—	—	Not Occupied	—	—
24	—	VT	3875	Diesel Exhaust Fluid Smart Pump Supply Voltage Phase 2	I	—
25	—	BK	1650	Ground	I	—
26	—	YE / GY	3199	Diesel Exhaust Fluid Pressure Line Heater Control	I	—
27	—	—	—	Not Occupied	—	—
28	—	GN / BK	4319	Diesel Exhaust Fluid Line Heater Low Control	I	—
29	—	—	—	Not Occupied	—	—
30	—	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
31	—	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
32	—	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
33	—	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
34	—	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
35	—	—	—	Not Occupied	—	—
36	—	GY / BK	2937	Diesel Exhaust Fluid Pump Motor Stator Low Reference	I	—
37	—	GY	3103	Diesel Exhaust Fluid Smart Pump Control	I	—
38	—	RD / WH	2040	Battery Positive Voltage	I	—

K124 Image Processing Module X1 (LWB)



4231339

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35340139
Service Connector: 13544280
Description: 20-Way F Mini 50 Series(BK)

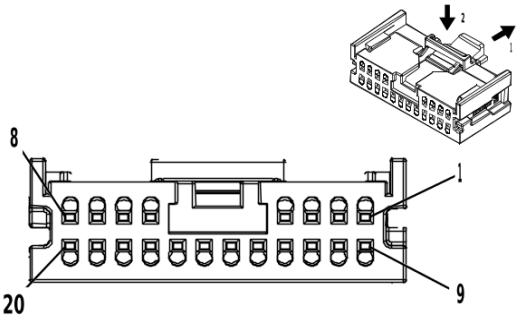
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19333221	EL-35616-58 (BK)	J-38125-215A
II	19370262	EL-35616-58 (BK)	EL-38125-58

K124 Image Processing Module X1 (LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / WH	1351	Signal Ground	I	—
2	0.35	RD / GN	3140	Battery Positive Voltage	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	RD / GN	3140	Battery Positive Voltage	II	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
10	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
11 - 15	—	—	—	Not Occupied	—	—
16	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
17	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
18	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
19	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
20	—	—	—	Not Occupied	—	—

K124 Image Processing Module X1 (SWB)



4231339

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35340139
Service Connector: 13544280
Description: 20-Way F Mini 50 Series(BK)

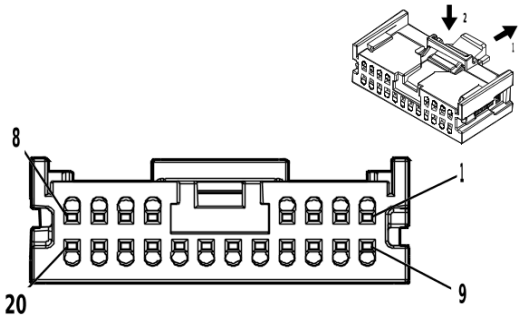
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19333221	EL-35616-58 (BK)	J-38125-215A
II	19370262	EL-35616-58 (BK)	EL-38125-58

K124 Image Processing Module X1 (SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / WH	1351	Signal Ground	I	—
2	0.35	RD / GN	3140	Battery Positive Voltage	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.35	RD / GN	3140	Battery Positive Voltage	II	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
10	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
11 - 15	—	—	—	Not Occupied	—	—
16	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
17	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
18	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
19	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
20	—	—	—	Not Occupied	—	—
23	0.35	GN / GY	4627	Image Processing Module LIN Bus 1	II	—
27	0.35	VT / GY	8978	Inertial Sensor Supply Voltage	II	—
31	0.35	GN	7225	Ethernet Bus 11 [+]	II	—
32	0.35	BU	7224	Ethernet Bus 11 [-]	II	—

K124 Image Processing Module X2 (UGN)



4695009

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13596106
Service Connector: 13596106
Description: 20-Way F Mini 50 Series(GY)

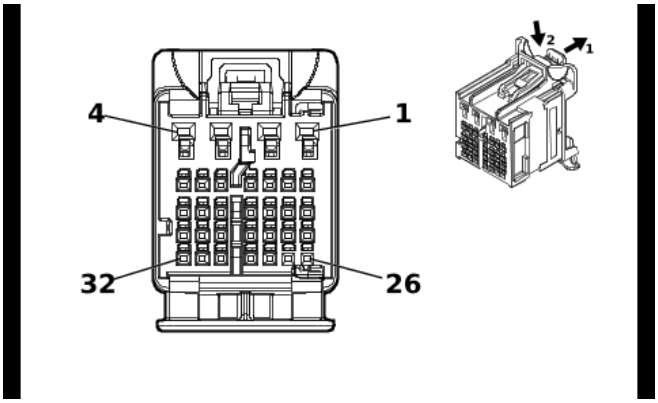
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19333221	EL-35616-58 (BK)	J-38125-215A

K124 Image Processing Module X2 (UGN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
3	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6 - 9	—	—	—	Not Occupied	—	—
10	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
11	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
12 - 16	—	—	—	Not Occupied	—	—
17	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
18 - 20	—	—	—	Not Occupied	—	—

K124 Image Processing Module X2 (UKL)



5493614

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392291
Service Connector: 13534978
Description: 32-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(GY with GY Inner Connector)

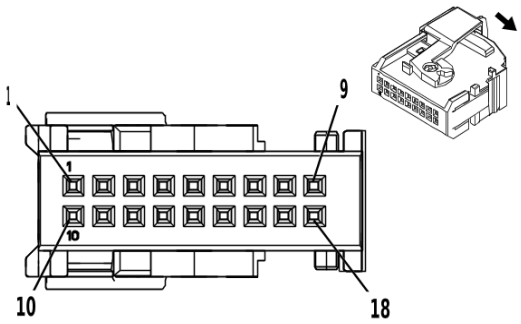
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58

K124 Image Processing Module X2 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 5	—	—	—	Not Occupied	—	—
6	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
7	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
10	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
14	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
15	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
16	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
17	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
18	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.35	GN	8977	Private Serial Data Active Safety CAN Bus [+] Serial Data	I	—
22	0.35	BU	8976	Private Serial Data Active Safety CAN Bus [-] Serial Data	I	—
23 - 32	—	—	—	Not Occupied	—	—

K157 Video Processing Module X1 (LWB)



4329088

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33168840
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series(BK)

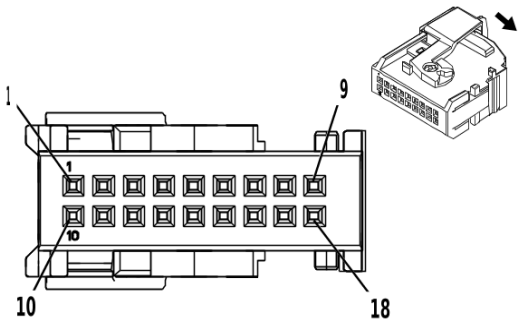
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

K157 Video Processing Module X1 (LWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK / WH	1351	Signal Ground	I	—
4 - 9	—	—	—	Not Occupied	—	—
10	0.5	RD / VT	1640	Battery Positive Voltage	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.5 0.35	WH WH	4986 4986	AUTOSAR CAN Bus [-] 1 Serial Data AUTOSAR CAN Bus [-] 1 Serial Data	I I	AX7 - AX7
14	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
15	0.5 0.35	BU BU	4987 4987	AUTOSAR CAN Bus [+] 1 Serial Data AUTOSAR CAN Bus [+] 1 Serial Data	I I	AX7 - AX7
16	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
17 - 18	—	—	—	Not Occupied	—	—

K157 Video Processing Module X1 (SWB)



4329088

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35332167
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series(BK)

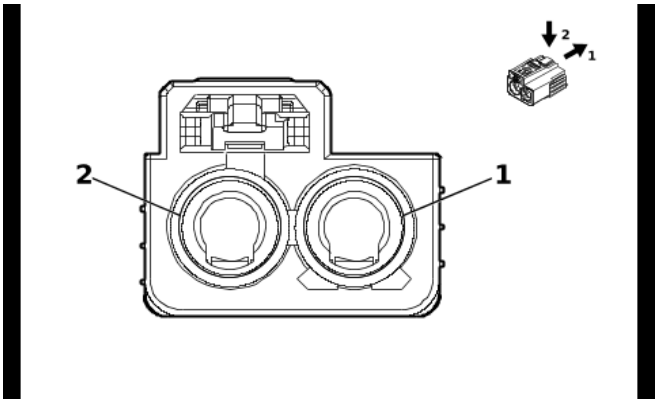
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

K157 Video Processing Module X1 (SWB)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK / WH	1351	Signal Ground	I	—
4 - 9	—	—	—	Not Occupied	—	—
10	0.5	RD / VT	1640	Battery Positive Voltage	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
14	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
15	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
16	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
17 - 18	—	—	—	Not Occupied	—	—

K157 Video Processing Module X3



5810808

Connector Part Information

Harness Type: Video Processing COAX
OEM Connector: 35249177
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way

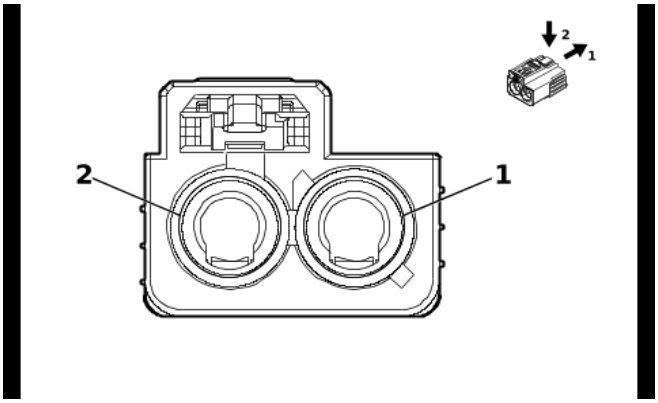
Terminal Part Information

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

K157 Video Processing Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
C1	0	—	Coax Cable	Coax Cable	I	—

K157 Video Processing Module X4



5810836

Connector Part Information

Harness Type: Video Processing COAX
OEM Connector: 35249175
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way

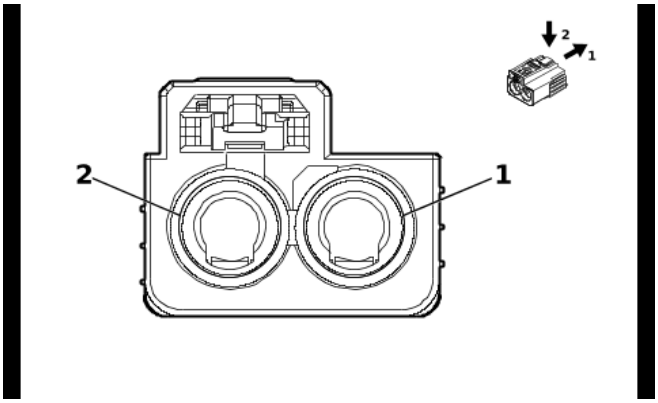
Terminal Part Information

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

K157 Video Processing Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	Coax Cable	Coax Cable	I	—
2	—	—	—	Not Occupied	—	—

K157 Video Processing Module X5



5810827

Connector Part Information

Harness Type: Video Processing COAX
OEM Connector: 35171572
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way

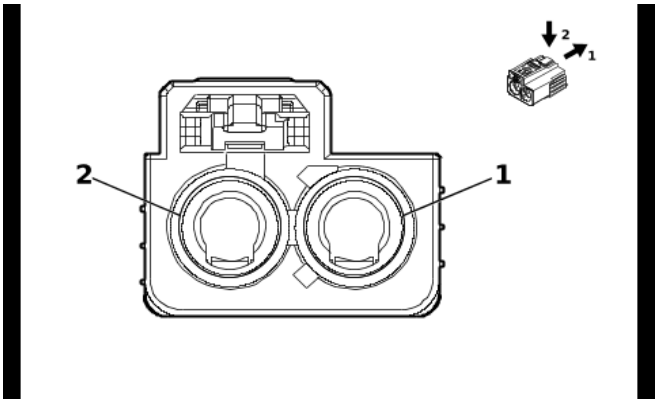
Terminal Part Information

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

K157 Video Processing Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	Coax Cable	Coax Cable	I	—
2	—	—	—	Not Occupied	—	—

K157 Video Processing Module X6



5810832

Connector Part Information

Harness Type: Video Processing COAX
OEM Connector: 35171571
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way

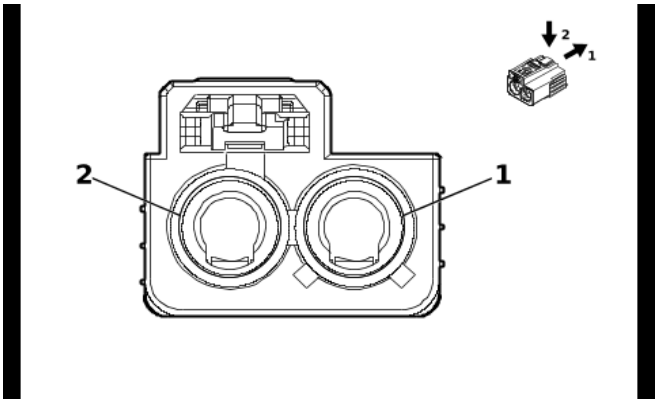
Terminal Part Information

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

K157 Video Processing Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	Coax Cable	Coax Cable	I	—
2	—	—	Coax Cable	Coax Cable	I	—

K157 Video Processing Module X7



5810835

Connector Part Information

Harness Type: Video Processing COAX
OEM Connector: 35434012
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way

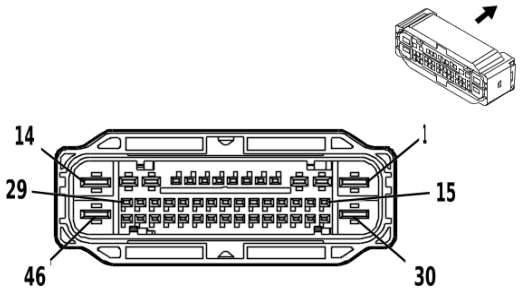
Terminal Part Information

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

K157 Video Processing Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	Coax Cable	Coax Cable	I	—
2	—	—	Coax Cable	Coax Cable	I	—

K160 Brake System Control Module



4162046

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212

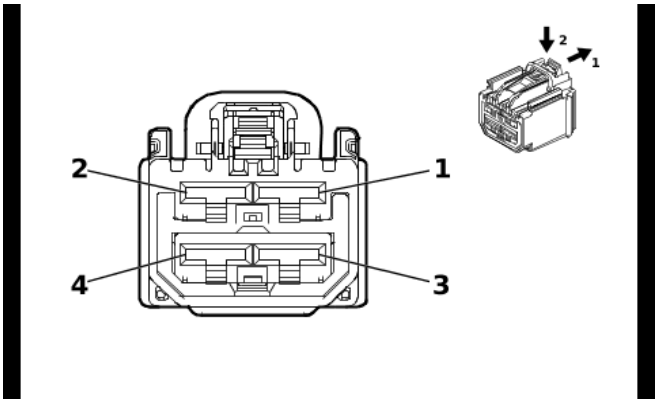
K160 Brake System Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK	150	Ground	III	—
2	2.5	WH	2001	Left Park Brake Motor Apply Control	I	—
3	2.5	GY / BK	4369	Left Park Brake Motor Low Reference	I	—
4	0.5	GY / WH	7064	Left Front Wheel Speed Sensor Control	II	—
5	0.5	GY	830	Left Front Wheel Speed Sensor Signal	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.5	VT / WH	639	Run/Crank Ignition 1 Voltage	II	—
10	0.5	GY / BN	7065	Right Front Wheel Speed Sensor Control	II	—
11	0.5	YE	872	Right Front Wheel Speed Sensor Signal	II	—
12	2.5	GN / VT	1988	Right Park Brake Motor Apply Control	I	—
13	2.5	GY	4368	Right Park Brake Motor Low Reference	I	—
14	6	RD / YE	442	Battery Positive Voltage	III	—
15	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	II	—
16	0.5	BU	884	Left Rear Wheel Speed Sensor Signal	II	—
17	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
18	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	II	—
19 - 22	—	—	—	Not Occupied	—	—
23	0.5	GN / YE	2731	Brake System Control Module LIN Bus 1	II	—
24	—	—	—	Not Occupied	—	—
25	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—

K160 Brake System Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	II	—
27	—	—	—	Not Occupied	—	—
28	0.5	GY / YE	7128	Right Rear Wheel Speed Sensor Control	II	—
29	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	II	—
30	6	BK	150	Ground	III	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
34	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	II	—
35	0.75	GN / BU	2733	Brake System Control Module LIN Bus 2	II	—
36	0.5	WH / BK	2223	Trailer Brake Apply Signal	II	—
37	0.5	YE / BK	2224	Trailer Brake Enable Signal	II	—
38	0.5	GN / GY	333	Brake Fluid Level Signal	II	—
39	0.75	BN / BU	1602	Front Brake Pad Wear Sensor Signal	II	—
40	—	—	—	Not Occupied	—	—
41	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
42	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	II	—
43	—	—	—	Not Occupied	—	—
44	0.75	GN / YE	1616	Rear Brake Pad Wear Sensor Signal	II	—
45	—	—	—	Not Occupied	—	—
46	6	RD / WH	1642	Battery Positive Voltage	III	—

K164 Differential Control Module X1



5492913

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35317762
Service Connector: 84766433
Description: 4-Way F 6.3 YESC Series(GY)

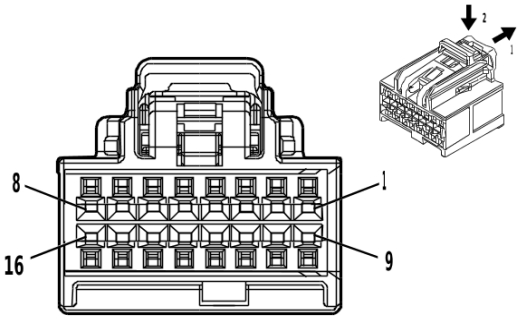
Terminal Part Information

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

K164 Differential Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	GY / BN	7968	Axle Differential Lock Control High	I	—
2	3	BK	2050	Ground	I	—
3	3	RD / GY	5540	Battery Positive Voltage	I	—
4	4	YE / WH	7969	Axle Differential Lock Control Low	I	—

K164 Differential Control Module X2



4873243

Connector Part Information

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

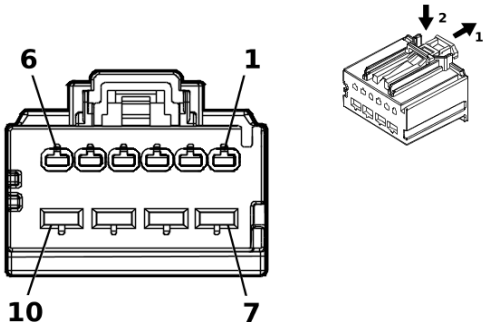
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354230	J-35616-64B (L-BU)	J-38125-215A

K164 Differential Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
3	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
4	0.35	BU / WH	7978	Axle Differential Lock Motor Temperature Sensor Signal	I	—
5	0.35	GY	7976	Axle Differential Lock Motor Position Sensor Signal 2	I	—
6	0.35	GN / BN	7975	Axle Differential Lock Motor Position Sensor Signal 1	I	—
7	0.35	VT / BK	7972	Axle Differential Lock Motor Brake Control Low	I	—
8	0.5	Bare	7970	Axle Differential Lock Control Shield	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
11	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
12	0.35	BK / YE	7977	Axle Differential Lock Motor Temperature Sensor Low Reference	I	—
13	0.35	BK / VT	7974	Axle Differential Lock Motor Position Sensor Low Reference	I	—
14	0.75	WH / RD	7973	Axle Differential Lock Motor Position Sensor High Reference	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	WH	7971	Axle Differential Lock Motor Brake Control High	I	—

K169 Folding 3rd Row Seat Module X1



5190551

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 31372-1700
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(GY)

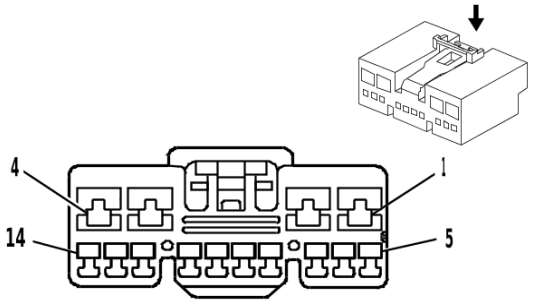
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

K169 Folding 3rd Row Seat Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BN	8921	Right 3rd Row Folding Seat Back Unlatch Motor Control High	I	—
2	0.75	BU / VT	8920	Right 3rd Row Folding Seat Back Unlatch Motor Control Low	I	—
3	0.5	YE / BN	4214	3rd Row Left Seat Recline Position Sensor Signal	I	—
4	0.75	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—
5	0.5	WH / VT	4213	3rd Row Right Seat Recline Position Sensor Signal	I	—
6	0.5	GN / BU	2856	Body Control Module LIN Bus 10	I	—
7	1.5	BU	4217	3rd Row Right Seat Recline Motor Forward Control	II	—
8	1.5	GY / OG	4218	3rd Row Right Seat Recline Rearward Control	II	—
9	—	—	—	Not Occupied	—	—
10	2.5	BK	2050	Ground	II	—

K169 Folding 3rd Row Seat Module X2



1469285

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 7283-8397-40
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 0.64, 2.8 YESC Series(L-GY)

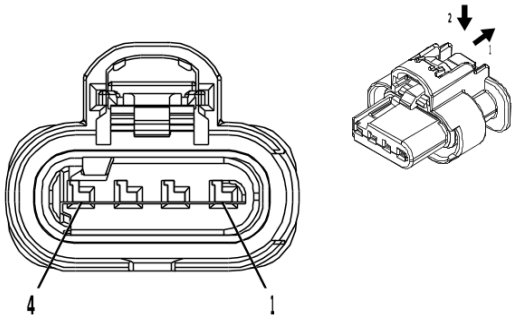
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

K169 Folding 3rd Row Seat Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD / GY	7840	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	VT / BK	4221	3rd Row Left Seat Recline Motor Forward Control	I	—
4	1.5	BN	4222	3rd Row Left Seat Recline Motor Rearward Control	I	—
5	0.5	WH / BK	2697	Right 3rd Row Seat Right Latch Signal	II	—
6	0.5	YE / BU	2698	Left 3rd Row Seat Recline Switch Signal	II	—
7	0.5	GN / GY	2699	Right 3rd Row Seat Recline Switch Signal	II	—
8	0.5	VT / BN	2696	Right 3rd Row Seat Left Latch Signal	II	—
9	0.5	GY / BU	2695	Left 3rd Row Seat Right Latch Signal	II	—
10	0.5	BN / GN	2694	Left 3rd Row Seat Left Latch Signal	II	—
11	0.75	GY / WH	8922	Left 3rd Row Folding Seat Back Unlatch Motor Control Low	II	—
12	0.75	YE / BK	8923	Left 3rd Row Folding Seat Back Unlatch Motor Control High	II	—
13 - 14	—	—	—	Not Occupied	—	—

K171 Rear Closure Hands Free Module X1



4210809

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33390897
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

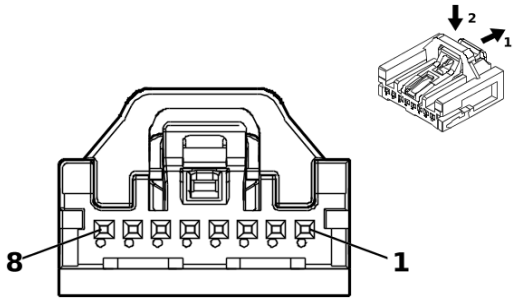
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K171 Rear Closure Hands Free Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1450	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GN / BU	2856	Body Control Module LIN Bus 10	I	—
4	0.5	RD / GY	4840	Battery Positive Voltage	I	—

K172 Night Vision Control Module X1 (UV3)



5200269

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35068228
Service Connector: 84769201
Description: 8-Way F Mini 50 Series(BK)

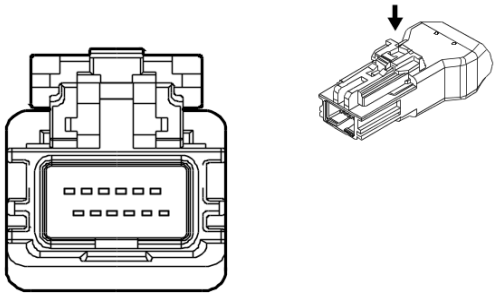
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K172 Night Vision Control Module X1 (UV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
2	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
3	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
4	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	BK / WH	1851	Signal Ground	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	RD / VT	4040	Battery Positive Voltage	I	—

K172 Night Vision Control Module X2 (UV3)



4527210

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33358813
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series(BK)

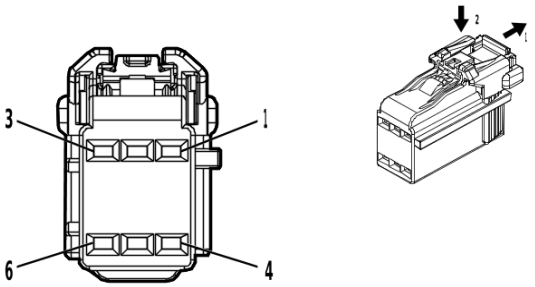
Terminal Part Information

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

K172 Night Vision Control Module X2 (UV3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

K175 Front Floor Console Compartment Cooler (DCK)



4862126

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35327305
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series(BK)

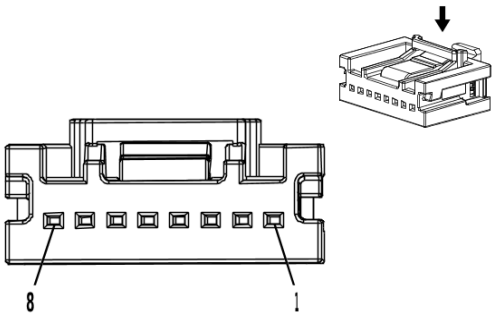
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

K175 Front Floor Console Compartment Cooler (DCK)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	6340	Battery Positive Voltage	I	—
2	0.75	BK	1250	Ground	II	—
3	0.35	GN / VT	2857	Body Control Module LIN Bus 11	I	—
4	0.35	GN / WH	7846	Refrigerator On Indicator Control	I	—
5	0.35	BU / GN	7845	Refrigerator Freeze Indicator Control	I	—
6	0.35	BN / BK	7844	Refrigerator Enable Signal	I	—

K179 Automated Driving Mapping Module X1 (UKL)



4017639

Connector Part Information

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

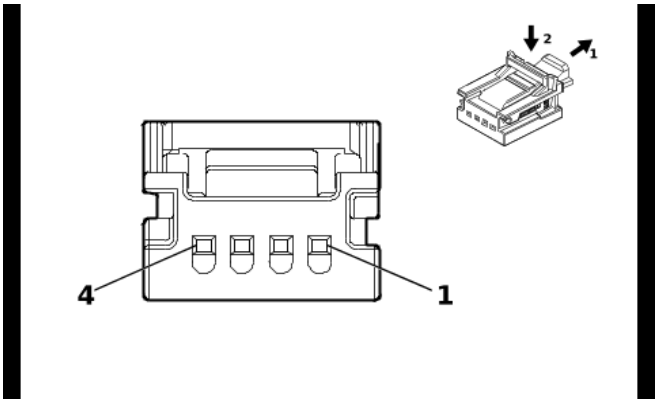
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K179 Automated Driving Mapping Module X1 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GN	3140	Battery Positive Voltage	I	—
2	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
3	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
4	0.35	BU / GY	4105	AUTOSAR CAN Bus [+] 8 Serial Data	I	—
5	0.35	WH / GY	4104	AUTOSAR CAN Bus [-] 8 Serial Data	I	—
6	0.35	BK / WH	1351	Signal Ground	I	—
7 - 8	—	—	—	Not Occupied	—	—

K179 Automated Driving Mapping Module X2 (UKL)



5493269

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33299481
Service Connector: 84941155
Description: 4-Way F Mini 50 Series(GN)

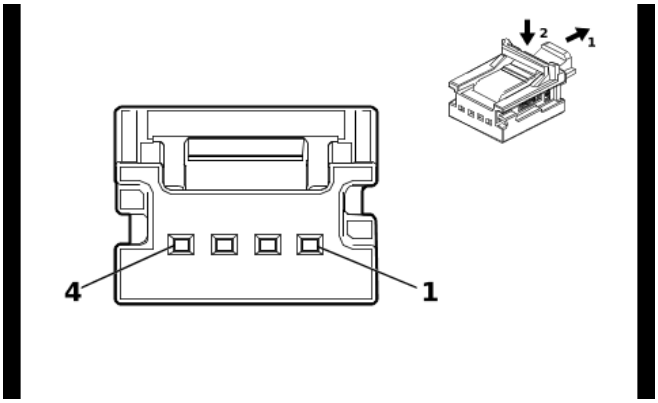
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K179 Automated Driving Mapping Module X2 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BN	7208	Ethernet Bus 3 [-]	I	—
3	0.35	BN / WH	7209	Ethernet Bus 3 [+]	I	—
4	—	—	—	Not Occupied	—	—

K179 Automated Driving Mapping Module X3 (UKL)



5493602

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35249191
Service Connector: 84941156
Description: 4-Way F Mini 50 Series(GY)

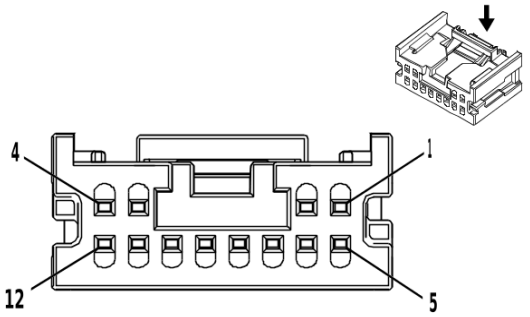
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K179 Automated Driving Mapping Module X3 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BU	7224	Ethernet Bus 11 [-]	I	—
3	0.35	GN	7225	Ethernet Bus 11 [+]	I	—
4	—	—	—	Not Occupied	—	—

K180 Driver Monitoring System Module X1 (UKL)



3824362

Connector Part Information

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

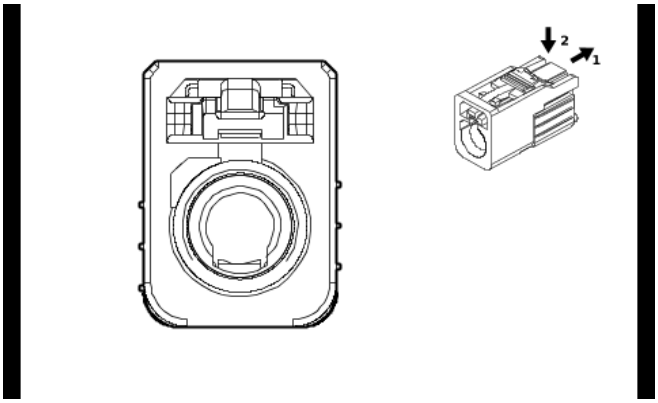
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19333221	EL-35616-58 (BK)	J-38125-215A

K180 Driver Monitoring System Module X1 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	4040	Battery Positive Voltage	I	—
2	0.35	BK / WH	1851	Signal Ground	I	—
3	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BU / BN	7744	Driver Illumination Lamp Ground	I	—
8	0.35	YE / BU	2245	Driver Illumination Lamp 2 Control	I	—
9	0.35	WH / VT	2246	Driver Illumination Lamp 1 Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
12	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—

K180 Driver Monitoring System Module X2 (UKL)



5519144

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33340313
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(GN)

Terminal Part Information

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

K180 Driver Monitoring System Module X2 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

K180S Driver Monitoring System Module - Steering Wheel X1 (UKL)

—

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: Not Available
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
I	Not required	No Tool Required	No Tool Required

K180S Driver Monitoring System Module - Steering Wheel X1 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / GY	5883	Steering Wheel Heating Switch Signal	I	—
2	—	BN / WH	5884	Steering Wheel Heating Switch LED Control	I	—
3	—	RD / BN	10040	Secondary Fused Battery Positive Voltage	I	—
4	—	BK	6050	Steering Wheel Ground	I	—
5	—	BK / WH	6051	Steering Wheel Ground	I	—
6	—	GN / BK	2858	Body Control Module LIN Bus 12	I	—

K180S Driver Monitoring System Module - Steering Wheel X2 (UKL)

—

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: Not Available
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
I	Not required	No Tool Required	No Tool Required

K180S Driver Monitoring System Module - Steering Wheel X2 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / YE	5888	Steering Wheel Heating High Control	I	—
2	—	GY / YE	5887	Steering Wheel Heating Low Control	I	—
3	—	VT / BU	5886	Steering Wheel Heating Temperature Sensor Signal	I	—
4	—	YE / RD	5885	Steering Wheel Heating Voltage Reference	I	—

K180S Driver Monitoring System Module - Steering Wheel X5 (UKL)

—

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: Not Available
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
I	Not required	No Tool Required	No Tool Required

K180S Driver Monitoring System Module - Steering Wheel X5 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / YE	7747	Steering Wheel Lightbar Green Control	I	—
2	—	GY / BU	7746	Steering Wheel Lightbar Red Control	I	—
3	—	BN / VT	7745	Steering Wheel Lightbar Control	I	—
4	—	BU / GN	7748	Steering Wheel Lightbar Blue Control	I	—

K180S Driver Monitoring System Module - Steering Wheel X6 (UKL)

—

Connector Part Information

Harness Type: Steering Wheel
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
I	Not required	No Tool Required	No Tool Required

K180S Driver Monitoring System Module - Steering Wheel X6 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / GN	5140	Battery Positive Voltage	I	—
2	—	BU	4627	Image Processing Module LIN Bus 1	I	—
3	—	BK / WH	6051	Steering Wheel Ground	I	—

K180S Driver Monitoring System Module - Steering Wheel X10 (UKL)

—

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

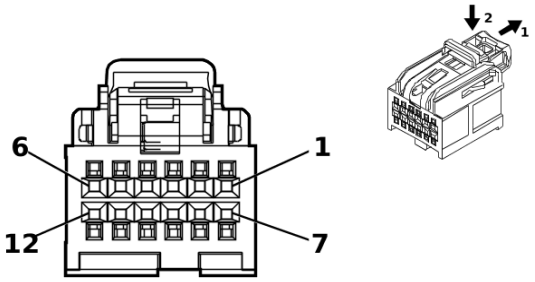
Terminal Part Information

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

K180S Driver Monitoring System Module - Steering Wheel X10 (UKL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU / RD	—	—	I	—
2	—	GN / OG	—	—	I	—

K182 Parking Assist Control Module X1



4975223

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series(BK)

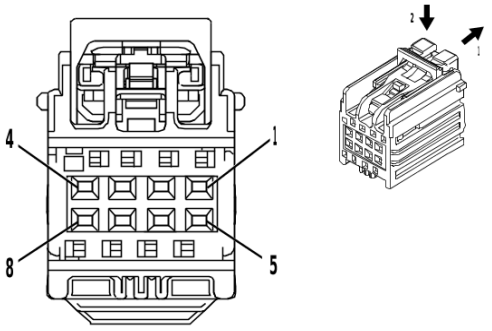
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (L-BU)	J-38125-215A

K182 Parking Assist Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	4740	Battery Positive Voltage	I	—
2	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
3	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
4	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	BK / WH	1351	Signal Ground	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
9	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
10	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
11 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X2



4280711

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33183559
Service Connector: 19355209
Description: 8-Way F Kaizen Series(GY)

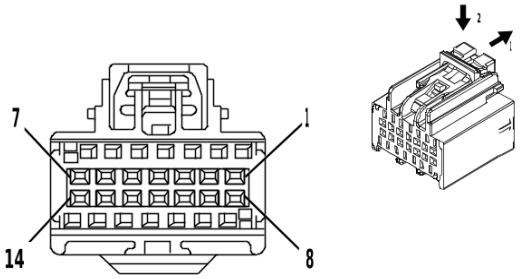
Terminal Part Information

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

K182 Parking Assist Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	3157	Right Rear Advanced Parking Assist Side Object Sensor Signal	I	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
4	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
5	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
6	0.5	YE / BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
7	0.5	GN	3156	Left Rear Advanced Parking Assist Side Object Sensor Signal	I	—
8	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

K182 Parking Assist Control Module X3



4547098

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35014564
Service Connector: 19354933
Description: 14-Way F 0.64 Kaizen Series(BU)

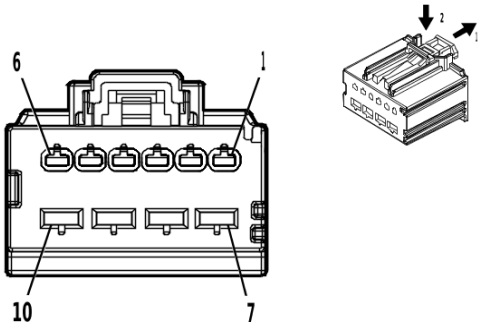
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19303553	J-35616-64B (L-BU)	J-38125-215A

K182 Parking Assist Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
2	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GY	3154	Left Front Advanced Parking Assist Side Object Sensor Signal	I	—
5	0.5	YE / GY	5216	Left Front Middle Parking Assist Sensor	I	—
6	0.5	WH / GY	5217	Right Front Outer Parking Assist Sensor	I	—
7	0.5	BN	6581	Front Parking Assist Display Control	I	—
8	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
9	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
10	—	—	—	Not Occupied	—	—
11	0.5	VT / WH	5215	Left Front Outer Parking Assist Sensor	I	—
12	0.5	VT / GY	5218	Right Front Middle Parking Assist Sensor	I	—
13	0.5	GN	3155	Right Front Advanced Parking Assist Side Object Sensor Signal	I	—
14	0.5	BK / BU	5214	Front Parking Assist Sensor Low Reference	I	—

K194 Rear Gate Module X1



5035058

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35152553
Service Connector: 13525907
Description: 10-Way F 1.5, 2.8 MX Series(BK)

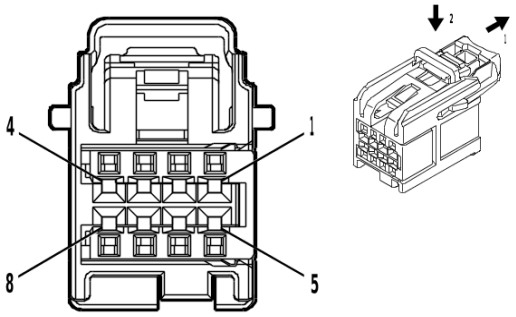
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85544080	J-35616-4A (PU)	J-38125-11A

K194 Rear Gate Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD / BN	3842	Battery Positive Voltage	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	2.5	BK	2050	Ground	I	—

K194 Rear Gate Module X2



4935776

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series(BK)

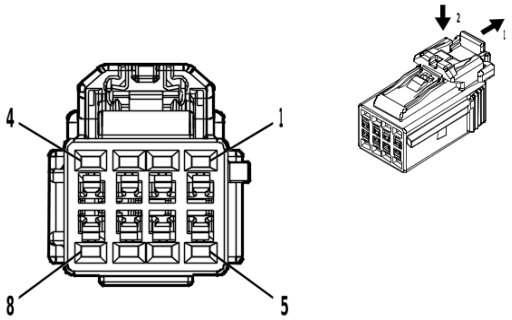
Terminal Part Information

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

K194 Rear Gate Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
3	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
4	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—
7	0.35	WH	4100	AUTOSAR CAN Bus [-] 4 Serial Data	I	—
8	0.35	BU / VT	4101	AUTOSAR CAN Bus [+] 4 Serial Data	I	—

K194 Rear Gate Module X3



5086387

Connector Part Information

Harness Type: Left Liftgate Actuator
OEM Connector: 13533339
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series(BK)

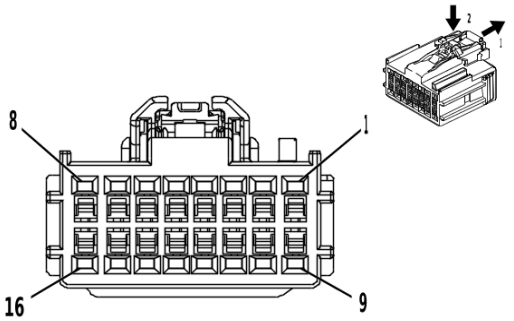
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

K194 Rear Gate Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	4689	Rear Closure Open/Close Motor Open Control	I	—
2	—	—	—	Not Occupied	—	—
3	—	GN / YE	4686	Rear Closure Position Sensor Signal 2	I	—
4	—	BN / RD	4683	Rear Closure Position Sensor Voltage Reference	I	—
5	—	RD / WH	4690	Rear Closure Open/Close Motor Close Control	I	—
6	—	YE	4687	Rear Closure Position Sensor Low Reference	I	—
7	—	RD	4685	Rear Closure Position Sensor Signal 1	I	—
8	—	—	—	Not Occupied	—	—

K194 Rear Gate Module X4



4115730

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35029309
Service Connector: 13533121
Description: 16-Way F 1.2 OCS Series(BK)

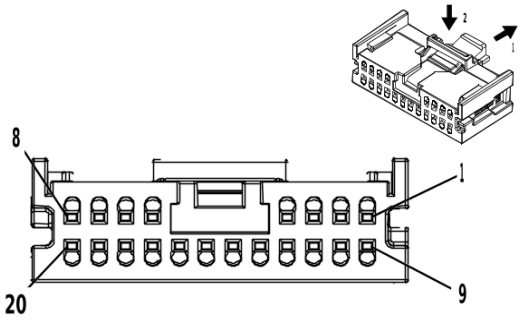
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19371240	J-35616-12 (BU)	J-38125-215A
II	84962854	J-35616-12 (BU)	J-38125-215A

K194 Rear Gate Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BN	4681	Rear Closure Cinch Latch Motor Cinch Control	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.35	GY / VT	4678	Rear Closure Latch Unlatch Status	II	—
5	—	—	—	Not Occupied	—	—
6	0.35	WH / GN	8084	Rear Closure Latch Neutral Status	II	—
7	—	—	—	Not Occupied	—	—
8	0.35	GY / WH	4658	Rear Closure Switch LED Control	II	—
9	1	BU / GY	4682	Rear Closure Cinch Latch Motor Release Control	I	—
10	0.35	BK / VT	4656	Rear Closure Object Sensor Low Reference	II	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	YE / BK	8085	Rear Closure Latch Primary Status	II	—
14	0.35	GY / GN	6190	Liftgate Window/Rear Compartment Lid, Exterior Unlatch Signal	II	—
15	—	—	—	Not Occupied	—	—
16	0.35	GN	4657	Rear Closure Switch Signal	II	—

K212 Gear Shift Control Module



4231339

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35340139
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F Mini 50 Series(BK)

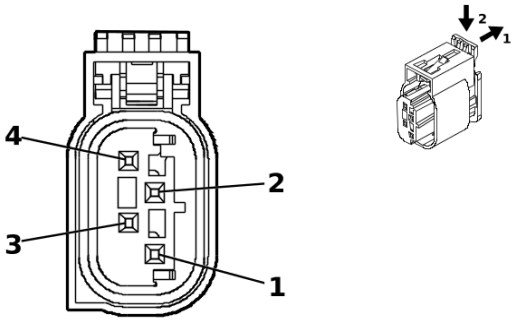
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

K212 Gear Shift Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
2	0.35	BU / BK	4977	AUTOSAR CAN Bus [+] 3 Serial Data	I	—
3	0.35	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
4	0.35	WH	4976	AUTOSAR CAN Bus [-] 3 Serial Data	I	—
5	0.35	YE	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
6	0.35	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
7	0.35	YE / BU	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
8	0.35	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
9	0.35	RD / GN	5140	Battery Positive Voltage	I	—
10 - 15	—	—	—	Not Occupied	—	—
16	0.35	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
17	0.35	VT / WH	639	Run/Crank Ignition 1 Voltage	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.35	BK	1250	Ground	I	—

K214 Trailer Tire Pressure Indicator Module



5215490

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13655424
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 MTS Series, Sealed(BK)

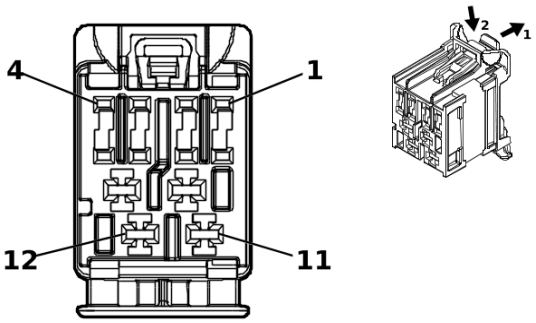
Terminal Part Information

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

K214 Trailer Tire Pressure Indicator Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / GY	4840	Battery Positive Voltage	I	—
2	0.5	BK	1450	Ground	I	—
3	0.5	GN / YE	2862	Body Control Module LIN Bus 16	I	—
4	—	—	—	Not Occupied	—	—

K219 Lighting Control Module X1



5203784

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33382115
Service Connector: 13509990
Description: 12-Way F 1.2, 2.8 stAK50h Series(L-PU)

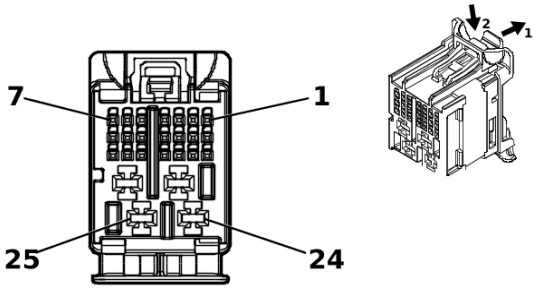
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84729890	J-35616-12 (BU)	J-38125-215A
II	87814662	J-35616-4A (PU)	J-38125-557

K219 Lighting Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	712	Left Headlamp Low Beam Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	YE / GN	4733	Exterior Door Handle Lamp Control	I	—
4	—	—	—	Not Occupied	—	—
5	0.5	BU / WH	1314	Left Front Turn Signal Lamp Control	I	—
6	0.5	GN / WH	24	Backup Lamp Control	I	—
7	0.5	WH / GN	5966	Approach Lamp Control	I	—
8	0.5	YE / GY	122	Rear Fog Lamp Control	I	—
9	1	RD / VT	7140	Battery Positive Voltage	II	—
10	0.5	BN / BU	6993	Left Rear Park Lamp Control	II	—
11	—	—	—	Not Occupied	—	—
12	0.5	WH / BU	10132	Headlamp Leveling CAN Bus Communication Enable	II	—

K219 Lighting Control Module X2



5203807

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392286
Service Connector: 13534966
Description: 25-Way F 0.5 MQS, 2.8 MCP Series(GY with GY Inner Connector)

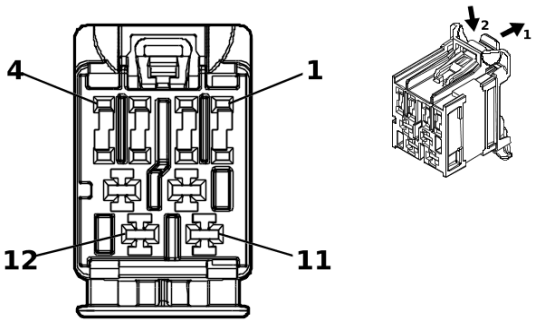
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	87814662	J-35616-4A (PU)	J-38125-557

K219 Lighting Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	6846	Rear License Plate Lamp Control	I	—
2	0.35	GN / WH	2270	Rear Window Washer Relay Control	I	—
3	0.35	BN / GY	2268	Windshield Washer Relay Control	I	—
4	0.35	BU / BN	38	Backup Lamp Relay Control	I	—
5 - 9	—	—	—	Not Occupied	—	—
10	0.35	BN / GN	196	Windshield Wiper Motor Park Switch Signal	I	—
11	0.35	VT / BK	6568	Front Turn Signal Lamp Feedback Signal	I	—
12	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	VT	185	Low Washer Fluid Indicator Control	I	—
15 - 18	—	—	—	Not Occupied	—	—
19	0.35	WH / BN	7055	Auxiliary Park Lamp Relay Control	I	—
20	0.35	WH / YE	7545	Right Front Turn Signal Lamp Feedback Signal	I	—
21	0.35	WH / VT	860	Windshield Wiper Switch High Signal	I	—
22	0.75	RD / GN	7740	Battery Positive Voltage	II	—
23	0.75	RD / BU	840	Battery Positive Voltage	II	—
24 - 25	—	—	—	Not Occupied	—	—

K219 Lighting Control Module X3



5203797

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33382116
Service Connector: 13509989
Description: 12-Way F 1.2, 2.8 stAK50h Series(GN)

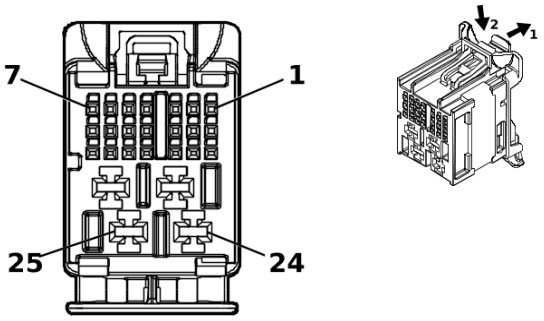
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84729890	J-35616-12 (BU)	J-38125-215A
II	87814662	J-35616-4A (PU)	J-38125-557

K219 Lighting Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / GY	704	Camera Washer Relay Control	I	—
2	0.35	VT / GN	10130	Auxiliary Center Stack Display Backlight Dimming Control	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	YE	312	Right Headlamp Low Beam Control	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	BU / VT	1335	Right Rear Turn Signal Lamp Control 2	I	—
7	0.5	GN / WH	1324	Backup Lamp Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.75	RD / BU	540	Battery Positive Voltage	II	—
10	0.75	RD / BN	1440	Battery Positive Voltage	II	—
11	0.5	YE / GN	2024	Animation Lighting Control	II	—
12	0.5	BN / GY	6995	Right Rear Park Lamp Control	II	—

K219 Lighting Control Module X4



5203416

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392283
Service Connector: 13534969
Description: 25-Way F 0.5 MQS, 2.8 MCP Series(PU with GY Inner Connector)

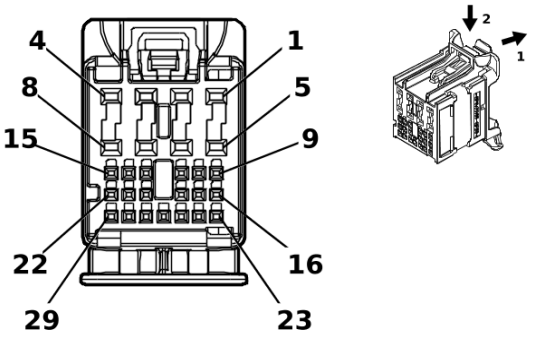
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	87814662	J-35616-4A (PU)	J-38125-557

K219 Lighting Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
4	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
5	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
6	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
7	0.35	WH / BU	6311	Cruise/ETC/TCC Brake Signal	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.35	WH	4978	AUTOSAR CAN Bus [-] 2 Serial Data	I	—
11	0.35	BU / YE	4979	AUTOSAR CAN Bus [+] 2 Serial Data	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.35	VT / BU	4001	Left Rear Door Lock Switch Lock Control	I	—
16	0.35	WH / YE	4002	Left Rear Door Lock Switch Unlock Control	I	—
17	0.35	GN / BN	4003	Right Rear Door Lock Switch Lock Control	I	—
18	0.35	BU / GY	4004	Right Rear Door Lock Switch Unlock Control	I	—
19	—	—	—	Not Occupied	—	—
20	0.35	BU / YE	2279	Liftgate Window Ajar Switch Signal	I	—
21	—	—	—	Not Occupied	—	—
22	0.75	RD / BN	1140	Battery Positive Voltage	II	—
23	1	BK / WH	1151	Signal Ground	II	—
24	1	RD / GN	1540	Battery Positive Voltage	II	—
25	1	BK / WH	1151	Signal Ground	II	—

K219 Lighting Control Module X5



5203373

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35392292
Service Connector: 13534975
Description: 29-Way F 0.5 NANO, 1.2 MCON, stAK50h Series(BU with GY Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370262	EL-35616-58 (BK)	EL-38125-58
II	84729890	J-35616-12 (BU)	J-38125-215A

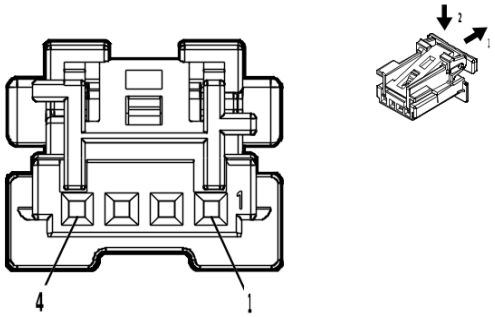
K219 Lighting Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BU	7538	Left Front DRL Control	II	—
2	0.5	BU / GN	1253	Right Front Park Lamp Control	II	—
3	0.5	GY / YE	7542	Left Rear Stop Lamp Control	II	—
4	0.5	WH / YE	7541	Right Rear Stop Lamp Control	II	—
5	0.5	BU / BN	7539	Right Front DRL Control	II	—
6	0.5	WH / YE	1254	Left Front Park Lamp Control	II	—
7	0.5	GN / VT	1315	Right Front Turn Signal Lamp Control	II	—
8	0.5	BU / WH	1334	Left Rear Turn Signal Lamp Control 2	II	—
9	0.35	GN / GY	2115	Right Turn Signal Lamp Control 2	I	—
10	0.35	WH / GY	2114	Left Turn Signal Lamp Control 2	I	—
11	0.35	GY	1715	Windshield Wiper Switch High Signal	I	—
13	0.35	GN / BN	319	Right Rear Trailer Stop/Turn Lamp Control	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.35	WH	311	Right Headlamp High Beam Control	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
20 - 22	—	—	—	Not Occupied	—	—
23	0.35	WH / VT	6567	Rear Turn Signal Lamp Feedback Signal	I	—
24	0.35	WH / BK	7544	Right Rear Turn Signal Lamp Feedback Signal	I	—
25	0.35	BN / YE	820	Center High Mounted Stop Lamp Supply Voltage	I	—
26 - 27	—	—	—	Not Occupied	—	—

K219 Lighting Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
28	0.35	WH	711	Left Headlamp High Beam Control	I	—
29	0.35	YE / BU	318	Left Rear Trailer Stop/Turn Lamp Control	I	—

M4 Air Inlet Valve Actuator



4997407

Connector Part Information

Harness Type: HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

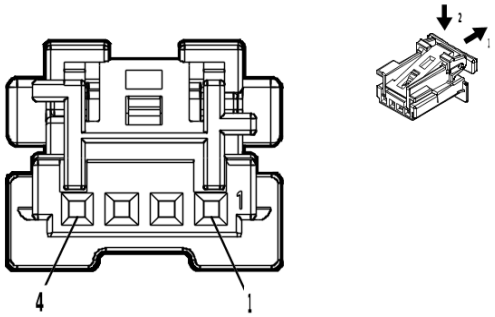
Terminal Part Information

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

M4 Air Inlet Valve Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BU / VT	2852	Body Control Module LIN Bus 6	I	—
3	—	BK	1050	Ground	I	—
4	—	WH / YE	4634	HVAC Remote Enable Signal	I	—

M6 Temperature Valve Actuator



4997407

Connector Part Information

Harness Type: HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

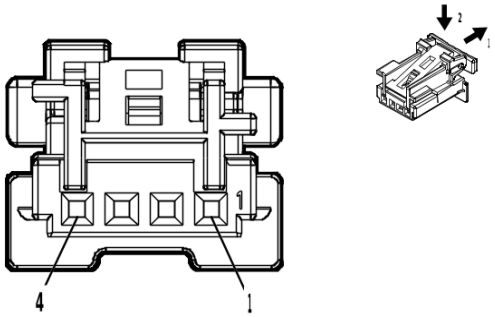
Terminal Part Information

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

M6 Temperature Valve Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BU / VT	2852	Body Control Module LIN Bus 6	I	—
3	—	BK	1050	Ground	I	—
4	—	WH / YE	4634	HVAC Remote Enable Signal	I	—

M6BP Rear Programmable Temperature Valve Actuator



4997407

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

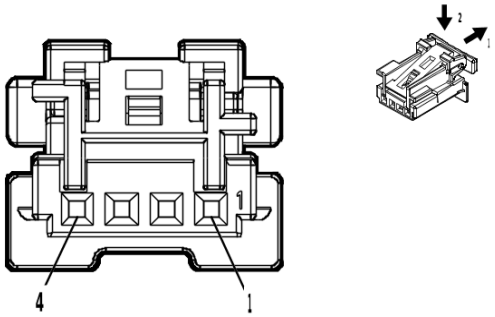
Terminal Part Information

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

M6BP Rear Programmable Temperature Valve Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	1450	Ground	I	—
2	—	GN / WH	2853	Body Control Module LIN Bus 7	I	—
3	—	—	—	Not Occupied	—	—
4	—	YE / WH	4635	HVAC Remote Enable 2 Signal	I	—

M6PR Programmable Temperature Valve Actuator - Right



4997407

Connector Part Information

Harness Type: HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

Terminal Part Information

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

M6PR Programmable Temperature Valve Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BU	2852	Body Control Module LIN Bus 6	I	—
3	—	—	—	Not Occupied	—	—
4	—	RD	4634	HVAC Remote Enable Signal	I	—

M8B Blower Motor - Rear

—

Connector Part Information

Harness Type: Rear Blower Motor
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

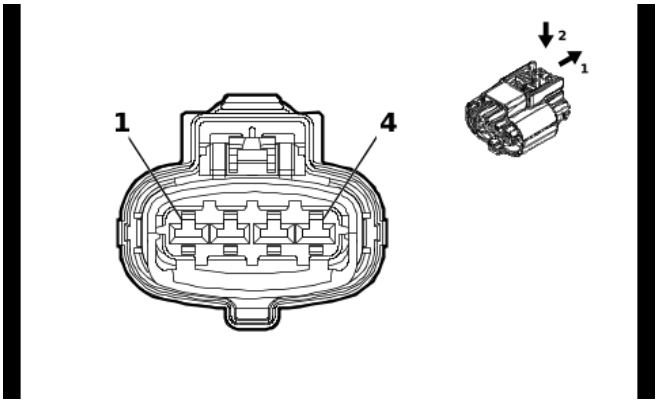
Terminal Part Information

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

M8B Blower Motor - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU	5988	Rear Blower Motor Low Reference	I	—
2	—	BK	101	Blower Motor Control 2	I	—

M10 Charge Air Cooler Coolant Pump (LM2)



5869064

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133588
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed(BK)

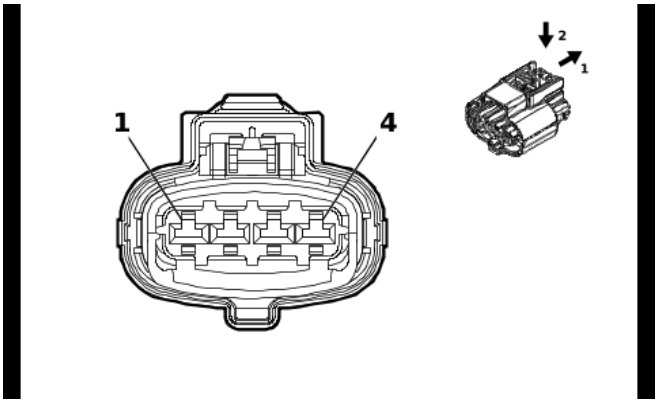
Terminal Part Information

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

M10 Charge Air Cooler Coolant Pump (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	BK	6550	Ground	I	—

M10 Charge Air Cooler Coolant Pump (LT4)



5869064

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133588
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed(BK)

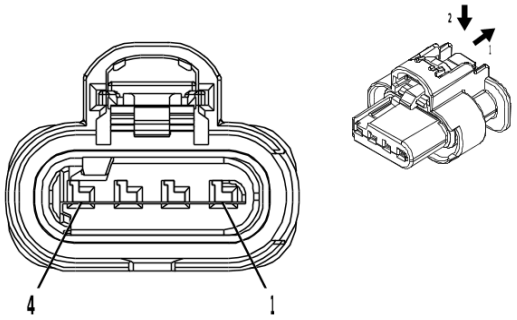
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M10 Charge Air Cooler Coolant Pump (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	BK	6550	Ground	I	—

M26 Front Drive Axle Actuator (NP0/NQH)



4210809

Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness
OEM Connector: 33390897
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed(BK)

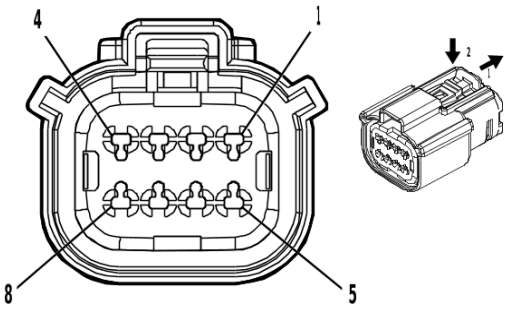
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M26 Front Drive Axle Actuator (NP0/NQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	8016	Secondary Axle Motor Control	I	—
2	0.5	GY / BK	1570	Front Axle Actuator Control	I	—
3	0.5	YE / WH	1695	4WD Locked Range Indicator Control	I	—
4	0.5	BK	450	Ground	I	—

M31L Liftgate Power Assist Actuator - Left



4846407

Connector Part Information

Harness Type: Left Liftgate Power Assist Actuator
OEM Connector: 13520074
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.5 MX Series, Sealed(BK)

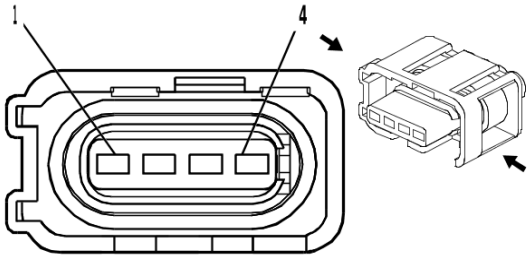
Terminal Part Information

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

M31L Liftgate Power Assist Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	4689	Rear Closure Open/Close Motor Open Control	I	—
2	—	—	—	Not Occupied	—	—
3	—	GN / YE	4686	Rear Closure Position Sensor Signal 2	I	—
4	—	BN / RD	4683	Rear Closure Position Sensor Voltage Reference	I	—
5	—	RD / WH	4690	Rear Closure Open/Close Motor Close Control	I	—
6	—	YE	4687	Rear Closure Position Sensor Low Reference	I	—
7	—	RD	4685	Rear Closure Position Sensor Signal 1	I	—
8	—	—	—	Not Occupied	—	—

M33 Liftgate Window Latch



1711027

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 15489983
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Micro-Pack Timer III Series, Sealed(NA)

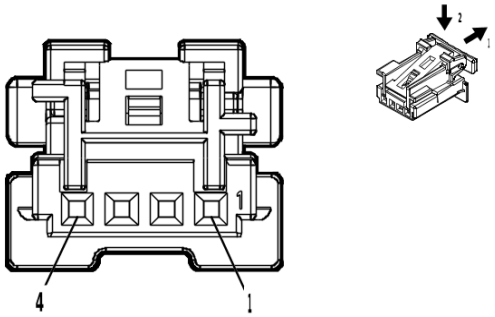
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M33 Liftgate Window Latch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / GN	4089	Rear Closure Motor Control	I	—
2	0.35	BK	2050	Ground	I	—
3	0.35	BU / YE	2279	Liftgate Window Ajar Switch Signal	I	—
4	0.35	BK	2050	Ground	I	—

M37 Mode Valve Actuator



4997407

Connector Part Information

Harness Type: HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

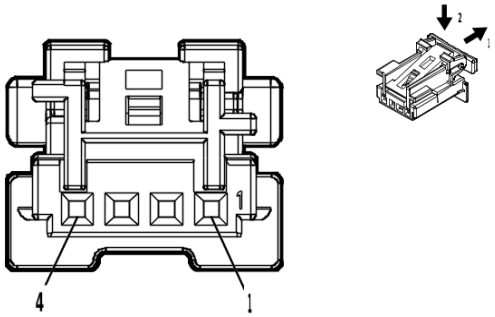
Terminal Part Information

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

M37 Mode Valve Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	1050	Ground	I	—
2	—	BU / VT	2852	Body Control Module LIN Bus 6	I	—
3	—	—	—	Not Occupied	—	—
4	—	WH / YE	4634	HVAC Remote Enable Signal	I	—

M37BP Rear Programmable Mode Valve Actuator



4997407

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 13511018
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

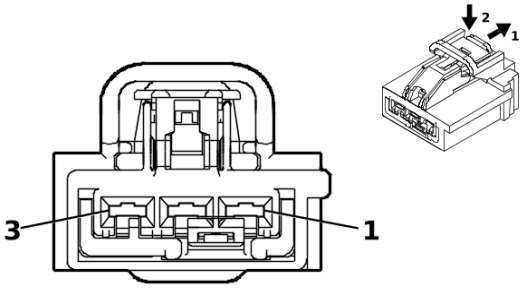
Terminal Part Information

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

M37BP Rear Programmable Mode Valve Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	1450	Ground	I	—
2	—	GN / WH	2853	Body Control Module LIN Bus 7	I	—
3	—	BK / WH	1450	Ground	I	—
4	—	GN / WH	4635	HVAC Remote Enable 2 Signal	I	—

M45 Rear Window Wiper Motor



5215435

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 35340169
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 YESC Series(GY)

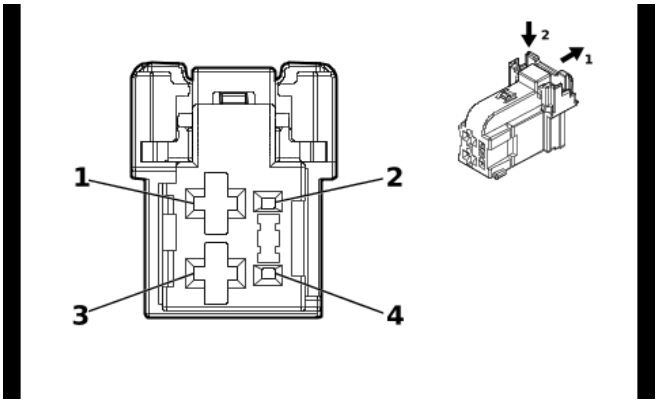
Terminal Part Information

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

M45 Rear Window Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2050	Ground	I	—
2	0.35	GN / BU	2856	Body Control Module LIN Bus 10	I	—
3	0.75	RD / YE	3040	Battery Positive Voltage	I	—

M50D Front Seat Tilt Adjuster Actuator - Driver



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

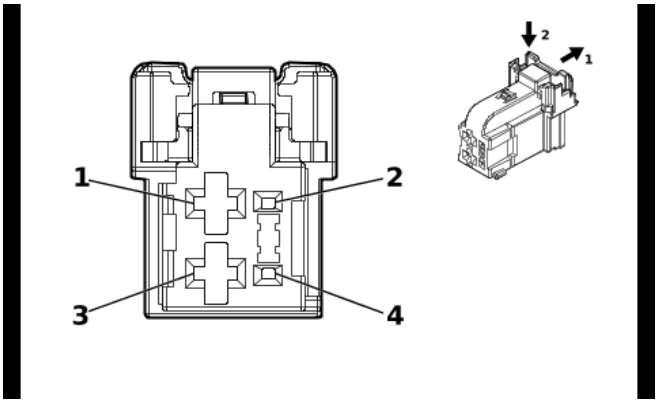
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M50D Front Seat Tilt Adjuster Actuator - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / VT	287	Driver Seat Front Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / BN	286	Driver Seat Front Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M50P Front Seat Tilt Adjuster Actuator - Passenger



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

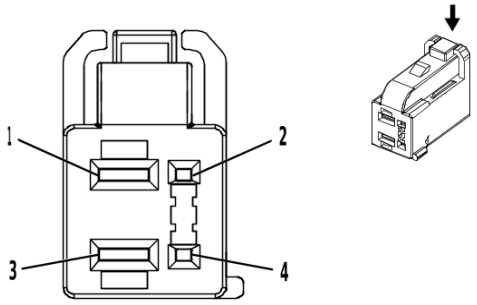
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M50P Front Seat Tilt Adjuster Actuator - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / VT	297	Passenger Seat Front Vertical Motor Up Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / BU	298	Passenger Seat Front Vertical Motor Down Control	I	—
4	—	—	—	Not Occupied	—	—

M51D Front Seat Adjuster Actuator - Driver



3683652

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13583828
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

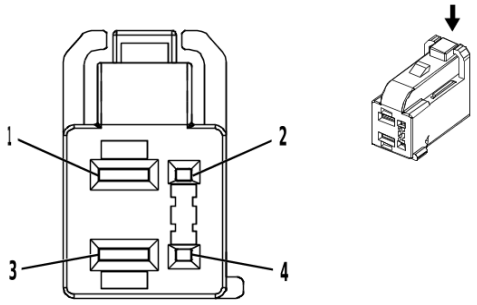
Terminal Part Information

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

M51D Front Seat Adjuster Actuator - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE / BU	285	Driver Seat Horizontal Motor Forward Control	I	—
4	—	—	—	Not Occupied	—	—

M51P Front Seat Adjuster Actuator - Passenger



3683652

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13583828
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

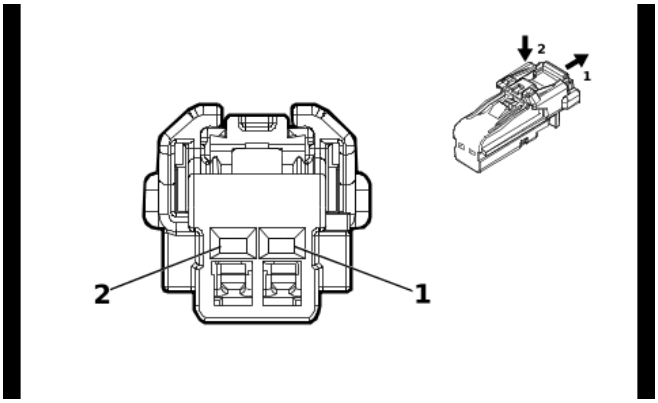
Terminal Part Information

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

M51P Front Seat Adjuster Actuator - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE / BU	290	Passenger Seat Horizontal Motor Rearward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	YE / WH	296	Passenger Seat Horizontal Motor Forward Control	I	—
4	—	—	—	Not Occupied	—	—

M53D Front Seat Back Lumbar Motor - Driver



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

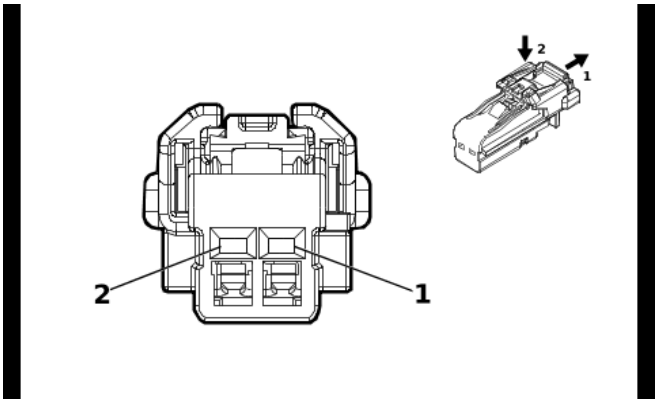
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M53D Front Seat Back Lumbar Motor - Driver

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

M53P Front Seat Back Lumbar Motor - Passenger



4115691

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

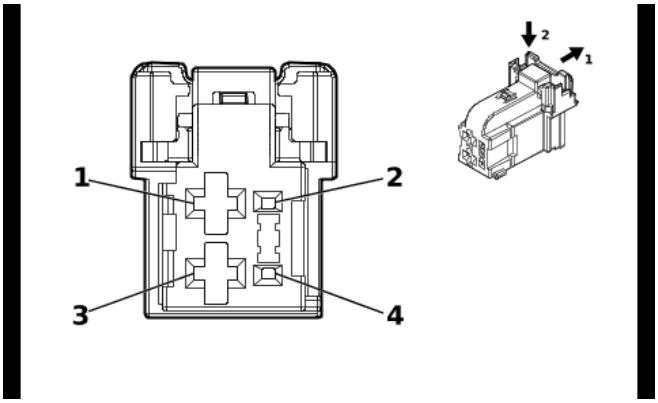
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M53P Front Seat Back Lumbar Motor - Passenger

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

M55D Front Seat Vertical Adjuster Actuator - Driver



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

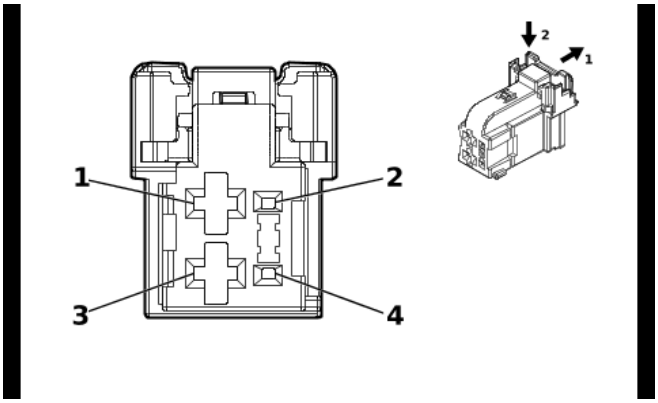
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M55D Front Seat Vertical Adjuster Actuator - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / BU	283	Driver Seat Rear Vertical Motor Down Control	I	A45/ AUN
2	—	—	—	Not Occupied	—	—
3	1.5	YE	282	Driver Seat Rear Vertical Motor Up Control	I	A45/ AUN
4	—	—	—	Not Occupied	—	—

M55P Front Seat Vertical Adjuster Actuator - Passenger



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

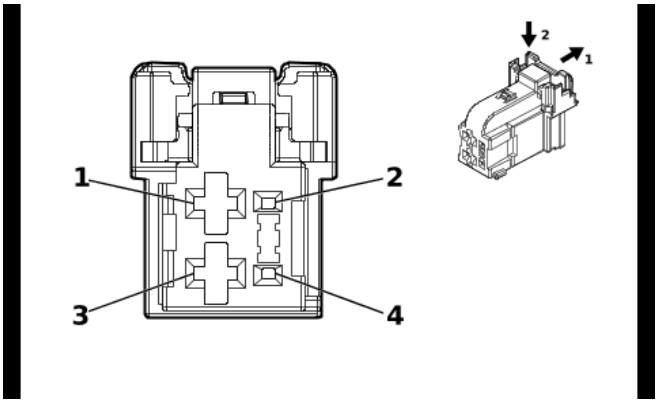
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M55P Front Seat Vertical Adjuster Actuator - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / WH	289	Passenger Seat Rear Vertical Motor Down Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	GN / WH	288	Passenger Seat Rear Vertical Motor Up Control	I	—
4	—	—	—	Not Occupied	—	—

M56D Front Seat Recliner Actuator - Driver



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

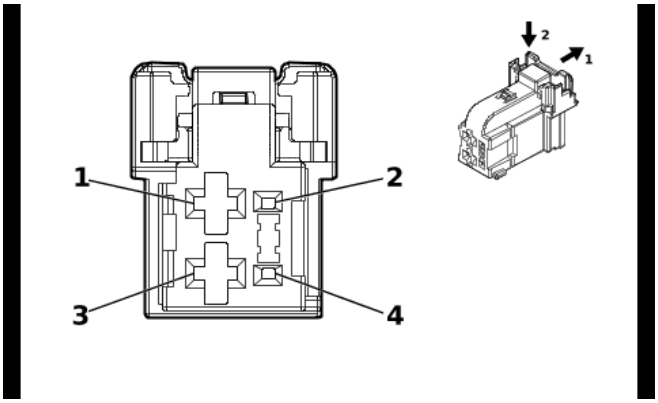
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M56D Front Seat Recliner Actuator - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / YE	276	Driver Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU / YE	277	Driver Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M56P Front Seat Recliner Actuator - Passenger



5410027

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

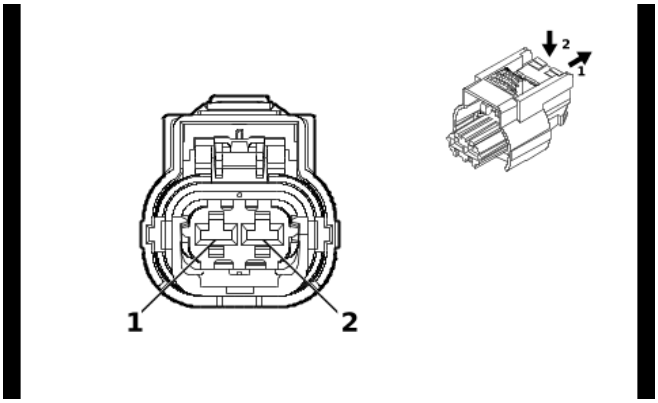
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M56P Front Seat Recliner Actuator - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN	76	Passenger Seat Recline Motor Forward Control	I	—
2	—	—	—	Not Occupied	—	—
3	1.5	BU / BN	77	Passenger Seat Recline Motor Rearward Control	I	—
4	—	—	—	Not Occupied	—	—

M64 Starter X1 (L87)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

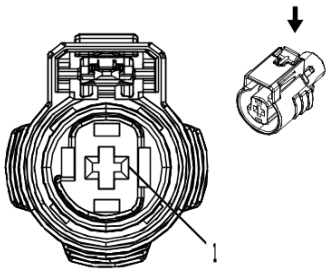
Terminal Part Information

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

M64 Starter X1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—
2	2.5	YE / GN	4358	Starter Pinion Solenoid Voltage	I	—

M64 Starter X1 (LM2/LT4)



2717134

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15526411
Service Connector: 19300471
Description: 1-Way F 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M64 Starter X1 (LM2/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M64 Starter X2

—

Connector Part Information

Harness Type: Starter Motor
OEM Connector: 84734248
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

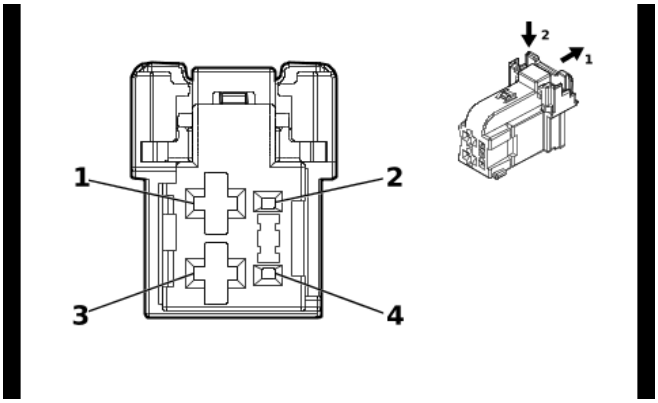
Terminal Part Information

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

M64 Starter X2

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

M65 Steering Column Telescope Actuator



5410027

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

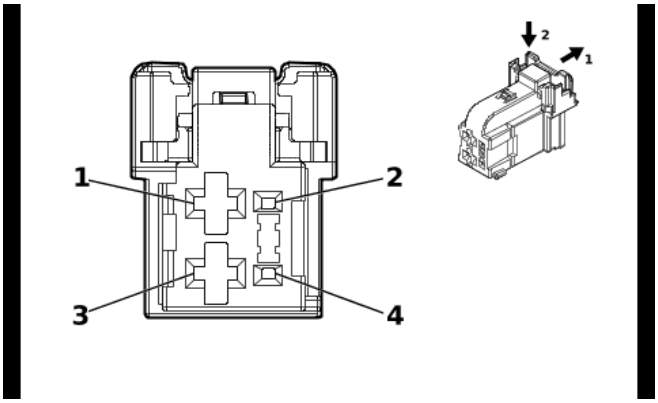
Terminal Part Information

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

M65 Steering Column Telescope Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2098	Steering Column Telescope Motor Forward Control	I	—
2	0.5	RD	2110	Steering Column Telescope Motor Rearward Control	I	—
3	0.5	YE	2153	Steering Column Telescope Motor Signal	I	—
4	0.5	WH	2152	Steering Column Telescope Motor Low Reference	I	—

M68 Steering Column Tilt Wheel Actuator



5410027

Connector Part Information

Harness Type: Steering Column
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

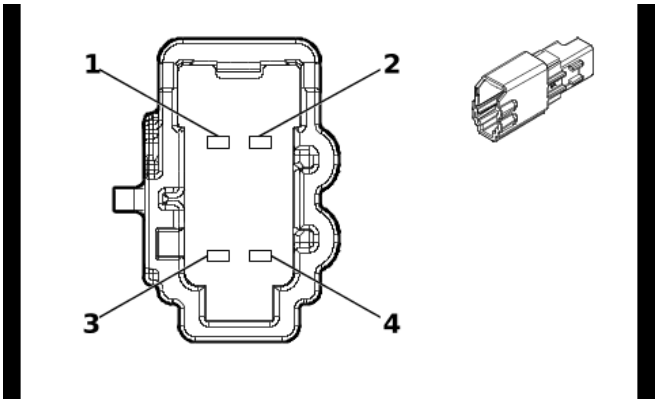
Terminal Part Information

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

M68 Steering Column Tilt Wheel Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	2111	Steering Column Tilt Motor Up Control	I	—
2	0.5	GY	2112	Steering Column Tilt Motor Down Control	I	—
3	0.5	YE	2154	Steering Column Tilt Motor Signal	I	—
4	0.5	BU	2157	Steering Column Tilt Motor Low Reference	I	—

M73A Front Seat Back Ventilation Blower - Driver (KQV)



5423974

Connector Part Information

Harness Type: Driver Seat Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

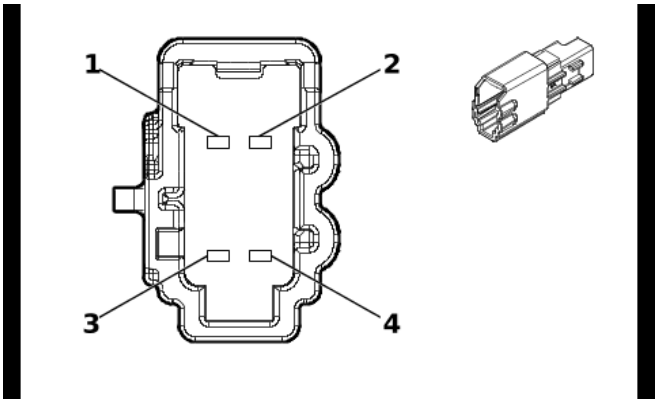
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

M73A Front Seat Back Ventilation Blower - Driver (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
2	—	GN / VT	5906	Driver Seat Blower Motor Control 1	I	—
3	—	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73B Front Seat Back Ventilation Blower - Passenger (KQV)



5423974

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

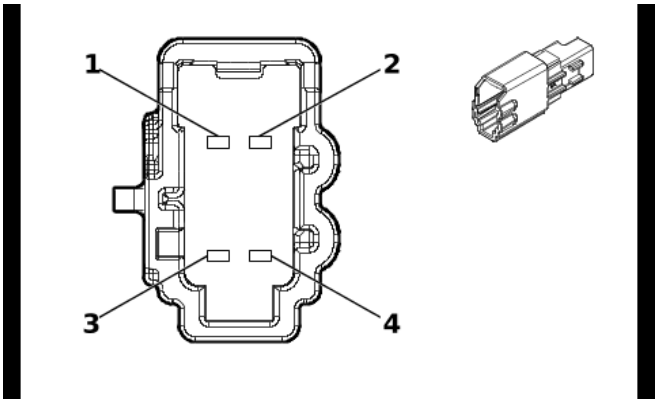
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

M73B Front Seat Back Ventilation Blower - Passenger (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
2	0.5	VT / WH	5908	Passenger Seat Blower Motor Control 1	I	—
3	0.5	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73D Front Seat Cushion Ventilation Blower - Driver



5423974

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

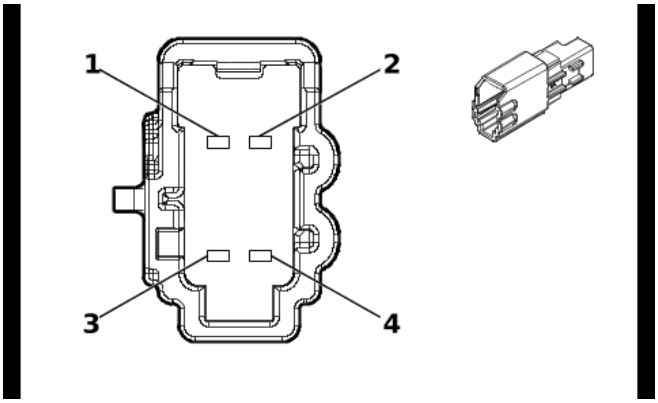
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

M73D Front Seat Cushion Ventilation Blower - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
2	0.5	GN / VT	5906	Driver Seat Blower Motor Control 1	I	—
3	0.5	BK	1150	Ground	I	—
4	—	—	—	Not Occupied	—	—

M73P Front Seat Cushion Ventilation Blower - Passenger (KQV)



5423974

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 6098-9049
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 MCON Series(GY)

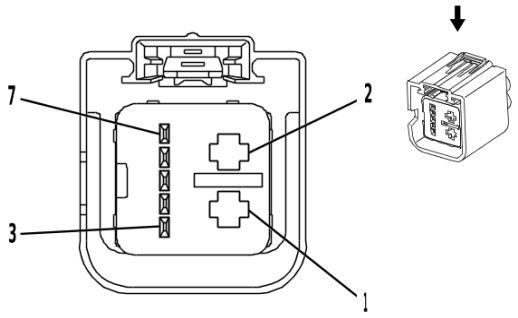
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

M73P Front Seat Cushion Ventilation Blower - Passenger (KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
2	0.5	VT / WH	5908	Passenger Seat Blower Motor Control 1	I	—
3	0.5	BK	1250	Ground	I	—
4	—	—	—	Not Occupied	—	—

M74D Front Side Door Window Regulator Motor - Driver



2282932

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

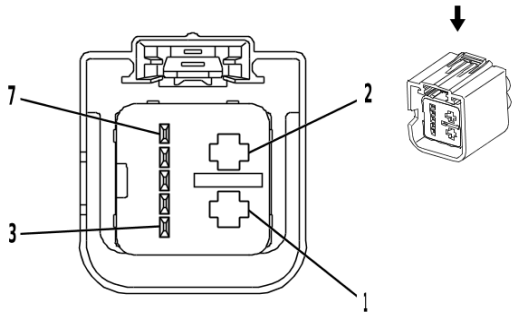
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M74D Front Side Door Window Regulator Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	I	—
2	2.5	RD / GY	3540	Battery Positive Voltage	I	—
3	0.35	GY / GN	2763	Window Switch Left Front Up Signal	II	—
4	0.35	GN / YE	6134	Body Control Module LIN Bus 3	II	—
5	0.35	GN	2766	Power Window Switch Left Front Express Signal	II	—
6	0.35	GY	745	Left Front Door Ajar Switch Signal	II	—
7	0.35	WH / BN	2764	Window Switch Left Front Down Signal	II	—

M74LR Rear Side Door Window Regulator Motor - Left



2282932

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

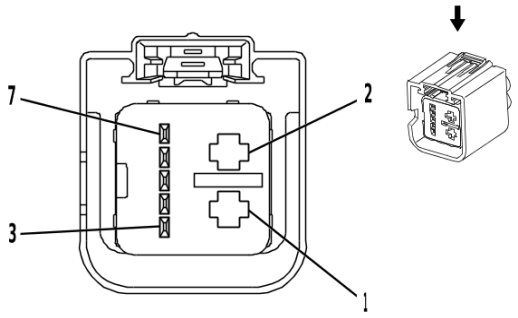
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M74LR Rear Side Door Window Regulator Motor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	I	—
2	2.5	RD / GY	3540	Battery Positive Voltage	I	—
3	0.35	GN / GY	1185	Window Switch Left Rear Up Signal	II	—
4	0.35	GN / GY	6135	Body Control Module LIN Bus 4	II	—
5	0.35	GY / GN	5048	Window Switch Left Rear Express Signal	II	—
6	0.35	GY	747	Left Rear Door Ajar Switch Signal	II	—
7	0.35	BN / BU	1187	Window Switch Left Rear Down Signal	II	—

M74P Front Side Door Window Regulator Motor - Passenger



2282932

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

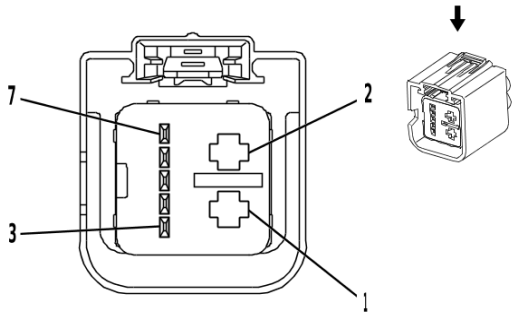
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M74P Front Side Door Window Regulator Motor - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1250	Ground	I	—
2	2.5	RD / BN	4240	Battery Positive Voltage	I	—
3	0.35	GN	1184	Window Switch Right Front Up Signal	II	—
4	0.35	GN / YE	6134	Body Control Module LIN Bus 3	II	—
5	0.35	VT / GY	2765	Window Switch Right Front Express Signal	II	—
6	0.35	GY	746	Right Front Door Ajar Switch Signal	II	—
7	0.35	BN	5295	Window Switch Right Front Down Signal	II	—

M74RR Rear Side Door Window Regulator Motor - Right



2282932

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed(GY)

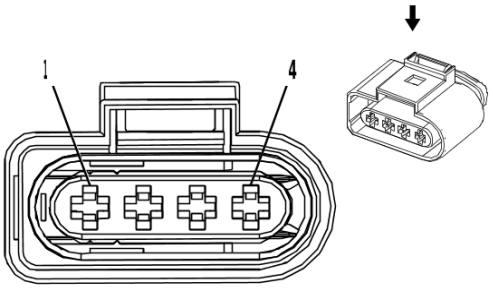
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M74RR Rear Side Door Window Regulator Motor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1250	Ground	I	—
2	2.5	RD / BN	4240	Battery Positive Voltage	I	—
3	0.35	GN / GY	1186	Window Switch Right Rear Up Signal	II	—
4	0.35	GN / GY	6135	Body Control Module LIN Bus 4	II	—
5	0.35	WH / GN	5049	Window Switch Right Rear Express Signal	II	—
6	0.35	GY	748	Right Rear Door Ajar Switch Signal	II	—
7	0.35	BN / BU	1188	Window Switch Right Rear Down Signal	II	—

M75 Windshield Wiper Motor



2474722

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13941663
Service Connector: 85596545
Description: 4-Way F Junior Power Timer Series, Sealed(BK)

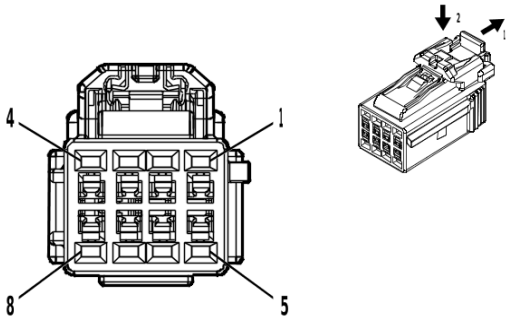
Terminal Part Information

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

M75 Windshield Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	WH	92	Windshield Wiper Motor High Speed Control	I	—
2	2	YE / BN	95	Windshield Wiper Motor Low Speed Control	I	—
3	0.5	BN / GN	196	Windshield Wiper Motor Park Switch Signal	I	—
4	2	BK	150	Ground	I	—

M81 Sunroof Sunshade Motor (C3U)



5086387

Connector Part Information

Harness Type: Sunroof Sunshade
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
I	Not required	No Tool Required	No Tool Required

M81 Sunroof Sunshade Motor (C3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	BU / BN	3781	Front Sunroof Sunshade Motor Open Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	—	GN / VT	3782	Front Sunshade Motor Close Control	I	—
7 - 8	—	—	—	Not Occupied	—	—

M96 Active Grille Air Shutter Actuator (VTI/WMI)

—

Connector Part Information

Harness Type: Active Grille Air Shutter
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
I	Not required	No Tool Required	No Tool Required

M96 Active Grille Air Shutter Actuator (VTI/WMI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / BU	5705	Powertrain Main Relay Control	I	—
2	—	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	—	BK	6550	Ground	I	—

M96B Active Grille Air Shutter Actuator 2 (VTI)

—

Connector Part Information

Harness Type: Active Grille Air Shutter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

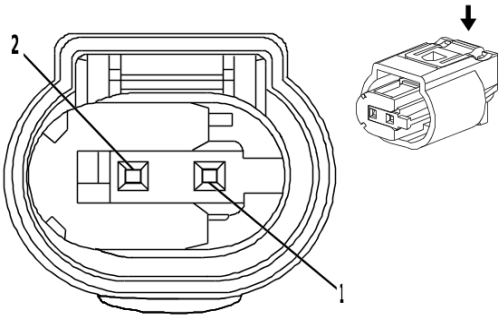
Terminal Part Information

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

M96B Active Grille Air Shutter Actuator 2 (VTI)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / BU	5705	Powertrain Main Relay Control	I	—
2	—	GN / VT	4621	Engine Control Module LIN Bus 1	I	—
3	—	BK	6550	Ground	I	—

M97 Fuel Tank Filler Door Lock Actuator



1869767

Connector Part Information

Harness Type: Fuel Tank Filler Door Lock Release Wiring Harness
OEM Connector: 13623700
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Micro-Quadlock Series, Sealed(BK)

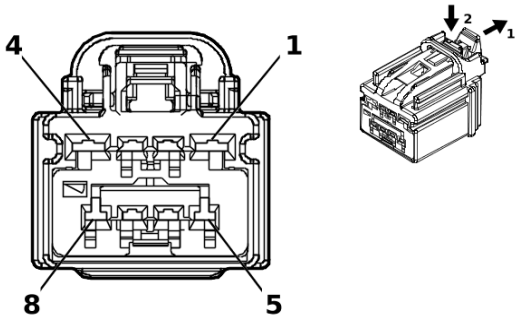
Terminal Part Information

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

M97 Fuel Tank Filler Door Lock Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / BK	2690	Fuel Door Actuator Unlock Control	I	—
2	0.5	VT / GY	2683	Unlatch Actuators Unlatch Low Reference 1	I	—

M101L Front Seat Belt Retractor Motor - Left



5202274

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35155249
Service Connector: 84766434
Description: 8-Way F 1.5, 2.8 YESC Series(GY)

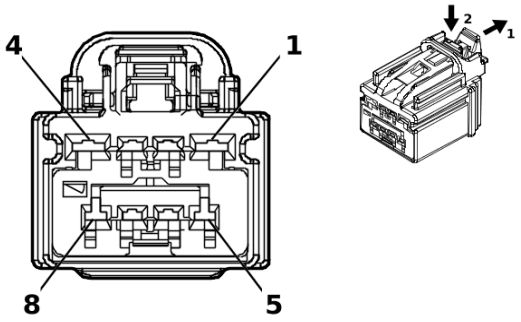
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

M101L Front Seat Belt Retractor Motor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1150	Ground	II	—
2 - 3	—	—	—	Not Occupied	—	—
4	2.5	RD / WH	4042	Battery Positive Voltage	II	—
5	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—

M101R Front Seat Belt Retractor Motor - Right



5202274

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35155249
Service Connector: 84766434
Description: 8-Way F 1.5, 2.8 YESC Series(GY)

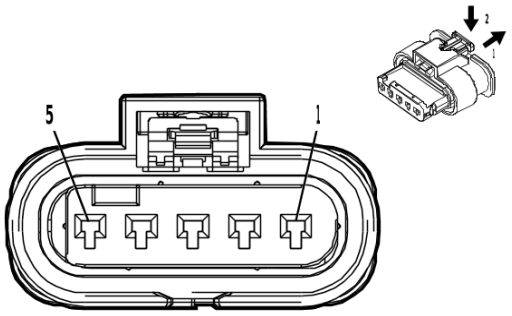
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

M101R Front Seat Belt Retractor Motor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	1250	Ground	II	—
2 - 3	—	—	—	Not Occupied	—	—
4	2.5	RD / GY	1042	Battery Positive Voltage	II	—
5	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
6	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
7	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
8	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—

M103 Turbocharger Vane Position Actuator



3338689

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed(BK)

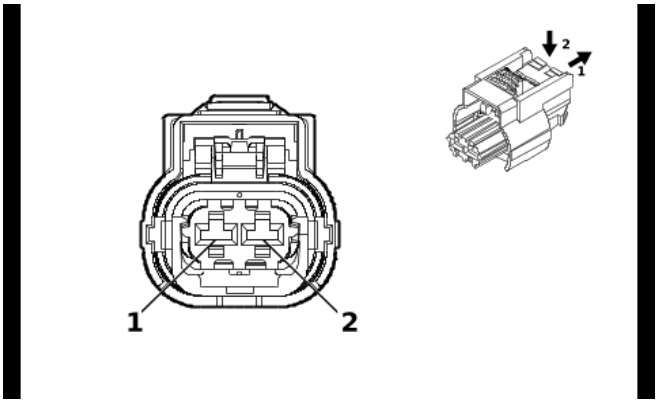
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M103 Turbocharger Vane Position Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / BN	1313	Variable Geometry Turbocharger Position Sensor Motor Open Control	I	—
2	0.5	VT / YE	5947	Turbocharger Vane Position Sensor Signal	I	—
3	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
4	0.5	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 Parking Brake Actuator - Left



4992524

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 13532979
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

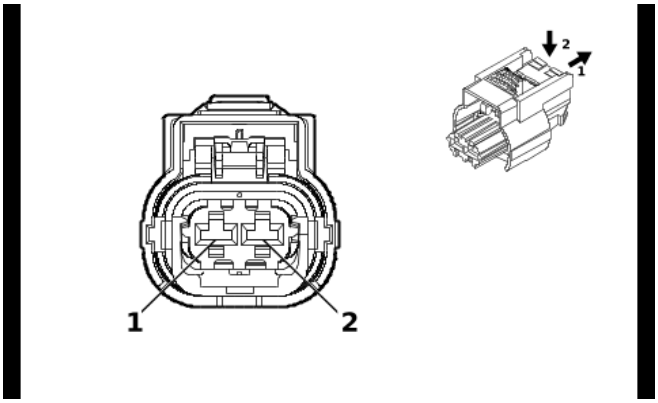
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M104L Parking Brake Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH	2001	Left Park Brake Motor Apply Control	I	
2	2.5	GY / BK	4369	Left Park Brake Motor Low Reference	I	—

M104R Parking Brake Actuator - Right



4992524

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 13532979
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

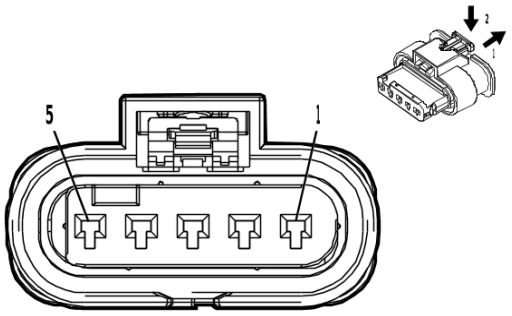
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

M104R Parking Brake Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN / VT	1988	Right Park Brake Motor Apply Control	I	—
2	2.5	GY	4368	Right Park Brake Motor Low Reference	I	—

M106S Exhaust Control Valve Actuator - Sound Quality



3338689

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed(BK)

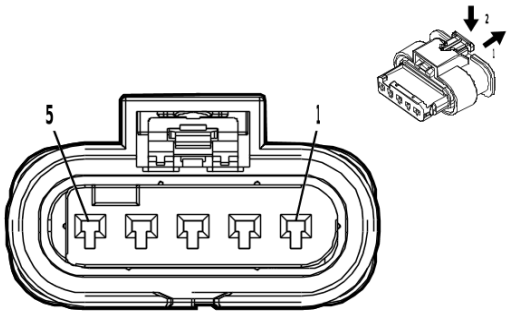
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M106S Exhaust Control Valve Actuator - Sound Quality

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2050	Ground	I	—
2	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	I	—
3	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
4	0.5	BU / WH	4306	Exhaust Flow Control Valve 1 - Cylinder Deactivation Feedback Signal	I	—
5	—	—	—	Not Occupied	—	—

M106SB Exhaust Control Valve 2 Actuator - Sound Quality



3338689

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed(BK)

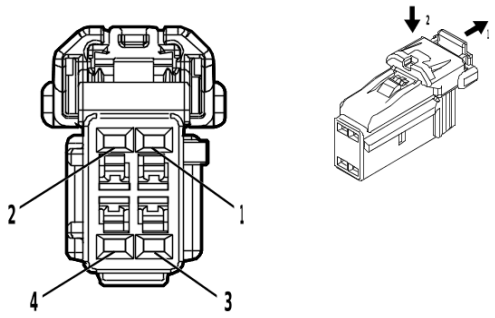
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M106SB Exhaust Control Valve 2 Actuator - Sound Quality

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2050	Ground	I	—
2	0.5	BN / GN	4305	Exhaust Flow Control Valve 1	I	—
3	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
4	0.5	VT / YE	4317	Exhaust Flow Control Valve 2 - Cylinder Deactivation Feedback Signal	I	—
5	—	—	—	Not Occupied	—	—

M107LR Folding Rear Seat Back Actuator - Left (ATN/ATT)



4872683

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-8435
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

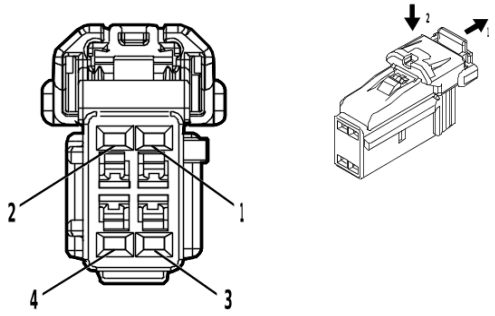
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M107LR Folding Rear Seat Back Actuator - Left (ATN/ATT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / GY	6240	Battery Positive Voltage	I	—
2	0.75	BK	1150	Ground	I	—
3	0.5	GN	6808	Left Rear Folding Seat Motor Control	I	—
4	—	—	—	Not Occupied	—	—

M107RR Folding Rear Seat Back Actuator - Right (ATN/ATT)



4872683

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 6098-8435
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(BK)

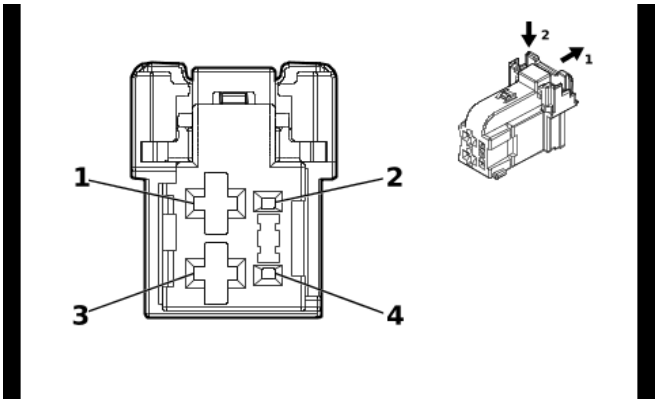
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M107RR Folding Rear Seat Back Actuator - Right (ATN/ATT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / GY	6240	Battery Positive Voltage	I	—
2	0.75	BK	1450	Ground	I	—
3	0.75	BN / WH	6809	Right Rear Folding Seat Motor Control	I	—
4	—	—	—	Not Occupied	—	—

M108LR 3rd Row Seat Back Pivot Actuator Motor - Left



5410027

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

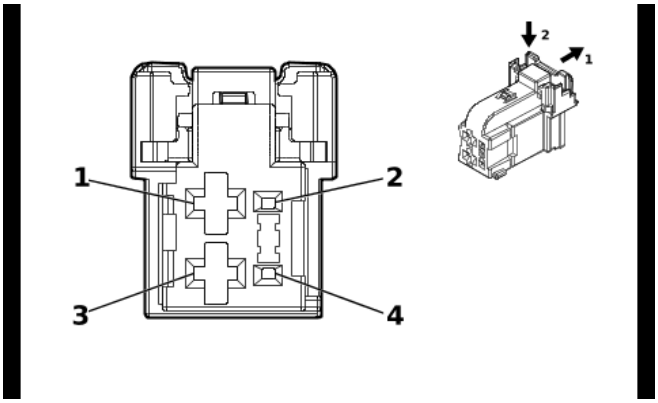
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M108LR 3rd Row Seat Back Pivot Actuator Motor - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN	4222	3rd Row Left Seat Recline Motor Rearward Control	I	—
2	0.5	YE / BN	4214	3rd Row Left Seat Recline Position Sensor Signal	II	—
3	1.5	VT / BK	4221	3rd Row Left Seat Recline Motor Forward Control	I	—
4	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	II	—

M108RR 3rd Row Seat Back Pivot Actuator Motor - Right



5410027

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 2316171-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series(BK)

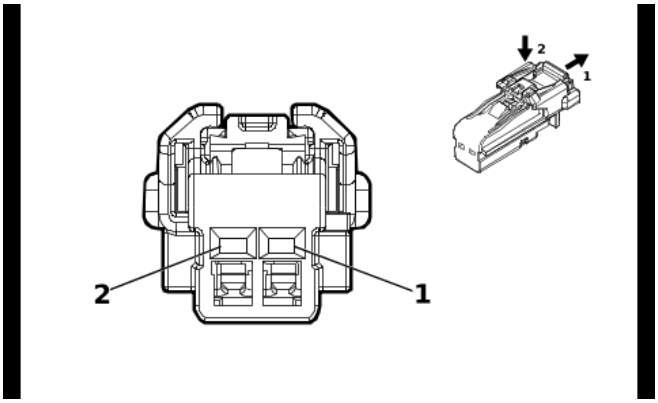
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M108RR 3rd Row Seat Back Pivot Actuator Motor - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY / OG	4218	3rd Row Right Seat Recline Rearward Control	I	—
2	0.5	WH / VT	4213	3rd Row Right Seat Recline Position Sensor Signal	II	—
3	1.5	BU	4217	3rd Row Right Seat Recline Motor Forward Control	I	—
4	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	II	—

M109LR Folding 3rd Row Seat Back Actuator - Left



4115691

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

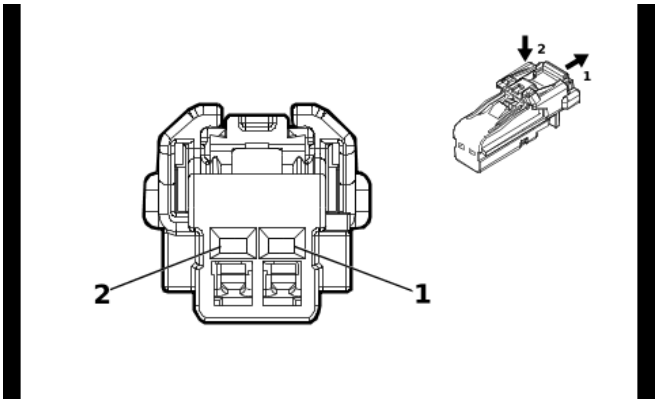
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M109LR Folding 3rd Row Seat Back Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / BK	8923	Left 3rd Row Folding Seat Back Unlatch Motor Control High	I	—
2	0.75	GY / WH	8922	Left 3rd Row Folding Seat Back Unlatch Motor Control Low	I	—

M109RR Folding 3rd Row Seat Back Actuator - Right



4115691

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 6098-8988
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

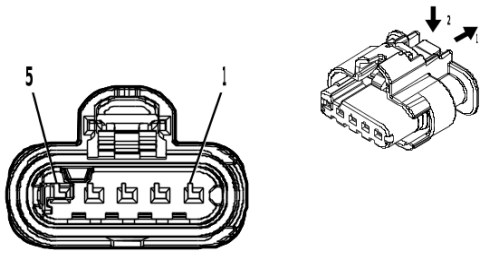
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M109RR Folding 3rd Row Seat Back Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BN	8921	Right 3rd Row Folding Seat Back Unlatch Motor Control High	I	—
2	0.75	BU / VT	8920	Right 3rd Row Folding Seat Back Unlatch Motor Control Low	I	—

M122 Exhaust Pressure Regulator Valve (LM2)



4997783

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed(BK)

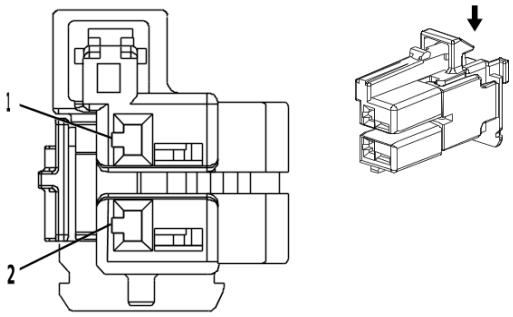
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M122 Exhaust Pressure Regulator Valve (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 Flow Control Valve 1	I	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
4	0.5	BN	1421	Exhaust Restrictor Motor Closed Control	I	—
5	0.5	YE / BN	1420	Exhaust Restrictor Motor Open Control	I	—

M123 Transmission Park Valve Lock Solenoid Actuator



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)

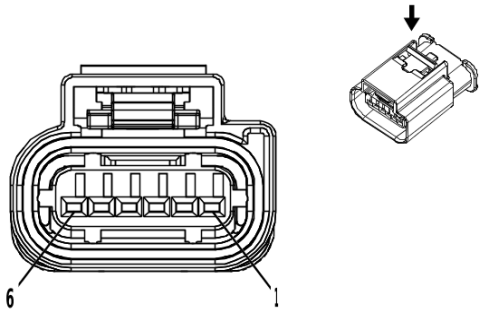
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M123 Transmission Park Valve Lock Solenoid Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
2	0.5	OG	2159	Park Inhibit Solenoid Assembly Control	I	—

M131 Supercharger Bypass Valve Actuator (LT4)



3747579

Connector Part Information

Harness Type: Turbo Wiring Harness
OEM Connector: 2272975-5
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 MCON Series, Sealed(BK)

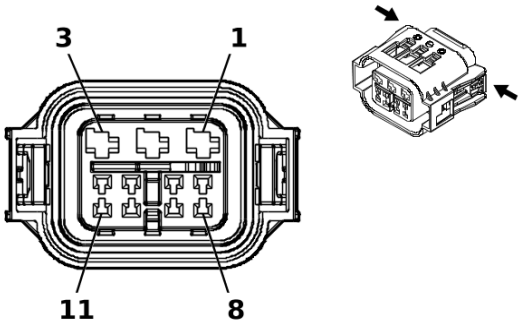
Terminal Part Information

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

M131 Supercharger Bypass Valve Actuator (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BN	2591	Turbocharger Wastegate Motor Open Control	I	—
2	0.5	WH / BU	2592	Turbocharger Wastegate Motor Close Control	I	—
3	0.5	WH	2590	Turbocharger Wastegate Motor Feedback Signal	I	—
4	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
5	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
6	—	—	—	Not Occupied	—	—

M135 Differential Lock Motor



5202126

Connector Part Information

Harness Type: Differential Carrier Lock Wiring Harness
OEM Connector: 33131692
Service Connector: Service by Harness - See Part Catalog
Description: 11-Way F 1.2 Multilock, 2.8 SLK Series, Sealed(BK)

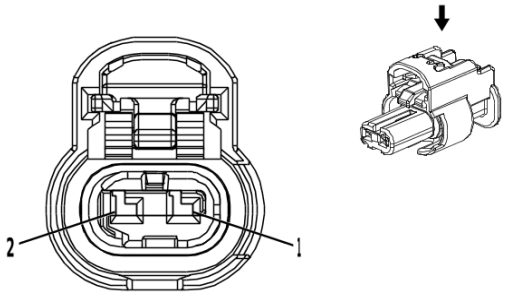
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

M135 Differential Lock Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	2.5	YE / WH	7969	Axle Differential Lock Control Low	II	—
3	2.5	GY / BN	7968	Axle Differential Lock Control High	II	—
4	0.5	WH / RD	7973	Axle Differential Lock Motor Position Sensor High Reference	I	—
5	0.5	BU / WH	7978	Axle Differential Lock Motor Temperature Sensor Signal	I	—
6	0.5	GN / BN	7975	Axle Differential Lock Motor Position Sensor Signal 1	I	—
7	0.5	WH	7971	Axle Differential Lock Motor Brake Control High	I	—
8	0.5	BK / YE	7977	Axle Differential Lock Motor Temperature Sensor Low Reference	I	—
9	0.5	BK / VT	7974	Axle Differential Lock Motor Position Sensor Low Reference	I	—
10	0.5	GY	7976	Axle Differential Lock Motor Position Sensor Signal 2	I	—
11	0.5	VT / BK	7972	Axle Differential Lock Motor Brake Control Low	I	—

M143D Front Side Door Latch Cinch Actuator - Driver (AF7)



4335931

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 33371691
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

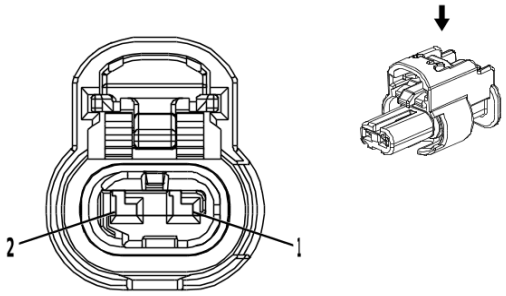
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M143D Front Side Door Latch Cinch Actuator - Driver (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / GN	8053	Left Front Door Cinch Latch Motor Low Control	I	—
2	0.75	VT / BK	8052	Left Front Door Cinch Latch Motor High Control	I	—

M143LR Rear Side Door Latch Cinch Actuator - Left (AF7)



4335931

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33371691
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

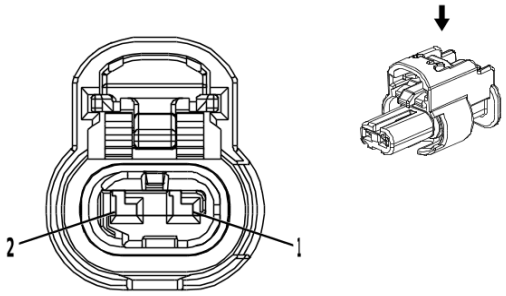
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

M143LR Rear Side Door Latch Cinch Actuator - Left (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / VT	8063	Left Rear Door Cinch Latch Motor Low Control	I	—
2	0.35	BN / GN	8062	Left Rear Door Cinch Latch Motor High Control	I	—

M143P Front Side Door Latch Cinch Actuator - Passenger (AF7)



4335931

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 33371691
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

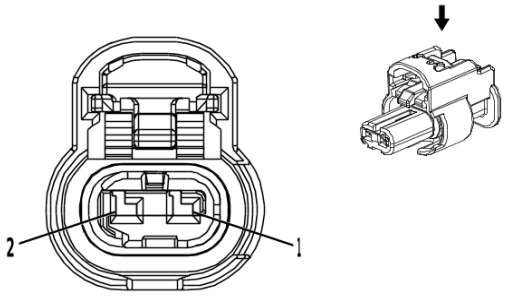
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M143P Front Side Door Latch Cinch Actuator - Passenger (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / WH	8058	Right Front Door Cinch Latch Motor Low Control	I	—
2	0.75	BN / VT	8057	Right Front Door Cinch Latch Motor High Control	I	—

M143RR Rear Side Door Latch Cinch Actuator - Right (AF7)



4335931

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 33371691
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

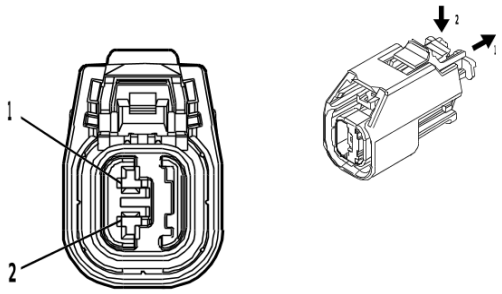
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

M143RR Rear Side Door Latch Cinch Actuator - Right (AF7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BN	8068	Right Rear Door Cinch Latch Motor Low Control	I	—
2	0.5	BU / BN	8067	Right Rear Door Cinch Latch Motor High Control	I	—

P13 Horn



4889830

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33164011
Service Connector: 86802964
Description: 2-Way F 1.5 OCS Series, Sealed(BK)

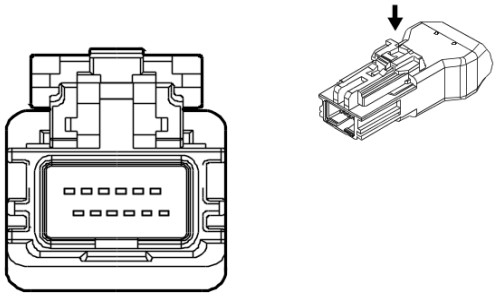
Terminal Part Information

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

P13 Horn

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	—
2	0.75	BN / GY	29	Horn Control	I	—

P16 Instrument Panel Cluster Control Module X1



4527210

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 33358813
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M 2.0 HSAL-2 Series(BK)

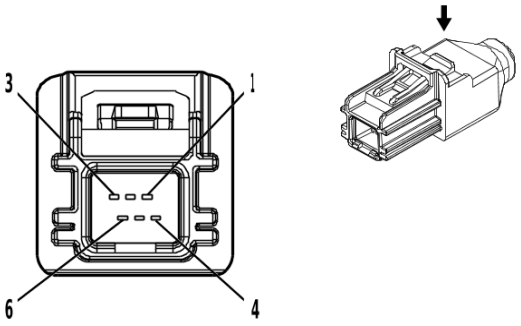
Terminal Part Information

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

P16 Instrument Panel Cluster Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

P16 Instrument Panel Cluster Control Module X2



4806625

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: VP000160
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(BK)

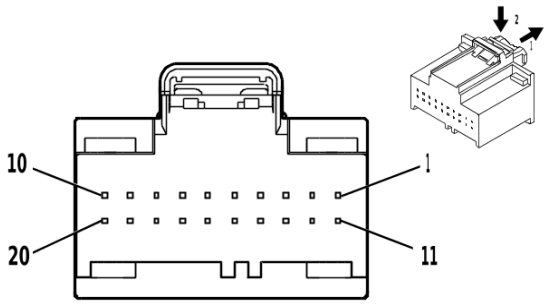
Terminal Part Information

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

P16 Instrument Panel Cluster Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

P16 Instrument Panel Cluster Control Module X3



5112891

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35160140
Service Connector: 13525990
Description: 20-Way F 0.64 Series(BK)

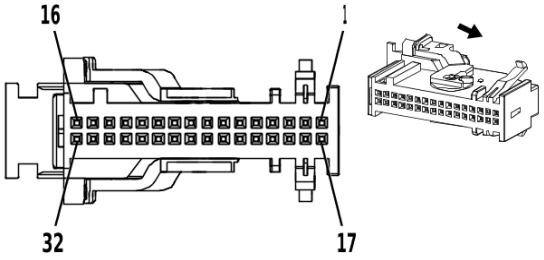
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

P16 Instrument Panel Cluster Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG / BN	358	Air Bag Indicator Control	I	—
2	0.35	GN / BK	875	ABS Indicator Control	I	—
3	0.35	YE / WH	33	Brake Warning Indicator Control	I	—
4	0.35	YE / VT	1877	Brake Warning Indicator Control 2	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	YE / WH	234	Seat Belt Indicator Control	I	—
7	0.35	BN / WH	419	Check Engine Indicator Control	I	—
8	0.35	GN / WH	1084	Low Tire Pressure Indicator Control	I	—
9	0.35	VT / BK	8082	Stability Off Indicator Control	I	—
10	0.35	WH / BU	8081	Stability Active Indicator Control	I	—
11	0.35	YE / RD	8083	Auxiliary Display Supply Voltage	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.35	BU / RD	8080	Auxiliary Center Stack Display Supply Voltage	I	—
16	0.35	BK / YE	10129	Auxiliary Center Stack Display Low Reference	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	GY / RD	10128	Auxiliary Center Stack Display Supply Voltage 2	I	—
19 - 20	—	—	—	Not Occupied	—	—

P16 Instrument Panel Cluster Control Module X4



627214

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12198036
Service Connector: 13511333
Description: 32-Way F 0.64 Micro-Quadlock Series(BK with GY Cover)

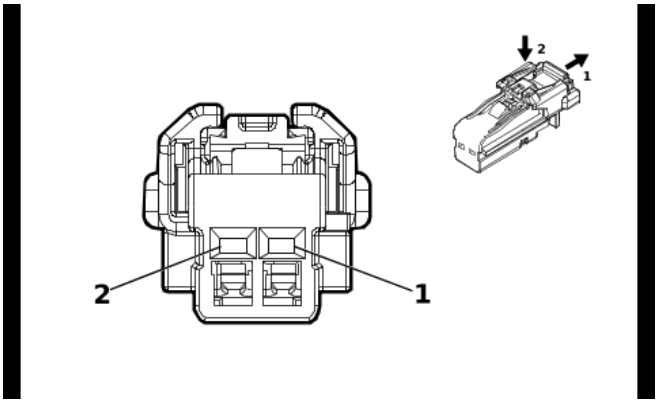
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

P16 Instrument Panel Cluster Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / BU	7216	Ethernet Bus 7 [-]	I	—
2 - 6	—	—	—	Not Occupied	—	—
7	0.75	RD / WH	1340	Battery Positive Voltage	I	—
8	0.5	VT / WH	639	Run/Crank Ignition 1 Voltage	I	—
9	0.35	YE / WH	622	Head-Up Display Switch Signal	I	—
10	0.35	BK / GN	5699	Head-Up Display Switch Low Reference	I	—
11	0.35	GY / BK	4787	Day Night LED Control	I	—
12	0.35	GY / YE	3885	Forward Collision Alert LED Control	I	—
13	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
14	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
15 - 16	—	—	—	Not Occupied	—	—
17	0.35	GY / BU	7217	Ethernet Bus 7 [+]	I	—
18	—	—	—	Not Occupied	—	—
19	0.75	BK	1850	Ground	I	—
20	0.35	GN / BK	3894	Instrument Panel Cluster Control Module LIN Bus 1	I	—
21 - 28	—	—	—	Not Occupied	—	—
29	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
30	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
31 - 32	—	—	—	Not Occupied	—	—

P18 Door Lock Status Indicator



4115691

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

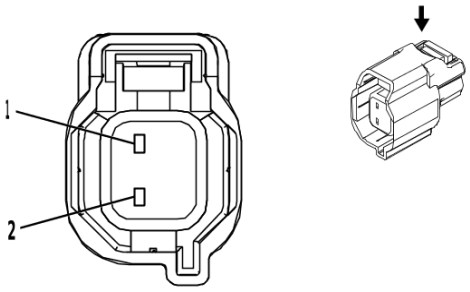
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P18 Door Lock Status Indicator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	728	Security Indicator Control	I	—
2	0.35	BK	1150	Ground	I	—

P19AFC Front Floor Speaker - Console (UQH)



2900396

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series, Sealed(L-GY)

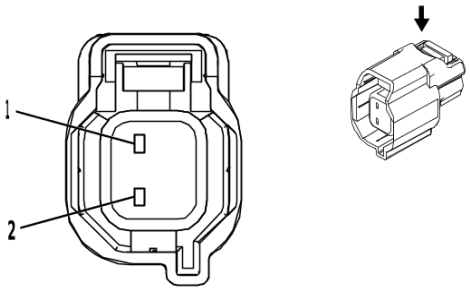
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AFC Front Floor Speaker - Console (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	5766	Center Console Center Speaker [-] Control	I	—
2	0.75	VT / GN	5756	Center Console Speaker [+] Control	I	—

P19AG Radio Front Side Door Speaker - Left (UQH)



2900396

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

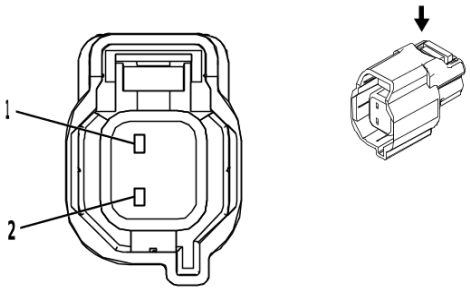
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AG Radio Front Side Door Speaker - Left (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—

P19AG Radio Front Side Door Speaker - Left (UQP)



2900396

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

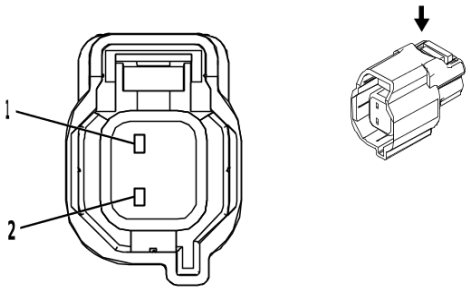
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AG Radio Front Side Door Speaker - Left (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	—
2	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—

P19AH Radio Front Side Door Speaker - Right (UQH)



2900396

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

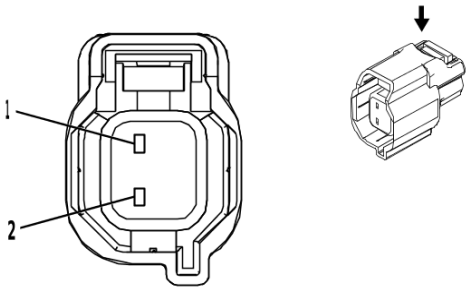
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AH Radio Front Side Door Speaker - Right (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	—
2	0.75	YE	200	Right Front Speaker 1 [+] Control	I	—

P19AH Radio Front Side Door Speaker - Right (UQP)



2900396

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

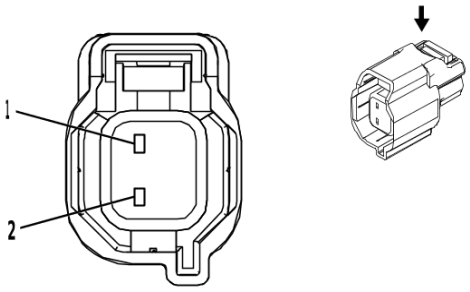
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AH Radio Front Side Door Speaker - Right (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	—
2	0.75	YE	200	Right Front Speaker 1 [+] Control	I	—

P19AL Radio Rear Side Door Speaker - Left



2900396

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

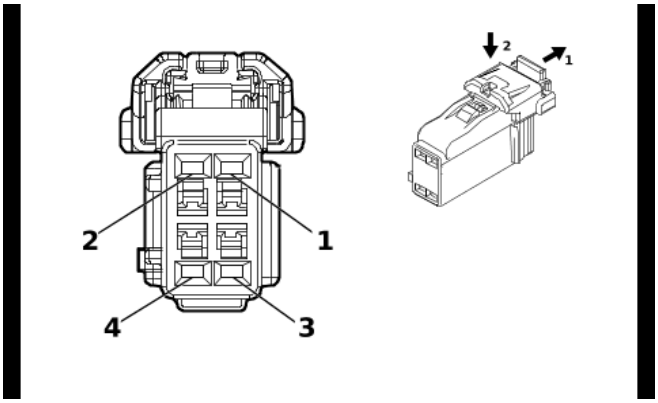
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AL Radio Rear Side Door Speaker - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BK	116	Left Rear Speaker [-] Control	I	—
2	0.75	GN	199	Left Rear Speaker [+] Control	I	—

P19ALU Radio Rear Side Door Upper Speaker - Left (UQH)



5490507

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35209716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(GN)

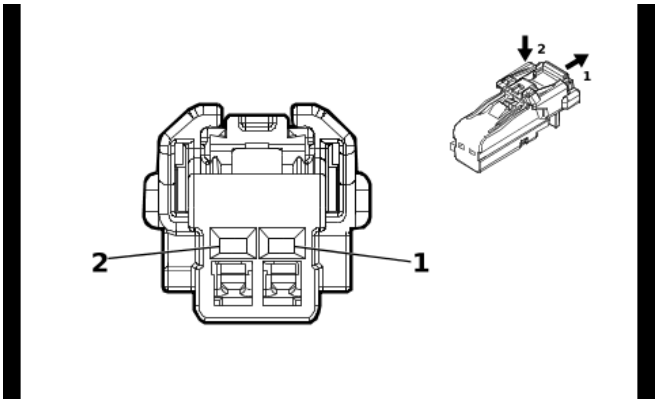
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19ALU Radio Rear Side Door Upper Speaker - Left (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BK	1959	Left Rear Midrange Speaker [-] Control	I	—
2	0.5	YE / BN	1859	Left Rear Midrange Speaker [+] Control	I	—
3	0.5	VT / YE	1958	Left Rear Tweeter Speaker [-] Control	I	—
4	0.5	GN / YE	1858	Left Rear Tweeter Speaker [+] Control	I	—

P19ALU Radio Rear Side Door Upper Speaker - Left (UQP)



5490513

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35327304
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series(GN)

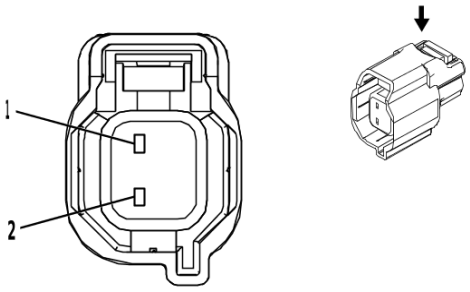
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19ALU Radio Rear Side Door Upper Speaker - Left (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / BK	116	Left Rear Speaker [-] Control	I	—
2	0.75	GN	199	Left Rear Speaker [+] Control	I	—

P19AM Radio Rear Side Door Speaker - Right



2900396

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

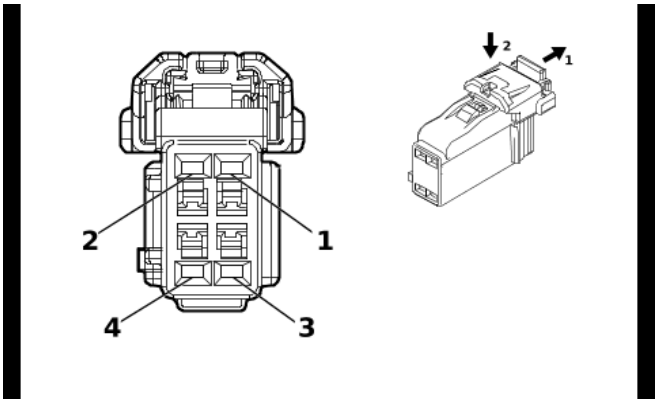
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AM Radio Rear Side Door Speaker - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / BK	115	Right Rear Speaker [-] Control	I	—
2	0.75	WH	46	Right Rear Speaker [+] Control	I	—

P19AMU Radio Rear Side Door Upper Speaker - Right (UQH)



5490507

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35209716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series(GN)

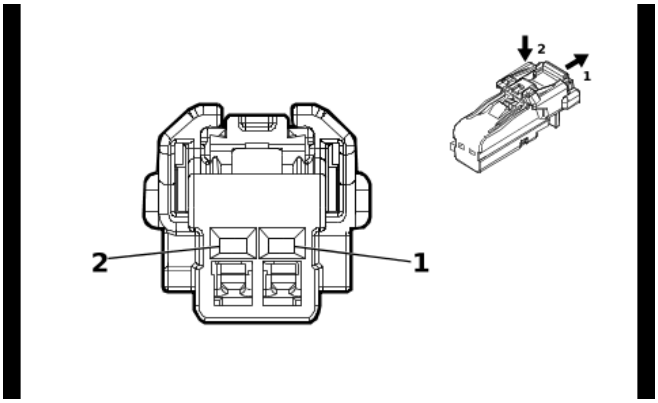
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19AMU Radio Rear Side Door Upper Speaker - Right (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / BU	1955	Right Rear Midrange Speaker [-] Control	I	—
2	0.75	YE / GN	1855	Right Rear Midrange Speaker [+] Control	I	—
3	0.75	YE / VT	1949	Right Rear Tweeter Speaker [-] Control	I	—
4	0.75	WH / GY	1854	Right Rear Tweeter Speaker [+] Control	I	—

P19AMU Radio Rear Side Door Upper Speaker - Right (UQP)



5490513

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35327304
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series(GN)

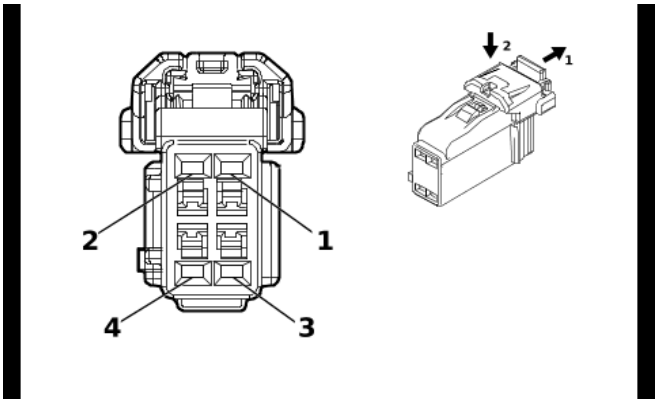
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19AMU Radio Rear Side Door Upper Speaker - Right (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / BK	115	Right Rear Speaker [-] Control	I	—
2	0.75	WH	46	Right Rear Speaker [+] Control	I	—

P19B Radio Front Center Speaker (UQH)



5490507

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35209716
Service Connector: 84941157
Description: 4-Way F 1.2 Series(GN)

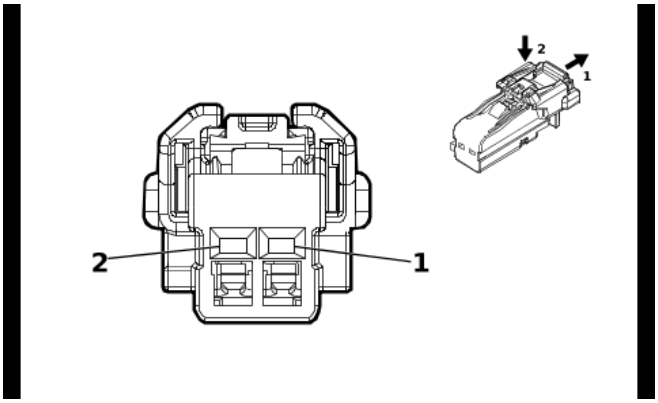
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19B Radio Front Center Speaker (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / YE	1960	Front Center Speaker [-] Control	I	—
2	0.75	YE / WH	1860	Front Center Speaker [+] Control	I	—
3	0.75	BN / YE	8565	Front Center Speaker [-] 2 Control	I	—
4	0.75	BU / GN	8566	Front Center Speaker 2 [+] Control	I	—

P19B Radio Front Center Speaker (UQP)



5490513

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

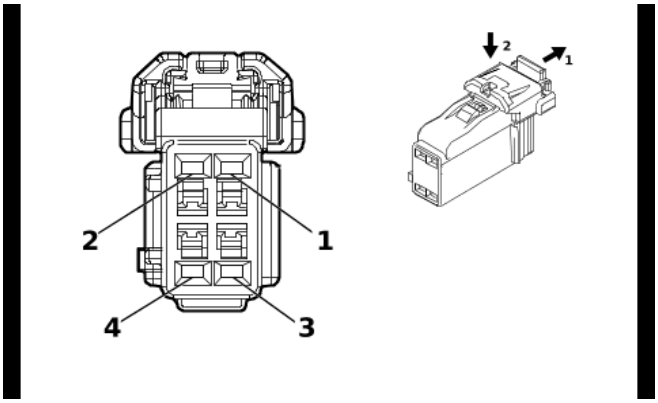
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19B Radio Front Center Speaker (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / YE	1960	Front Center Speaker [-] Control	I	—
2	0.75	YE / WH	1860	Front Center Speaker [+] Control	I	—

P19H Radio Windshield Side Garnish Molding Speaker - Left Front (UQH)



5490507

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35209716
Service Connector: 84941157
Description: 4-Way F 1.2 Series(GN)

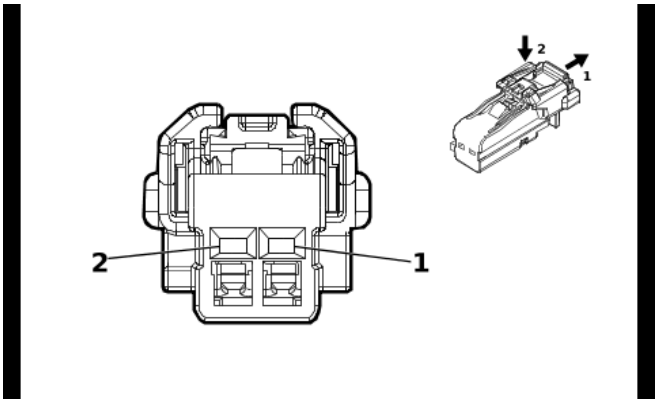
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19H Radio Windshield Side Garnish Molding Speaker - Left Front (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / BN	1957	Left Front Midrange Speaker [-] Control	I	—
2	0.75	BU / VT	1857	Left Front Midrange Speaker [+] Control	I	—
3	0.75	YE / GY	1956	Left Front Tweeter Speaker [-] Control	I	—
4	0.75	YE / BU	1856	Left Front Tweeter Speaker [+] Control	I	—

P19J Radio Front Speaker - Instrument Panel Left



5490513

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

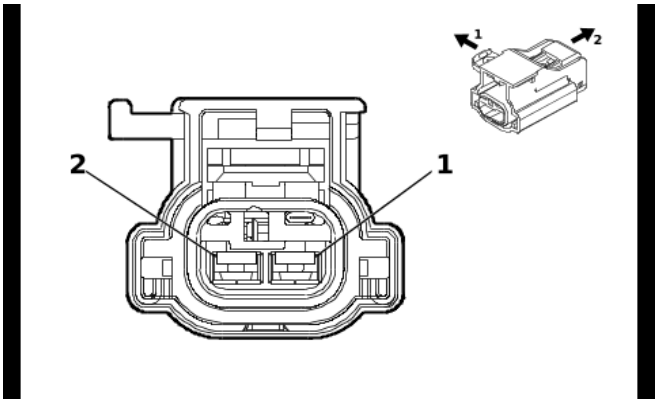
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19J Radio Front Speaker - Instrument Panel Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / BK	1974	Left Front Speaker [-] Control 2	I	—
2	0.75	BU / VT	1874	Left Front Speaker [+] Control 2	I	—

P19LA Radio Rear Compartment Speaker (UQH)



5495479

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33512073
Service Connector: 84941152
Description: 2-Way F 2.8 APEX Series(NA)

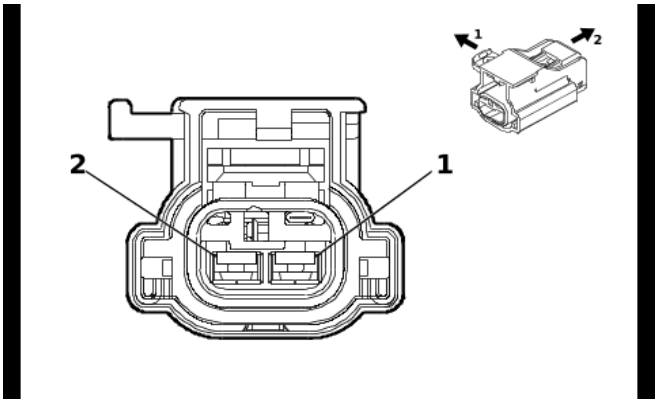
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

P19LA Radio Rear Compartment Speaker (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN / BK	1794	Left/Rear Subwoofer [-] Control	I	—
2	2.5	BU / GY	346	Left/Rear Subwoofer [+] Control	I	—

P19LA Radio Rear Compartment Speaker (UQP)



5495479

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33512073
Service Connector: 84941152
Description: 2-Way F 2.8 APEX Series(NA)

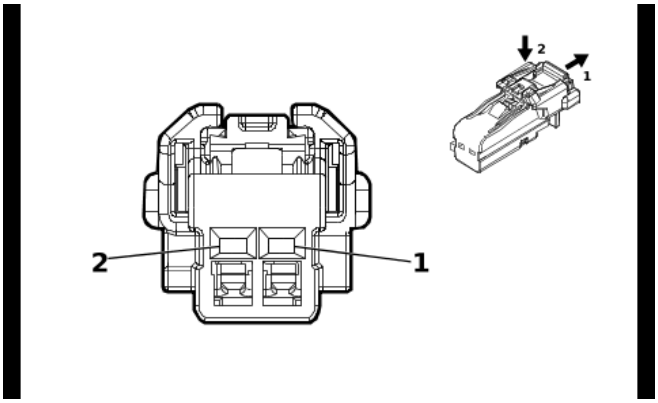
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

P19LA Radio Rear Compartment Speaker (UQP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY / BK	315	Right Subwoofer [-] Control	I	—
2	2.5	GN / VT	1795	Right Subwoofer [+] Control	I	—

P19M Radio Body Rear Corner Upper Garnish Molding Speaker - Left



5490513

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

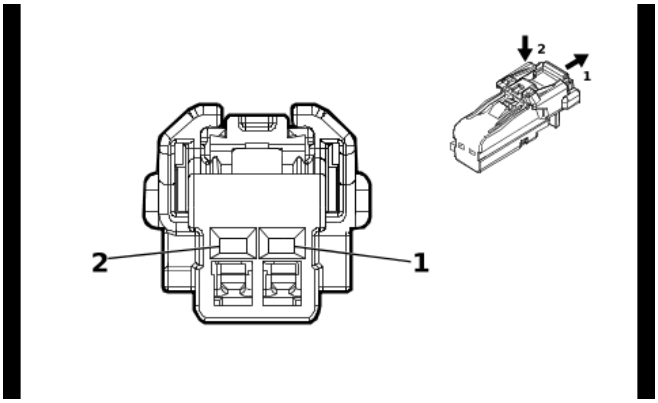
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19M Radio Body Rear Corner Upper Garnish Molding Speaker - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	8575	Left Rear D-Pillar Speaker [-] Control	I	—
2	0.5	WH / GN	8576	Left Rear D-Pillar Speaker [+] Control	I	—

P19RHA Radio Roof Speaker - Left Front (UQH)



5490513

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

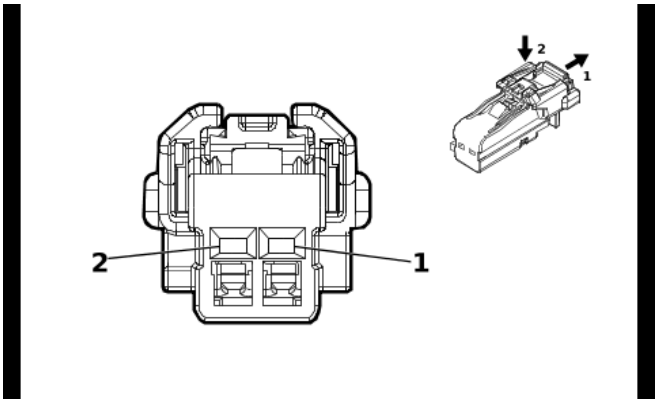
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19RHA Radio Roof Speaker - Left Front (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / WH	8571	Left Front Headliner Speaker [-] Control	I	—
2	0.75	GN / BN	8572	Left Front Headliner Speaker [+] Control	I	—

P19RHB Radio Roof Speaker - Right Front



5490513

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

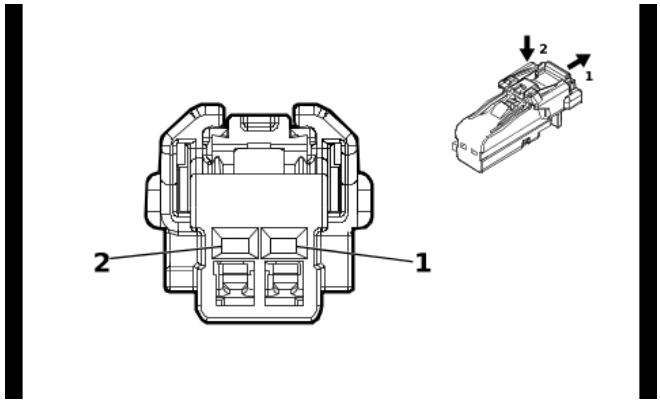
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19RHB Radio Roof Speaker - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / VT	8573	Right Front Headliner Speaker [-] Control	I	—
2	0.75	GY / GN	8574	Right Front Headliner Speaker [+] Control	I	—

P19RHC Radio Roof Speaker - Left Rear (UQH)



5490513

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

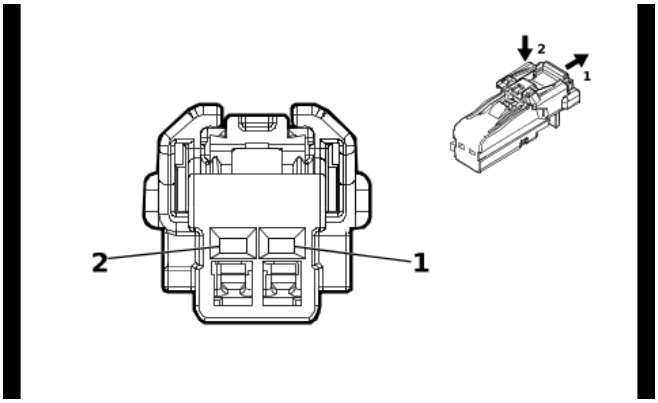
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19RHC Radio Roof Speaker - Left Rear (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN / WH	8567	Left Rear Headliner Speaker [-] Control	I	—
2	0.75	GY / BN	8568	Left Rear Headliner Speaker [+] Control	I	—

P19RHD Radio Roof Speaker - Right Rear



5490513

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

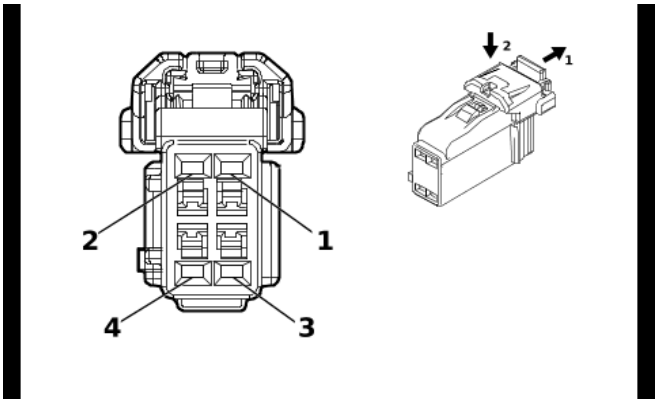
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19RHD Radio Roof Speaker - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	8569	Right Rear Headliner Speaker [-] Control	I	UQH
2	0.75	VT / GY	8570	Right Rear Headliner Speaker [+] Control	I	UQH

P19V Radio Windshield Side Garnish Molding Speaker - Right Front



5490507

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35209716
Service Connector: 84941157
Description: 4-Way F 1.2 Series(GN)

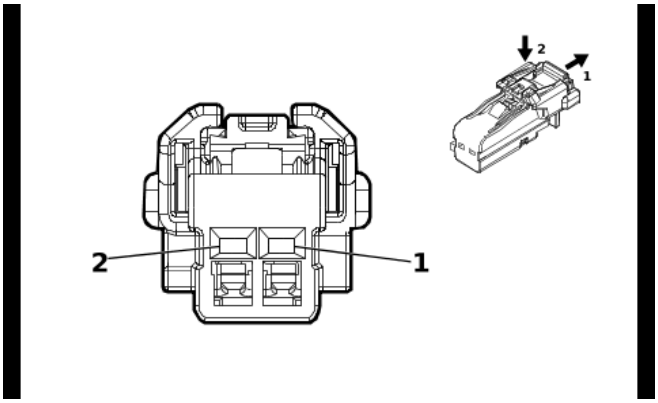
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19V Radio Windshield Side Garnish Molding Speaker - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BK	1953	Right Front Midrange Speaker [-] Control	I	—
2	0.75	WH / YE	1853	Right Front Midrange Speaker [+] Control	I	—
3	0.75	VT / BN	1952	Right Front Tweeter Speaker [-] Control	I	—
4	0.75	BN / GN	1852	Right Front Tweeter Speaker [+] Control	I	—

P19W Radio Front Speaker - Instrument Panel Right



5490513

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

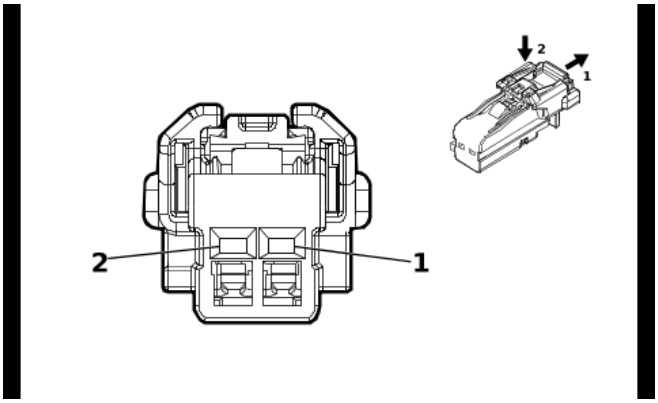
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19W Radio Front Speaker - Instrument Panel Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / BK	1975	Right Front Speaker [-] Control 2	I	—
2	0.75	GN / BU	1875	Right Front Speaker [+] Control 2	I	—

P19Z Radio Body Rear Corner Upper Garnish Molding Speaker - Right



5490513

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35327304
Service Connector: 84941158
Description: 2-Way F 1.2 Series(GN)

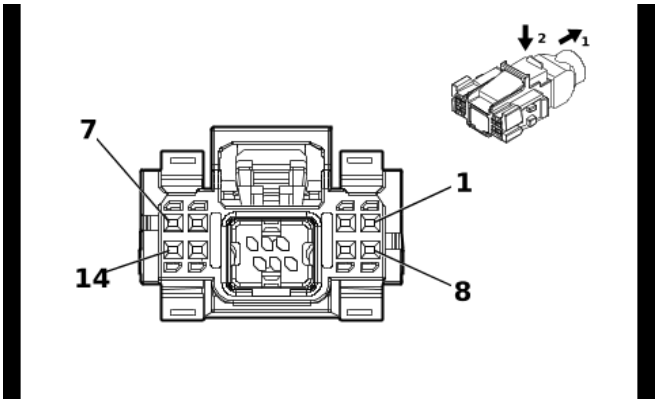
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

P19Z Radio Body Rear Corner Upper Garnish Molding Speaker - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	8577	Right Rear D-Pillar Speaker [-] Control	I	—
2	0.5	VT	8578	Right Rear D-Pillar Speaker [+] Control	I	—

P22E Video Display - Left Front Seat Back



5500325

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13532130
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 0.5 MQS, High Speed Autolink Series(GY)

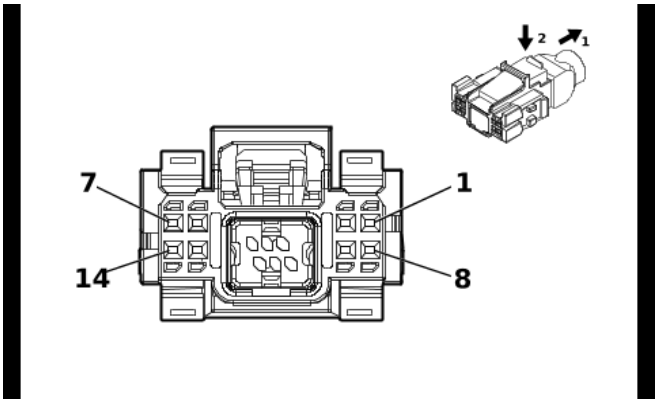
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required
II	Not required	No Tool Required	No Tool Required

P22E Video Display - Left Front Seat Back

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / BN	3640	Battery Positive Voltage	I	—
2	0.35	BK / WH	1451	Signal Ground	I	—
3	0.1	Bare	4819	Rear Seat Infotainment Display 2 LVDS (Low Voltage Differential Signaling) Low Reference	II	—
4	0.1	BU	4820	Passenger Seat Back Video Display Signal [+]	II	—
5	0.1	WH	4821	Rear Seat Infotainment Display 2 LVDS (Low Voltage Differential Signaling) Signal [-]	II	—
6	0.35	GN / YE	7066	Entertainment Remote Enable Signal	I	—
7 - 14	—	—	—	Not Occupied	—	—

P22F Video Display - Right Front Seat Back X1 (UW9)



5404342

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13532129
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 0.5 MQS, High Speed Autolink Series(BK)

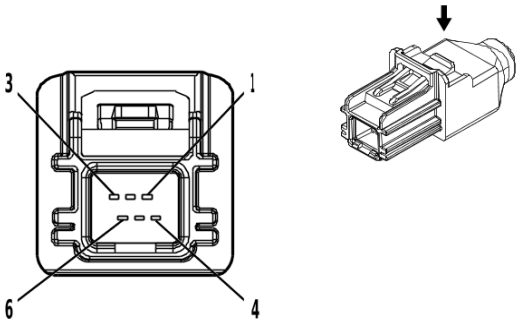
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required
II	Not required	No Tool Required	No Tool Required

P22F Video Display - Right Front Seat Back X1 (UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / BN	3640	Battery Positive Voltage	I	—
2	0.35	BK / WH	1451	Signal Ground	I	—
3	0.1	Bare	4819	Rear Seat Infotainment Display 2 LVDS (Low Voltage Differential Signaling) Low Reference	II	—
4	0.1	BU	4820	Passenger Seat Back Video Display Signal [+]	II	—
5	0.1	WH	4821	Rear Seat Infotainment Display 2 LVDS (Low Voltage Differential Signaling) Signal [-]	II	—
6	0.35	GN / YE	7066	Entertainment Remote Enable Signal	I	—
7	0.35	VT / WH	7213	Ethernet Bus 5 [+]	I	—
8	0.35	RD / BN	3640	Battery Positive Voltage	I	—
9	0.35	BK / WH	1451	Signal Ground	I	—
10 - 13	—	—	—	Not Occupied	—	—
14	0.35	VT	7212	Ethernet Bus 5 [-]	I	—

P22F Video Display - Right Front Seat Back X2 (UW9)



4806625

Connector Part Information

Harness Type: Front Seat Wiring Harness LVDS
OEM Connector: 13522802
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(BK)

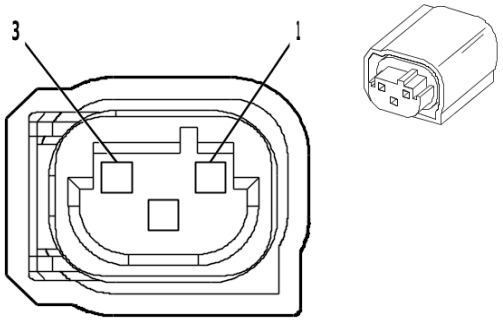
Terminal Part Information

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

P22F Video Display - Right Front Seat Back X2 (UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.1	Bare	4828	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) Low Reference	I	—
2	0.1	BU	4829	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) Signal [+]	I	—
3	0.1	WH	4830	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) Signal [-]	I	—
4	0.1	RD	2466	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) B Signal [+]	I	—
5	0.1	BK	2467	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) 2 Signal [-]	I	—
6	0.1	Bare	2465	Rear Seat Infotainment Auxiliary Audio/Video Jack LVDS (Low Voltage Differential Signaling) B Low Reference	I	—

P25 Content Theft Deterrent Alarm



2534360

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13623745
Service Connector: 84999471
Description: 3-Way F 0.64 Micro-Quadlock Series, Sealed(BK)

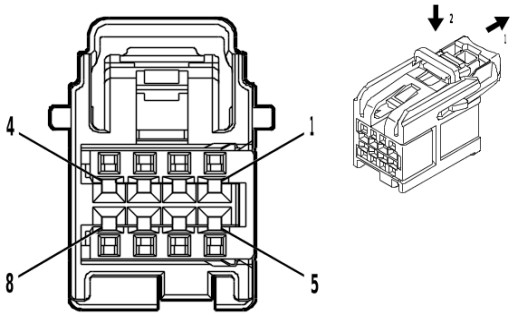
Terminal Part Information

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

P25 Content Theft Deterrent Alarm

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	150	Ground	I	—
2	0.5	GN / BU	6133	Body Control Module LIN Bus 2	I	—
3	0.5	RD / YE	2340	Battery Positive Voltage	I	—

P29 Head-Up Display X1 (UV6)



4935776

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series(BK)

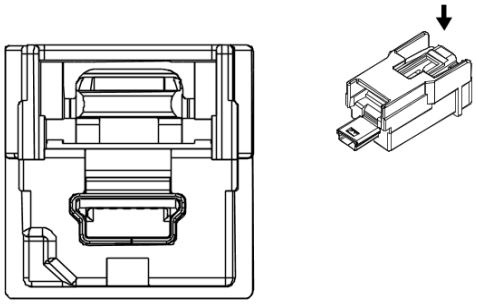
Terminal Part Information

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

P29 Head-Up Display X1 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / BK	3894	Instrument Panel Cluster Control Module LIN Bus 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	YE / WH	622	Head-Up Display Switch Signal	I	—
4	0.5	BK	1850	Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	RD / WH	1340	Battery Positive Voltage	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BK / GN	5699	Head-Up Display Switch Low Reference	I	—

P29 Head-Up Display X2 (UV6)



2807491

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS
OEM Connector: 13946577
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(GY)

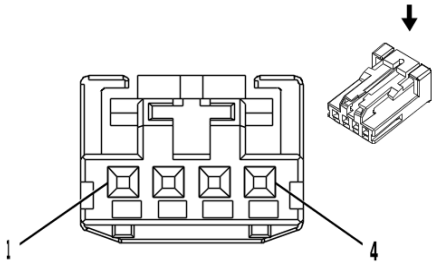
Terminal Part Information

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

P29 Head-Up Display X2 (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	—	—	4836	Instrument Panel Cluster LVDS (Low Voltage Differential Signaling) Signal [-]	I	—
3	—	—	4835	Instrument Cluster LVDS (Low Voltage Differential Signaling) Signal [+]	I	—
4	—	—	4834	Instrument Panel Cluster LVDS (Low Voltage Differential Signaling) Low Reference	I	—
USB	—	—	—	Not Occupied	—	—

P43 Forward Collision Alert Display (-UV6)



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

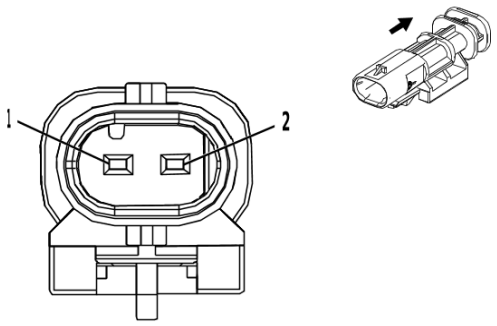
Terminal Part Information

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

P43 Forward Collision Alert Display (-UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	639	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	—

P45L Front Seat Lane Departure Warning Actuator - Left



2474755

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13591337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

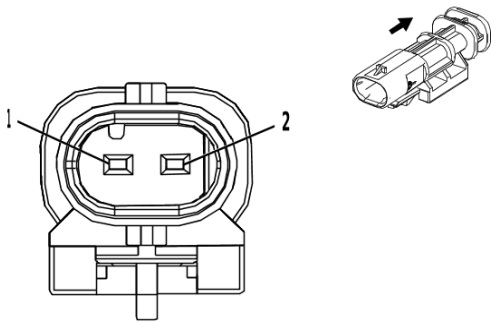
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

P45L Front Seat Lane Departure Warning Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.35	YE / BN	3037	Driver Seat Left Rear Haptic Movement Motor Control	I	—

P45R Front Seat Lane Departure Warning Actuator - Right



2474755

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 13591337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

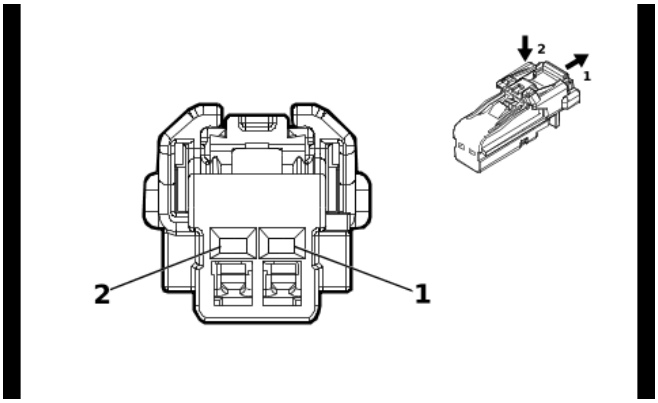
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

P45R Front Seat Lane Departure Warning Actuator - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.35	BN	3038	Driver Seat Right Rear Haptic Movement Motor Control	I	—

P50 Regulatory Emergency Call Backup Speaker (UER)



4115691

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

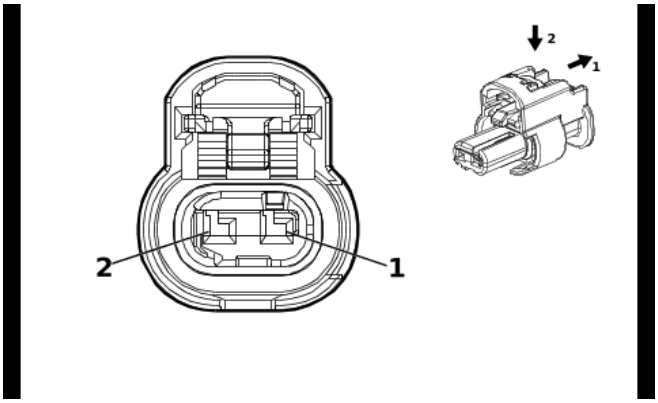
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

P50 Regulatory Emergency Call Backup Speaker (UER)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / BK	4769	Emergency Call Backup Speaker [-] Control	I	—
2	0.35	GY / GN	4770	Emergency Call Backup Speaker [+] Control	I	—

Q2 Air Conditioning Clutch X2



4649903

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

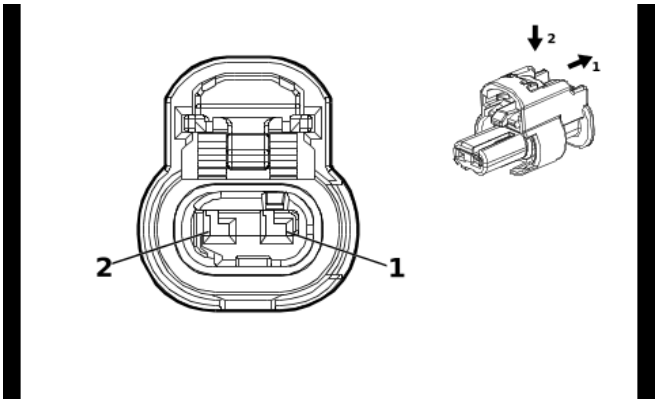
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q2 Air Conditioning Clutch X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6550	Ground	I	—
2	0.75	BN / GN	59	A/C Compressor Clutch Control	I	—

Q4 Automatic Level Control Solenoid Valve (F47)



4649903

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33327048
Service Connector: 85519075
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

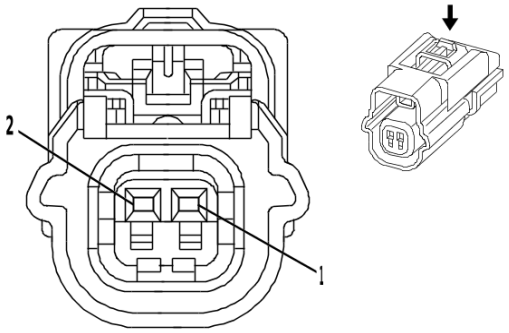
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q4 Automatic Level Control Solenoid Valve (F47)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BU	3261	Vehicle Level Control Exhaust Solenoid Valve Control	I	—
2	0.5	WH / GN	320	Vehicle Level Control Exhaust Solenoid Valve Control	I	—

Q6 Camshaft Position Actuator Solenoid Valve (L87)



1664592

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 89047381
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed(BK)

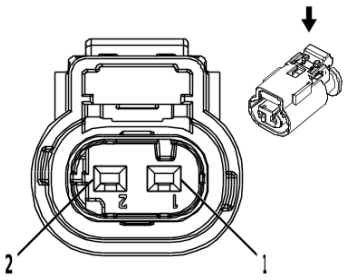
Terminal Part Information

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

Q6 Camshaft Position Actuator Solenoid Valve (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—
2	—	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—

Q12 Evaporative Emission Canister Purge Solenoid Valve (L87)



2717066

Connector Part Information

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

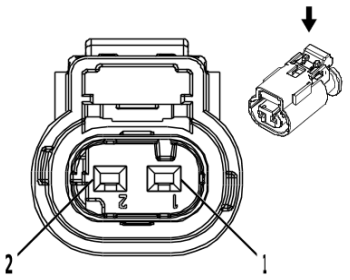
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q12 Evaporative Emission Canister Purge Solenoid Valve (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	0.75	GN / BU	428	EVAP Canister Purge Solenoid Control	I	—

Q12 Evaporative Emission Canister Purge Solenoid Valve (LT4)



2717066

Connector Part Information

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

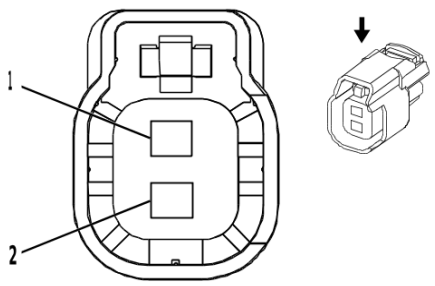
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q12 Evaporative Emission Canister Purge Solenoid Valve (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	0.5	GN / BU	428	EVAP Canister Purge Solenoid Control	I	—

Q13 Evaporative Emission Canister Vent Solenoid Valve (L87)



2422378

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13771883
Service Connector: 13579002
Description: 2-Way F 1.5 Series, Sealed(BK)

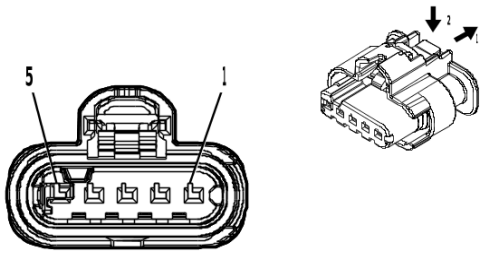
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

Q13 Evaporative Emission Canister Vent Solenoid Valve (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Vent Solenoid Valve Control	I	—
2	0.5	RD / WH	2040	Battery Positive Voltage	I	—

Q14A Exhaust Gas Recirculation Valve 1 (LM2)



4997783

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed(BK)

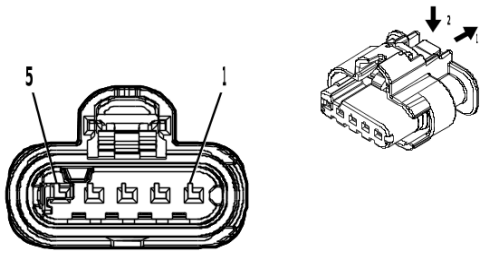
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool 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	II	—
2	0.5	BN / WH	5763	Exhaust Gas Recirculation Position Signal	II	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4	0.5	WH / VT	5764	Exhaust Gas Recirculation Valve High Control	I	—
5	0.5	VT / BK	5746	Exhaust Gas Recirculation Valve Low Control	I	—

Q14B Exhaust Gas Recirculation Valve 2 (LM2)



4997783

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed(BK)

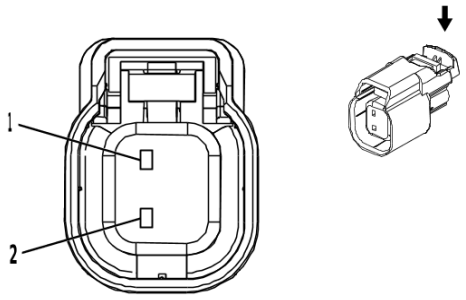
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool 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	II	—
2	0.5	BU / GN	4012	Exhaust Gas Recirculation 2 Valve Position Sensor Signal	II	—
3	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	II	—
4	0.5	BU / WH	4014	Exhaust Gas Recirculation 2 Valve Open Control	I	—
5	0.5	BU / BN	4013	Exhaust Gas Recirculation 2 Valve Close Control	I	—

Q17A Fuel Injector 1 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

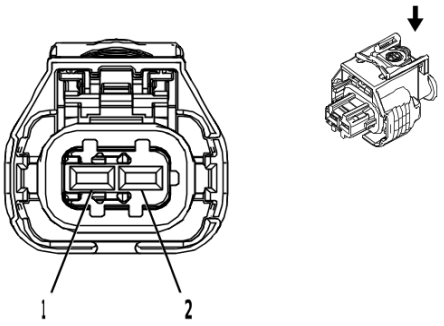
Terminal Part Information

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

Q17A Fuel Injector 1 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BN / WH	0	—	I	—
2	0.8	BN	0	—	I	—

Q17A Fuel Injector 1 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

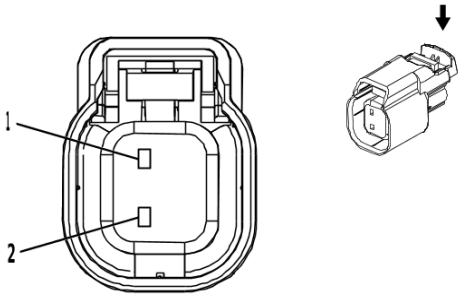
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17A Fuel Injector 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
2	1.5	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—

Q17B Fuel Injector 2 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

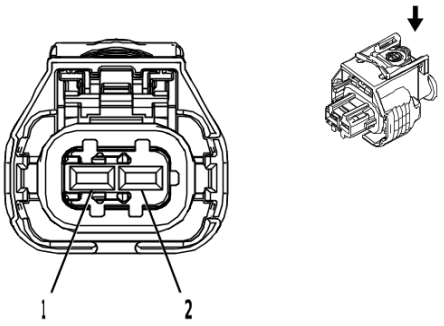
Terminal Part Information

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

Q17B Fuel Injector 2 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BU / GY	0	—	I	—
2	0.8	BU	0	—	I	—

Q17B Fuel Injector 2 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

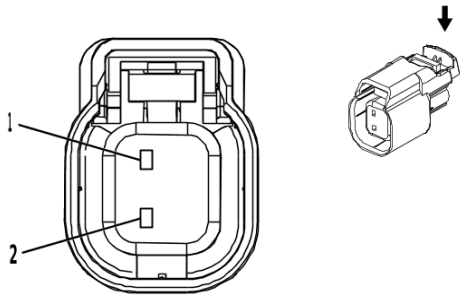
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17B Fuel Injector 2 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
2	1.5	BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—

Q17C Fuel Injector 3 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

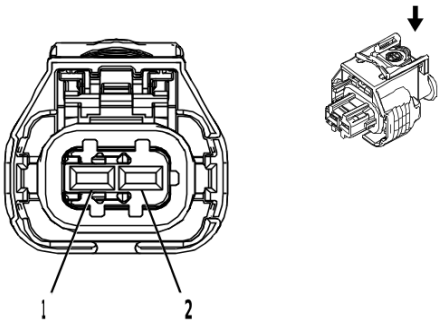
Terminal Part Information

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

Q17C Fuel Injector 3 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GN / GY	0	—	I	—
2	0.8	GN	0	—	I	—

Q17C Fuel Injector 3 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

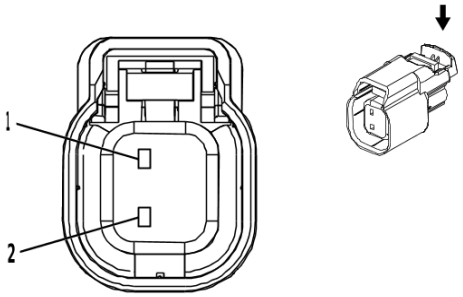
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17C Fuel Injector 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
2	1.5	GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—

Q17D Fuel Injector 4 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

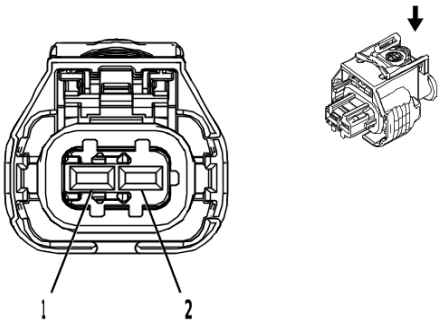
Terminal Part Information

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

Q17D Fuel Injector 4 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BU / WH	0	—	I	—
2	0.8	GY / BU	0	—	I	—

Q17D Fuel Injector 4 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

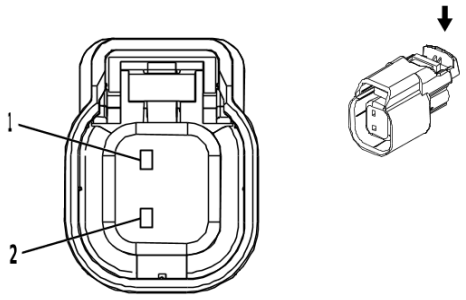
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17D Fuel Injector 4 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
2	1.5	GY / BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—

Q17E Fuel Injector 5 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

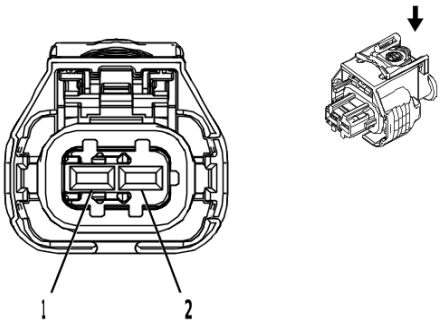
Terminal Part Information

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

Q17E Fuel Injector 5 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GN / WH	0	—	I	—
2	0.8	WH / GN	0	—	I	—

Q17E Fuel Injector 5 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

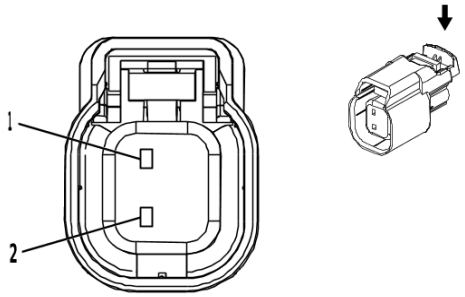
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17E Fuel Injector 5 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
2	1.5	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—

Q17F Fuel Injector 6 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

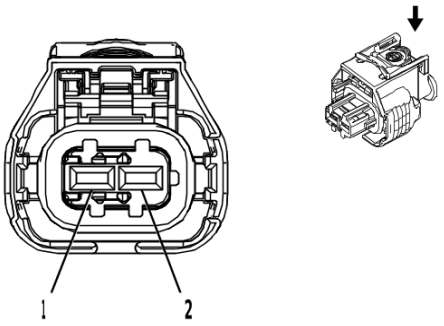
Terminal Part Information

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

Q17F Fuel Injector 6 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	VT / GY	0	—	I	—
2	0.8	VT / GN	0	—	I	—

Q17F Fuel Injector 6 (LM2)



2845578

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

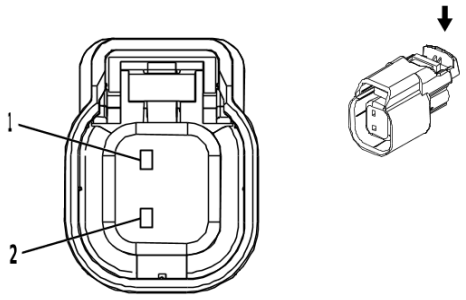
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17F Fuel Injector 6 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
2	1.5	VT / GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—

Q17G Fuel Injector 7 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

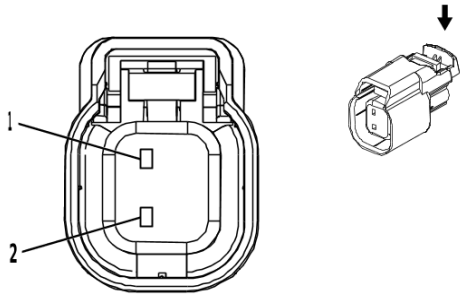
Terminal Part Information

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

Q17G Fuel Injector 7 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	I	—
2	0.8	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	I	—

Q17H Fuel Injector 8 (L87/LT4)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 340624008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

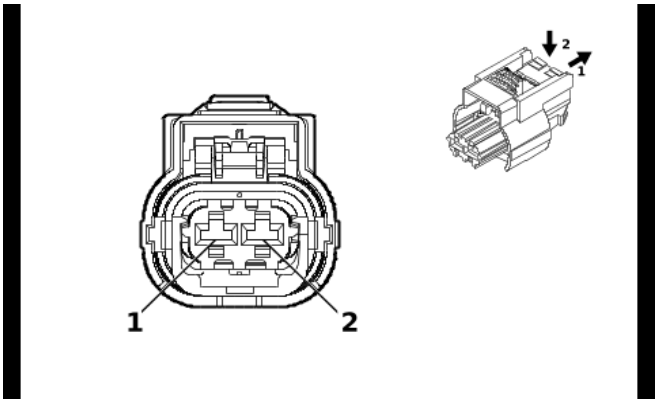
Terminal Part Information

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

Q17H Fuel Injector 8 (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	I	—
2	0.8	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	I	—

Q18A Fuel Pressure Regulator 1 (LM2)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

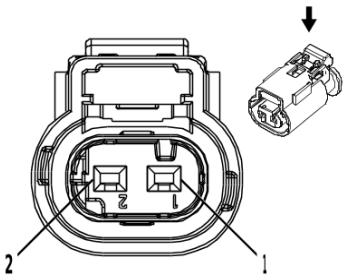
Terminal Part Information

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

Q18A Fuel Pressure Regulator 1 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE / VT	7245	High Pressure Fuel Pump Low Enable Signal	I	—
2	0.75	GY / BN	7244	High Pressure Fuel Pump High Side Control	I	—

Q18B Fuel Pressure Regulator 2 (LM2)



2717066

Connector Part Information

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

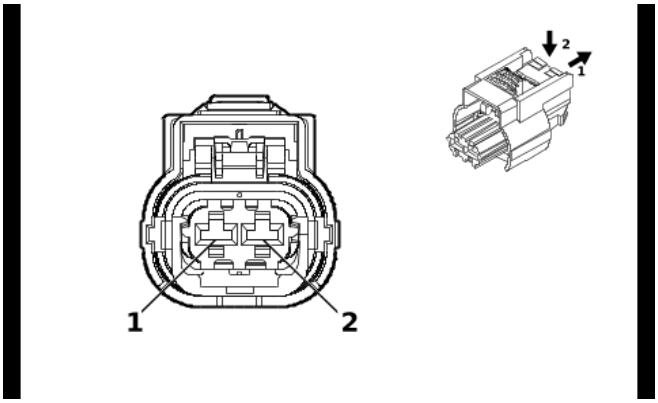
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

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 Valve Low Reference	I	—
2	0.5	BU / WH	2530	Fuel Rail Pressure Solenoid Valve Control	I	—

Q18C Fuel Pressure Regulator 3 (LM2)



4992524

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35182447
Service Connector: 84941154
Description: 2-Way F 2.8 MCP Series, Sealed(BK)

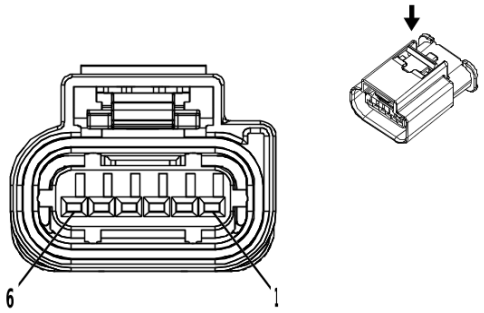
Terminal Part Information

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

Q18C Fuel Pressure Regulator 3 (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	2420	Fuel High Pressure Pump Low Enable Signal	I	—
2	0.75	GY	2419	Fuel High Pressure Pump High Side Supply Voltage	I	—

Q20 Intake Airflow Control Valve (LM2)



3747579

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed(BK)

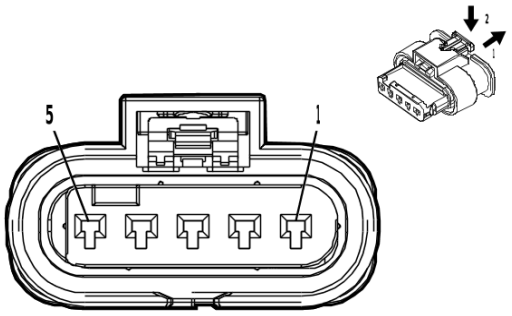
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q20 Intake Airflow Control Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Open Control	I	—
2	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
3	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
4	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—
5	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
6	—	—	—	Not Occupied	—	—

Q22 Intake Manifold Tuning Solenoid Valve (LM2)



3338689

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed(BK)

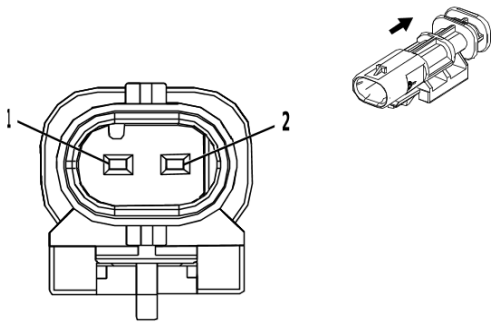
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q22 Intake Manifold Tuning Solenoid Valve (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	Intake Manifold Runner Valve Actuator Control	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.75	BK / BU	1408	Variable Swirl Valve Close Control	I	—
5	0.75	BK / GN	1389	Variable Swirl Valve Open Control	I	—

Q37LFB Front Shock Absorber Actuator - Left (Z95)



2474755

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33207247
Service Connector: 85533165
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

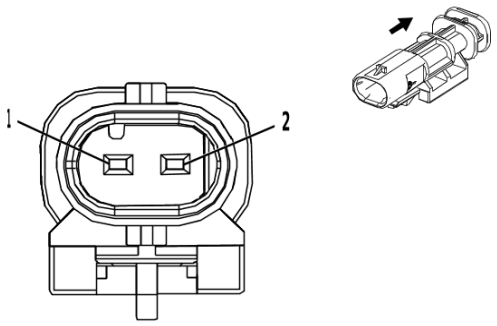
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

Q37LFB Front Shock Absorber Actuator - Left (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	1107	Left Front Shock Absorber Actuator Control	I	—
2	0.5	GY / BU	1113	Left Front Shock Absorber Actuator Control	I	—

Q37LRB Rear Shock Absorber Actuator - Left (Z95)



2474755

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33207247
Service Connector: 85533165
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

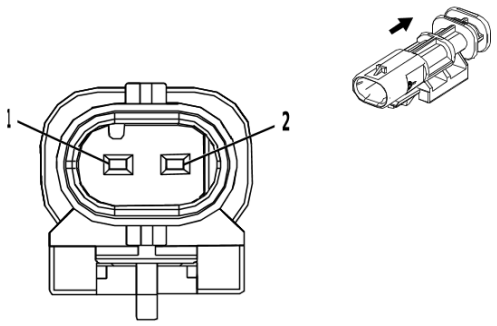
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

Q37LRB Rear Shock Absorber Actuator - Left (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / GY	1114	Left Rear Shock Absorber Actuator Control	I	—
2	0.5	GN / VT	1115	Left Rear Shock Absorber Actuator Control	I	—

Q37RFB Front Shock Absorber Actuator - Right (Z95)



2474755

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33207247
Service Connector: 85533165
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

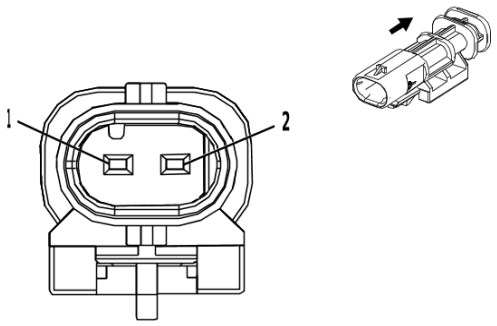
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

Q37RFB Front Shock Absorber Actuator - Right (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / BU	1116	Right Front Shock Absorber Actuator Control	I	—
2	0.5	GY / WH	1117	Right Front Shock Absorber Actuator Control	I	—

Q37RRB Rear Shock Absorber Actuator - Right (Z95)



2474755

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33207247
Service Connector: 85533165
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

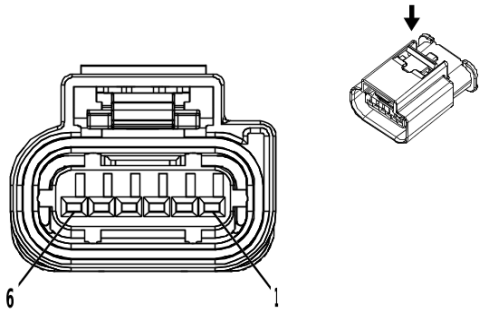
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

Q37RRB Rear Shock Absorber Actuator - Right (Z95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	1118	Right Rear Shock Absorber Actuator Control	I	—
2	0.5	GN / GY	1119	Right Rear Shock Absorber Actuator Control	I	—

Q38 Throttle Body (L87)



3747579

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed(BK)

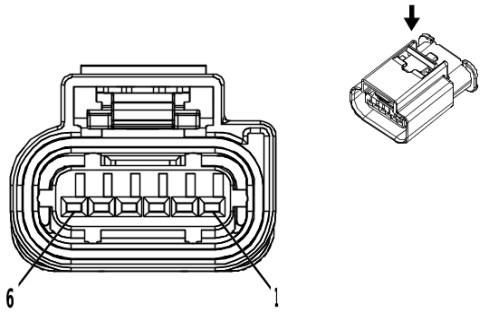
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q38 Throttle Body (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Open Control	I	—
2	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
3	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
4	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	I	—
5	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	I	—
6	—	—	—	Not Occupied	—	—

Q38 Throttle Body (LT4)



3747579

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed(BK)

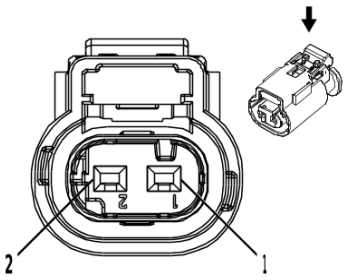
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q38 Throttle Body (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Open Control	I	—
2	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
3	0.5	BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
4	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	I	—
5	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	I	—
6	—	—	—	Not Occupied	—	—

Q44 Engine Oil Pressure Control Solenoid Valve (L87/LT4)



2717066

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 12681015
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

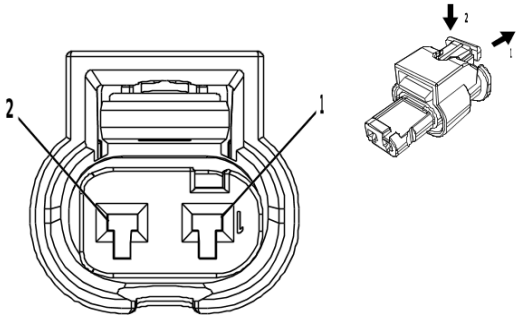
Terminal Part Information

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

Q44 Engine Oil Pressure Control Solenoid Valve (L87/LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	—	BU	179	Engine Oil Pump Control	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, Sealed(BN)

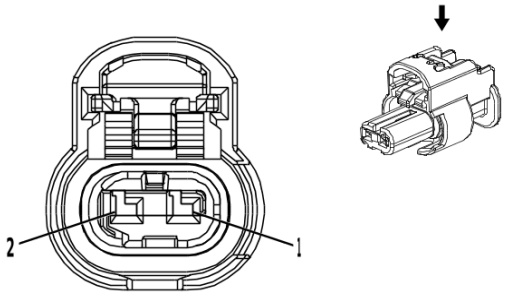
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q44 Engine Oil Pressure Control Solenoid Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / BN	106	Oil Pump Motor Control	I	—
2	—	BU	179	Engine Oil Pump Control	I	—

Q46 Air Conditioning Compressor Solenoid Valve X1



4335931

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

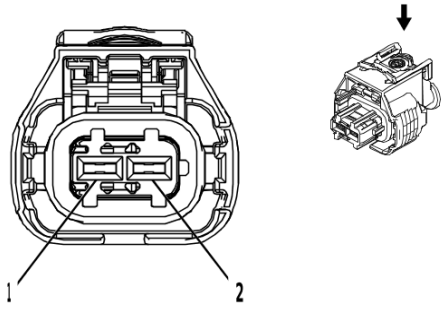
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q46 Air Conditioning Compressor Solenoid Valve X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / YE	7574	A/C Compressor Solenoid Valve Control	I	—
2	0.5	BU / BN	7573	A/C Compressor Solenoid Valve Control	I	—

Q61 Reductant Fluid Injector (LM2)



2577394

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 84941154
Description: 2-Way F 2.8 Series, Sealed(BK)

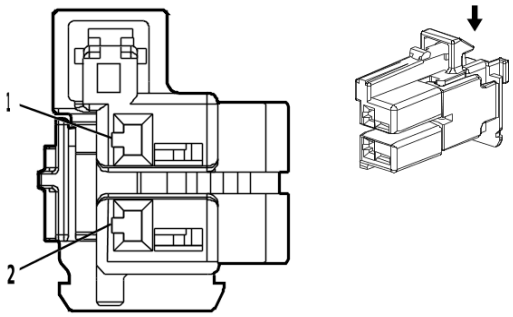
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q61 Reductant Fluid Injector (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN / WH	3100	Diesel Exhaust Fluid Dosing Valve Low Control	I	—
2	0.75	BN	3099	Diesel Exhaust Fluid Dosing Valve High Control	I	—

Q77A Transmission Control Solenoid Valve 1



4672650

Connector Part Information

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

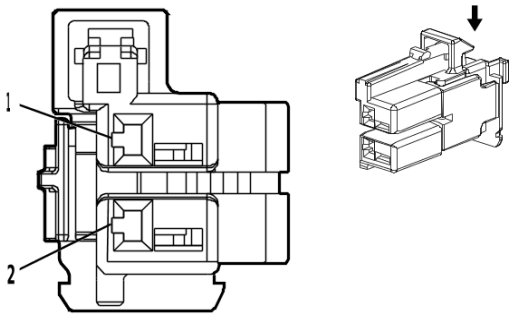
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77A Transmission Control Solenoid Valve 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	BU / GN	6404	Clutch Solenoid Valve E Control	I	—

Q77B Transmission Control Solenoid Valve 2



4672650

Connector Part Information

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

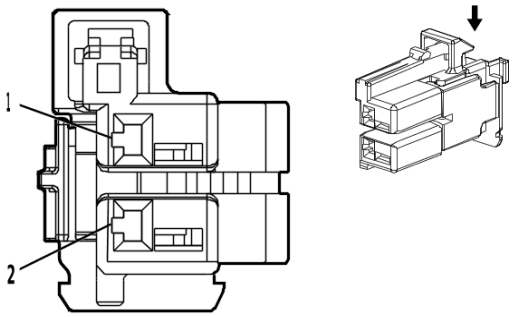
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77B Transmission Control Solenoid Valve 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	GN / BN	6403	Clutch Solenoid Valve D Control	I	—

Q77C Transmission Control Solenoid Valve 3



4672650

Connector Part Information

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

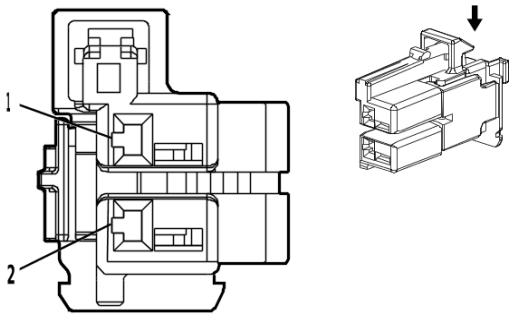
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77C Transmission Control Solenoid Valve 3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	GY	6402	Clutch Solenoid Valve C Control	I	—

Q77D Transmission Control Solenoid Valve 4



4672650

Connector Part Information

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

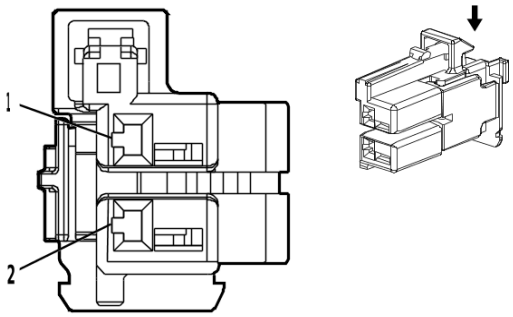
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77D Transmission Control Solenoid Valve 4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	BN / WH	4509	Transmission Clutch F Control	I	—

Q77E Transmission Control Solenoid Valve 5



4672650

Connector Part Information

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

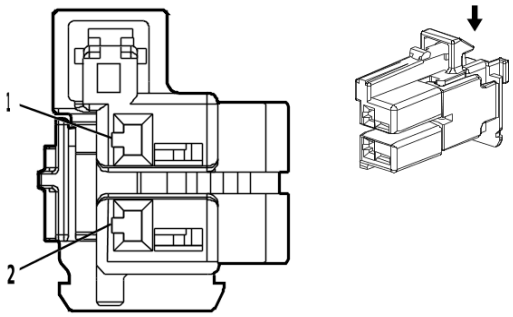
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77E Transmission Control Solenoid Valve 5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	YE / VT	4507	Transmission Clutch H Control	I	—

Q77F Transmission Control Solenoid Valve 6



4672650

Connector Part Information

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

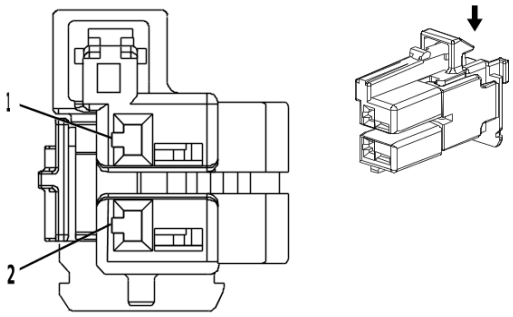
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q77F Transmission Control Solenoid Valve 6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6388	Transmission High Side Driver 2 Control	I	—
2	—	BU / GY	4508	Transmission Clutch G Control	I	—

Q77G Transmission Control Solenoid Valve 7



4364736

Connector Part Information

Harness Type: Transmission Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

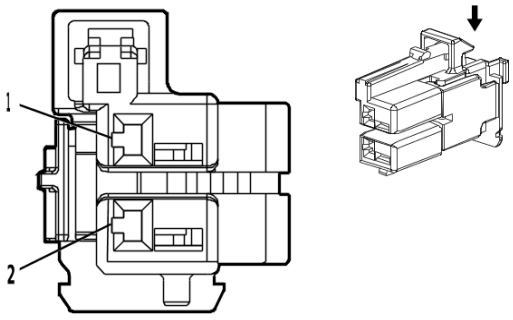
Terminal Part Information

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

Q77G Transmission Control Solenoid Valve 7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	6387	Transmission High Side Driver 1 Control	I	—
2	—	GN / OG	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—

Q77H Transmission Control Solenoid Valve 8



4672683

Connector Part Information

Harness Type: Transmission Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

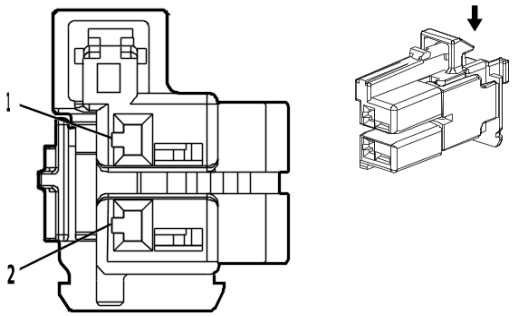
Terminal Part Information

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

Q77H Transmission Control Solenoid Valve 8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
2	0.5	GY / BN	422	Torque Converter Clutch Solenoid Valve Control	I	—
3	0.5	GY / BN	422	Torque Converter Clutch Solenoid Valve Control	I	—

Q77J Transmission Control Solenoid Valve 9



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)

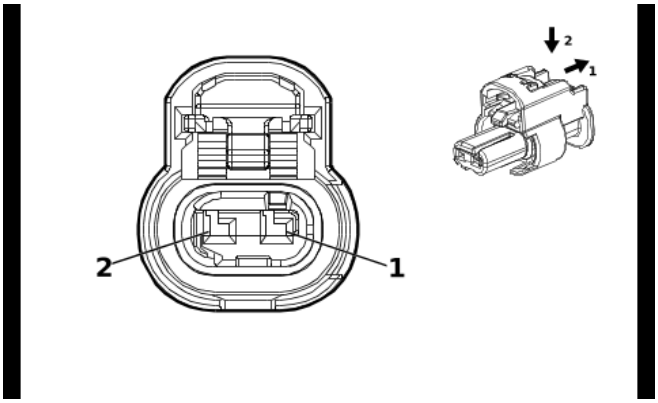
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q77J Transmission Control Solenoid Valve 9

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
2	0.5	VT	7819	Default Disable Solenoid Control	I	—

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

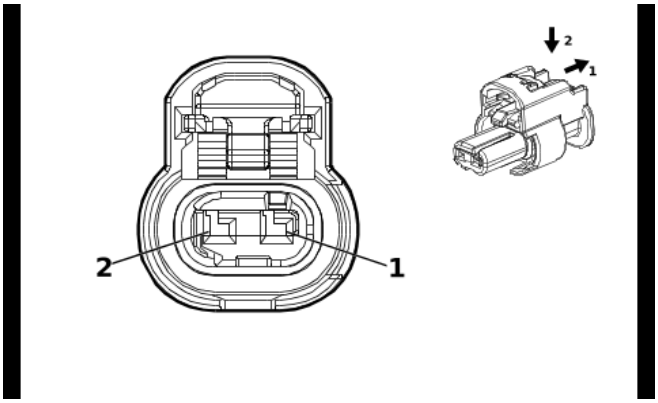
Terminal Part Information

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

Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / BU	2491	Cylinder Shutoff Solenoid Enable Signal 1	I	—
2	—	BU	5491	Cylinder Deactivation Solenoid Valve Control 1	I	—

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

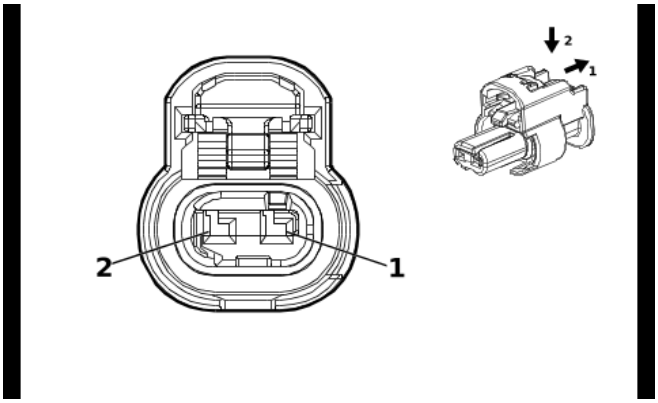
Terminal Part Information

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

Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / GN	2492	Cylinder Shutoff Solenoid Enable Signal 2	I	—
2	—	GN	5492	Cylinder Deactivation Solenoid Valve Control 2	I	—

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

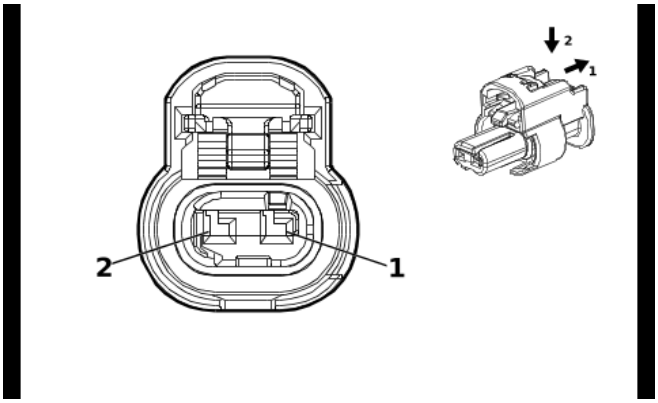
Terminal Part Information

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

Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / GY	2493	Cylinder Shutoff Solenoid Enable Signal 3	I	—
2	—	GY	5493	Cylinder Deactivation Solenoid Valve Control 3	I	—

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

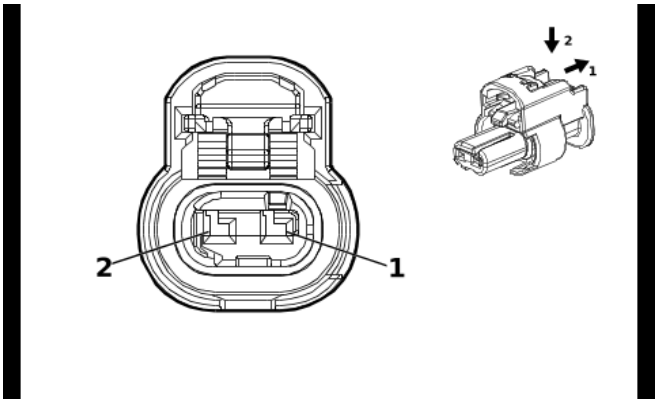
Terminal Part Information

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

Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / GN	2494	Cylinder Shutoff Solenoid Enable Signal 4	I	—
2	—	YE / BU	5494	Cylinder Deactivation Solenoid Valve Control 4	I	—

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

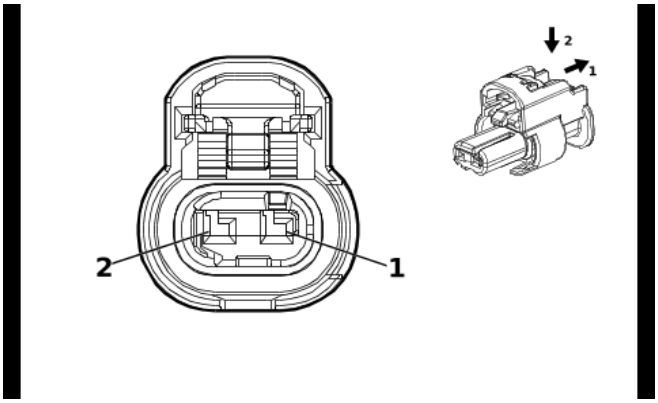
Terminal Part Information

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

Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / VT	2495	Cylinder Shutoff Solenoid Enable Signal 5	I	—
2	—	VT	5495	Cylinder Deactivation Solenoid Valve Control 5	I	—

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

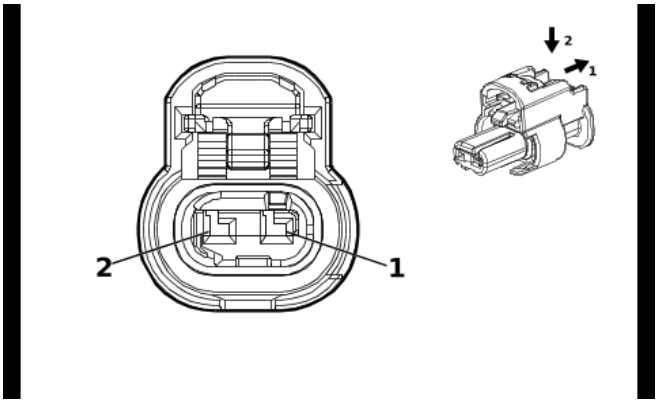
Terminal Part Information

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

Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / BN	2496	Cylinder Shutoff Solenoid Enable Signal 6	I	—
2	—	BN	5496	Cylinder Deactivation Solenoid Valve Control 6	I	—

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

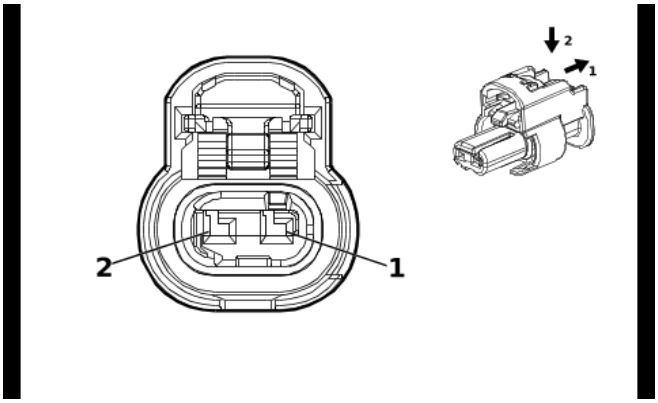
Terminal Part Information

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

Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN / GY	2497	Cylinder Shutoff Solenoid Enable Signal 7	I	—
2	—	WH	5497	Cylinder Deactivation Solenoid Valve Control 7	I	—

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L87)



4036662

Connector Part Information

Harness Type: Valve Lifter
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

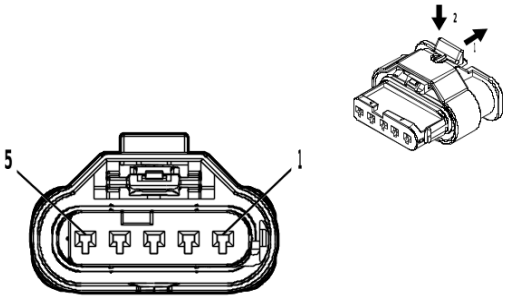
Terminal Part Information

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

Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / YE	2498	Cylinder Shutoff Solenoid Enable Signal 8	I	—
2	—	YE	5498	Cylinder Deactivation Solenoid Valve Control 8	I	—

Q97 Engine Coolant Flow Control Valve (LM2)



4994456

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed(NA)

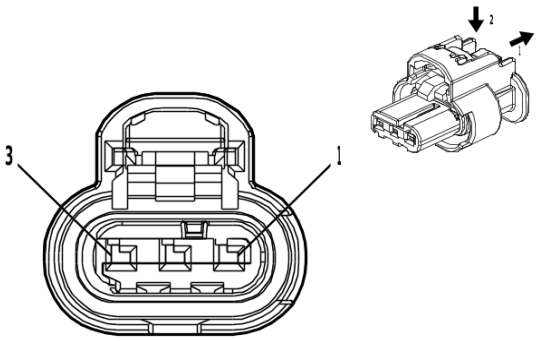
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q97 Engine Coolant Flow Control Valve (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	2976	Coolant Diverter Valve Actuator Control Open	I	—
2	0.75	BU / BN	2977	Coolant Diverter Valve Actuator Control Close	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
4	0.5	BU / GY	2978	Coolant Diverter Valve Position Signal	I	—
5	0.5	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

Q97B Engine Coolant Flow Control Valve - Block (LM2)



4778903

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

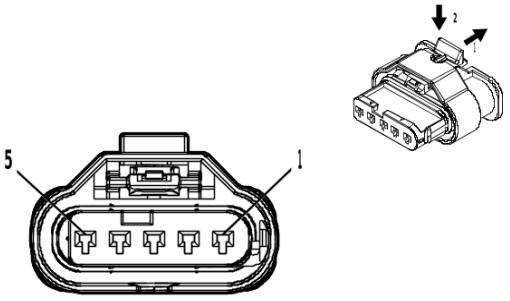
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q97B Engine Coolant Flow Control Valve - Block (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / BN	2732	Engine Control Module LIN Bus 4	I	—
2	0.5	BK	6550	Ground	I	—
3	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—

Q97M Engine Coolant Flow Control Valve - Main (LM2)



4994456

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed(NA)

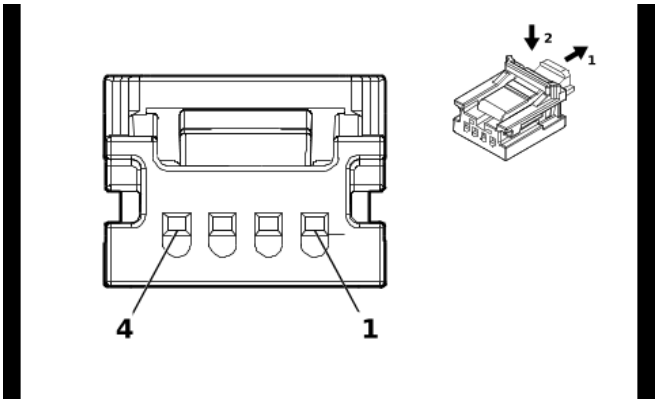
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q97M Engine Coolant Flow Control Valve - Main (LM2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / BN	2972	Coolant Flow Control Actuator Control Close	I	—
2	0.75	GY / BU	2971	Coolant Flow Control Actuator Control Open	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	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	—

S2L Automatic Transmission Manual Shift Auxiliary Position Switch - Left



5493278

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)

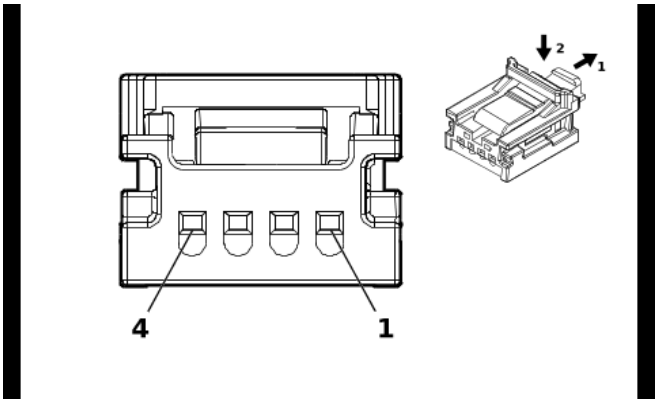
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S2L Automatic Transmission Manual Shift Auxiliary Position Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	6051	Steering Wheel Ground	I	—
2	—	—	—	Not Occupied	—	—
3	—	YE / BU	6855	Transmission Tap Down Switch Signal	I	—
4	—	—	—	Not Occupied	—	—

S2R Automatic Transmission Manual Shift Auxiliary Position Switch - Right



5493584

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507115
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Mini 50 Series(GY)

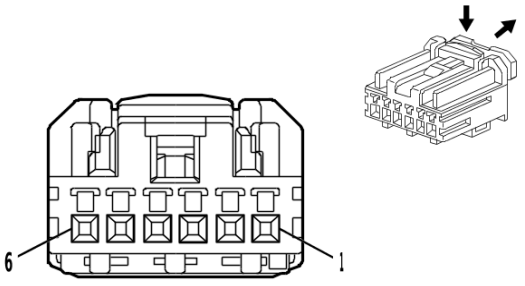
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S2R Automatic Transmission Manual Shift Auxiliary Position Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	6051	Steering Wheel Ground	I	—
2	—	—	—	Not Occupied	—	—
3	—	YE / BU	6855	Transmission Tap Down Switch Signal	I	—
4	—	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—

S13D Door Lock Switch - Driver



4650256

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series(BK)

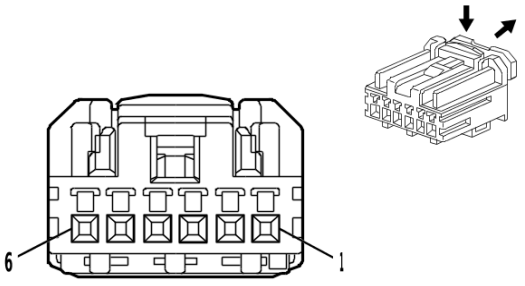
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

S13D Door Lock Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / GY	4784	Left Front Door LED Backlight Dimming Control	I	—
2	0.35	BN / YE	2771	Left Front Door Lock Switch Lock Signal	I	—
3	0.35	BN / WH	2772	Left Front Door Lock Switch Unlock Signal	I	—
4	0.35	BK	1150	Ground	I	—
5	0.35	VT / YE	4244	Left Front Door Lock Indicator Control	I	—
6	—	—	—	Not Occupied	—	—

S13LR Door Lock Switch - Left Rear



4650256

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series(BK)

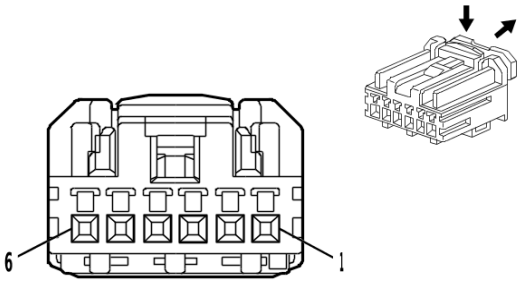
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

S13LR Door Lock Switch - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
2	0.35	VT / BU	4001	Left Rear Door Lock Switch Lock Control	I	—
3	0.35	WH / YE	4002	Left Rear Door Lock Switch Unlock Control	I	—
4	0.35	BK	1150	Ground	I	—
5	0.35	VT / WH	6675	Left Rear Door Lock Indicator Control	I	—
6	—	—	—	Not Occupied	—	—

S13P Door Lock Switch - Passenger



4650256

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series(BK)

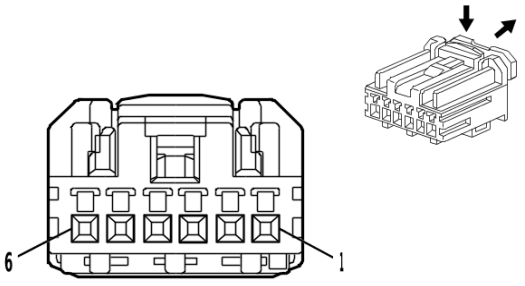
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

S13P Door Lock Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / VT	4638	LED Backlight Dimming Control Right Front Door	I	—
2	0.35	YE / VT	2773	Right Front Door Lock Switch Lock Control	I	—
3	0.35	BN / VT	2774	Right Front Door Lock Switch Unlock Control	I	—
4	0.35	BK	1250	Ground	I	—
5	0.35	YE / BU	4245	Right Front Door Lock Indicator Control	I	—
6	—	—	—	Not Occupied	—	—

S13RR Door Lock Switch - Right Rear



4650256

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series(BK)

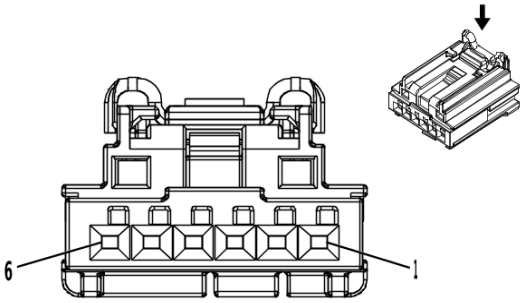
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

S13RR Door Lock Switch - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
2	0.35	GN / BN	4003	Right Rear Door Lock Switch Lock Control	I	—
3	0.35	BU / GY	4004	Right Rear Door Lock Switch Unlock Control	I	—
4	0.35	BK	1250	Ground	I	—
5	0.5	YE / BK	6677	Right Rear Door Lock Indicator Control	II	—
6	—	—	—	Not Occupied	—	—

S26 Hazard Warning Switch



3960313

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

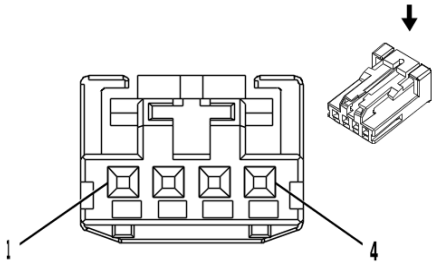
Terminal Part Information

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

S26 Hazard Warning Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	I	—
2	0.5	GY / YE	7543	Hazard Warning Indicator LED Dimming Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GN / WH	111	Hazard Warning Switch Signal	I	—
5 - 6	—	—	—	Not Occupied	—	—

S32LF Front Seat Heater Switch - Left (KA1&KQV)



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

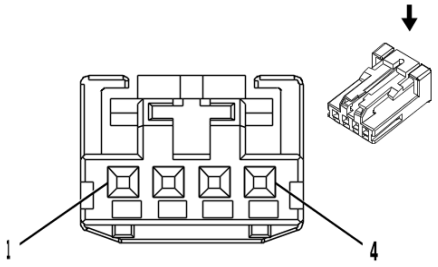
Terminal Part Information

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

S32LF Front Seat Heater Switch - Left (KA1&KQV)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	1940	Battery Positive Voltage	I	—
2	0.35	GN / BK	2858	Body Control Module LIN Bus 12	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK / WH	1151	Signal Ground	I	—

S32RF Front Seat Heater Switch - Right



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

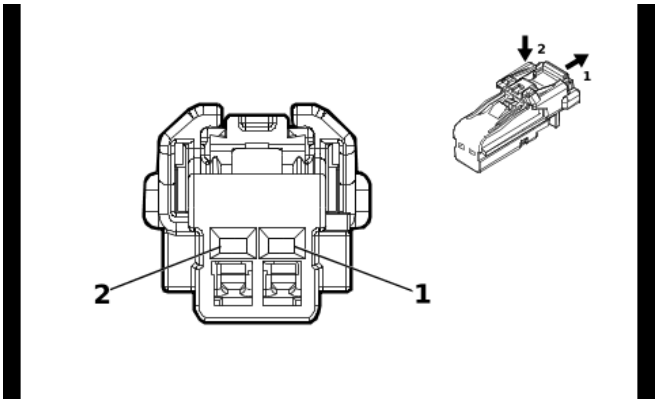
Terminal Part Information

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

S32RF Front Seat Heater Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / BU	5240	Battery Positive Voltage	I	—
2	0.35	GN / BK	2858	Body Control Module LIN Bus 12	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK / WH	1251	Signal Ground	I	—

S33 Steering Wheel Horn Contact



4115691

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13532422
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

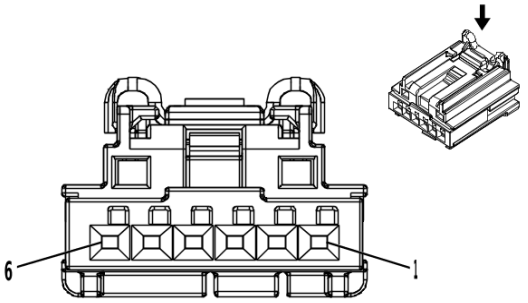
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

S33 Steering Wheel Horn Contact

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	6051	Steering Wheel Ground	I	—
2	—	GN / WH	3287	Horn Switch Signal	I	—

S36 Dimmer Switch



3960313

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series(BK)

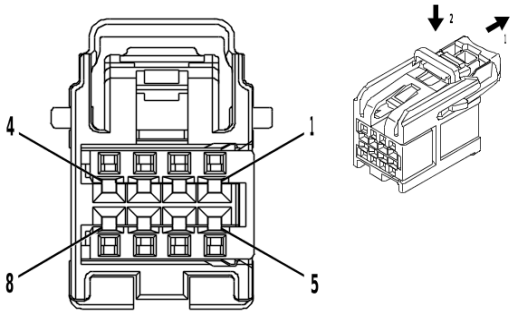
Terminal Part Information

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

S36 Dimmer Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / YE	5005	Instrument Panel Lamp Dimmer Switch Low Reference	I	—
2	0.35	YE / GY	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK	1850	Ground	I	—
5	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
6	—	—	—	Not Occupied	—	—

S38 On/Off Vehicle Switch



4232228

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series(GY)

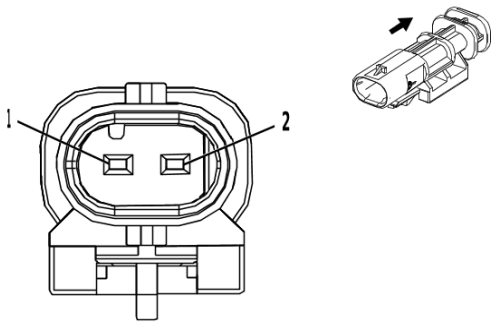
Terminal Part Information

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

S38 On/Off Vehicle Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BK	5719	Ignition Mode Switch Start LED Signal	I	—
2	0.35	BN / BK	5720	Ignition Mode Switch Accessory LED Signal	I	—
3	0.5	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 1	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	BK / GY	3559	Passive Start Switch 2 Low Reference	I	—
8	0.35	GN / BK	3558	Passive Start Switch Signal 2	I	—

S45A Liftgate Release Switch - Exterior



2474755

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness
OEM Connector: 33207247
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

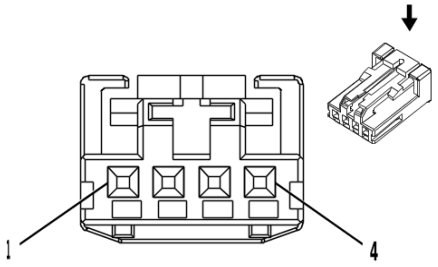
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-17 (L-GN)	No Tool Required

S45A Liftgate Release Switch - Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / BU	5797	Rear Closure Handle Switch Open Signal	I	—
2	0.35	BK	2050	Ground	I	—

S47D Front Seat Adjuster Memory Switch - Driver



2717162

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

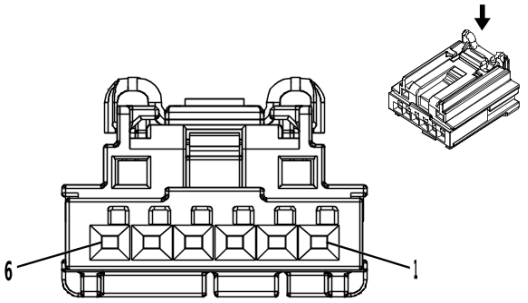
Terminal Part Information

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

S47D Front Seat Adjuster Memory Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / GY	4784	Left Front Door LED Backlight Dimming Control	I	—
2	0.35	BK / WH	1151	Signal Ground	I	—
3	0.35	WH	615	Seat Memory Switch Signal 1	I	—
4	0.35	BU / GN	614	Seat Memory Switch Set Signal	I	—

S64D Front Seat Adjuster Switch - Driver



3960313

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 2035363-4
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

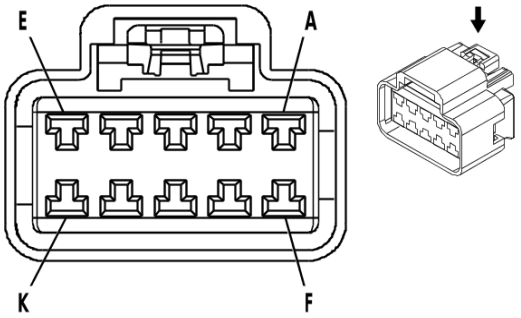
Terminal Part Information

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

S64D Front Seat Adjuster Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / BN	2240	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	GN / GY	3758	Driver Seat Adjuster Memory Module LIN Bus 2	I	AVK
	0.35	GN / GY	3758	Driver Seat Adjuster Memory Module LIN Bus 2	I	- AVK
4	0.5	BK	1150	Ground	I	—
5	0.5	BU / YE	2818	Driver Seat Auxiliary Adjustment Switch Signal	I	—
6	0.5	BK / VT	2817	Auxiliary Driver Seat Adjustment Switch Low Reference	I	—

S64P Front Seat Adjuster Switch - Passenger



623046

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 35058909
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series(BK)

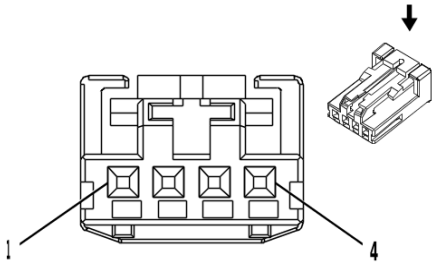
Terminal Part Information

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

S64P Front Seat Adjuster Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BU / WH	289	Passenger Seat Rear Vertical Motor Down Control	I	—
B	1.5	YE / BU	290	Passenger Seat Horizontal Motor Rearward Control	I	—
C	1.5	YE / WH	296	Passenger Seat Horizontal Motor Forward Control	I	—
D	1.5	BU / BN	77	Passenger Seat Recline Motor Rearward Control	I	—
E	2.5	BK	1250	Ground	I	—
F	1.5	GN / BU	298	Passenger Seat Front Vertical Motor Down Control	I	—
G	2.5	RD / YE	7440	Battery Positive Voltage	I	—
H	1.5	GN	76	Passenger Seat Recline Motor Forward Control	I	—
J	1.5	GN / WH	288	Passenger Seat Rear Vertical Motor Up Control	I	—
K	1.5	GN / VT	297	Passenger Seat Front Vertical Motor Up Control	I	—

S65D Front Seat Lumbar Switch - Driver



2717162

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

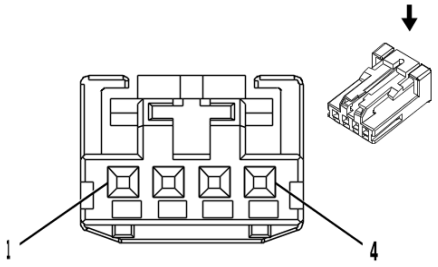
Terminal Part Information

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

S65D Front Seat Lumbar Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BU / YE	2818	Driver Seat Auxiliary Adjustment Switch Signal	I	—
4	0.5	BK / VT	2817	Auxiliary Driver Seat Adjustment Switch Low Reference	I	—

S65P Front Seat Lumbar Switch - Passenger (A45&AKE&AVU)



2717162

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 1-936119-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

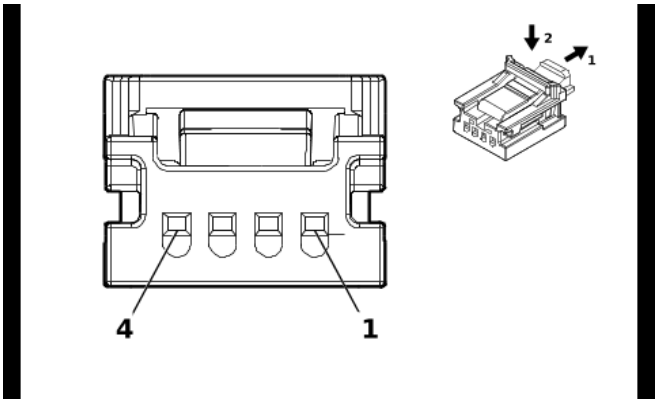
Terminal Part Information

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

S65P Front Seat Lumbar Switch - Passenger (A45&AKE&AVU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	YE / GN	1068	Passenger Seat Lumbar Support Switch Analog Signal	I	—
4	0.5	BK / BU	2194	Passenger Seat Position Switch Low Reference	I	—

S70E Radio Favorites Switch - Steering Wheel



5493278

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)

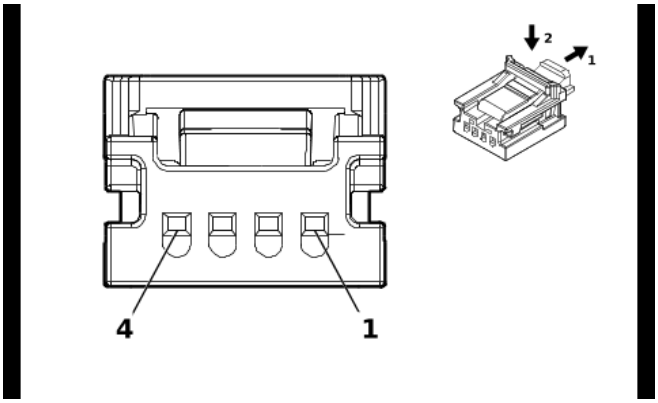
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70E Radio Favorites Switch - Steering Wheel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / BK	3893	Steering Wheel LED Backlight Dimming Control	I	—
2	—	WH / YE	4313	Radio Favorite Forward Switch Signal	I	—
3	—	YE / BU	4312	Radio Favorite Back Switch Signal	I	—
4	—	BK / WH	6051	Steering Wheel Ground	I	—

S70F Radio Volume Switch - Steering Wheel



5493278

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)

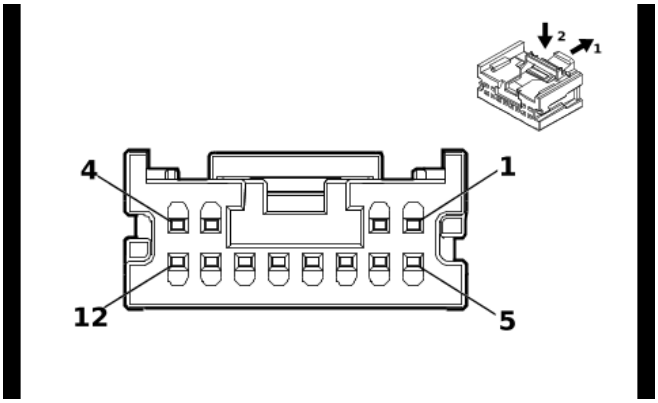
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70F Radio Volume Switch - Steering Wheel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	6051	Steering Wheel Ground	I	—
2	—	BU	4315	Radio Volume Up Switch Signal	I	—
3	—	GY / BN	4314	Radio Volume Down Switch Signal	I	—
4	—	YE / BK	3893	Steering Wheel LED Backlight Dimming Control	I	—

S70L Cruise Control Switch



4539608

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507122
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series(GY)

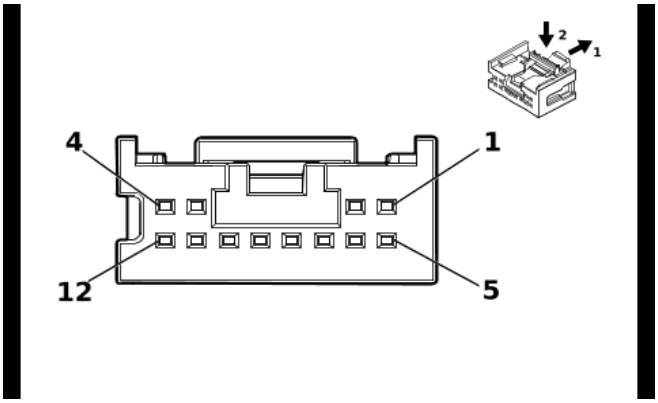
Terminal Part Information

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

S70L Cruise Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / GN	5140	Battery Positive Voltage	I	—
2	—	YE / BK	3893	Steering Wheel LED Backlight Dimming Control	I	—
3	—	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	—	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
5	—	—	—	Not Occupied	—	—
6	—	BK / WH	6051	Steering Wheel Ground	I	—
7	—	BN / WH	5884	Steering Wheel Heating Switch LED Control	I	—
8	—	YE / GY	5883	Steering Wheel Heating Switch Signal	I	—
9	—	—	—	Not Occupied	—	—
10	—	BK / VT	1449	Steering Wheel Resistor Ladder Low Reference	I	—
11	—	VT / WH	2505	Communication Voice Switch Signal	I	—
12	—	GN / GY	2504	Communication Hang Up Switch Signal	I	—

S70R Radio Control Switch - Steering Wheel



5634582

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507114
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series(GY)

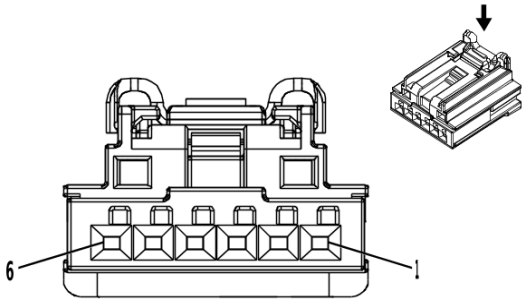
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S70R Radio Control Switch - Steering Wheel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / GN	5140	Battery Positive Voltage	I	—
2	—	—	—	Not Occupied	—	—
3	—	GN / BK	3894	Instrument Panel Cluster Control Module LIN Bus 1	I	—
4	—	VT / WH	2505	Communication Voice Switch Signal	I	—
5	—	GN / GY	2504	Communication Hang Up Switch Signal	I	—
6	—	BK / WH	6051	Steering Wheel Ground	I	—
7	—	WH / YE	4313	Radio Favorite Forward Switch Signal	I	—
8	—	YE / BU	4312	Radio Favorite Back Switch Signal	I	—
9	—	—	—	Not Occupied	—	—
10	—	BU	4315	Radio Volume Up Switch Signal	I	—
11	—	GY / BN	4314	Radio Volume Down Switch Signal	I	—
12	—	—	—	Not Occupied	—	—

S71 Steering Column Tilt Wheel and Telescope Switch



4145138

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33251915
Service Connector: 19356359
Description: 6-Way F 0.64 Generation Y Series(BK)

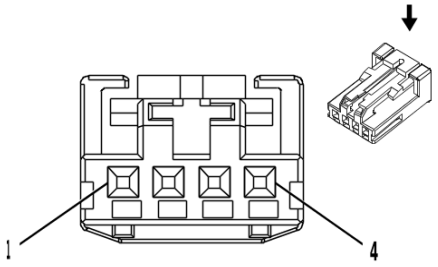
Terminal Part Information

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

S71 Steering Column Tilt Wheel and Telescope Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / YE	2094	Steering Column Tilt and Telescope Switch Forward Signal	I	—
2	0.35	YE / BN	2097	Steering Column Tilt and Telescope Switch Down Signal	I	—
3	0.35	BN / GY	2096	Steering Column Tilt and Telescope Switch Up Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	GN / BN	2095	Steering Column Tilt and Telescope Switch Rearward Signal	I	—
6	0.35	VT / BK	2020	Steering Column Tilt and Telescope Switch Feedback Signal	I	—

S76 Trailer Brake Control Switch



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13599500
Service Connector: 84867143
Description: 4-Way F 0.64 Micro-Quadlock Series(YE)

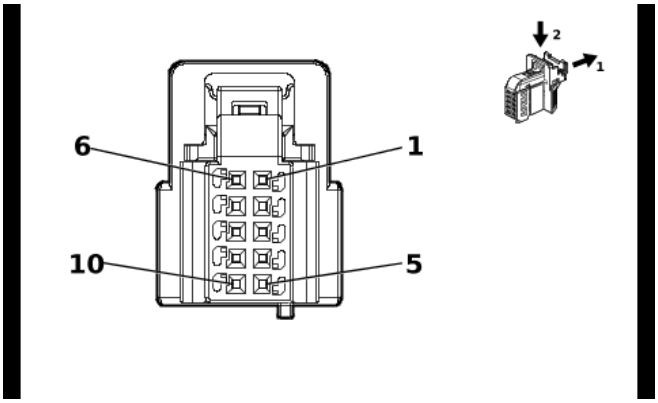
Terminal Part Information

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

S76 Trailer Brake Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / VT	4040	Battery Positive Voltage	I	—
2	0.35	GN / BU	2733	Brake System Control Module LIN Bus 2	I	—
3	0.35	BK	1850	Ground	I	—
4	—	—	—	Not Occupied	—	—

S78 Turn Signal Switch



5838155

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35380960
Service Connector: 13518417
Description: 10-Way F 0.64 MQS Series(BK)

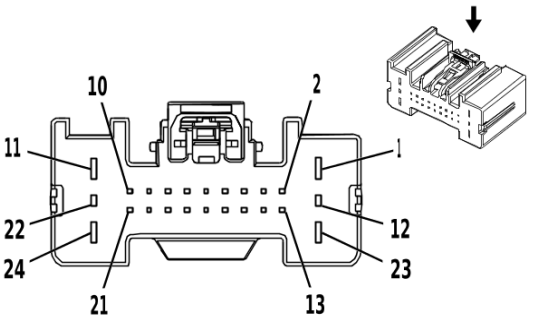
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

S78 Turn Signal Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / GN	2915	Left Turn Signal Switch Signal	I	—
2	0.35	VT / BU	2916	Right Turn Signal Switch Signal	I	—
3	0.35	BK	1850	Ground	I	—
4	0.35	GN / BN	306	Headlamp Switch Off Signal	I	—
5	0.35	GN / GY	13	Headlamp Switch Park Lamp Signal	I	—
6	0.35	YE / BN	307	Headlamp Switch Flash Signal	I	—
7	0.35	WH	524	High Beam Select Switch High Beam Signal	I	—
8	0.35	BU / GY	187	Rear Fog Lamp Switch Signal	I	—
9	0.35	WH / VT	103	Headlamp Switch On Signal	I	—
10	0.35	GY / BN	3904	Auto High Beam Assist Switch Signal	I	—

S79D Front Side Door Window Control Switch - Driver X1



2871905

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64 GEN-Y, 1.5, 2.8 YESC Series(BK)

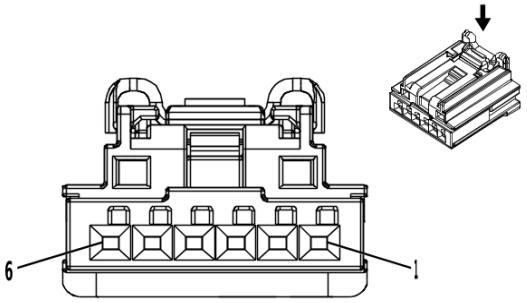
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-64B (L-BU)	No Tool Required

S79D Front Side Door Window Control Switch - Driver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / BN	2764	Window Switch Left Front Down Signal	II	—
2	0.35	GN	2766	Power Window Switch Left Front Express Signal	III	—
3	0.35	BN / YE	2771	Left Front Door Lock Switch Lock Signal	III	—
4	0.35	BN / WH	2772	Left Front Door Lock Switch Unlock Signal	III	—
5	—	—	—	Not Occupied	—	—
6	0.35	VT / YE	4244	Left Front Door Lock Indicator Control	III	—
7	0.35	BN / GY	4784	Left Front Door LED Backlight Dimming Control	III	—
8	0.35	GY / YE	1760	Left Side Object Detection LED Control	III	—
9	0.35	WH / GN	2786	Left Front Mirror Motor Fold In Control	III	—
10	0.35	YE / BN	2789	Left Front Mirror Motor Common Control	III	—
11	0.5	BK	1150	Ground	II	—
12	0.35	GY / WH	2785	Left Front Mirror Motor Fold Out Control	I	—
13 - 17	—	—	—	Not Occupied	—	—
18	0.35	VT / BU	2788	Left Front Mirror Motor Up [+] Down [-] Control	III	—
19	0.35	BN / BK	2790	Left Front Mirror Motor Right [+] Left [-] Control	III	—
20	—	—	—	Not Occupied	—	—
21	0.35	GN / YE	6134	Body Control Module LIN Bus 3	III	—
22	0.35	WH	606	Left Outside Rearview Mirror Heater Control	I	—
23	0.35	GY / GN	2763	Window Switch Left Front Up Signal	II	—
24	0.5	RD / VT	1940	Battery Positive Voltage	II	—

S79D Front Side Door Window Control Switch - Driver X2



4145138

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33251915
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

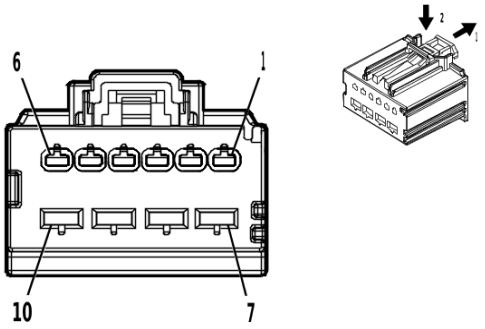
Terminal Part Information

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

S79D Front Side Door Window Control Switch - Driver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / YE	2792	Left Front Mirror Position Sensor Left [-] Right [+] Signal	I	—
2	0.35	GY / BN	2787	Left Front Mirror Position Sensor Up [+] Down [-] Signal	I	—
3	0.35	VT / RD	2791	Left Front Mirror Position Sensor High Reference	I	—
4	0.35	BK / BN	673	Left Outside Rearview Mirror Position Sensor Low Reference	I	—
5 - 6	—	—	—	Not Occupied	—	—

S79LR Rear Side Door Window Switch - Left



5035058

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(BK)

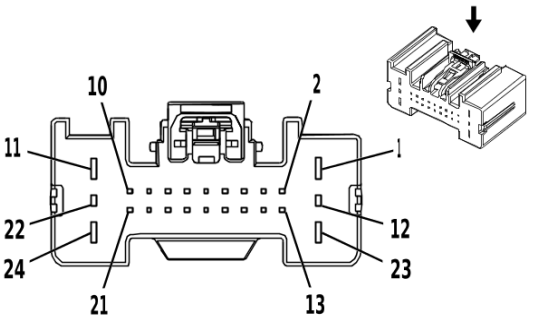
Terminal Part Information

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

S79LR Rear Side Door Window Switch - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN / GY	1185	Window Switch Left Rear Up Signal	I	—
4	0.35	BN / BU	1187	Window Switch Left Rear Down Signal	I	—
5	0.35	GY / GN	5048	Window Switch Left Rear Express Signal	I	—
6	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
7 - 10	—	—	—	Not Occupied	—	—

S79P Front Side Door Window Switch - Passenger



2871905

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64 GEN-Y, 1.5, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-64B (L-BU)	No Tool Required

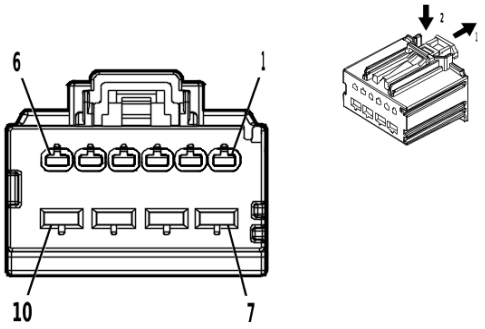
S79P Front Side Door Window Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	II	—
2	0.35	YE / RD	2799	Right Front Mirror Position Sensor High Reference	III	—
3	0.35	GN / BK	2798	Right Front Mirror Motor Right [+] Left [-] Control	III	—
4	0.35	YE / VT	2796	Right Front Mirror Motor Up [+] Down [-] Control	III	—
5	—	—	—	Not Occupied	—	—
6	0.35	YE / BU	4245	Right Front Door Lock Indicator Control	III	—
7	0.35	GY / VT	4638	LED Backlight Dimming Control Right Front Door	III	—
8	0.35	GY	1761	Right Side Object Detection LED Control	III	—
9	0.35	BU / GY	2794	Right Front Mirror Motor Fold In Control	III	—
10	0.35	YE / WH	2793	Right Front Mirror Motor Fold Out Control	III	—
11	0.35	GN	1184	Window Switch Right Front Up Signal	II	—
12	0.35	BN / VT	607	Right Outside Rearview Mirror Heater Control	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	GN / YE	6134	Body Control Module LIN Bus 3	III	—
15	0.35	VT / WH	2800	Right Front Mirror Position Sensor Left [-] Right [+] Signal	III	—
16	0.35	BU / YE	2795	Right Front Mirror Position Sensor Up [+] Down [-] Signal	III	—
17	0.35	YE / VT	2773	Right Front Door Lock Switch Lock Control	III	—

S79P Front Side Door Window Switch - Passenger (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	BN / VT	2774	Right Front Door Lock Switch Unlock Control	III	—
19	—	—	—	Not Occupied	—	—
20	0.35	VT / GY	2765	Window Switch Right Front Express Signal	III	—
21	0.35	WH	2797	Right Front Mirror Motor Common Control	III	—
22	0.35	BK / GN	675	Right Outside Rearview Mirror Position Sensor Low Reference	I	—
23	0.5	RD / BU	5240	Battery Positive Voltage	II	—
24	0.35	BN	5295	Window Switch Right Front Down Signal	II	—

S79RR Rear Side Door Window Switch - Right



5035058

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35152553
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 MX Series(BK)

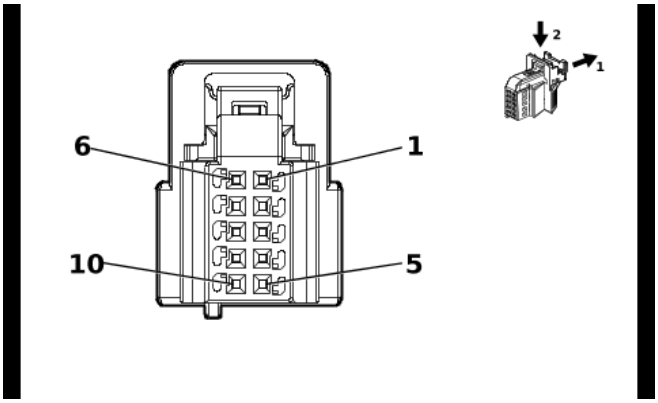
Terminal Part Information

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

S79RR Rear Side Door Window Switch - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN / GY	1186	Window Switch Right Rear Up Signal	I	—
4	0.35	BN / BU	1188	Window Switch Right Rear Down Signal	I	—
5	0.35	WH / GN	5049	Window Switch Right Rear Express Signal	I	—
6	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
7 - 10	—	—	—	Not Occupied	—	—

S82 Windshield Wiper and Windshield Washer Switch



5837272

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35549465
Service Connector: 13518418
Description: 10-Way F 0.64 MQS Series(GY)

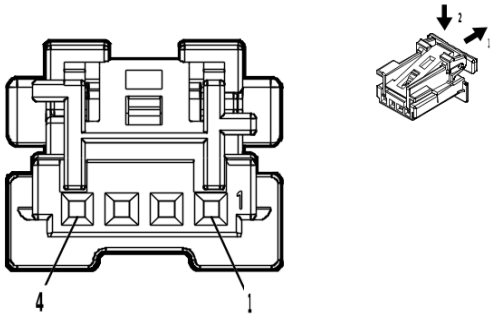
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

S82 Windshield Wiper and Windshield Washer Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK / GY	6009	Windshield Wiper Switch Low Reference	I	—
2	0.35	GY	1715	Windshield Wiper Switch High Signal	I	—
3	0.35	YE / BU	1714	Windshield Wiper Switch Low Signal	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	BN / BU	391	Rear Window Wiper Switch Signal	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	WH / BK	94	Windshield Washer Switch Signal	I	—
8 - 10	—	—	—	Not Occupied	—	—

S91 Parking Brake Control Switch



4997407

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35082250
Service Connector: 19371192
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

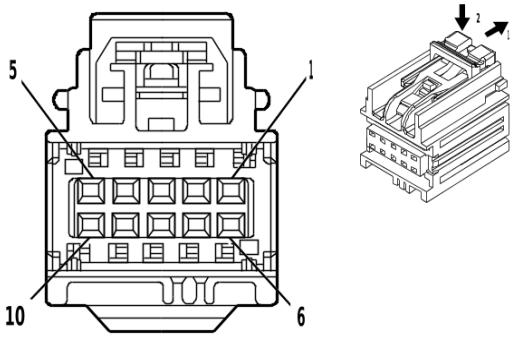
Terminal Part Information

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

S91 Parking Brake Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / GN	5140	Battery Positive Voltage	I	—
2	0.5	GN / YE	2731	Brake System Control Module LIN Bus 1	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	1851	Signal Ground	I	—

S124 Engine Stop/Start Mode Control Switch



4822741

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33353271
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(BK)

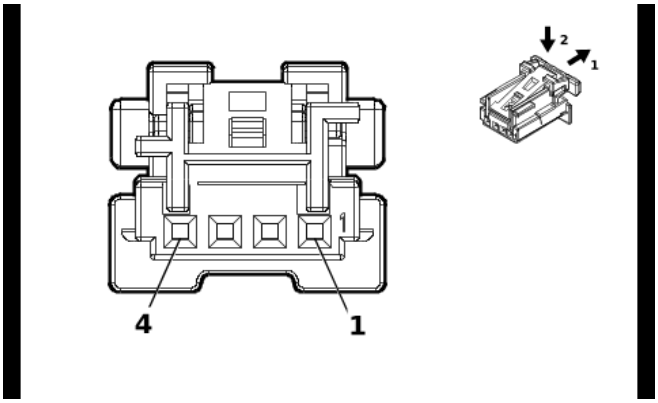
Terminal Part Information

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

S124 Engine Stop/Start Mode Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	—
2	0.35	YE / BN	1428	Automatic Vehicle Hold Switch Signal	I	—
3	0.35	GN / GY	2431	Automatic Vehicle Hold Indicator Control	I	—
4	0.35	WH	3152	Lane Departure Warning Indicator Control	I	—
5	—	—	—	Not Occupied	—	—
6	0.35 0.35	GN WH / GN	1110 2911	Stop/Start Indicator Control Driver Mode 1 Indicator Control	I I	LM2/ L87 LT4
7	0.35 0.35	BU BU / GY	1111 4990	Stop/Start Switch Signal Driver Mode 1 Switch Signal	I I	LM/ L87 LT4
8	—	—	—	Not Occupied	—	—
9	0.5	BK	1250	Ground	I	—
10	0.5	YE	6817	LED Backlight Dimming Control 1	I	—

S126 Ride Control Switch



5490483

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35212777
Service Connector: 84941153
Description: 4-Way F 0.64 Micro-Quadlock Series(BN)

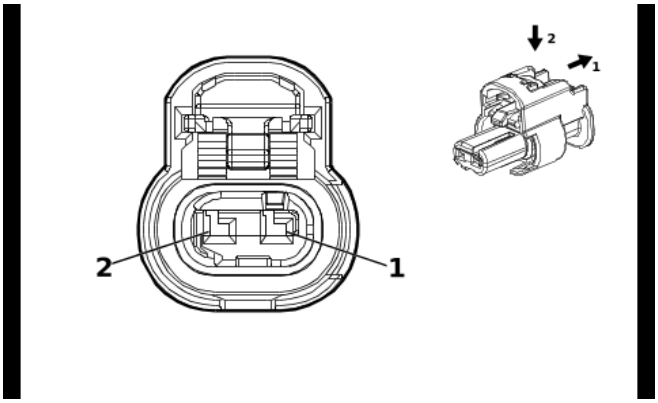
Terminal Part Information

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

S126 Ride Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / BN	2203	Enhanced Driver Mode 2 Switch Signal	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	BK / VT	1449	Steering Wheel Resistor Ladder Low Reference	I	—
4	0.35	BK	1850	Ground	I	—

S141 Liftgate Window Release Switch - Exterior



4649903

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

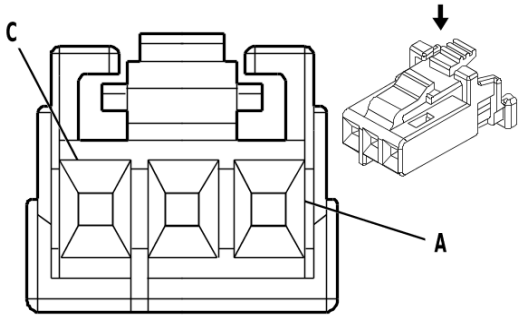
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

S141 Liftgate Window Release Switch - Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY / GN	6190	Liftgate Window/Rear Compartment Lid, Exterior Unlatch Signal	I	—
2	0.35	BK	2050	Ground	I	—

S143L Rear Seat Back Folding Switch - 2nd Row Left (ATN/ATT)



1376712

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15417063
Service Connector: 88987857
Description: 3-Way F 0.64 Micro-Pack Series(BK)

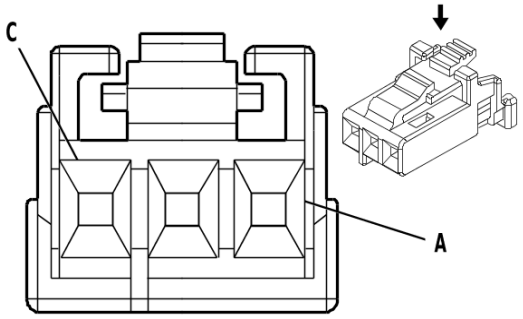
Terminal Part Information

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

S143L Rear Seat Back Folding Switch - 2nd Row Left (ATN/ATT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	YE / BK	5813	Park Enable Control	I	—
B	—	—	—	Not Occupied	—	—
C	0.5	GN	6808	Left Rear Folding Seat Motor Control	I	—

S143R Rear Seat Back Folding Switch - 2nd Row Right (ATN/ATT)



1376712

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15417063
Service Connector: 88987857
Description: 3-Way F 0.64 Micro-Pack Series(BK)

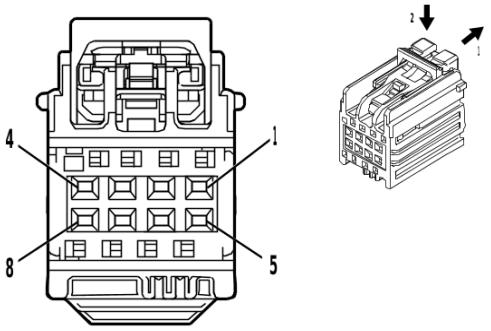
Terminal Part Information

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

S143R Rear Seat Back Folding Switch - 2nd Row Right (ATN/ATT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	YE / BK	5813	Park Enable Control	I	—
B	—	—	—	Not Occupied	—	—
C	0.5	BN / WH	6809	Right Rear Folding Seat Motor Control	I	—

S144A Rear Seat Back Folding Switch - 2nd Row Rear Compartment (ATN/ATT)



4808677

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35015626
Service Connector: 19368548
Description: 8-Way F 0.64 YESC Series(BK)

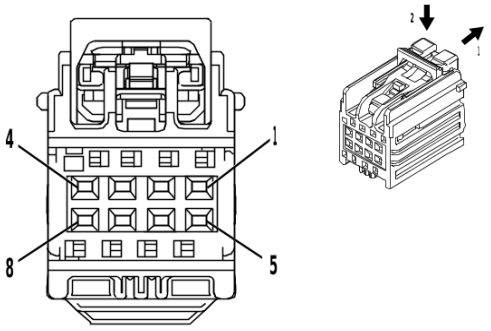
Terminal Part Information

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

S144A Rear Seat Back Folding Switch - 2nd Row Rear Compartment (ATN/ATT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	YE / BK	5813	Park Enable Control	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GN	6808	Left Rear Folding Seat Motor Control	I	—
5	0.75	BN / WH	6809	Right Rear Folding Seat Motor Control	I	—
6 - 8	—	—	—	Not Occupied	—	—

S144B 3rd Row Seat Folding Switch - Rear Compartment (AS8)



4280711

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33183559
Service Connector: 19355209
Description: 8-Way F Kaizen Series(GY)

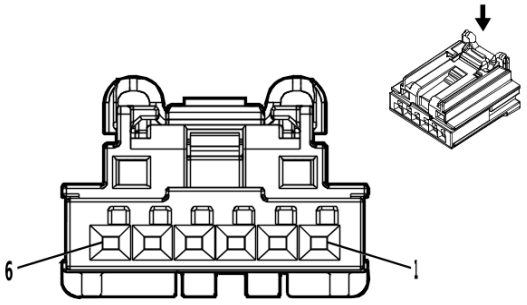
Terminal Part Information

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

S144B 3rd Row Seat Folding Switch - Rear Compartment (AS8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	2698	Left 3rd Row Seat Recline Switch Signal	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK / BU	5474	3rd Row Seat Sensor Low Reference	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	GN / GY	2699	Right 3rd Row Seat Recline Switch Signal	I	—
7 - 8	—	—	—	Not Occupied	—	—

S145 Beverage Cooler Switch (DCK)



5020940

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920634
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

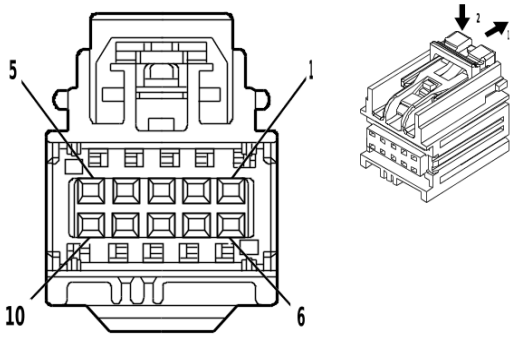
Terminal Part Information

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

S145 Beverage Cooler Switch (DCK)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1250	Ground	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	GN / WH	7846	Refrigerator On Indicator Control	I	—
4	0.35	BN / BK	7844	Refrigerator Enable Signal	I	—
5	0.35	BU / GN	7845	Refrigerator Freeze Indicator Control	I	—
6	—	—	—	Not Occupied	—	—

S165 Infotainment Control Switch



4891168

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33315379
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Kaizen Series(NA)

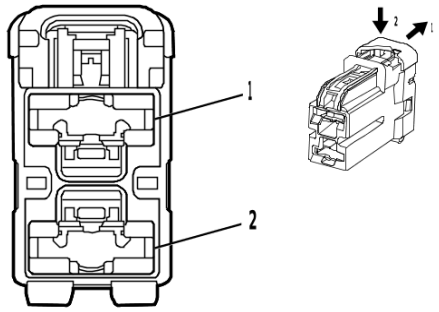
Terminal Part Information

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

S165 Infotainment Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BK	4057	Private Serial Data Infotainment CAN Bus [+] Serial Data	I	—
2	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
3	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
4	—	—	—	Not Occupied	—	—
5	0.35	BK / WH	1451	Signal Ground	I	—
6	0.35	WH / BK	4056	Private Serial Data Infotainment CAN Bus [-] Serial Data	I	—
7	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
8	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	RD / WH	7240	Battery Positive Voltage	I	—

T1 DC/AC Converter Control Module X1 (KI4/KI5)



2453116

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13581928
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 9.5 Series(BK)

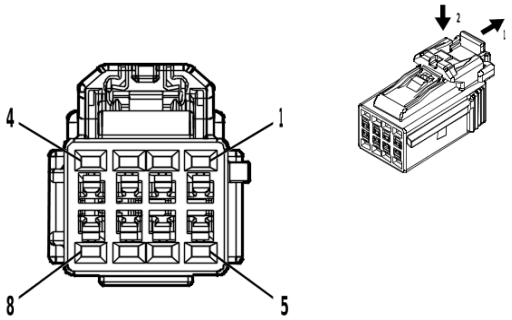
Terminal Part Information

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

T1 DC/AC Converter Control Module X1 (KI4/KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	BN / BK	4629	DC/AC Inverter Control	I	—
2	5	BK	1450	Ground	I	—

T1 DC/AC Converter Control Module X2 (KI4)



5086387

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35029311
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series(BK)

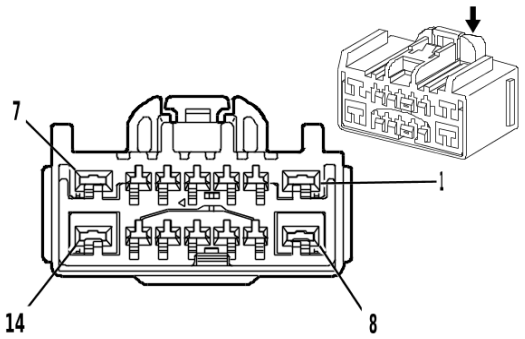
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required

T1 DC/AC Converter Control Module X2 (KI4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	5683	120V AC Phase A	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	VT / RD	4049	AC Power Outlet Sensor High Reference	II	—
4	0.75	BU / BN	6807	DC/AC Inverter Control	II	—
5	0.75	RD	5684	120V AC Phase B	II	—
6	—	—	—	Not Occupied	—	—
7	0.75	BK	1250	Ground	II	—
8	0.35	VT	4701	Retained Accessory Power Control	I	—

T1 DC/AC Converter Control Module X2 (KI5)



1540775

Connector Part Information

Harness Type: Body Rear Wiring Harness Extension Harness
OEM Connector: 33356826
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 YESC Series(BU)

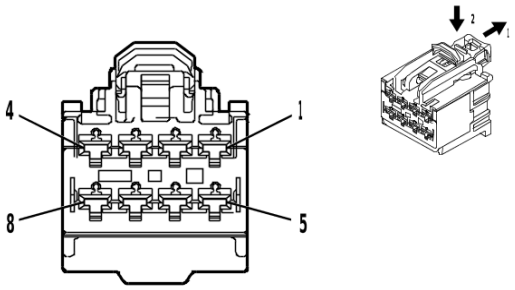
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

T1 DC/AC Converter Control Module X2 (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	686	230 VAC Outlet Phase A	II	—
2	0.5	VT / RD	4049	AC Power Outlet Sensor High Reference	I	—
3	0.5	VT / WH	1139	Run/Crank Ignition 1 Voltage	I	—
4	0.5	WH / GN	4628	DC/AC Inverter Relay Control	I	—
5	0.5	BU / BN	6807	DC/AC Inverter Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.75	BN / WH	2262	230V AC Phase A 2	II	—
8	0.75	BU	6865	230V AC Phase B	II	—
9	0.5	Bare	2526	230V AC Outlet Low Reference	I	—
10	0.5	GN / BU	6133	Body Control Module LIN Bus 2	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	GN / BN	2266	DC/AC Inverter Control 2	I	—
13	0.5	Bare	2544	230V AC Outlet 2 Low Reference	I	—
14	0.75	BU / WH	2263	230V AC Phase B 2	II	—

T3 Audio Amplifier X1



4875738

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33223792
Service Connector: 19369366
Description: 8-Way F 2.8 OCS Series(BK)

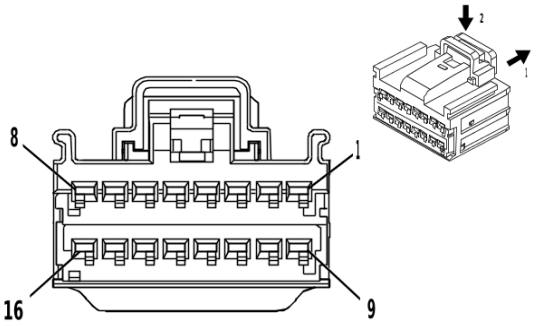
Terminal Part Information

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

T3 Audio Amplifier X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU / VT	1857	Left Front Midrange Speaker [+] Control	I	UQH
	2.5	GN / VT	1795	Right Subwoofer [+] Control	I	UQP
2	0.75	BU / BN	1957	Left Front Midrange Speaker [-] Control	I	UQH
	2.5	GY / BK	315	Right Subwoofer [-] Control	I	- UQH
3	3	RD / YE	3840	Battery Positive Voltage	I	—
4	3	RD / YE	3740	Battery Positive Voltage	I	—
5	0.75	GY / BU	1955	Right Rear Midrange Speaker [-] Control	I	UQH
	0.5	BN / WH	8575	Left Rear D-Pillar Speaker [-] Control	I	UQP
6	0.75	YE / GN	1855	Right Rear Midrange Speaker [+] Control	I	UQH
	0.5	WH / GN	8576	Left Rear D-Pillar Speaker [+] Control	I	UQP
7	2.5	BK / WH	1451	Signal Ground	I	—
8	2.5	BK / WH	1451	Signal Ground	I	—

T3 Audio Amplifier X2



4332214

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15512506
Service Connector: 13591061
Description: 16-Way F 1.5 OCS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84757974	J-35616-2A (GY)	J-38125-215A

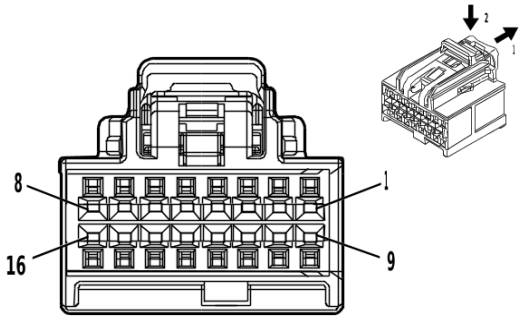
T3 Audio Amplifier X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1 0.75	YE / WH YE	1860 200	Front Center Speaker [+] Control Right Front Speaker 1 [+] Control	I I	UQH - UQH
2	0.75	WH	46	Right Rear Speaker [+] Control	I	—
3	1 0.75	WH / YE GN	1853 199	Right Front Midrange Speaker [+] Control Left Rear Speaker [+] Control	I I	UQH UQP
4	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—
5	0.5	WH / GN	8576	Left Rear D-Pillar Speaker [+] Control	I	UQH
6	0.75 0.75	VT GN / BU	8578 1875	Right Rear D-Pillar Speaker [+] Control Right Front Speaker [+] Control 2	I I	UQH UQP
7	0.5 1	YE / BN BU / VT	1859 1874	Left Rear Midrange Speaker [+] Control Left Front Speaker [+] Control 2	I I	UQH UQP
8	0.5 0.75	GN / YE VT	1858 8578	Left Rear Tweeter Speaker [+] Control Right Rear D-Pillar Speaker [+] Control	I I	UQH UQP
9	1 0.75	BU / YE YE / BK	1960 117	Front Center Speaker [-] Control Right Front Speaker [-] Control 1	I I	UQH - UQH
10	0.75	BU / BK	115	Right Rear Speaker [-] Control	I	—
11	1 0.75	BN / BK GN / BK	1953 116	Right Front Midrange Speaker [-] Control Left Rear Speaker [-] Control	I I	UQH UQP
12	0.75 0.75	BN / BU GN / BK	118 116	Left Front Speaker [-] Control 1 Left Rear Speaker [-] Control	I I	UQH UQP
13	1 0.5	BU / YE BN / WH	1960 8575	Front Center Speaker [-] Control Left Rear D-Pillar Speaker [-] Control	I I	UQP - UQP
14	0.75 0.75	GY / WH BN / BK	8577 1975	Right Rear D-Pillar Speaker [-] Control Right Front Speaker [-] Control 2	I I	UQH UQP

T3 Audio Amplifier X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
15	0.5	WH / BK	1959	Left Rear Midrange Speaker [-] Control	I	UQH
	1	GY / BK	1974	Left Front Speaker [-] Control 2	I	UQP
16	0.5	VT / YE	1958	Left Rear Tweeter Speaker [-] Control	I	UQH
	0.75	GY / WH	8577	Right Rear D-Pillar Speaker [-] Control	I	UQP

T3 Audio Amplifier X3



4873243

Connector Part Information

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

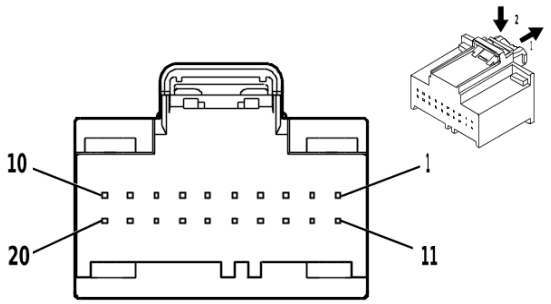
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354230	J-35616-64B (L-BU)	J-38125-215A

T3 Audio Amplifier X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.75 0.75	BN / GN YE / GN	1852 5760	Right Front Tweeter Speaker [+] Control Right Front Seat Right Speaker [+] Control	I I	UQH UQP
6	0.75 0.75	BU / GN GY / YE	8566 5759	Front Center Speaker 2 [+] Control Right Front Seat Left Speaker [+] Control	I I	UQH UQP
7	0.75 0.75	WH / GY BN / GY	1854 5758	Right Rear Tweeter Speaker [+] Control Left Front Seat Right Speaker [+] Control	I I	UQH UQP
8	0.75 0.75	YE / BU GN / VT	1856 5757	Left Front Tweeter Speaker [+] Control Left Front Seat Left Speaker [+] Control	I I	UQH UQP
9 - 12	—	—	—	Not Occupied	—	—
13	0.75 0.75	VT / BN GN / BK	1952 5770	Right Front Tweeter Speaker [-] Control Right Front Seat Right Speaker [-] Control	I I	UQH UQP
14	0.75 0.75	BN / YE YE / BK	8565 5769	Front Center Speaker [-] 2 Control Right Front Seat Left Speaker [-] Control	I I	UQH UQP
15	0.75 0.75	YE / VT GY / BK	1949 5768	Right Rear Tweeter Speaker [-] Control Left Front Seat Right Speaker [-] Control	I I	UQH UQP
16	0.75 0.75	YE / GY GN / GY	1956 5767	Left Front Tweeter Speaker [-] Control Left Front Seat Left Speaker [-] Control	I I	UQH UQP

T3 Audio Amplifier X5



5112891

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35160140
Service Connector: 13525990
Description: 20-Way F 0.64 Series(BK)

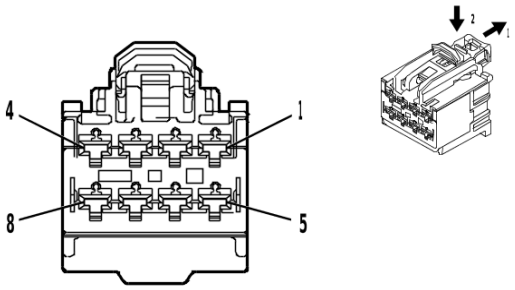
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

T3 Audio Amplifier X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	BU	8581	Automotive Audio Bus A2B Serial Data 2 [-]	I	—
5	0.35	GN	8582	Infotainment Audio Serial Data [+] 2	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.35	BN / BK	7214	Ethernet Bus 6 [-]	I	—
10	0.35	GY / BK	7215	Ethernet Bus 6 [+]	I	—
11	0.35	BU	8579	Automotive Audio Bus A2B Serial Data 1 [-]	I	—
12	0.35	GN	8580	Automotive Audio Bus A2B Serial Data 1 [+]	I	—
13 - 16	—	—	—	Not Occupied	—	—
17	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
18	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
19 - 20	—	—	—	Not Occupied	—	—

T3R Audio Amplifier - Auxiliary X1 (UQH)



4875738

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33223792
Service Connector: 19369366
Description: 8-Way F 2.8 OCS Series(BK)

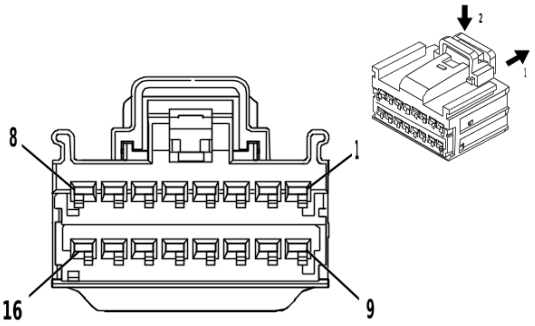
Terminal Part Information

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

T3R Audio Amplifier - Auxiliary X1 (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BU / GY	346	Left/Rear Subwoofer [+] Control	I	- UQH
2	2.5	GN / BK	1794	Left/Rear Subwoofer [-] Control	I	UQP
3	3	RD / YE	3840	Battery Positive Voltage	I	—
4	3	RD / YE	3740	Battery Positive Voltage	I	—
5 - 8	—	—	—	Not Occupied	—	—

T3R Audio Amplifier - Auxiliary X2 (UQH)



4332214

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15512506
Service Connector: 13591061
Description: 16-Way F 1.5 OCS Series(BK)

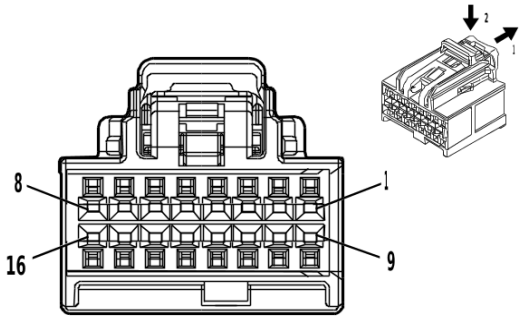
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84757974	J-35616-2A (GY)	J-38125-215A

T3R Audio Amplifier - Auxiliary X2 (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 1	YE BU / VT	200 1874	Right Front Speaker 1 [+] Control Left Front Speaker [+] Control 2	I I	- UQH UQP
2 - 3	—	—	—	Not Occupied	—	—
4	0.75	BU	201	Left Front Speaker 1 [+] Control	I	—
5	0.75	VT / GN	5756	Center Console Speaker [+] Control	I	UQP
6	0.75	GN / BU	1875	Right Front Speaker [+] Control 2	I	UQP
7 - 8	—	—	—	Not Occupied	—	—
9	1	GY / BK	1974	Left Front Speaker [-] Control 2	I	UQP
10	—	—	—	Not Occupied	—	—
11	0.75	YE / BK	117	Right Front Speaker [-] Control 1	I	- UQH
12	0.75	BN / BU	118	Left Front Speaker [-] Control 1	I	UQH
13	0.75	BN / BU	5766	Center Console Center Speaker [-] Control	I	UQH
14	0.75	BN / BK	1975	Right Front Speaker [-] Control 2	I	UQP
15 - 16	—	—	—	Not Occupied	—	—

T3R Audio Amplifier - Auxiliary X3 (UQH)



4873243

Connector Part Information

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

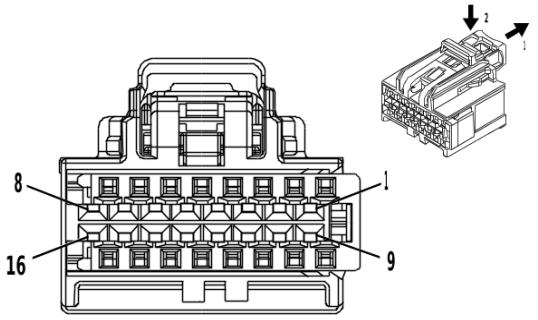
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354230	J-35616-64B (L-BU)	J-38125-215A

T3R Audio Amplifier - Auxiliary X3 (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	8581	Automotive Audio Bus A2B Serial Data 2 [-]	I	—
2	0.35	GN	8582	Infotainment Audio Serial Data [+] 2	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	GN	8582	Infotainment Audio Serial Data [+] 2	I	—
5	0.35	BU	8581	Automotive Audio Bus A2B Serial Data 2 [-]	I	—
6 - 16	—	—	—	Not Occupied	—	—

T3RB Audio Amplifier - Auxiliary 2 X1 (UQH)



4256181

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35016345
Service Connector: 13519740
Description: 16-Way F 0.64 OCS Series(BN)

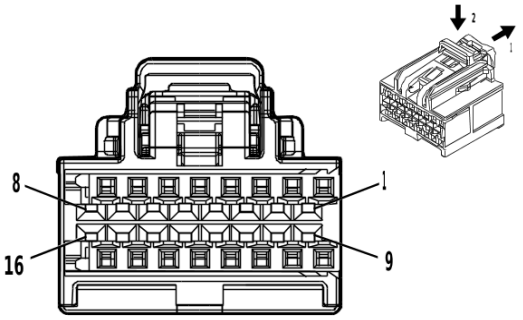
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84619127	J-35616-64B (L-BU)	J-38125-215A

T3RB Audio Amplifier - Auxiliary 2 X1 (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY / BN	8568	Left Rear Headliner Speaker [+] Control	I	—
2	0.75	GY / GN	8574	Right Front Headliner Speaker [+] Control	I	—
3	0.75	GN / BN	8572	Left Front Headliner Speaker [+] Control	I	—
4	—	—	—	Not Occupied	—	—
5	0.75	BK / WH	1451	Signal Ground	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.75	RD / BU	6040	Battery Positive Voltage	I	—
9	0.75	GN / WH	8567	Left Rear Headliner Speaker [-] Control	I	—
10	0.75	BN / VT	8573	Right Front Headliner Speaker [-] Control	I	—
11	0.75	BU / WH	8571	Left Front Headliner Speaker [-] Control	I	—
12	—	—	—	Not Occupied	—	—
13	0.75	BK / WH	1451	Signal Ground	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.75	RD / BU	6040	Battery Positive Voltage	I	—

T3RB Audio Amplifier - Auxiliary 2 X2 (UQH)



4873254

Connector Part Information

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

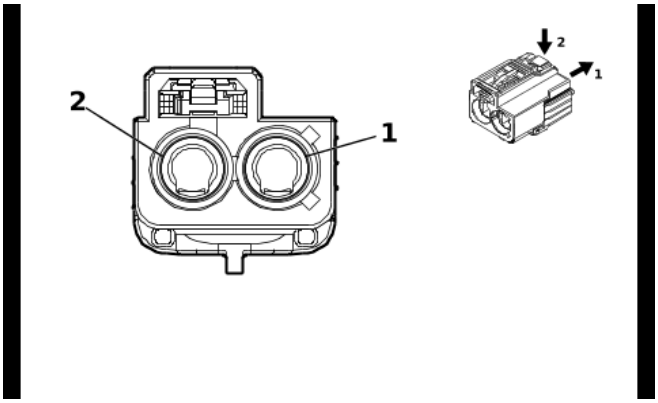
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300660	J-35616-64B (L-BU)	J-38125-215A

T3RB Audio Amplifier - Auxiliary 2 X2 (UQH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.75	YE / GN	5760	Right Front Seat Right Speaker [+] Control	I	—
5	0.75	GY / YE	5759	Right Front Seat Left Speaker [+] Control	I	—
6	0.75	BN / GY	5758	Left Front Seat Right Speaker [+] Control	I	—
7	0.75	GN / VT	5757	Left Front Seat Left Speaker [+] Control	I	—
8	0.75	VT / GY	8570	Right Rear Headliner Speaker [+] Control	I	—
9	0.35	GN	8582	Infotainment Audio Serial Data [+] 2	I	—
10	0.35	BU	8581	Automotive Audio Bus A2B Serial Data 2 [-]	I	—
11	—	—	—	Not Occupied	—	—
12	0.75	GN / BK	5770	Right Front Seat Right Speaker [-] Control	I	—
13	0.75	YE / BK	5769	Right Front Seat Left Speaker [-] Control	I	—
14	0.75	GY / BK	5768	Left Front Seat Right Speaker [-] Control	I	—
15	0.75	GN / GY	5767	Left Front Seat Left Speaker [-] Control	I	—
16	0.75	BN	8569	Right Rear Headliner Speaker [-] Control	I	—

T4P High Frequency Antenna X1



5661671

Connector Part Information

Harness Type: High Frequency Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

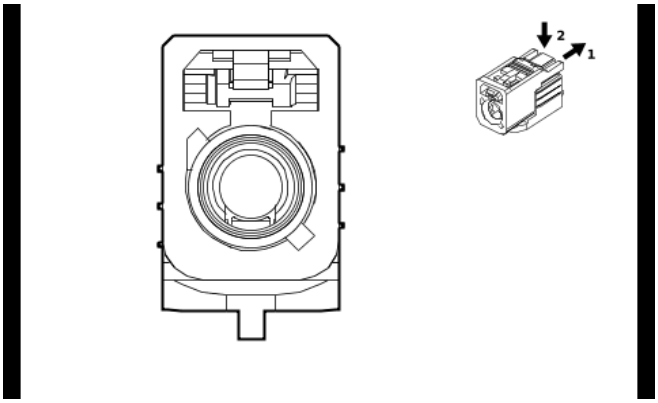
Terminal Part Information

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

T4P High Frequency Antenna X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
1_PU	—	—	Coax Cable	Coax Cable	I	—
2_PU	—	—	Coax Cable	Coax Cable	I	—

T4TA Auxiliary Wireless Communication Interface Antenna



5518436

Connector Part Information

Harness Type: Auxiliary Wireless Communication Interface Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

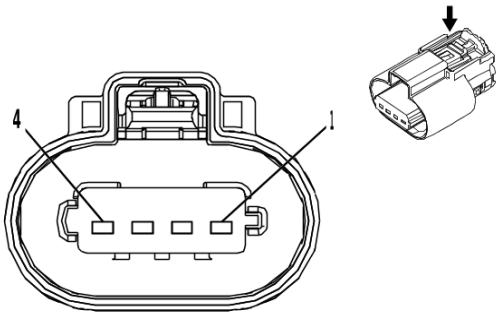
Terminal Part Information

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

T4TA Auxiliary Wireless Communication Interface Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BG	—	—	Coax Cable	Coax Cable	I	—
Coax Cable	—	—	—	Not Occupied	—	—

T8A Ignition Coil 1 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

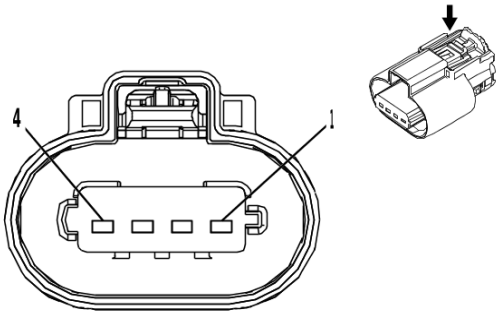
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8A Ignition Coil 1 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8A Ignition Coil 1 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

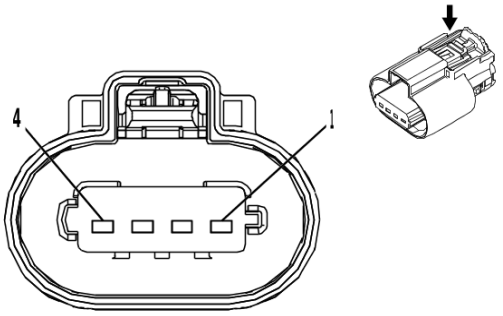
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8A Ignition Coil 1 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8B Ignition Coil 2 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

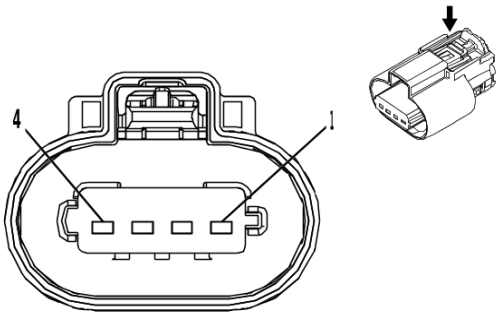
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8B Ignition Coil 2 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.75	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.75	BU / WH	2122	Ignition Control 2	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T8B Ignition Coil 2 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

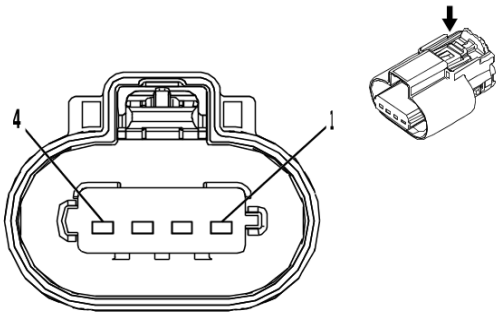
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8B Ignition Coil 2 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.5	BK	6450	Engine Even Bank Ground	I	—
3	0.5	BU / WH	2122	Ignition Control 2	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T8C Ignition Coil 3 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

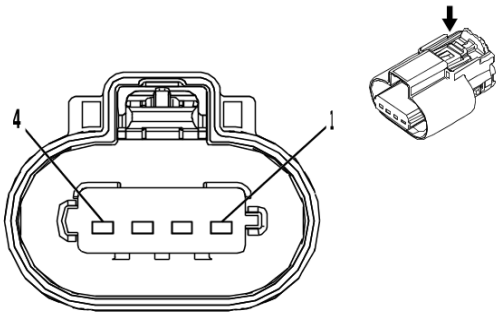
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8C Ignition Coil 3 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8C Ignition Coil 3 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

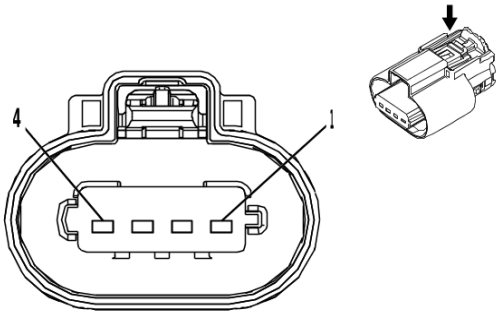
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8C Ignition Coil 3 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8D Ignition Coil 4 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

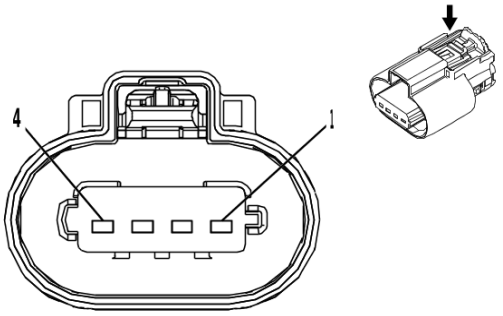
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8D Ignition Coil 4 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.75	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 Voltage 3	I	—

T8D Ignition Coil 4 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

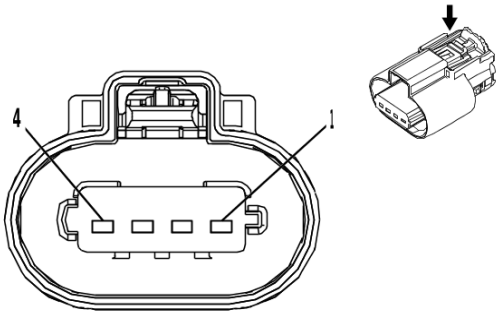
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8D Ignition Coil 4 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.5	BK	6450	Engine Even Bank Ground	I	—
3	0.5	YE / BU	2124	Ignition Control 4	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T8E Ignition Coil 5 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

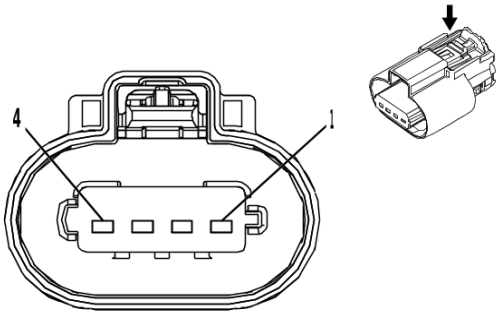
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8E Ignition Coil 5 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank Ground	I	—
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 Voltage 2	I	—

T8E Ignition Coil 5 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

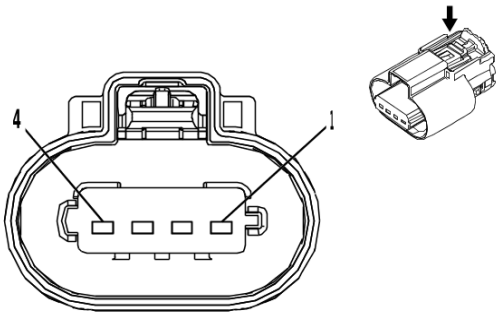
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8E Ignition Coil 5 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank Ground	I	—
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 Voltage 2	I	—

T8F Ignition Coil 6 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

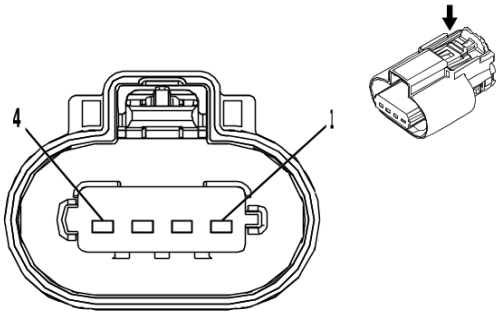
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8F Ignition Coil 6 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.75	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 Voltage 3	I	—

T8F Ignition Coil 6 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

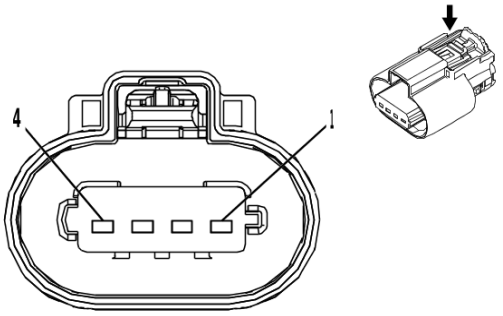
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8F Ignition Coil 6 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.5	BK	6450	Engine Even Bank Ground	I	—
3	0.5	BN / BU	2126	Ignition Control 6	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T8G Ignition Coil 7 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

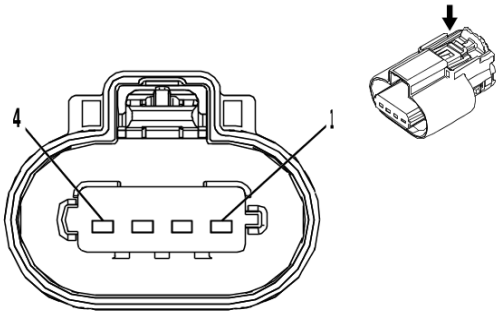
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8G Ignition Coil 7 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8G Ignition Coil 7 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

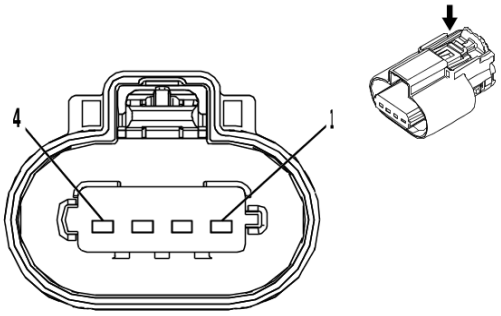
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8G Ignition Coil 7 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6150	Engine Odd Bank 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 Voltage 2	I	—

T8H Ignition Coil 8 (L87)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

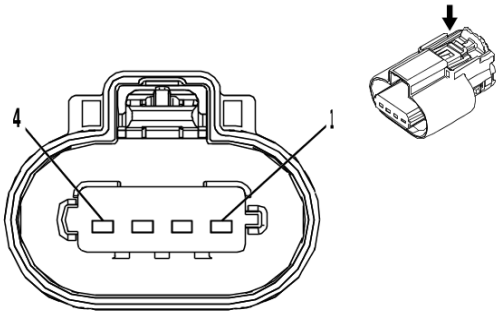
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8H Ignition Coil 8 (L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.75	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 Voltage 3	I	—

T8H Ignition Coil 8 (LT4)



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

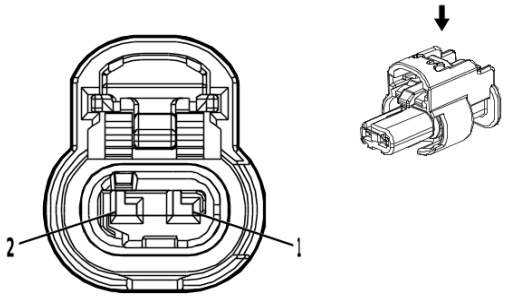
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

T8H Ignition Coil 8 (LT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.5	BK	6450	Engine Even Bank Ground	I	—
3	0.5	VT / WH	2128	Ignition Control 8	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T10E Low Frequency Rear Compartment Antenna



4690744

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

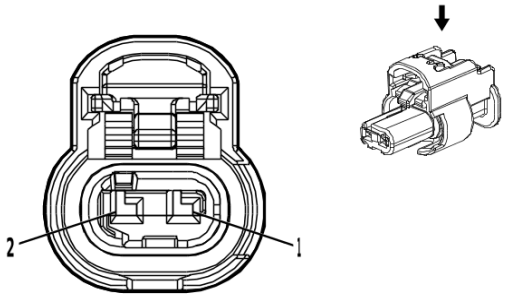
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

T10E Low Frequency Rear Compartment Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	3554	Interior Passive Entry Antenna 2 High Signal	I	—
2	0.35	GY / BK	3555	Interior Passive Entry Antenna 2 Low Signal	I	—

T10G Low Frequency Rear Bumper Antenna



4690744

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33375932
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

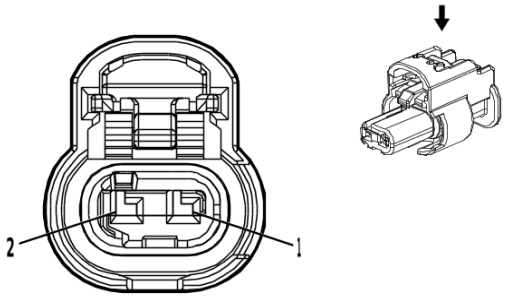
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

T10G Low Frequency Rear Bumper Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / GN	3568	Rear Closure Passive Entry Antenna High Signal	I	—
2	0.5	GN / GY	3569	Rear Closure Passive Entry Antenna Low Signal	I	—

T10KA Low Frequency Console Number 2 Antenna



4690744

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33375932
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

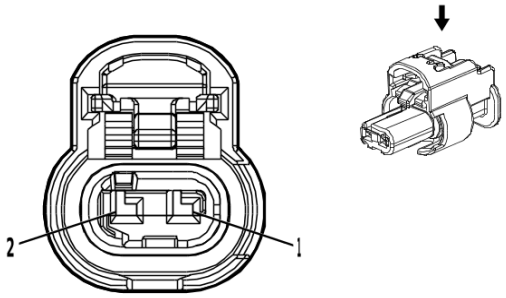
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

T10KA Low Frequency Console Number 2 Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / BK	3552	Interior Passive Entry Antenna 1 High Signal	I	—
2	0.35	WH	3553	Interior Passive Entry Antenna 1 Low Signal	I	—

T10L Low Frequency Body Side Antenna - Left



4690744

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 33375932
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

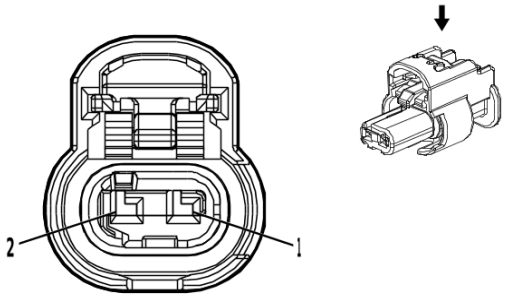
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

T10L Low Frequency Body Side Antenna - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	4301	Passive Entry Left Front Antenna Signal High	I	—
2	0.5	VT / GY	4302	Passive Entry Left Front Antenna Signal Low	I	—

T10R Low Frequency Body Side Antenna - Right



4690744

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 33375932
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

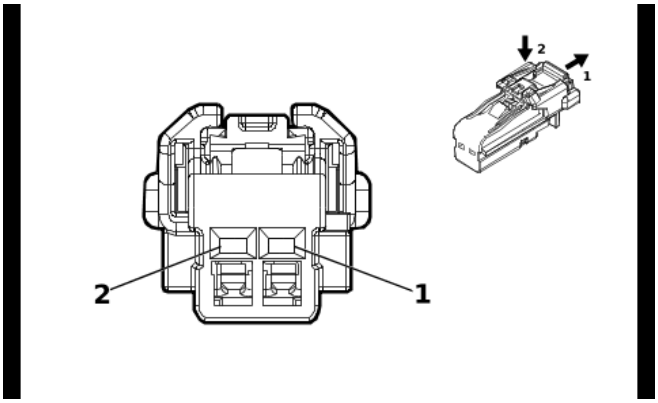
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

T10R Low Frequency Body Side Antenna - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	4303	Passive Entry Right Front Door Antenna Signal High	I	—
2	0.5	GN / BK	4304	Passive Entry Right Front Door Antenna Signal Low	I	—

T10U Low Frequency Console Antenna - Front



4115691

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 35311666
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series(BK)

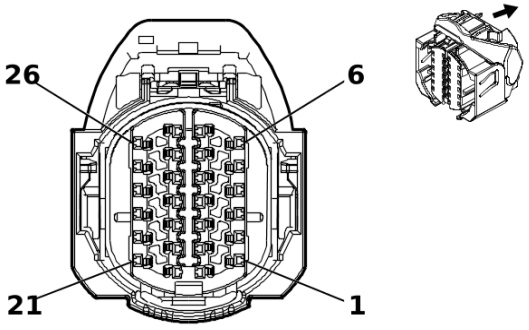
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

T10U Low Frequency Console Antenna - Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / BK	4996	Immobilizer Antenna Signal [+]	I	—
2	0.5	WH / GY	4997	Immobilizer Antenna Low Signal	I	—

T12 Automatic Transmission X1



5275597

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35345999
Service Connector: 13528029
Description: 26-Way F 1.2 MCON Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19331733	J-35616-12 (BU)	J-38125-215A

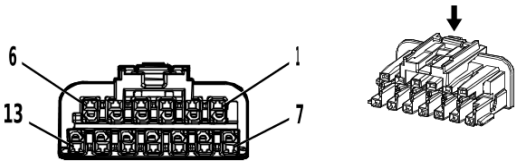
T12 Automatic Transmission X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	6353	Input Speed Signal	I	—
2	0.5	GN / VT	4510	Transmission Intermediate Speed Signal	I	—
3	0.5	BN / BU	6254	Transmission Input Speed Sensor Signal	I	—
4	0.5	GY / BU	6358	Output Speed Signal	I	—
5	0.5	VT / WH	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	I	—
6	0.5	VT / WH	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	I	—
7	0.5	YE / GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—
8	0.5	YE / BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—
9	0.5	GY / BN	6388	Transmission High Side Driver 2 Control	I	—
10	0.75	RD / VT	7940	Battery Positive Voltage	I	—
11	0.5	GN / GY	6387	Transmission High Side Driver 1 Control	I	—
12	0.5	YE	2159	Park Inhibit Solenoid Assembly Control	I	—
13	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	I	—
14	0.5	YE / BN	6404	Clutch Solenoid Valve E Control	I	—
15	0.5	GY / GN	6403	Clutch Solenoid Valve D Control	I	—
16	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—
17	0.75	BK	6550	Ground	I	—
18	0.5	GN	2968	Transmission Auxiliary Fluid Pump Control	I	—
19	0.5	GN / BK	7819	Default Disable Solenoid Control	I	—

T12 Automatic Transmission X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	BN	3706	Electronic Transmission Range Select Switch Analog Signal 1	I	—
21	0.5	VT	4509	Transmission Clutch F Control	I	—
22	0.5	WH / BU	4507	Transmission Clutch H Control	I	—
23	0.5	WH	4508	Transmission Clutch G Control	I	—
24	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—
25	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	I	—
26	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—

T12 Automatic Transmission X2



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)

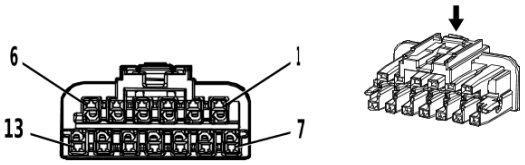
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

T12 Automatic Transmission X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / GY	6319	Electronic Transmission Range Select Out of Park Switch 2 Signal	I	—
2	0.5	YE	6317	Electronic Transmission Range Select Out of Park Switch Signal	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 Fluid Temperature Sensor Signal	I	—
8	0.5	OG	2159	Park Inhibit Solenoid Assembly Control	I	—
9	0.5	BN	6387	Transmission High Side Driver 1 Control	I	—
10	1.5	GN / VT	8640	Battery Positive Voltage	I	—
11	0.5	WH	6388	Transmission High Side Driver 2 Control	I	—
12	0.5	BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	I	—
13	0.5	GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	I	—

T12 Automatic Transmission X3



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)

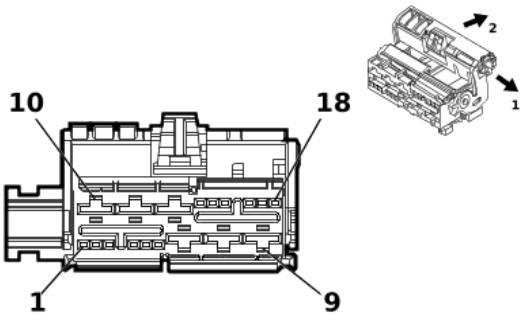
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

T12 Automatic Transmission X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	4509	Transmission Clutch F Control	I	—
2	0.5	YE / VT	4507	Transmission Clutch H Control	I	—
3	0.5	BU / GY	4508	Transmission Clutch G Control	I	—
4	0.5	GN / OG	1530	Transmission Line Pressure Control Solenoid Valve Control	I	—
5	0.5	GY / BN	422	Torque Converter Clutch Solenoid Valve Control	I	—
6	0.5	BU / BN	586	Transmission Fluid Temperature Sensor Low Reference	I	—
7	0.5	BU / GN	6404	Clutch Solenoid Valve E Control	I	—
8	0.5	GN / BN	6403	Clutch Solenoid Valve D Control	I	—
9	0.5	GY	6402	Clutch Solenoid Valve C Control	I	—
10	1.5	BK / YE	6550	Ground	I	—
11	0.5	GY / OG	2968	Transmission Auxiliary Fluid Pump Control	I	—
12	0.5	VT	7819	Default Disable Solenoid Control	I	—
13	—	—	—	Not Occupied	—	—

T19 Multifunction Power Supply Converter



3825662

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35176467
Service Connector: 84789277
Description: 18-Way F 0.64 MTS, 6.3 MCP Series(BK)

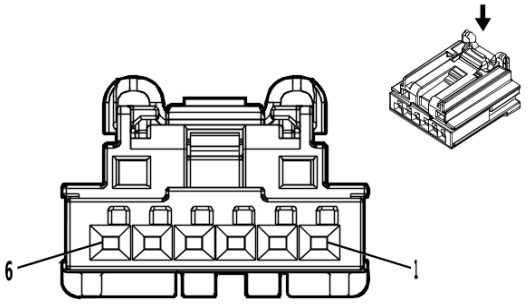
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A
II	19367600	J-35616-42 (RD)	J-38125-556

T19 Multifunction Power Supply Converter

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.35	VT / GN	4320	Powertrain Sensor Bus Enable	I	—
5	0.35	YE / BK	625	Starter Enable Relay Control	I	—
6	—	—	—	Not Occupied	—	—
7	2.5	BK	250	Ground	II	—
8	2.5	RD / YE	8140	Battery Positive Voltage	II	—
9	2.5	RD / GN	2173	12V Regulated Supply Voltage 2	II	—
10	2.5	RD / YE	2172	12V Regulated Supply Voltage 1	II	—
11	2.5	RD / WH	8040	Battery Positive Voltage	II	—
12	2.5	BK	250	Ground	II	—
13	0.35	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
14	0.35	BU / GY	4054	Private Serial Data Powertrain CAN Bus [-] Serial Data	I	—
15	0.35	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
16	0.35	WH	4055	Private Serial Data Powertrain CAN Bus [+] Serial Data	I	—
17 - 18	—	—	—	Not Occupied	—	—

T22 Wireless Accessory Charging Module



5020940

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920634
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

Terminal Part Information

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

T22 Wireless Accessory Charging Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD / VT	6340	Battery Positive Voltage	I	—
2	0.75	BK	1250	Ground	I	—
3	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
4	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—
5	0.35	BU / YE	4984	AUTOSAR CAN Bus [-] 5 Serial Data	I	—
6	0.35	BU / WH	4985	AUTOSAR CAN Bus [+] 5 Serial Data	I	—

T35AF Radio Antenna Amplifier - AM/FM

—

Connector Part Information

Harness Type: Amplifier Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

Terminal Part Information

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

T35AF Radio Antenna Amplifier - AM/FM

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

T35FD Radio Antenna Amplifier - FM2/DAB X2 (U2Q)

—

Connector Part Information

Harness Type: Radio FM2/DAB Antenna
OEM Connector: 13526048
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

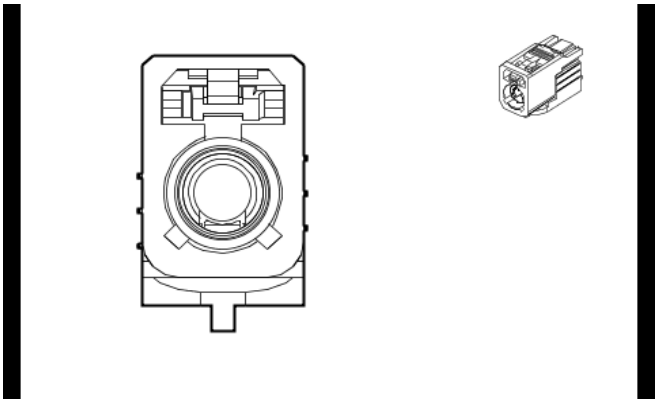
Terminal Part Information

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

T35FD Radio Antenna Amplifier - FM2/DAB X2 (U2Q)

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

T35X Radio Antenna - XM X3 (U2K)



5661657

Connector Part Information

Harness Type: Radio XM Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

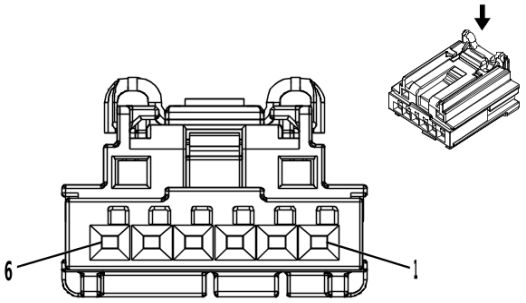
Terminal Part Information

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

T35X Radio Antenna - XM X3 (U2K)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
Coax Cable	—	—	—	Not Occupied	—	—
CU	—	—	Coax Cable	Coax Cable	I	—

X23 Multimedia Receptacle X1 (MCR)



3960313

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

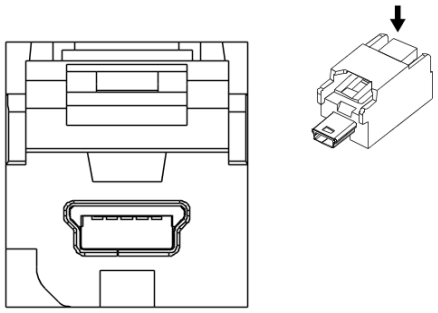
Terminal Part Information

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

X23 Multimedia Receptacle X1 (MCR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD / WH	7240	Battery Positive Voltage	I	—
2	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.35	BK / WH	1451	Signal Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

X23 Multimedia Receptacle X2



3214018

Connector Part Information

Harness Type: Multimedia Receptacle LVDS USB
OEM Connector: 13584747
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(GY)

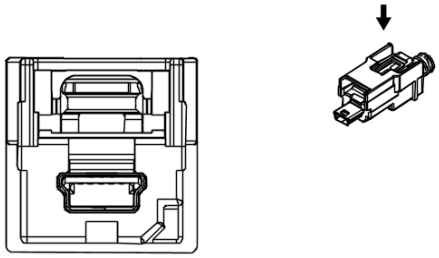
Terminal Part Information

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

X23 Multimedia Receptacle X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X23 Multimedia Receptacle X3



2807425

Connector Part Information

Harness Type: Multimedia Receptacle USB
OEM Connector: 13584746
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(BK)

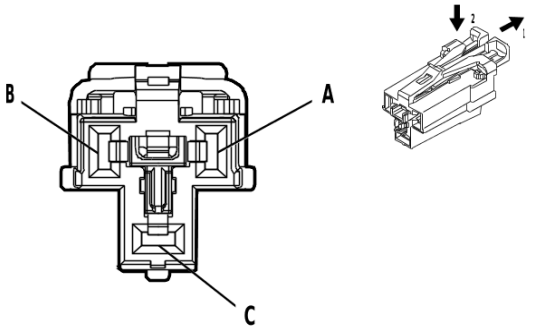
Terminal Part Information

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

X23 Multimedia Receptacle X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X80H Accessory Power Receptacle - Floor Console Front



4872413

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series(GY)

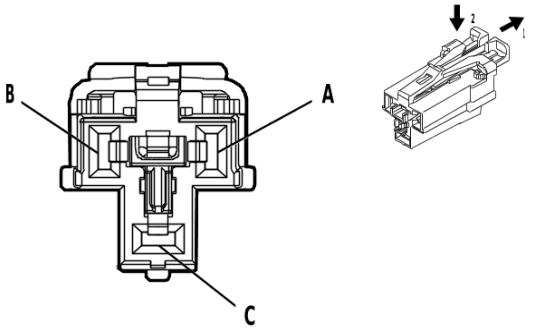
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required

X80H Accessory Power Receptacle - Floor Console Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	VT	1001	Retained Accessory Power Ignition Voltage	II	—
B	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
C	1	BK	1250	Ground	I	—

X80L Front Floor Console Accessory Power Rear Receptacle



4872413

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series(GY)

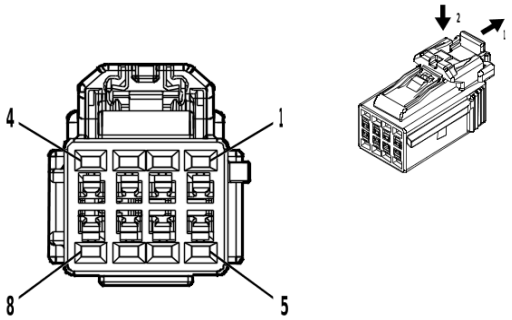
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required

X80L Front Floor Console Accessory Power Rear Receptacle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	VT	1301	Retained Accessory Power Control	II	—
B	0.35	YE	6817	LED Backlight Dimming Control 1	III	—
C	1	BK	1250	Ground	I	—

X81RA Quarter Lower Rear Trim Panel Accessory Power Receptacle - 110V AC (KI4)



5086387

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35029311
Service Connector: 84613126
Description: 8-Way F 1.2 Series(BK)

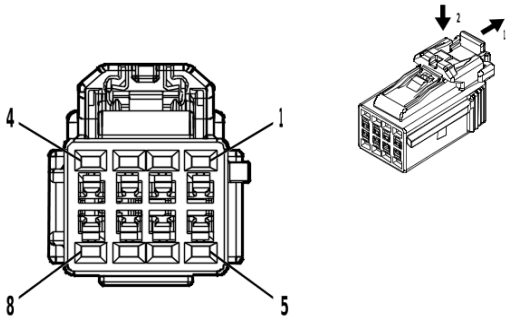
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

X81RA Quarter Lower Rear Trim Panel Accessory Power Receptacle - 110V AC (KI4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	2264	120V AC Phase A 2	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	VT / RD	4049	AC Power Outlet Sensor High Reference	I	—
4	0.75	GN / BN	2266	DC/AC Inverter Control 2	I	—
5	0.5	RD / WH	2265	120V AC Phase B 2	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	BK	1450	Ground	I	—
8	0.5	YE	6817	LED Backlight Dimming Control 1	I	—

X81RB Quarter Lower Rear Trim Panel Accessory Power Receptacle - 220V AC (KI5)



5086387

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35029311
Service Connector: 84613126
Description: 8-Way F 1.2 Series(BK)

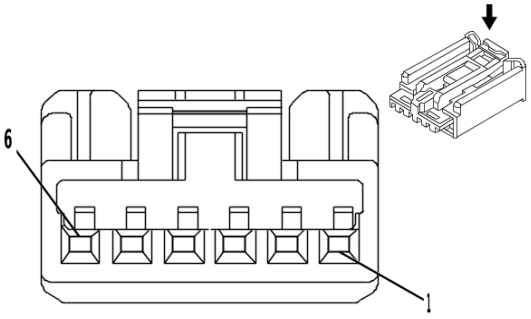
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

X81RB Quarter Lower Rear Trim Panel Accessory Power Receptacle - 220V AC (KI5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / WH	2264	120V AC Phase A 2	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	VT / RD	4049	AC Power Outlet Sensor High Reference	I	—
4	0.75	GN / BN	2266	DC/AC Inverter Control 2	I	—
5	0.5	RD / WH	2265	120V AC Phase B 2	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	BK	1450	Ground	I	—
8	0.5	YE	6817	LED Backlight Dimming Control 1	I	—

X82 Audio Player and USB and Auxiliary In and Memory Card Receptacle X1 (UW9)



1862240

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13595476
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Kaizen Series(BK)

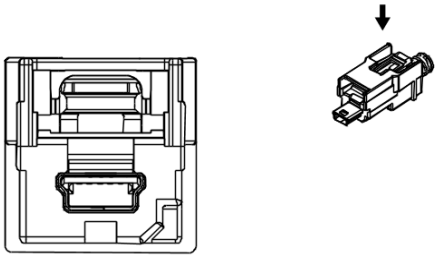
Terminal Part Information

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

X82 Audio Player and USB and Auxiliary In and Memory Card Receptacle X1 (UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN / YE	7066	Entertainment Remote Enable Signal	I	—
2	0.35	VT	4701	Retained Accessory Power Control	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK / WH	1451	Signal Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	RD / WH	7240	Battery Positive Voltage	I	—

X83B Audio/Video Receptacle X2 (UW9)



2807425

Connector Part Information

Harness Type: Floor Console USB
OEM Connector: 13580202
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(BK)

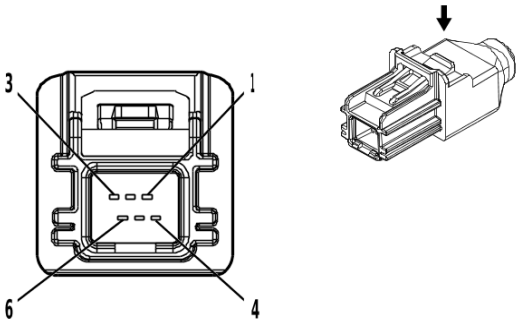
Terminal Part Information

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

X83B Audio/Video Receptacle X2 (UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

X83B Audio/Video Receptacle X3 (UW9)



4806625

Connector Part Information

Harness Type: Floor Console LVDS
OEM Connector: 13522806
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 6-Way M HSAL-2 Series(BK)

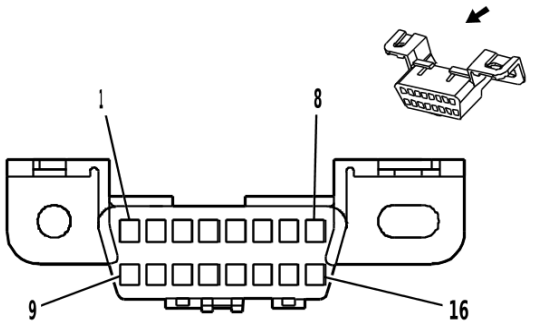
Terminal Part Information

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

X83B Audio/Video Receptacle X3 (UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	LVDS	—	Auxiliary Video Signal	I	—

X84 Data Link Connector



68793

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series(BK)

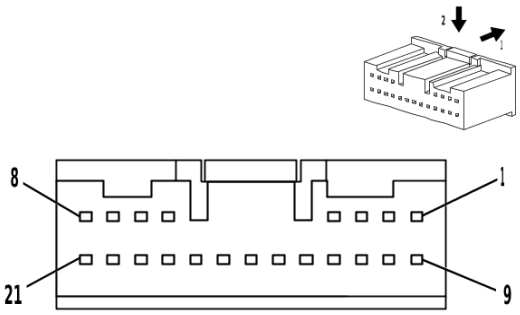
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580059	J-35616-14 (GN)	J-38125-12A

X84 Data Link Connector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU / BN	4983	AUTOSAR CAN Bus [+] 7 Serial Data	I	—
2	0.35	GN	2578	Private Serial Data Presentation CAN Bus [+] 1 Serial Data	I	—
3	0.35	YE / WH	4973	Ethernet Bus 1R [+]	I	—
4	1	BK	1850	Ground	I	—
5	0.75	BK / WH	1851	Signal Ground	I	—
6	0.35	YE	4981	AUTOSAR CAN Bus [+] 6 Serial Data	I	—
7	0.35	VT	2580	Private Serial Data Presentation CAN Bus [+] 2 Serial Data	I	—
8	0.35	WH	7207	Ethernet Bus 1 Enable Signal	I	—
9	0.35	WH	4982	AUTOSAR CAN Bus [-] 7 Serial Data	I	—
10	0.35	BN	2577	Private Serial Data Presentation CAN Bus [-] 1 Serial Data	I	—
11	0.35	YE	4972	Ethernet Bus 1R [-]	I	—
12	0.35	GN / WH	4975	Ethernet Bus 1T [+]	I	—
13	0.35	GN	4974	Ethernet Bus 1T [-]	I	—
14	0.35	WH	4980	AUTOSAR CAN Bus [-] 6 Serial Data	I	—
15	0.35	GY	2579	Private Serial Data Presentation CAN Bus [-] 2 Serial Data	I	—
16	0.5	RD / YE	6540	Battery Positive Voltage	I	—

X85 Steering Wheel Airbag Coil X1



3960237

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (L-BU)	J-38125-215A
II	13575865	J-35616-64B (L-BU)	J-38125-215A

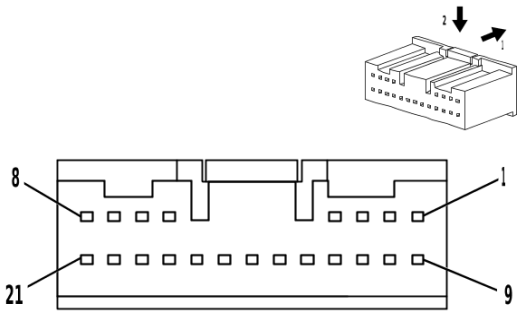
X85 Steering Wheel Airbag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK / WH	1851	Signal Ground	I	—
2	0.35	GN / WH	3287	Horn Switch Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	II	—
6	0.5	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	II	—
7	0.5	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	II	—
8	0.5	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	II	—
9	0.35	GN / BK	3894	Instrument Panel Cluster Control Module LIN Bus 1	I	—
10	0.35 0.35	GN / GY GN / BK	4627 2858	Image Processing Module LIN Bus 1 Body Control Module LIN Bus 12	I I	(UKL- N38) {INVALID - UKL
11	0.35	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
12	0.35	BK / VT	1449	Steering Wheel Resistor Ladder Low Reference	I	—
13	0.35	WH / VT	2246	Driver Illumination Lamp 1 Control	I	—
14	0.75	RD / GN	5140	Battery Positive Voltage	I	—
15	0.35	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
16	0.35	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—
17	0.35	YE / BU	2245	Driver Illumination Lamp 2 Control	I	—
18	0.35	BU / BN	7744	Driver Illumination Lamp Ground	I	—

X85 Steering Wheel Airbag Coil X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	—	—	—	Not Occupied	—	—
20	0.5	BK	1850	Ground	I	—
21	0.35	RD / BN	10040	Secondary Fused Battery Positive Voltage	I	—

X85 Steering Wheel Airbag 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(YE)

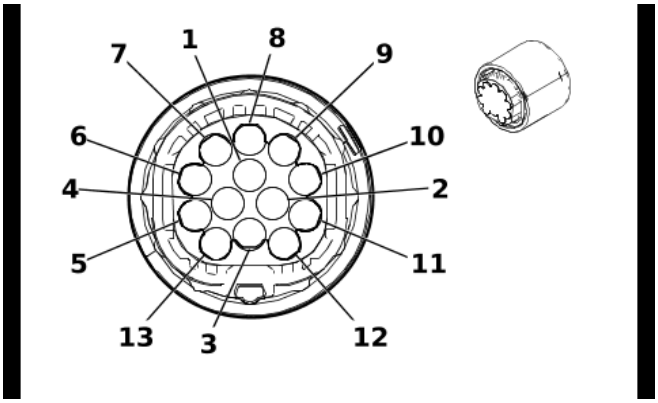
Terminal Part Information

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

X85 Steering Wheel Airbag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / WH	6051	Steering Wheel Ground	I	—
2	—	GN / WH	3287	Horn Switch Signal	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	—	OG / GN	3023	Steering Wheel Air Bag Stage 2 High Control	I	—
6	—	WH / OG	3022	Steering Wheel Air Bag Stage 2 Low Control	I	—
7	—	BN / OG	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
8	—	OG / VT	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
9	—	RD / BN	10040	Secondary Fused Battery Positive Voltage	I	—
10	—	BK	6050	Steering Wheel Ground	I	—
11	—	—	—	Not Occupied	—	—
12	—	GY / OG	7744	Driver Illumination Lamp Ground	I	—
13	—	YE / OG	2245	Driver Illumination Lamp 2 Control	I	—
14	—	VT / YE	5526	Tap Up/Tap Down Switch Signal	I	—
15	—	GY / GN	5737	Distance Sensing Cruise Control Gap Up/Down Switch Signal	I	—
16	—	RD / GN	5140	Battery Positive Voltage	I	—
17	—	PU	2246	Driver Illumination Lamp 1 Control	I	—
18	—	BK / VT	1449	Steering Wheel Resistor Ladder Low Reference	I	—
19	—	BN / GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
20	—	GN / BK	2858	Body Control Module LIN Bus 12	I	—
21	—	GN / BK	3894	Instrument Panel Cluster Control Module LIN Bus 1	I	—

X88 Trailer Wiring Harness Connector X1 (U1D&(MAS/MBM/MBR))



5499621

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35383017
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 2.5 Series(BK)

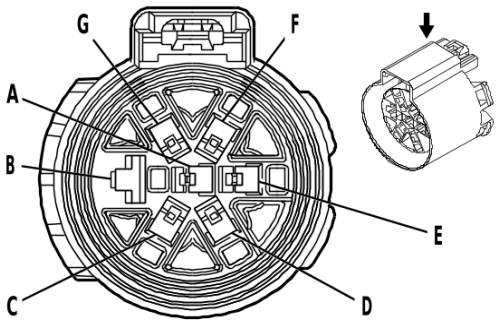
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X88 Trailer Wiring Harness Connector X1 (U1D&(MAS/MBM/MBR))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU / WH	5186	Left Trailer Turn Signal Lamp Control	II	—
2	0.5	YE / WH	5190	Trailer Fog Lamp Control	II	—
3	2.5	BK	2350	Ground	I	—
4	0.5	YE / GY	5187	Right Trailer Turn Signal Lamp Control	II	—
5	0.5	GY	5185	Right Trailer Park Lamp Control	II	—
6	0.5	BN / YE	5188	Trailer Stop Lamp Control	II	—
7	0.5	BN / GY	5184	Left Trailer Park Lamp Control	II	—
8	0.5	GN / WH	5189	Trailer Backup Lamp Control	II	—
9	2.5	RD / GN	742	Battery Positive Voltage	I	—
10	1	VT / BK	339	Run/Crank Ignition 1 Voltage	II	—
11	1	BK	2350	Ground	II	—
12	—	—	—	Not Occupied	—	—
13	2.5	BK	2350	Ground	I	—

X88 Trailer Wiring Harness Connector X1 (Z82&UET)



2056936

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13857223
Service Connector: 86816072
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed(BK)

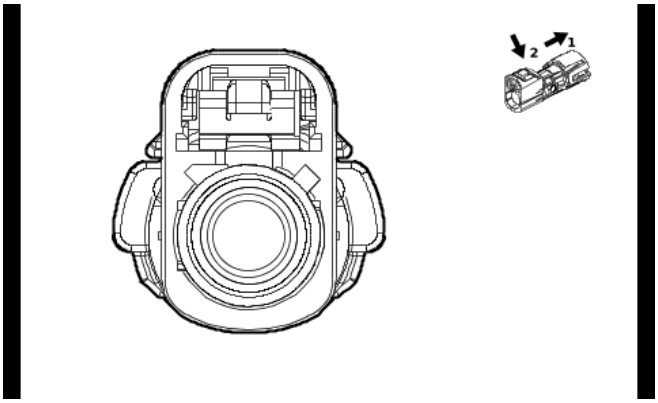
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X88 Trailer Wiring Harness Connector X1 (Z82&UET)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75 0.75	GN / WH WH / GN	5189 1624	Trailer Backup Lamp Control Trailer Backup Lamp Control	II II	UET - UET
B	3	BK	1950	Ground	I	—
C	2.5	BU	47	Trailer Auxiliary Control	II	—
D	0.75 0.75	YE / GY GN / VT	5187 1619	Right Trailer Turn Signal Lamp Control Right Rear Trailer Stop/Turn Lamp Control	II II	U1D+ (MAS/ MBM/ MBR) - UET
E	4	RD / GN	742	Battery Positive Voltage	II	—
F	0.75 1	BN / GY GY / BN	5184 2109	Left Trailer Park Lamp Control Trailer Park Lamp Control	II II	U1D+ (MAS/ MBM/ MBR) - UET
G	0.75 0.75	BU / WH YE / GY	5186 1618	Left Trailer Turn Signal Lamp Control Left Rear Trailer Stop/Turn Lamp Control	II II	UET - UET

X88 Trailer Wiring Harness Connector X2 (UVS)



5758030

Connector Part Information

Harness Type: Chassis Wiring Harness COAX
OEM Connector: 35187032
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BK)

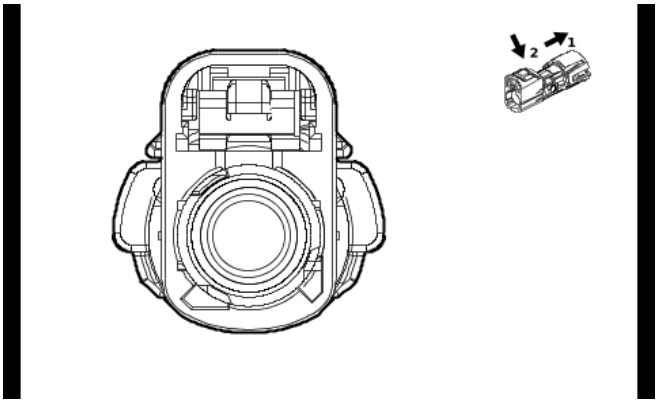
Terminal Part Information

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

X88 Trailer Wiring Harness Connector X2 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Trailer Rear Vision Camera Coaxial Video Signal	I	—

X88 Trailer Wiring Harness Connector X3 (UVS)



5757455

Connector Part Information

Harness Type: Chassis Wiring Harness COAX
OEM Connector: 35187043
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(OG)

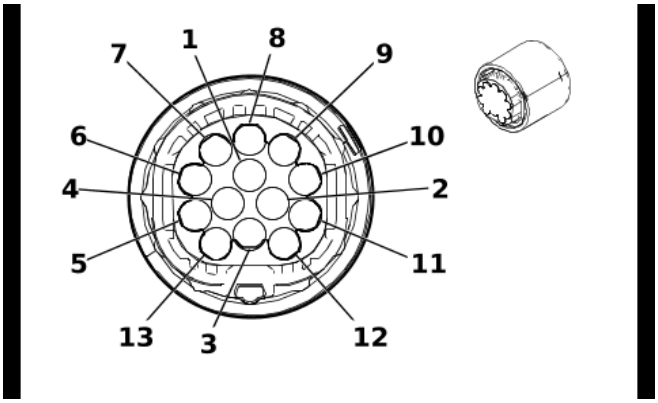
Terminal Part Information

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

X88 Trailer Wiring Harness Connector X3 (UVS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Trailer 2 Rear Vision Camera Coaxial Video Signal	I	—

X88B Tow Vehicle Electrical Receptacle X1 (Z82&UET)



5499621

Connector Part Information

Harness Type: Chassis Harness
OEM Connector: 35383017
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 2.5 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

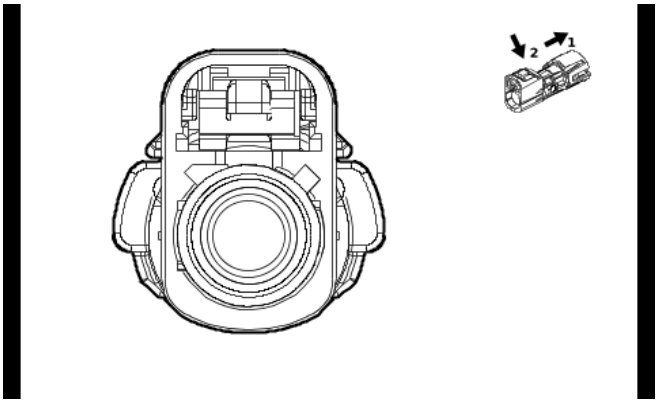
X88B Tow Vehicle Electrical Receptacle X1 (Z82&UET)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	— —	GN / WH WH / GN	5189 1624	Trailer Backup Lamp Control Trailer Backup Lamp Control	I I	UET - UET
2	— —	BK YE / WH	1950 5190	Ground Trailer Fog Lamp Control	I I	- U1D U1D+ (MAS/ MBM/ MBR)
3	— —	BK BU	2350 47	Ground Trailer Auxiliary Control	I I	UET - UET
4	— —	YE / GY GN / VT	5187 1619	Right Trailer Turn Signal Lamp Control Right Rear Trailer Stop/Turn Lamp Control	I I	U1D+ (MAS/ MBM/ MBR) - UET
5	— —	RD / GN GY	742 5185	Battery Positive Voltage Right Trailer Park Lamp Control	I I	- U1D U1D+ (MAS/ MBM/ MBR)
6	— — —	BN / YE BN / GY GY / BN	5188 5184 2109	Trailer Stop Lamp Control Left Trailer Park Lamp Control Trailer Park Lamp Control	I I I	U1D+ (MAS/ MBM/ MBR) UET - UET
7	— — —	BN / GY BU / WH YE / GY	5184 5186 1618	Left Trailer Park Lamp Control Left Trailer Turn Signal Lamp Control Left Rear Trailer Stop/Turn Lamp Control	I I I	U1D+ (MAS/ MBM/ MBR) UET - UET
8	—	GN / WH	5189	Trailer Backup Lamp Control	I	—
9	—	RD / GN	742	Battery Positive Voltage	I	—
10	—	VT / BK	339	Run/Crank Ignition 1 Voltage	I	—
11	—	BK	2350	Ground	I	—

X88B Tow Vehicle Electrical Receptacle X1 (Z82&UET) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
12	—	—	—	Not Occupied	—	—
13	—	BK	2350	Ground	I	—

X88B Tow Vehicle Electrical Receptacle X2 (Z82&UET)



5758030

Connector Part Information

Harness Type: Chassis Harness COAX
OEM Connector: 13529782
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(BK)

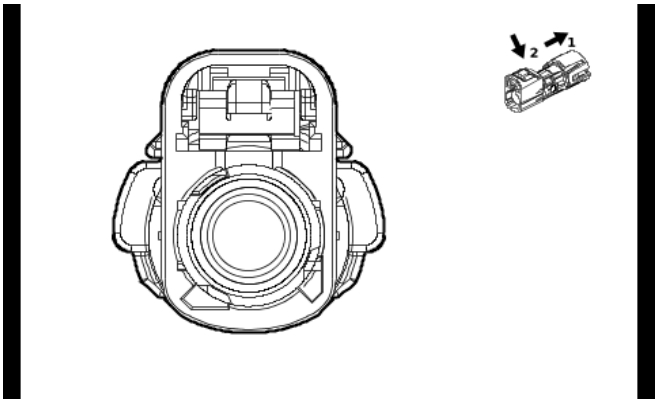
Terminal Part Information

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

X88B Tow Vehicle Electrical Receptacle X2 (Z82&UET)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

X88B Tow Vehicle Electrical Receptacle X3 (Z82&UET)



5757455

Connector Part Information

Harness Type: Chassis Harness COAX
OEM Connector: 13529793
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type(OG)

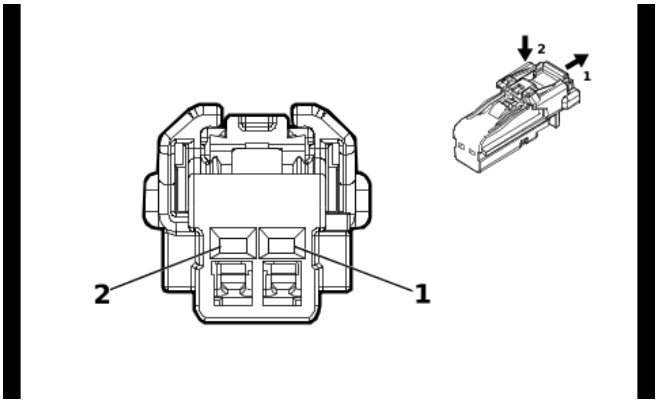
Terminal Part Information

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

X88B Tow Vehicle Electrical Receptacle X3 (Z82&UET)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	Rear Vision Camera Coaxial Video Signal	I	—

X92BCL USB Receptacle - 3rd Row Seat Left



4115691

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

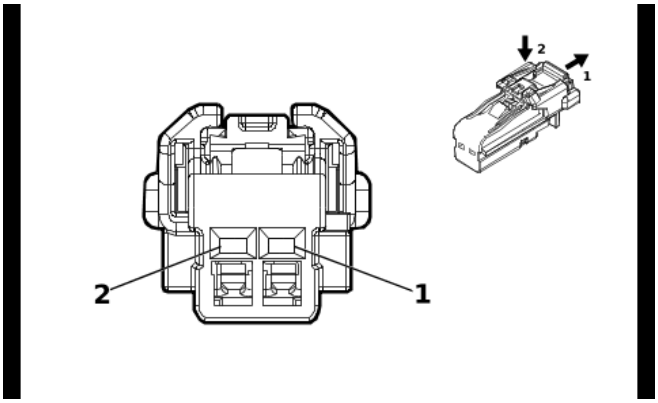
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

X92BCL USB Receptacle - 3rd Row Seat Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	4701	Retained Accessory Power Control	I	—
2	0.5	BK	1150	Ground	I	—

X92BCR USB Receptacle - 3rd Row Seat Right



4115691

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35311666
Service Connector: 87816612
Description: 2-Way F 1.2 MCON Series(BK)

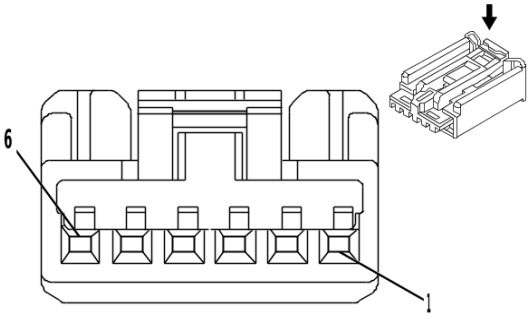
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

X92BCR USB Receptacle - 3rd Row Seat Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT	4701	Retained Accessory Power Control	I	—
2	0.5	BK	1450	Ground	I	—

X92D USB Receptacle - Center Console (-UW9)



1862240

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13595476
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Kaizen Series(BK)

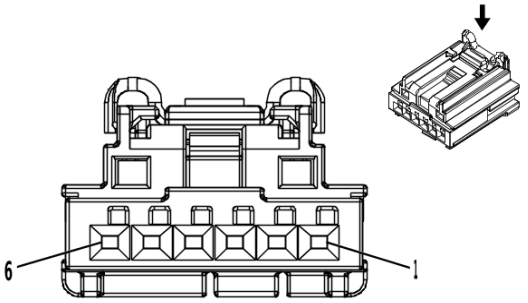
Terminal Part Information

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

X92D USB Receptacle - Center Console (-UW9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	VT	4701	Retained Accessory Power Control	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	BK	1250	Ground	I	—
5	—	—	—	Not Occupied	—	—
6	0.5	VT	4701	Retained Accessory Power Control	I	—

X92G USB 2 Port Receptacle X1 (MCR)



3960313

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series(BK)

Terminal Part Information

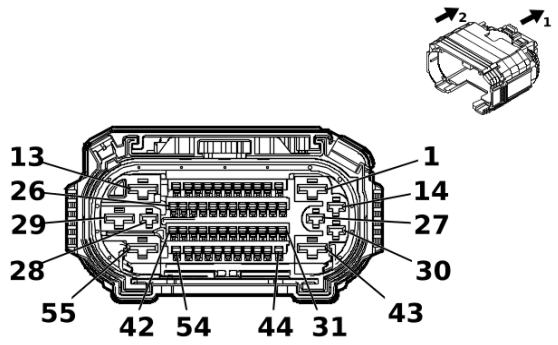
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

X92G USB 2 Port Receptacle X1 (MCR)

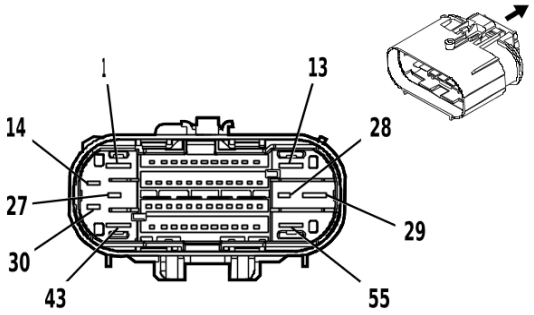
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / YE	2340	Battery Positive Voltage	I	—
2	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
3	0.75	BK / WH	1451	Signal Ground	I	—
4 - 6	—	—	—	Not Occupied	—	—

Inline Harness Connector End Views

X125 Engine Wiring Harness to Body Wiring Harness (L87/LT4)



5246872



4994369

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35179598
Service Connector: 19371184
Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35205185
Service Connector: 84727363
Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-12 (BU)	J-38125-215A
II	19371217	J-35616-12 (BU)	J-38125-553
III	84634921	J-35616-42 (RD)	J-38125-212
IV	84847992	J-35616-32 (OG)	J-38125-36
V	84867140	J-35616-13 (BU)	J-38125-215A

X125 Engine Wiring Harness to Body Wiring Harness (L87/LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.5	BK / BU	1271	V	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.5	GN / WH	1162	V	—
6	—	—	—	—	—	Wait To Start Indicator Control	6	0.35	GN / BN	507	V	—
7 - 14	—	—	—	—	—	Not Occupied	7 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.5	YE	4063	V	—
16 - 23	—	—	—	—	—	Not Occupied	16 - 23	—	—	—	—	—

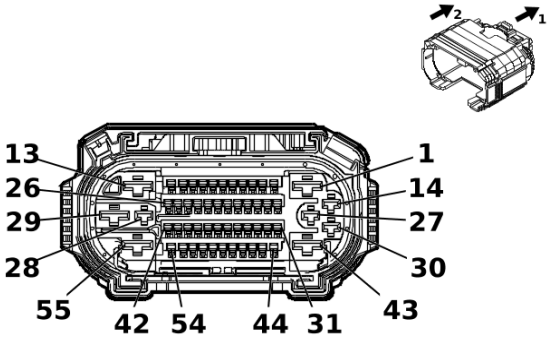
X125 Engine Wiring Harness to Body Wiring Harness (L87/LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
24	0.5	BU / GY	4054	I	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	24	0.35	BU / GY	4054	V	—
25	0.5	WH	4055	I	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	25	0.35	WH	4055	V	—
26 - 30	—	—	—	—	—	Not Occupied	26 - 30	—	—	—	—	—
31	—	—	—	—	—	Cruise/ETC/ TCC Brake Signal	31	0.5	WH / BU	6311	V	—
32 - 34	—	—	—	—	—	Not Occupied	32 - 34	—	—	—	—	—
35	0.5 0.5	BK / YE BK / GY	548 626	I I	L87 LM2	Engine Control Sensors Low Reference 1 Engine Control Vehicle Sensors Low Reference 1	35	0.5	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.5	WH / GN	5380	V	—
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.5	WH / RD	5381	V	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.5	BK / VT	1272	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE / BK	625	I	—	Starter Enable Relay Control	42	0.35	YE / BK	625	V	—
43	4	BK / WH	6151	III	—	Engine Control Module Ground	43	4	BK / WH	6151	IV	—
44	1	RD / GN	1840	II	—	Battery Positive Voltage	44	0.75	RD / GN	1840	V	—
45 - 46	—	—	—	—	—	Not Occupied	45 - 46	—	—	—	—	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.5	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—

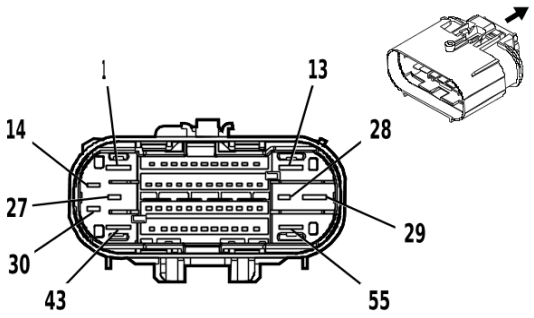
X125 Engine Wiring Harness to Body Wiring Harness (L87/LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.5	YE / WH	1161	V	—
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.5	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.5	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.5	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X125 Engine Wiring Harness to Body Wiring Harness (LM2)



5246872



4994369

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35434344

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35205185

Service Connector: 84727363

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19370818	J-35616-12 (BU)	J-38125-215A
II	19371217	J-35616-12 (BU)	J-38125-553
III	84634921	J-35616-42 (RD)	J-38125-212
IV	84847992	J-35616-32 (OG)	J-38125-36
V	84867140	J-35616-13 (BU)	J-38125-215A

X125 Engine Wiring Harness to Body Wiring Harness (LM2)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BK / BU	1271	I	—	Accelerator Pedal Position Low Reference 1	3	0.5	BK / BU	1271	V	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	5	0.5	GN / WH	1162	V	—
6	0.35	GN / BN	507	I	—	Wait To Start Indicator Control	6	0.35	GN / BN	507	V	—
7 - 14	—	—	—	—	—	Not Occupied	7 - 14	—	—	—	—	—
15	0.5	YE	4063	I	—	Hood Status A Signal	15	0.5	YE	4063	V	—
16 - 23	—	—	—	—	—	Not Occupied	16 - 23	—	—	—	—	—

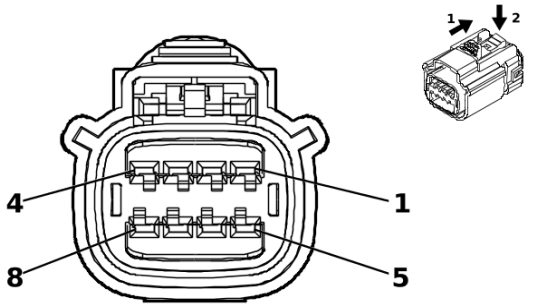
X125 Engine Wiring Harness to Body Wiring Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
24	0.5	BU / GY	4054	I	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	24	0.35	BU / GY	4054	V	—
25	0.5	WH	4055	I	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	25	0.35	WH	4055	V	—
26 - 30	—	—	—	—	—	Not Occupied	26 - 30	—	—	—	—	—
31	—	—	—	—	—	Cruise/ETC/ TCC Brake Signal	31	0.5	WH / BU	6311	V	—
32 - 34	—	—	—	—	—	Not Occupied	32 - 34	—	—	—	—	—
35	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	35	0.5	BK / YE	5382	V	—
36	0.5	WH / GN	5380	I	—	Brake Position Sensor Signal	36	0.5	WH / GN	5380	V	—
37	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	37	0.5	WH / RD	5381	V	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—
40	0.5	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	40	0.5	BK / VT	1272	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.5	YE / BK	625	I	—	Starter Enable Relay Control	42	0.35	YE / BK	625	V	—
43	4	BK / WH	6151	III	—	Engine Control Module Ground	43	4	BK / WH	6151	IV	—
44	1	RD / GN	1840	II	—	Battery Positive Voltage	44	0.75	RD / GN	1840	V	—
45 - 46	—	—	—	—	—	Not Occupied	45 - 46	—	—	—	—	—
47	0.5	BU / BN	7573	I	—	A/C Compressor Solenoid Valve Control	47	0.5	BU / BN	7573	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.5	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	49	0.5	YE / WH	1161	V	—

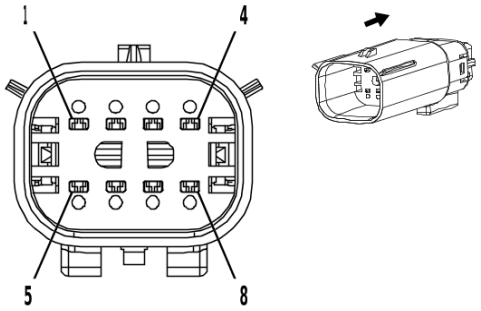
X125 Engine Wiring Harness to Body Wiring Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
50	0.5	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	50	0.5	WH / RD	1164	V	—
51	0.5	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	51	0.5	BN / RD	1274	V	—
52	—	—	—	—	—	Not Occupied	52	—	—	—	—	—
53	0.5	BU / YE	7574	I	—	A/C Compressor Solenoid Valve Control	53	0.5	BU / YE	7574	V	—
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X128B Engine Wiring Harness to Engine Camshaft Wiring Harness (L87/LT4)



5253496



2667653

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15514667
Service Connector: 84766296
Description: 8-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Camshaft Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-2A (GY)	No Tool Required
III	Not required	No Tool Required	No Tool Required

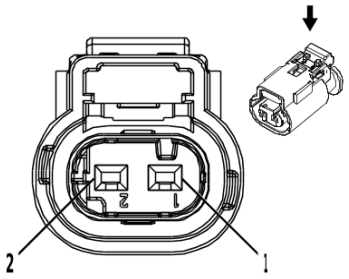
X128B Engine Wiring Harness to Engine Camshaft Wiring Harness (L87/LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / BU	5300	I	—	Intake Camshaft Position Sensor 1 Voltage Reference	1	0.5	GY / BU	5300	III	—
2	0.5	BK / GN	5301	I	—	Intake Camshaft Position Sensor Low Reference 1	2	0.5	BK / GN	5301	III	—
3	0.5	YE / VT	5275	I	—	Intake Camshaft Position Sensor 1	3	0.5	YE / VT	5275	III	—
4	0.5	BU	179	I	—	Engine Oil Pump Control	4	0.5	BU	179	III	—
5	0.5	VT / BN	5284	I	—	Intake Camshaft Position Actuator Solenoid Valve 1	5	0.5	VT / BN	5284	III	—
6	0.5	BK / BN	6753	I	—	Camshaft Position Actuator Solenoid Valve W Low Reference	6	0.5	BK / BN	6753	III	—

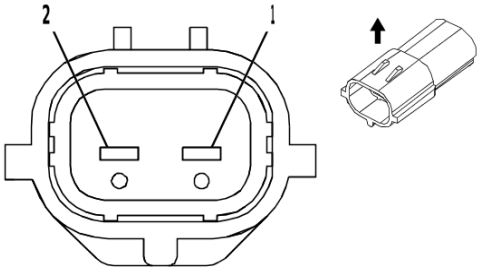
X128B Engine Wiring Harness to Engine Camshaft Wiring Harness (L87/LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	VT / BU	5293	II	—	Powertrain Main Relay Fused Supply Voltage 4	7	0.75	VT / BU	5293	III	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X129 Engine Wiring Harness to Engine Oil Pressure Control Solenoid Valve Jumper Wiring Harness (LM2)



2717066



2684367

Connector Part Information

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

Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M (BK)

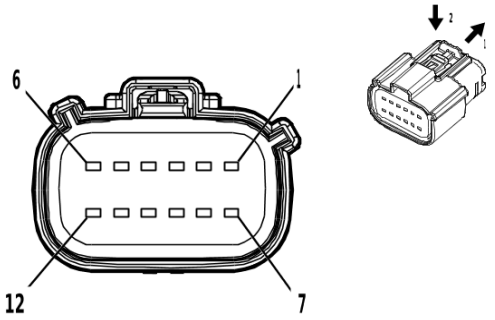
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	No Tool Required	No Tool Required

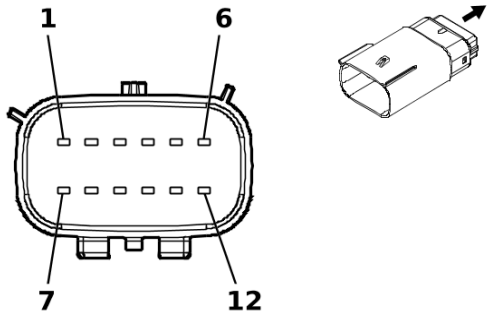
X129 Engine Wiring Harness to Engine Oil Pressure Control Solenoid Valve Jumper Wiring Harness (LM2)

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	—	Engine Oil Pump Control	2	0.5	BU	179	II	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LM2)



4584248



5187933

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33221171
Service Connector: 19333239
Description: 12-Way F 1.5 MX Series, Sealed(D-GY)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 33482-6261
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

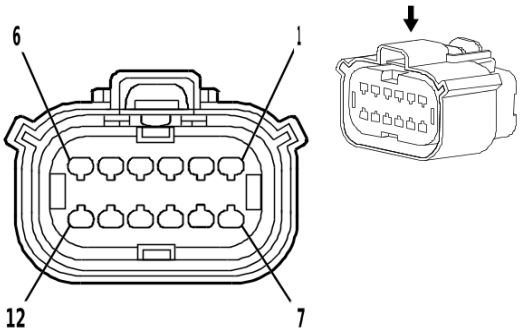
X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LM2)

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 High Voltage Supply Cylinder 1	1	1.5	BN / WH	4901	II	—
2	1.5	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	2	1.5	BN	4801	II	—
3	1.5	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	3	1.5	BU / GY	4902	II	—
4	1.5	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	4	1.5	BU	4802	II	—
5	1.5	GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	5	1.5	GN / GY	4903	II	—
6	1.5	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	6	1.5	GN	4803	II	—

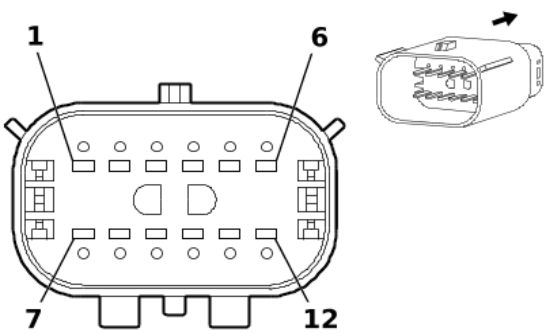
X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LM2) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	1.5	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	7	1.5	BU / WH	4904	II	—
8	1.5	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	1.5	GY / BU	4804	II	—
9	1.5	GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	9	1.5	GN / WH	4905	II	—
10	1.5	WH / GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	10	1.5	WH / GN	4805	II	—
11	1.5	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	11	1.5	VT / GY	4906	II	—
12	1.5	VT / GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	12	1.5	VT / GN	4806	II	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Left (L87/LT4)



1825165



1825167

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13595088
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Left
OEM Connector: 334826206
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

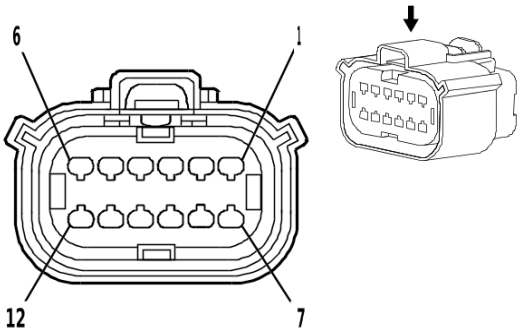
X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Left (L87/LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	1	0.8	BN / WH	4901	II	—
2	0.75	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	2	0.8	GN / GY	4903	II	—
3	0.75	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	3	0.8	GN / WH	4905	II	—
4	0.75	GY / WH	4908	I	—	Direct Fuel Injector High Voltage Supply Cylinder 8	4	0.8	WH / YE	4907	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.8	BN	4801	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

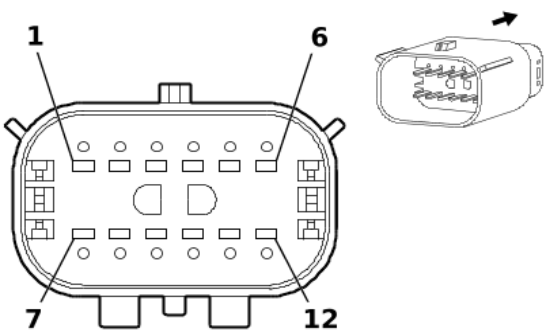
X160 Engine Wiring Harness to Fuel Injector Wiring Harness - Left (L87/LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	7	0.8	GN	4803	II	—
8	0.75	WH / GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	8	0.8	WH / GN	4805	II	—
9	0.75	VT / GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.8	YE / GY	4807	II	—
10	0.5	GY	4808	I	—	Direct Fuel Injector High Voltage Control Cylinder 8	10	0.5	GY	4808	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	—

X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Right (L87 / LT4)



1825165



1825167

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13922706
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness - Right
OEM Connector: 334826211
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

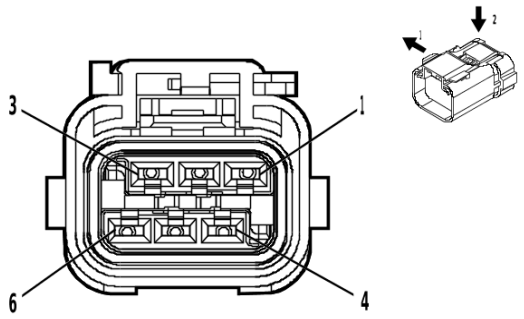
X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Right (L87 / LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	1	0.8	BU / GY	4902	II	—
2	0.75	BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	2	0.8	GN / GY	4903	II	—
3	0.75	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	3	0.8	VT / GY	4906	II	—
4	0.75	GY / WH	4908	I	—	Direct Fuel Injector High Voltage Supply Cylinder 8	4	0.8	WH / YE	4907	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.8	BN	4801	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

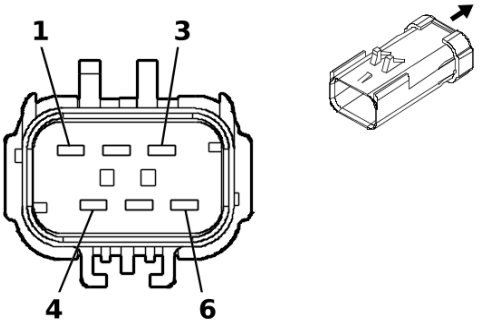
X161 Engine Wiring Harness to Fuel Injector Wiring Harness - Right (L87 / LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	GY / BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	0.8	GY / BU	4804	II	—
9	0.75	VT / GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.8	VT / GN	4806	II	—
10	0.75	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	10	0.8	GY	4808	II	—
11	0.75	VT / BK	7300	I	—	High Pressure Fuel Pump Low Control	11	0.8	VT / BK	7300	II	—
12	0.75	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	12	0.8	BK / YE	548	II	—

X163 Engine Wiring Harness to Diesel Glow Plug Wiring Harness (LM2)



4997615



5187846

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15419838
Service Connector: 86825462
Description: 6-Way F 2.8 APEX Series, Sealed(BK)

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 54200612
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 2.8 APEX Series, Sealed(BK)

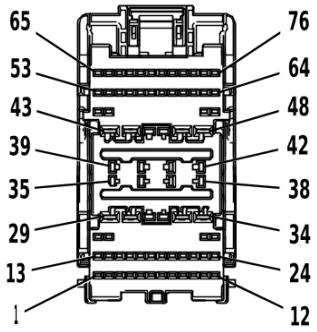
Terminal Part Information

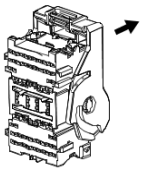
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X163 Engine Wiring Harness to Diesel Glow Plug Wiring Harness (LM2)

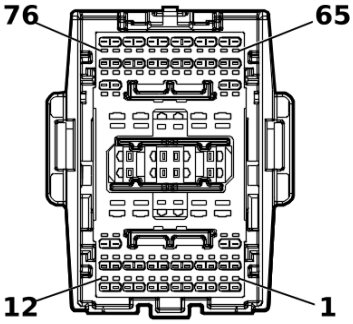
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	GY / BU	1581	I	—	Glow Plug 1 Control	1	2.5	GY / RD	1581	II	—
2	2.5	GY / BN	1582	I	—	Glow Plug 2 Control	2	2.5	GY / BK	1582	II	—
3	2.5	GY / GN	1583	I	—	Glow Plug 3 Control	3	2.5	GY / GN	1583	II	—
4	2.5	GY / YE	1584	I	—	Glow Plug 4 Control	4	2.5	GY / YE	1584	II	—
5	2.5	GY / WH	1585	I	—	Glow Plug 5 Control	5	2.5	GY / WH	1585	II	—
6	2.5	GY / VT	1586	I	—	Glow Plug 6 Control	6	2.5	GY	1586	II	—

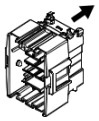
X210 Instrument Panel Wiring Harness to Body Wiring Harness





3960183





5277492

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35273135
Service Connector: 13526160
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575708	J-35616-2A (GY)	J-38125-11A
II	13587516	J-35616-4A (PU)	J-38125-11A
III	84962854	J-35616-12 (BU)	J-38125-215A
IV	84616651	J-35616-13 (BU)	J-38125-215A
V	84888592	J-35616-5 (PU)	J-38125-11A
VI	85119177	J-35616-3 (GY)	J-38125-553

X210 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 8	—	—	—	—	—	Not Occupied	1 - 8	—	—	—	—	—
9	0.75	GN / BU	1875	III	—	Right Front Speaker [+] Control 2	9	0.75	GN / BU	1875	IV	—
10	0.75	BN / BK	1975	III	—	Right Front Speaker [-] Control 2	10	0.75	BN / BK	1975	IV	—
11 - 13	—	—	—	—	—	Not Occupied	11 - 13	—	—	—	—	—
14	0.5 0.35	WH WH	4978 4978	III III	UHY - UHY	AUTOSAR CAN Bus [-] 2 Serial Data AUTOSAR CAN Bus [-] 2 Serial Data	14	0.35	WH	4978	IV	—
15 - 16	—	—	—	—	—	Not Occupied	15 - 16	—	—	—	—	—
17	0.35	YE	6812	III	—	Out of Park Signal	17	0.5	YE	6812	IV	—

X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.35	GN / GY	4627	III	—	Image Processing Module LIN Bus 1	18	0.35	GN / GY	4627	IV	—
19 - 21	—	—	—	—	—	Not Occupied	19 - 21	—	—	—	—	—
22	0.35	WH	4986	III	—	AUTOSAR CAN Bus [-] 1 Serial Data	22	0.35	WH	4986	IV	—
23	0.35	BU	4987	III	—	AUTOSAR CAN Bus [+] 1 Serial Data	23	0.35	BU	4987	IV	—
24 - 25	—	—	—	—	—	Not Occupied	24 - 25	—	—	—	—	—
26	0.5 0.35	BU / YE BU / YE	4979 4979	III III	UHY - UHY	AUTOSAR CAN Bus [+] 2 Serial Data AUTOSAR CAN Bus [+] 2 Serial Data	26	0.35	BU / YE	4979	IV	—
27	0.35	GN / WH	2854	III	—	Body Control Module LIN Bus 8	27	0.35	GN / WH	2854	IV	—
28 - 34	—	—	—	—	—	Not Occupied	28 - 34	—	—	—	—	—
35	0.75	GY / BN	8568	I	—	Left Rear Headliner Speaker [+] Control	35	0.75	GY / BN	8568	VI	—
36 - 38	—	—	—	—	—	Not Occupied	36 - 38	—	—	—	—	—
39	0.75	GN / WH	8567	I	—	Left Rear Headliner Speaker [-] Control	39	0.75	GN / WH	8567	VI	—
40	0.35	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data	40	0.35	WH / GY	4104	VI	—
41 - 43	—	—	—	—	—	Not Occupied	41 - 43	—	—	—	—	—
44	0.35	GN / YE	7066	II	—	Entertainment Remote Enable Signal	44	0.35	GN / YE	7066	V	—
45	0.75	BN / BK	1953	I	—	Right Front Midrange Speaker [-] Control	45	1	BN / BK	1953	VI	—
46	0.75	WH / YE	1853	I	—	Right Front Midrange Speaker [+] Control	46	1	WH / YE	1853	VI	—
47	0.35	BU / GY	4105	II	—	AUTOSAR CAN Bus [+] 8 Serial Data	47	0.35	BU / GY	4105	V	—

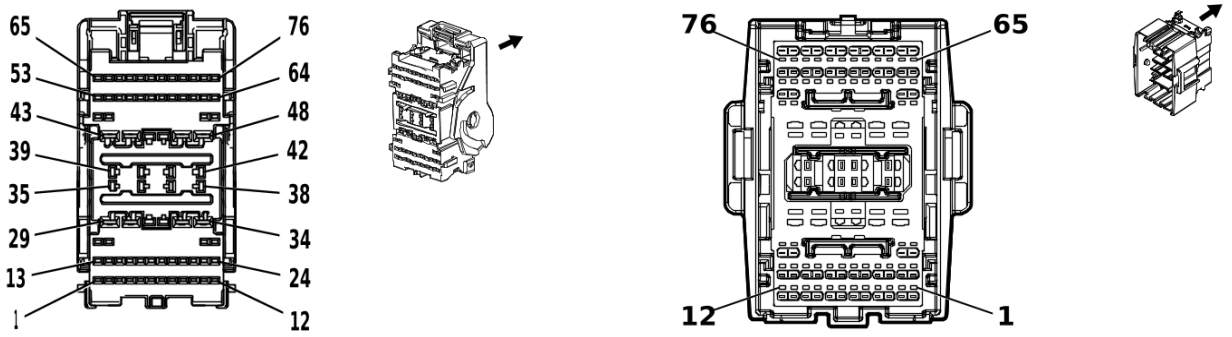
X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.35	BU	8579	III	—	Automotive Audio Bus A2B Serial Data 1 [-]	49	0.35	BU	8579	IV	—
50	0.35	GN	8580	III	—	Automotive Audio Bus A2B Serial Data 1 [+]	50	0.35	GN	8580	IV	—
51	0.35	BU / VT	807	III	—	Ignition Off/ Accessory Ignition Voltage	51	0.35	BU / VT	807	IV	—
52 - 54	—	—	—	—	—	Not Occupied	52 - 54	—	—	—	—	—
55	0.75	BU / WH	8571	III	—	Left Front Headliner Speaker [-] Control	55	0.75	BU / WH	8571	IV	—
56	0.75	GN / BN	8572	III	—	Left Front Headliner Speaker [+] Control	56	0.75	GN / BN	8572	IV	—
57	0.75	BN	8569	III	—	Right Rear Headliner Speaker [-] Control	57	0.75	BN	8569	IV	—
58	0.75	VT / GY	8570	III	—	Right Rear Headliner Speaker [+] Control	58	0.75	VT / GY	8570	IV	—
59	—	—	—	—	—	Not Occupied	59	—	—	—	—	—
60	0.35	YE / WH	1690	III	—	Mirror Dimming Signal	60	0.35	YE / WH	1690	IV	—
61 - 62	—	—	—	—	—	Not Occupied	61 - 62	—	—	—	—	—
63	0.35	BK / YE	1691	III	—	Automatic Day/Night Mirror Low Reference	63	0.35	BK / YE	1691	IV	—
64	—	—	—	—	—	Not Occupied	64	—	—	—	—	—
65	0.35	WH / BK	4056	III	—	Private Serial Data Infotainment CAN Bus [-] Serial Data	65	0.5	WH / BK	4056	IV	—
66 - 68	—	—	—	—	—	Not Occupied	66 - 68	—	—	—	—	—
69	0.35	GN / BK	2858	III	—	Body Control Module LIN Bus 12	69	0.35	GN / BK	2858	IV	—

X210 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
70	0.35	BU / BK	4057	III	—	Private Serial Data Infotainment CAN Bus [+] Serial Data	70	0.5	BU / BK	4057	IV	—
71	—	—	—	—	—	Not Occupied	71	—	—	—	—	—
72	0.35	GN / WH	2861	III	—	Body Control Module LIN Bus 15	72	0.35	GN / WH	2861	IV	—
73	0.75	BN / VT	8573	III	—	Right Front Headliner Speaker [-] Control	73	0.75	BN / VT	8573	IV	—
74	0.75	GY / GN	8574	III	—	Right Front Headliner Speaker [+] Control	74	0.75	GY / GN	8574	IV	—
75	—	—	—	—	—	Not Occupied	75	—	—	—	—	—
76	0.35	GY / GN	4083	III	—	Retained Accessory Power Relay 2 Coil Control	76	0.35	GY / GN	4083	IV	—

X211 Instrument Panel Wiring Harness to Body Wiring Harness



Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35273135
Service Connector: 13526160
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575708	J-35616-2A (GY)	J-38125-11A
II	13587516	J-35616-4A (PU)	J-38125-11A
III	84962854	J-35616-12 (BU)	J-38125-215A
IV	84616651	J-35616-13 (BU)	J-38125-215A
V	84888592	J-35616-5 (PU)	J-38125-11A
VI	85119177	J-35616-3 (GY)	J-38125-553

X211 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 4	—	—	—	—	—	Not Occupied	1 - 4	—	—	—	—	—
5	0.35	WH / GY	4104	III	—	AUTOSAR CAN Bus [-] 8 Serial Data	5	0.35	WH / GY	4104	IV	—
6	0.35	BU / GY	4105	III	—	AUTOSAR CAN Bus [+] 8 Serial Data	6	0.35	BU / GY	4105	IV	—
7	0.35	GY	1715	III	—	Windshield Wiper Switch High Signal	7	0.35	GY	1715	IV	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.35	WH / VT	4849	III	—	LED Ambient Lighting Enable Signal	9	0.35	WH / VT	4849	IV	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.75	BN / YE	8565	III	—	Front Center Speaker [-] 2 Control	11	0.75	BN / YE	8565	IV	—

X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	0.75	BU / GN	8566	III	—	Front Center Speaker 2 [+] Control	12	0.75	BU / GN	8566	IV	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	GN / YE	2731	III	—	Brake System Control Module LIN Bus 1	14	0.5	GN / YE	2731	IV	—
15	0.35	GN / VT	5199	III	—	Run/Crank Relay Coil Control	15	0.5	GN / VT	5199	IV	—
16	0.5	VT / WH	639	III	—	Run/Crank Ignition 1 Voltage	16	0.5	VT / WH	639	IV	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	0.35	GN / BN	2853	III	—	Body Control Module LIN Bus 7	18	0.35	GN / BN	2853	IV	—
19	0.35	WH	4976	III	—	AUTOSAR CAN Bus [-] 3 Serial Data	19	0.35	WH	4976	IV	—
20	0.35	BU / BK	4977	III	—	AUTOSAR CAN Bus [+] 3 Serial Data	20	0.35	BU / BK	4977	IV	—
21	0.5	OG / VT	3026	III	—	Passenger Instrument Panel Air Bag Stage 2 Low Control	21	0.5	OG / VT	3026	IV	—
22	0.5	GY / OG	3027	III	—	Passenger Instrument Panel Air Bag Stage 2 High Control	22	0.5	GY / OG	3027	IV	—
23	0.35	WH	4986	III	—	AUTOSAR CAN Bus [-] 1 Serial Data	23	0.35	WH	4986	IV	—
24	0.35	BU	4987	III	—	AUTOSAR CAN Bus [+] 1 Serial Data	24	0.35	BU	4987	IV	—
25	0.35	GN / GY	2431	III	—	Automatic Vehicle Hold Indicator Control	25	0.5	GN / GY	2431	IV	—
26	0.5	GN / WH	24	III	—	Backup Lamp Control	26	0.5	GN / WH	24	IV	—
27	0.35	GN	1110	III	—	Stop/Start Indicator Control	27	0.5	GN	1110	IV	—
28	0.35	BU	1111	III	—	Stop/Start Switch Signal	28	0.5	BU	1111	IV	—
29	—	—	—	—	—	Not Occupied	29	—	—	—	—	—
30	1.5	BK / WH	1451	II	—	Signal Ground	30	2	BK / WH	1451	V	—

X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.35	BU / WH	4985	I	—	AUTOSAR CAN Bus [+] 5 Serial Data	31	0.35	BU / WH	4985	VI	—
32	0.35	BU / YE	4984	I	—	AUTOSAR CAN Bus [-] 5 Serial Data	32	0.35	BU / YE	4984	VI	—
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	2.5	RD / VT	1242	II	—	Battery Positive Voltage	34	2	RD / VT	1242	V	—
35	—	—	—	—	—	Not Occupied	35	—	—	—	—	—
36	0.35	GN / WH	7530	I	—	Driver Seat Adjuster Memory Module LIN Bus 1	36	0.5	GN / WH	7530	VI	—
37	0.35	WH / GN	2911	I	—	Driver Mode 1 Indicator Control	37	0.35	WH / GN	2911	VI	—
38	—	—	—	—	—	Not Occupied	38	—	—	—	—	—
39	0.35	VT / GN	7558	I	—	Front Footwell Accent Lighting Control	39	0.35	VT / GN	7558	VI	—
40	0.75	BU / VT	1874	I	—	Left Front Speaker [+] Control 2	40	1	BU / VT	1874	VI	—
41	0.75	GY / BK	1974	I	—	Left Front Speaker [-] Control 2	41	1	GY / BK	1974	VI	—
42	—	—	—	—	—	Not Occupied	42	—	—	—	—	—
43	0.75	BU / YE	1960	II	—	Front Center Speaker [-] Control	43	1	BU / YE	1960	V	—
44	0.75	YE / WH	1860	II	—	Front Center Speaker [+] Control	44	1	YE / WH	1860	V	—
45	0.75	BU / BN	1957	I	—	Left Front Midrange Speaker [-] Control	45	0.75	BU / BN	1957	VI	—
46	0.75	BU / VT	1857	I	—	Left Front Midrange Speaker [+] Control	46	0.75	BU / VT	1857	VI	—
47	0.35	GN / BN	507	II	—	Wait To Start Indicator Control	47	0.35	GN / BN	507	V	—
48	2.5	BU	47	II	—	Trailer Auxiliary Control	48	2.5	BU	47	V	—
49 - 50	—	—	—	—	—	Not Occupied	49 - 50	—	—	—	—	—
51	0.35	BU / GY	4990	III	—	Driver Mode 1 Switch Signal	51	0.35	BU / GY	4990	IV	—

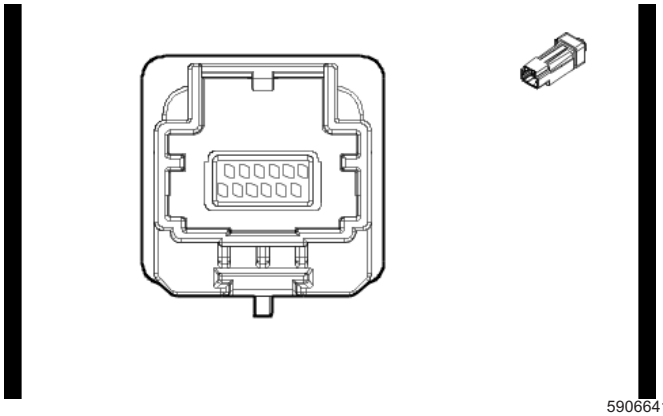
X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
52	0.35	VT / GN	10130	III	—	Auxiliary Center Stack Display Backlight Dimming Control	52	0.35	VT / GN	10130	IV	—
53	0.35	GY	728	III	—	Security Indicator Control	53	0.5	GY	728	IV	—
54	0.5	YE	6817	III	—	LED Backlight Dimming Control 1	54	0.5	YE	6817	IV	—
55	0.75	YE / GY	1956	III	—	Left Front Tweeter Speaker [-] Control	55	0.75	YE / GY	1956	IV	—
56	0.5	YE / OG	3025	III	—	Passenger Instrument Panel Air Bag Stage 1 High Control	56	0.5	YE / OG	3025	IV	—
57	—	—	—	—	—	Not Occupied	57	—	—	—	—	—
58	0.5	VT / WH	239	III	—	Run/Crank Ignition 1 Voltage	58	0.5	VT / WH	239	IV	—
59 - 60	—	—	—	—	—	Not Occupied	59 - 60	—	—	—	—	—
61	0.75	BN / GN	1852	III	—	Right Front Tweeter Speaker [+] Control	61	0.75	BN / GN	1852	IV	—
62	0.75	VT / BN	1952	III	—	Right Front Tweeter Speaker [-] Control	62	0.75	VT / BN	1952	IV	—
63	0.5	OG / VT	3021	III	—	Steering Wheel Air Bag Stage 1 High Control	63	0.5	OG / VT	3021	IV	—
64	0.5	BN / OG	3020	III	—	Steering Wheel Air Bag Stage 1 Low Control	64	0.5	BN / OG	3020	IV	—
65	0.5	OG / GN	3023	III	—	Steering Wheel Air Bag Stage 2 High Control	65	0.5	OG / GN	3023	IV	—
66	0.5	WH / OG	3022	III	—	Steering Wheel Air Bag Stage 2 Low Control	66	0.5	WH / OG	3022	IV	—
67	0.75	YE / BU	1856	III	—	Left Front Tweeter Speaker [+] Control	67	0.75	YE / BU	1856	IV	—
68	0.5	OG / WH	3024	III	—	Passenger Instrument Panel Air Bag Stage 1 Low Control	68	0.5	OG / WH	3024	IV	—

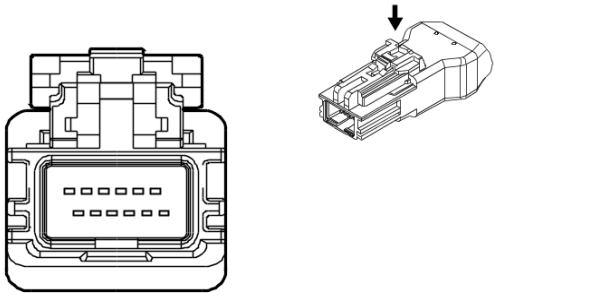
X211 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
69 - 70	—	—	—	—	—	Not Occupied	69 - 70	—	—	—	—	—
71	0.35	WH	4100	III	—	AUTOSAR CAN Bus [-] 4 Serial Data	71	0.35	WH	4100	IV	—
72	0.35	BU / VT	4101	III	—	AUTOSAR CAN Bus [+] 4 Serial Data	72	0.35	BU / VT	4101	IV	—
73	0.35	YE / BN	1428	III	—	Automatic Vehicle Hold Switch Signal	73	0.5	YE / BN	1428	IV	—
74	0.35	GN / BU	2733	III	—	Brake System Control Module LIN Bus 2	74	0.75	GN / BU	2733	IV	—
75	0.35	WH	3152	III	—	Lane Departure Warning Indicator Control	75	0.35	WH	3152	IV	—
76	0.35	GY / WH	3153	III	—	Lane Departure Warning Disable Switch Signal	76	0.5	GY / WH	3153	IV	—

X213 Instrument Panel Wiring Harness to Body Wiring Harness



5906641



4527210

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS

OEM Connector: VP000199

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 12-Way F 2.0 HSAL-2 Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: VP000119

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 12-Way M 2.0 HSAL-2 Series(BK)

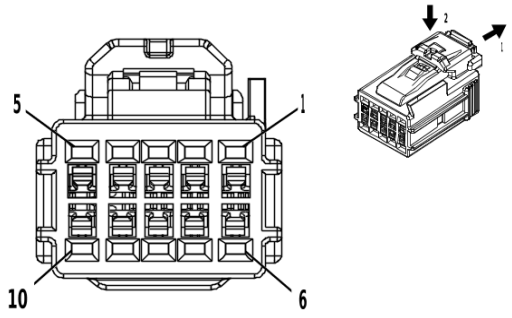
Terminal Part Information

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

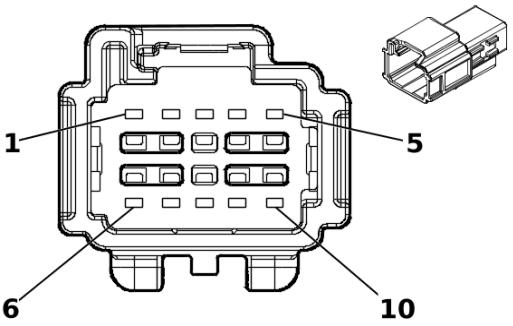
X213 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Night Vision Signal	—	—	LVDS	—	I	—

X214 Instrument Panel Wiring Harness to Body Wiring Harness



4254030



5355759

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327186
Service Connector: 13532428
Description: 10-Way F 1.2 Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35258941
Service Connector: 13530136
Description: 10-Way M 1.2 MCON Series(BK)

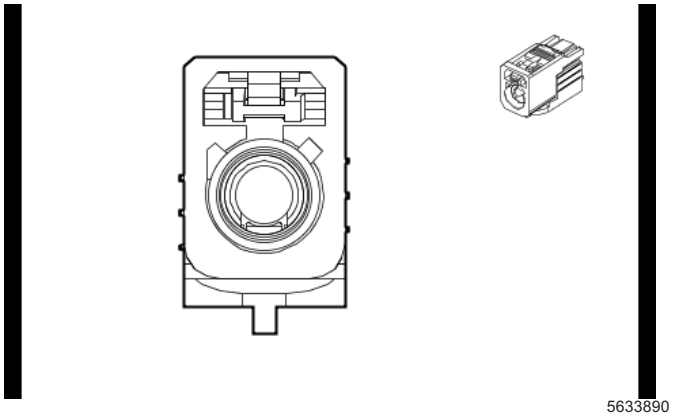
Terminal Part Information

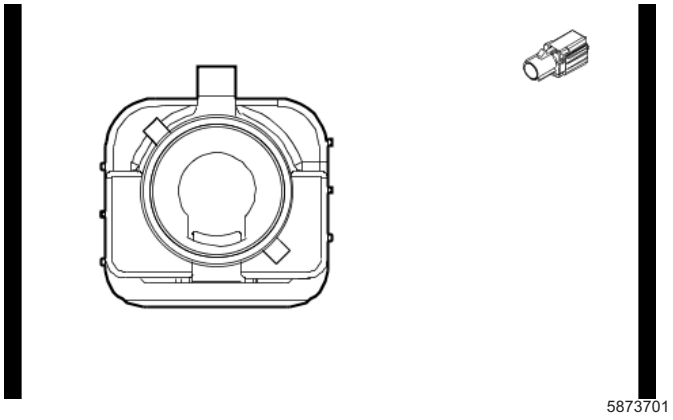
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84962854	J-35616-12 (BU)	J-38125-215A
II	84726946	J-35616-13 (BU)	J-38125-215A

X214 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT / WH	7213	I	—	Ethernet Bus 5 [+]	1	0.35	VT / WH	7213	II	—
2	0.35	VT	7212	I	—	Ethernet Bus 5 [-]	2	0.35	VT	7212	II	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	0.35	BN	7208	I	—	Ethernet Bus 3 [-]	4	0.35	BN	7208	II	—
5	0.35	BN / WH	7209	I	—	Ethernet Bus 3 [+]	5	0.35	BN / WH	7209	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	BN / BK	7214	I	—	Ethernet Bus 6 [-]	7	0.35	BN / BK	7214	II	—
8	0.35	GY / BK	7215	I	—	Ethernet Bus 6 [+]	8	0.35	GY / BK	7215	II	—
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—

X216 Body Wiring Harness to Instrument Panel Wiring Harness





Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 33351013

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BU)

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351038

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type(BU)

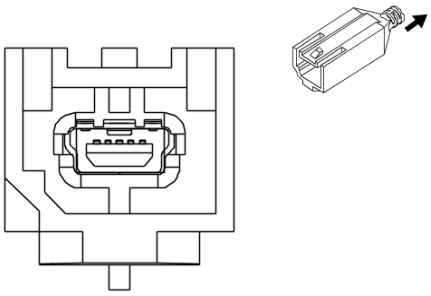
Terminal Part Information

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

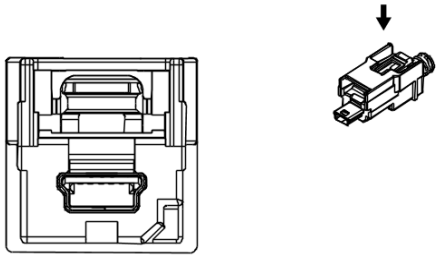
X216 Body Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Front Vision Camera 1 Coaxial Video Signal	—	—	Coax Cable	—	I	—

X225A Front Floor Console Wiring Harness to Instrument Panel Wiring Harness



3273655



2807425

Connector Part Information

Harness Type: Front Floor Console Wiring Harness LVDS

OEM Connector: 13699757

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 5-Way F 2.0 Mini-B USB Type(BK)

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS

OEM Connector: VP000109

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 5-Way M 2.0 Mini-B USB Type(BK)

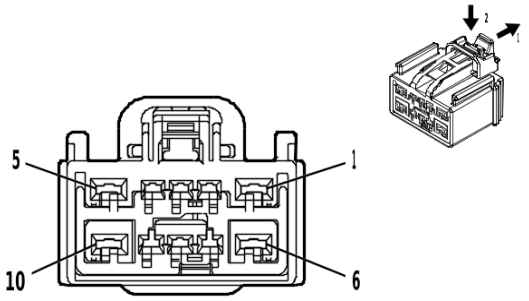
Terminal Part Information

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

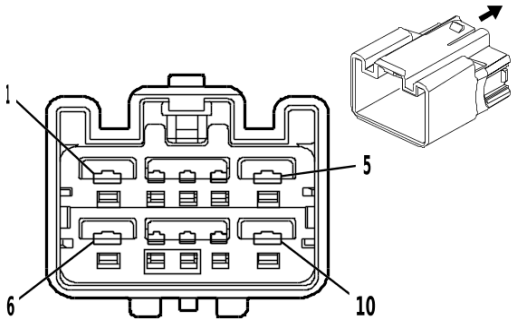
X225A Front Floor Console Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Auxiliary Video Signal	—	—	LVDS	—	I	—

X225B Instrument Panel Wiring Harness to Front Floor Console Wiring Harness



5020939



1851890

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35061724
Service Connector: 13518747
Description: 10-Way F 1.5, 2.8 Kaizen Series(L-GY)

Connector Part Information

Harness Type: Front Floor Console Wiring Harness
OEM Connector: 13506926
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M Kaizen Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587516	J-35616-4A (PU)	J-38125-11A
II	19332534	J-35616-14 (GN)	J-38125-557
III	Not required	J-35616-3 (GY)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

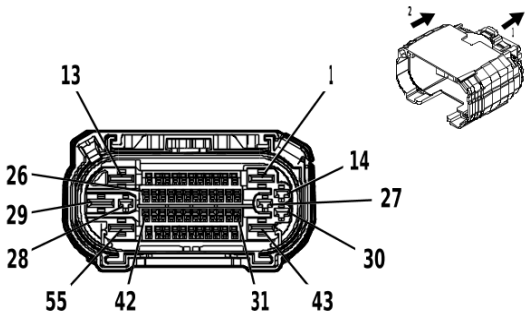
X225B Instrument Panel Wiring Harness to Front Floor Console Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	VT	1001	I	—	Retained Accessory Power Ignition Voltage	1	1.5	VT	1001	IV	—
2	0.5	RD / YE	2340	II	—	Battery Positive Voltage	2	0.5	RD / YE	2340	III	—
3	0.35	BN / BK	4996	II	—	Immobilizer Antenna Signal [+]	3	0.5	BN / BK	4996	III	—
4	0.35	WH / GY	4997	II	—	Immobilizer Antenna Low Signal	4	0.5	WH / GY	4997	III	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.35	GY / YE	7543	I	—	Hazard Warning Indicator LED Dimming Signal	6	0.5	GY / YE	7543	IV	—
7	0.35	GN / WH	111	II	—	Hazard Warning Switch Signal	7	0.5	GN / WH	111	III	—

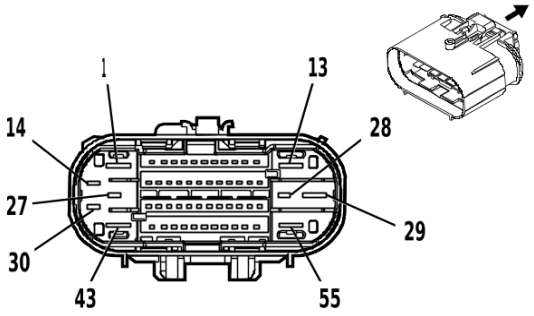
X225B Instrument Panel Wiring Harness to Front Floor Console Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.35	BN / BK	3552	II	—	Interior Passive Entry Antenna 1 High Signal	8	0.35	BN / BK	3552	III	—
9	0.35	WH	3553	II	—	Interior Passive Entry Antenna 1 Low Signal	9	0.35	WH	3553	III	—
10	0.35	RD / GN	5140	I	—	Battery Positive Voltage	10	0.35	RD / GN	5140	IV	—

X225C Front Floor Console Wiring Harness to Body Wiring Harness



4992168



4993301

Connector Part Information

Harness Type: Front Floor Console Wiring Harness

OEM Connector: 35016652

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35427886

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-16 (L-GN)	No Tool Required
III	Not required	J-35616-35 (VT)	No Tool Required
IV	Not required	J-35616-42 (RD)	No Tool Required
V	Not required	J-35616-43 (RD)	No Tool Required
VI	84867140	J-35616-13 (BU)	J-38125-215A
VII	84867141	J-35616-13 (BU)	J-38125-215A
VIII	84992391	J-35616-5 (PU)	J-38125-215A

X225C Front Floor Console Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK / WH	1351	V	—	Signal Ground	1	0.5	BK / WH	1351	VIII	—
2	0.75	BK / WH	1451	II	—	Signal Ground	2	0.75	BK / WH	1451	VI	—
3	0.5	VT / RD	4049	II	—	AC Power Outlet Sensor High Reference	3	0.5	VT / RD	4049	VI	—
4	0.75	RD / VT	6340	II	—	Battery Positive Voltage	4	0.75	RD / VT	6340	VI	—
5	0.35	BN / BK	405	I	—	Lower Duct Air Temperature Sensor Signal	5	0.5	BN / BK	405	VI	—
6	0.35	VT / GN	4320	I	—	Powertrain Sensor Bus Enable	6	0.75	VT / GN	4320	VI	—
7	0.35	RD / WH	7240	I	—	Battery Positive Voltage	7	0.35	RD / WH	7240	VI	—

X225C Front Floor Console Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.75	YE / WH	4635	II	—	HVAC Remote Enable 2 Signal	9	0.5	YE / WH	4635	VI	—
10	0.35	WH	3152	I	—	Lane Departure Warning Indicator Control	10	0.35	WH	3152	VI	—
11	0.35	GY / GN	8927	I	—	Ambient Light Device 4 LIN Bus 1	11	0.35	GY / GN	8927	VI	—
12	0.75	WH / VT	4849	II	—	LED Ambient Lighting Enable Signal	12	0.75	WH / VT	4849	VI	—
13	0.35	VT / WH	639	IV	—	Run/Crank Ignition 1 Voltage	13	0.5	VT / WH	639	VIII	—
14	0.5	VT	4701	III	—	Retained Accessory Power Control	14	0.5	VT	4701	VIII	—
15	0.5	GN / BK	2211	II	—	Rear Blower Motor Speed Control	15	0.5	GN / BK	2211	VI	—
16	0.5	RD / BN	7540	II	—	Battery Positive Voltage	16	0.5	RD / BN	7540	VI	—
17	0.35	YE / BU	4054	I	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	17	0.35	BU / GY	4054	VI	—
18	0.35	YE	4055	I	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	18	0.35	WH	4055	VI	—
19	0.75	BK / VT	470	II	—	Sensor Low Reference	19	0.5	BK / VT	470	VI	—
20	0.35	BN	404	I	—	Upper Duct Air Temperature Sensor Signal	20	0.5	BN	404	VI	—
21	0.35	BU / BK	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	21	0.35	BU / BK	4977	VI	—
22	0.35	WH	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	22	0.35	WH	4976	VI	—
23	0.35	GN / VT	2857	I	—	Body Control Module LIN Bus 11	23	0.5	GN / VT	2857	VI	—
24	0.35	GN / YE	7066	I	—	Entertainment Remote Enable Signal	24	0.35	GN / YE	7066	VI	—
25	—	—	—	—	—	Not Occupied	25	—	—	—	—	—
26	0.75	BK	5683	II	—	120V AC Phase A	26	0.75	BK	5683	VI	—

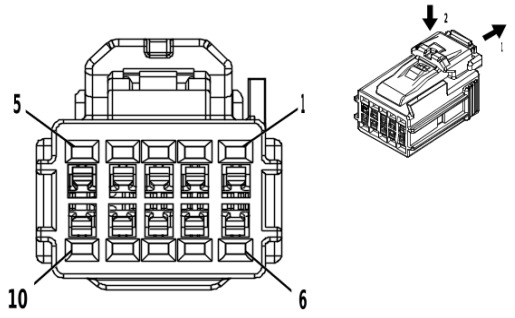
X225C Front Floor Console Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
27	1.5	VT	1701	III	—	Retained Accessory Power Control	27	1.5	VT	1701	VIII	—
28	—	—	—	—	—	Not Occupied	28	—	—	—	—	—
29	0.35	GY / WH	3153	IV	—	Lane Departure Warning Disable Switch Signal	29	0.5	GY / WH	3153	VIII	—
30	—	—	—	—	—	Not Occupied	30	—	—	—	—	—
31	0.35	WH / BK	4056	I	—	Private Serial Data Infotainment CAN Bus [-] Serial Data	31	0.5	WH / BK	4056	VI	—
32	0.35	BU / BK	4057	I	—	Private Serial Data Infotainment CAN Bus [+] Serial Data	32	0.5	BU / BK	4057	VI	—
33 - 34	—	—	—	—	—	Not Occupied	33 - 34	—	—	—	—	—
35	0.75	BU / BN	6807	II	—	DC/AC Inverter Control	35	0.75	BU / BN	6807	VI	—
36	0.35	YE / BN	1428	I	—	Automatic Vehicle Hold Switch Signal	36	0.5	YE / BN	1428	VI	—
37	0.35	GN / GY	2431	I	—	Automatic Vehicle Hold Indicator Control	37	0.5	GN / GY	2431	VI	—
38	0.35	BU / YE	4984	I	—	AUTOSAR CAN Bus [-] 5 Serial Data	38	0.35	BU / YE	4984	VI	—
39	0.35	BU / WH	4985	I	—	AUTOSAR CAN Bus [+] 5 Serial Data	39	0.35	BU / WH	4985	VI	—
40	0.5	YE	6817	II	—	LED Backlight Dimming Control 1	40	0.5	YE	6817	VI	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.75	RD	5684	II	—	120V AC Phase B	42	0.75	RD	5684	VI	—
43	1.5	VT	1301	IV	—	Retained Accessory Power Control	43	1.5	VT	1301	VIII	—
44	0.75	GN / VT	4786	II	—	Dome/Reading Lamp Enable Signal	44	—	—	—	—	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—

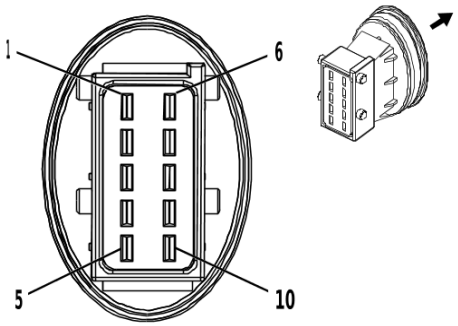
X225C Front Floor Console Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
46	0.35	VT	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	46	0.35	WH	4976	VI	—
47	0.35	VT / BU	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	47	0.35	BU / BK	4977	VI	—
48	0.35	GN	1110	I	—	Stop/Start Indicator Control	48	0.5	GN	1110	VI	—
49	0.35	BU	1111	I	—	Stop/Start Switch Signal	49	0.5	BU	1111	VI	—
50	0.35	BU / YE	4984	I	—	AUTOSAR CAN Bus [-] 5 Serial Data	50	0.35	BU / YE	4984	VI	—
51	0.35	BU / WH	4985	I	—	AUTOSAR CAN Bus [+] 5 Serial Data	51	0.35	BU / WH	4985	VI	—
52	0.35	BU / GY	4054	I	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	52	0.35	BU / GY	4054	VI	—
53	0.35	WH	4055	I	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	53	0.35	WH	4055	VI	—
54	1	BK / WH	2519	II	—	120V AC Outlet Low Reference	54	1	BK / WH	2519	VII	—
55	2	BK	1250	IV	—	Ground	55	2	BK	1250	VIII	—

X250 Instrument Panel Wiring Harness to HVAC Wiring Harness



4254030



3632783

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35327186
Service Connector: 13532428
Description: 10-Way F 1.2 Series(BK)

Connector Part Information

Harness Type: HVAC Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M (BK)

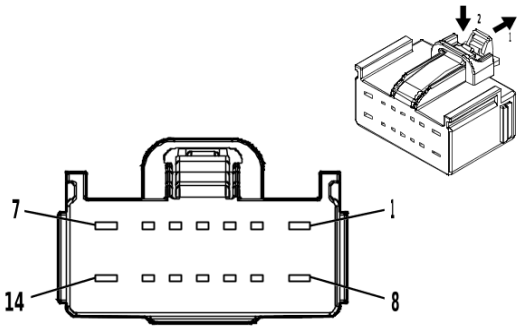
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	84962854	J-35616-12 (BU)	J-38125-215A
II	Not required	No Tool Required	No Tool Required

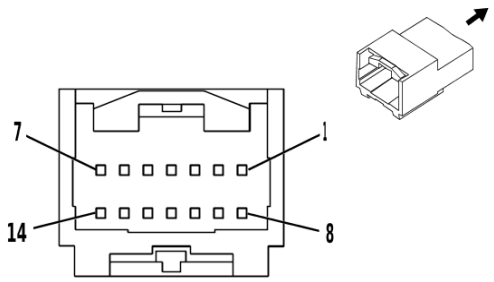
X250 Instrument Panel Wiring Harness to HVAC Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	BK	1050	I	—	Ground	2	0.5	BK	1050	II	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—
5	0.35	GY	6137	I	—	A/C Evaporator Temperature Sensor Signal	5	0.35	BN	6137	II	—
6	0.35	GN / VT	2852	I	—	Body Control Module LIN Bus 6	6	0.35	BU	2852	II	—
7	0.35	BK / YE	407	I	—	Sensor Low Reference	7	0.35	YE	407	II	—
8	0.35	VT / WH	239	I	—	Run/Crank Ignition 1 Voltage	8	0.35	BN / VT	239	II	—
9	0.35	WH / YE	4634	I	—	HVAC Remote Enable Signal	9	0.35	RD	4634	II	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

X251 Body Wiring Harness to HVAC Wiring Harness



4934172



2871900

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33366376
Service Connector: 13513605
Description: 14-Way F 1.5, 2.8 YESC Series(GY)

Connector Part Information

Harness Type: HVAC Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way M (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575850	J-35616-14 (GN)	J-38125-557
II	Not Available	J-35616-4A (PU)	J-38125-11A
III	Not required	No Tool Required	No Tool Required

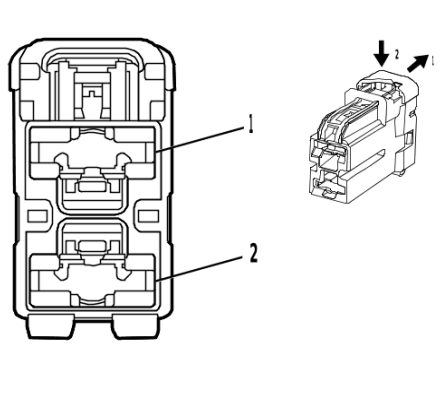
X251 Body Wiring Harness to HVAC Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD / GY	1740	II	—	Battery Positive Voltage	1	3	RD / GY	1740	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	YE / WH	4635	I	—	HVAC Remote Enable 2 Signal	3	0.5	YE / WH	4635	III	—
4	0.5	BK	1450	I	—	Ground	4	0.5	BK	1450	III	—
5	0.35	GN / BN	2853	I	—	Body Control Module LIN Bus 7	5	0.35	GN / BN	2853	III	—
6	0.5	BN	404	I	—	Upper Duct Air Temperature Sensor Signal	6	0.5	BN	404	III	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	0.5	GN / BK	2211	I	—	Rear Blower Motor Speed Control	9	0.5	GN / BK	2211	III	—
10	0.5	BN / BK	405	I	—	Lower Duct Air Temperature Sensor Signal	10	0.5	BN / BK	405	III	—
11	0.5	BK / VT	470	I	—	Sensor Low Reference	11	0.5	BK / VT	470	III	—

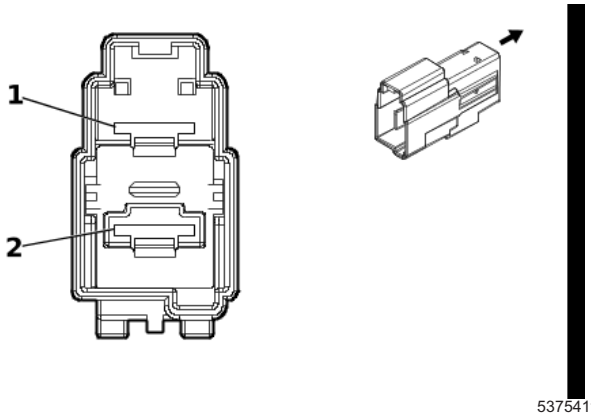
X251 Body Wiring Harness to HVAC Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12 - 13	—	—	—	—	—	Not Occupied	12 - 13	—	—	—	—	—
14	3	BK	1450	II	—	Ground	14	3	BK	1450	III	—

X251L Auxiliary Heat Wiring Harness to Body Wiring Harness



2453116



5375411

Connector Part Information

Harness Type: Auxiliary Heat Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35013203
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 9.5 Y-Type Series(BK)

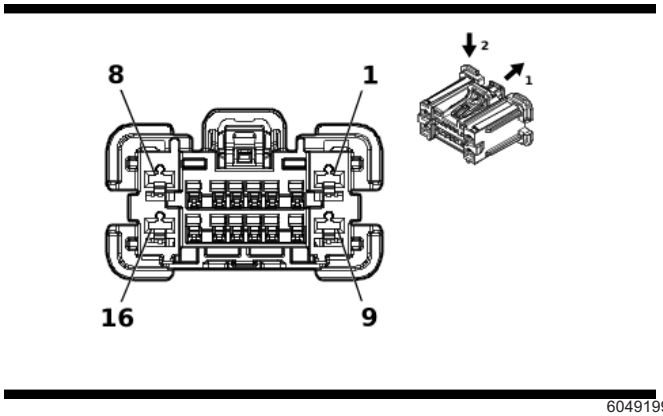
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-21 (RD)	No Tool Required

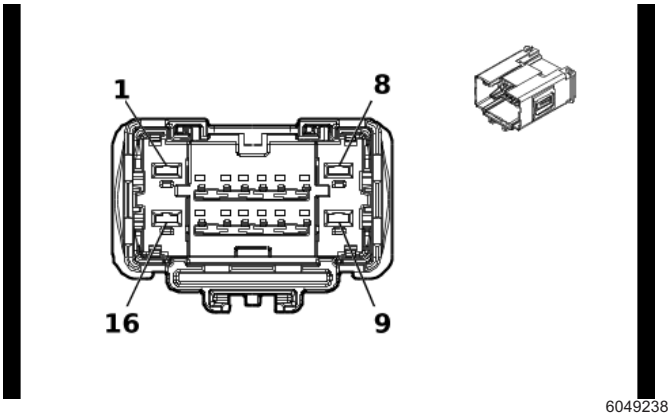
X251L Auxiliary Heat Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	16	RD / GY	642	I	—	Battery Positive Voltage	2	16	RD / GY	642	II	—

X309 Body Wiring Harness to Body Wiring Harness



6049199



6049238

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35465015
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 Sumitomo, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35465017
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.2 Sumitomo, 2.8 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578893	J-35616-4A (PU)	J-38125-11A
II	13580025	J-35616-4A (PU)	J-38125-11A
III	Not required	J-35616-12 (BU)	No Tool Required
IV	Not required	J-35616-16 (L-GN)	No Tool Required
V	13575824	J-35616-5 (PU)	J-38125-215A
VI	19352075	J-35616-17 (L-GN)	J-38125-215A
VII	19355729	J-35616-5 (PU)	J-38125-215A
VIII	Not required	J-35616-17 (L-GN)	No Tool Required

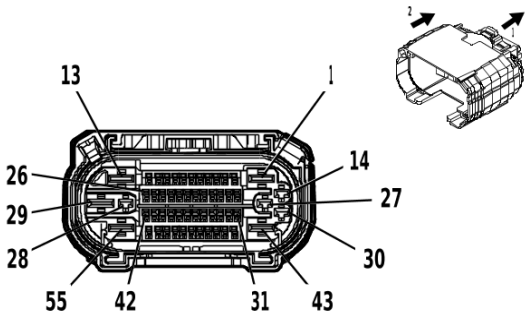
X309 Body Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD / WH	4740	I	—	Battery Positive Voltage	1	0.5	RD / WH	4740	V	—
2 - 3	—	—	—	—	—	Not Occupied	2 - 3	—	—	—	—	—
4	0.5	VT	8578	IV	—	Right Rear D-Pillar Speaker [+] Control	4	0.75	VT	8578	VI	—
5	0.35	BU / VT	4101	III	—	AUTOSAR CAN Bus [+] 4 Serial Data	5	0.35	BU / VT	4101	VIII	—
6	0.35	BU	4987	III	—	AUTOSAR CAN Bus [+] 1 Serial Data	6	0.35	BU	4987	VIII	—
7	—	—	—	—	—	Not Occupied	7	—	—	—	—	—
8	1	RD / GN	3140	II	—	Battery Positive Voltage	8	1	RD / GN	3140	VII	—

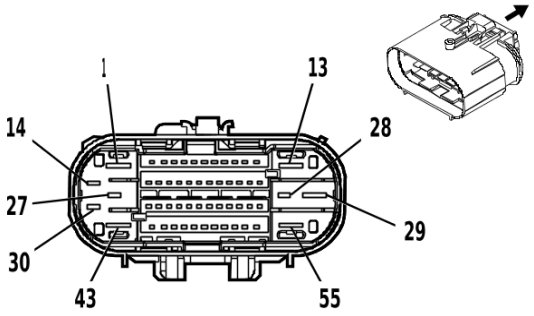
X309 Body Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	1 0.5	RD / GN RD / BN	3140 4940	II I	UGN+ UKL UGN- UKL	Battery Positive Voltage Battery Positive Voltage	9	1 0.5	RD / GN RD / BN	3140 4940	VII V	UGN+ UKL UGN- UKL
10 - 11	—	—	—	—	—	Not Occupied	10 - 11	—	—	—	—	—
12	0.5	GY / WH	8577	IV	—	Right Rear D-Pillar Speaker [-] Control	12	0.75	GY / WH	8577	VI	—
13	0.35	WH	4100	IV	—	AUTOSAR CAN Bus [-] 4 Serial Data	13	0.35	WH	4100	VIII	—
14	0.35	WH	4986	III	—	AUTOSAR CAN Bus [-] 1 Serial Data	14	0.35	WH	4986	VIII	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	RD / GY	4840	I	—	Battery Positive Voltage	16	0.5	RD / GY	4840	V	—

X328 Front Seat Wiring Harness to Body Wiring Harness



4992168



4993301

Connector Part Information

Harness Type: Front Seat Wiring Harness

OEM Connector: 35327294

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35427875

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	No Tool Required	No Tool Required
IV	84847992	J-35616-32 (OG)	J-38125-36
V	84867140	J-35616-13 (BU)	J-38125-215A

X328 Front Seat Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1150	II	—	Ground	1	2.5	BK	1150	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	GN / WH	7530	I	—	Driver Seat Adjuster Memory Module LIN Bus 1	3	0.5	GN / WH	7530	V	—
4	0.75	RD / BN	2240	I	—	Battery Positive Voltage	4	0.75	RD / BN	2240	V	—
5	0.35	WH	615	I	—	Seat Memory Switch Signal 1	5	0.5	WH	615	V	—
6	0.35	BU / GN	614	I	—	Seat Memory Switch Set Signal	6	0.5	BU / GN	614	V	—
7	—	—	—	—	—	Ambient Light Device 4 LIN Bus 1	7	0.35	GY / GN	8927	V	—
8	—	—	—	—	—	LED Ambient Lighting Enable Signal	8	0.5	WH / VT	4849	V	—

X328 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Ground	9	0.5	BK	1150	V	—
10	0.5	BK / YE	2080	I	—	Driver Heated Seat Thermistor Low Reference	10	0.5	BK / YE	2080	V	—
11	0.5	YE / GY	2079	I	—	Driver Seat Heating Temperature Sensor Signal	11	0.5	YE / GY	2079	V	—
12	0.75	RD / BN	3640	I	—	Battery Positive Voltage	12	0.75	RD / BN	3640	V	—
13 - 14	—	—	—	—	—	Not Occupied	13 - 14	—	—	—	—	—
15	0.75	BN / VT	2077	I	—	Driver Seat Heating Element Control	15	0.75	BN / VT	2077	V	—
16	0.75	BN / BK	2078	I	—	Driver Seat Heating Element Low Reference	16	0.75	BN / BK	2078	V	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	0.5	BU	2425	I	—	Driver Seat Back Heating Temperature Sensor Signal	18	0.5	BU	2425	V	—
19	0.75	BN	2432	I	—	Driver Seat Back Heating Element Control	19	0.75	BN	2432	V	—
20	0.5	GN / VT	5906	I	—	Driver Seat Blower Motor Control 1	20	0.5	GN / VT	5906	V	—
21	0.5	VT / WH	1139	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / WH	1139	V	—
22	0.35	BK / WH	1451	I	—	Signal Ground	22	0.75	BK / WH	1451	V	—
23 - 24	—	—	—	—	—	Not Occupied	23 - 24	—	—	—	—	—
25	0.35	BU / VT	4101	I	—	AUTOSAR CAN Bus [+] 4 Serial Data	25	0.35	BU / VT	4101	V	—
26	0.35	WH	4100	I	—	AUTOSAR CAN Bus [-] 4 Serial Data	26	0.35	WH	4100	V	—
27 - 28	—	—	—	—	—	Not Occupied	27 - 28	—	—	—	—	—
29	2.5	RD / YE	5040	II	—	Battery Positive Voltage	29	2.5	RD / YE	5040	IV	—
30	—	—	—	—	—	Not Occupied	30	—	—	—	—	—

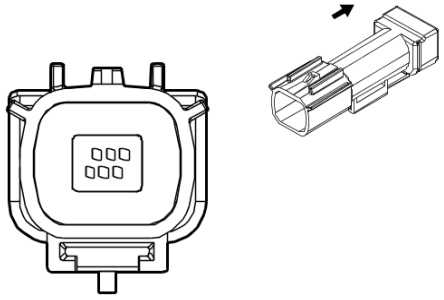
X328 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.5	GY	157	I	—	Interior Lamp Control	31	—	—	—	—	—
32	0.5	OG / GY	2652	I	—	Driver Seat Belt Sensor Signal	32	0.5	OG / GY	2652	V	—
33	0.5	BK / OG	1363	I	—	Driver Seat Belt Switch Low Reference	33	0.5	BK / OG	1363	V	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG / BU	4962	III	—	Driver Seat Back Air Bag High Control	35	0.5	OG / BU	4962	V	—
36	0.5	BK / OG	4963	III	—	Driver Seat Back Air Bag Low Control	36	0.5	BK / OG	4963	V	—
37	0.35	GN / YE	7066	I	—	Entertainment Remote Enable Signal	37	0.35	GN / YE	7066	V	—
38 - 42	—	—	—	—	—	Not Occupied	38 - 42	—	—	—	—	—
43	—	—	—	—	—	Left Front Seat Left Speaker [-] Control	43	0.75	GN / GY	5767	IV	—
44	—	—	—	—	—	Left Front Seat Left Speaker [+] Control	44	0.75	GN / VT	5757	V	—
45	—	—	—	—	—	Left Front Seat Right Speaker [-] Control	45	0.75	GY / BK	5768	V	—
46	—	—	—	—	—	Left Front Seat Right Speaker [+] Control	46	0.75	BN / GY	5758	V	—
47 - 48	—	—	—	—	—	Not Occupied	47 - 48	—	—	—	—	—
49	—	—	—	—	—	Body Control Module LIN Bus 15	49	0.35	GN / WH	2861	V	—
50	0.35	BU / VT	4101	I	—	AUTOSAR CAN Bus [+] 4 Serial Data	50	0.35	BU / VT	4101	V	—
51	0.35	WH	4100	I	—	AUTOSAR CAN Bus [-] 4 Serial Data	51	0.35	WH	4100	V	—
52	0.5	OG / BN	4207	III	—	Driver Inboard Seat Side Air Bag High Control	52	0.5	OG / BN	4207	V	—
53	0.5	GY / OG	4208	III	—	Driver Inboard Seat Side Air Bag Low Control	53	0.5	GY / OG	4208	V	—

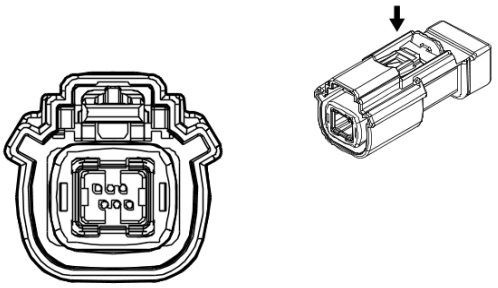
X328 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
54 - 55	—	—	—	—	—	Not Occupied	54 - 55	—	—	—	—	—

X329 Body Wiring Harness to Front Seat Wiring Harness



4477041



4477145

Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: 35269008

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way F HSAL-2 Series, Sealed(BK)

Connector Part Information

Harness Type: Front Seat Wiring Harness LVDS

OEM Connector: 13586870

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way M HSAL-2 Series, Sealed(BK)

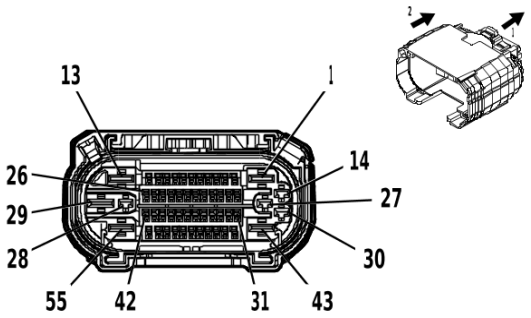
Terminal Part Information

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

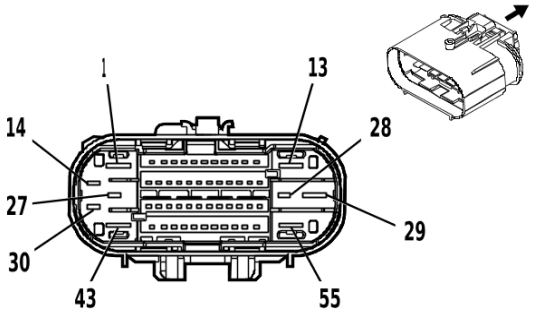
X329 Body Wiring Harness to Front Seat Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Performance Data Recorder Low Voltage Differential Signaling LVDS Signal	—	—	LVDS	—	I	—

X333 Front Seat Wiring Harness to Body Wiring Harness



4992168



4993301

Connector Part Information

Harness Type: Front Seat Wiring Harness

OEM Connector: 35327295

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35427884

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-42 (RD)	No Tool Required
IV	Not required	J-35616-43 (RD)	No Tool Required
V	Not required	No Tool Required	No Tool Required
VI	84847992	J-35616-32 (OG)	J-38125-36
VII	84867140	J-35616-13 (BU)	J-38125-215A
VIII	84992391	J-35616-5 (PU)	J-38125-215A

X333 Front Seat Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BK	1250	III	—	Ground	1	2.5	BK	1250	VI	—
2 - 3	—	—	—	—	—	Not Occupied	2 - 3	—	—	—	—	—
4	0.75	RD / BU	3940	I	—	Battery Positive Voltage	4	0.75	RD / BU	3940	VII	—
5 - 6	—	—	—	—	—	Not Occupied	5 - 6	—	—	—	—	—
7	0.5	BU	4987	I	—	AUTOSAR CAN Bus [+] 1 Serial Data	7	0.35	BU	4987	VII	—
8	0.5	WH	4986	I	—	AUTOSAR CAN Bus [-] 1 Serial Data	8	0.35	WH	4986	VII	—
9	0.5	GN / VT	2857	I	—	Body Control Module LIN Bus 11	9	0.5	GN / VT	2857	VII	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

X333 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.35	BK / WH	1451	I	—	Signal Ground	11	0.75	BK / WH	1451	VII	—
12	0.75	RD / BN	3640	I	—	Battery Positive Voltage	12	0.75	RD / BN	3640	VII	—
13	0.75	RD / GN	6140	IV	—	Battery Positive Voltage	13	0.75	RD / GN	6140	VI	—
14	0.5	YE / GY	2079	II	—	Driver Seat Heating Temperature Sensor Signal	14	0.5	YE / GY	2079	VIII	—
15	0.75	BN / VT	2077	I	—	Driver Seat Heating Element Control	15	0.75	BN / VT	2077	VII	—
16	0.75	BN / BK	2078	I	—	Driver Seat Heating Element Low Reference	16	0.75	BN / BK	2078	VII	—
17	0.5	BK / YE	2080	I	—	Driver Heated Seat Thermistor Low Reference	17	0.5	BK / YE	2080	VII	—
18	0.5	BU	2425	I	—	Driver Seat Back Heating Temperature Sensor Signal	18	0.5	BU	2425	VII	—
19	0.75	BN	2432	I	—	Driver Seat Back Heating Element Control	19	0.75	BN	2432	VII	—
20	0.5	GN / VT	5906	I	—	Driver Seat Blower Motor Control 1	20	0.5	GN / VT	5906	VII	—
21	0.5	VT / WH	1139	I	—	Run/Crank Ignition 1 Voltage	21	0.5	VT / WH	1139	VII	—
22	0.5	RD / GN	4440	I	—	Battery Positive Voltage	22	0.5	RD / GN	4440	VII	—
23	—	—	—	—	—	Not Occupied	23	—	—	—	—	—
24	0.35	GY / OG	3946	I	—	Passenger Automatic Locking Retractor Switch Low Reference	24	0.5	GY / OG	3946	VII	—
25	0.35	OG / BN	3947	I	—	Passenger Automatic Locking Retractor Switch Signal	25	0.5	OG / BN	3947	VII	—
26	0.35	BK / WH	1351	I	—	Signal Ground	26	0.5	BK / WH	1351	VII	—
27	0.75	RD / BN	6640	II	—	Battery Positive Voltage	27	0.75	RD / BN	6640	VIII	—
28	—	—	—	—	—	Not Occupied	28	—	—	—	—	—

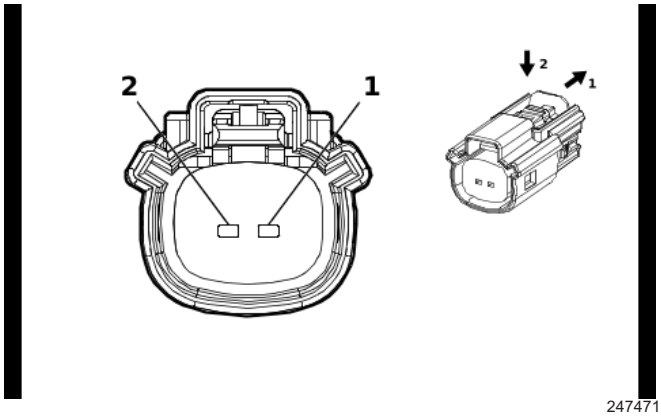
X333 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
29	2.5	RD / YE	7440	III	—	Battery Positive Voltage	29	2.5	RD / YE	7440	VI	—
30 - 31	—	—	—	—	—	Not Occupied	30 - 31	—	—	—	—	—
32	0.5	OG / VT	1362	I	—	Passenger Seat Belt Switch Signal	32	0.5	OG / VT	1362	VII	—
33	0.5	BK / OG	1363	I	—	Driver Seat Belt Switch Low Reference	33	0.5	BK / OG	1363	VII	—
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	OG / GY	4956	V	—	Passenger Seat Back Air Bag High Control	35	0.5	OG / GY	4956	VII	—
36	0.5	BU / OG	4957	V	—	Passenger Seat Back Air Bag Low Control	36	0.5	BU / OG	4957	VII	—
37	0.35	GN / YE	7066	I	—	Entertainment Remote Enable Signal	37	0.35	GN / YE	7066	VII	—
38 - 40	—	—	—	—	—	Not Occupied	38 - 40	—	—	—	—	—
41	—	—	—	—	—	AUTOSAR CAN Bus [+] 4 Serial Data	41	0.5	BU / VT	4101	VII	—
42	—	—	—	—	—	AUTOSAR CAN Bus [-] 4 Serial Data	42	0.5	WH	4100	VII	—
43	—	—	—	—	—	Right Front Seat Left Speaker [-] Control	43	0.75	YE / BK	5769	VI	—
44	—	—	—	—	—	Right Front Seat Left Speaker [+] Control	44	0.75	GY / YE	5759	VII	—
45	—	—	—	—	—	Right Front Seat Right Speaker [-] Control	45	0.75	GN / BK	5770	VII	—
46	—	—	—	—	—	Right Front Seat Right Speaker [+] Control	46	0.75	YE / GN	5760	VII	—
47	—	—	—	—	—	LED Ambient Lighting Enable Signal	47	0.5	WH / VT	4849	VII	—
48	—	—	—	—	—	Ground	48	0.75	BK	1250	VII	—
49	—	—	—	—	—	Ambient Light Device 4 LIN Bus 1	49	0.35	GY / GN	8927	VII	—

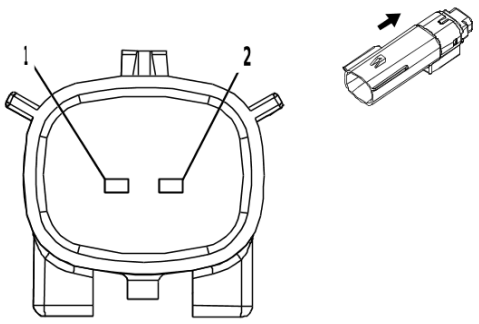
X333 Front Seat Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
50	—	—	—	—	—	AUTOSAR CAN Bus [+] 4 Serial Data	50	0.35	BU / VT	4101	VII	—
51	—	—	—	—	—	AUTOSAR CAN Bus [-] 4 Serial Data	51	0.35	WH	4100	VII	—
52	0.5	BU	4987	I	—	AUTOSAR CAN Bus [+] 1 Serial Data	52	0.5	BU	4987	VII	—
53	0.5	WH	4986	I	—	AUTOSAR CAN Bus [-] 1 Serial Data	53	0.5	WH	4986	VII	—
54 - 55	—	—	—	—	—	Not Occu-pied	54 - 55	—	—	—	—	—

X334E Front Seat Wiring Harness to Body Wiring Harness



2474713



3338703

Connector Part Information

Harness Type: Front Seat Wiring Harness
OEM Connector: 33471-0206
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35198959
Service Connector: 84867146
Description: 2-Way M 1.5 MX Series, Sealed(BK)

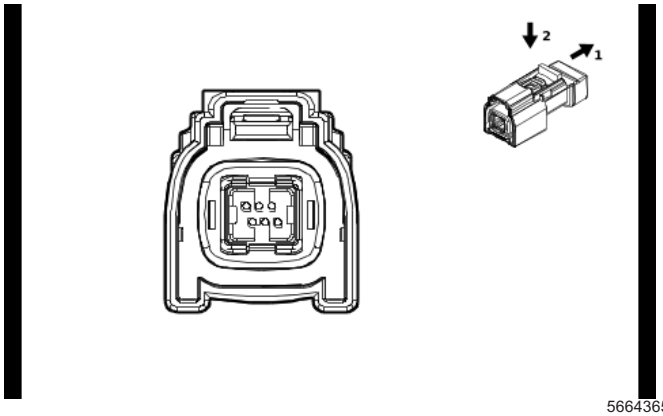
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

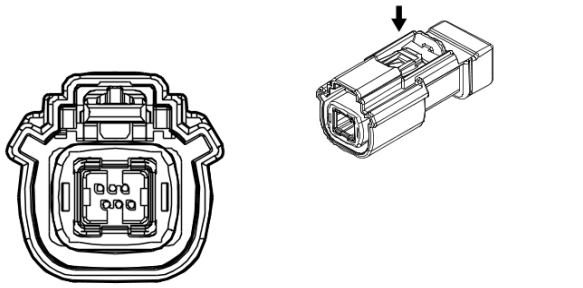
X334E Front Seat Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT	7212	I	—	Ethernet Bus 5 [-]	1	0.35	VT	7212	II	—
2	0.35	VT / WH	7213	I	—	Ethernet Bus 5 [+]	2	0.35	VT / WH	7213	II	—

X334L Front Seat Wiring Harness to Body Wiring Harness



5664365



4477145

Connector Part Information

Harness Type: Front Seat Wiring Harness LVDS

OEM Connector: 13527114

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way F HSAL-2 Series, Sealed(GY)

Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: 13527117

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way M HSAL-2 Series, Sealed(GY)

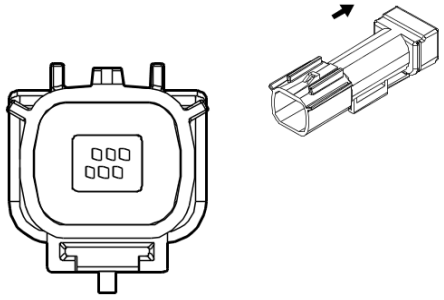
Terminal Part Information

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

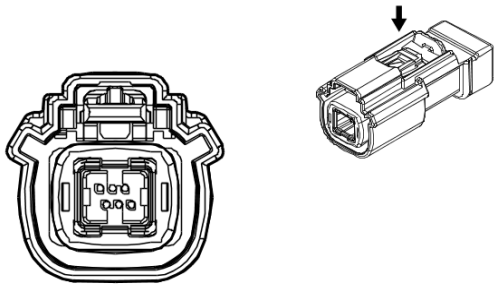
X334L Front Seat Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Performance Data Recorder Low Voltage Differential Signaling LVDS Signal	—	—	LVDS	—	I	—

X334U Body Wiring Harness to Front Seat Wiring Harness



4477041



4477145

Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: 35269008

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way F HSAL-2 Series, Sealed(BK)

Connector Part Information

Harness Type: Front Seat Wiring Harness LVDS

OEM Connector: 13586870

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way M HSAL-2 Series, Sealed(BK)

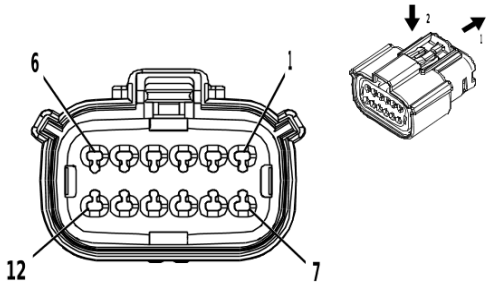
Terminal Part Information

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

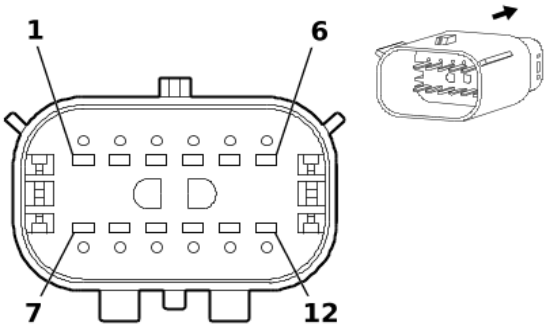
X334U Body Wiring Harness to Front Seat Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Performance Data Recorder Low Voltage Differential Signaling LVDS Signal	—	—	LVDS	—	I	—

X340 Body Wiring Harness to Rear Seat Wiring Harness



2871860



1825167

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33362189
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 33482-6260
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

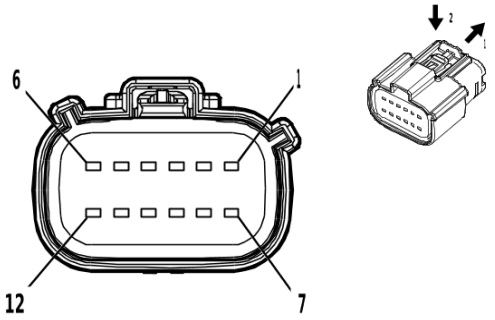
X340 Body Wiring Harness to Rear Seat Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	RD / GY	6240	I	—	Battery Positive Voltage	1	0.75	RD / GY	6240	II	—
2	0.75	GY	2294	I	—	Left Rear Seat Cushion Heating Element Control	2	0.75	GY	2294	II	—
3	0.75	BU / BK	2446	I	—	Left Rear Seat Heating Element Low Reference	3	0.75	BU / BK	2446	II	—
4	0.5	WH / BU	7047	I	—	Left Rear Seat Cushion Temperature Sensor Signal	4	0.5	WH / BU	7047	II	—
5	0.5	BU / WH	7048	I	—	Left Rear Cushion Thermistor Feedback Signal	5	0.5	BU / WH	7048	II	—
6	0.5	GN	6808	I	—	Left Rear Folding Seat Motor Control	6	0.5	GN	6808	II	—
7	0.75	BK	2050	I	—	Ground	7	0.75	BK	1150	II	—

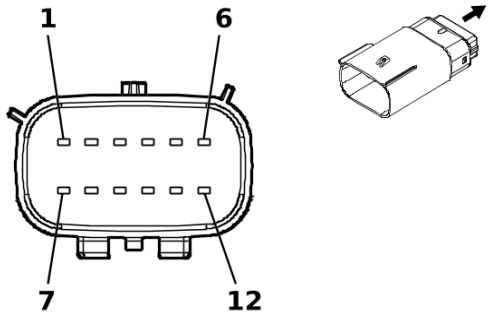
X340 Body Wiring Harness to Rear Seat Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	YE / OG	5161	I	—	Left Rear Seat Belt Switch Signal	8	0.5	YE / OG	5161	II	—
9	0.5	BK / OG	1363	I	—	Driver Seat Belt Switch Low Reference	9	0.5	BK / OG	1363	II	—
10	0.5	BU / OG	5163	I	—	Rear Center Seat Belt Switch Signal	10	0.5	BU / OG	5163	II	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

X344 Body Wiring Harness to Rear Seat Wiring Harness



4584248



5187933

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33221171
Service Connector: 19333239
Description: 12-Way F 1.5 MX Series, Sealed(D-GY)

Connector Part Information

Harness Type: Rear Seat Wiring Harness
OEM Connector: 33482-6261
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

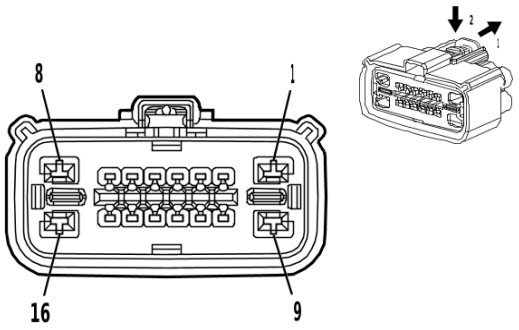
X344 Body Wiring Harness to Rear Seat Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	RD / WH	5740	I	—	Battery Positive Voltage	1	0.75	RD / WH	5740	II	—
2	0.75	RD / BU	6740	I	—	Battery Positive Voltage	2	0.75	RD / BU	6740	II	—
3	0.75	GY	2294	I	—	Left Rear Seat Cushion Heating Element Control	3	0.75	GY	2294	II	—
4	0.5	GN / VT	2857	I	—	Body Control Module LIN Bus 11	4	0.5	GN / VT	2857	II	—
5	0.75	RD / GY	6240	I	—	Battery Positive Voltage	5	0.75	RD / GY	6240	II	—
6	0.5	BN / WH	6809	I	—	Right Rear Folding Seat Motor Control	6	0.75	BN / WH	6809	II	—
7	0.75	BU / BK	2446	I	—	Left Rear Seat Heating Element Low Reference	7	0.75	BU / BK	2446	II	—
8	0.75	BK	1450	I	—	Ground	8	0.75	BK	1450	II	—
9	0.5	WH / BU	7047	I	—	Left Rear Seat Cushion Temperature Sensor Signal	9	0.5	WH / BU	7047	II	—

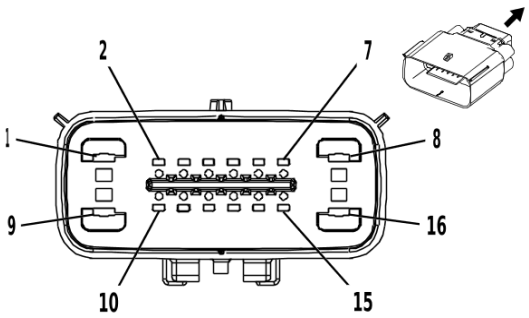
X344 Body Wiring Harness to Rear Seat Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	BU / WH	7048	I	—	Left Rear Cushion Thermistor Feedback Signal	10	0.5	BU / WH	7048	II	—
11	0.5	BN / OG	5162	I	—	Right Rear Seat Belt Switch Signal	11	0.5	BN / OG	5162	II	—
12	0.5	BK / OG	1363	I	—	Driver Seat Belt Switch Low Reference	12	0.5	BK / OG	1363	II	—

X346A Body Wiring Harness to 3rd Row Seat Wiring Harness



4283035



2373686

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35105593
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: 3rd Row Seat Wiring Harness
OEM Connector: 34986-2096
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217
III	Not required	J-35616-3 (GY)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

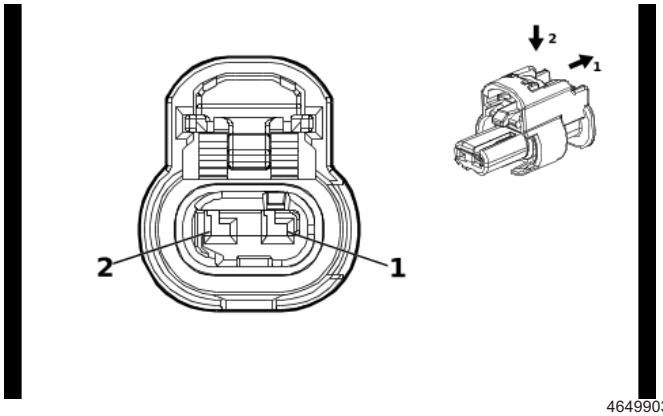
X346A Body Wiring Harness to 3rd Row Seat Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / GY	7840	I	—	Battery Positive Voltage	1	2.5	RD / GY	7840	IV	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	GN / BU	2856	II	—	Body Control Module LIN Bus 10	3	0.5	GN / BU	2856	III	—
4	0.5	BK / BU	5474	II	—	3rd Row Seat Sensor Low Reference	4	0.75	BK / BU	5474	III	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.5	YE / BU	2698	II	—	Left 3rd Row Seat Recline Switch Signal	6	0.5	YE / BU	2698	III	—
7	0.5	GN / GY	2699	II	—	Right 3rd Row Seat Recline Switch Signal	7	0.5	GN / GY	2699	III	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	2.5	BK	2050	I	—	Ground	9	2.5	BK	2050	IV	—

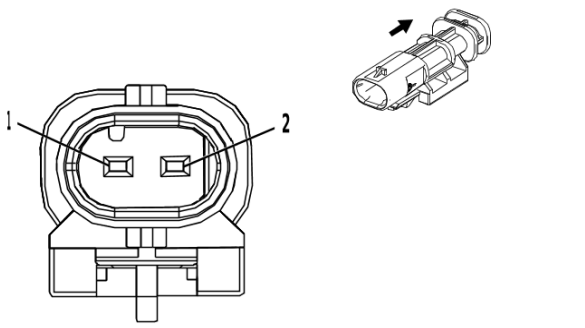
X346A Body Wiring Harness to 3rd Row Seat Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.5	GN / OG	3516	II	—	3rd Row Left Seat Belt Switch Signal	11	0.5	GN / OG	3516	III	—
12	0.5	VT / OG	3517	II	—	3rd Row Right Seat Belt Switch Signal	12	0.5	VT / OG	3517	III	—
13	0.5	OG / GN	3700	II	—	3rd Row Center Seat Belt Switch Signal	13	0.5	OG / GN	3700	III	—
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.5	BK / OG	1363	II	—	Driver Seat Belt Switch Low Reference	15	0.5	BK / OG	1363	III	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—

X353 Fuel Tank Filler Door Lock Release Wiring Harness to Chassis Wiring Harness



4649903



2474755

Connector Part Information

Harness Type: Fuel Tank Filler Door Lock Release Wiring Harness
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33207247
Service Connector: 85533165
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

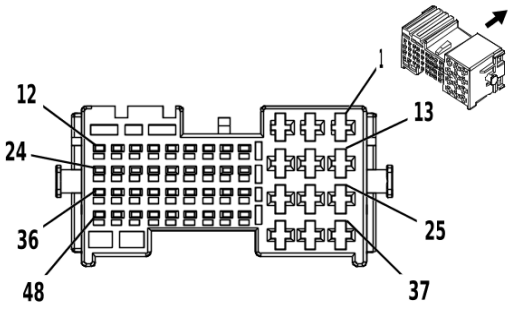
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

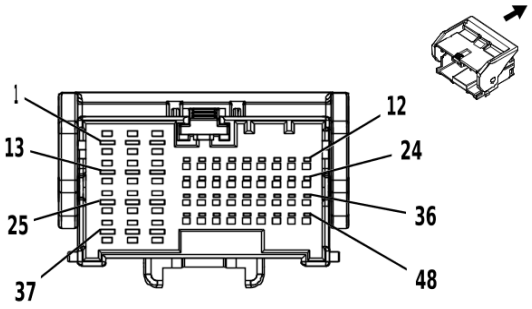
X353 Fuel Tank Filler Door Lock Release Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU / BK	2690	I	—	Fuel Door Actuator Unlock Control	1	0.5	BU / BK	2690	II	—
2	0.5	VT / GY	2683	I	—	Unlatch Actuators Unlatch Low Reference 1	2	0.5	VT / GY	2683	II	—

X370A Headlining Trim Panel Harness to Instrument Panel Wiring Harness



3277913



3277901

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 13889713
Service Connector: 19329739
Description: 48-Way F 1.2 MCON, 2.8 MCP Series(BK)

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15512031
Service Connector: 19329740
Description: 48-Way M 1.2 MCON, 2.8 MCP Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19329758	J-35616-12 (BU)	J-38125-215A
II	87814662	J-35616-4A (PU)	J-38125-557
III	13575574	J-35616-5 (PU)	J-38125-215A
IV	19329749	J-35616-13 (BU)	J-38125-215A

X370A Headlining Trim Panel Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / BU	4540	II	—	Battery Positive Voltage	1	2.5	RD / BU	4540	III	—
2	0.35 0.35	BU / YE BU / GY	4979 4105	II II	UEU/ UHY UGN/ UKL	AUTOSAR CAN Bus [+] 2 Serial Data AUTOSAR CAN Bus [+] 8 Serial Data	2	0.35 0.35	BU / YE BU / GY	4979 4105	III III	UEU/ UHY UGN/ UKL
3	0.35 0.35	WH WH / GY	4978 4104	II II	UEU/ UHY UGN/ UKL	AUTOSAR CAN Bus [-] 2 Serial Data AUTOSAR CAN Bus [-] 8 Serial Data	3	0.35 0.35	WH WH / GY	4978 4104	III III	UEU/ UHY UGN/ UKL
4 - 8	—	—	—	—	—	Not Occupied	4 - 8	—	—	—	—	—
9	0.35	YE / VT	2516	I	—	Telematics Switch Green LED Indicator Control	9	0.35	YE / VT	2516	IV	—
10	0.35	GN / WH	2514	I	—	Telematics Switch Signal	10	0.35	GN / WH	2514	IV	—

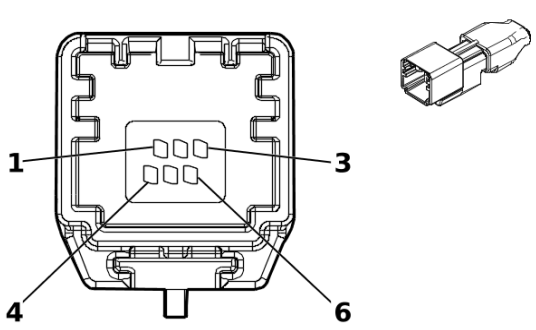
X370A Headlining Trim Panel Harness to Instrument Panel Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.35	GN / BK	2515	I	—	Telematics Switch Supply Voltage	11	0.5	GN / BK	2515	IV	—
12	0.35	BN / WH	2517	I	—	Telematics Switch Red LED Indicator Control	12	0.35	BN / WH	2517	IV	—
13	0.5	RD / YE	240	II	—	Battery Positive Voltage	13	1	RD / YE	240	III	—
14	0.35 0.35	WH BU / GY	4978 4105	II II	UEU/ UHY UGN/ UKL	AUTOSAR CAN Bus [-] 2 Serial Data AUTOSAR CAN Bus [+] 8 Serial Data	14	0.5 0.35	WH BU / GY	4978 4105	III III	UEU/ UHY UGN/ UKL
15	0.35 0.35	BU / YE WH / GY	4979 4104	II II	UEU/ UHY UGN/ UKL	AUTOSAR CAN Bus [+] 2 Serial Data AUTOSAR CAN Bus [-] 8 Serial Data	15	0.5 0.35	BU / YE WH / GY	4979 4104	III III	UEU/ UHY UGN/ UKL
16 - 17	—	—	—	—	—	Not Occupied	16 - 17	—	—	—	—	—
18	0.35	GN / WH	2854	I	—	Body Control Module LIN Bus 8	18	0.35	GN / WH	2854	IV	—
19 - 20	—	—	—	—	—	Not Occupied	19 - 20	—	—	—	—	—
21	0.5	BU	655	I	—	Cellular Telephone Microphone Signal	21	0.35	BU	655	IV	—
22	0.5	BK / BN	654	I	—	Cellular Telephone Microphone Low Reference	22	0.35	BK / BN	654	IV	—
23	0.35	GN / WH	24	I	—	Backup Lamp Control	23	0.5	GN / WH	24	IV	—
24	—	—	—	—	—	Not Occupied	24	—	—	—	—	—
25	0.5	BK	1850	II	—	Ground	25	0.5	BK	1050	III	—
26	0.5	VT / WH	239	II	—	Run/Crank Ignition 1 Voltage	26	0.5	VT / WH	239	III	—
27	—	—	—	—	—	Not Occupied	27	—	—	—	—	—
28	0.35	BU	8579	I	—	Automotive Audio Bus A2B Serial Data 1 [-]	28	0.35	BU	8579	IV	—
29	0.35	GN	8580	I	—	Automotive Audio Bus A2B Serial Data 1 [+]	29	0.35	GN	8580	IV	—
30	—	—	—	—	—	Not Occupied	30	—	—	—	—	—

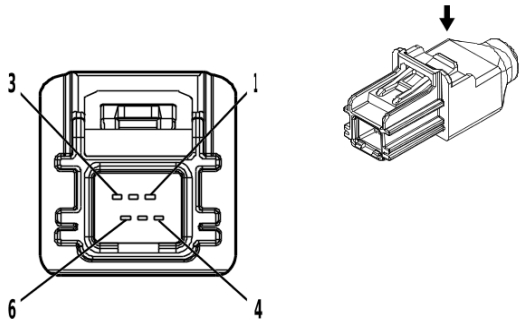
X370A Headlining Trim Panel Harness to Instrument Panel Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
31	0.35 0.5	BK / WH BK / WH	1851 1851	I I	DD8/ DRZ - DD8-DRZ	Signal Ground Signal Ground	31	0.35	BK / WH	1851	IV	—
32	0.35	BK / YE	1691	I	—	Automatic Day/Night Mirror Low Reference	32	0.35	BK / YE	1691	IV	—
33	0.35	YE / WH	1690	I	—	Mirror Dimming Signal	33	0.35	YE / WH	1690	IV	—
34 - 35	—	—	—	—	—	Not Occupied	34 - 35	—	—	—	—	—
36	0.75	VT / GY	8570	I	—	Right Rear Headliner Speaker [+] Control	36	0.75	VT / GY	8570	IV	—
37	2.5	BK	1850	II	—	Ground	37	2.5	BK	1050	III	—
38	0.5	GN / WH	4115	II	—	Body Control Module LIN Bus 5	38	0.35	GN / WH	4115	III	—
39	—	—	—	—	—	Not Occupied	39	—	—	—	—	—
40	0.35	GN	8580	I	—	Automotive Audio Bus A2B Serial Data 1 [+]	40	0.35	GN	8580	IV	—
41	0.35	BU	8579	I	—	Automotive Audio Bus A2B Serial Data 1 [-]	41	0.35	BU	8579	IV	—
42	—	—	—	—	—	Not Occupied	42	—	—	—	—	—
43	0.75	BU / WH	8571	I	—	Left Front Headliner Speaker [-] Control	43	0.75	BU / WH	8571	IV	—
44	0.75	GN / BN	8572	I	—	Left Front Headliner Speaker [+] Control	44	0.75	GN / BN	8572	IV	—
45	0.75	GY / GN	8574	I	—	Right Front Headliner Speaker [+] Control	45	0.75	GY / GN	8574	IV	—
46	0.75	BN / VT	8573	I	—	Right Front Headliner Speaker [-] Control	46	0.75	BN / VT	8573	IV	—
47	0.75	GN / WH	8567	I	—	Left Rear Headliner Speaker [-] Control	47	0.75	GN / WH	8567	IV	—
48	0.75	GY / BN	8568	I	—	Left Rear Headliner Speaker [+] Control	48	0.75	GY / BN	8568	IV	—

X371 Instrument Panel Wiring Harness to Headlining Trim Panel Harness



5356069



4806625

Connector Part Information

Harness Type: Instrument Panel Wiring Harness LVDS

OEM Connector: VP000232

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way F HSAL-2 Series(BK)

Connector Part Information

Harness Type: Headlining Trim Panel Harness LVDS

OEM Connector: VP000160

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way M HSAL-2 Series(BK)

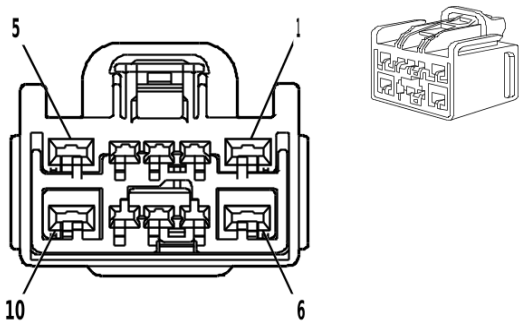
Terminal Part Information

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

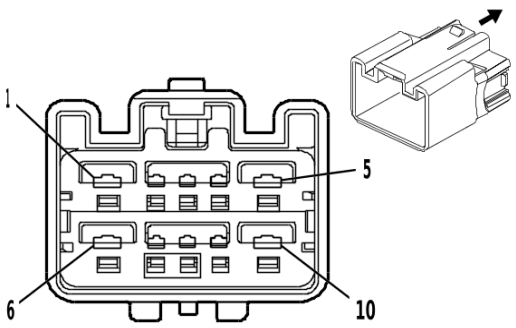
X371 Instrument Panel Wiring Harness to Headlining Trim Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Performance Data Recorder Low Voltage Differential Signaling LVDS Signal	—	—	LVDS	—	I	—

X375 Sunroof Wiring Harness to Headlining Trim Panel Harness



1851891



1851890

Connector Part Information

Harness Type: Sunroof Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F

Connector Part Information

Harness Type: Headlining Trim Panel Harness
OEM Connector: 13506926
Service Connector: 89047070
Description: 10-Way M Kaizen Series(L-GY)

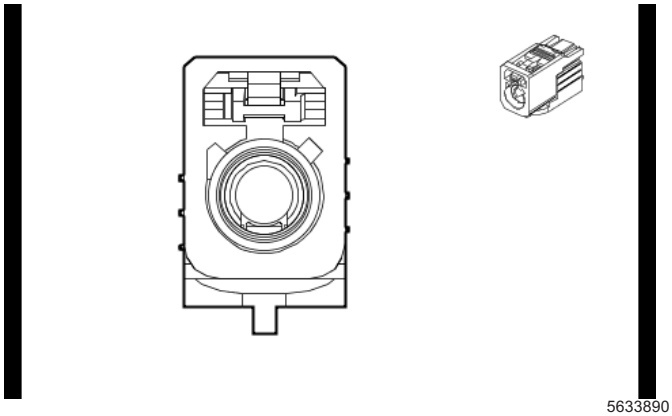
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	13578907	J-35616-3 (GY)	J-38125-215A
III	13578908	J-35616-5 (PU)	J-38125-11A

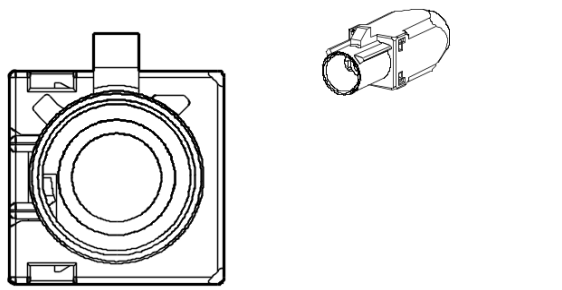
X375 Sunroof Wiring Harness to Headlining Trim Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / BU	4540	I	—	Battery Positive Voltage	1	2.5	RD / BU	4540	III	—
2 - 4	—	—	—	—	—	Not Occupied	2 - 4	—	—	—	—	—
5	2.5	BK	1850	I	—	Ground	5	2.5	BK	1850	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	GN / WH	2854	I	—	Body Control Module LIN Bus 8	7	0.35	GN / WH	2854	II	—
8 - 10	—	—	—	—	—	Not Occupied	8 - 10	—	—	—	—	—

X390 Instrument Panel Wiring Harness to Antenna Wiring Harness



5633890



5215603

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351013

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BU)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M (BU)

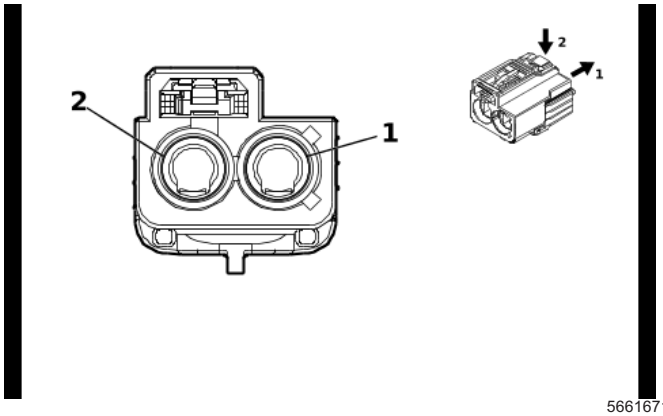
Terminal Part Information

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

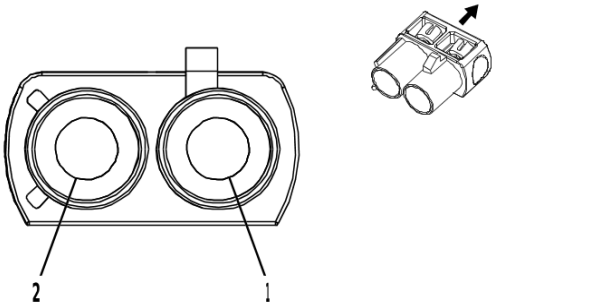
X390 Instrument Panel Wiring Harness to Antenna Wiring Harness

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

X391 Instrument Panel Wiring Harness to Antenna Wiring Harness



5661671



4363750

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351060

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way F Coax Type(VT)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way M (VT)

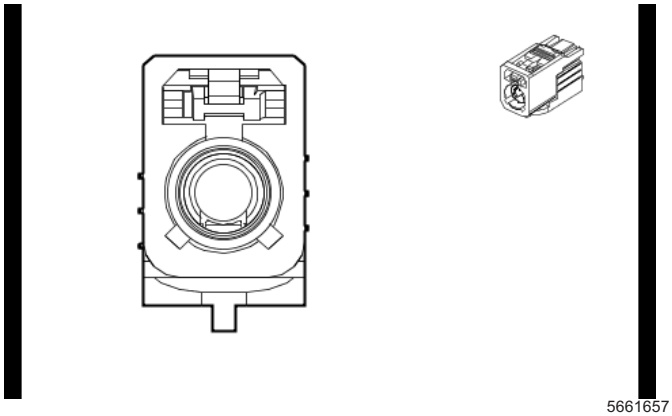
Terminal Part Information

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

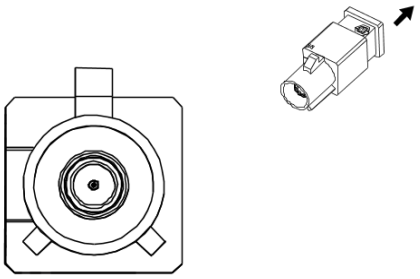
X391 Instrument Panel Wiring Harness to Antenna Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	(GPS/Cell) Coaxial Antenna Cell/ GPS combined Signal	—	—	Coax Cable	—	I	—

X392 Instrument Panel Wiring Harness to Antenna Wiring Harness



5661657



3275596

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351022

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(YE)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M (YE)

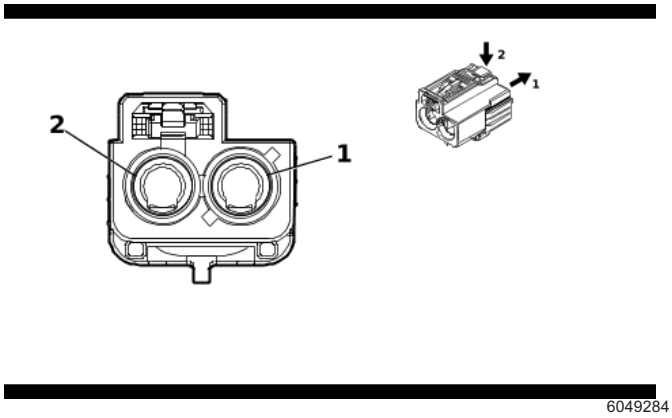
Terminal Part Information

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

X392 Instrument Panel Wiring Harness to Antenna Wiring Harness

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

X394 Instrument Panel Wiring Harness to Antenna Wiring Harness



6049284

—

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351059

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way F Coax Type(BU)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way M (BU)

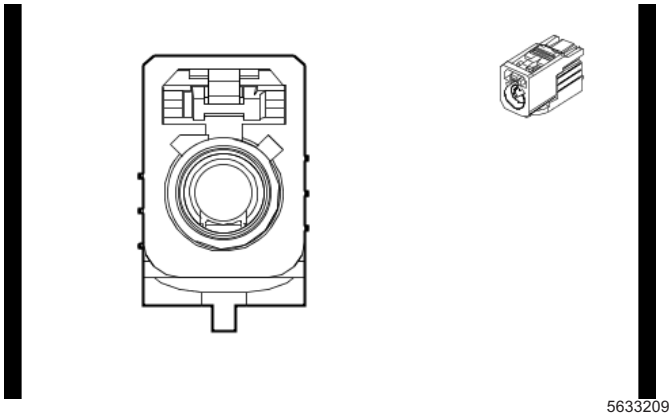
Terminal Part Information

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

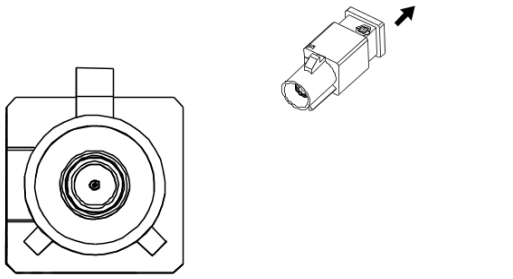
X394 Instrument Panel Wiring Harness to Antenna Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	(GPS/Cell) Coaxial Antenna Cell/ GPS combined Signal	—	—	Coax Cable	—	I	—

X396 Instrument Panel Wiring Harness to Antenna Wiring Harness



5633209



3275596

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 33351010

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BK)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M (BK)

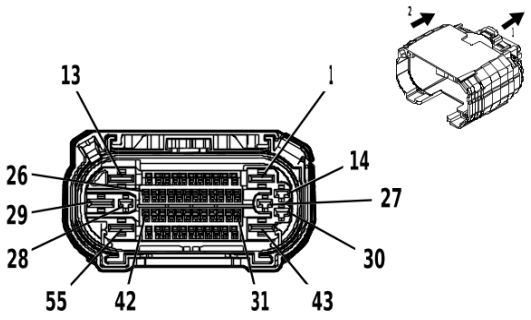
Terminal Part Information

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

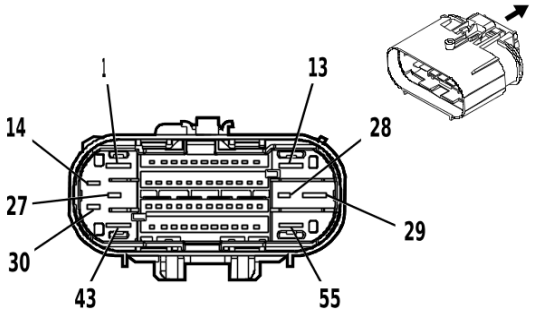
X396 Instrument Panel Wiring Harness to Antenna Wiring Harness

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

X400 Chassis Wiring Harness to Body Wiring Harness



4992168



4993301

Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 35333113

Service Connector: 19371185

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness

OEM Connector: 35388010

Service Connector: 84727364

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332901	J-35616-35 (VT)	J-38125-212
II	19370818	J-35616-12 (BU)	J-38125-215A
III	84634921	J-35616-42 (RD)	J-38125-212
IV	84847992	J-35616-32 (OG)	J-38125-36
V	84867140	J-35616-13 (BU)	J-38125-215A
VI	84992391	J-35616-5 (PU)	J-38125-215A

X400 Chassis Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	4	GN / VT	1988	III	—	Right Park Brake Motor Apply Control	1	2.5	GN / VT	1988	IV	—
2	0.75	GN / BU	2733	II	—	Brake System Control Module LIN Bus 2	2	0.75	GN / BU	2733	V	—
3	0.5	BU / GY	4054	II	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	3	0.35	BU / GY	4054	V	—
4	0.5	WH	4055	II	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	4	0.35	WH	4055	V	—
5	0.5	BK / BN	2185	II	—	Vehicle Level Control Position Sensor Low Reference	5	0.5	BK / BN	2185	V	—

X400 Chassis Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	WH / RD	2165	II	—	Vehicle Level Control Position Sensor 5V Reference	6	0.5	WH / RD	2165	V	—
7	0.5	BN	2184	II	—	Vehicle Level Control Position Sensor Signal	7	0.5	BN	2184	V	—
8 - 9	—	—	—	—	—	Not Occupied	8 - 9	—	—	—	—	—
10	0.5	WH / VT	6567	II	—	Rear Turn Signal Lamp Feedback Signal	10	0.35	WH / VT	6567	V	—
11	0.75	GN / YE	1616	II	—	Rear Brake Pad Wear Sensor Signal	11	0.75	GN / YE	1616	V	—
12	0.75	BN / BU	1602	II	—	Front Brake Pad Wear Sensor Signal	12	0.75	BN / BU	1602	V	—
13	4	WH	2001	III	—	Left Park Brake Motor Apply Control	13	2.5	WH	2001	IV	—
14	2.5	BU	47	I	—	Trailer Auxiliary Control	14	2.5	BU	47	VI	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	GY / YE	7128	II	—	Right Rear Wheel Speed Sensor Control	16	0.5	GY / YE	7128	V	—
17	0.5	VT	882	II	—	Right Rear Wheel Speed Sensor Signal	17	0.5	VT	882	V	—
18	0.75	WH / RD	7524	II	—	Front Vehicle Level Sensor 5V Reference	18	0.75	WH / RD	7524	V	—
19	0.5	BK / GY	7526	II	—	Front Axle Level Sensor Low Reference	19	0.5	BK / GY	7526	V	—
20	0.5	BN / WH	7525	II	—	Front Vehicle Level Sensor Signal	20	0.5	BN / WH	7525	V	—
21	0.5	WH	4976	II	—	AUTOSAR CAN Bus [-] 3 Serial Data	21	0.35	WH	4976	V	—
22	0.5	BU / BK	4977	II	—	AUTOSAR CAN Bus [+] 3 Serial Data	22	0.35	BU / BK	4977	V	—
23	0.5	WH / BK	7544	II	—	Right Rear Turn Signal Lamp Feedback Signal	23	0.35	WH / BK	7544	V	—

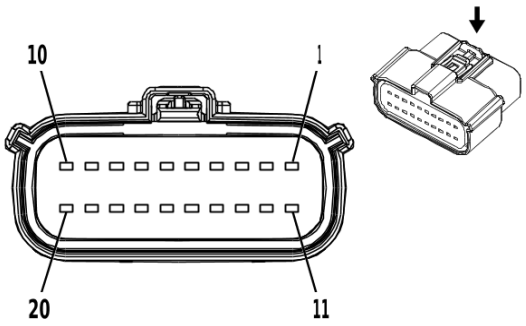
X400 Chassis Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
24	0.5	BU / VT	4101	II	—	AUTOSAR CAN Bus [+] 4 Serial Data	24	—	—	—	—	—
25	0.5	WH	4100	II	—	AUTOSAR CAN Bus [-] 4 Serial Data	25	0.35	WH	4100	V	—
26	0.5	BK	7970	II	—	Axle Differential Lock Control Shield	26	0.5	BK	7970	V	—
27	—	—	—	—	—	Ground	27	2.5	BK	150	VI	—
28	2.5	GY / BN	7968	I	—	Axle Differential Lock Control High	28	2.5	GY / BN	7968	VI	—
29	4	GY / BK	4369	III	—	Left Park Brake Motor Low Reference	29	2.5	GY / BK	4369	IV	—
30	2.5	YE / WH	7969	I	—	Axle Differential Lock Control Low	30	2.5	YE / WH	7969	VI	—
31	0.5	BK / YE	7977	II	—	Axle Differential Lock Motor Temperature Sensor Low Reference	31	0.35	BK / YE	7977	V	—
32	0.5	BU / WH	7978	II	—	Axle Differential Lock Motor Temperature Sensor Signal	32	0.35	BU / WH	7978	V	—
33	0.5	YE	872	II	—	Right Front Wheel Speed Sensor Signal	33	0.5	YE	872	V	—
34	0.5	GY / BN	7065	II	—	Right Front Wheel Speed Sensor Control	34	0.5	GY / BN	7065	V	—
35	0.5	WH	7971	II	—	Axle Differential Lock Motor Brake Control High	35	0.35	WH	7971	V	—
36	0.5	VT / BK	7972	II	—	Axle Differential Lock Motor Brake Control Low	36	0.35	VT / BK	7972	V	—
37	0.5	GY	830	II	—	Left Front Wheel Speed Sensor Signal	37	0.5	GY	830	V	—
38	0.5	GY / WH	7064	II	—	Left Front Wheel Speed Sensor Control	38	0.5	GY / WH	7064	V	—
39	0.5	WH	4978	II	—	AUTOSAR CAN Bus [-] 2 Serial Data	39	0.35	WH	4978	V	—

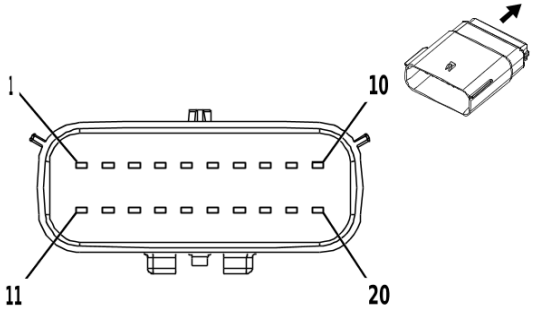
X400 Chassis Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
40	0.5	VT / GY	2683	II	—	Unlatch Actuators Unlatch Low Reference 1	40	0.75	VT / GY	2683	V	—
41	0.5	BU / BK	2690	II	—	Fuel Door Actuator Unlock Control	41	0.5	BU / BK	2690	V	—
42	—	—	—	—	—	Not Occupied	42	—	—	—	—	—
43	4	GY	4368	III	—	Right Park Brake Motor Low Reference	43	2.5	GY	4368	IV	—
44	—	—	—	—	—	Not Occupied	44	—	—	—	—	—
45	0.5	BN / YE	820	II	—	Center High Mounted Stop Lamp Supply Voltage	45	0.5	BN / YE	820	V	—
46	0.5	GY / BK	7127	II	—	Left Rear Wheel Speed Sensor Control	46	0.5	GY / BK	7127	V	—
47	0.5	BU	884	II	—	Left Rear Wheel Speed Sensor Signal	47	0.5	BU	884	V	—
48	0.5	WH	4100	II	—	AUTOSAR CAN Bus [-] 4 Serial Data	48	0.35	WH	4100	V	—
49	0.5	BU / VT	4101	II	—	AUTOSAR CAN Bus [+] 4 Serial Data	49	0.35	BU / VT	4101	V	—
50	0.5	GY	7976	II	—	Axle Differential Lock Motor Position Sensor Signal 2	50	0.35	GY	7976	V	—
51	0.5	BK / VT	7974	II	—	Axle Differential Lock Motor Position Sensor Low Reference	51	0.35	BK / VT	7974	V	—
52	0.5	GN / BN	7975	II	—	Axle Differential Lock Motor Position Sensor Signal 1	52	0.35	GN / BN	7975	V	—
53	0.5	BU / YE	4979	II	—	AUTOSAR CAN Bus [+] 2 Serial Data	53	0.35	BU / YE	4979	V	—
54	0.75	WH / RD	7973	II	—	Axle Differential Lock Motor Position Sensor High Reference	54	0.75	WH / RD	7973	V	—
55	—	—	—	—	—	Battery Positive Voltage	55	4	RD / YE	442	IV	—

X401 Body Wiring Harness to Chassis Wiring Harness



2871898



2871861

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13650143
Service Connector: 19300557
Description: 20-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35455699
Service Connector: 19351705
Description: 20-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	19331234	J-35616-14 (GN)	J-38125-557

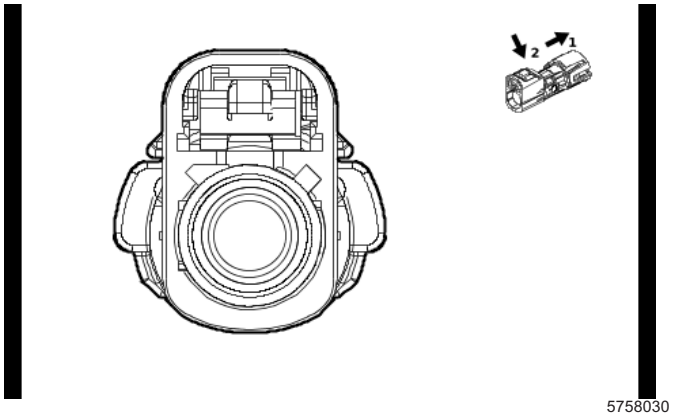
X401 Body Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / BK	2223	I	—	Trailer Brake Apply Signal	1	0.5	WH / BK	2223	II	—
2	0.5	YE / BK	2224	I	—	Trailer Brake Enable Signal	2	0.5	YE / BK	2224	II	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	0.5	BU / WH	1334	I	—	Left Rear Turn Signal Lamp Control 2	4	0.5	BU / WH	1334	II	—
5	0.35	WH	4986	I	—	AUTOSAR CAN Bus [-] 1 Serial Data	5	0.5	WH	4986	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	GN / WH	24	I	—	Backup Lamp Control	7	0.5	GN / WH	24	II	—
8 - 9	—	—	—	—	—	Not Occupied	8 - 9	—	—	—	—	—
10	0.5	YE / GN	2024	I	—	Animation Lighting Control	10	0.5	YE / GN	2024	II	—

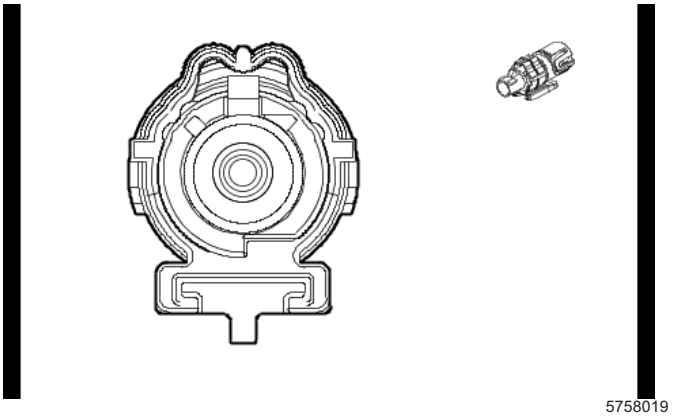
X401 Body Wiring Harness to Chassis Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.75	VT / GN	4320	I	—	Powertrain Sensor Bus Enable Powertrain Sensor Bus Enable	11	0.5 0.75	VT / GN VT / GN	4320 4320	II II	FHX FJW
12	0.5	BU / VT	1335	I	—	Right Rear Turn Signal Lamp Control 2	12	0.5	BU / VT	1335	II	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	BN / GY	6995	I	—	Right Rear Park Lamp Control	14	0.5	BN / GY	6995	II	—
15	0.35	BU	4987	I	—	AUTOSAR CAN Bus [+] 1 Serial Data	15	0.5	BU	4987	II	—
16	0.5	GN / WH	1324	I	—	Backup Lamp Control	16	0.5	GN	1324	II	—
17	0.5	BN / BU	6993	I	—	Left Rear Park Lamp Control	17	0.5	BN / BU	6993	II	—
18	2	RD / VT	1242	I	—	Battery Positive Voltage	18	2	RD / VT	1242	II	—
19	0.5	WH / YE	7541	I	—	Right Rear Stop Lamp Control	19	0.5	WH / YE	7541	II	—
20	0.5	GY / YE	7542	I	—	Left Rear Stop Lamp Control	20	0.5	GY / YE	7542	II	—

X402A Body Wiring Harness to Chassis Wiring Harness



5758030


5758019

Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187032

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338239

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed(BK)

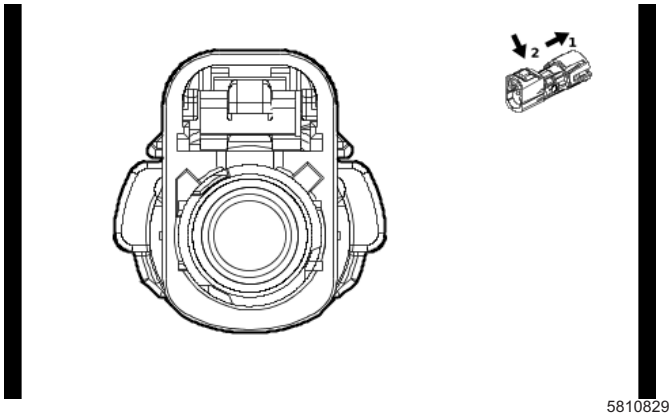
Terminal Part Information

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

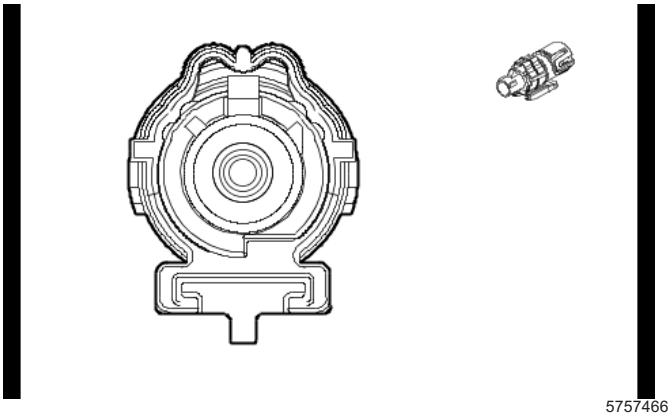
X402A Body Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Trailer Rear Vision Camera Coaxial Video Signal	—	—	Coax Cable	—	I	—

X402B Body Wiring Harness to Chassis Wiring Harness



5810829


5757466

Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 35187033

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(WH)

Connector Part Information

Harness Type: Chassis Wiring Harness COAX

OEM Connector: 33338240

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed(WH)

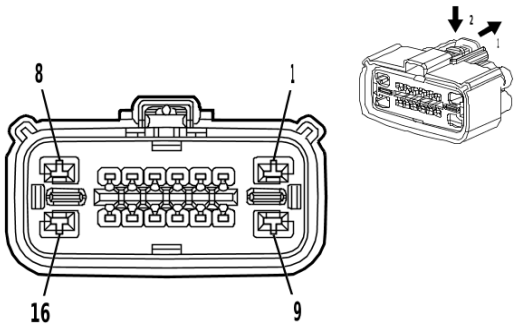
Terminal Part Information

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

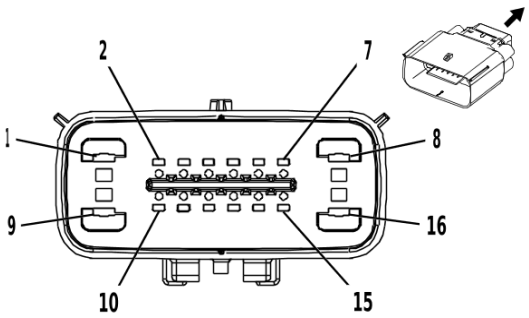
X402B Body Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Trailer 2 Rear Vision Camera Co-axial Video Signal	—	—	Coax Cable	—	I	—

X403 Engine Wiring Harness to Chassis Wiring Harness (L87)



4283035



2373686

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35382404
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33129084
Service Connector: 19331031
Description: 16-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	19366658	J-35616-5 (PU)	J-38125-12A
III	86800300	J-35616-3 (GY)	J-38125-217

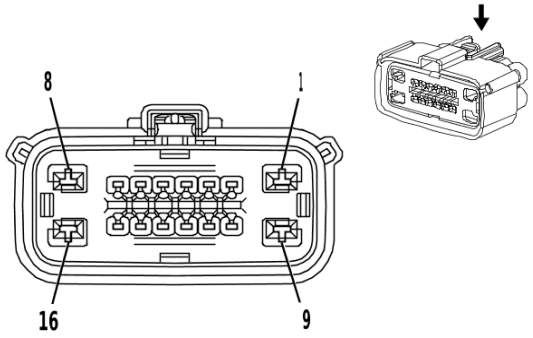
X403 Engine Wiring Harness to Chassis Wiring Harness (L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Engine Control Module Ground	1	1.5	BK / WH	6151	II	—
2	—	—	—	—	—	Powertrain Sensor Bus Enable	2	0.5	VT / GN	4320	III	—
3	0.5	GN / GY	465	I	—	Fuel Pump Primary Relay Control	3	0.5	GN / GY	465	III	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	WH	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	5	0.5	WH	4976	III	—
6	0.5	BU / BK	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	6	0.5	BU / BK	4977	III	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	—	—	—	—	—	Run/Crank Ignition 1 Voltage	9	0.5	VT / BK	2139	II	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

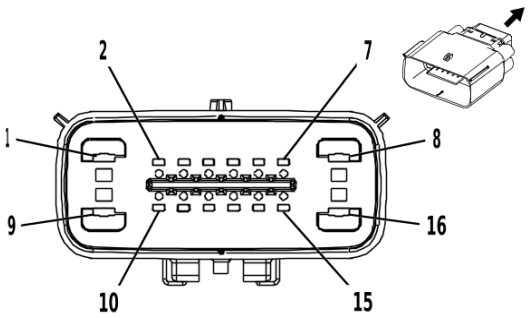
X403 Engine Wiring Harness to Chassis Wiring Harness (L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	VT / GN	4320	I	—	Powertrain Sensor Bus Enable	11	0.5	VT / GN	4320	III	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	WH	4978	I	—	AUTOSAR CAN Bus [-] 2 Serial Data	13	0.5	WH	4978	III	—
14	0.5	BU / YE	4979	I	—	AUTOSAR CAN Bus [+] 2 Serial Data	14	0.5	BU / YE	4979	III	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	—	—	—	—	—	Powertrain Sensor Bus Enable	16	1	VT / GN	4320	II	—

X403 Engine Wiring Harness to Chassis Wiring Harness (LM2/LT4)



3684497



2373686

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33218250
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33129084
Service Connector: 19331031
Description: 16-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217
III	19366658	J-35616-5 (PU)	J-38125-12A
IV	86800300	J-35616-3 (GY)	J-38125-217

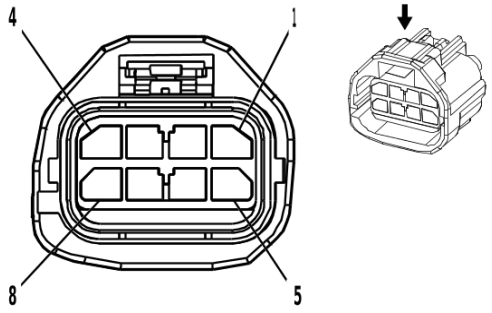
X403 Engine Wiring Harness to Chassis Wiring Harness (LM2/LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BK / WH	6151	I	—	Engine Control Module Ground	1	1.5	BK / WH	6151	III	—
2	1	VT / GN	4320	II	—	Powertrain Sensor Bus Enable	2	0.5	VT / GN	4320	IV	—
3	0.5	GN / GY	465	II	—	Fuel Pump Primary Relay Control	3	0.5	GN / GY	465	IV	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	WH	4976	II	—	AUTOSAR CAN Bus [-] 3 Serial Data	5	0.5	WH	4976	IV	—
6	0.5	BU / BK	4977	II	—	AUTOSAR CAN Bus [+] 3 Serial Data	6	0.5	BU / BK	4977	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	0.5	VT / BK	2139	I	—	Run/Crank Ignition 1 Voltage	9	0.5	VT / BK	2139	III	—
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—

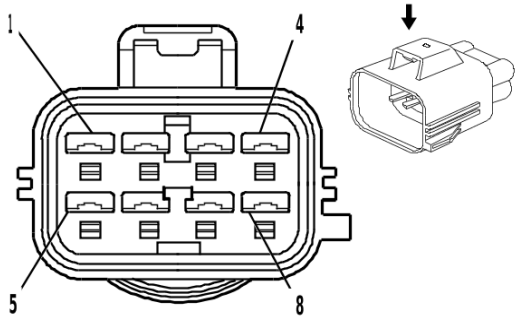
X403 Engine Wiring Harness to Chassis Wiring Harness (LM2/LT4) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	VT / GN	4320	II	—	Powertrain Sensor Bus Enable	11	0.5	VT / GN	4320	IV	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	WH	4978	II	—	AUTOSAR CAN Bus [-] 2 Serial Data	13	0.5	WH	4978	IV	—
14	0.5	BU / YE	4979	II	—	AUTOSAR CAN Bus [+] 2 Serial Data	14	0.5	BU / YE	4979	IV	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	1	VT / GN	4320	I	—	Powertrain Sensor Bus Enable	16	1	VT / GN	4320	III	—

X404L Assist Step Motor - Left to Chassis Wiring Harness (B3L)



1401778



1856785

Connector Part Information

Harness Type: Assist Step Motor - Left
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed(D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

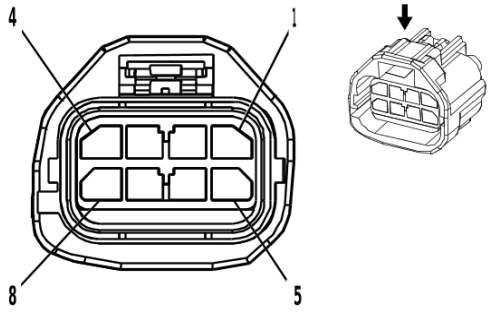
X404L Assist Step Motor - Left to Chassis Wiring Harness (B3L)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	YE	7471	I	—	Left Running Board Step Motor Control Extend	1	2	WH / BN	7471	II	—
2	0.5	OG / WH	7468	I	—	Left Running Board Step Motor Hall Sensor 5V Reference	2	0.5	VT / RD	7468	II	—
3	0.5	YE / WH	7467	I	—	Left Running Board Step Motor Hall Sensor Signal	3	0.5	YE	7467	II	—
4	0.5	BN / WH	7466	I	—	Left Running Board Step Motor Hall Sensor Low Reference	4	0.5	YE / BN	7466	II	—
5	2	OG	7472	I	—	Left Running Board Step Motor Control Retract	5	2	GY	7472	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	RD	4748	I	—	Left Running Board Step Courtesy Lamp Control	7	0.5	BN	4748	II	—

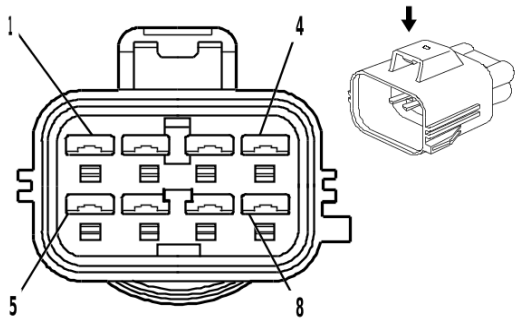
X404L Assist Step Motor - Left to Chassis Wiring Harness (B3L) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	1	BK	1650	I	—	Ground	8	1	BK	1650	II	—

X404R Assist Step Motor - Right to Chassis Wiring Harness (B3L)



1401778



1856785

Connector Part Information

Harness Type: Assist Step Motor - Right
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed(D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

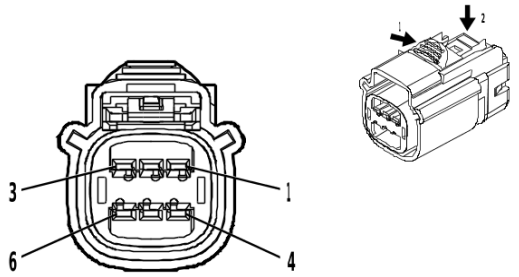
X404R Assist Step Motor - Right to Chassis Wiring Harness (B3L)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	YE	7470	I	—	Right Running Board Step Motor Control Extend	1	2	BU	7470	II	—
2	0.5	OG / WH	7464	I	—	Right Running Board Step Motor Hall Sensor 5V Reference	2	0.5	GN / RD	7464	II	—
3	0.5	YE / WH	7465	I	—	Right Running Board Step Motor Hall Sensor Signal	3	0.5	VT	7465	II	—
4	0.5	BN / WH	7463	I	—	Right Running Board Step Motor Hall Sensor Low Reference	4	0.5	YE / BK	7463	II	—
5	2	OG	7469	I	—	Right Left Running Board Step Motor Control Retract	5	2	GN	7469	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

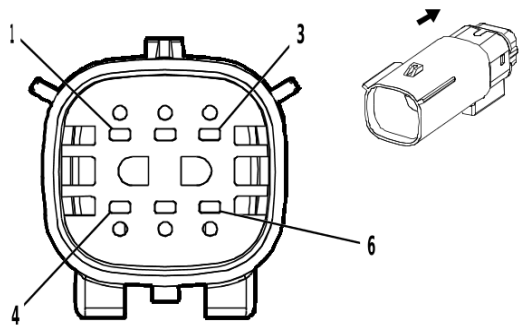
X404R Assist Step Motor - Right to Chassis Wiring Harness (B3L) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	RD	4749	I	—	Right Running Board Step Courtesy Lamp Control	7	0.5	GY / VT	4749	II	—
8	1	BK	1650	I	—	Ground	8	1	BK	1650	II	—

X405D Chassis Wiring Harness to Power Steering Wiring Harness Extension Harness



5004419



1986159

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35325491
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Power Steering Wiring Harness Extension Harness
OEM Connector: 33482-3619
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

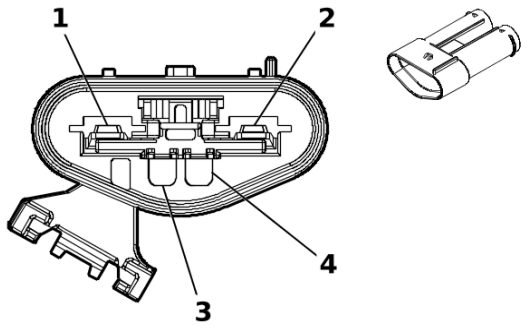
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X405D Chassis Wiring Harness to Power Steering Wiring Harness Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU	4987	I	—	AUTOSAR CAN Bus [+] 1 Serial Data	1	0.5	BU	4987	II	—
2 - 5	—	—	—	—	—	Not Occu-pied	2 - 5	—	—	—	—	—
6	0.5	WH	4986	I	—	AUTOSAR CAN Bus [-] 1 Serial Data	6	0.5	WH	4986	II	—

X405P Battery Wiring Harness to Power Steering Control Module Wiring Harness

—



5330353

Connector Part Information

Harness Type: Battery Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

Connector Part Information

Harness Type: Power Steering Control Module Wiring Harness
OEM Connector: 13582138
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 2.8, 12 MAK Series, Sealed(BK)

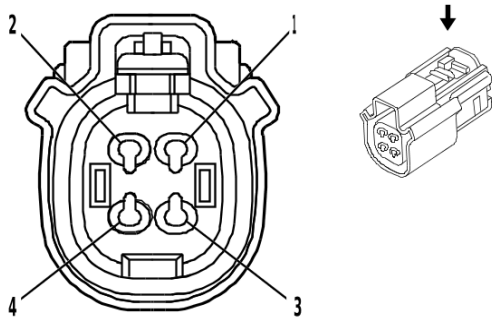
Terminal Part Information

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

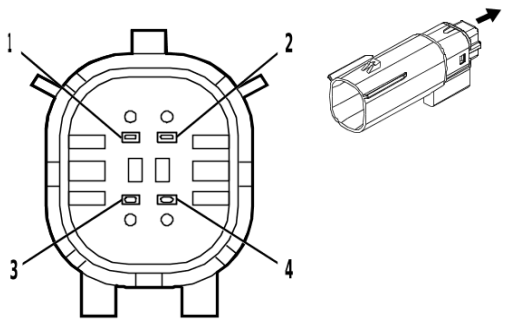
X405P Battery Wiring Harness to Power Steering Control Module Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	20	RD	842	I	—	Battery Positive Voltage	1	20	RD	842	II	—
2	20	BK	350	I	—	Ground	2	20	BK	350	II	—

X415A Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Engine Wiring Harness (NP0/NQH)



1960031



2368875

Connector Part Information

Harness Type: Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness

OEM Connector: 33346391

Service Connector: Service by Harness - See Part Catalog

Description: 4-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 33344515

Service Connector: 84838880

Description: 4-Way M 1.5 MX Series, Sealed(BK)

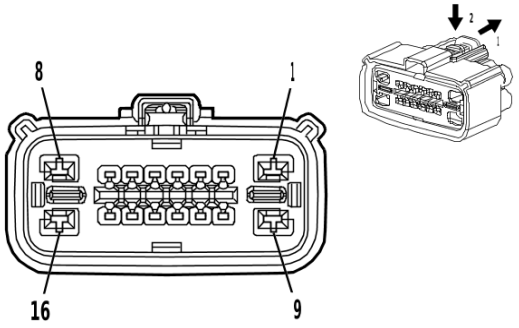
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

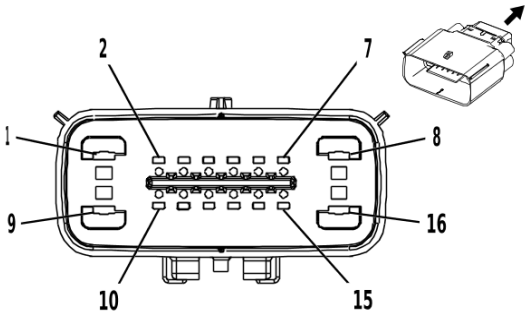
X415A Transfer Case Selector Shift Control Switch Wiring Harness Extension Harness to Engine Wiring Harness (NP0/NQH)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	450	I	—	Ground Ground	1	0.75 0.5	BK BK	6550 6550	II II	L87 LM2
2	0.5	YE / WH	1695	I	—	4WD Locked Range Indicator Control 4WD Locked Range Indicator Control	2	0.5	YE / WH	1695	II	—
3	0.5	GN	8016	I	—	Secondary Axle Motor Control	3	0.75	GN	8016	II	—
4	0.5	GY / BK	1570	I	—	Front Axle Actuator Control Front Axle Actuator Control	4	0.5	GY / BK	1570	II	—

X415R Chassis Wiring Harness to Differential Carrier Lock Wiring Harness



4283035



2373686

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35435909
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Differential Carrier Lock Wiring Harness
OEM Connector: 33129084
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.5, 2.8 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217
III	Not required	J-35616-3 (GY)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

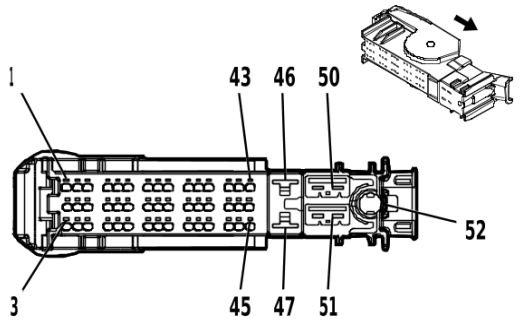
X415R Chassis Wiring Harness to Differential Carrier Lock Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	GY / BN	7968	I	—	Axle Differential Lock Control High	1	2.5	GY / BN	7968	IV	—
2	0.5	WH	7971	II	—	Axle Differential Lock Motor Brake Control High	2	0.5	WH	7971	III	—
3	0.5	GN / BN	7975	II	—	Axle Differential Lock Motor Position Sensor Signal 1	3	0.5	GN / BN	7975	III	—
4	0.5	BK / VT	7974	II	—	Axle Differential Lock Motor Position Sensor Low Reference	4	0.5	BK / VT	7974	III	—
5	0.5	VT / BK	7972	II	—	Axle Differential Lock Motor Brake Control Low	5	0.5	VT / BK	7972	III	—

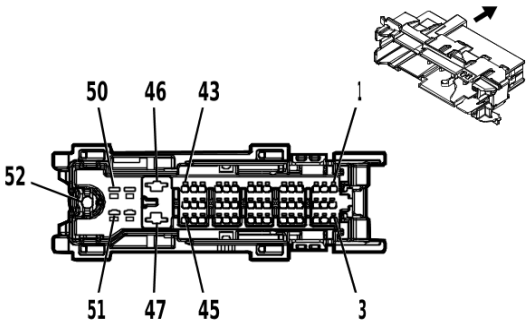
X415R Chassis Wiring Harness to Differential Carrier Lock Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.75	WH / RD	7973	II	—	Axle Differential Lock Motor Position Sensor High Reference	6	0.5	WH / RD	7973	III	—
7	0.5	BK / YE	7977	II	—	Axle Differential Lock Motor Temperature Sensor Low Reference	7	0.5	BK / YE	7977	III	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	2.5	YE / WH	7969	I	—	Axle Differential Lock Control Low	9	2.5	YE / WH	7969	IV	—
10	0.5	BK	7970	II	—	Axle Differential Lock Control Shield	10	0.5	BK	7970	III	—
11	0.5	GY	7976	II	—	Axle Differential Lock Motor Position Sensor Signal 2	11	0.5	GY	7976	III	—
12	0.5	BU / WH	7978	II	—	Axle Differential Lock Motor Temperature Sensor Signal	12	0.5	BU / WH	7978	III	—
13 - 16	—	—	—	—	—	Not Occupied	13 - 16	—	—	—	—	—

X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness



4992530



4993484

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35077349
Service Connector: Service by Harness - See Part Catalog
Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35190453
Service Connector: 13527236
Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	Not required	No Tool Required	No Tool Required
V	19301536	J-35616-43 (RD)	J-38125-11A
VI	84616651	J-35616-13 (BU)	J-38125-215A
VII	84888592	J-35616-5 (PU)	J-38125-11A
VIII	Service by Cable	No Tool Required	J-38125-12A

X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD / VT	1940	I	—	Battery Positive Voltage	1	0.5	RD / VT	1940	VI	—
2	0.75	VT / BU	2687	I	—	Left Front Door Unlatch Actuator Unlatch Control	2	0.75	VT / BU	2687	VI	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—
5	0.5	BK / WH	1151	I	—	Signal Ground	5	0.5	BK / WH	1151	VI	—
6 - 9	—	—	—	—	—	Not Occupied	6 - 9	—	—	—	—	—
10	0.75	BN / BU	118	I	—	Left Front Speaker [-] Control 1	10	0.75	BN / BU	118	VI	—
11	0.35	GN / YE	6134	I	—	Body Control Module LIN Bus 3	11	0.5	GN / YE	6134	VI	—

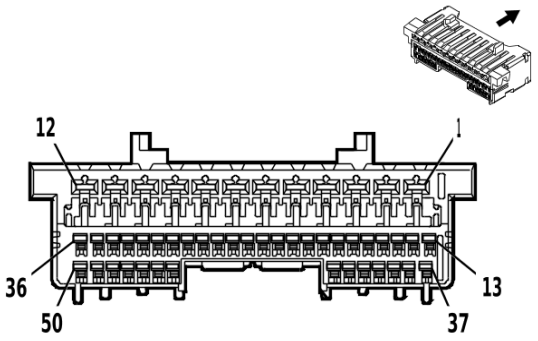
X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	0.35	VT / GY	126	I	—	Left Front Door Open Switch Signal	12	0.35	VT / GY	126	VI	—
13	0.75	BU	201	I	—	Left Front Speaker 1 [+] Control	13	0.75	BU	201	VI	—
14	0.5	BU	2675	I	—	Left Front Exterior Door Handle Switch Unlock Signal	14	0.35	BU	2675	VI	—
15	0.35	GY	2674	I	—	Left Front Door Exterior Switch Lock Signal	15	0.35	GY	2674	VI	—
16	0.35	YE / WH	1690	I	—	Mirror Dimming Signal	16	0.35	YE / WH	1690	VI	—
17	0.35	BK / YE	1691	I	—	Automatic Day/Night Mirror Low Reference	17	0.35	BK / YE	1691	VI	—
18	0.35	GN / BK	2858	I	—	Body Control Module LIN Bus 12	18	0.5	GN / BK	2858	VI	—
19	0.75	VT / GY	2683	I	—	Unlatch Actuators Unlatch Low Reference 1	19	0.75	VT / GY	2683	VI	—
20	—	—	—	—	—	Left Front Door Handle Switch Signal 1	20	0.35	GN / BK	394	VI	—
21	0.35	YE / GN	4733	I	—	Exterior Door Handle Lamp Control	21	0.5	YE / GN	4733	VI	—
22 - 26	—	—	—	—	—	Not Occupied	22 - 26	—	—	—	—	—
27	0.35	WH / GY	2114	I	—	Left Turn Signal Lamp Control 2	27	0.35	WH / GY	2114	VI	—
28	0.5 0.75	BN BN	5910 5910	I I	AF7+ UTT UTT- AF7	Door Dead Lock Actuator Lock Control Door Dead Lock Actuator Lock Control	28	0.75	BN	5910	VI	—
29 - 30	—	—	—	—	—	Not Occupied	29 - 30	—	—	—	—	—
31	0.35	WH / GN	5966	I	—	Approach Lamp Control	31	0.5	WH / GN	5966	VI	—
32	—	—	—	—	—	Not Occupied	32	—	—	—	—	—
33	0.35	GY	728	I	—	Security Indicator Control	33	0.5	GY	728	VI	—

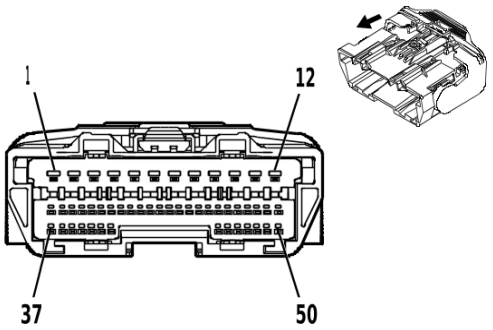
X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
34	—	—	—	—	—	Not Occupied	34	—	—	—	—	—
35	0.5	BK / OG	6628	I	—	Left Front Side Impact Sensor Low Reference	35	0.5	BK / OG	6628	VI	—
36	0.5	OG / GN	2132	I	—	Left Front Side Impact Sensor Signal	36	0.5	OG / GN	2132	VI	—
37	0.35	GN / WH	2861	I	—	Body Control Module LIN Bus 15	37	0.35	GN / WH	2861	VI	—
38	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	38	0.35	WH / VT	4849	VI	—
39	0.5	GY	157	I	—	Interior Lamp Control	39	0.5	GY	157	VI	—
40	—	—	—	—	—	Not Occupied	40	—	—	—	—	—
41	0.5	WH	615	I	—	Seat Memory Switch Signal 1	41	0.5	WH	615	VI	—
42	0.5	BU / GN	614	I	—	Seat Memory Switch Set Signal	42	0.5	BU / GN	614	VI	—
43 - 45	—	—	—	—	—	Not Occupied	43 - 45	—	—	—	—	—
46	2.5	RD / GY	3540	II	—	Battery Positive Voltage	46	2.5	RD / GY	3540	V	—
47	2.5	BK	1150	II	—	Ground	47	2.5	BK	1150	V	—
48	—	—	—	—	—	Not Occupied	48	—	—	—	—	—
49	0.75	RD / YE	2342	III	—	Battery Positive Voltage	49	1	RD / YE	2342	VII	—
50 - 51	—	—	—	—	—	Not Occupied	50 - 51	—	—	—	—	—
52	0	—	4725	IV	—	Left Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal	52	0	—	4725	VIII	—

X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver



4997556



5022037

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35283943
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series(BK)

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way M 1.2, 2.8 OCS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-17 (L-GN)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.35	VT / BU	2788	II	—	Left Front Mirror Motor Up [+] Down [-] Control	3	0.35	VT / BU	2788	IV	—
4	0.35	VT / RD	2791	II	—	Left Front Mirror Position Sensor High Reference	4	0.35	VT / RD	2791	IV	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.35	GY	728	II	—	Security Indicator Control	6	0.35	GY	728	IV	—
7	0.35	GN / BK	2858	II	—	Body Control Module LIN Bus 12	7	0.35	GN / BK	2858	IV	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

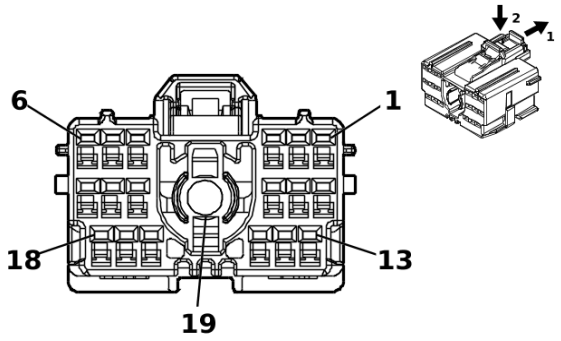
X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.35	WH / YE	2792	II	—	Left Front Mirror Position Sensor Left [-] Right [+] Signal	9	0.35	WH / YE	2792	IV	—
10	0.35	WH / BN	2764	II	—	Window Switch Left Front Down Signal	10	0.35	WH / BN	2764	IV	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.35	GN / WH	2861	II	—	Body Control Module LIN Bus 15	12	0.35	GN / WH	2861	IV	—
13 - 14	—	—	—	—	—	Not Occupied	13 - 14	—	—	—	—	—
15	0.5	WH	615	I	—	Seat Memory Switch Signal 1	15	0.35	WH	615	III	—
16	0.75	BK	1150	I	—	Ground	16	0.35	BK	1150	III	—
17	0.35	GN / YE	6134	I	—	Body Control Module LIN Bus 3	17	0.35	GN / YE	6134	III	—
18	0.35	GN	2766	I	—	Power Window Switch Left Front Express Signal	18	0.35	GN	2766	III	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	RD / VT	1940	I	—	Battery Positive Voltage	20	0.5	RD / VT	1940	III	—
21	0.35	YE / BN	2789	I	—	Left Front Mirror Motor Common Control	21	0.35	YE / BN	2789	III	—
22 - 23	—	—	—	—	—	Not Occupied	22 - 23	—	—	—	—	—
24	0.35	BK / BN	673	I	—	Left Outside Rearview Mirror Position Sensor Low Reference	24	0.35	BK / BN	673	III	—
25	0.35	GY / GN	2763	I	—	Window Switch Left Front Up Signal	25	0.35	GY / GN	2763	III	—
26	—	—	—	—	—	Not Occupied	26	—	—	—	—	—
27	0.35	BN / BK	2790	I	—	Left Front Mirror Motor Right [+] Left [-] Control	27	0.35	BN / BK	2790	III	—
28 - 29	—	—	—	—	—	Not Occupied	28 - 29	—	—	—	—	—

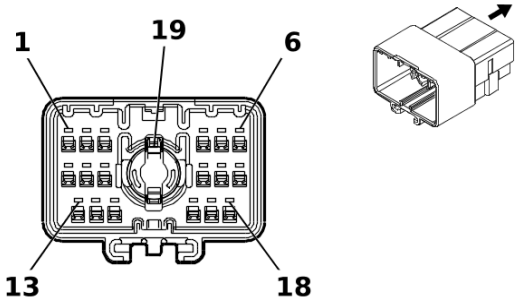
X505 Front Side Door Door Wiring Harness - Driver to Front Side Door Door Lock Door Wiring Harness - Driver (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
30	0.5	GY	157	I	—	Interior Lamp Control	30	0.35	GY	157	III	—
31	0.35	GY / YE	1760	I	—	Left Side Object Detection LED Control	31	0.35	GY / YE	1760	III	—
32 - 35	—	—	—	—	—	Not Occupied	32 - 35	—	—	—	—	—
36	0.5	BK / WH	1151	I	—	Signal Ground	36	0.35	BK / WH	1151	III	—
37	—	—	—	—	—	Not Occupied	37	—	—	—	—	—
38	0.35	WH	606	I	—	Left Outside Rearview Mirror Heater Control	38	0.35	WH	606	III	—
39	0.35	GY / WH	2785	I	—	Left Front Mirror Motor Fold Out Control	39	0.35	GY / WH	2785	III	—
40 - 42	—	—	—	—	—	Not Occupied	40 - 42	—	—	—	—	—
43	0.35	WH / GN	2786	I	—	Left Front Mirror Motor Fold In Control	43	0.35	WH / GN	2786	III	—
44	—	—	—	—	—	Not Occupied	44	—	—	—	—	—
45	0.5	BU / GN	614	I	—	Seat Memory Switch Set Signal	45	0.35	BU / GN	614	III	—
46	0.35	GY / BN	2787	I	—	Left Front Mirror Position Sensor Up [+] Down [-] Signal	46	0.35	GY / BN	2787	III	—
47	—	—	—	—	—	Not Occupied	47	—	—	—	—	—
48	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	48	0.35	WH / VT	4849	III	—
49 - 50	—	—	—	—	—	Not Occupied	49 - 50	—	—	—	—	—

X510 Front Side Door Door Wiring Harness - Driver to Outside Rearview Mirror Wiring Harness - Driver



5253439



4969165

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 35165322
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way F 1.2 MCON, Coaxial Series(BK)

Connector Part Information

Harness Type: Outside Rearview Mirror Wiring Harness - Driver
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required
III	Not required	No Tool Required	No Tool Required

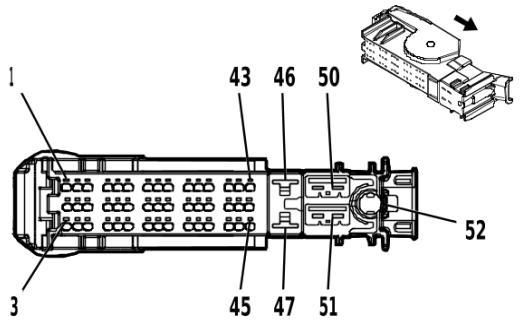
X510 Front Side Door Door Wiring Harness - Driver to Outside Rearview Mirror Wiring Harness - Driver

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN / BK	2790	I	—	Left Front Mirror Motor Right [+] Left [-] Control	1	0.35	BN / BK	2790	III	—
2	0.35	VT / BU	2788	I	—	Left Front Mirror Motor Up [+] Down [-] Control	2	0.35	VT / BU	2788	III	—
3	0.35	WH / GN	2786	I	—	Left Front Mirror Motor Fold In Control	3	0.35	WH / GN	2786	III	—
4	0.35	GY / YE	1760	I	—	Left Side Object Detection LED Control	4	0.35	GY / YE	1760	III	—
5	0.35	WH / GN	5966	I	—	Approach Lamp Control	5	0.35	WH / GN	5966	III	—
6	0.35	WH / YE	2792	I	—	Left Front Mirror Position Sensor Left [-] Right [+] Signal	6	0.35	WH / YE	2792	III	—

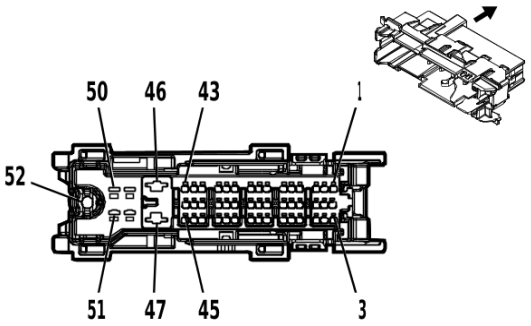
X510 Front Side Door Door Wiring Harness - Driver to Outside Rearview Mirror Wiring Harness - Driver (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.35	WH	606	I	—	Left Outside Rearview Mirror Heater Control	7	0.35	WH	606	III	—
8	0.35	WH / GY	2114	I	—	Left Turn Signal Lamp Control 2	8	0.35	WH / GY	2114	III	—
9	0.75	BK	1150	I	—	Ground	9	0.75	BK	1150	III	—
10	0.35	VT / RD	2791	I	—	Left Front Mirror Position Sensor High Reference	10	0.35	VT / RD	2791	III	—
11	0.35	GY / BN	2787	I	—	Left Front Mirror Position Sensor Up [+] Down [-] Signal	11	0.35	GY / BN	2787	III	—
12	0.35	BK / YE	1691	I	—	Automatic Day/Night Mirror Low Reference	12	0.35	BK / YE	1691	III	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.35	YE / BN	2789	I	—	Left Front Mirror Motor Common Control	14	0.35	YE / BN	2789	III	—
15	0.35	GY / WH	2785	I	—	Left Front Mirror Motor Fold Out Control	15	0.35	GY / WH	2785	III	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—
17	0.35	YE / WH	1690	I	—	Mirror Dimming Signal	17	0.35	YE / WH	1690	III	—
18	0.35	BK / BN	673	I	—	Left Outside Rearview Mirror Position Sensor Low Reference	18	0.35	BK / BN	673	III	—
19	0	—	4725	II	—	Left Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal	19	0	—	4725	III	—

X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness



4992530



4993484

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 35077349
Service Connector: Service by Harness - See Part Catalog
Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35190453
Service Connector: 13527236
Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	Not required	No Tool Required	No Tool Required
V	19301536	J-35616-43 (RD)	J-38125-11A
VI	84616651	J-35616-13 (BU)	J-38125-215A
VII	84888592	J-35616-5 (PU)	J-38125-11A
VIII	Service by Cable	No Tool Required	J-38125-12A

X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 3	—	—	—	—	—	Not Occupied	1 - 3	—	—	—	—	—
4	0.35	GN / GY	2115	I	—	Right Turn Signal Lamp Control 2	4	0.35	GN / GY	2115	VI	—
5	0.5	BK / WH	1251	I	—	Signal Ground	5	0.75	BK / WH	1251	VI	—
6 - 9	—	—	—	—	—	Not Occupied	6 - 9	—	—	—	—	—
10	0.75	YE / BK	117	I	—	Right Front Speaker [-] Control 1	10	0.75	YE / BK	117	VI	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—
13	0.75	YE	200	I	—	Right Front Speaker 1 [+] Control	13	0.75	YE	200	VI	—

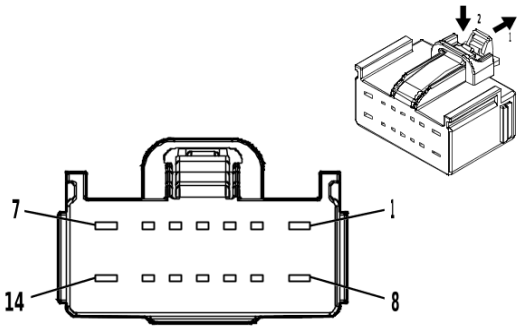
X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
14	—	—	—	—	—	Not Occupied	14	—	—	—	—	—
15	0.35	GN / BK	2858	I	—	Body Control Module LIN Bus 12	15	0.5	GN / BK	2858	VI	—
16 - 19	—	—	—	—	—	Not Occupied	16 - 19	—	—	—	—	—
20	0.5	BN / OG	2134	I	—	Right Front Side Impact Sensor Signal	20	0.5	BN / OG	2134	VI	—
21	0.5	BK / OG	6629	I	—	Right Front Side Impact Sensor Low Reference	21	0.5	BK / OG	6629	VI	—
22	—	—	—	—	—	Not Occupied	22	—	—	—	—	—
23	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	23	0.35	WH / VT	4849	VI	—
24	—	—	—	—	—	Not Occupied	24	—	—	—	—	—
25	0.35	GN / WH	2861	I	—	Body Control Module LIN Bus 15	25	0.35	GN / WH	2861	VI	—
26	—	—	—	—	—	Not Occupied	26	—	—	—	—	—
27	0.75	WH / BN	2684	I	—	Unlatch Actuators Unlatch Low Reference 2	27	0.75	WH / BN	2684	VI	—
28	0.5 0.75	BN BN	5910 5910	I I	AF7+ UTT UTT	Door Dead Lock Actuator Lock Control Door Dead Lock Actuator Lock Control	28	0.5	BN	5910	VI	—
29	0.35	GN / YE	6134	I	—	Body Control Module LIN Bus 3	29	0.5	GN / YE	6134	VI	—
30	0.35	WH / GN	5966	I	—	Approach Lamp Control	30	0.5	WH / GN	5966	VI	—
31	0.5	YE / GN	4733	I	—	Exterior Door Handle Lamp Control	31	0.5	YE / GN	4733	VI	—
32 - 34	—	—	—	—	—	Not Occupied	32 - 34	—	—	—	—	—
35	0.35	GN / GY	1177	I	—	Right Front Door Open Switch Signal	35	0.35	GN / GY	1177	VI	—
36 - 41	—	—	—	—	—	Not Occupied	36 - 41	—	—	—	—	—

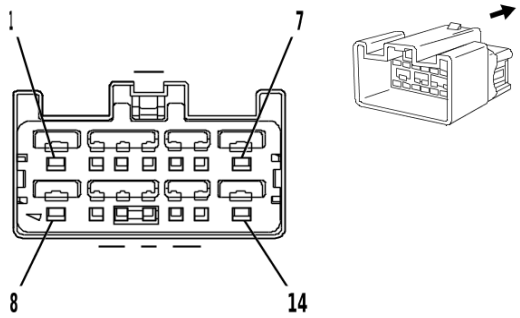
X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
42	0.35	GY / BU	2677	I	—	Right Front Door Exterior Switch Lock Signal	42	0.35	GY / BU	2677	VI	—
43	0.5	GY	157	I	—	Interior Lamp Control	43	0.5	GY	157	VI	—
44	0.75	GN	2688	I	—	Right Front Door Unlatch Actuator Unlatch Control	44	0.75	GN	2688	VI	—
45	0.5 0.35	GY / VT GY / VT	2676 2676	I I	AF7+ ATH+ Z75 X88/ Z75/ Z88	Right Front Door Exterior Switch Unlock Signal Right Front Door Exterior Switch Unlock Signal	45	0.35	GY / VT	2676	VI	—
46	2.5	RD / BN	4240	II	—	Battery Positive Voltage	46	2.5	RD / BN	4240	V	—
47	2.5	BK	1250	II	—	Ground	47	2.5	BK	1250	V	—
48	0.5	RD / BU	5240	III	—	Battery Positive Voltage	48	0.5	RD / BU	5240	VII	—
49	0.75	RD / WH	2242	III	—	Battery Positive Voltage	49	1	RD / WH	2242	VII	—
50 - 51	—	—	—	—	—	Not Occupied	50 - 51	—	—	—	—	—
52	0	—	4724	IV	—	Right Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal	52	0	—	4724	VIII	—

X602 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5)



4934172



1283905

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35105595
Service Connector: 13513604
Description: 14-Way F 1.5, 2.8 YESC Series(BK)

Connector Part Information

Harness Type: Body Rear Wiring Harness Extension Harness
OEM Connector: 10846900
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way M 1.5, 2.8 YESC Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575850	J-35616-14 (GN)	J-38125-557
II	84962855	J-35616-4A (PU)	J-38125-11A
III	Not required	J-35616-3 (GY)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

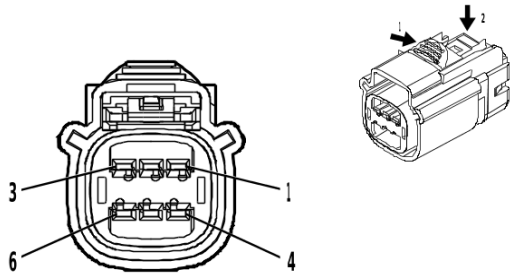
X602 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	5683	II	—	120V AC Phase A	1	0.75	BN	686	IV	—
2	0.5	VT / RD	4049	I	—	AC Power Outlet Sensor High Reference	2	0.5	VT / RD	4049	III	—
3	0.5	VT / WH	1139	I	—	Run/Crank Ignition 1 Voltage	3	0.5	VT / WH	1139	III	—
4	0.5	WH / GN	4628	I	—	DC/AC Inverter Relay Control	4	0.5	WH / GN	4628	III	—
5	0.75	BU / BN	6807	I	—	DC/AC Inverter Control	5	0.5	BU / BN	6807	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	BK / WH	2264	II	—	120V AC Phase A 2	7	0.75	BN / WH	2262	IV	—
8	0.75	RD	5684	II	—	120V AC Phase B	8	0.75	BU	6865	IV	—
9	0.5	Bare	2519	I	—	120V AC Outlet Low Reference	9	0.5	Bare	2526	III	—

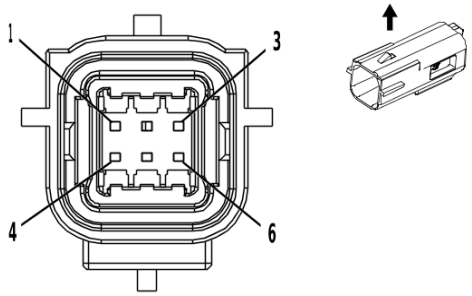
X602 Body Wiring Harness to Body Rear Wiring Harness Extension Harness (KI5) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	GN / BU	6133	I	—	Body Control Module LIN Bus 2	10	0.5	GN / BU	6133	III	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.75	GN / BN	2266	I	—	DC/AC Inverter Control 2	12	0.5	GN / BN	2266	III	—
13	0.5	Bare	2521	I	—	120V AC Outlet 2 Low Reference	13	0.5	Bare	2544	III	—
14	0.5	RD / WH	2265	II	—	120V AC Phase B 2	14	0.75	BU / WH	2263	IV	—

X604A Engine Wiring Harness to Active Air Grille Shutter Wiring Harness



5004419



4053925

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15513504
Service Connector: 84999473
Description: 6-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Active Air Grille Shutter Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M (BK)

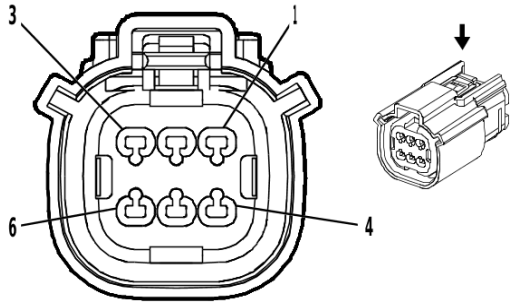
Terminal Part Information

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

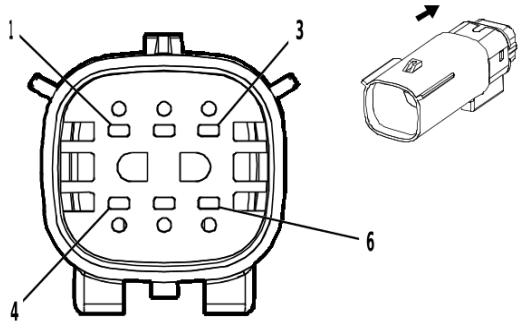
X604A Engine Wiring Harness to Active Air Grille Shutter Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN / VT	4621	I	—	Engine Control Module LIN Bus 1	1	0.5	GN / VT	4621	II	—
2	0.75 0.5	BK BK	6550 6550	I I	L87 LM2	Ground Ground	2	0.75 0.5	BK BK	6550 6550	II II	L87 LM2
3	0.5	VT / BU	5705	I	—	Powertrain Main Relay Control	3	0.5	VT / BU	5705	II	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	5	0.5	BU / GY	636	II	—
6	0.5 0.5	BK / YE BK / GY	548 626	I I	L87 LM2	Engine Control Sensors Low Reference 1 Engine Control Vehicle Sensors Low Reference 1	6	0.5 0.5	BK / YE BK / GY	548 626	II II	L87 LM2

X604B Engine Wiring Harness to Turbo Wiring Harness (LT4)



1986157



1986159

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33121562
Service Connector: 13578533
Description: 6-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Turbo Wiring Harness
OEM Connector: 33482-3624
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 1.5 MX Series, Sealed(BK)

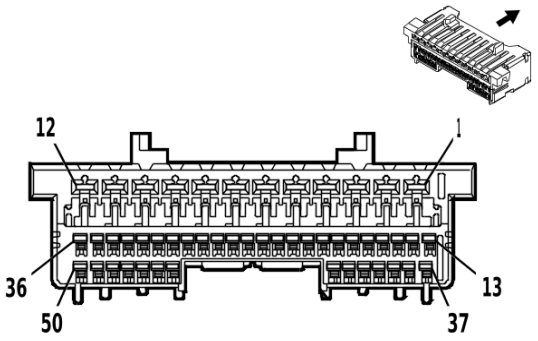
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

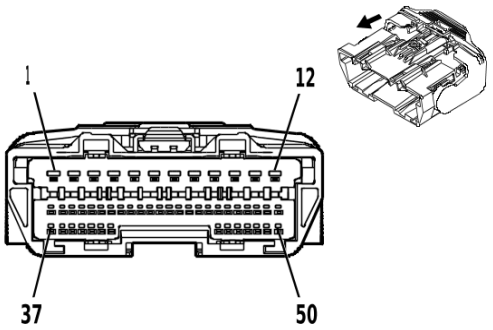
X604B Engine Wiring Harness to Turbo Wiring Harness (LT4)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / BN	2591	I	—	Turbocharger Wastegate Motor Open Control	1	0.5	WH / BN	2591	II	—
2	0.5	WH / BU	2592	I	—	Turbocharger Wastegate Motor Close Control	2	0.5	WH / BU	2592	II	—
3	0.5	WH	2590	I	—	Turbocharger Wastegate Motor Feedback Signal	3	0.5	WH	2590	II	—
4	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	4	0.5	BK / YE	548	II	—
5	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	5	0.5	WH / RD	480	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger



4997556



5022037

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger

OEM Connector: 35283943

Service Connector: Service by Harness - See Part Catalog

Description: 50-Way F 1.2, 2.8 OCS Series(BK)

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Passenger

OEM Connector: 33390111

Service Connector: Service by Harness - See Part Catalog

Description: 50-Way M 1.2, 2.8 OCS Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-17 (L-GN)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY	157	II	—	Interior Lamp Control	1	0.35	GY	157	IV	—
2	0.35	GN / BK	2858	II	—	Body Control Module LIN Bus 12	2	0.35	GN / BK	2858	IV	—
3	0.35	BN / VT	607	II	—	Right Outside Rearview Mirror Heater Control	3	0.35	BN / VT	607	IV	—
4	0.35	BK / GN	675	II	—	Right Outside Rearview Mirror Position Sensor Low Reference	4	0.35	BK / GN	675	IV	—
5	0.35	GN	1184	II	—	Window Switch Right Front Up Signal	5	0.35	GN	1184	IV	—

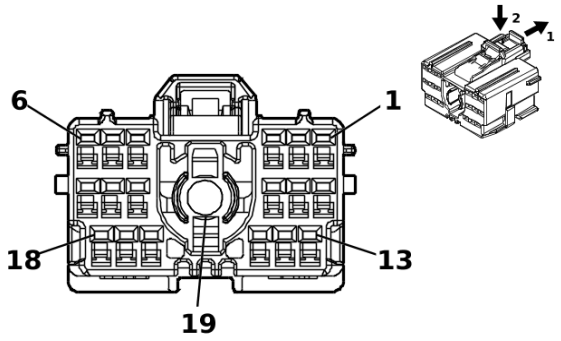
X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.35	GY	1761	II	—	Right Side Object Detection LED Control	6	0.35	GY	1761	IV	—
7	0.35	VT / GY	2765	II	—	Window Switch Right Front Express Signal	7	0.35	VT / GY	2765	IV	—
8	0.35	YE / WH	2793	II	—	Right Front Mirror Motor Fold Out Control	8	0.35	YE / WH	2793	IV	—
9	0.35	BU / GY	2794	II	—	Right Front Mirror Motor Fold In Control	9	0.35	BU / GY	2794	IV	—
10	0.35	BU / YE	2795	II	—	Right Front Mirror Position Sensor Up [+] Down [-] Signal	10	0.35	BU / YE	2795	IV	—
11	0.35	YE / VT	2796	II	—	Right Front Mirror Motor Up [+] Down [-] Control	11	0.35	YE / VT	2796	IV	—
12	0.35	WH	2797	II	—	Right Front Mirror Motor Common Control	12	0.35	WH	2797	IV	—
13	0.35	GN / BK	2798	I	—	Right Front Mirror Motor Right [+] Left [-] Control	13	0.35	GN / BK	2798	III	—
14	0.35	YE / RD	2799	I	—	Right Front Mirror Position Sensor High Reference	14	0.35	YE / RD	2799	III	—
15	0.35	VT / WH	2800	I	—	Right Front Mirror Position Sensor Left [-] Right [+] Signal	15	0.35	VT / WH	2800	III	—
16 - 17	—	—	—	—	—	Not Occupied	16 - 17	—	—	—	—	—
18	0.5	BK	1250	I	—	Ground	18	0.35	BK	1250	III	—
19	0.5	RD / BU	5240	I	—	Battery Positive Voltage	19	0.5	RD / BU	5240	III	—
20	0.35	BN	5295	I	—	Window Switch Right Front Down Signal	20	0.35	BN	5295	III	—
21	0.35	GN / YE	6134	I	—	Body Control Module LIN Bus 3	21	0.35	GN / YE	6134	III	—
22 - 24	—	—	—	—	—	Not Occupied	22 - 24	—	—	—	—	—

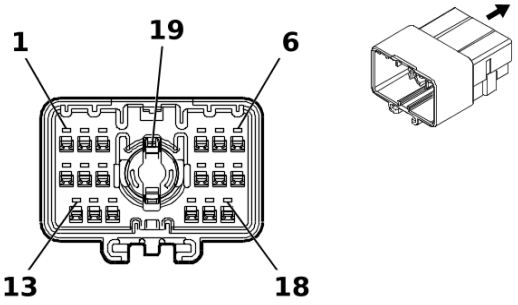
X605 Front Side Door Door Wiring Harness - Passenger to Front Side Door Door Lock Door Wiring Harness - Passenger (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.35	GN / WH	2861	I	—	Body Control Module LIN Bus 15	25	0.35	GN / WH	2861	III	—
26 - 41	—	—	—	—	—	Not Occupied	26 - 41	—	—	—	—	—
42	0.35	BK / WH	1251	I	—	Signal Ground	42	0.35	BK / WH	1251	III	—
43 - 47	—	—	—	—	—	Not Occupied	43 - 47	—	—	—	—	—
48	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	48	0.35	WH / VT	4849	III	—
49 - 50	—	—	—	—	—	Not Occupied	49 - 50	—	—	—	—	—

X610 Front Side Door Door Wiring Harness - Passenger to Outside Rearview Mirror Wiring Harness - Passenger



5253439



4969165

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger

OEM Connector: 35165322

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way F 1.2 MCON, Coaxial Series(BK)

Connector Part Information

Harness Type: Outside Rearview Mirror Wiring Harness - Passenger

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required
III	Not required	No Tool Required	No Tool Required
III	Not required	No Tool Required	No Tool Required

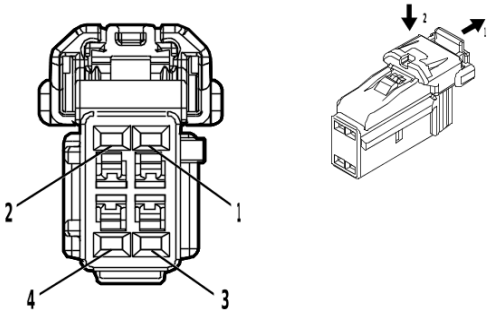
X610 Front Side Door Door Wiring Harness - Passenger to Outside Rearview Mirror Wiring Harness - Passenger

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN / BK	2798	I	—	Right Front Mirror Motor Right [+] Left [-] Control	1	0.35	GN / BK	2798	III	—
2	0.35	YE / VT	2796	I	—	Right Front Mirror Motor Up [+] Down [-] Control	2	0.35	YE / VT	2796	III	—
3	0.35	BU / GY	2794	I	—	Right Front Mirror Motor Fold In Control	3	0.35	BU / GY	2794	III	—
4	0.35	GY	1761	I	—	Right Side Object Detection LED Control	4	0.35	GY	1761	III	—
5	0.35	WH / GN	5966	I	—	Approach Lamp Control	5	0.35	WH / GN	5966	III	—

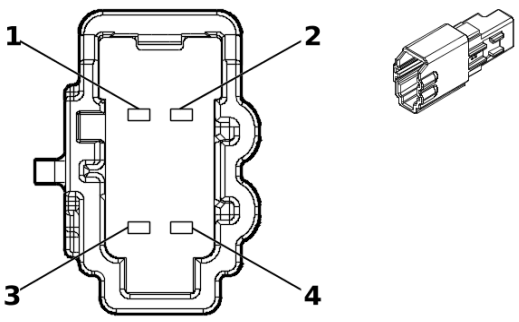
X610 Front Side Door Door Wiring Harness - Passenger to Outside Rearview Mirror Wiring Harness - Passenger (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.35	VT / WH	2800	I	—	Right Front Mirror Position Sensor Left [-] Right [+] Signal	6	0.35	VT / WH	2800	III	—
7	0.35	BN / VT	607	I	—	Right Outside Rearview Mirror Heater Control	7	0.35	BN / VT	607	III	—
8	0.35	GN / GY	2115	I	—	Right Turn Signal Lamp Control 2	8	0.35	GN / GY	2115	III	—
9	0.5	BK	1250	I	—	Ground	9	0.5	BK	1250	III	—
10	0.35	YE / RD	2799	I	—	Right Front Mirror Position Sensor High Reference	10	0.35	YE / RD	2799	III	—
11	0.35	BU / YE	2795	I	—	Right Front Mirror Position Sensor Up [+] Down [-] Signal	11	0.35	BU / YE	2795	III	—
12 - 13	—	—	—	—	—	Not Occupied	12 - 13	—	—	—	—	—
14	0.35	WH	2797	I	—	Right Front Mirror Motor Common Control	14	0.35	WH	2797	III	—
15	0.35	YE / WH	2793	I	—	Right Front Mirror Motor Fold Out Control	15	0.35	YE / WH	2793	III	—
16 - 17	—	—	—	—	—	Not Occupied	16 - 17	—	—	—	—	—
18	0.35	BK / GN	675	I	—	Right Outside Rearview Mirror Position Sensor Low Reference	18	0.35	BK / GN	675	III	—
19	0	—	4724	II	—	Right Sideview Camera LVDS (Low Voltage Differential Signaling) Coaxial Signal	19	0	—	4724	III	—

X618B Roof Wiring Harness to Body Wiring Harness



4872683



5360963

Connector Part Information

Harness Type: Roof Wiring Harness
OEM Connector: 35029308
Service Connector: 19369633
Description: 4-Way F 1.2 Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35264699
Service Connector: 84847258
Description: 4-Way M 1.2 MCON Series(BK)

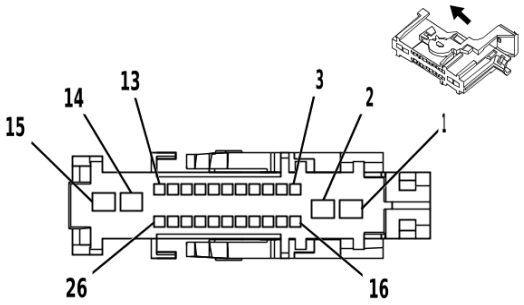
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required
III	Not required	J-35616-17 (L-GN)	No Tool Required

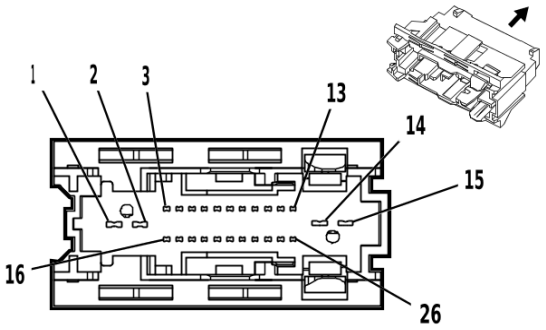
X618B Roof Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH / VT	1430	I	—	Exterior Courtesy Lamp Control	1	0.35	WH / VT	1430	II	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	BK	2050	I	—	Ground	3	0.5	BK	2050	III	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—

X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness



3530739



3530694

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 13981046
Service Connector: Service by Harness - See Part Catalog
Description: 26-Way F 1.2, 2.8 OCS Series(L-GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15531019
Service Connector: 13591678
Description: 26-Way M 1.2, 2.8 OCS Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	19329836	J-35616-65B (L-BU)	J-38125-215A
IV	84888592	J-35616-5 (PU)	J-38125-11A

X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / GY	3540	II	—	Battery Positive Voltage	1	2.5	RD / GY	3540	IV	—
2	0.75	RD / YE	2342	II	—	Battery Positive Voltage	2	1	RD / YE	2342	IV	—
3	0.75 0.75	GN / GY GY	1092 5911	I I	AF7+ MAH AF7- MAH	Left Rear Door Lock Actuator Unlock Control Door Lock Actuator Lock Control 2	3	0.75 0.75	GN / GY GY	1092 5911	III III	AF7+ MAH AF7- MAH
4	0.5	GY	157	I	—	Interior Lamp Control	4	0.5	GY	157	III	—
5	0.75	VT / GY	2683	I	—	Unlatch Actuators Unlatch Low Reference 1	5	0.75	VT / GY	2683	III	—
6	0.75	BU / WH	2685	I	—	Left Rear Door Unlatch Actuator Unlatch Control	6	0.75	BU / WH	2685	III	—
7	0.35	VT / BU	4001	I	—	Left Rear Door Lock Switch Lock Control	7	0.35	VT / BU	4001	III	—

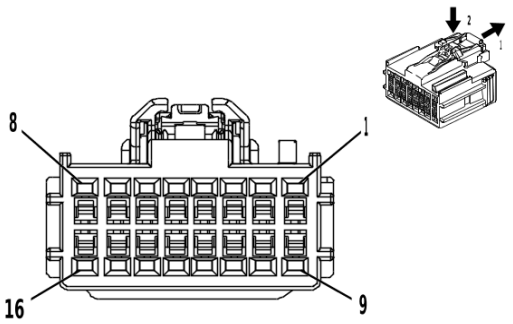
X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.35	WH / YE	4002	I	—	Left Rear Door Lock Switch Unlock Control	8	0.35	WH / YE	4002	III	—
9	0.5	GN / YE	1858	I	—	Left Rear Tweeter Speaker [+] Control	9	0.5	GN / YE	1858	III	—
10	0.5	YE / GN	4733	I	—	Exterior Door Handle Lamp Control	10	0.5	YE / GN	4733	III	—
11	0.35	GN / BU	4648	I	—	Left Rear Door Lock Status Signal	11	0.35	GN / BU	4648	III	—
12	0.35	WH / VT	4994	I	—	Left Rear Door Exterior Switch Unlock Signal	12	0.35	WH / VT	4994	III	—
13	0.35	VT / WH	6675	I	—	Left Rear Door Lock Indicator Control	13	0.35	VT / WH	6675	III	—
14	0.35	YE	6817	II	—	LED Backlight Dimming Control 1	14	0.5	YE	6817	IV	—
15	2.5	BK	1150	II	—	Ground	15	2.5	BK	1150	IV	—
16	0.35	YE	6653	I	—	Left Rear Door Handle Switch Signal 2	16	0.35	YE	6653	III	—
17	0.35	GN / GY	6135	I	—	Body Control Module LIN Bus 4	17	0.35	GN / GY	6135	III	—
18	0.35	GY / GN	8927	I	—	Ambient Light Device 4 LIN Bus 1	18	0.35	GY / GN	8927	III	—
19	0.5	YE / BN	1859	I	—	Left Rear Midrange Speaker [+] Control	19	0.5	YE / BN	1859	III	—
20	0.5	WH / BK	1959	I	—	Left Rear Midrange Speaker [-] Control	20	0.5	WH / BK	1959	III	—
21	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	21	0.35	WH / VT	4849	III	—
22	0.5	VT / YE	1958	I	—	Left Rear Tweeter Speaker [-] Control	22	0.5	VT / YE	1958	III	—
23	0.75	GN / BK	116	I	—	Left Rear Speaker [-] Control	23	0.75	GN / BK	116	III	—
24	0.75	GN	199	I	—	Left Rear Speaker [+] Control	24	0.75	GN	199	III	—

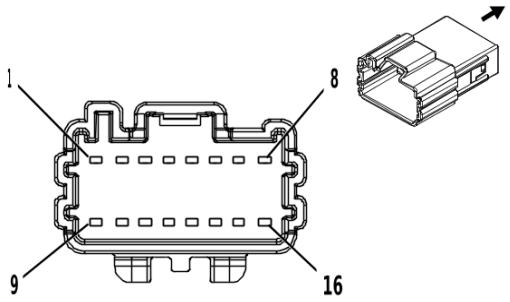
X700 Rear Side Door Door Wiring Harness - Left to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.5	VT	4301	I	—	Passive Entry Left Front Antenna Signal High	25	0.35	VT	4301	III	—
26	0.5	VT / GY	4302	I	—	Passive Entry Left Front Antenna Signal Low	26	0.35	VT / WH	4302	III	—

X705 Rear Side Door Door Wiring Harness - Left to Rear Side Door Door Lock Door Wiring Harness - Left



4115730



4223086

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35029309
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 OCS Series(BK)

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 35225462
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.2 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required
III	Not required	J-35616-17 (L-GN)	No Tool Required

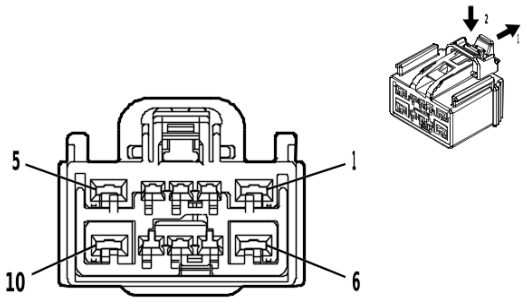
X705 Rear Side Door Door Wiring Harness - Left to Rear Side Door Door Lock Door Wiring Harness - Left

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE	6817	I	—	LED Backlight Dimming Control 1	1	0.35	YE	6817	II	—
2	0.5	GY	157	I	—	Interior Lamp Control	2	0.35	GY	157	III	—
3	0.35	VT / WH	6675	I	—	Left Rear Door Lock Indicator Control	3	0.35	VT / WH	6675	III	—
4	0.35	VT / BU	4001	I	—	Left Rear Door Lock Switch Lock Control	4	0.35	VT / BU	4001	III	—
5	0.35	WH / YE	4002	I	—	Left Rear Door Lock Switch Unlock Control	5	0.35	WH / YE	4002	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

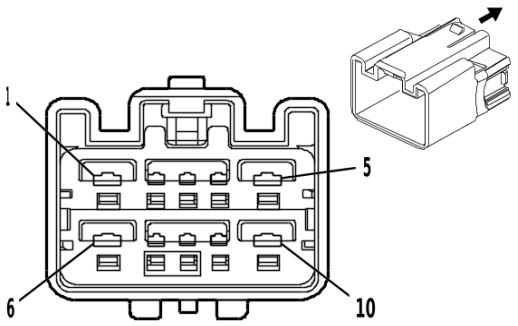
X705 Rear Side Door Door Wiring Harness - Left to Rear Side Door Door Lock Door Wiring Harness - Left (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	YE / BN	1859	I	—	Left Rear Midrange Speaker [+] Control	7	0.5	YE / BN	1859	III	—
8	0.5 0.75	VT / YE GN / BK	1958 116	I I	UQH UQP	Left Rear Tweeter Speaker [-] Control Left Rear Speaker [-] Control	8	0.5 0.75	VT / YE GN / BK	1958 116	III II	UQH UQP
9	0.5 0.75	GN / YE GN	1858 199	I I	UQH UQP	Left Rear Tweeter Speaker [+] Control Left Rear Speaker [+] Control	9	0.5 0.75	GN / YE GN	1858 199	III II	UQH UQP
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.5	WH / BK	1959	I	—	Left Rear Midrange Speaker [-] Control	11	0.5	WH / BK	1959	III	—
12	0.5	BK	1150	I	—	Ground	12	0.35	BK	1150	III	—
13	0.35	GY / GN	8927	I	—	Ambient Light Device 4 LIN Bus 1	13	0.35	GY / GN	8927	III	—
14 - 15	—	—	—	—	—	Not Occupied	14 - 15	—	—	—	—	—
16	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	16	0.35	WH / VT	4849	II	—

X706 Rear Side Door Door Wiring Harness - Left to Rear Side Door Door Lock Door Wiring Harness - Left



5020939



1851890

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Left
OEM Connector: 35061724
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: Rear Side Door Door Lock Door Wiring Harness - Left
OEM Connector: 13506926
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M Kaizen Series(L-GY)

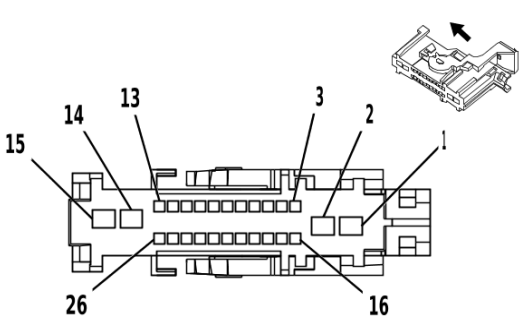
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

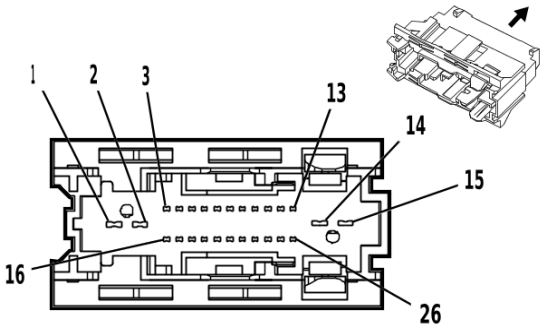
X706 Rear Side Door Door Wiring Harness - Left to Rear Side Door Door Lock Door Wiring Harness - Left

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	GN / GY	1185	I	—	Window Switch Left Rear Up Signal	3	0.35	GN / GY	1185	II	—
4 - 6	—	—	—	—	—	Not Occupied	4 - 6	—	—	—	—	—
7	0.35	GY / GN	5048	I	—	Window Switch Left Rear Express Signal	7	0.35	GY / GN	5048	II	—
8	0.35	BN / BU	1187	I	—	Window Switch Left Rear Down Signal	8	0.35	BN / BU	1187	II	—
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—

X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness



3530739



3530694

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 13981046
Service Connector: Service by Harness - See Part Catalog
Description: 26-Way F 1.2, 2.8 OCS Series(L-GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15531019
Service Connector: 13591678
Description: 26-Way M 1.2, 2.8 OCS Series(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	19329836	J-35616-65B (L-BU)	J-38125-215A
IV	84888592	J-35616-5 (PU)	J-38125-11A

X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD / BN	4240	II	—	Battery Positive Voltage	1	2.5	RD / BN	4240	IV	—
2	0.75	RD / WH	2242	II	—	Battery Positive Voltage	2	1	RD / WH	2242	IV	—
3	0.75 0.75	GY BN / YE	5911 1095	I I	AF7 - AF7	Door Lock Actuator Lock Control 2 Right Rear Door Lock Actuator Unlock Control	3	0.75 0.75	GY BN / YE	5911 1095	III III	AF7 - AF7
4	0.5	GY	157	I	—	Interior Lamp Control	4	0.5	GY	157	III	—
5	0.75	WH / BN	2684	I	—	Unlatch Actuators Unlatch Low Reference 2	5	0.75	WH / BN	2684	III	—
6	0.75	GN / BK	2686	I	—	Right Rear Door Unlatch Actuator Unlatch Control	6	0.75	GN / BK	2686	III	—
7	0.35	GN / BN	4003	I	—	Right Rear Door Lock Switch Lock Control	7	0.35	GN / BN	4003	III	—

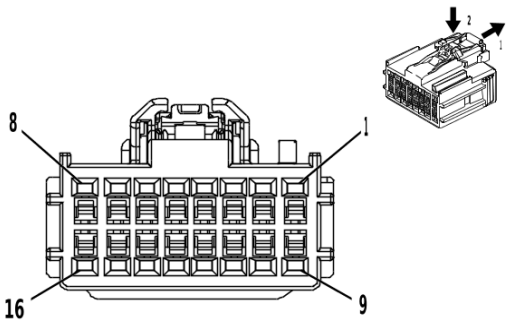
X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.35	BU / GY	4004	I	—	Right Rear Door Lock Switch Unlock Control	8	0.35	BU / GY	4004	III	—
9	0.75	WH / GY	1854	I	—	Right Rear Tweeter Speaker [+] Control	9	0.75	WH / GY	1854	III	—
10	0.5	YE / GN	4733	I	—	Exterior Door Handle Lamp Control	10	0.5	YE / GN	4733	III	—
11	0.35	WH / GY	4649	I	—	Right Rear Door Lock Status Signal	11	0.35	WH / GY	4649	III	—
12	0.35	GY / BU	4995	I	—	Right Rear Door Exterior Switch Unlock Signal	12	0.35	GY / BU	4995	III	—
13	0.35	YE / BK	6677	I	—	Right Rear Door Lock Indicator Control	13	0.35	YE / BK	6677	III	—
14	0.35	YE	6817	II	—	LED Backlight Dimming Control 1	14	0.5	YE	6817	IV	—
15	2.5	BK	1250	II	—	Ground	15	2.5	BK	1250	IV	—
16	0.35	BN / WH	6654	I	—	Right Rear Door Handle Switch Signal 2	16	0.35	BN / WH	6654	III	—
17	0.35	GN / GY	6135	I	—	Body Control Module LIN Bus 4	17	0.35	GN / GY	6135	III	—
18	0.35	GY / GN	8927	I	—	Ambient Light Device 4 LIN Bus 1	18	0.35	GY / GN	8927	III	—
19	0.75	YE / GN	1855	I	—	Right Rear Midrange Speaker [+] Control	19	0.75	YE / GN	1855	III	—
20	0.75	GY / BU	1955	I	—	Right Rear Midrange Speaker [-] Control	20	0.75	GY / BU	1955	III	—
21	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	21	0.35	WH / VT	4849	III	—
22	0.75	YE / VT	1949	I	—	Right Rear Tweeter Speaker [-] Control	22	0.75	YE / VT	1949	III	—
23	0.75	BU / BK	115	I	—	Right Rear Speaker [-] Control	23	0.75	BU / BK	115	III	—
24	0.75	WH	46	I	—	Right Rear Speaker [+] Control	24	0.75	WH	46	III	—

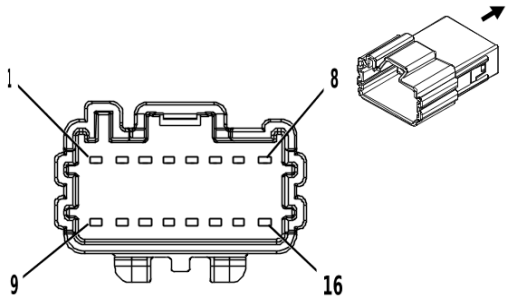
X800 Rear Side Door Door Wiring Harness - Right to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.5	GN / YE	4303	I	—	Passive Entry Right Front Door Antenna Signal High	25	0.35	GN / YE	4303	III	—
26	0.5	GN / BK	4304	I	—	Passive Entry Right Front Door Antenna Signal Low	26	0.35	GN / BK	4304	III	—

X805 Rear Side Door Door Wiring Harness - Right to Rear Side Door Door Lock Door Wiring Harness - Right



4115730



4223086

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35029309
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 OCS Series(BK)

Connector Part Information

Harness Type: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 35225462
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.2 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-13 (BU)	No Tool Required
III	Not required	J-35616-17 (L-GN)	No Tool Required

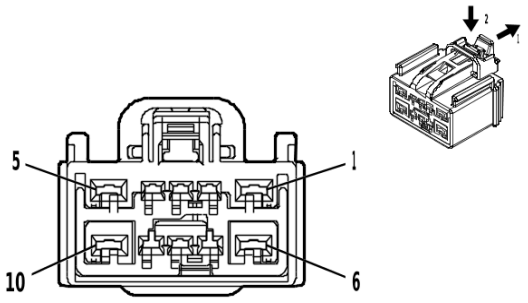
X805 Rear Side Door Door Wiring Harness - Right to Rear Side Door Door Lock Door Wiring Harness - Right

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE	6817	I	—	LED Backlight Dimming Control 1	1	0.35	YE	6817	II	—
2	0.5	GY	157	I	—	Interior Lamp Control	2	0.35	GY	157	III	—
3	0.35	YE / BK	6677	I	—	Right Rear Door Lock Indicator Control	3	0.5	YE / BK	6677	III	—
4	0.35	GN / BN	4003	I	—	Right Rear Door Lock Switch Lock Control	4	0.35	GN / BN	4003	III	—
5	0.35	BU / GY	4004	I	—	Right Rear Door Lock Switch Unlock Control	5	0.35	BU / GY	4004	III	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

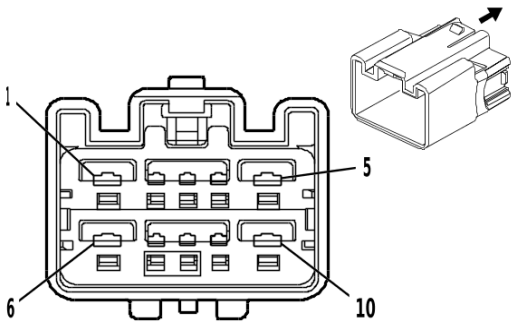
X805 Rear Side Door Door Wiring Harness - Right to Rear Side Door Door Lock Door Wiring Harness - Right (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	YE / GN	1855	I	—	Right Rear Midrange Speaker [+] Control	7	0.75	YE / GN	1855	II	—
8	0.75 0.75	YE / VT BU / BK	1949 115	I I	UQH UQP	Right Rear Tweeter Speaker [-] Control Right Rear Speaker [-] Control	8	0.75 0.75	YE / VT BU / BK	1949 115	II II	UQH UQP
9	0.75 0.75	WH / GY WH	1854 46	I I	UQH UQP	Right Rear Tweeter Speaker [+] Control Right Rear Speaker [+] Control	9	0.75 0.75	WH / GY WH	1854 46	II II	UQH UQP
10	—	—	—	—	—	Not Occupied	10	—	—	—	—	—
11	0.75	GY / BU	1955	I	—	Right Rear Midrange Speaker [-] Control	11	0.75	GY / BU	1955	II	—
12	0.5	BK	1250	I	—	Ground	12	0.35	BK	1250	III	—
13	0.35	GY / GN	8927	I	—	Ambient Light Device 4 LIN Bus 1	13	0.35	GY / GN	8927	III	—
14 - 15	—	—	—	—	—	Not Occupied	14 - 15	—	—	—	—	—
16	0.35	WH / VT	4849	I	—	LED Ambient Lighting Enable Signal	16	0.35	WH / VT	4849	II	—

X806 Rear Side Door Door Wiring Harness - Right to Rear Side Door Door Lock Door Wiring Harness - Right



5020939



1851890

Connector Part Information

Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35061724
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: Rear Side Door Door Lock Door Wiring Harness - Right
OEM Connector: 13506926
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M Kaizen Series(L-GY)

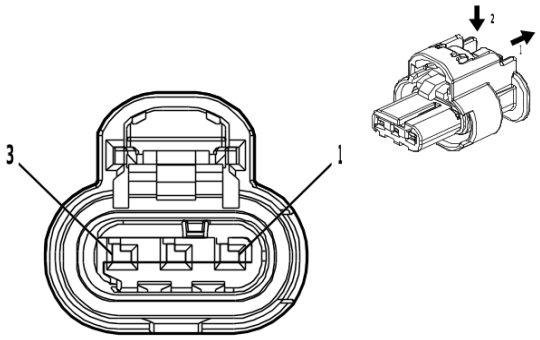
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

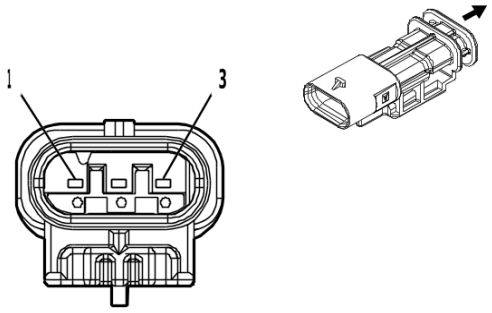
X806 Rear Side Door Door Wiring Harness - Right to Rear Side Door Door Lock Door Wiring Harness - Right

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	GN / GY	1186	I	—	Window Switch Right Rear Up Signal	3	0.35	GN / GY	1186	II	—
4 - 6	—	—	—	—	—	Not Occupied	4 - 6	—	—	—	—	—
7	0.35	WH / GN	5049	I	—	Window Switch Right Rear Express Signal	7	0.35	WH / GN	5049	II	—
8	0.35	BN / BU	1188	I	—	Window Switch Right Rear Down Signal	8	0.35	BN / BU	1188	II	—
9 - 10	—	—	—	—	—	Not Occupied	9 - 10	—	—	—	—	—

X904BL Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z95)



4778903



5068799

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M (BK)

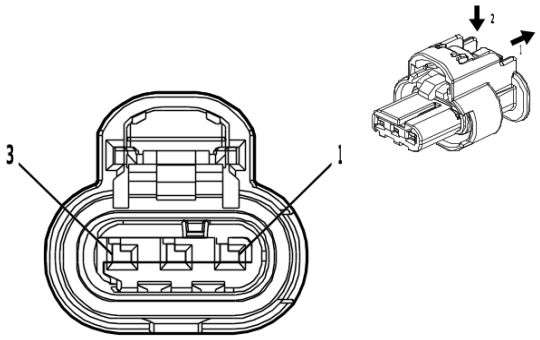
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

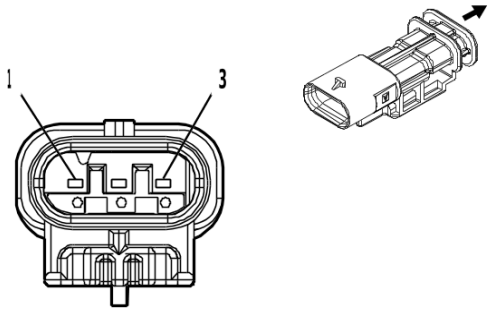
X904BL Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z95)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT / RD	1818	I	—	Left Rear Vertical Suspension Acceleration Sensor Voltage Reference	1	0.5	VT / RD	1818	II	—
2	0.5	BK / VT	1833	I	—	Left Rear Vertical Suspension Acceleration Sensor Low Reference	2	0.5	BK / VT	1833	II	—
3	0.5	YE / BN	1103	I	—	Left Rear Vertical Suspension Acceleration Sensor Signal	3	0.5	YE / BN	1103	II	—

X904BR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z95)



4778903



5068799

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33358808
Service Connector: 86792095
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M (BK)

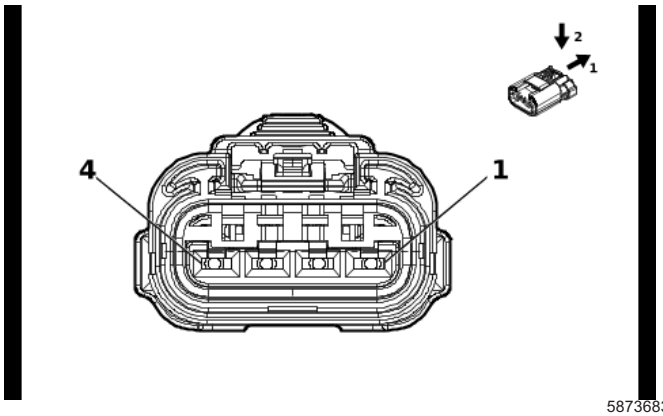
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

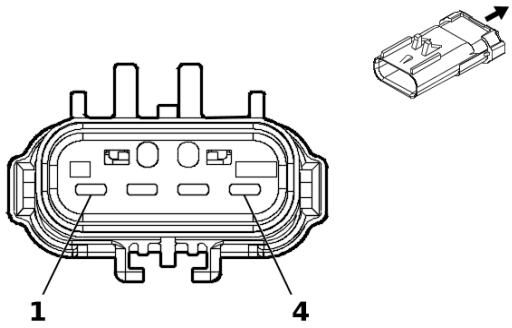
X904BR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness (Z95)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / RD	1820	I	—	Right Rear Vertical Suspension Acceleration Sensor Voltage Reference	1	0.5	GY / RD	1820	II	—
2	0.5	BK / BU	1108	I	—	Right Rear Vertical Suspension Acceleration Sensor Low Reference	2	0.5	BK / BU	1108	II	—
3	0.5	YE / BU	1109	I	—	Right Rear Vertical Suspension Acceleration Sensor Signal	3	0.5	YE / BU	1109	II	—

X904JL Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness



5873683



5246651

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35333812
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 APEX Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 13518460
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 2.8 APEX Series, Sealed(GY)

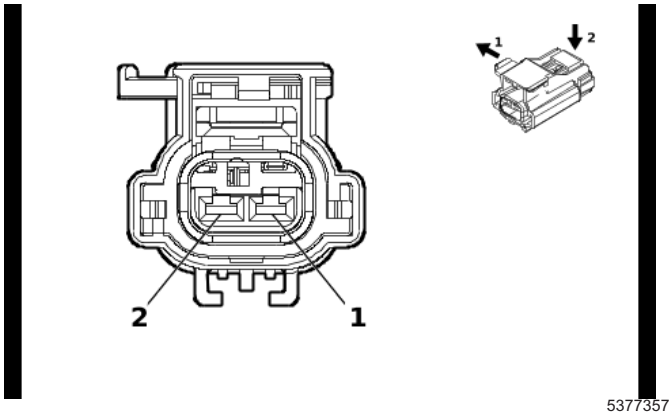
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-5 (PU)	No Tool Required

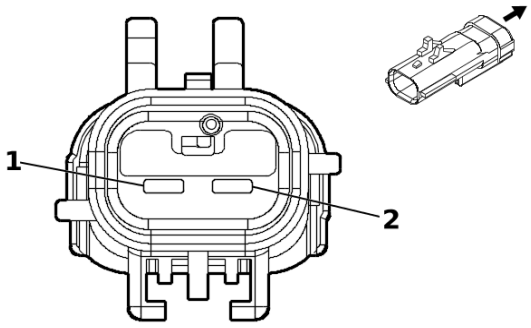
X904JL Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GN / YE	1616	I	—	Rear Brake Pad Wear Sensor Signal	1	0.75	GN / YE	1616	III	—
2	0.75	BK	2050	I	—	Ground	2	0.75	BK	2050	III	—
3	4	GY / BK	4369	II	—	Left Park Brake Motor Low Reference	3	2.5	GY / BK	4369	III	—
4	4	WH	2001	II	—	Left Park Brake Motor Apply Control	4	2.5	WH	2001	III	—

X904JR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness



5377357



5246766

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15380781
Service Connector: 84867144
Description: 2-Way F 2.8 APEX Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 13512891
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 2.8 APEX Series, Sealed(GY)

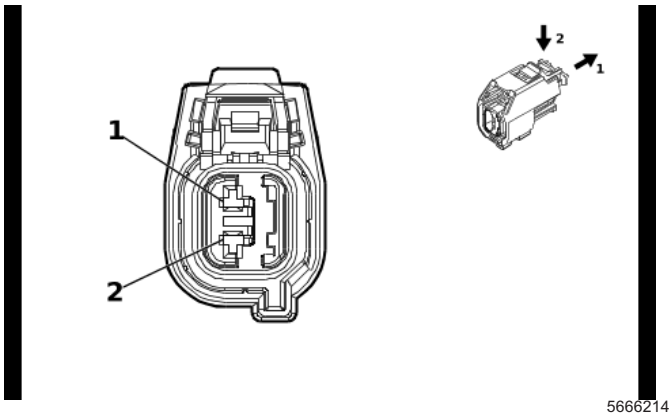
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X904JR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	GY	4368	I	—	Right Park Brake Motor Low Reference	1	2.5	GY	4368	II	—
2	2	GN / VT	1988	I	—	Right Park Brake Motor Apply Control	2	2.5	GN / VT	1988	II	—

X904LR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness



5666214

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Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33189092
Service Connector: 85526683
Description: 2-Way F 1.5 OCS Series, Sealed(GY)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M (GY)

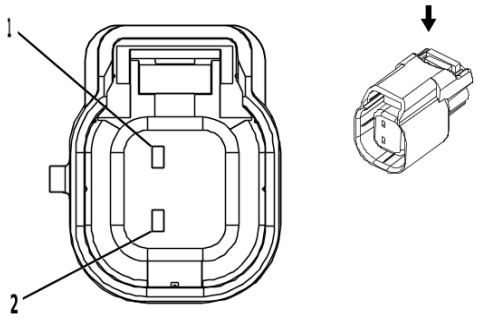
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

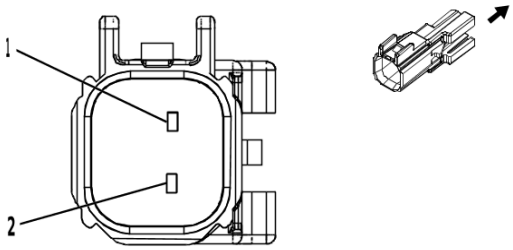
X904LR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness

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

X904RR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness



4115616



3271068

Connector Part Information

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

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M (BK)

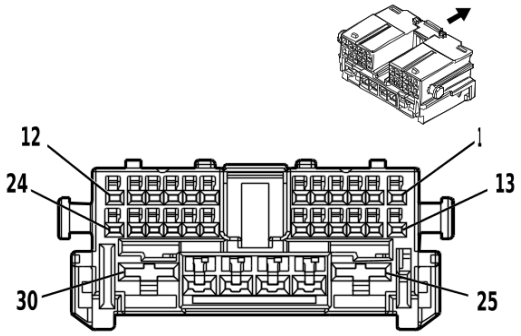
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

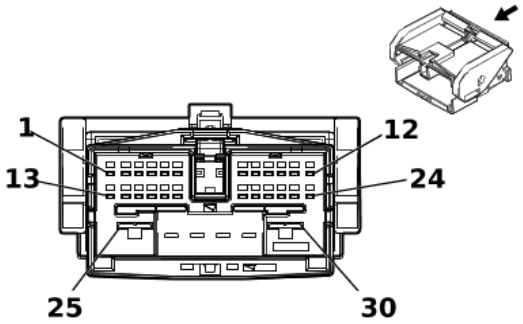
X904RR Chassis Wiring Harness to Chassis Rear Wiring Harness Extension Harness

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

X905 Liftgate Wiring Harness to Body Wiring Harness



4253192



4249201

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 35445563
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 1.2 MCON, 2.8, 6.3 YESC Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35445419
Service Connector: 13539008
Description: 30-Way M 1.2 MCON, 2.8, 6.3 YESC Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-42 (RD)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	13580023	J-35616-43 (RD)	J-38125-11A
V	84888592	J-35616-5 (PU)	J-38125-11A
VI	87838750	J-35616-13 (BU)	J-38125-215A

X905 Liftgate Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.35	GN / YE	6846	I	—	Rear License Plate Lamp Control	2	0.35	GN / YE	6846	VI	—
3	0.35	BU / GN	4089	I	—	Rear Closure Motor Control	3	0.35	BU / GN	4089	VI	—
4	0.5	BN / GY	6995	I	—	Right Rear Park Lamp Control	4	—	—	—	—	—
5	0.35	GN / BU	2856	I	—	Body Control Module LIN Bus 10	5	0.5	GN / BU	2856	VI	—
6	0.35	VT / GY	1303	I	—	Liftgate Ajar Switch Signal 1	6	—	—	—	—	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

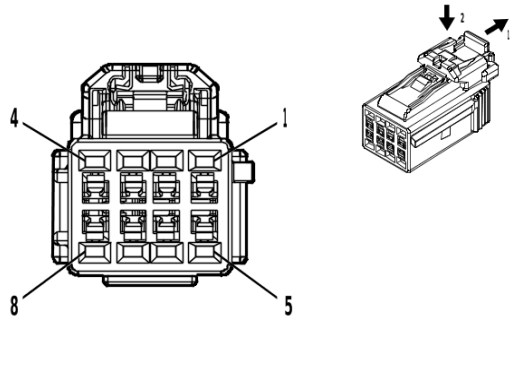
X905 Liftgate Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.5	GY / BK	2680	I	—	Lock Actuators Unlock Control 2	9	—	—	—	—	—
10	0.35	BK / VT	4656	I	—	Rear Closure Object Sensor Low Reference	10	0.35	BK / VT	4656	VI	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.75	VT / GN	8869	I	—	Police Liftgate Strobe Rear On OFF Control	12	—	—	—	—	—
13	0.35	BU / YE	2279	I	—	Liftgate Window Ajar Switch Signal	13	0.35	BU / YE	2279	VI	—
14	0.35	GY / WH	4658	I	—	Rear Closure Switch LED Control	14	0.35	GY / WH	4658	VI	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.35	YE / BU	5797	I	—	Rear Closure Handle Switch Open Signal	16	0.35	YE / BU	5797	VI	—
17	0.35	GY / GN	6190	I	—	Liftgate Window/Rear Compartment Lid, Exterior Unlatch Signal	17	0.35	GY / GN	6190	VI	—
18	0.35	BN / BU	6993	I	—	Left Rear Park Lamp Control	18	—	—	—	—	—
19	0.35	YE / BK	8085	I	—	Rear Closure Latch Primary Status	19	0.35	YE / BK	8085	VI	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.35	GY / VT	4678	I	—	Rear Closure Latch Unlatch Status	21	0.35	GY / VT	4678	VI	—
22	0.35	WH / GN	8084	I	—	Rear Closure Latch Neutral Status	22	0.35	WH / GN	8084	VI	—
23	0.35	GN	4657	I	—	Rear Closure Switch Signal	23	0.35	GN	4657	VI	—
24	0.5	BU / WH	6128	I	—	Rear Closure Unlatch Actuator Unlatch Control	24	—	—	—	—	—
25	2.5	BN / VT	293	II	—	Rear Defogger Grid Control	25	2.5	BN / VT	293	IV	—
26	0.75	RD / YE	3040	III	—	Battery Positive Voltage	26	0.75	RD / YE	3040	V	—

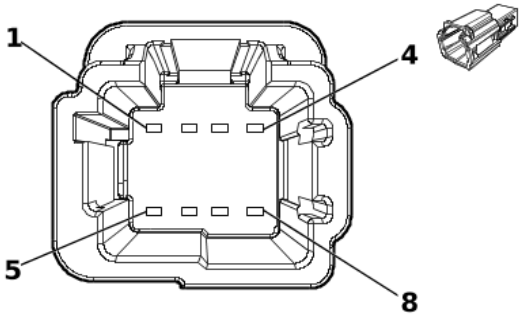
X905 Liftgate Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
27	1	BU / GY	4682	III	—	Rear Closure Cinch Latch Motor Re-lease Control	27	1	BU / GY	4682	V	—
28	1	BN	4681	III	—	Rear Closure Cinch Latch Motor Cinch Control	28	1	BN	4681	V	—
29	0.75	BK	2050	III	—	Ground	29	0.75	BK	2050	V	—
30	2.5	BK	2050	II	—	Ground	30	2.5	BK	2050	IV	—

X907 Rear License Plate Lamp Wiring Harness to Liftgate Wiring Harness



5086387



5751475

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness
OEM Connector: 35029311
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 1.2 Series(BK)

Connector Part Information

Harness Type: Liftgate Wiring Harness
OEM Connector: 13536188
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 1.2 MBS Series(BK)

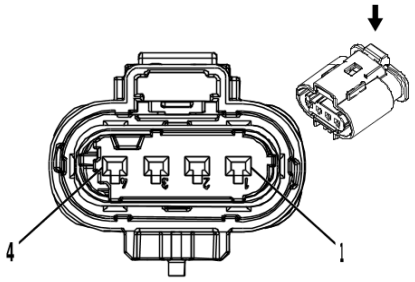
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

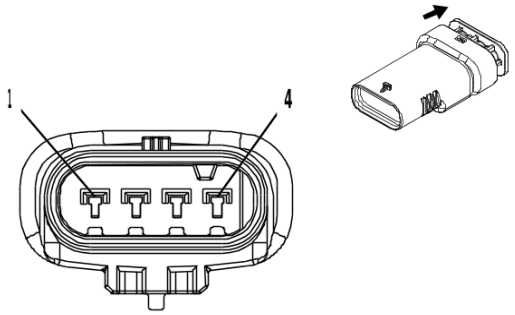
X907 Rear License Plate Lamp Wiring Harness to Liftgate Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE / BU	5797	I	—	Rear Closure Handle Switch Open Signal	1	0.35	YE / BU	5797	II	—
2	0.35	GN / YE	6846	I	—	Rear License Plate Lamp Control	2	0.35	GN / YE	6846	II	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—
5	0.35	GY / GN	6190	I	—	Liftgate Window/Rear Compartment Lid, Exterior Unlatch Signal	5	0.35	GY / GN	6190	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.35	BK	2050	I	—	Ground	7	0.35	BK	2050	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X944 Engine Wiring Harness to Engine Coolant Temperature Sensor Harness (LM2)



2717079



4560843

Connector Part Information

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

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Harness
OEM Connector: 10013906
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Multilock Series, Sealed(GY)

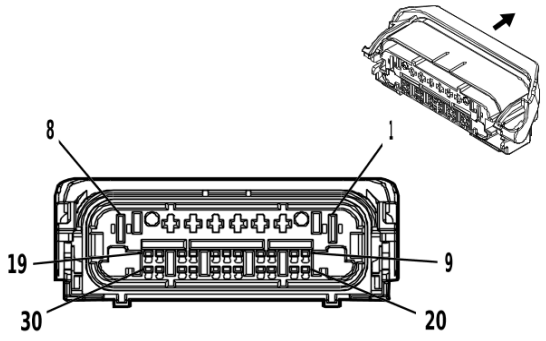
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

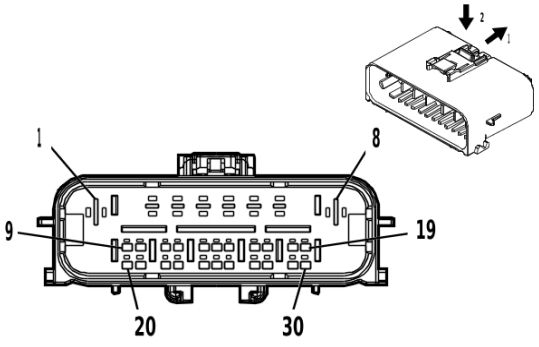
X944 Engine Wiring Harness to Engine Coolant Temperature Sensor Harness (LM2)

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	GY / VT	2404	II	—
2	0.5	BK / GY	626	I	—	Engine Control Vehicle Sensors Low Reference 1	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 / YE	548	I	—	Engine Control Sensors Low Reference 1	4	0.5	BK / GY	626	II	—

X950 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness



4650150



4817393

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness
OEM Connector: 2301462-1
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 1.2 MCON, 2.8, 6.3 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35547577
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-40 (BU)	No Tool Required
III	Not required	J-35616-4A (PU)	No Tool Required
IV	19300651	J-35616-43 (RD)	J-38125-557
V	19330703	J-35616-13 (BU)	J-38125-215A
VI	19330704	J-35616-17 (L-GN)	J-38125-215A
VII	Not required	J-35616-13 (BU)	No Tool Required
VIII	Not required	J-35616-5 (PU)	No Tool Required

X950 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU / GN	1253	II	—	Right Front Park Lamp Control	1	0.5	BU / GN	1253	IV	—
2	0.5	VT / GY	5218	III	—	Right Front Middle Parking Assist Sensor	2	0.5	VT / GY	5218	VIII	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	0.5	BK / WH	251	III	—	Signal Ground	4	0.75	BK / WH	251	VIII	—
5	0.75	RD / YE	740	III	—	Battery Positive Voltage	5	0.75	RD / YE	740	VIII	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

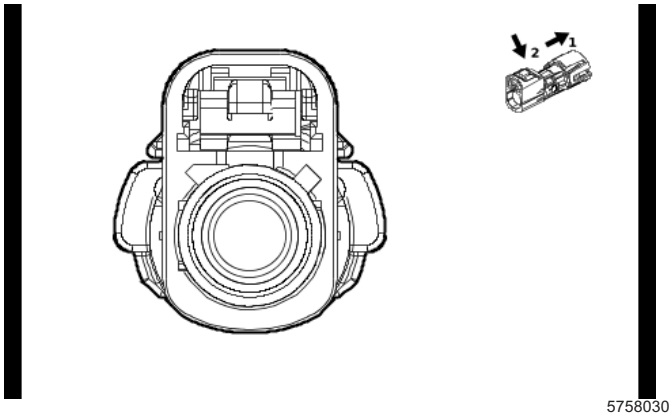
X950 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness (cont'd)

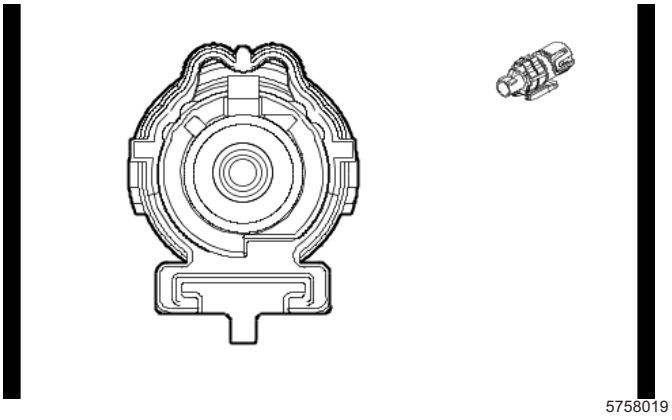
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	GY	3154	III	—	Left Front Advanced Parking Assist Side Object Sensor Signal	7	0.5	GY	3154	VIII	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—
9	0.5	GN	3155	I	—	Right Front Advanced Parking Assist Side Object Sensor Signal	9	0.5	GN	3155	VI	—
10	0.5	BU / BN	7539	I	—	Right Front DRL Control	10	0.5	BU / BN	7539	VI	—
11	0.5	WH / GY	5217	I	—	Right Front Outer Parking Assist Sensor	11	0.5	WH / GY	5217	VI	—
12	0.5	BK / BU	5214	I	—	Front Parking Assist Sensor Low Reference	12	0.5	BK / BU	5214	VI	—
13	0.5	VT / BK	6568	I	—	Front Turn Signal Lamp Feedback Signal	13	0.35	VT / BK	6568	VII	—
14	0.5	WH / YE	1254	I	—	Left Front Park Lamp Control	14	0.5	WH / YE	1254	VI	—
15	0.5	BN	6581	I	—	Front Parking Assist Display Control	15	0.5	BN	6581	VI	—
16	0.5	YE / GY	5216	I	—	Left Front Middle Parking Assist Sensor	16	0.5	YE / GY	5216	VI	—
17	0.5	RD / GN	3140	I	—	Battery Positive Voltage	17	0.5	RD / GN	3140	VI	—
18	0.75	RD / WH	640	I	—	Battery Positive Voltage	18	0.75	RD / WH	640	VI	—
19	0.5	YE / GN	2024	I	—	Animation Lighting Control	19	0.5	YE / GN	2024	VI	—
20	0.5	VT / WH	5215	I	—	Left Front Outer Parking Assist Sensor	20	0.5	VT / WH	5215	VI	—
21	0.5	WH / YE	7545	I	—	Right Front Turn Signal Lamp Feedback Signal	21	0.35	WH / YE	7545	V	—
22	0.5	GN / VT	1315	I	—	Right Front Turn Signal Lamp Control	22	0.5	GN / VT	1315	VI	—
23	0.75	BK	250	I	—	Ground	23	0.75	BK	250	VI	—
24	0.5	GY / BU	7538	I	—	Left Front DRL Control	24	0.5	GY / BU	7538	VI	—

X950 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
25	0.5	BU / WH	1314	I	—	Left Front Turn Signal Lamp Control	25	0.5	BU / WH	1314	VI	—
26	0.5	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data	26	0.35	WH / GY	4104	V	—
27	0.5	BU / GY	4105	I	—	AUTOSAR CAN Bus [+] 8 Serial Data	27	0.35	BU / GY	4105	V	—
28	0.75	BK	150	I	—	Ground	28	0.75	BK	150	VI	—
29	0.5	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data	29	0.35	WH / GY	4104	V	—
30	0.5	BU / GY	4105	I	—	AUTOSAR CAN Bus [+] 8 Serial Data	30	0.35	BU / GY	4105	V	—

X951 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness





Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness COAX

OEM Connector: 35187032

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BK)

Connector Part Information

Harness Type: Body Wiring Harness COAX

OEM Connector: 33338239

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type, Sealed(BK)

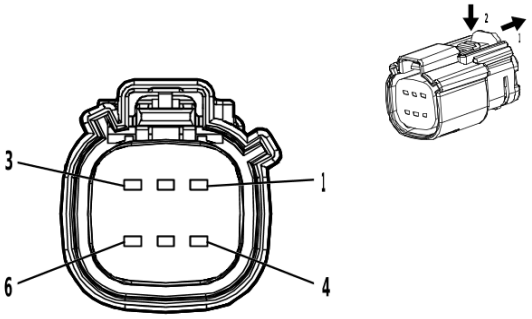
Terminal Part Information

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

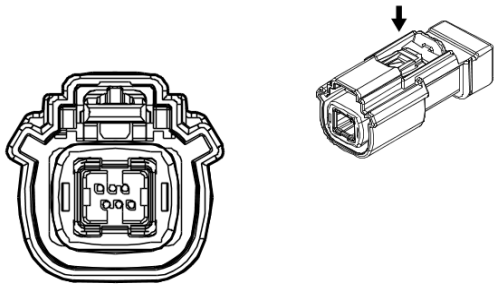
X951 Front Object Alarm Sensor Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Front Vision Camera 1 Coaxial Video Signal	—	—	Coax Cable	—	I	—

X952 Body Wiring Harness to Front Object Alarm Sensor Wiring Harness



4828881



4477145

Connector Part Information

Harness Type: Body Wiring Harness LVDS

OEM Connector: 35247011

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way F HSAL-2 Series, Sealed

Connector Part Information

Harness Type: Front Object Alarm Sensor Wiring Harness LVDS

OEM Connector: 111059-1001

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 6-Way M HSAL-2 Series, Sealed(BK)

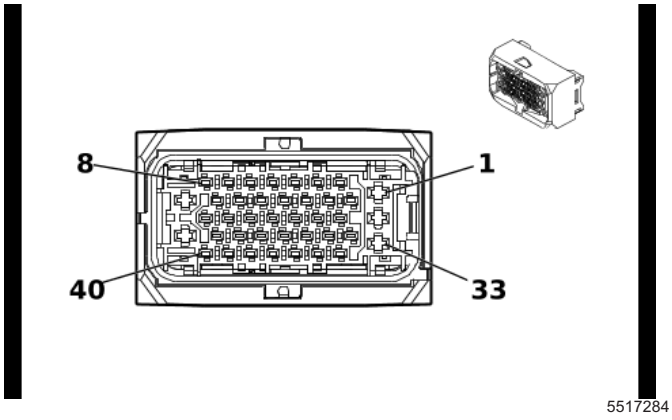
Terminal Part Information

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

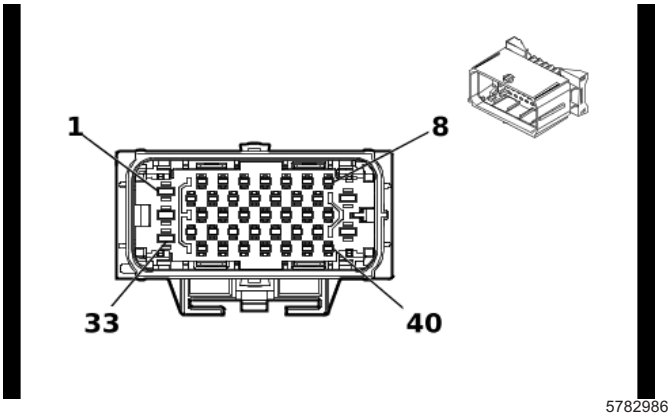
X952 Body Wiring Harness to Front Object Alarm Sensor Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	LVDS	—	I	—	Night Vision Signal	—	—	LVDS	—	I	—

X953 Body Wiring Harness to Rear Object Alarm Sensor Wiring Harness



5517284



5782986

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33367902
Service Connector: 84952158
Description: 40-Way F 1.5, 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 33370237
Service Connector: Service by Harness - See Part Catalog
Description: 40-Way M 1.5, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19369235	J-35616-14 (GN)	EL-38125-560A
II	Not required	J-35616-3 (GY)	No Tool Required

X953 Body Wiring Harness to Rear Object Alarm Sensor Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occupied	1 - 2	—	—	—	—	—
3	0.5	BN / WH	2374	I	—	Object Sensor Voltage Reference	3	0.5	BN / WH	2374	II	—
4	0.5	YE / GY	122	I	—	Rear Fog Lamp Control	4	0.5	YE / GY	122	II	—
5	0.5	YE	2375	I	—	Left Rear Outer Parking Assist Sensor Signal	5	0.5	YE	2375	II	—
6	0.5	YE / VT	2378	I	—	Right Rear Outer Parking Assist Sensor Signal	6	0.5	YE / VT	2378	II	—
7 - 9	—	—	—	—	—	Not Occupied	7 - 9	—	—	—	—	—
10	0.35	BU / GY	4105	I	—	AUTOSAR CAN Bus [+] 8 Serial Data	10	0.35	BU / GY	4105	II	—
11	0.35	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data	11	0.35	WH / GY	4104	II	—

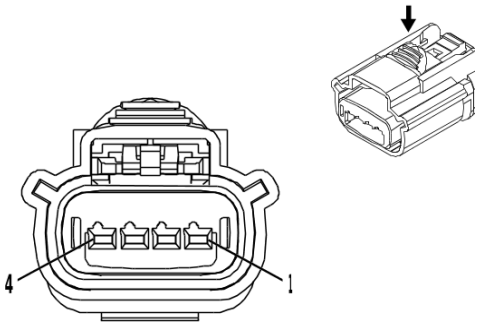
X953 Body Wiring Harness to Rear Object Alarm Sensor Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	0.5	GN	3156	I	—	Left Rear Advanced Parking Assist Side Object Sensor Signal	12	0.5	GN	3156	II	—
13	0.35	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data AUTOSAR CAN Bus [-] 8 Serial Data	13	0.5 0.35	WH / GY WH / GY	4104 4104	II II	UVZ/ UKL (UGN+ UKL/ UKL+ UVZ)
14	0.35	BU / GY	4105	I	—	AUTOSAR CAN Bus [+] 8 Serial Data AUTOSAR CAN Bus [+] 8 Serial Data	14	0.5 0.35	BU / GY BU / GY	4105 4105	II II	UVZ/ UKL (UGN+ UKL/ UKL+ UVZ)
15 - 18	—	—	—	—	—	Not Occupied	15 - 18	—	—	—	—	—
19	0.5	YE / WH	2377	I	—	Right Rear Middle Parking Assist Sensor Signal	19	0.5	YE / WH	2377	II	—
20	0.35	WH	4100	I	—	AUTOSAR CAN Bus [-] 4 Serial Data	20	0.35	WH	4100	II	—
21	0.35	BU / VT	4101	I	—	AUTOSAR CAN Bus [+] 4 Serial Data	21	0.35	BU / VT	4101	II	—
22	0.35	GN / BU	2856	I	—	Body Control Module LIN Bus 10	22	0.5	GN / BU	2856	II	—
23	—	—	—	—	—	Rear Closure Passive Entry Antenna High Signal	23	0.5	BN / GN	3568	II	—
24	0.35	GN / GY	3569	I	—	Rear Closure Passive Entry Antenna Low Signal	24	0.5	GN / GY	3569	II	—
25	1	RD / GN	3140	I	—	Battery Positive Voltage	25	1	RD / GN	3140	II	—
26	0.5	YE / BU	2376	I	—	Left Rear Middle Parking Assist Sensor Signal	26	0.5	YE / BU	2376	II	—
27	0.5	BK / GY	2379	I	—	Object Sensor Low Reference	27	0.5	BK / GY	2379	II	—
28	0.5	BU	3157	I	—	Right Rear Advanced Parking Assist Side Object Sensor Signal	28	0.5	BU	3157	II	—

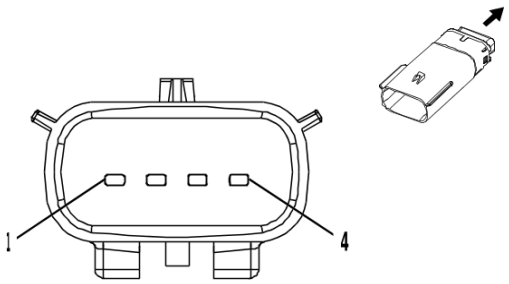
X953 Body Wiring Harness to Rear Object Alarm Sensor Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
29	0.35	GY	2066	I	—	Hands-Free Liftgate Sensor Lamp Control	29	0.5	GY	2066	II	—
30	0.35	GN / YE	2862	I	—	Body Control Module LIN Bus 16	30	0.5	GN / YE	2862	II	—
31 - 34	—	—	—	—	—	Not Occupied	31 - 34	—	—	—	—	—
35	0.5	RD / GY	4840	I	—	Battery Positive Voltage	35	0.5	RD / GY	4840	II	—
36	0.5	RD / BN	4940	I	—	Battery Positive Voltage	36	0.5	RD / BN	4940	II	—
37 - 38	—	—	—	—	—	Not Occupied	37 - 38	—	—	—	—	—
39	0.5	BK	1450	I	—	Ground	39	0.5	BK	1450	II	—
40	—	—	—	—	—	Not Occupied	40	—	—	—	—	—

X954 Body Wiring Harness to Forward Range Radar Sensor Wiring Harness (LT4&UGN/UKL)



4455251



2917338

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13591153
Service Connector: 19355605
Description: 4-Way F 1.5 OCS Series, Sealed(BK)

Connector Part Information

Harness Type: Forward Range Radar Sensor Wiring Harness
OEM Connector: 15514500
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.5 OCS Series, Sealed(BK)

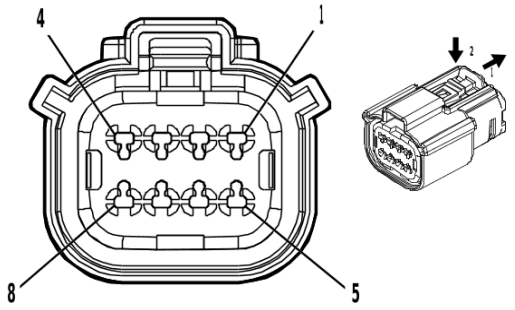
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

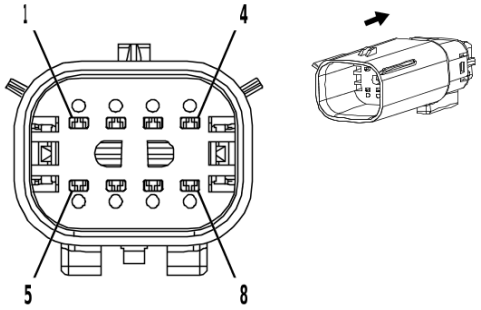
X954 Body Wiring Harness to Forward Range Radar Sensor Wiring Harness (LT4&UGN/UKL)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD / GN	3140	I	—	Battery Positive Voltage	1	0.5	RD / GN	3140	II	—
2	0.35	WH / GY	4104	I	—	AUTOSAR CAN Bus [-] 8 Serial Data	2	0.35	WH / GY	4104	II	—
3	0.35	BU / GY	4105	I	—	AUTOSAR CAN Bus [+] 8 Serial Data	3	0.35	BU / GY	4105	II	—
4	0.5	BK / WH	251	I	—	Signal Ground	4	0.5	BK / WH	251	II	—

X961 Engine Wiring Harness to Engine Jumper Wiring Harness



4846407



2667653

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35037827
Service Connector: 84928314
Description: 8-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

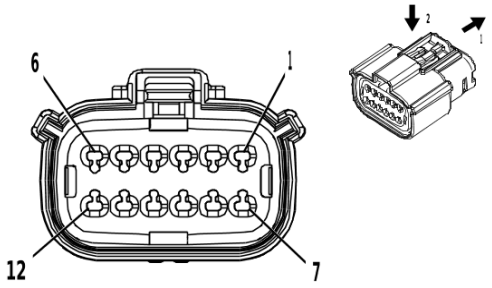
X961 Engine Wiring Harness to Engine Jumper Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / GN	2492	I	—	Cylinder Shutoff Solenoid Enable Signal 2	1	0.5	WH / GN	2492	II	—
2	0.5	GN	5492	I	—	Cylinder Deactivation Solenoid Valve Control 2	2	0.5	GN	5492	II	—
3	0.5	YE / GY	2493	I	—	Cylinder Shutoff Solenoid Enable Signal 3	3	0.5	YE / GY	2493	II	—
4	0.5	GY	5493	I	—	Cylinder Deactivation Solenoid Valve Control 3	4	0.5	GY	5493	II	—
5	0.5	WH / VT	2495	I	—	Cylinder Shutoff Solenoid Enable Signal 5	5	0.5	WH / VT	2495	II	—
6	0.5	VT	5495	I	—	Cylinder Deactivation Solenoid Valve Control 5	6	0.5	VT	5495	II	—

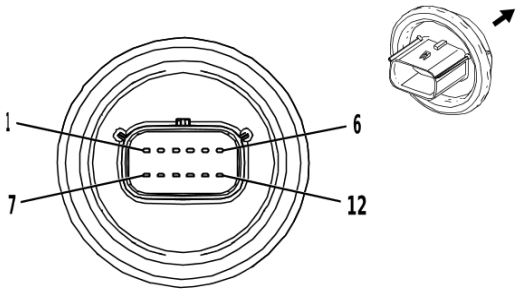
X961 Engine Wiring Harness to Engine Jumper Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	WH / YE	2498	I	—	Cylinder Shutoff Solenoid Enable Signal 8	7	0.5	WH / YE	2498	II	—
8	0.5	YE	5498	I	—	Cylinder Deactivation Solenoid Valve Control 8	8	0.5	YE	5498	II	—

X962 Engine Wiring Harness to Engine Coolant Temperature Sensor Jumper Wiring Harness (L87)



2871860



3238775

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33362189
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required

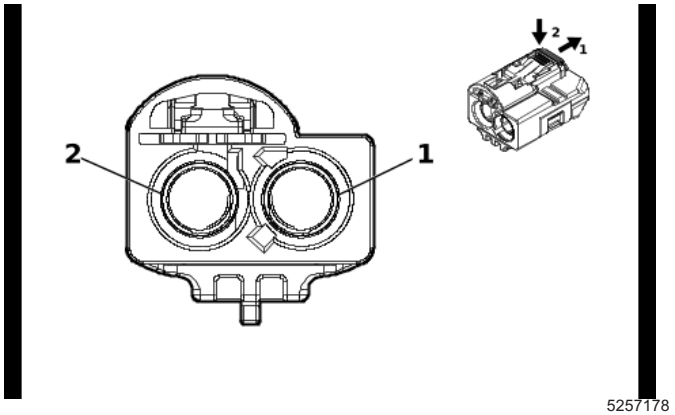
X962 Engine Wiring Harness to Engine Coolant Temperature Sensor Jumper Wiring Harness (L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH / BU	2491	I	—	Cylinder Shutoff Solenoid Enable Signal 1	1	0.5	WH / BU	2491	II	—
2	0.5	BU	5491	I	—	Cylinder Deactivation Solenoid Valve Control 1	2	0.5	BU	5491	II	—
3	0.5	YE / GN	2494	I	—	Cylinder Shutoff Solenoid Enable Signal 4	3	0.5	YE / GN	2494	II	—
4	0.5	YE / BU	5494	I	—	Cylinder Deactivation Solenoid Valve Control 4	4	0.5	YE / BU	5494	II	—
5	0.5	YE / BN	2496	I	—	Cylinder Shutoff Solenoid Enable Signal 6	5	0.5	YE / BN	2496	II	—

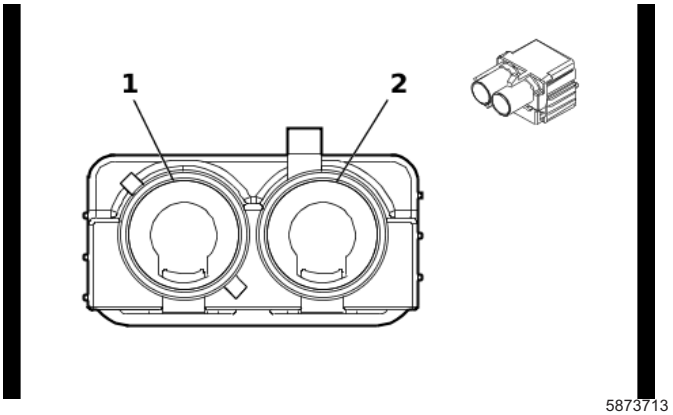
X962 Engine Wiring Harness to Engine Coolant Temperature Sensor Jumper Wiring Harness (L87) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	0.5	BN	5496	I	—	Cylinder Deactivation Solenoid Valve Control 6	6	0.5	BN	5496	II	—
7	0.5	GN / GY	2497	I	—	Cylinder Shutoff Solenoid Enable Signal 7	7	0.5	GN / GY	2497	II	—
8	0.5	WH	5497	I	—	Cylinder Deactivation Solenoid Valve Control 7	8	0.5	WH	5497	II	—
9	0.5	BU	410	I	—	Engine Coolant Temperature Sensor Signal	9	0.5	BU	410	II	—
10	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	10	0.5	BK / YE	548	II	—
11 - 12	—	—	—	—	—	Not Occupied	11 - 12	—	—	—	—	—

X995F Rear View Camera Wiring Harness to Rear License Plate Lamp Wiring Harness (DRZ)



5257178



5873713

Connector Part Information

Harness Type: Rear View Camera Wiring Harness LVDS

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way F

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness LVDS

OEM Connector: 33351073

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 2-Way M Coax Type(BU)

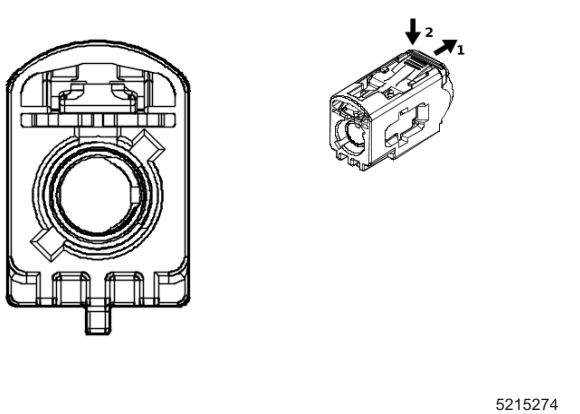
Terminal Part Information

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

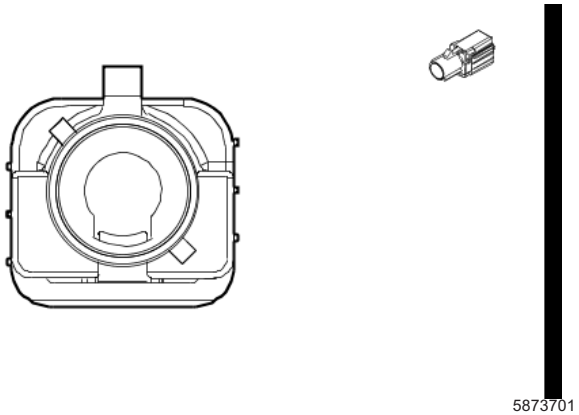
X995F Rear View Camera Wiring Harness to Rear License Plate Lamp Wiring Harness (DRZ)

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

X995F Rear View Camera Wiring Harness to Rear License Plate Lamp Wiring Harness (-DRZ)



5215274



5873701

Connector Part Information

Harness Type: Rear View Camera Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F

Connector Part Information

Harness Type: Rear License Plate Lamp Wiring Harness COAX

OEM Connector: 33351038

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type(BU)

Terminal Part Information

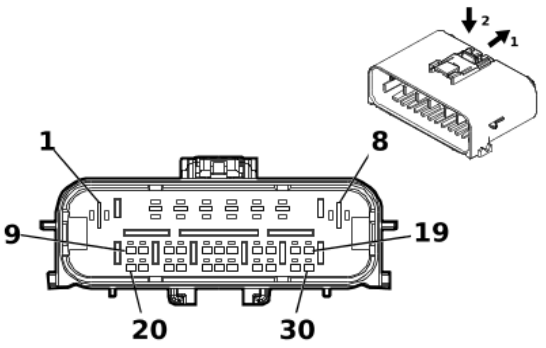
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X995F Rear View Camera Wiring Harness to Rear License Plate Lamp Wiring Harness (-DRZ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	Rear Vision Camera Co-axial Video Signal	—	—	Coax Cable	—	I	—

X999 Reductant Control Module Jumper Wiring Harness to Chassis Wiring Harness

—



5377298

Connector Part Information

Harness Type: Reductant Control Module Jumper Wiring Harness

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 30-Way F

Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 35538391

Service Connector: Service by Harness - See Part Catalog

Description: 30-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	19300651	J-35616-43 (RD)	J-38125-557
III	84616651	J-35616-17 (L-GN)	J-38125-215A
IV	Not required	J-35616-5 (PU)	No Tool Required

X999 Reductant Control Module Jumper Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BU	3921	I	—	Diesel Exhaust Fluid Heater Control 1	1	2.5	BU	3921	II	—
2	0.5	RD / WH	2040	I	—	Battery Positive Voltage	2	0.5	RD / WH	2040	IV	—
7	1	BK	1650	I	—	Ground	7	1	BK	1650	IV	—
8	2.5	BK	1650	I	—	Ground	8	2.5	BK	1650	II	—
11	0.5	BU / BK	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	11	0.5	BU / BK	4977	III	—
12	0.5	WH	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	12	0.5	WH	4976	III	—
22	0.5	BU / BK	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	22	0.5	BU / BK	4977	III	—

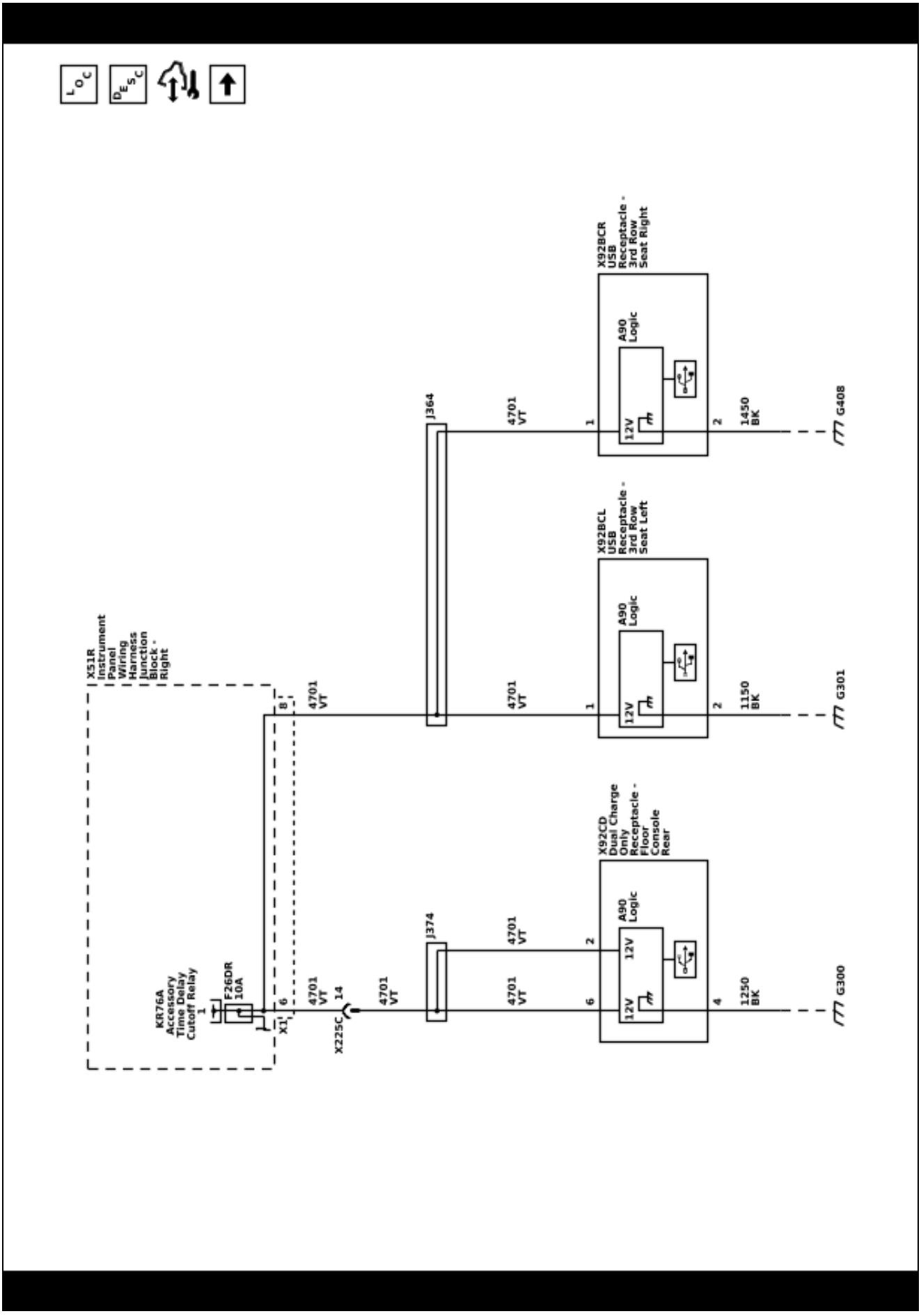
X999 Reductant Control Module Jumper Wiring Harness to Chassis Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
23	0.5	WH	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	23	0.5	WH	4976	III	—
25	0.5	VT / BK	2139	I	—	Run/Crank Ignition 1 Voltage	25	0.5	VT / BK	2139	III	—

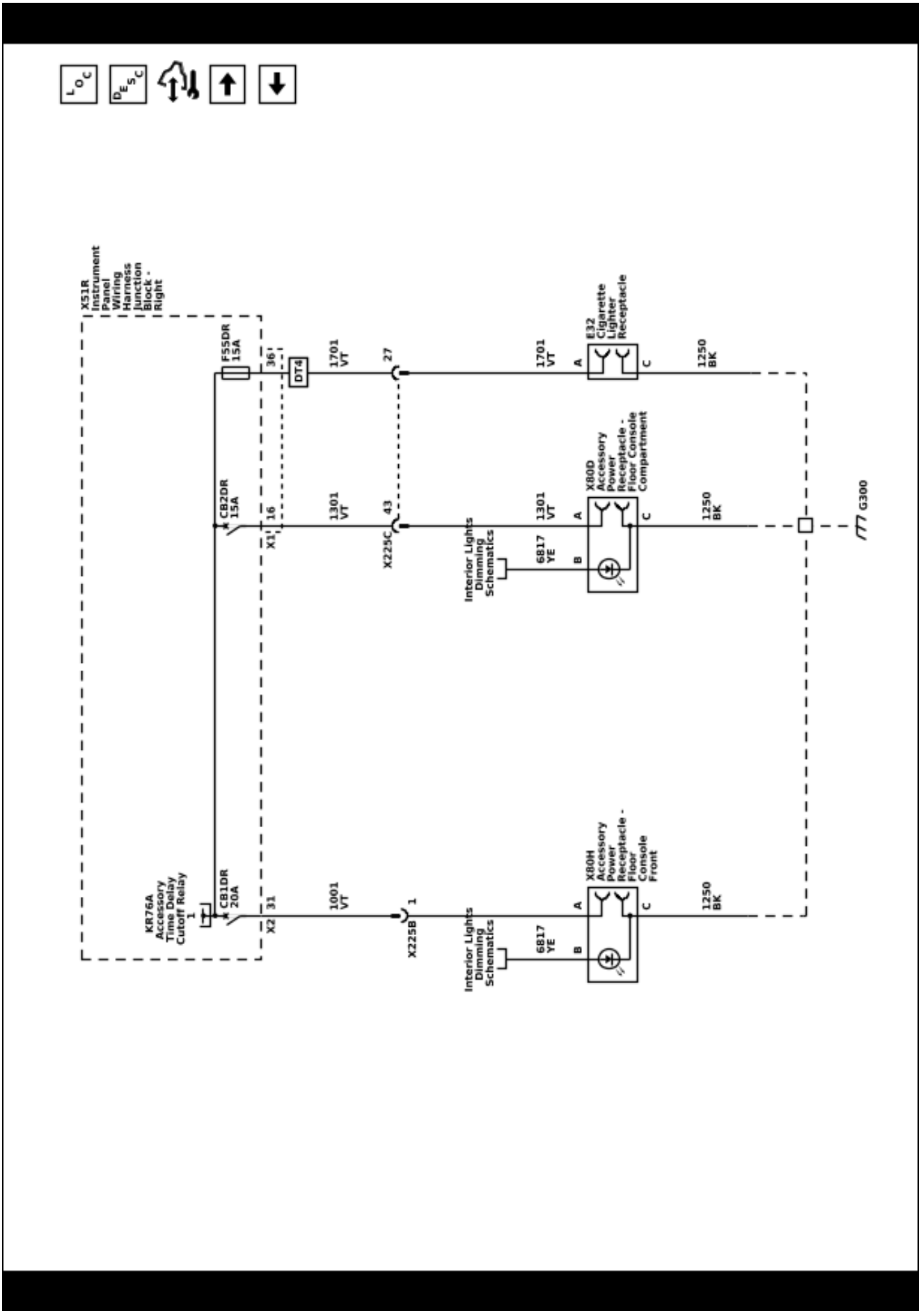
Power Outlets

Schematic and Routing Diagrams

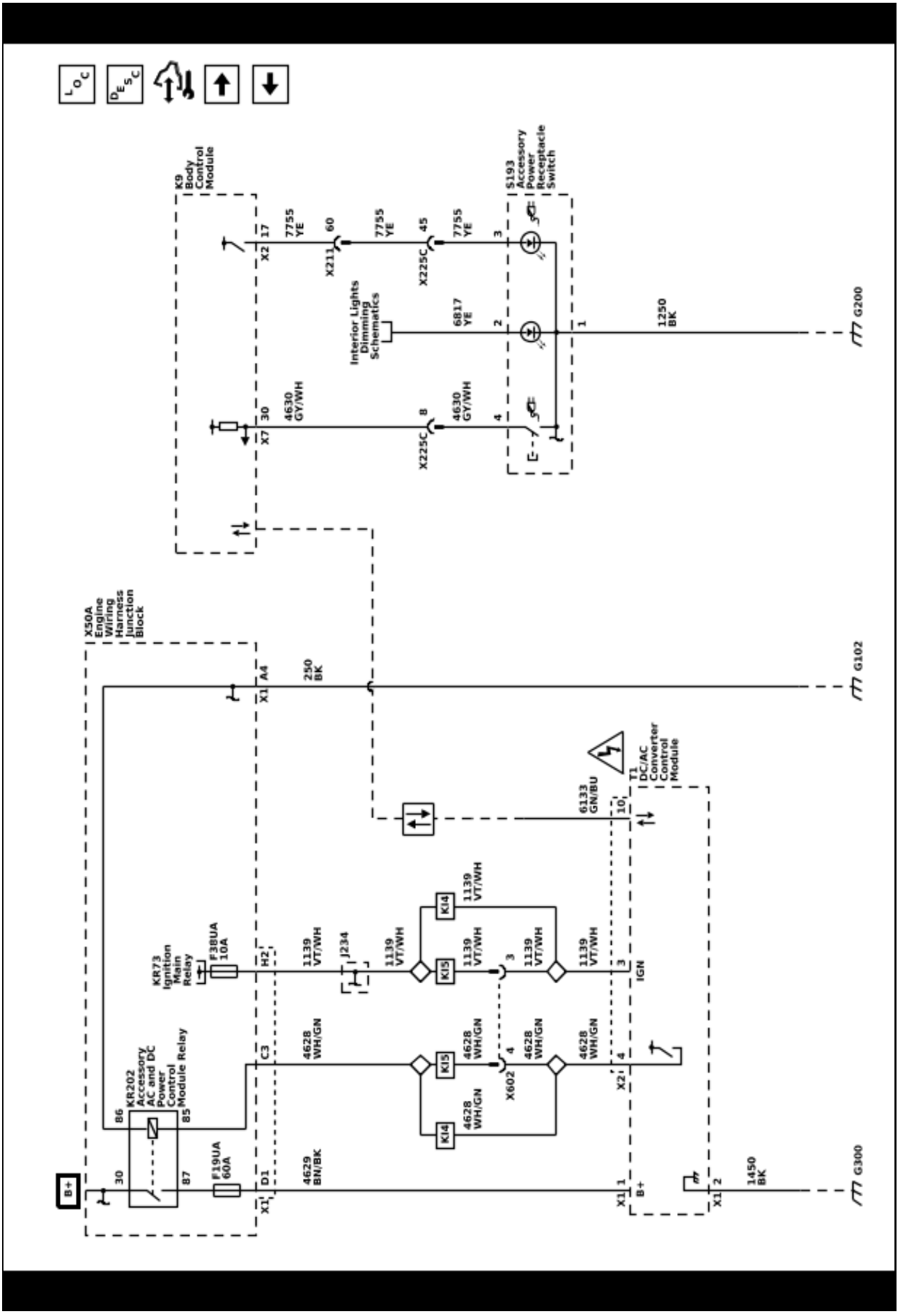
Cigar Lighter/Power Outlet Schematics (USB Receptacles)



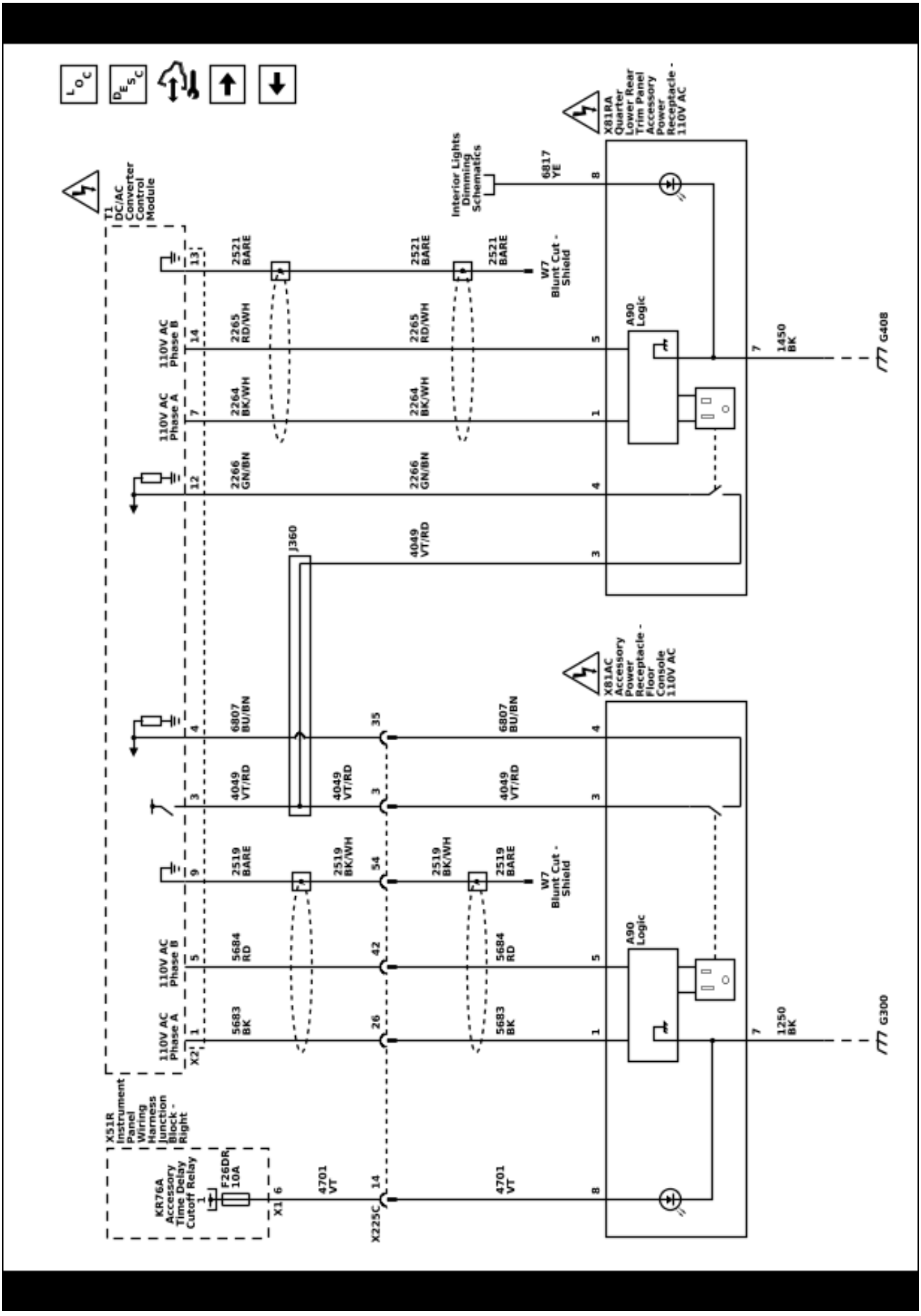
Cigar Lighter/Power Outlet Schematics (Power Receptacles)



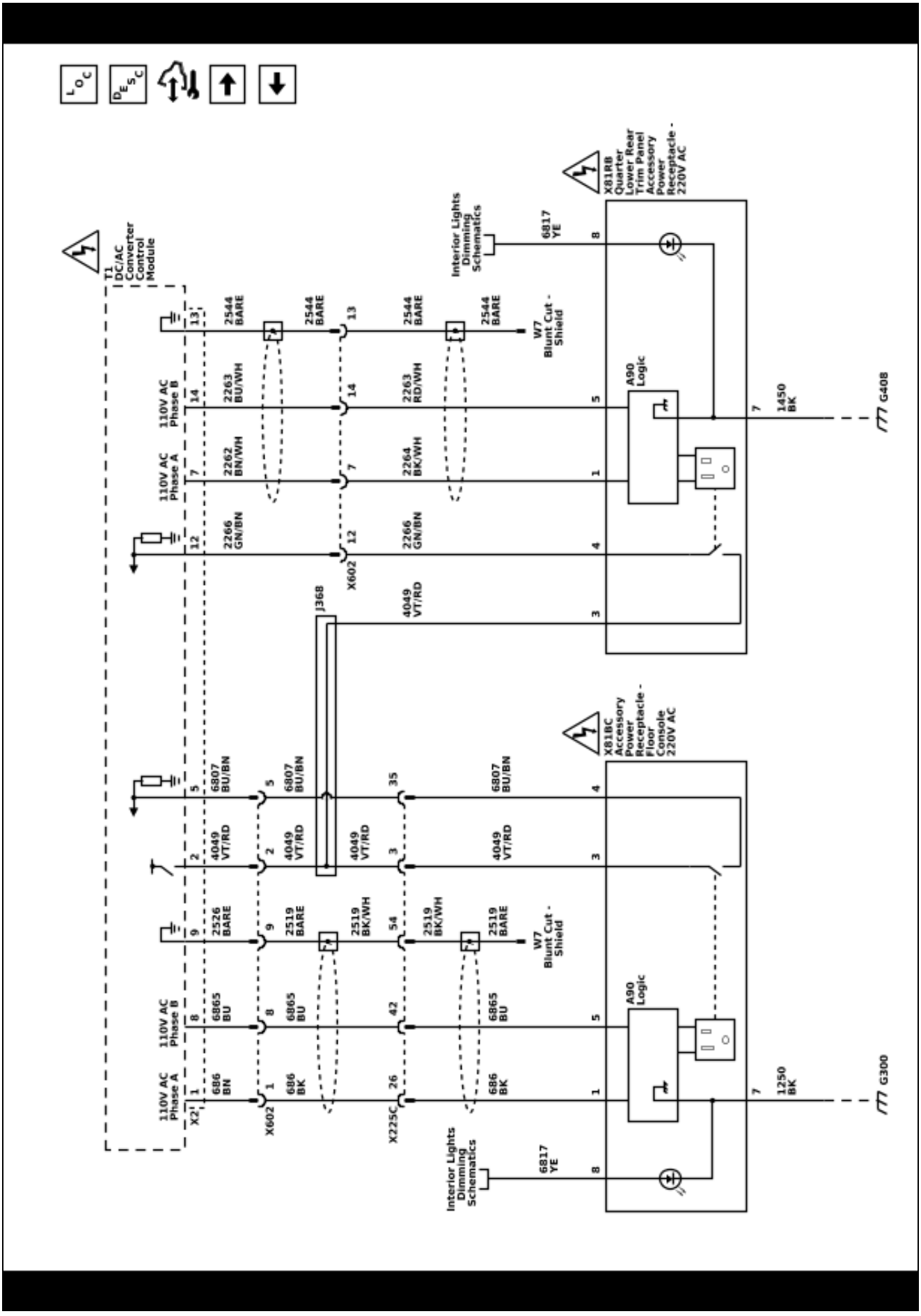
Cigar Lighter/Power Outlet Schematics (AC and DC Power Module Power, Ground, Serial Data and Controls (KI4 / KI5))



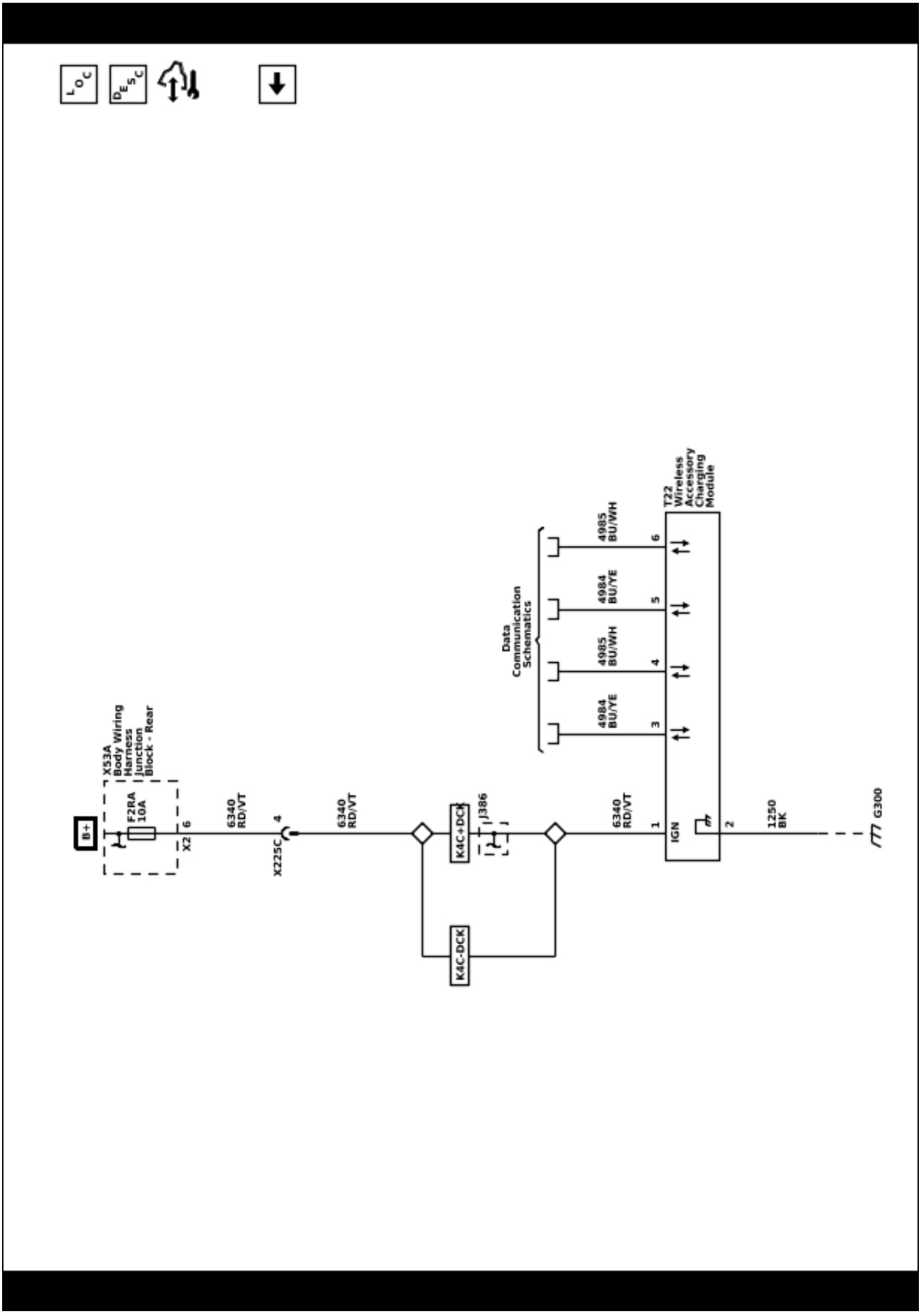
Cigar Lighter/Power Outlet Schematics (110VAC Accessory Power Receptacle (KI4))



Cigar Lighter/Power Outlet Schematics (230V AC Accessory Power Receptacle (KI5))



Cigar Lighter/Power Outlet Schematics (Wireless Charging)



Description and Operation

Mobile Device Wireless Charger Description and Operation

Mobile Device Wireless Charging System

The Mobile Device Wireless Charging System (WCS) is an system for wirelessly charging mobile devices. It is capable of charging the batteries of compatible mobile devices. A compatible device is one that is compliant with Power Matters Alliance (PMA), Wireless Power Consortium (WPC) Standard, or Alliance for Wireless Power (A4WP), meaning that it is equipped with a PMA, WPC, or A4WP wireless charge “receiver” that will work with the charge “transmitter” installed in the vehicle. The devices may utilize built-in charging circuitry or an adapter (external plug-in device which contains the charging circuitry). To check for phone or other device compatibility, refer to GM Total Connect.

Warning: Remove all objects from the charging pad before charging your mobile device. Objects, such as coins, keys, rings, paper clips, or cards, between the phone and charging pad will become very hot. On the rare occasion that the charging system does not detect an object, and the object gets wedged between the phone and charger, remove the phone and allow the object to cool before removing it from the charging pad, to prevent burns.

Charging

To charge a device, place it on the charging surface in the vehicle. There is a charging coil located in the center of the charging surface. The device has a charging coil typically near the center of the device. These coils must be lined up in order for charging to proceed. When the interruptible retained accessory power (IRAP) relay is closed (this is true typically when vehicle ignition is in Run or Accessory position), the WCS will detect the device, establish communications with the device to confirm it is a compatible device, and then deliver charging power to the device via wireless interface. The WCS will be able to deliver 5W to 15W of power as requested by the compatible device. It shall only enter a charging state if communication is established and a compatible device is identified.

The WCS shall not enter a charging state if there is no communication established with a compatible device. Due to differences in objects, a foreign object detection protocol is employed to detect a non-compliant device and hold power transfer initiation until the non-compliant object has been removed and a compliant object has been detected. The charger monitors its internal temperature and will shut down if the charger temperature exceeds 185F (85C).

Indicator

The body control module will detect the device battery is charging and send a serial data message on the GMLAN bus to the radio display. The radio display will indicate a device is currently charging by displaying a lightning bolt over the phone icon. When the indicator is toggling on and off this indicates a thermal limit has been reached and the device will not charge. For more information refer to the owners manual.

Cooling

The wireless charger is kept cool using the HVAC system. There is a dedicated HVAC duct that connects to the Wireless Charging Module bracket (which holds the module and the mat).

Power Outlets Description and Operation

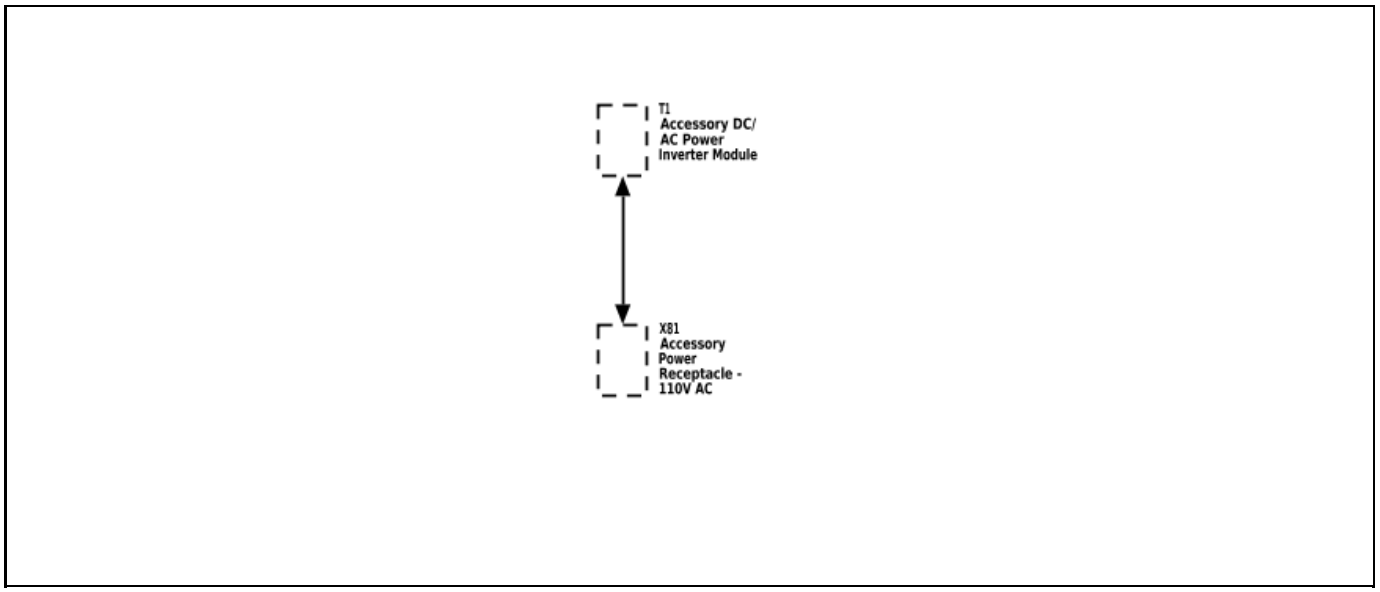
12 Volt Power Outlet Receptacle Description and Operation

The 12 V accessory power receptacles are supplied with power by the accessory relay.

The vehicle is fitted with a cigarette lighter and/or with a 12 V accessory power receptacle. The cigarette lighter and accessory power outlets are controlled by an ignition operated relay. The accessory power receptacle and cigarette lighter are operational when the ignition is turned to either the On or the Accessories positions. To operate the cigarette lighter, press in the lighter knob. When the element is hot, the lighter automatically pops out and is ready for use.

110 Volt Power Outlet Receptacle System Description

Power Outlets Block Diagram



3403851

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 110 V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 110 V at 60 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 110 V AC provides the usual connection for AC powered devices.

110 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 110 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 110 V AC, the normally open switch in the accessory power receptacle – 110 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 110 V AC switch, the inverter module begins to supply 110 V AC to the accessory power receptacle – 110 V AC after a 1.5 s delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

110 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 110 V circuit for a short to vehicle chassis ground. If a 110 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

110 Volt Power Outlet Receptacle Overload Shutdown

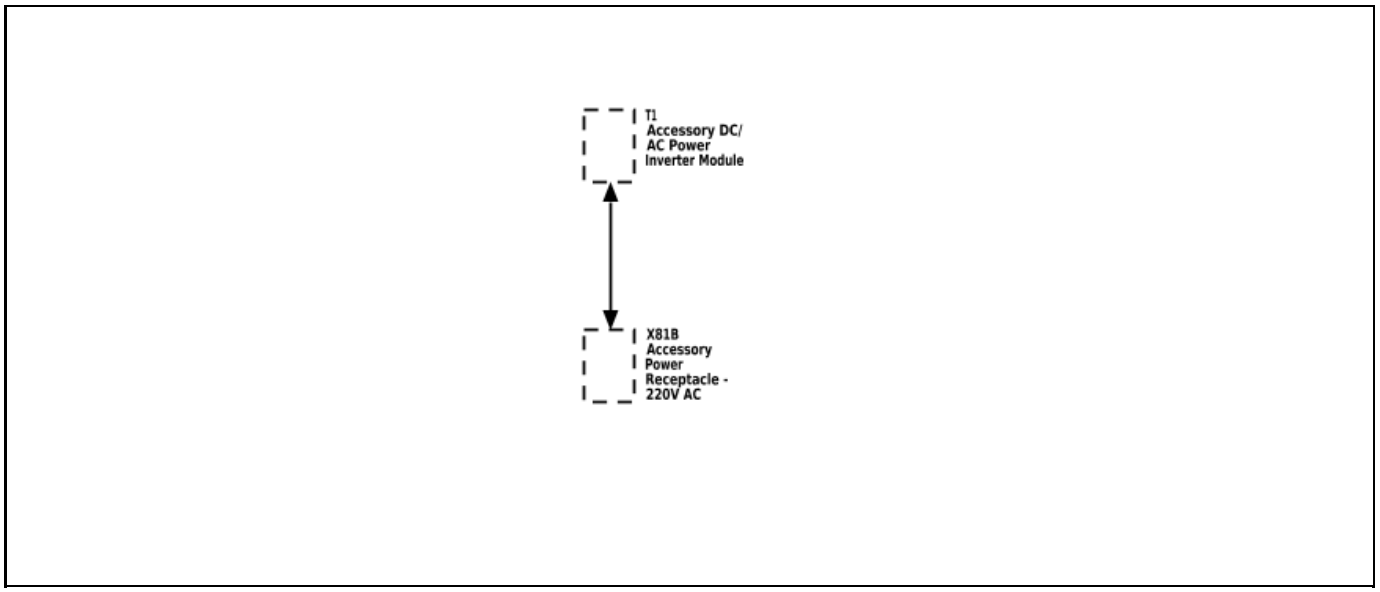
The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 s , or 2.5 A for 10 s . The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

110 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the outlet, and then plugged into the outlet.

230 Volt Power Outlet Receptacle System Description

Power Outlets Block Diagram



3403853

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 220V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 220–230 V at 50 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 220V AC provides the usual connection for AC powered devices.

230 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 220V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 220V AC, the normally open switch in the accessory power receptacle – 220V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 220V AC switch, the inverter module begins to supply 220–230 V AC to the accessory power receptacle – 220V AC after a 1.5 second delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

230 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 230 V circuit for a short to vehicle chassis ground. If a 230 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

230 Volt Power Outlet Receptacle Overload Shutdown

The accessory AC/DC power control module will turn OFF if the current in the 230 V circuit is greater than 3.8 A for 1 second, or 2.5 A for 10 seconds. The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

230 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the accessory power receptacle – 220V AC, and then plugged into the accessory power receptacle – 220V AC.

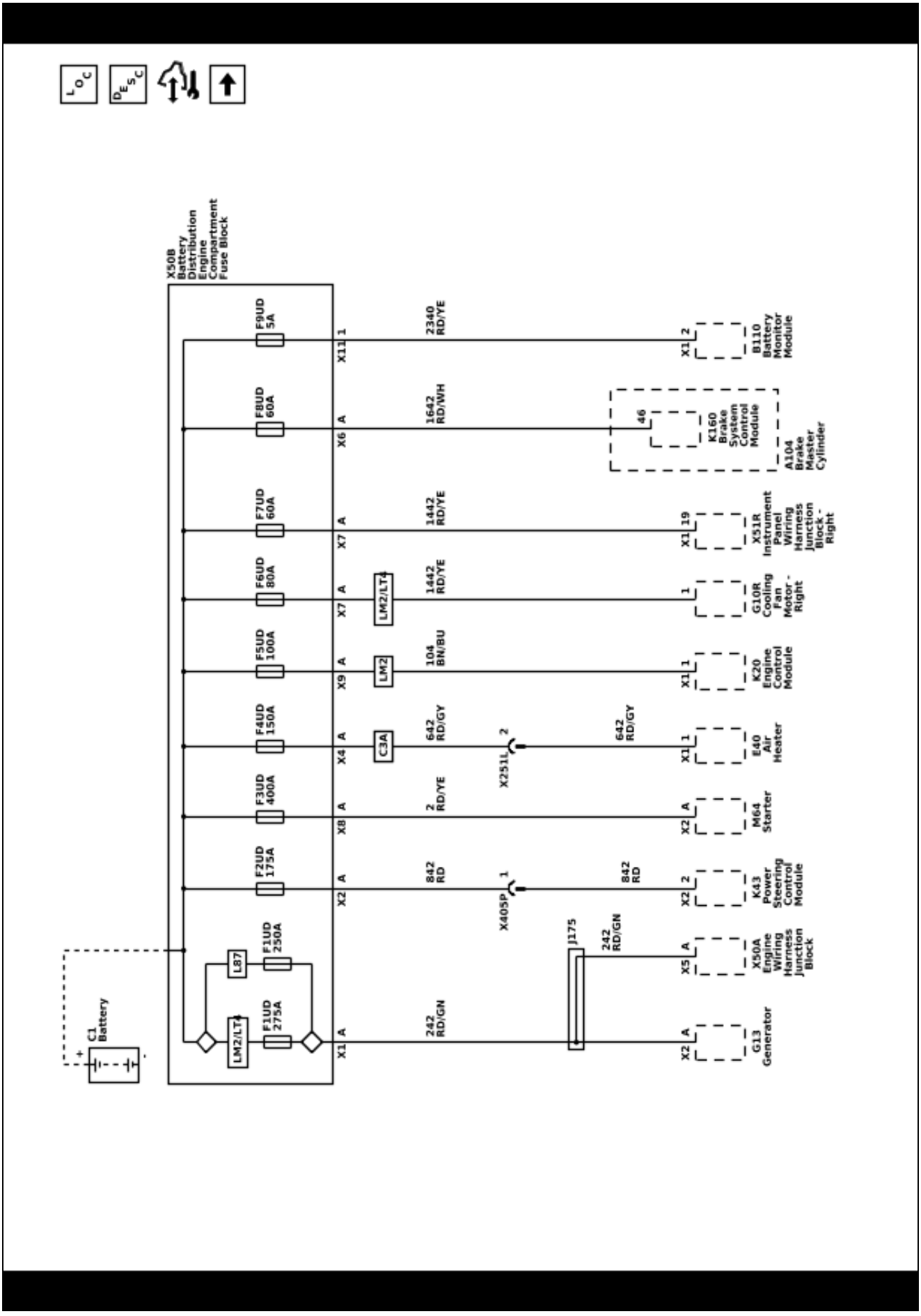
USB Receptacle Description and Operation (USS)

The vehicle is fitted with USB charge port receptacles at the rear of the floor console. These USB receptacles are for charging devices only. The USB receptacles are controlled by an ignition operated relay and are operational when the ignition is turned to either the On or the Accessories positions.

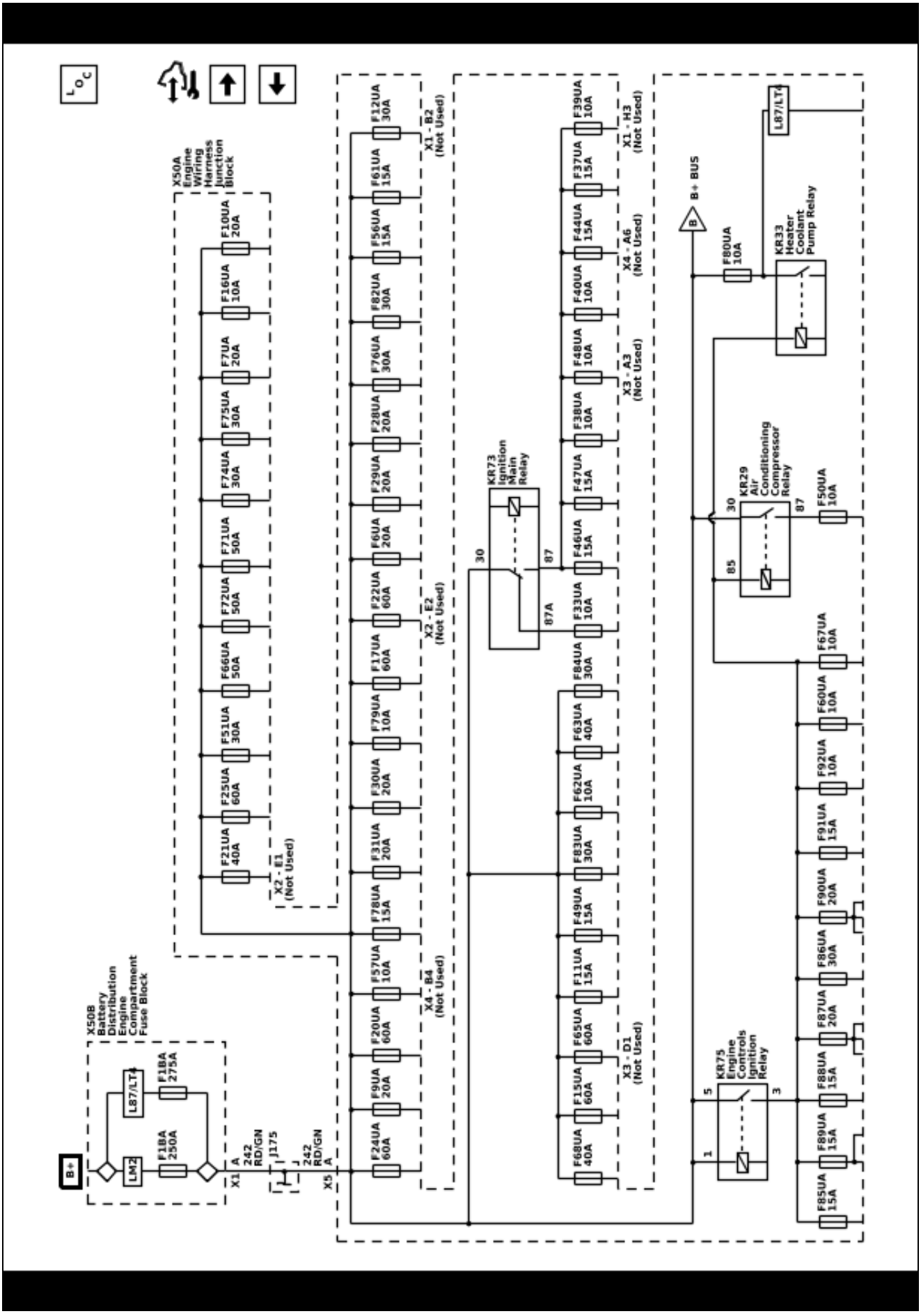
Wiring Systems and Power Management

Schematic and Routing Diagrams

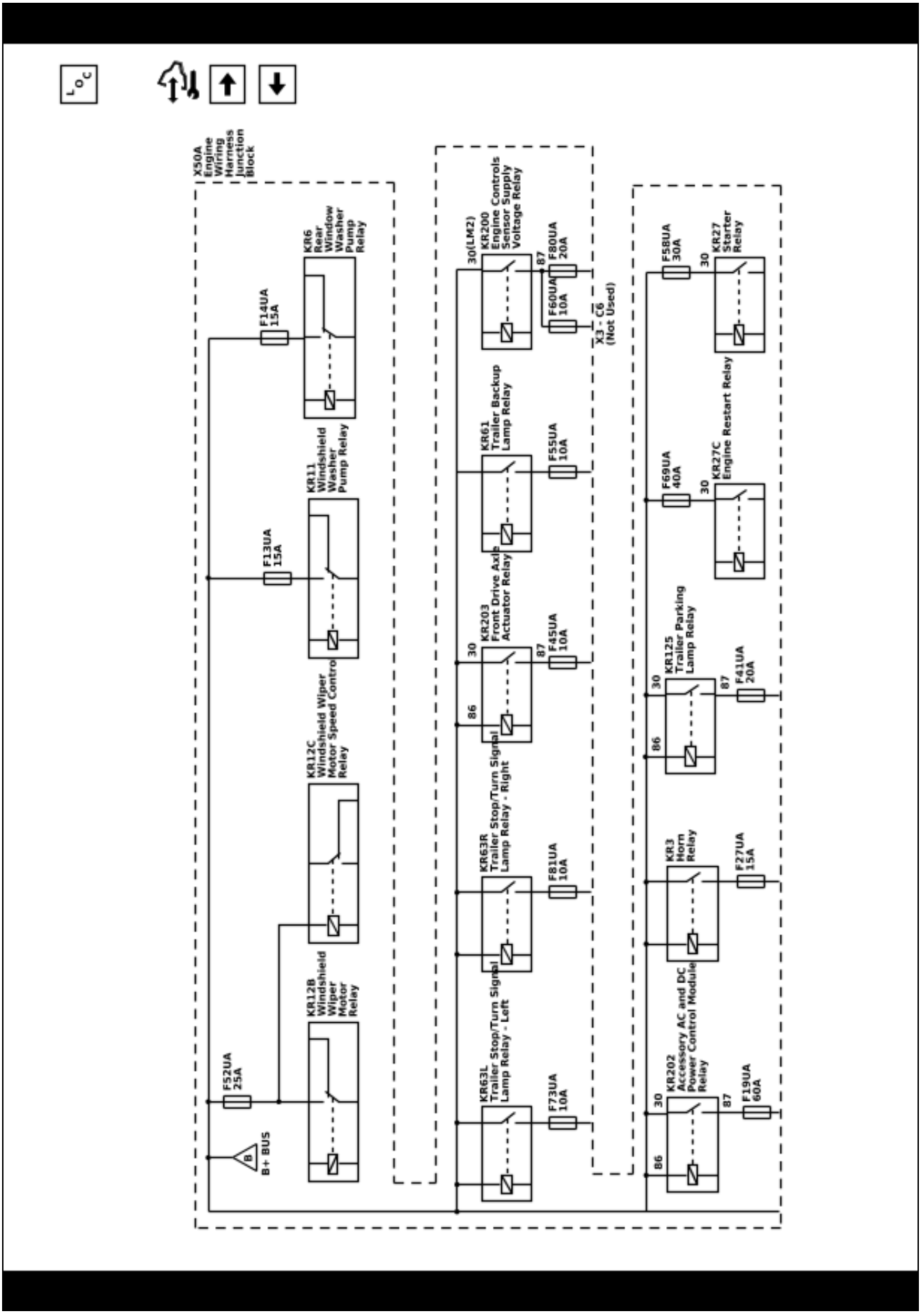
Power Distribution Schematics (X50B Battery Distribution Engine Compartment Fuse Block)



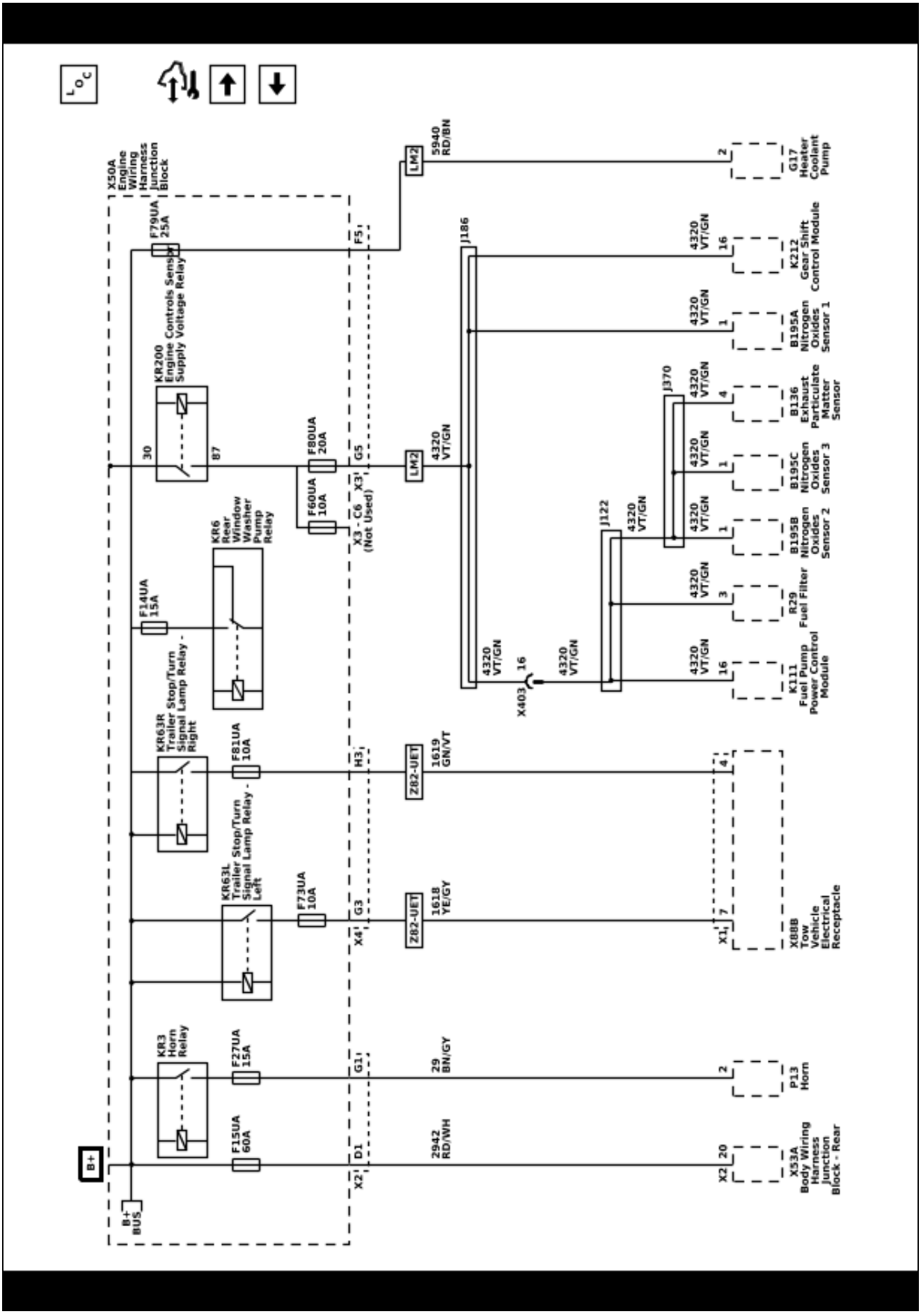
Power Distribution Schematics (X50A Engine Wiring Harness Junction Block - B+ Bus (1 of 2))



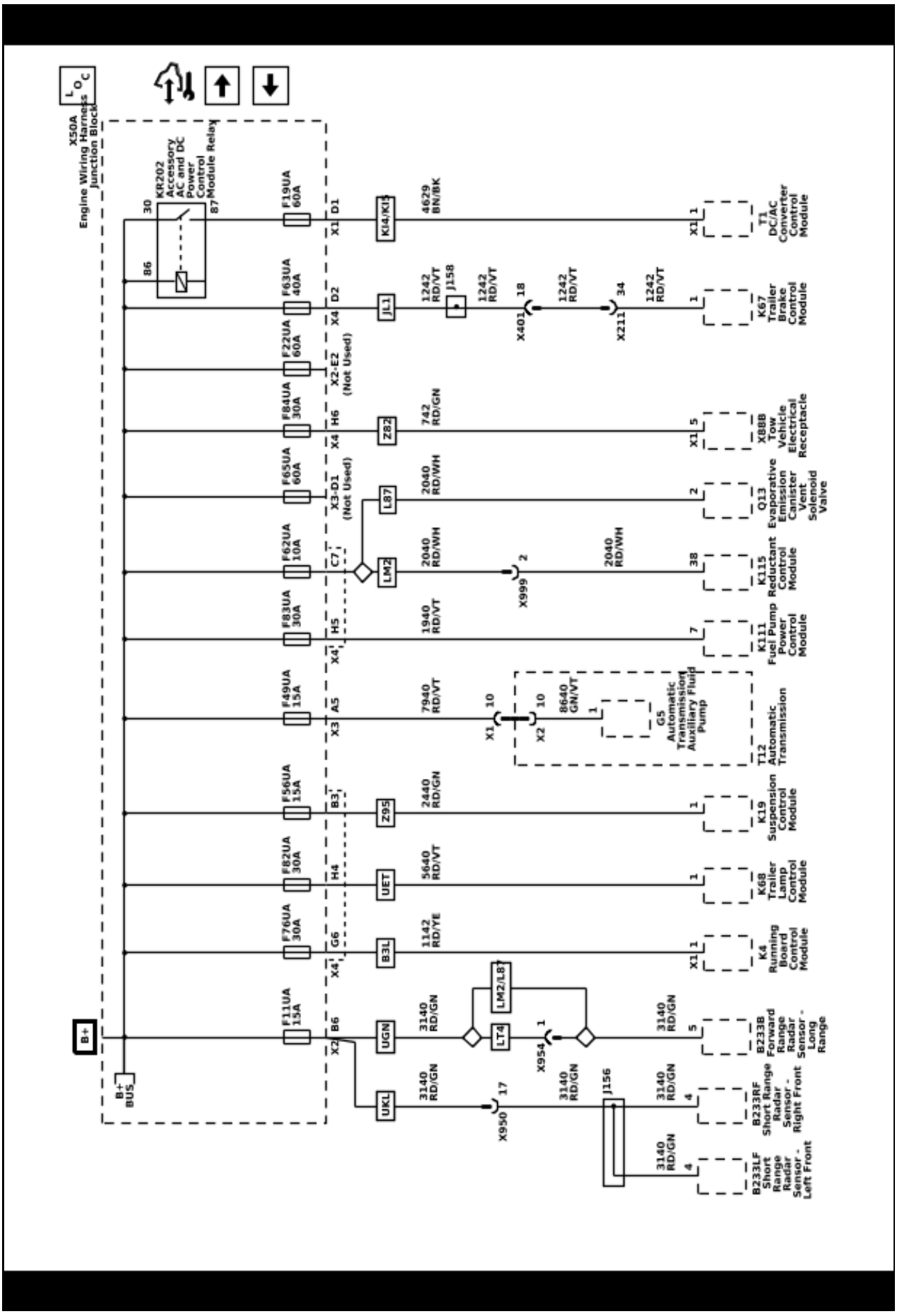
Power Distribution Schematics (X50A Engine Wiring Harness Junction Block - B+ Bus (2 of 2))



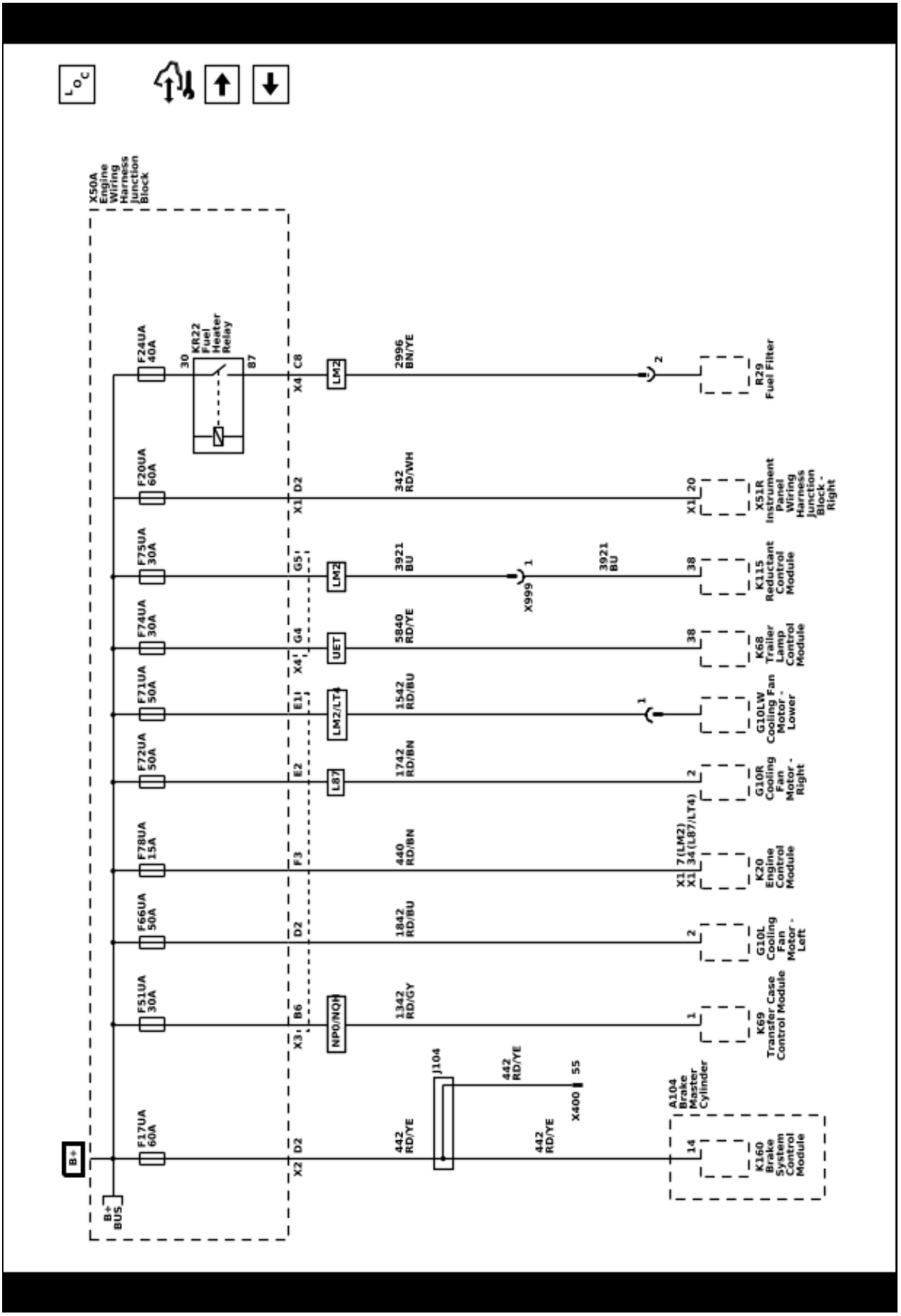
Power Distribution Schematics (F14UA, F15UA, F27UA, F73UA, F79UA, F80UA and F81UA Fuses)



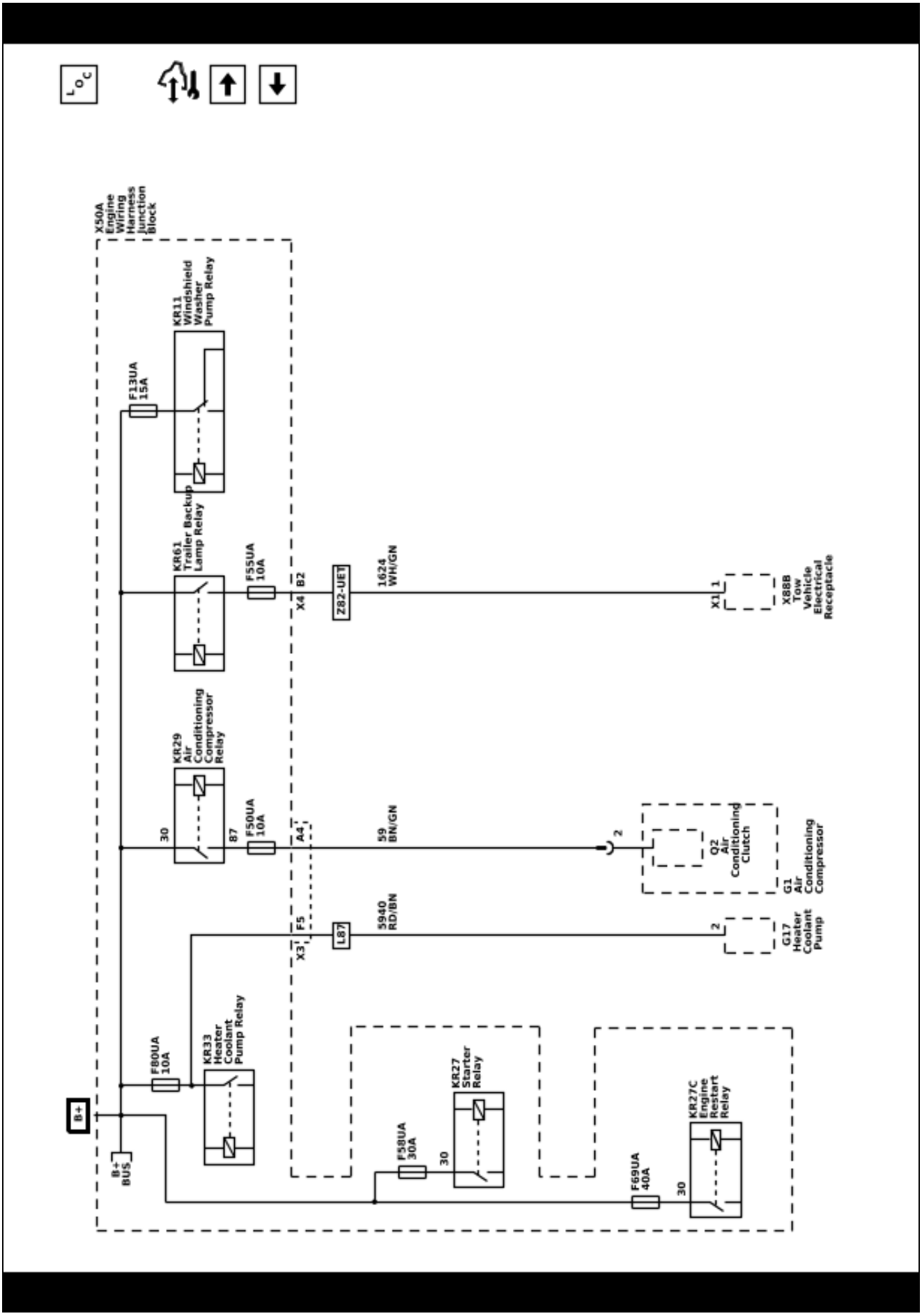
Power Distribution Schematics (F11UA, F19UA, F22UA, F49UA, F56UA, F62UA, F63UA, F65UA, F76UA, F82UA, F83UA and F84UA Fuses)



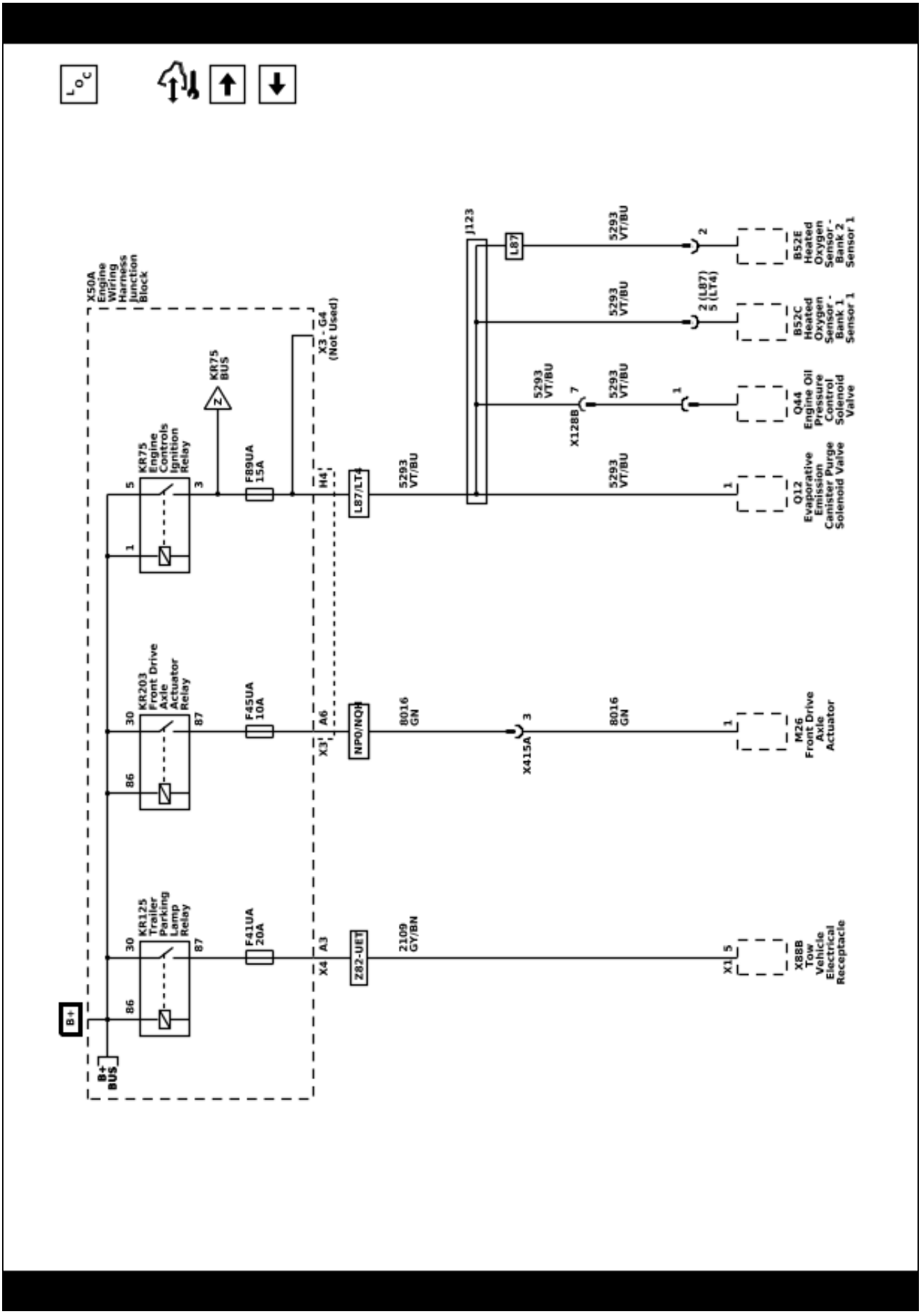
Power Distribution Schematics (F17UA, F20UA, F24UA, F51UA, F66UA, F71UA, F72UA, F74UA, F75UA and F78UA Fuses)



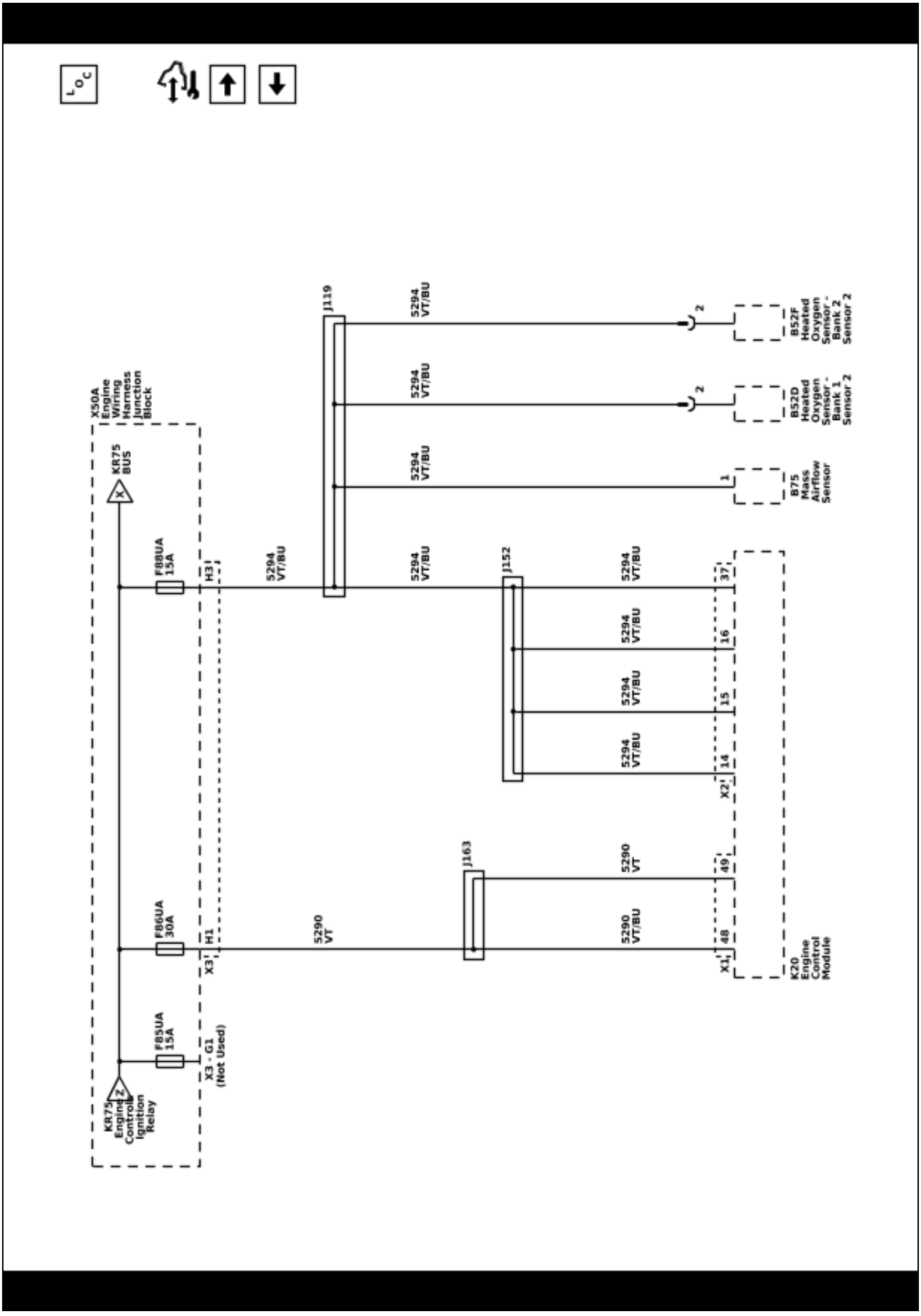
Power Distribution Schematics (F13UA, F50UA, F55UA, F58UA, F69UA and F80UA Fuses)



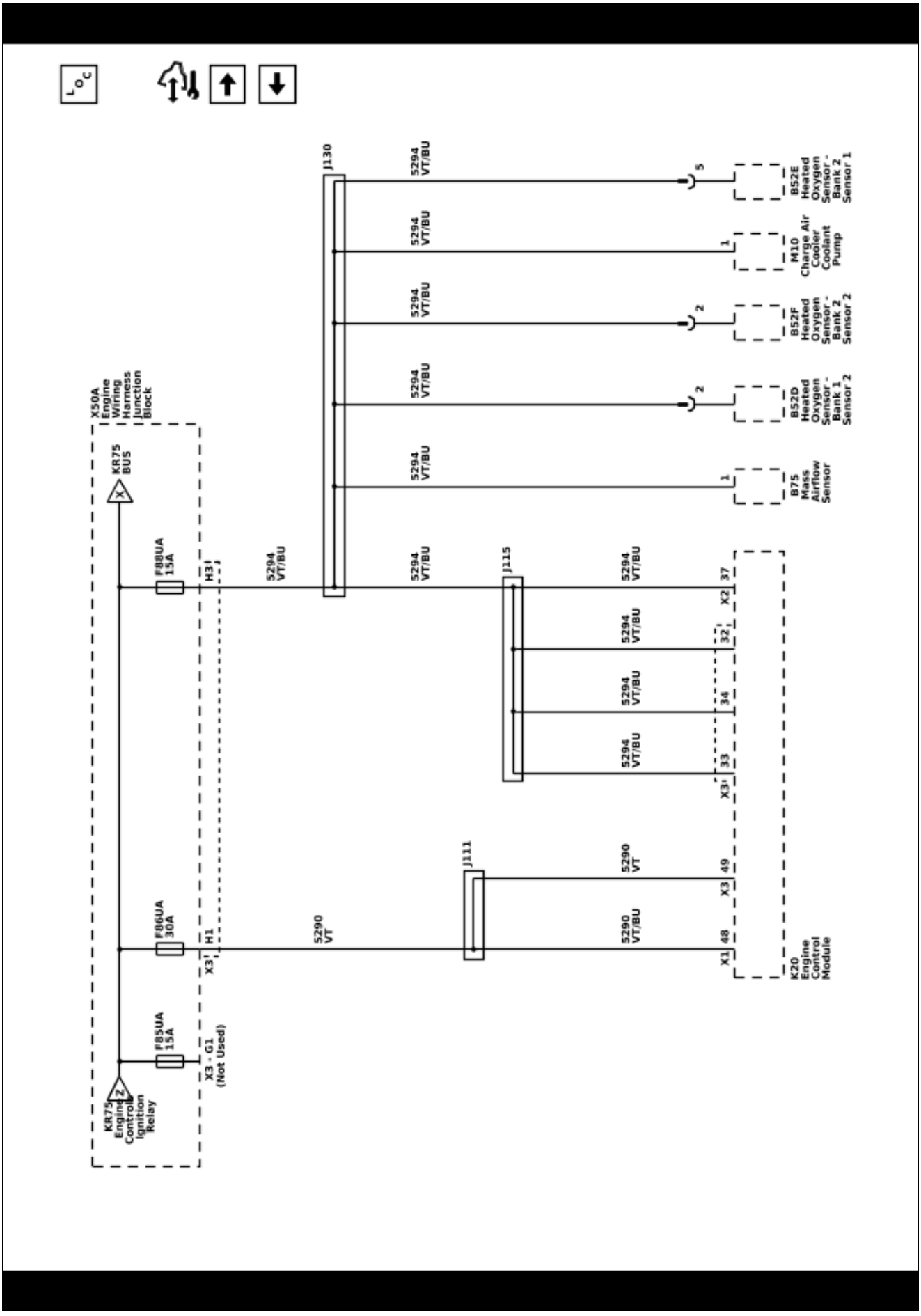
Power Distribution Schematics (F41UA, F45UA and F89UA Fuses)



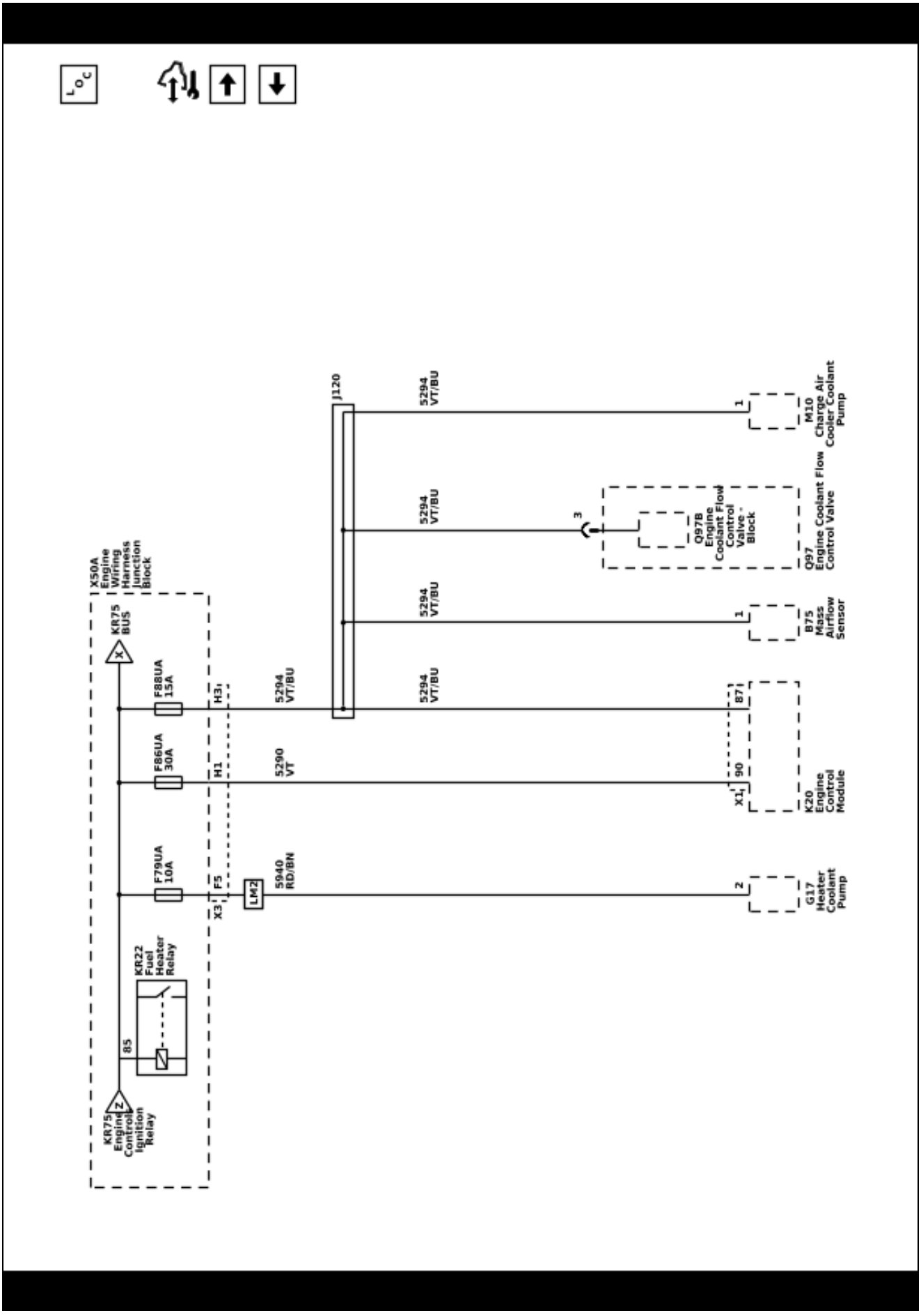
Power Distribution Schematics (F85UA, F86UA and F88UA Fuses (L87))



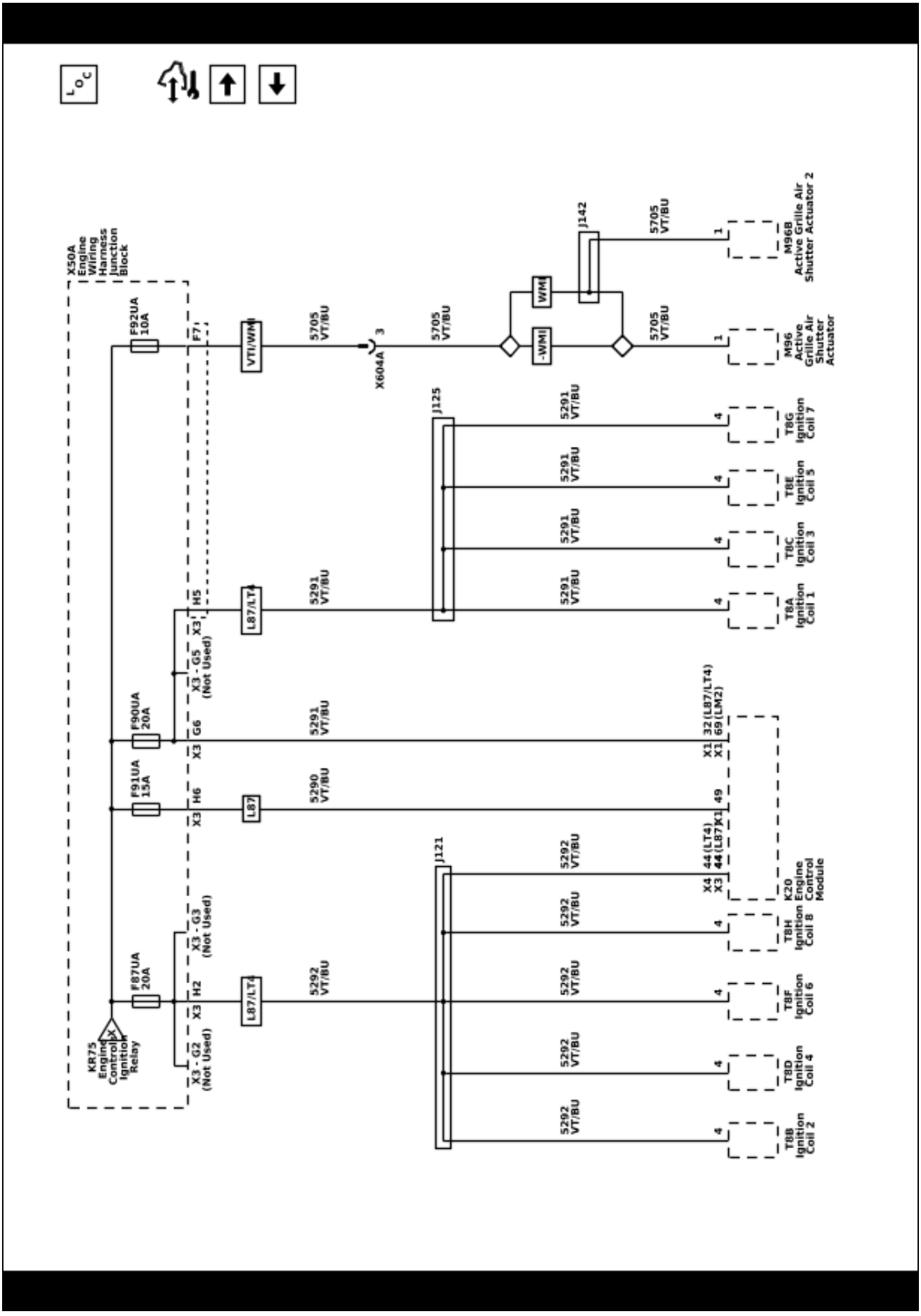
Power Distribution Schematics (F85UA, F86UA and F88UA Fuses (LT4))



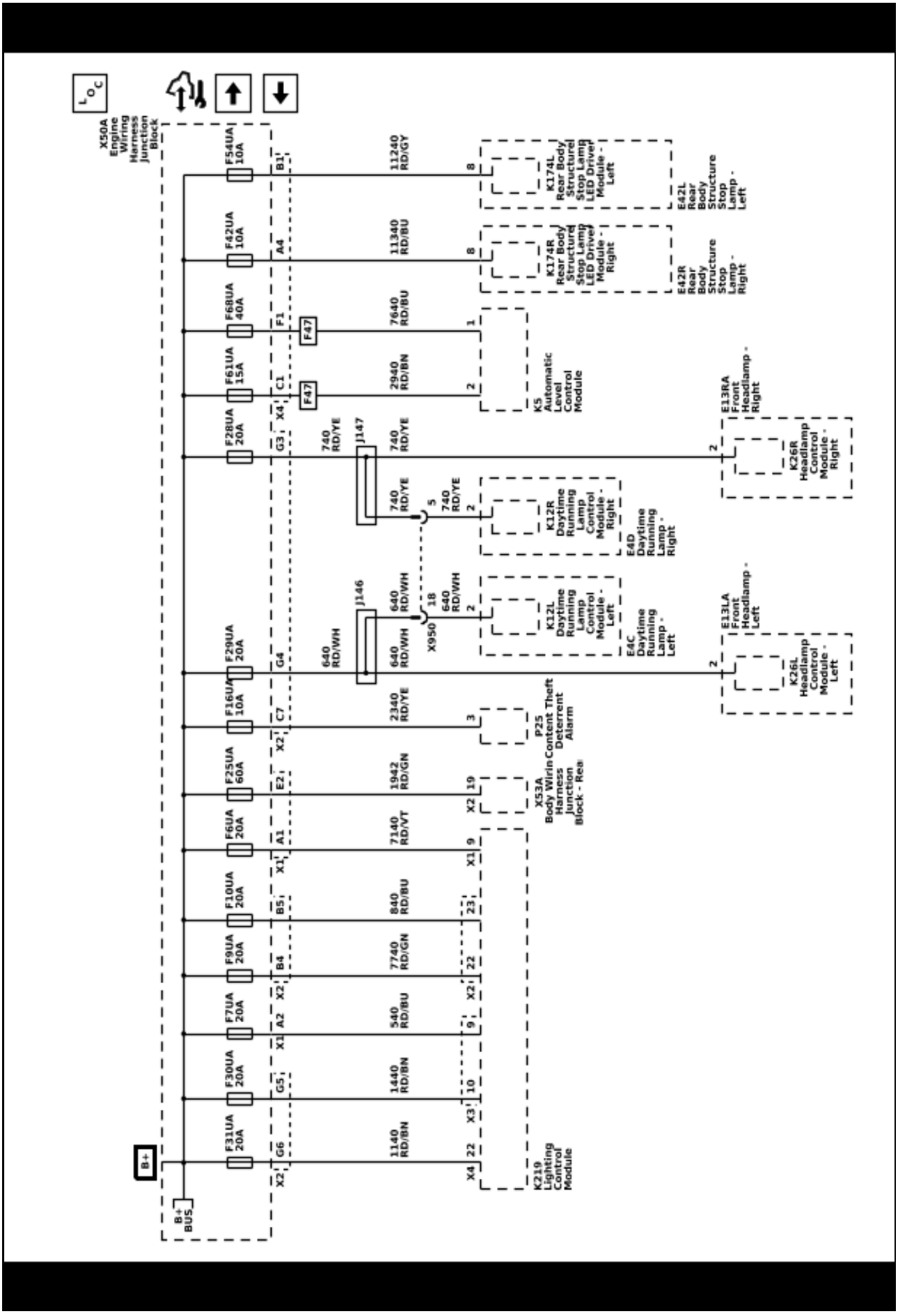
Power Distribution Schematics (F85UA, F86UA and F88UA Fuses (LM2))



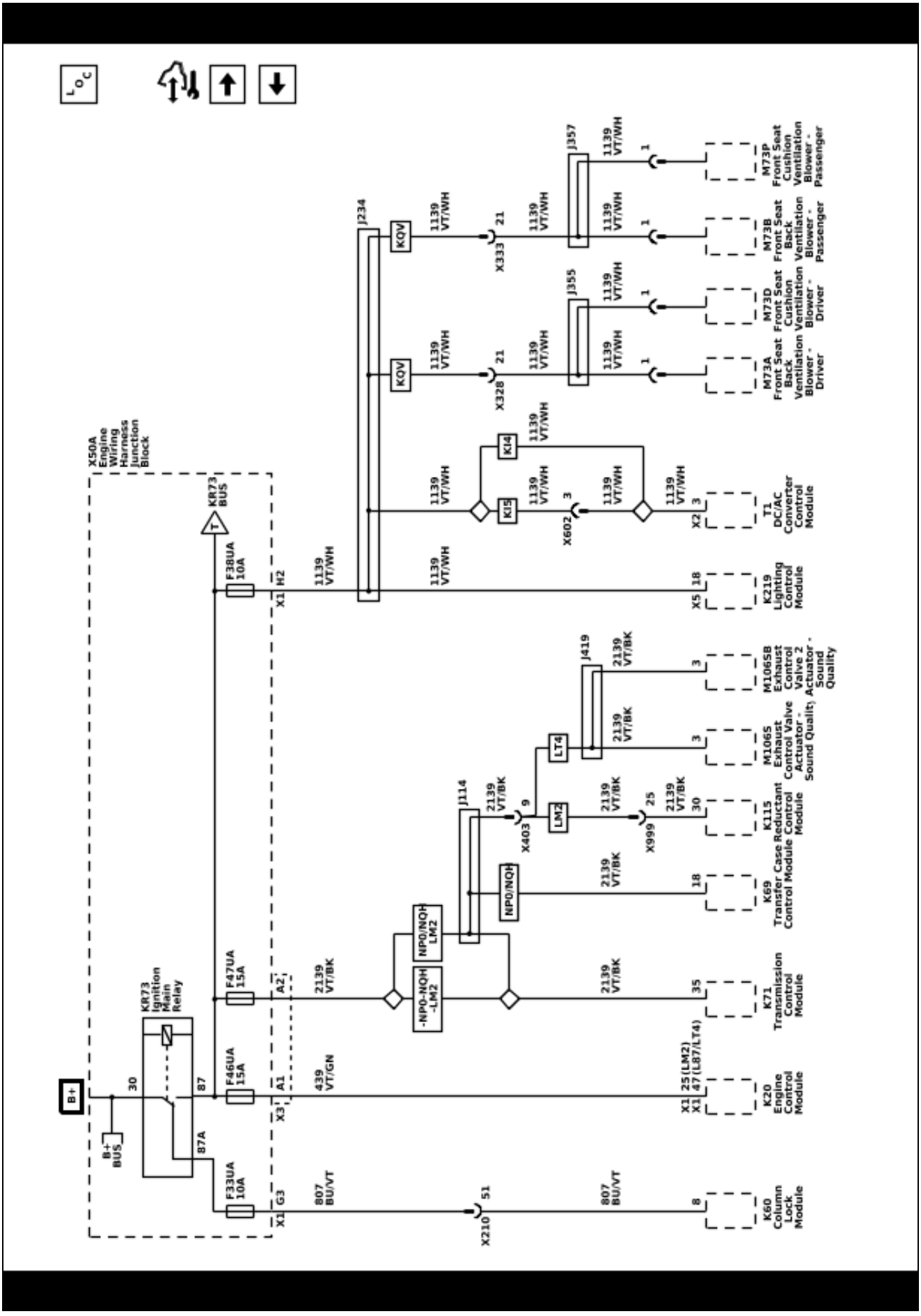
Power Distribution Schematics (F87UA, F90UA and F92UA Fuses)



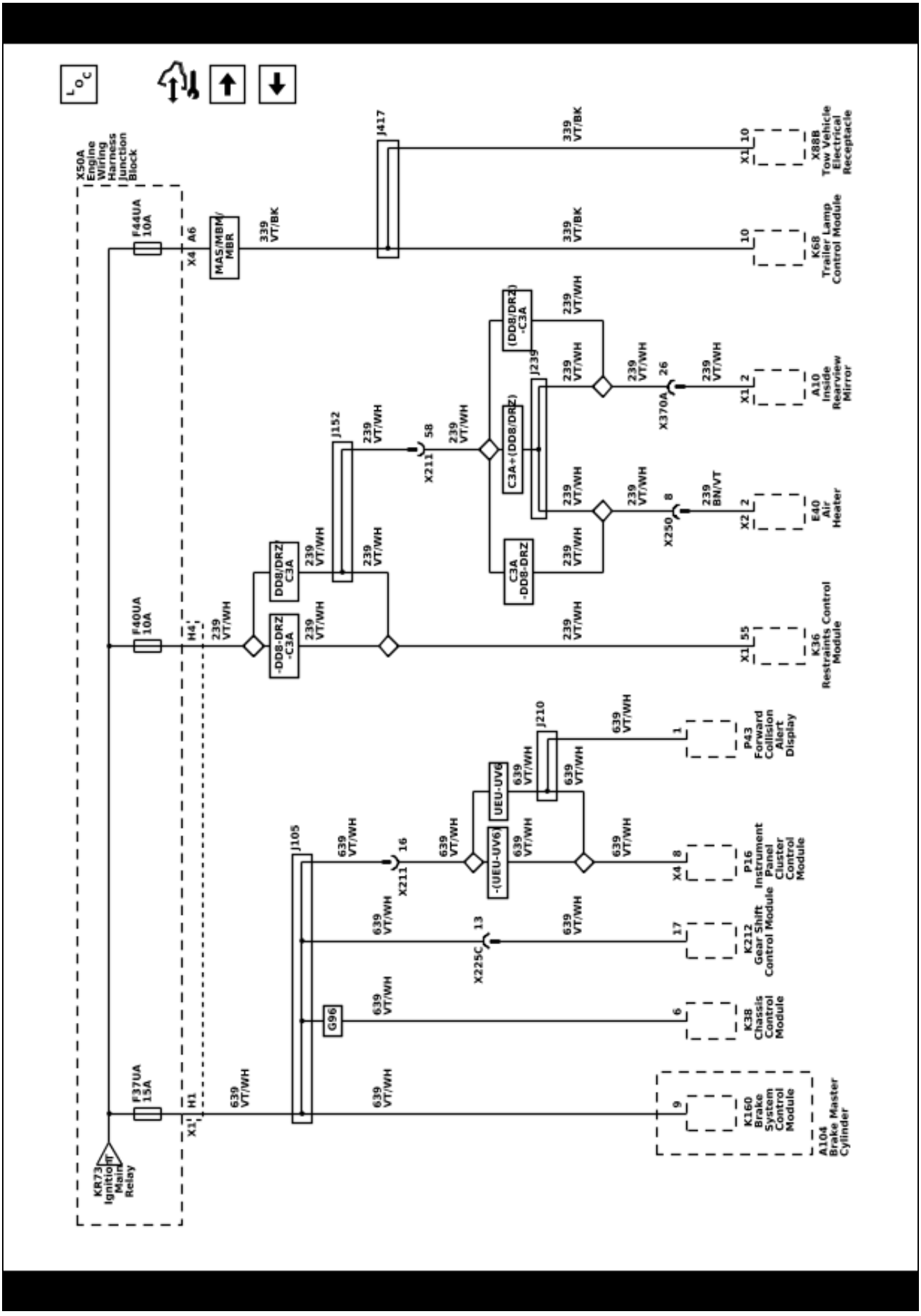
Power Distribution Schematics (F6UA, F7UA, F9UA, F10UA, F16UA, F25UA, F28UA, F29UA, F30UA, F31UA, F42UA, F54UA, F61Ua and F68UA Fuses)



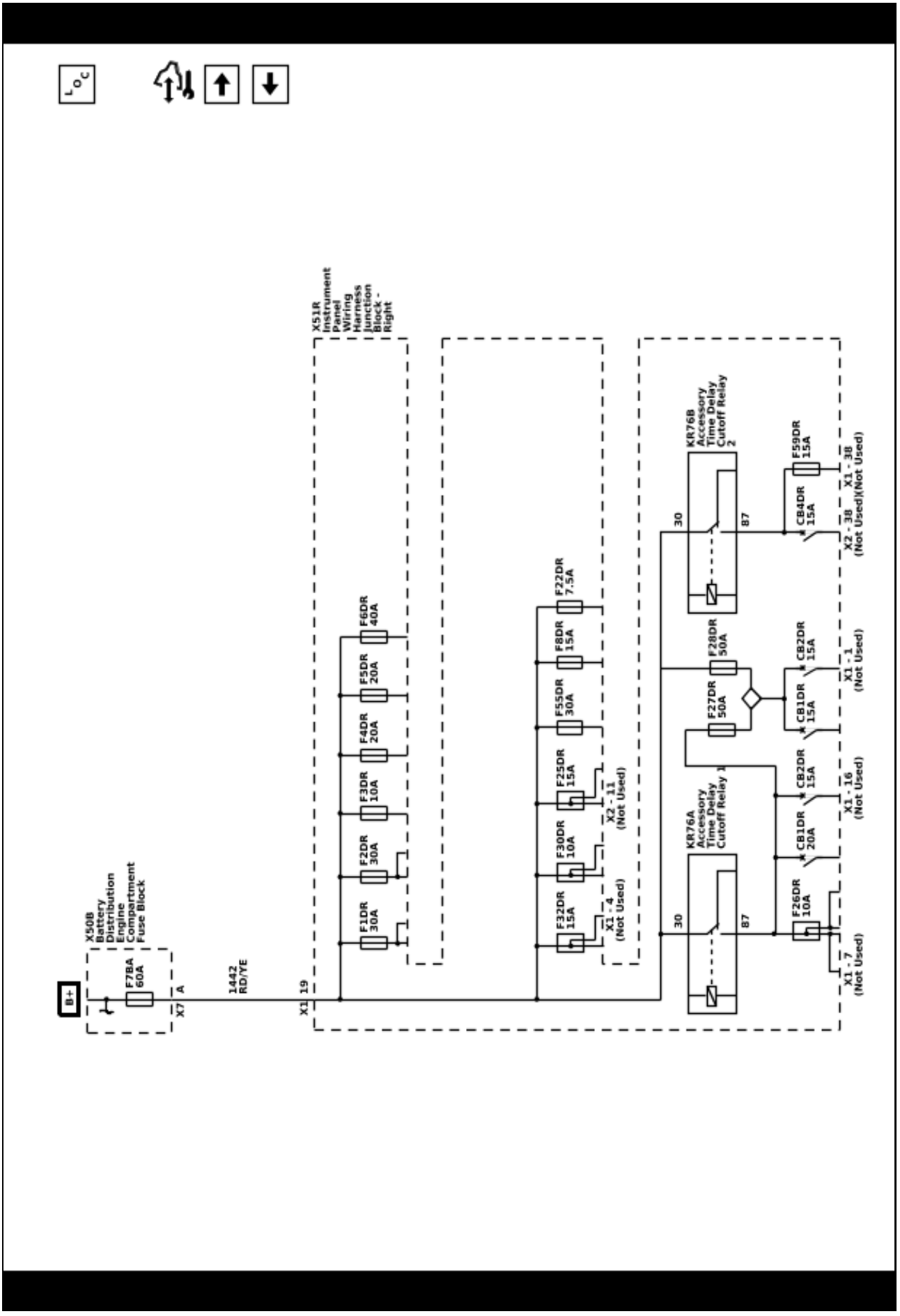
Power Distribution Schematics (F33UA, F38UA, F46UA and F47UA Fuses)



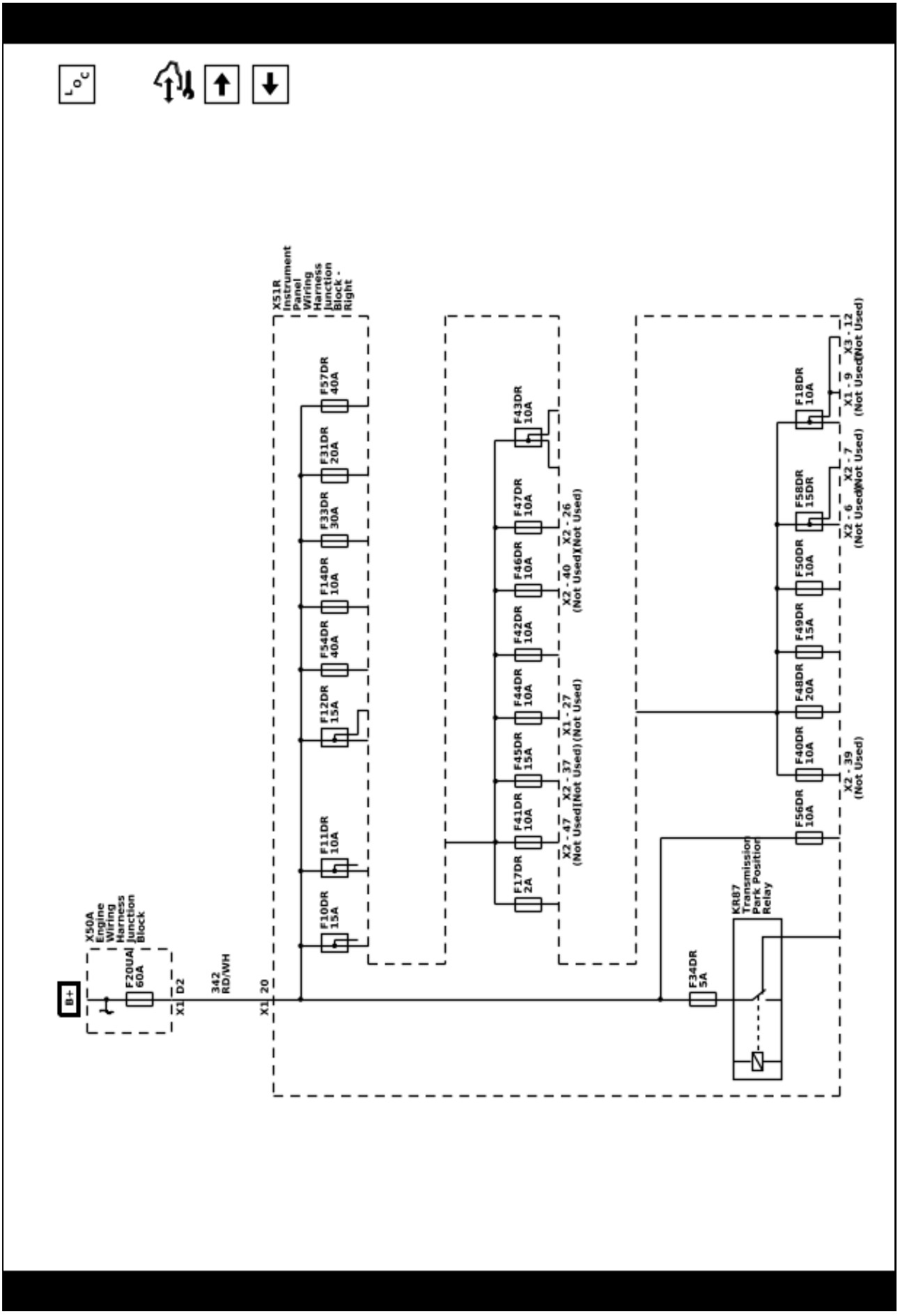
Power Distribution Schematics (F37UA, F40UA and F44UA Fuses)



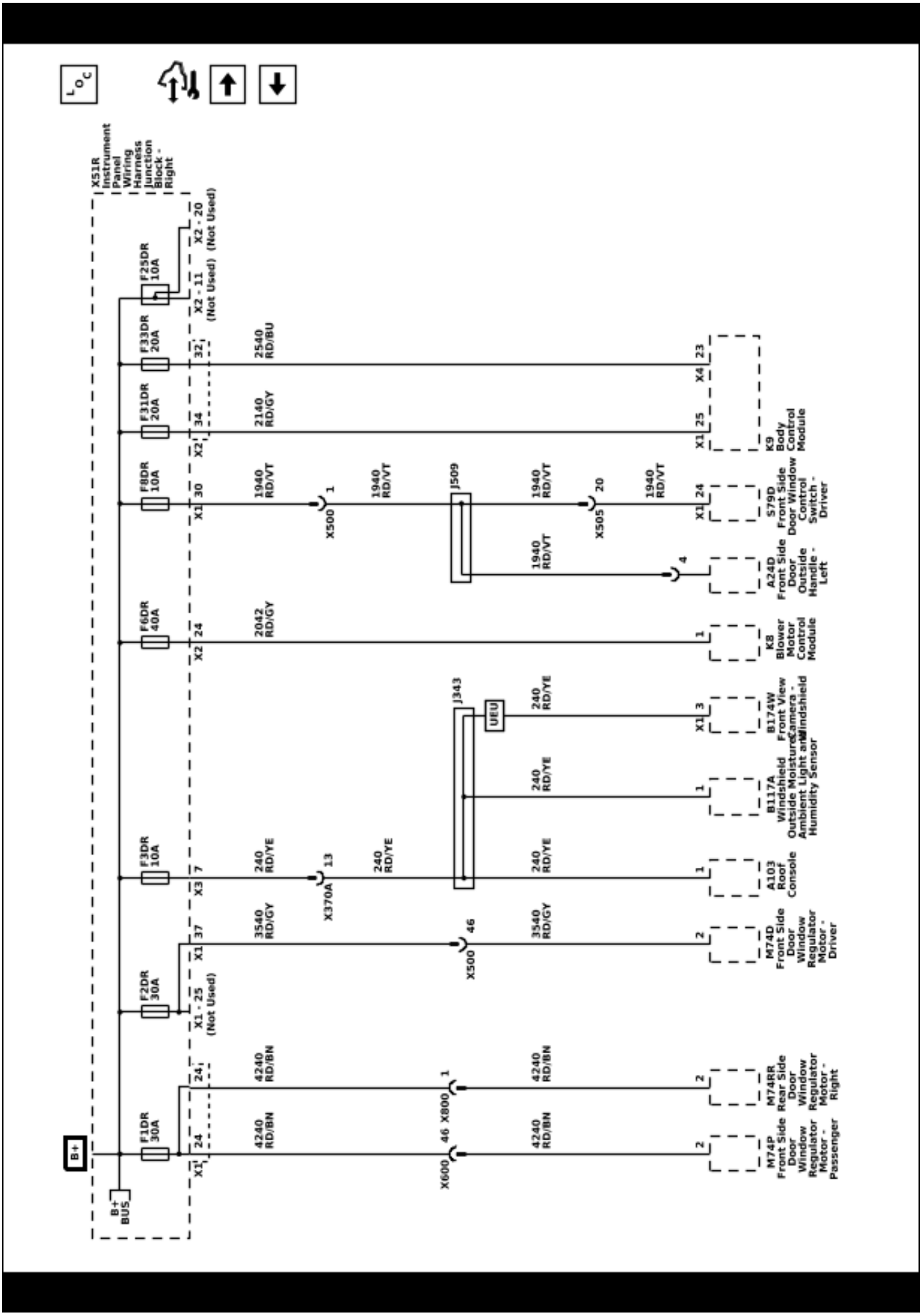
Power Distribution Schematics (X51R Instrument Panel Wiring Harness Junction Block - Right - B+ Bus (1 of 2))



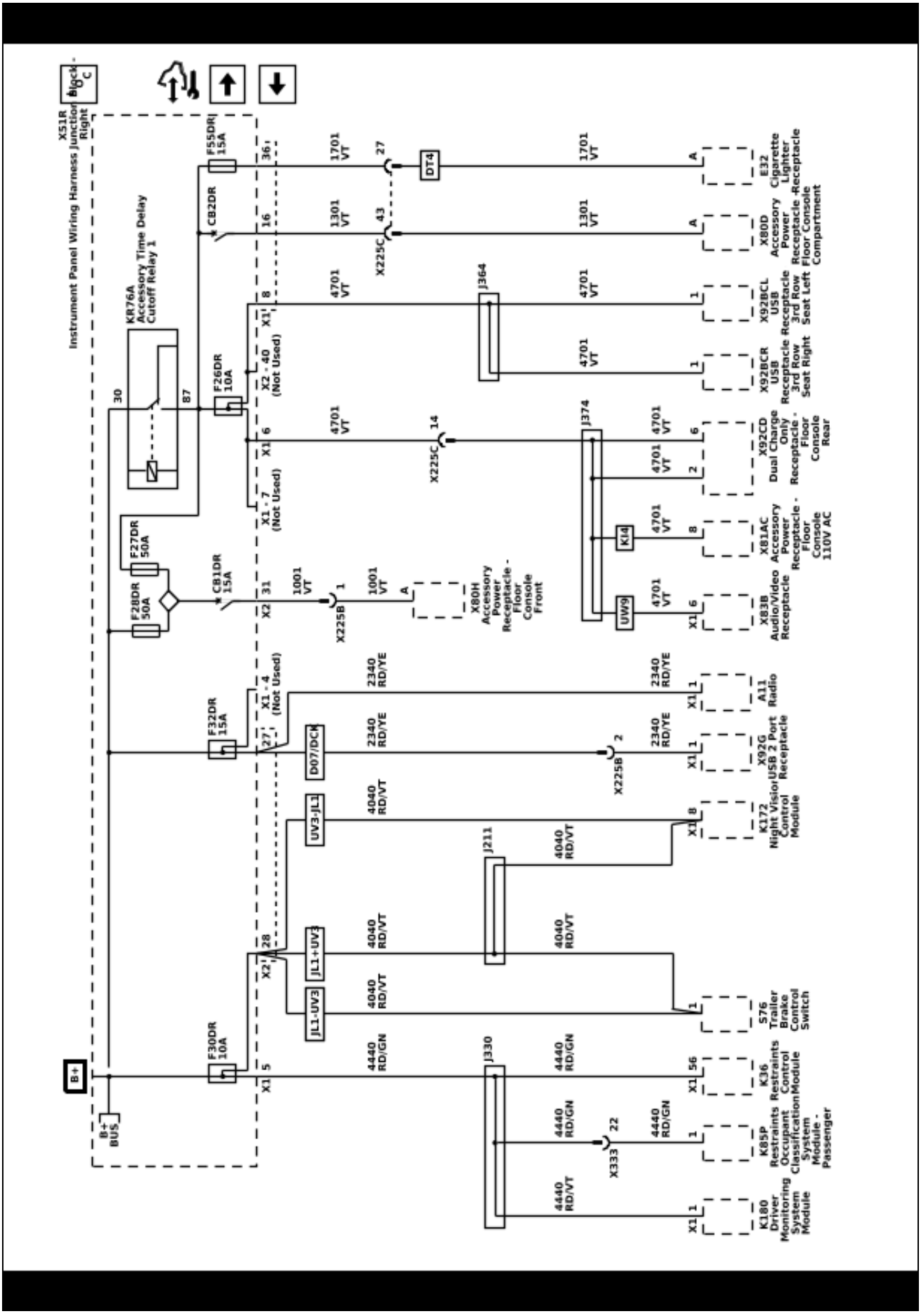
Power Distribution Schematics (X51R Instrument Panel Wiring Harness Junction Block - Right - B+ Bus (2 of 2))



Power Distribution Schematics (F1DR, F2DR, F3DR, F6DR, F8DR, F25DR, F31DR and F33DR Fuses)

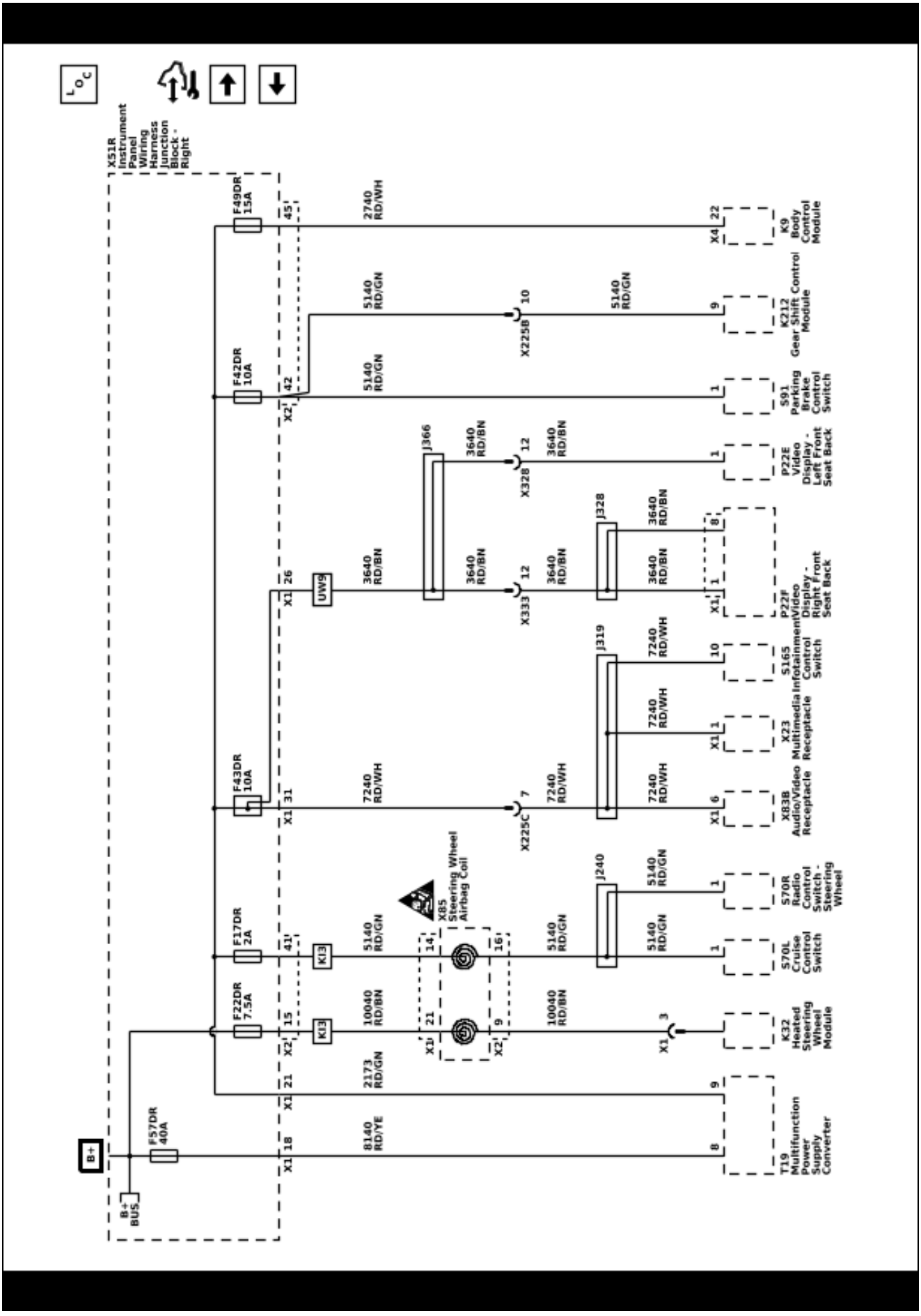


Power Distribution Schematics (CB1DR Circuit Breaker, F26DR, F27DR, F28DR, F30DR and F32DR Fuses)

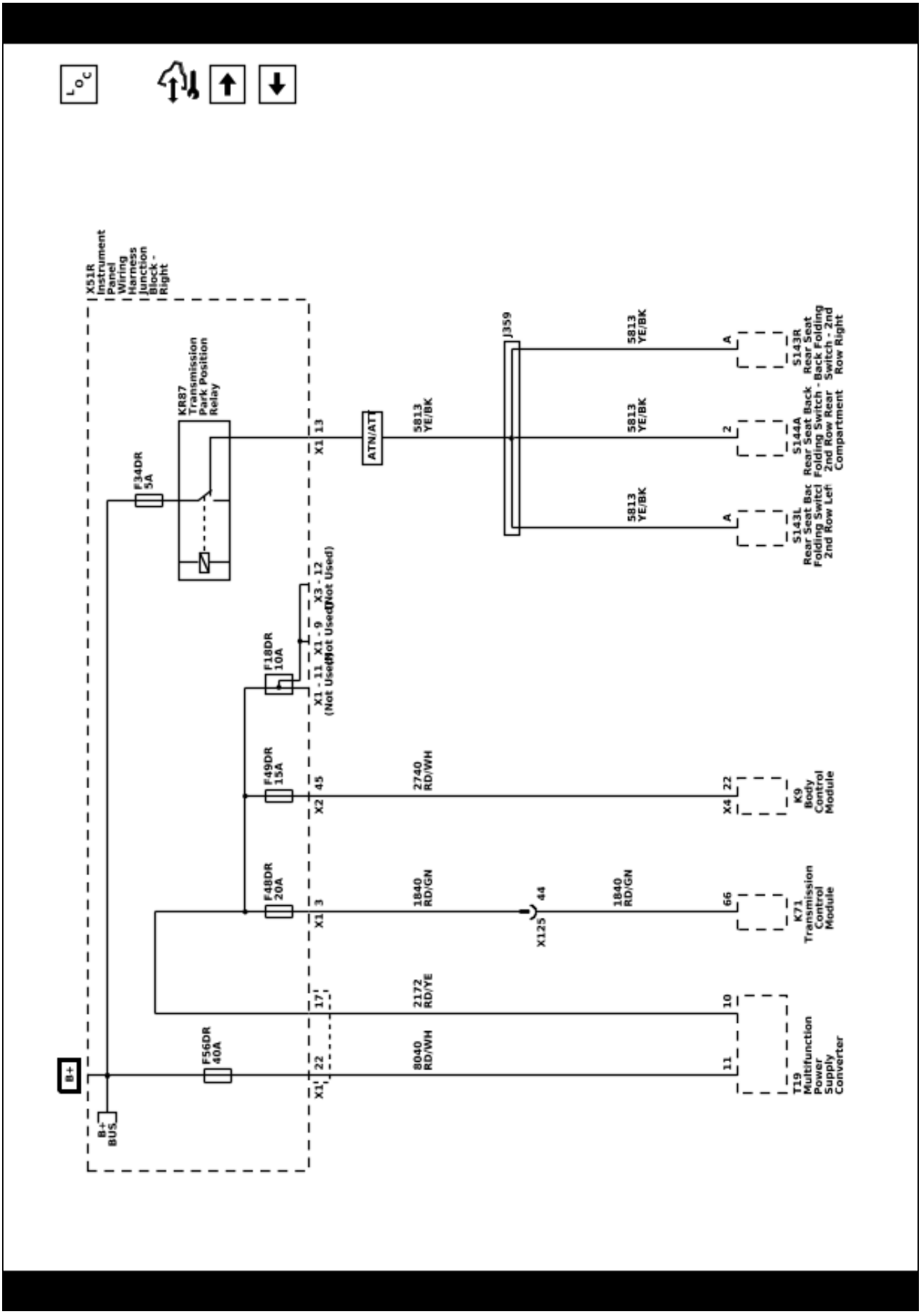


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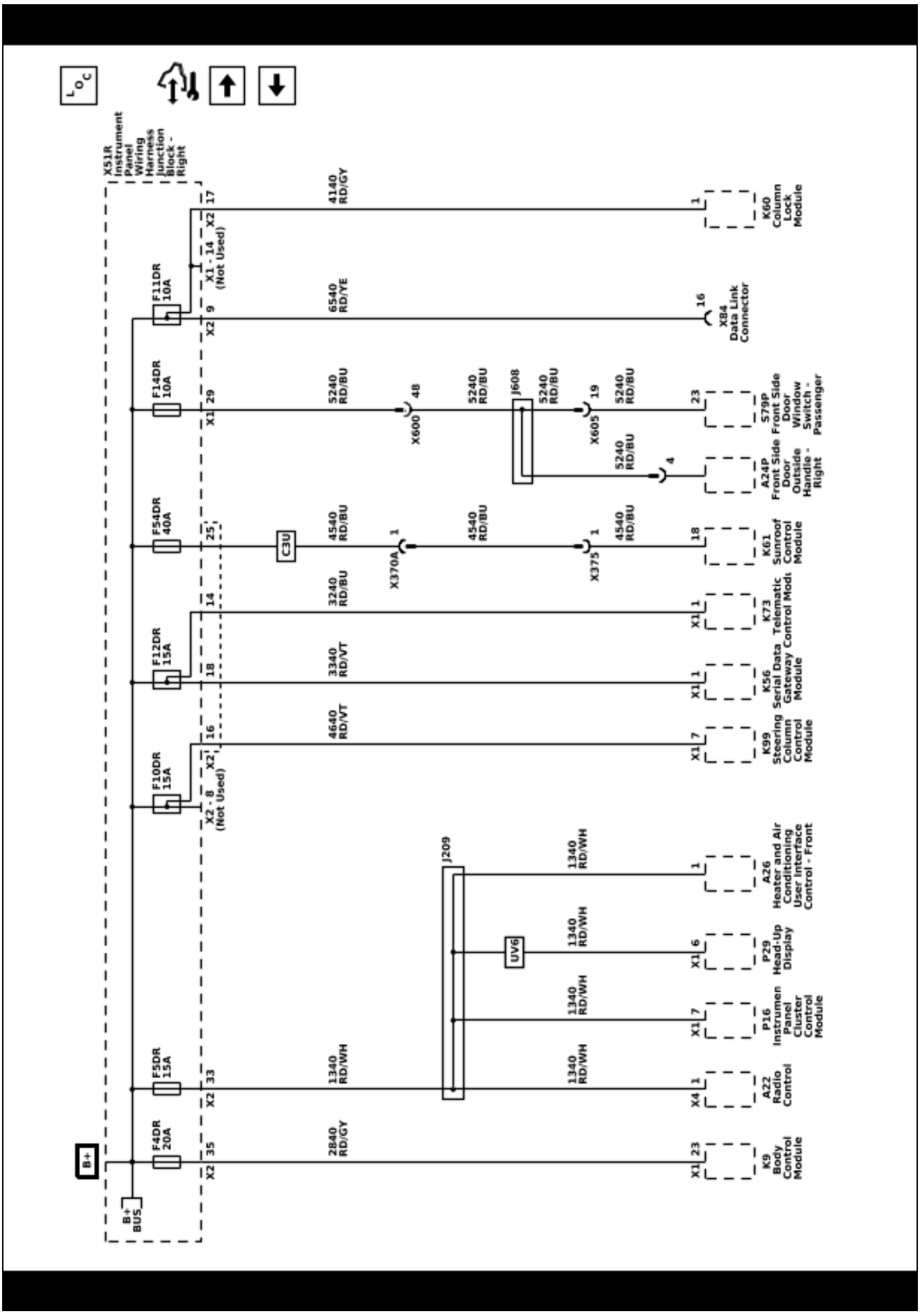
Power Distribution Schematics (F17DR, F22DR, F42DR, F43DR, F49DR and F57DR Fuses)



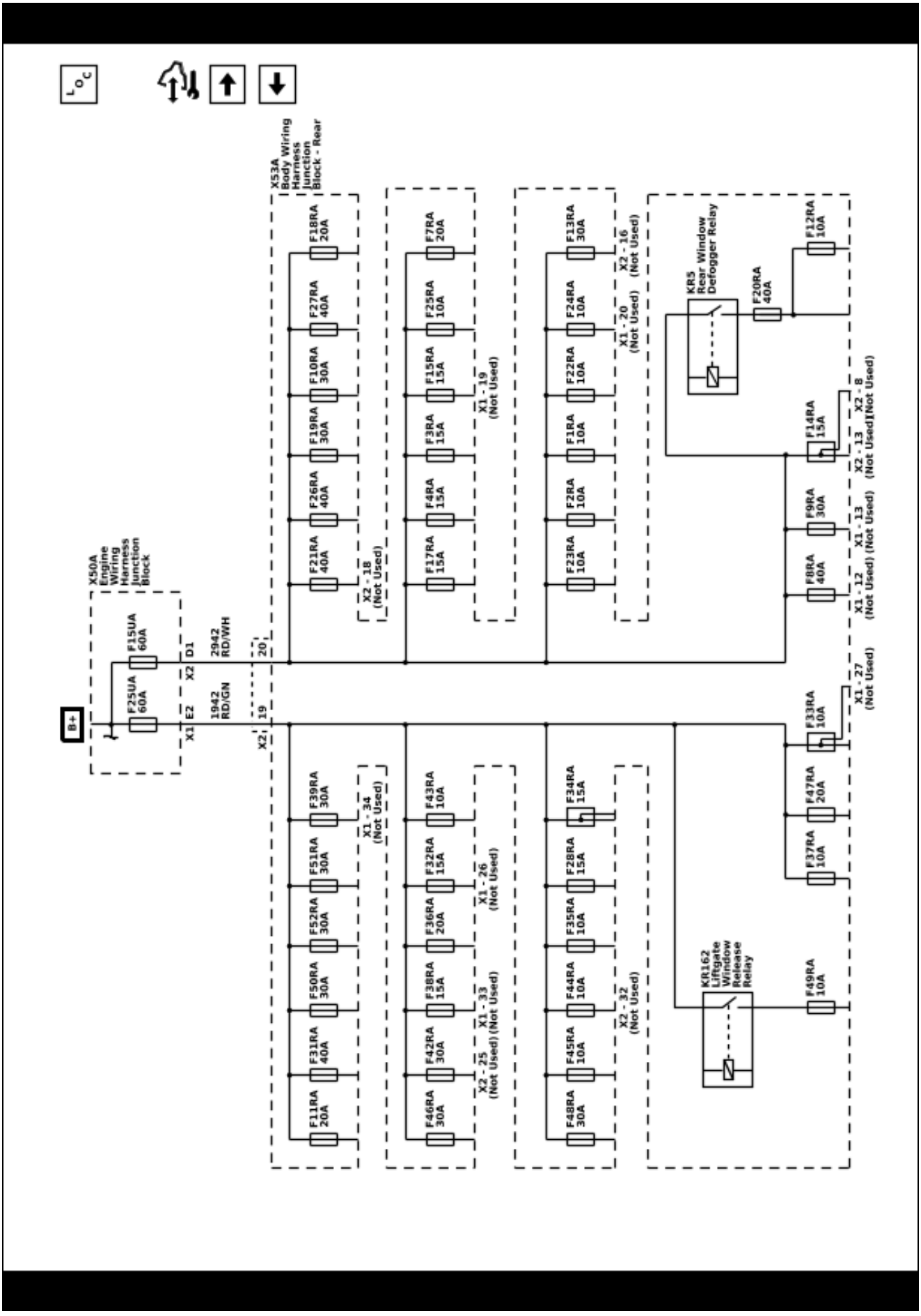
Power Distribution Schematics (F18DR, F34DR, F48DR, F49DR and F56DR Fuses)



Power Distribution Schematics (F4DR, F5DR, F10DR, F11DR, F12DR, F14DR and F54DR)

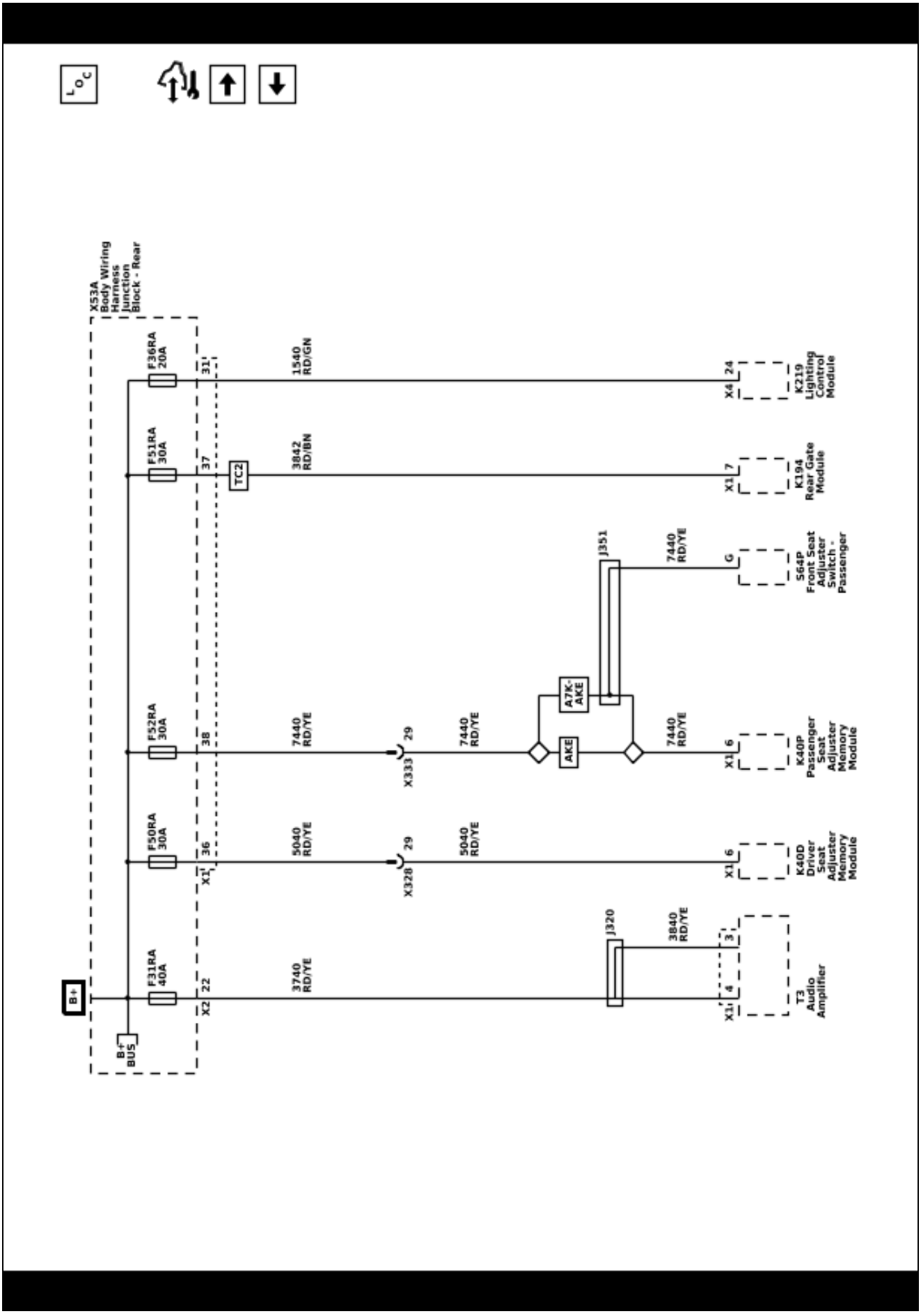


Power Distribution Schematics (X53A Body Wiring Harness Junction Block - Rear - B+ Bus)

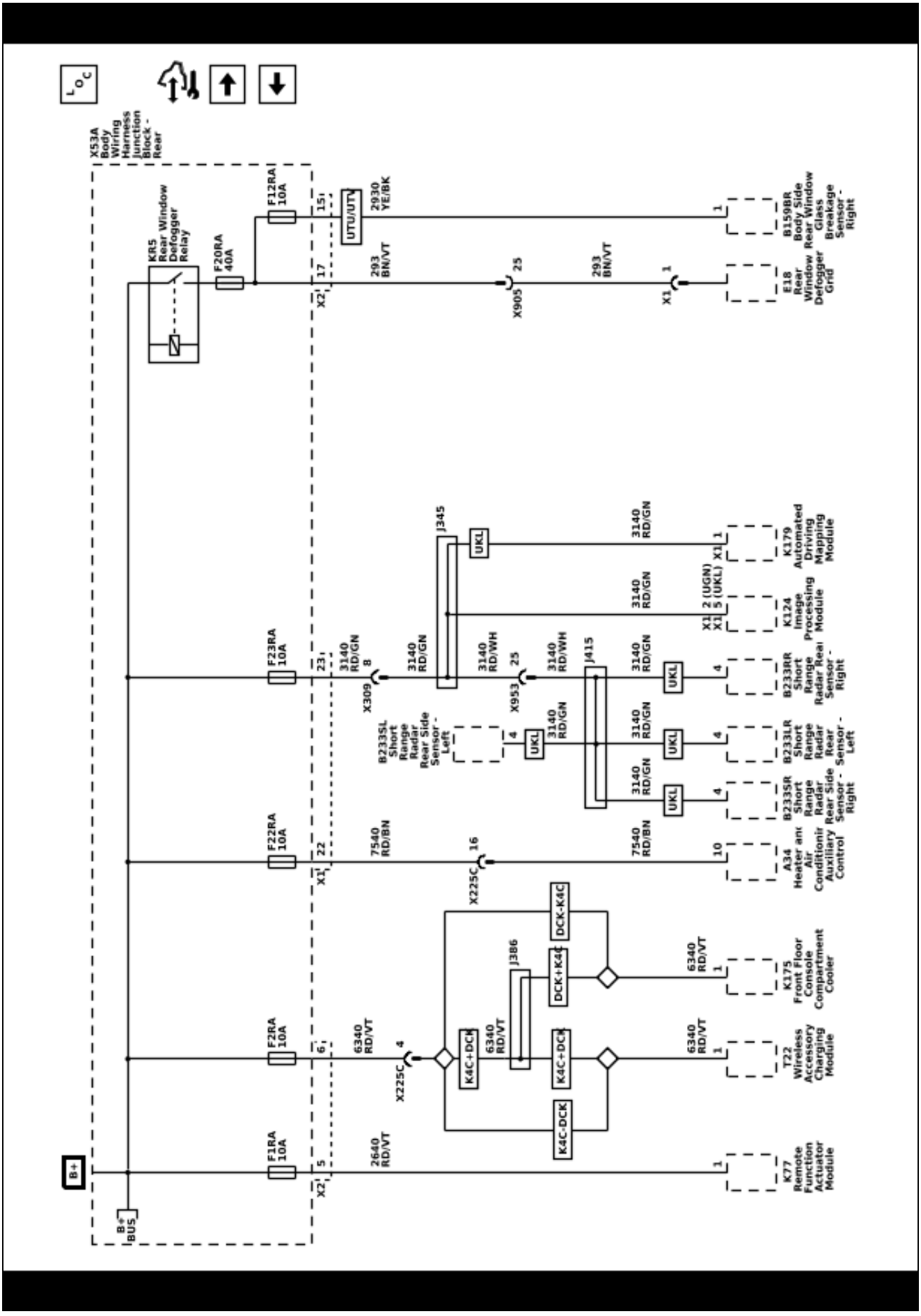


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Power Distribution Schematics (F31RA, F36RA, F38RA, F50RA, F51RA and F52RA Fuses)

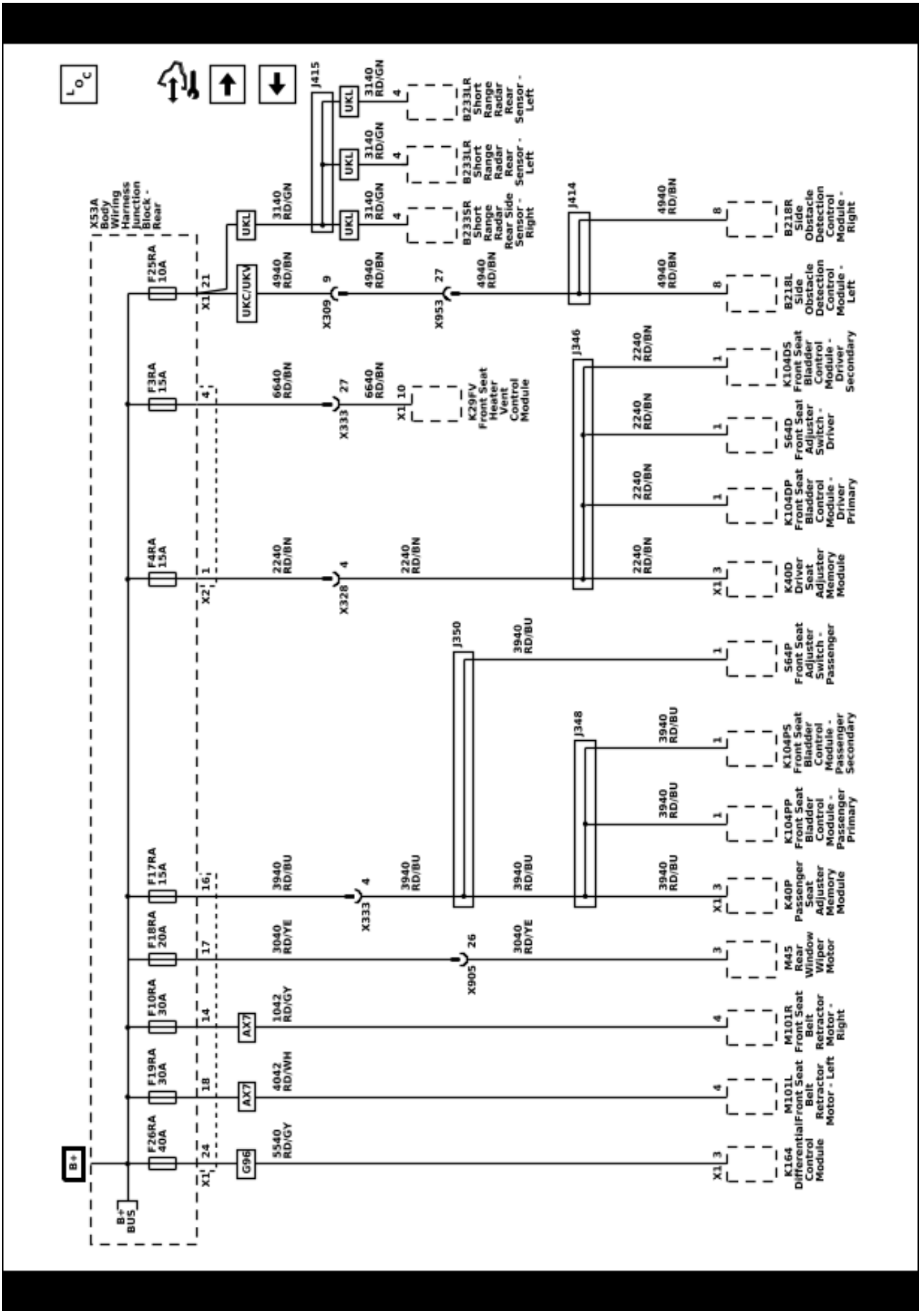


Power Distribution Schematics (F1RA, F2RA, F12RA, F20RA, F22RA and F23RA Fuses)

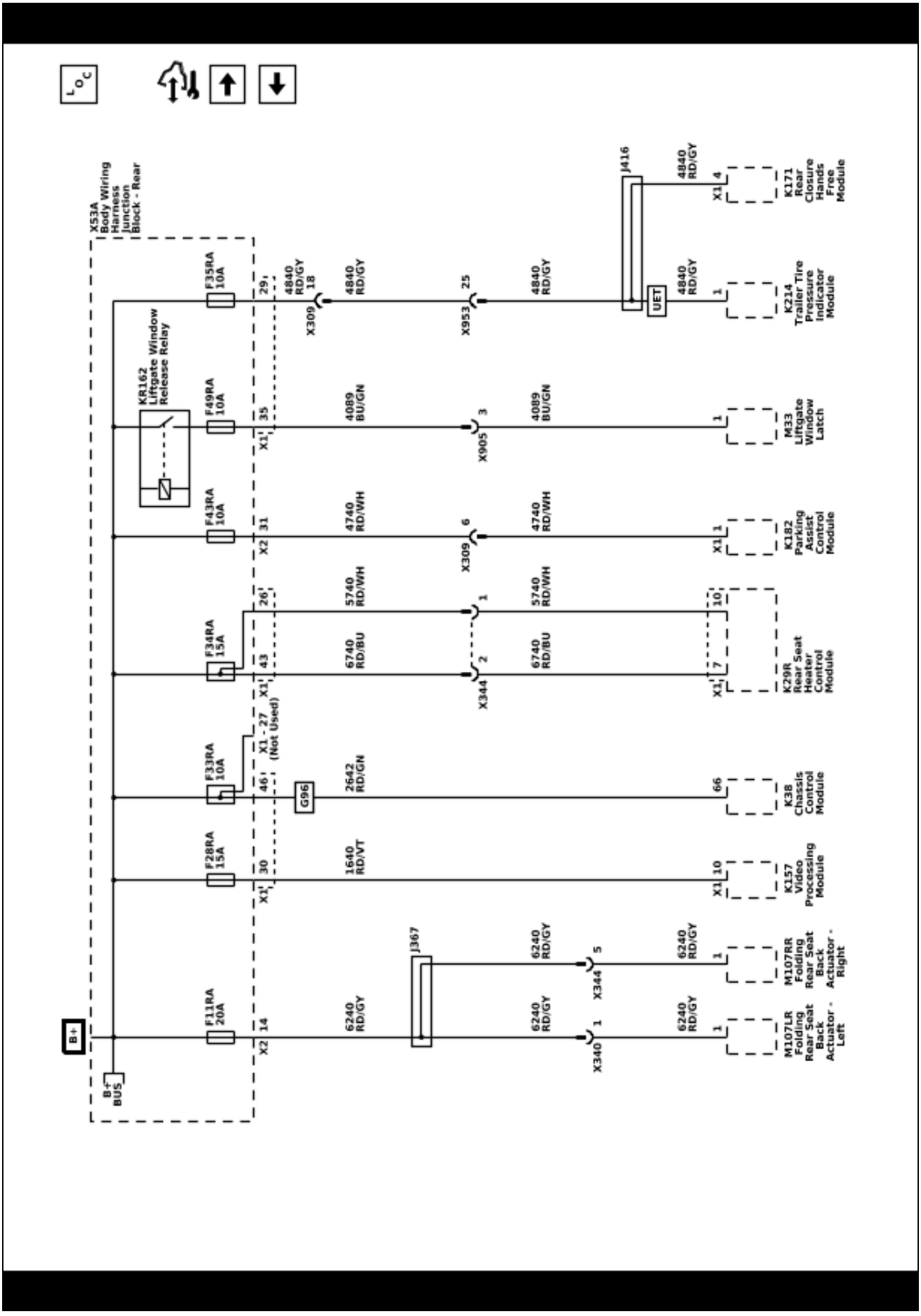


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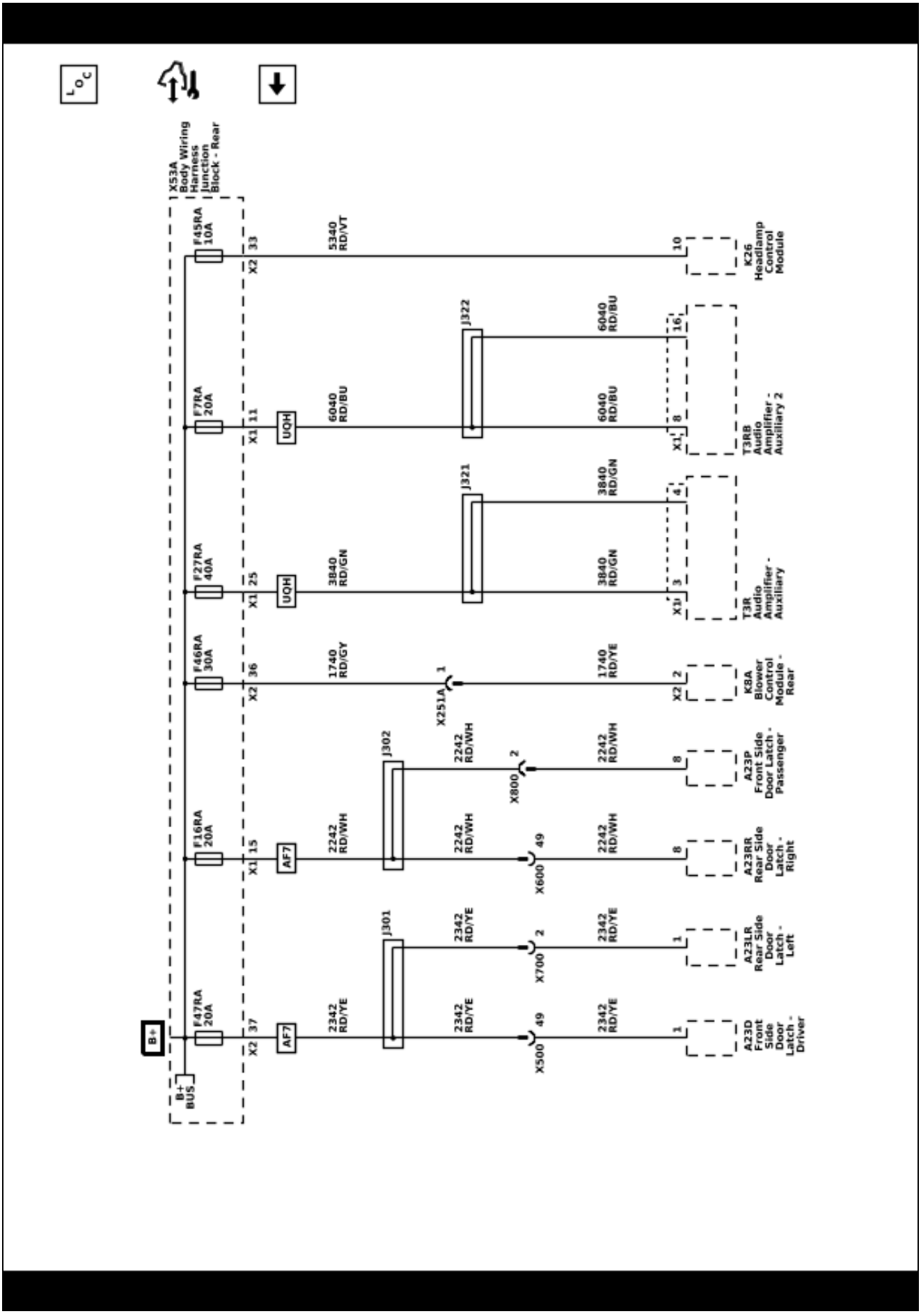
Power Distribution Schematics (F3RA, F4RA, F10RA, F17RA, F18RA, F19RA, F25RA and F26RA Fuses)



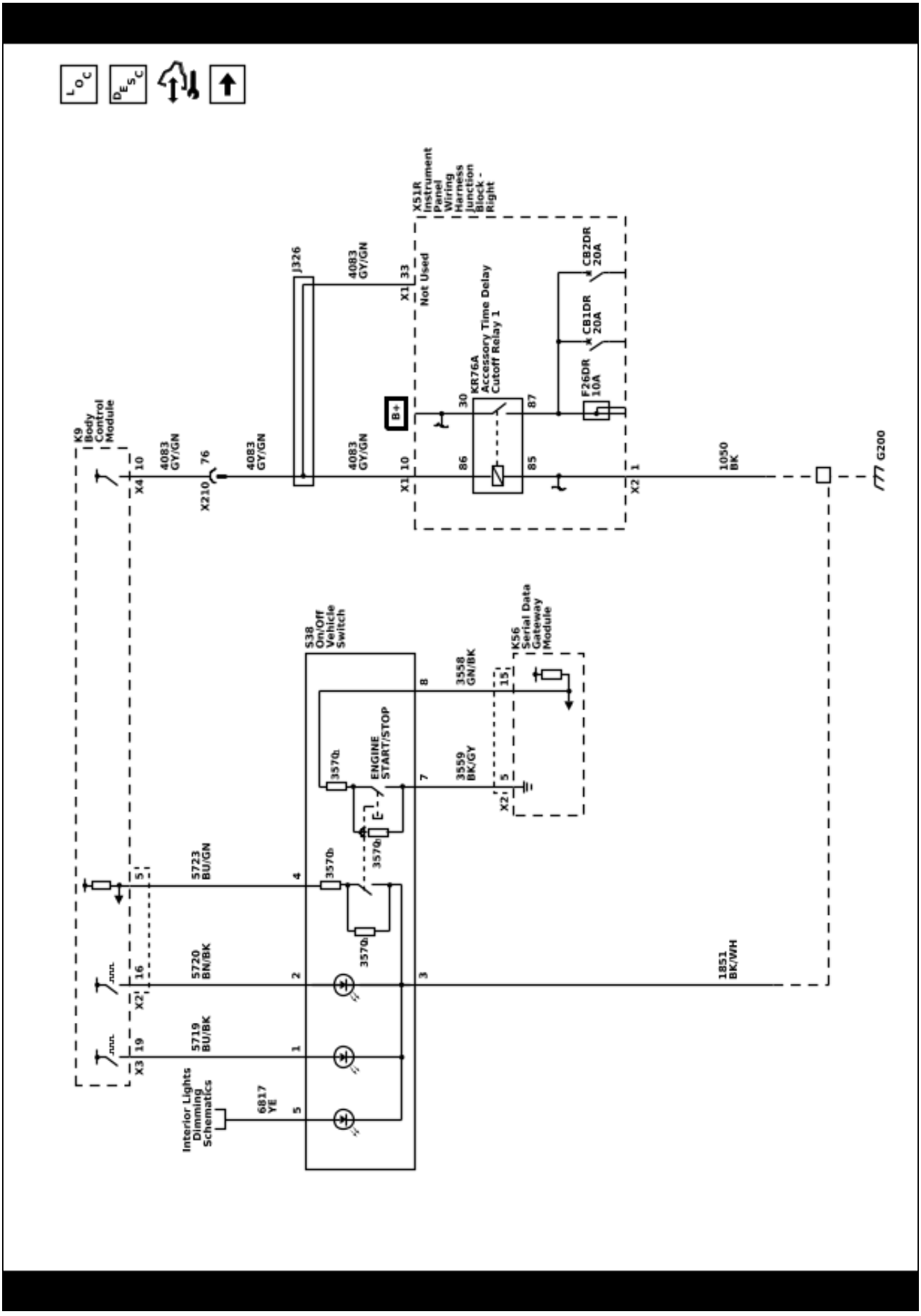
Power Distribution Schematics (F11RA, F28RA, F34RA, F35RA, F43RA and F49RA Fuses)



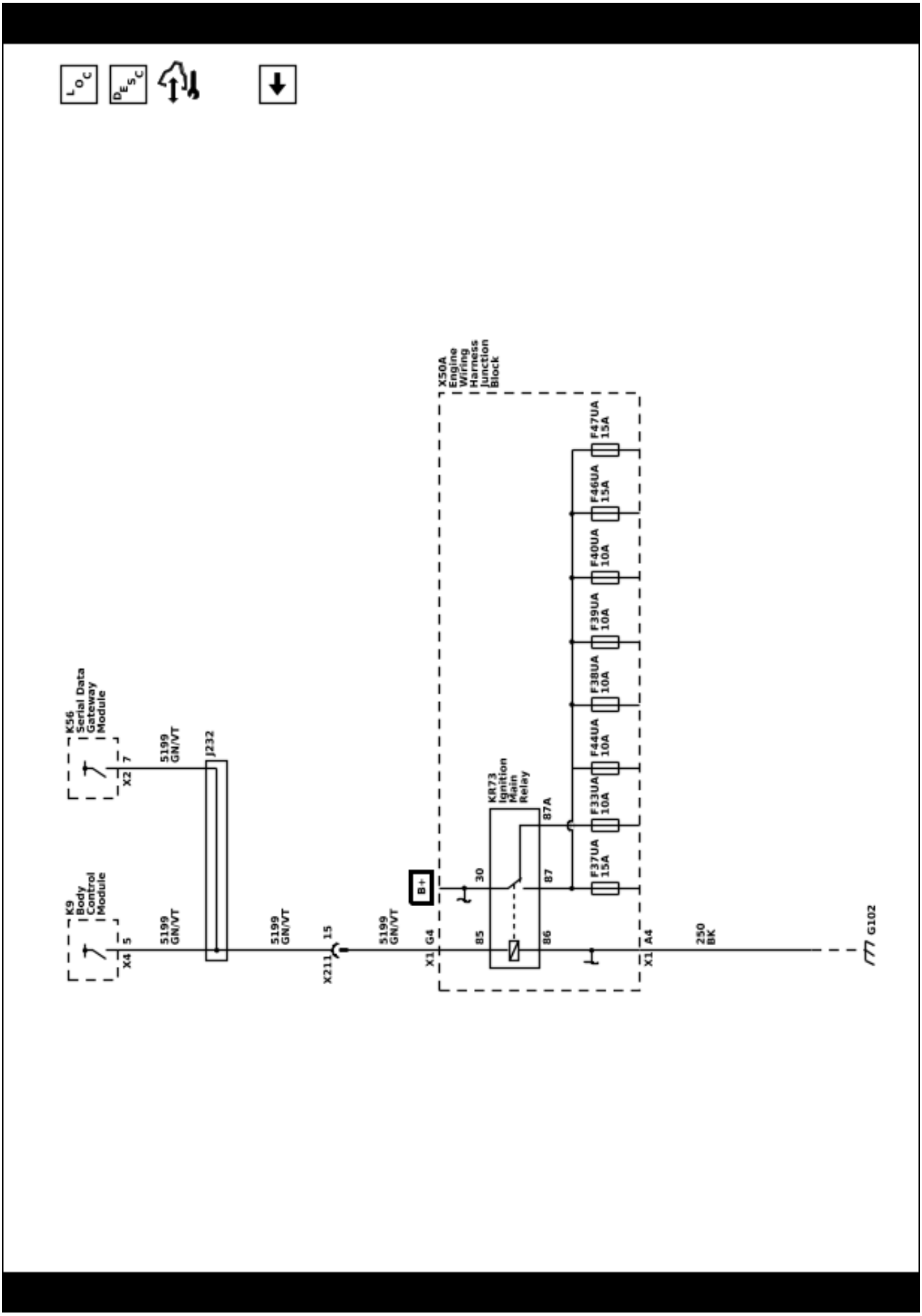
Power Distribution Schematics (F7RA, F16RA, F27RA, F45RA, F46RA, F47RA and F54RA Fuses)



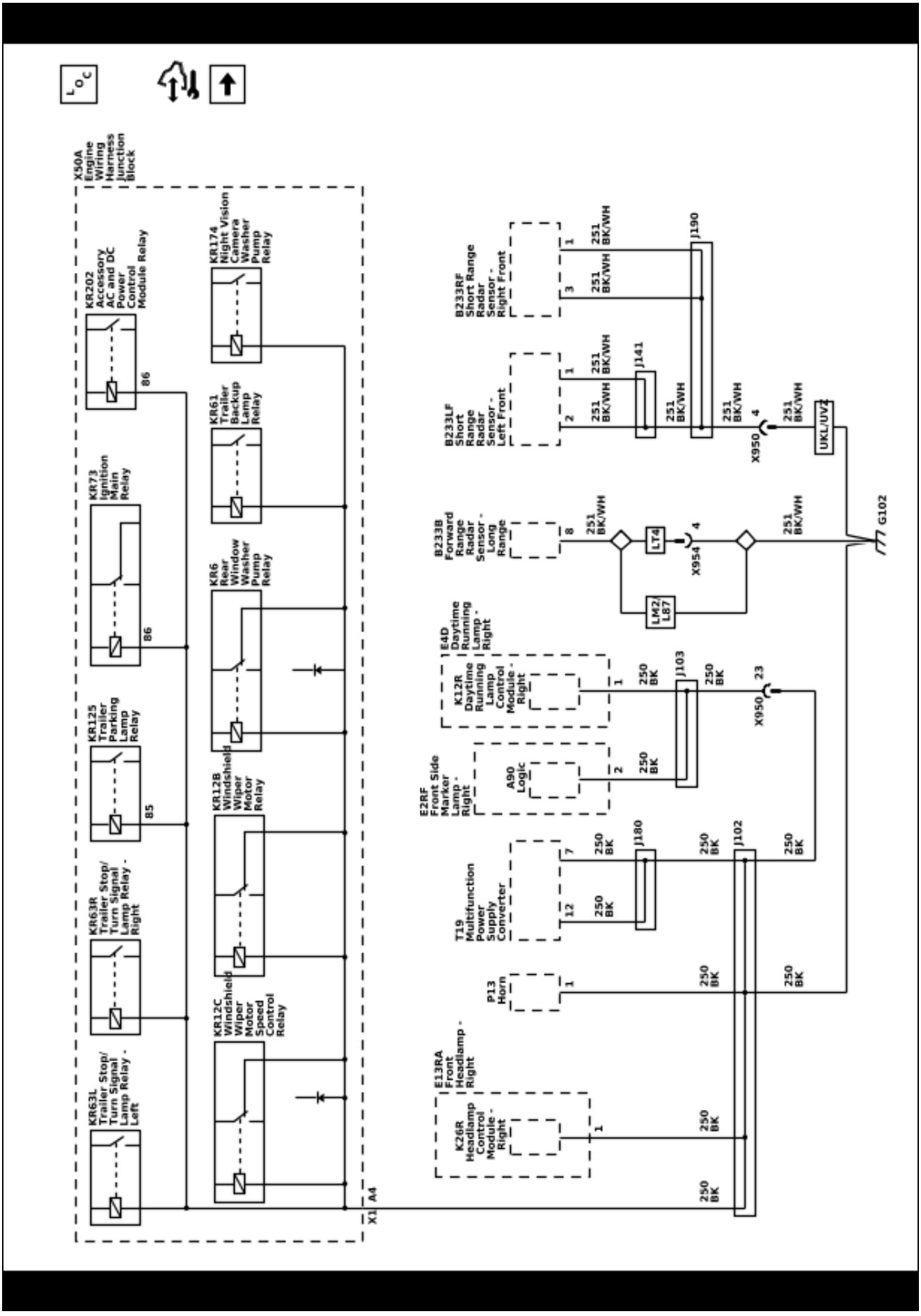
Power Moding Schematics (On/Off Vehicle Switch and Retained Accessory Power)



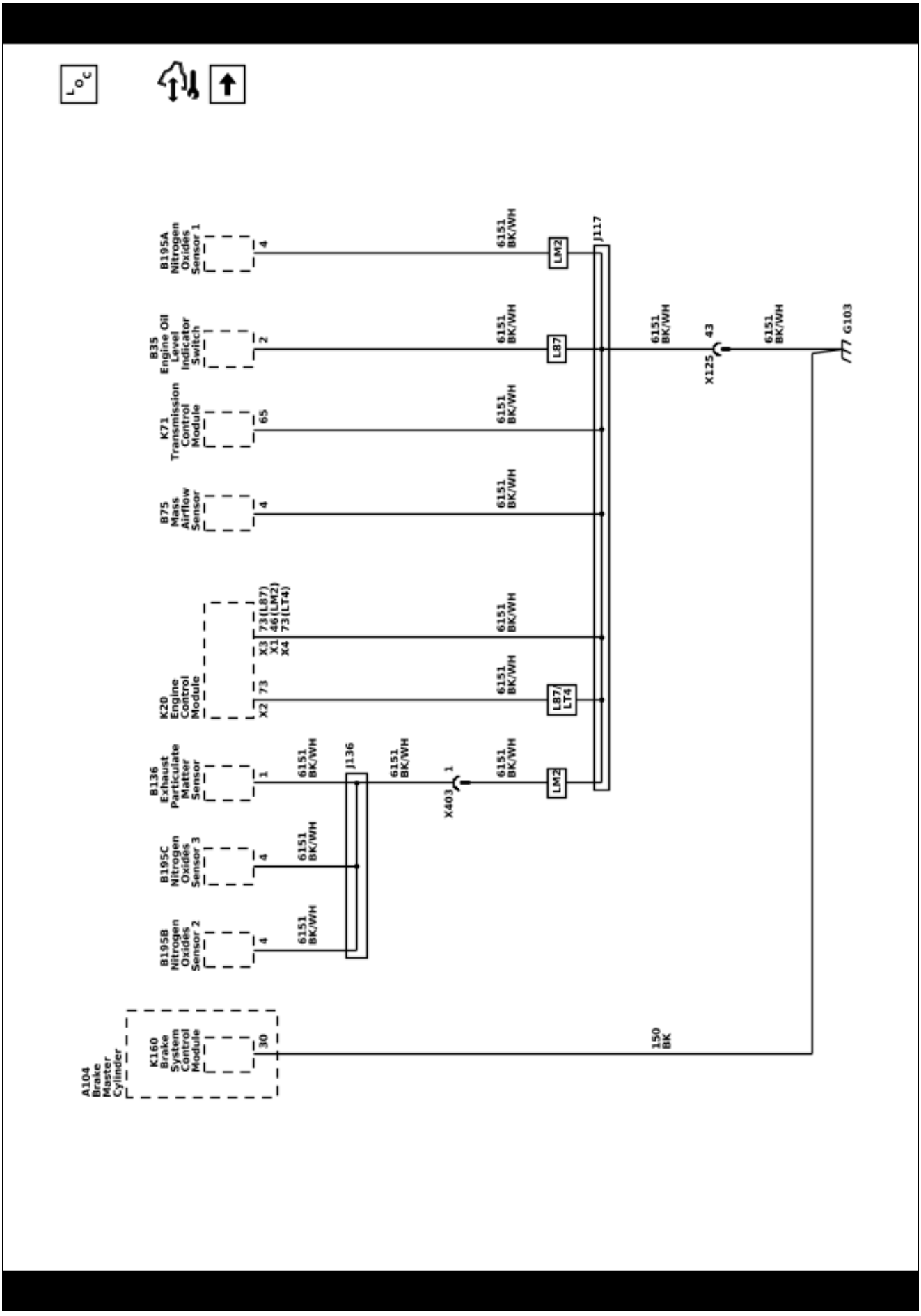
Power Moding Schematics (Ignition Main Relay)



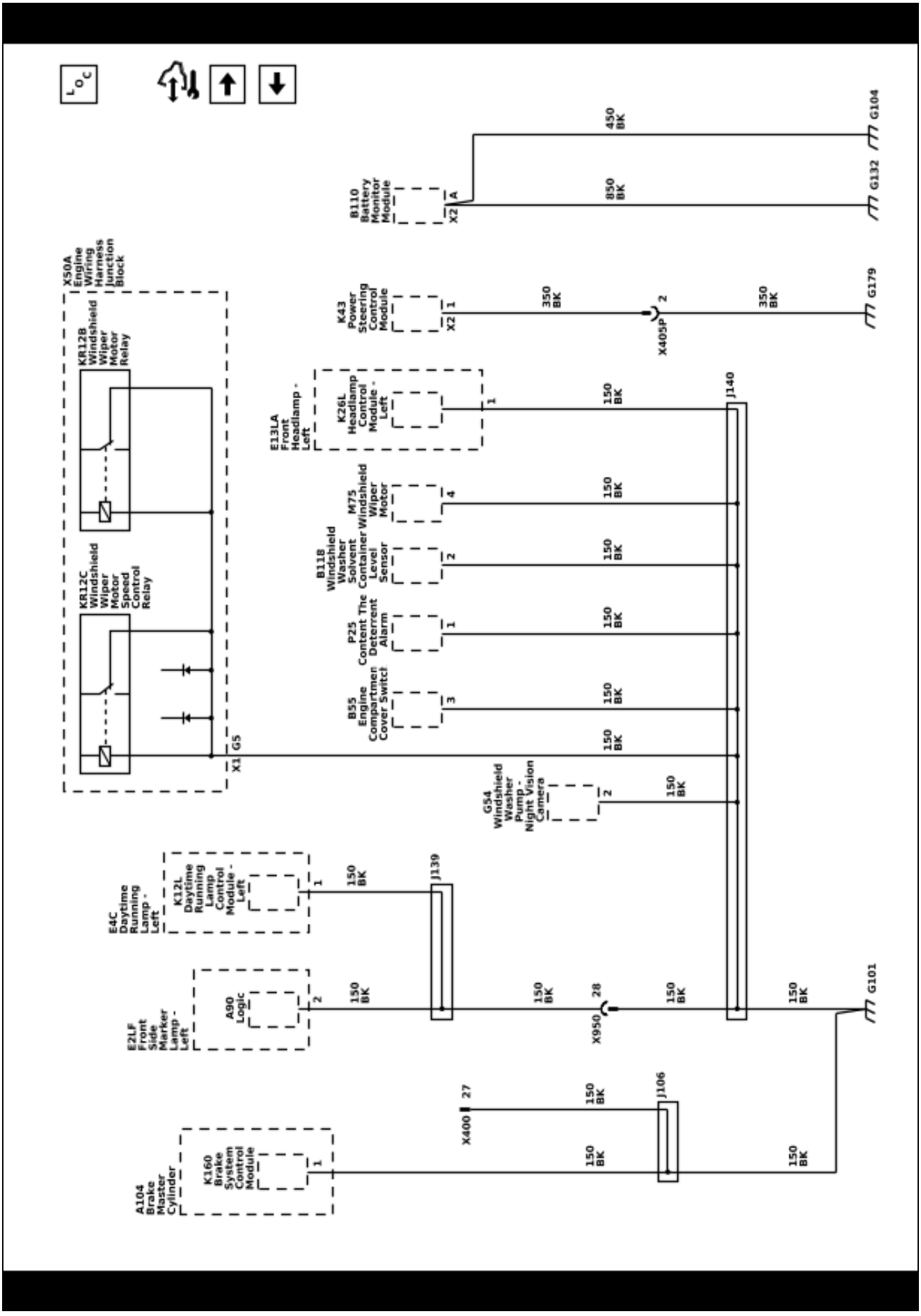
Ground Distribution Schematics (G102)



Ground Distribution Schematics (G103)

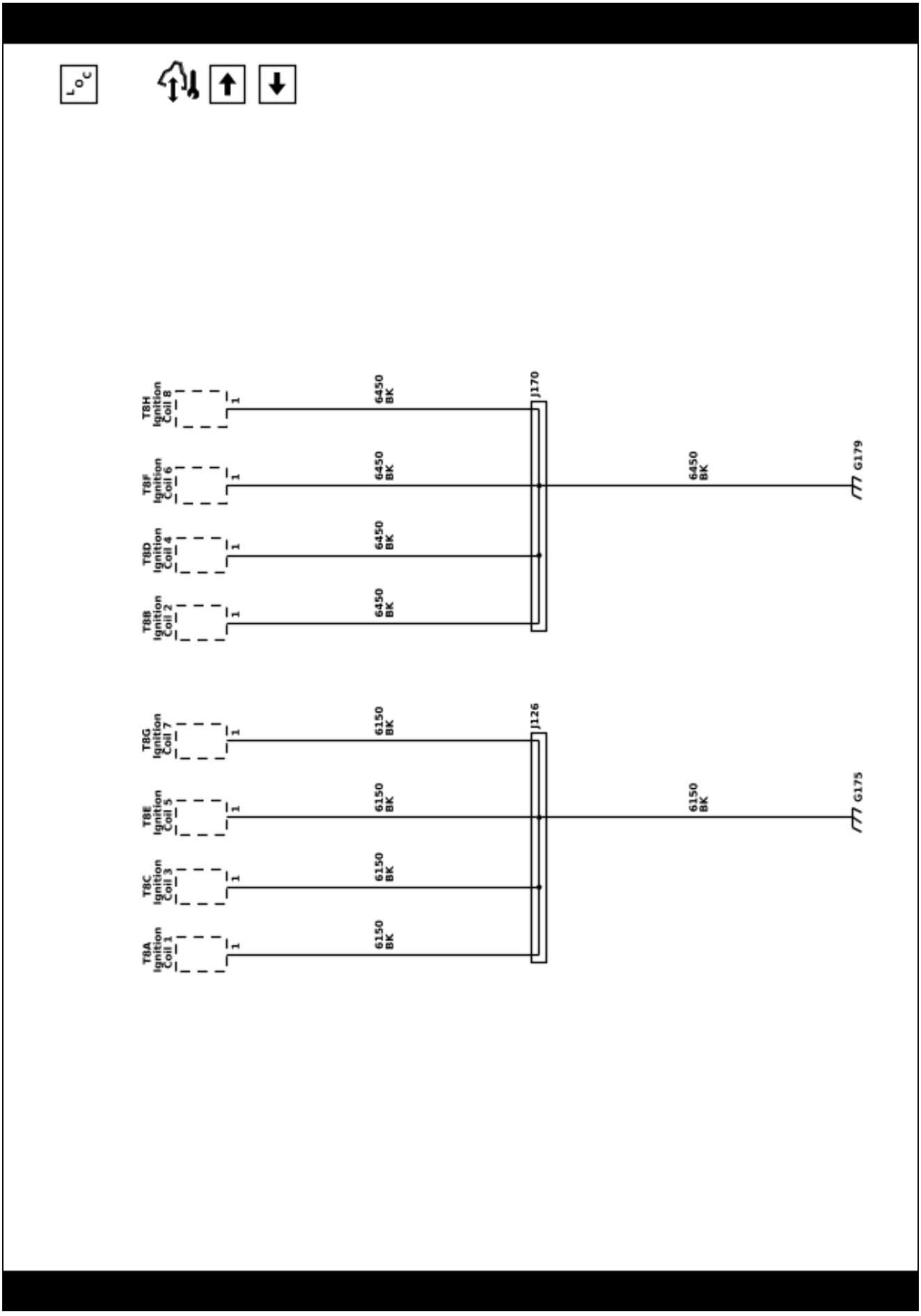


Ground Distribution Schematics (G101, G104, G132 and G176)

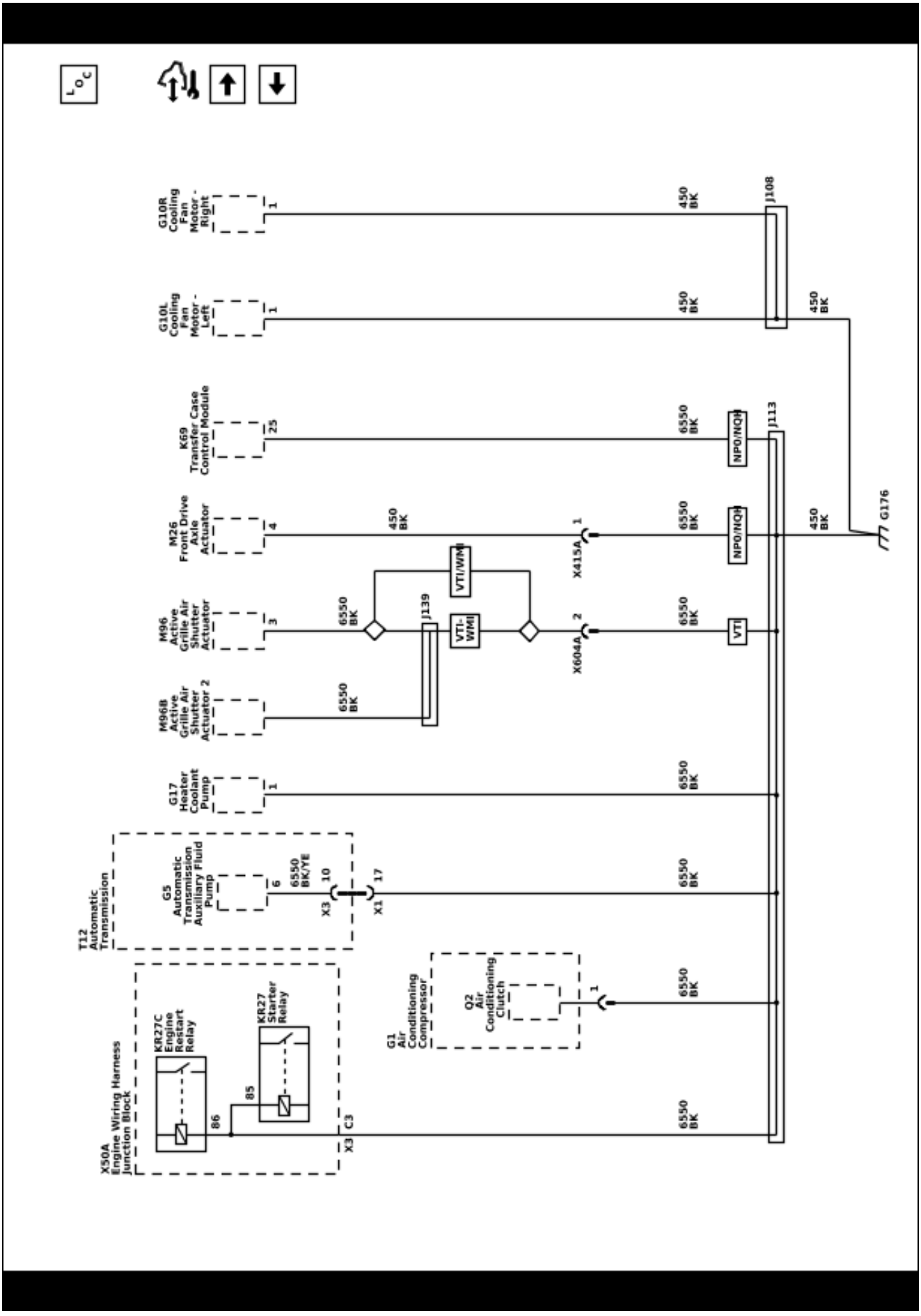


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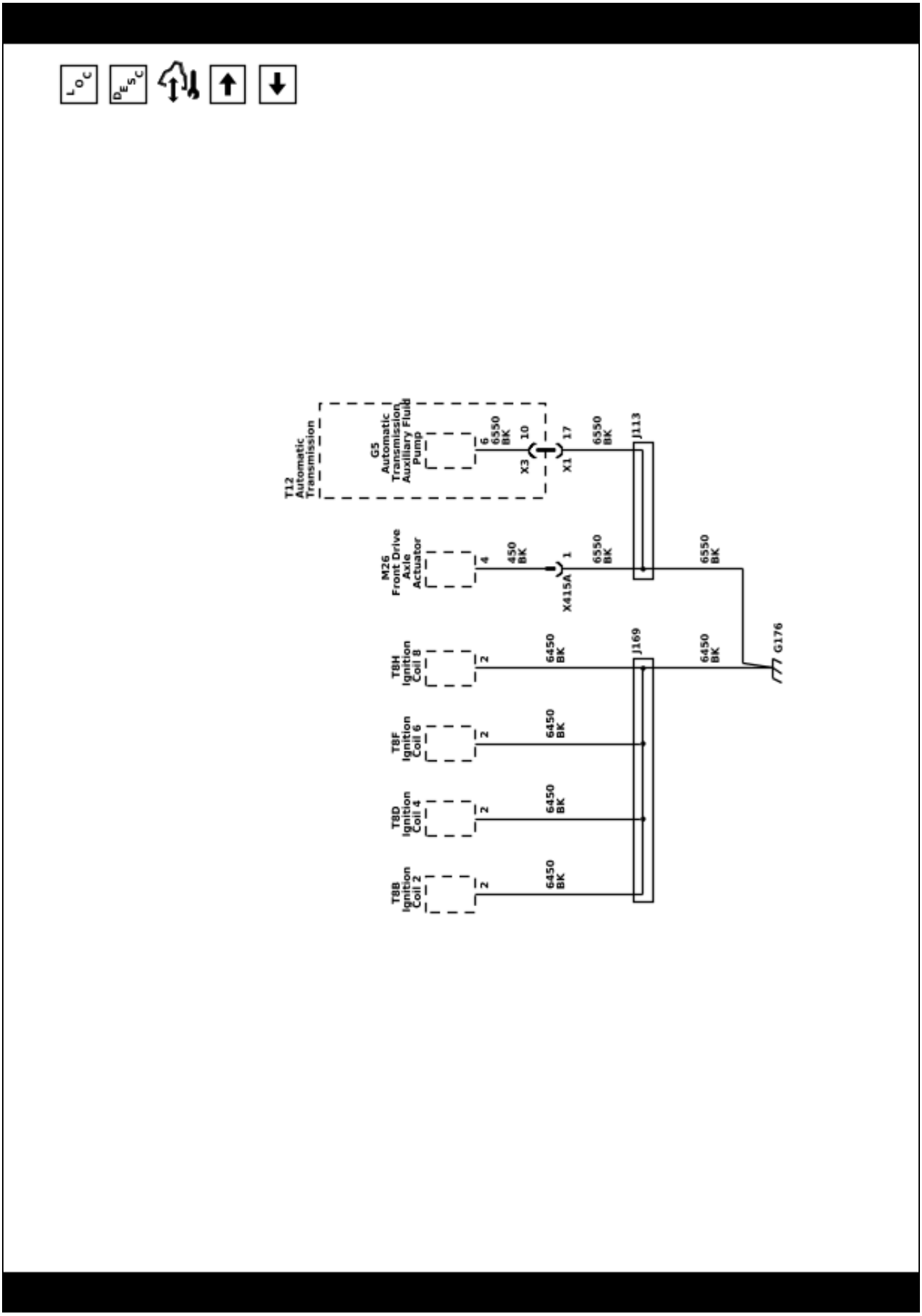
Ground Distribution Schematics (G175 and G179 (L87))



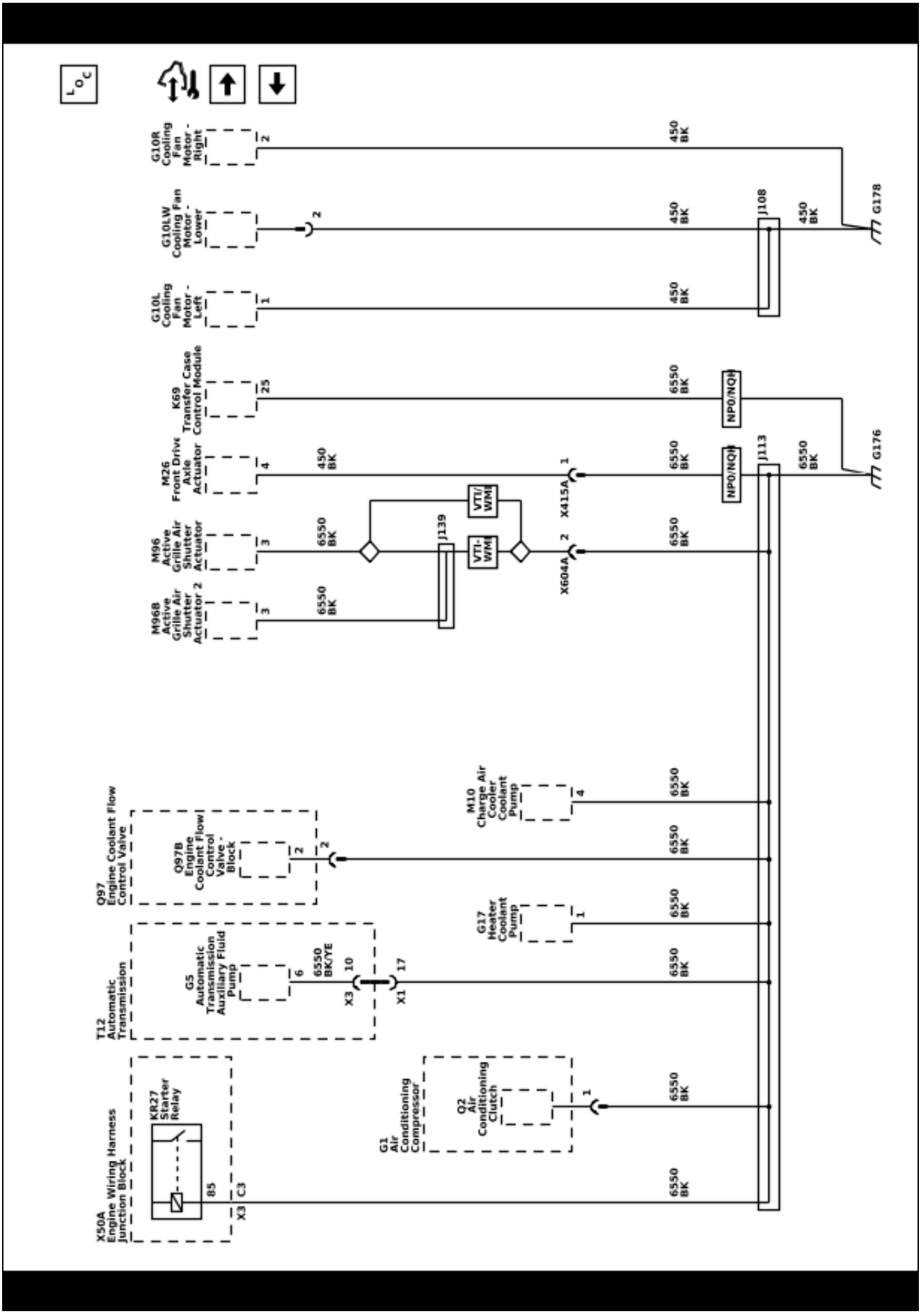
Ground Distribution Schematics (G176 (L87))



Ground Distribution Schematics (G176 (LT4))

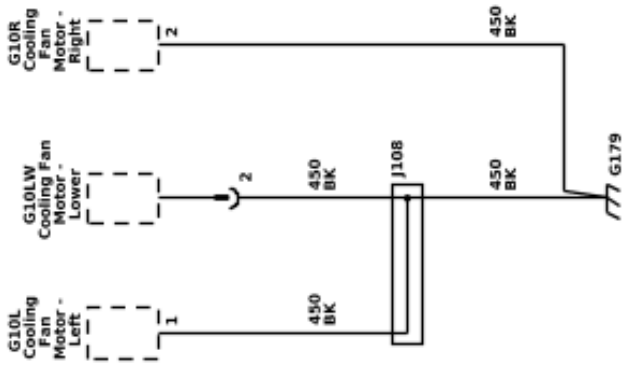


Ground Distribution Schematics (G176 and G178 (LM2))

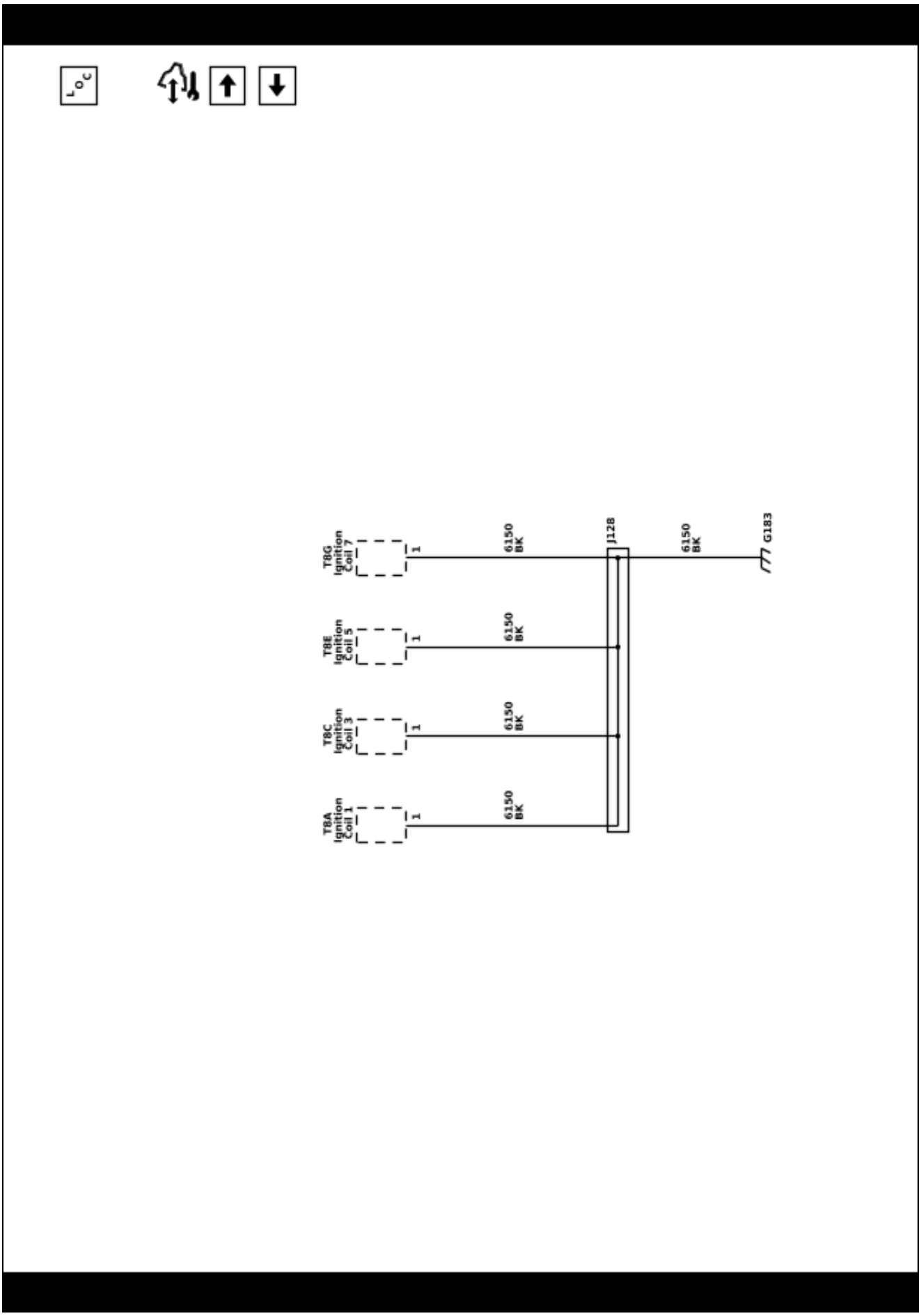


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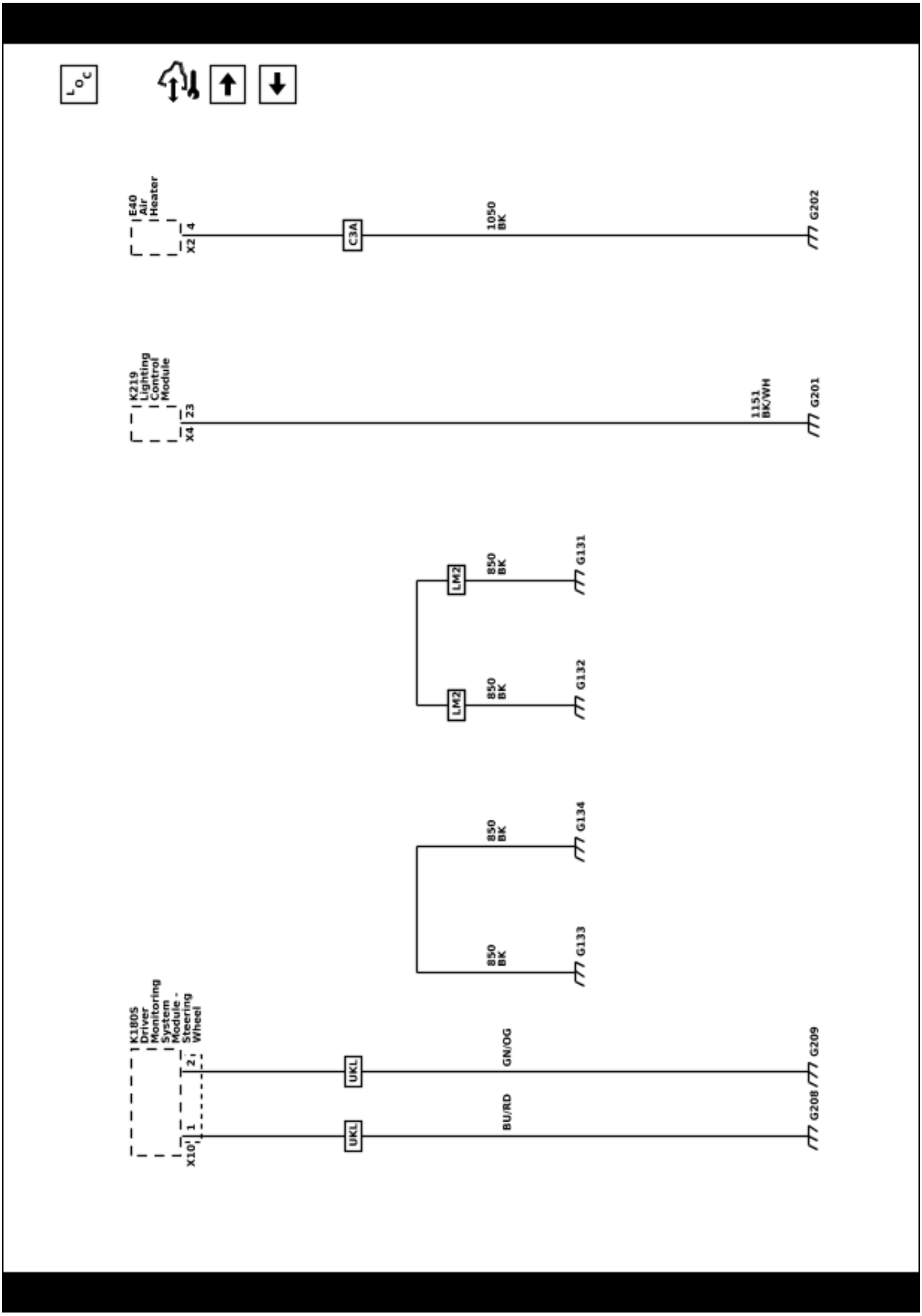
Ground Distribution Schematics (G179 (LT4))



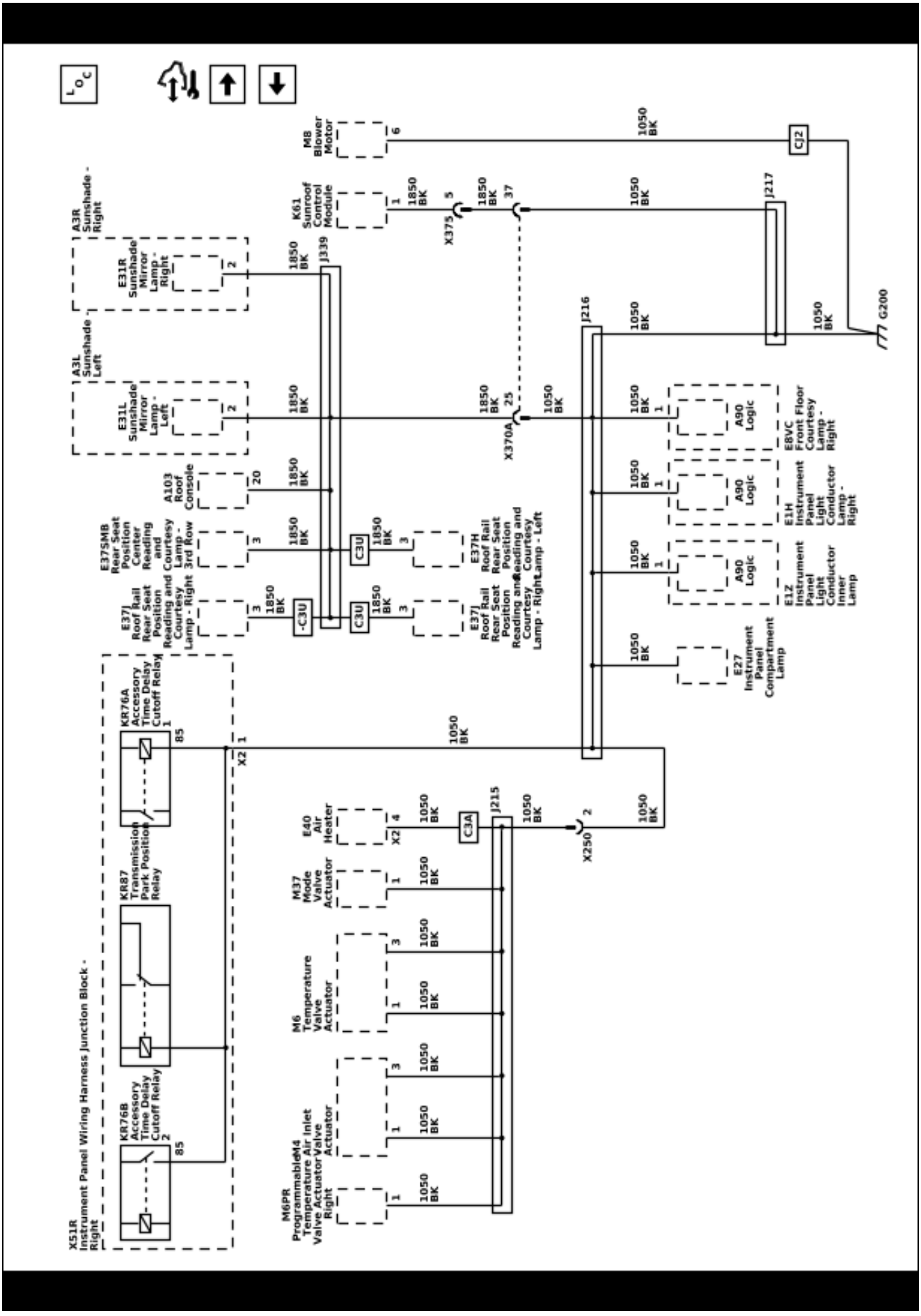
Ground Distribution Schematics (G183 (LT4))



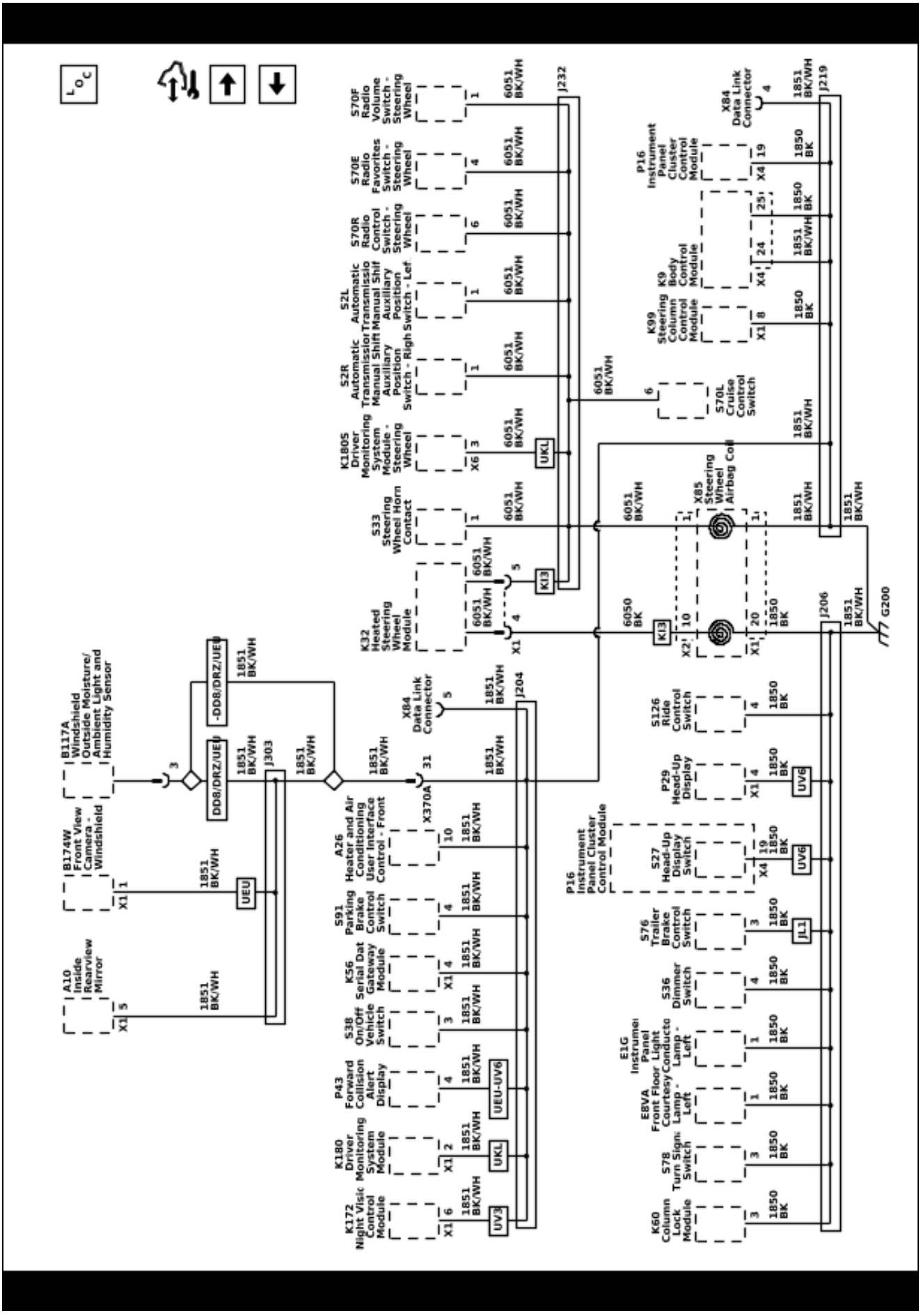
Ground Distribution Schematics (G131, G133, G134, G135, G201, 202, G208 and G209)



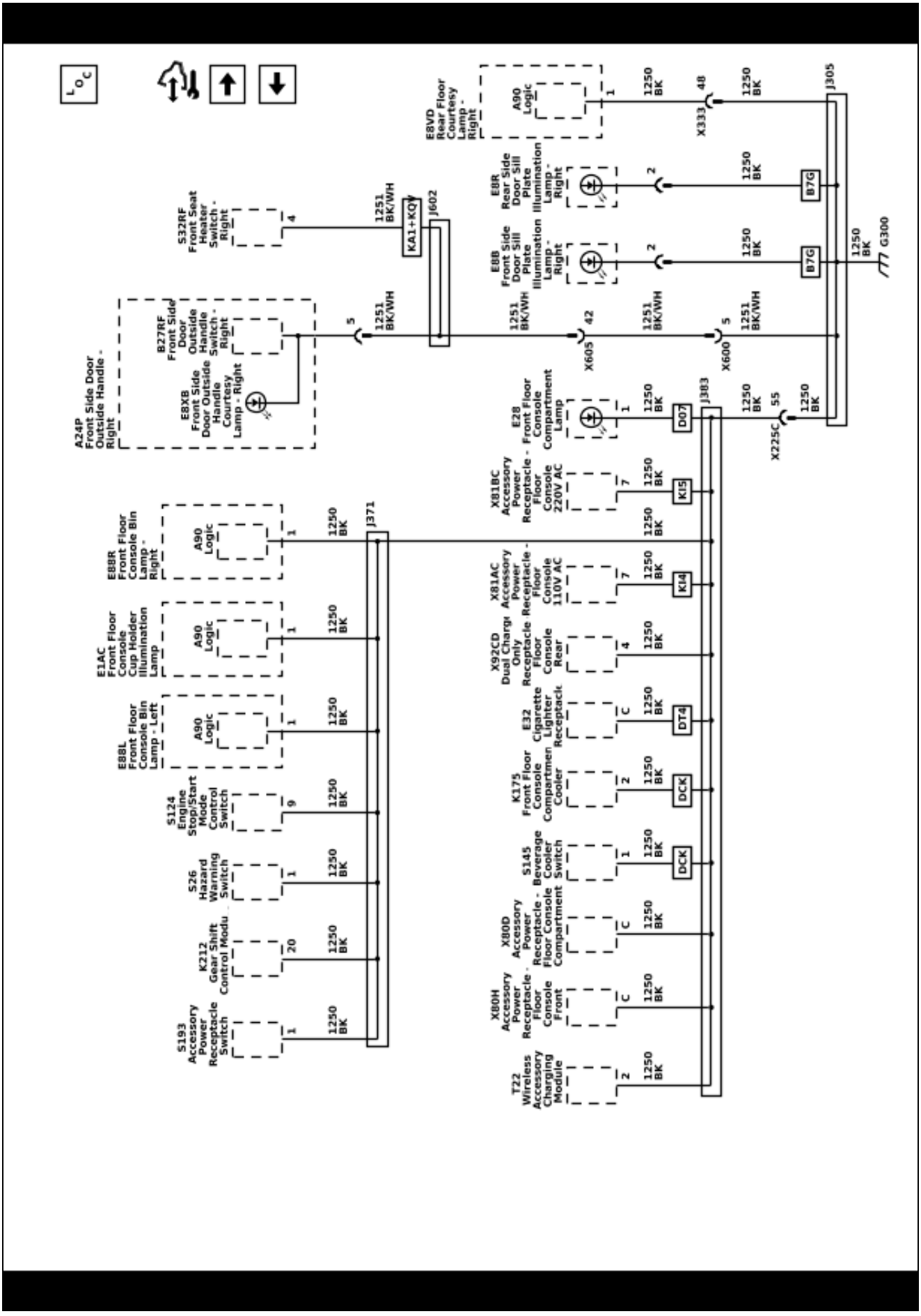
Ground Distribution Schematics (G200 (1 of 2))



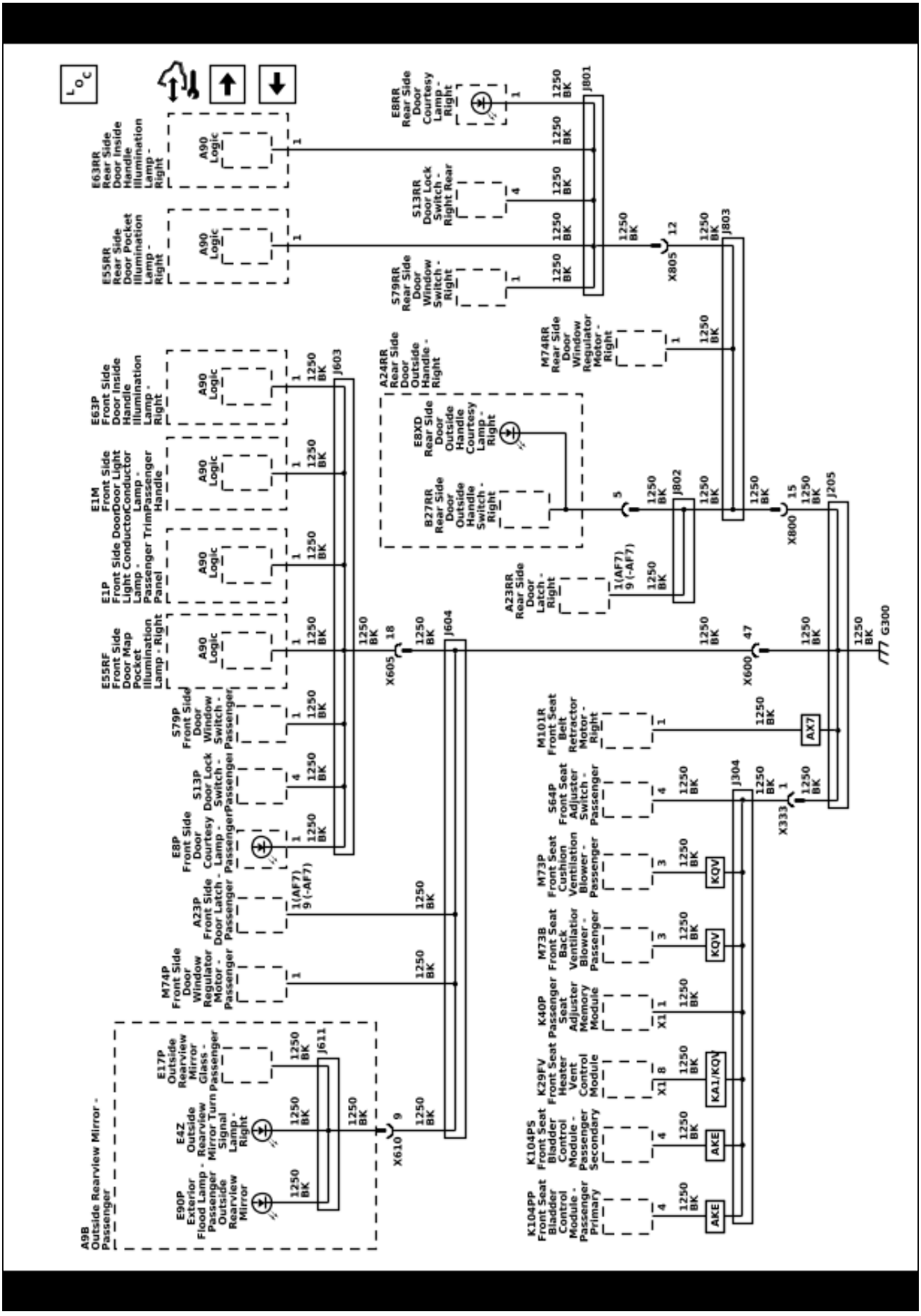
Ground Distribution Schematics (G200 (2 of 2))



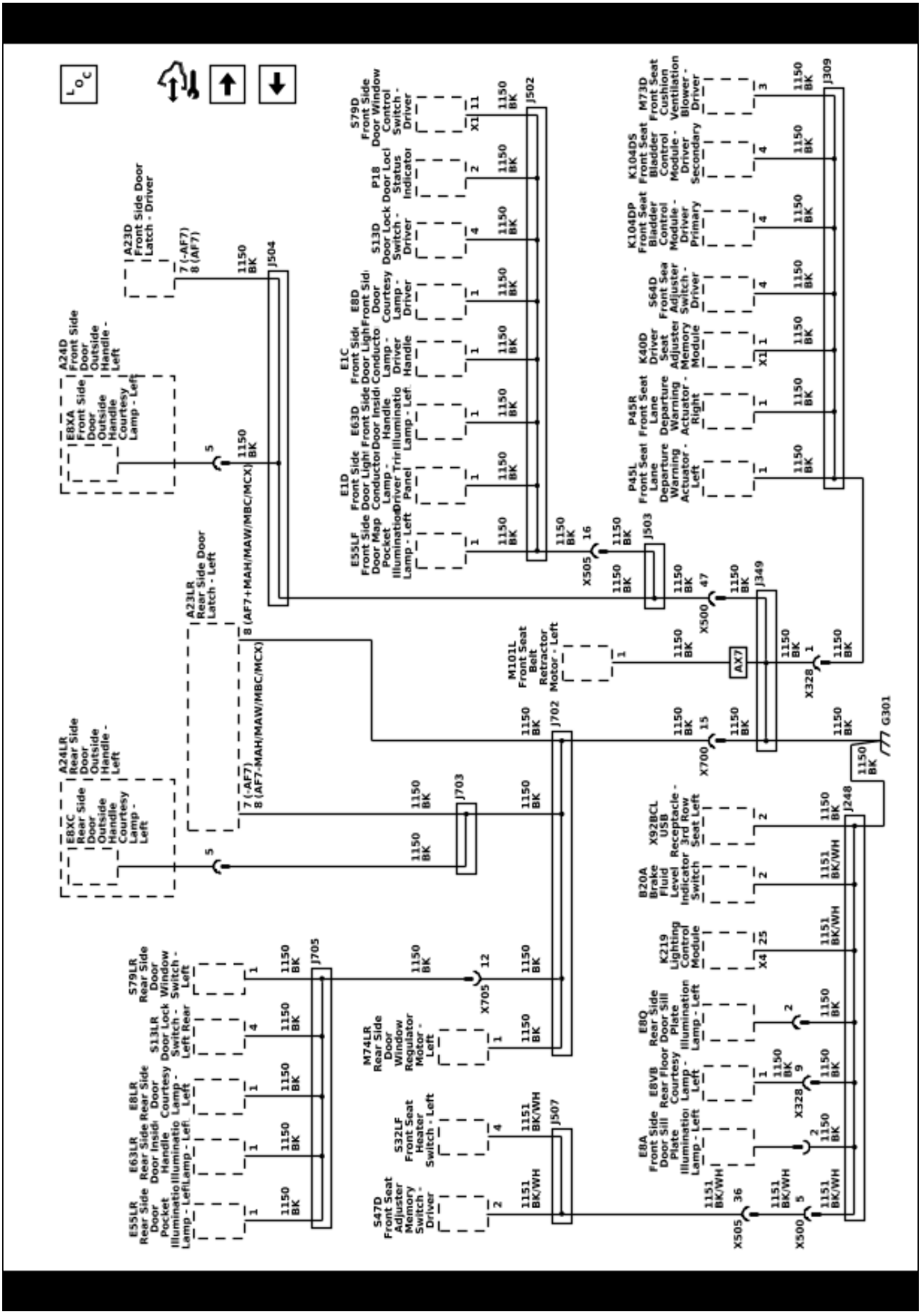
Ground Distribution Schematics (G300 (1 of 2))



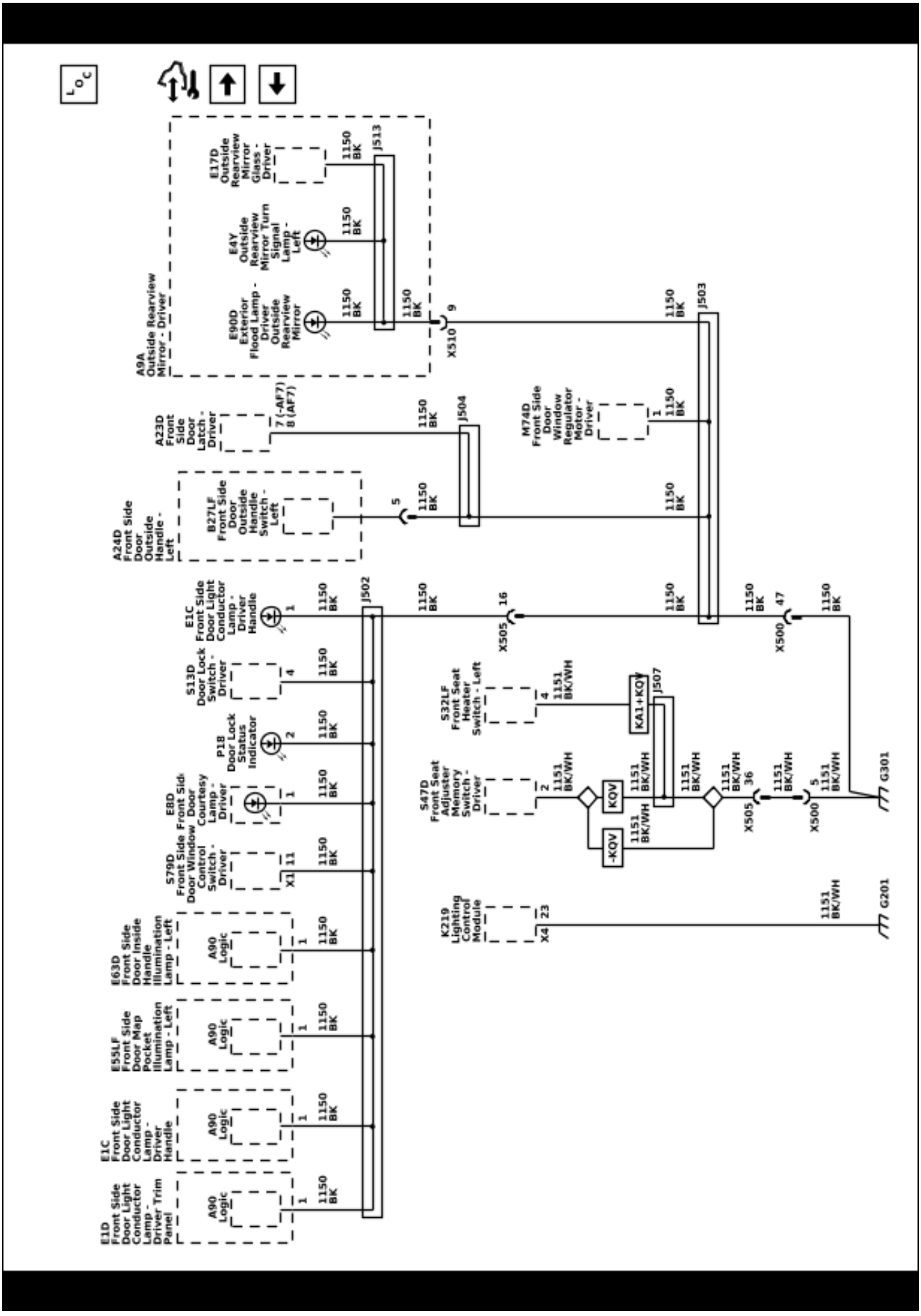
Ground Distribution Schematics (G300 (2 of 2))



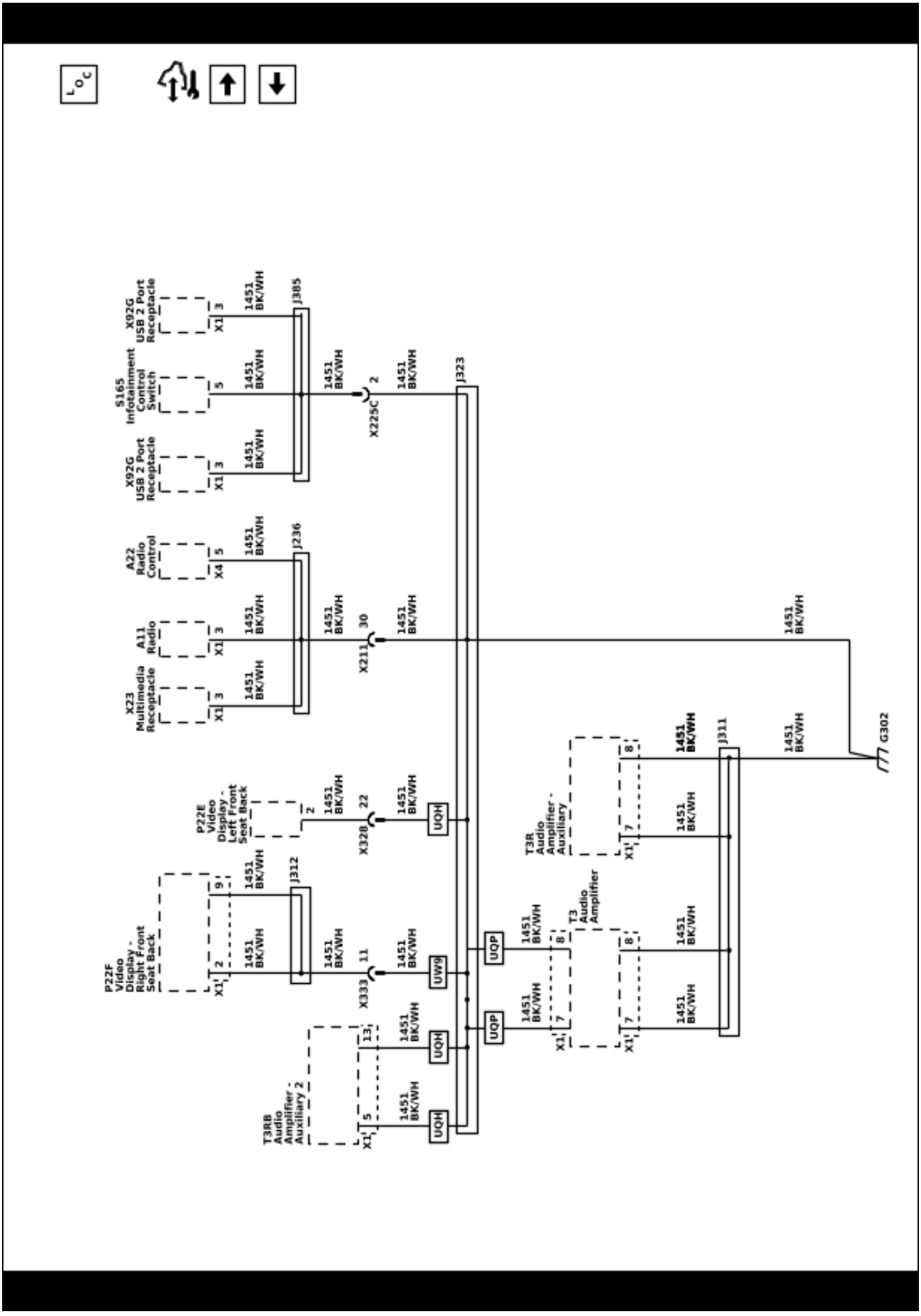
Ground Distribution Schematics (G301 (1 or 2))



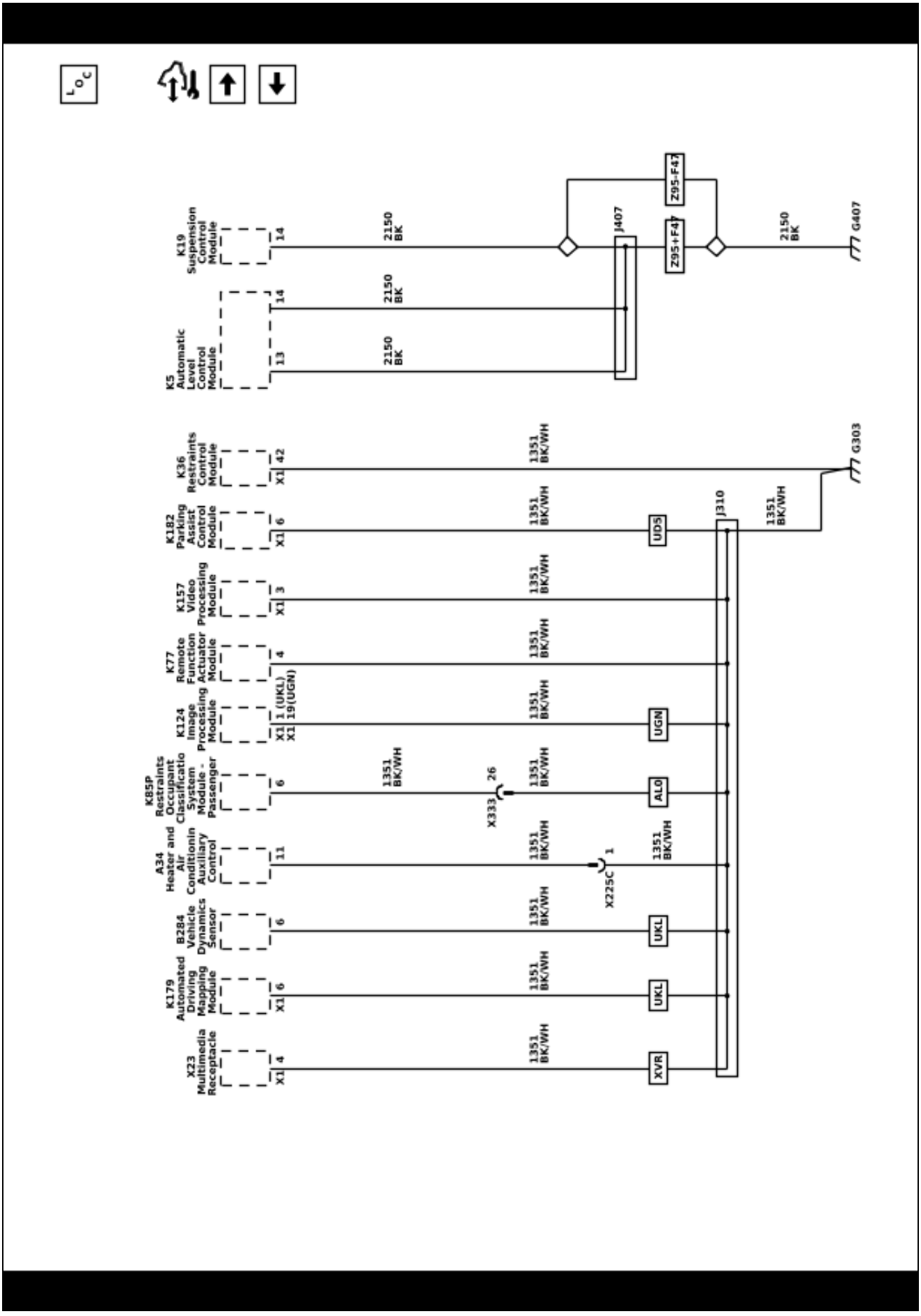
Ground Distribution Schematics (G301 (2 or 2))



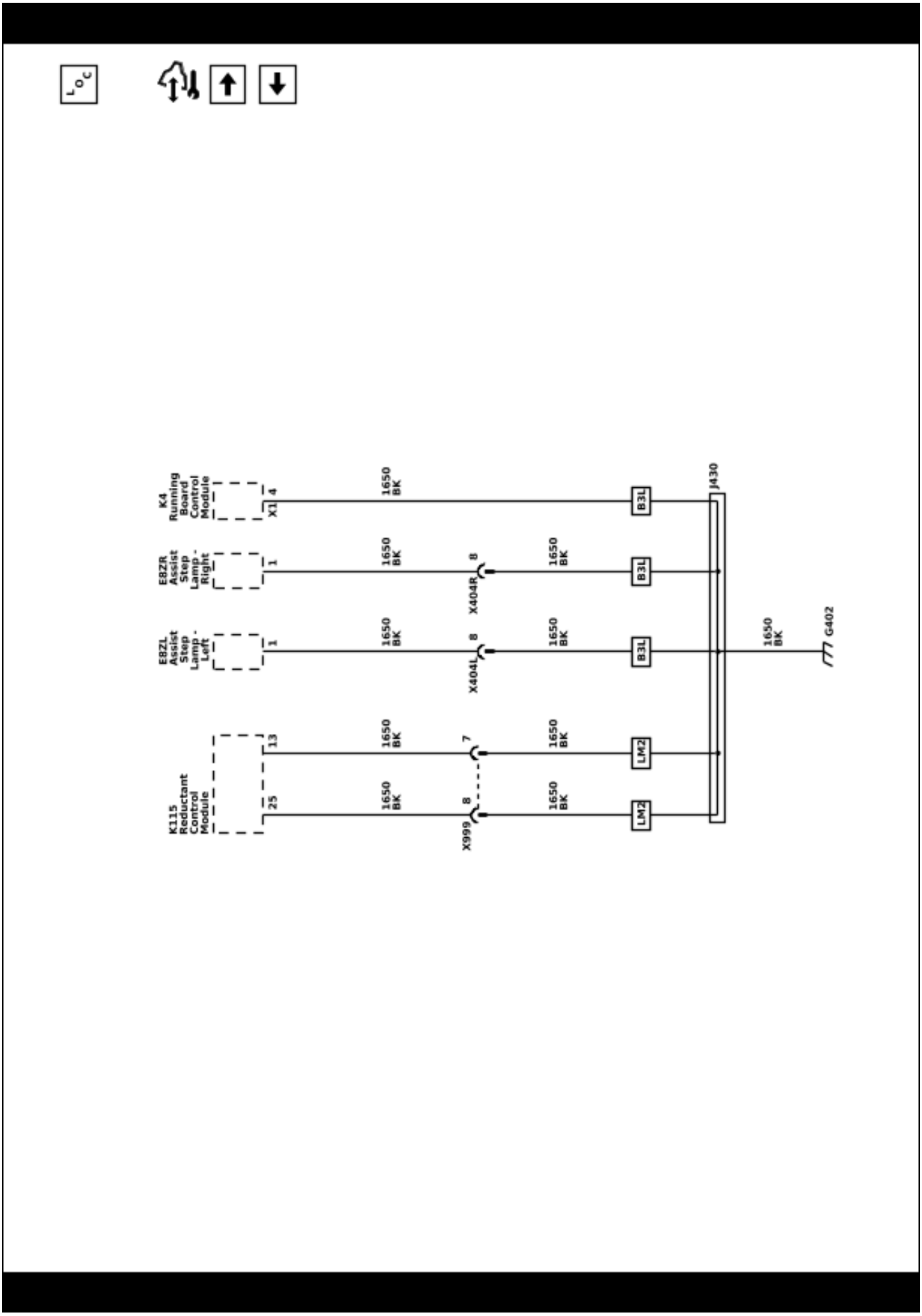
Ground Distribution Schematics (G302)



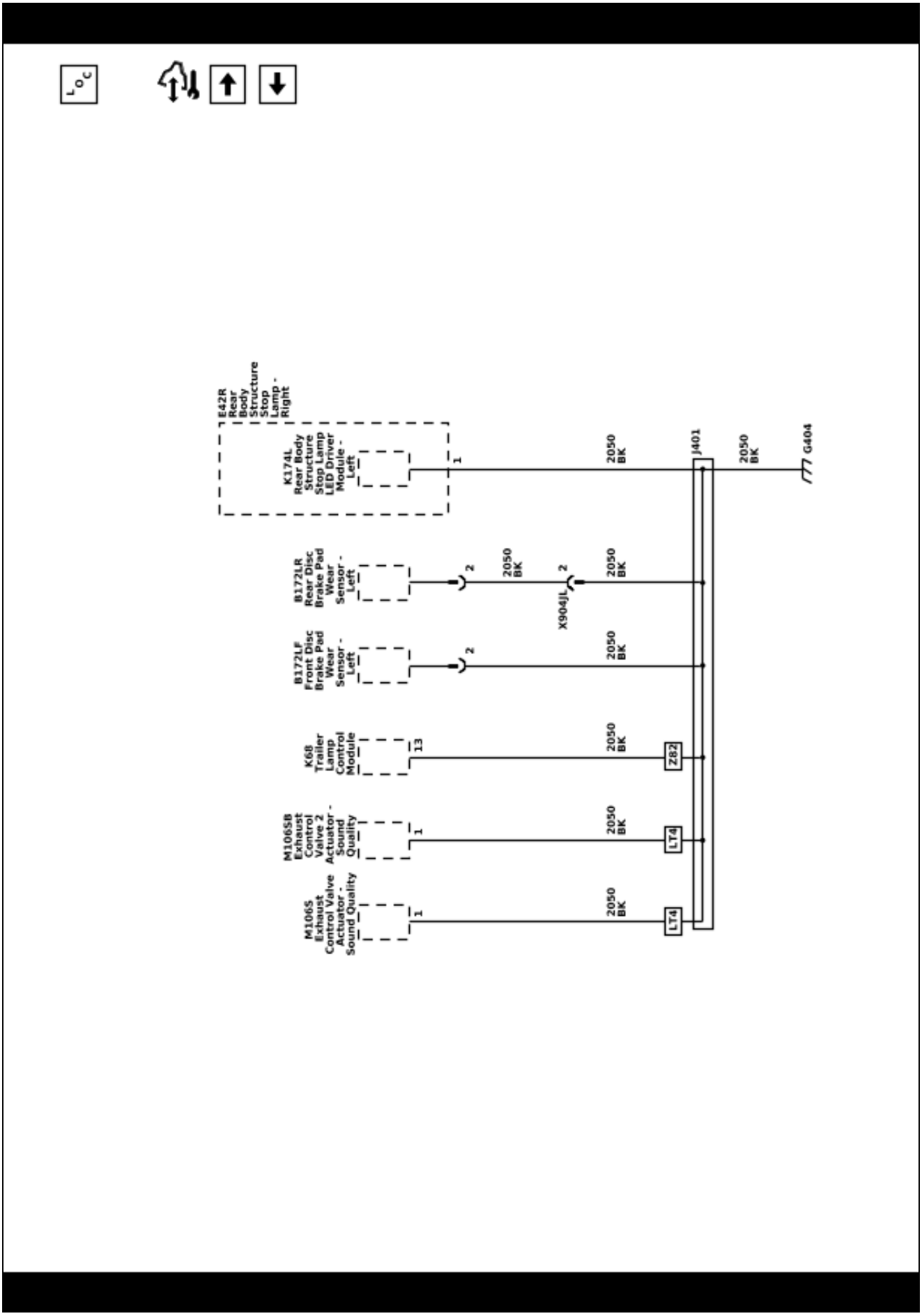
Ground Distribution Schematics (G303 and G407)



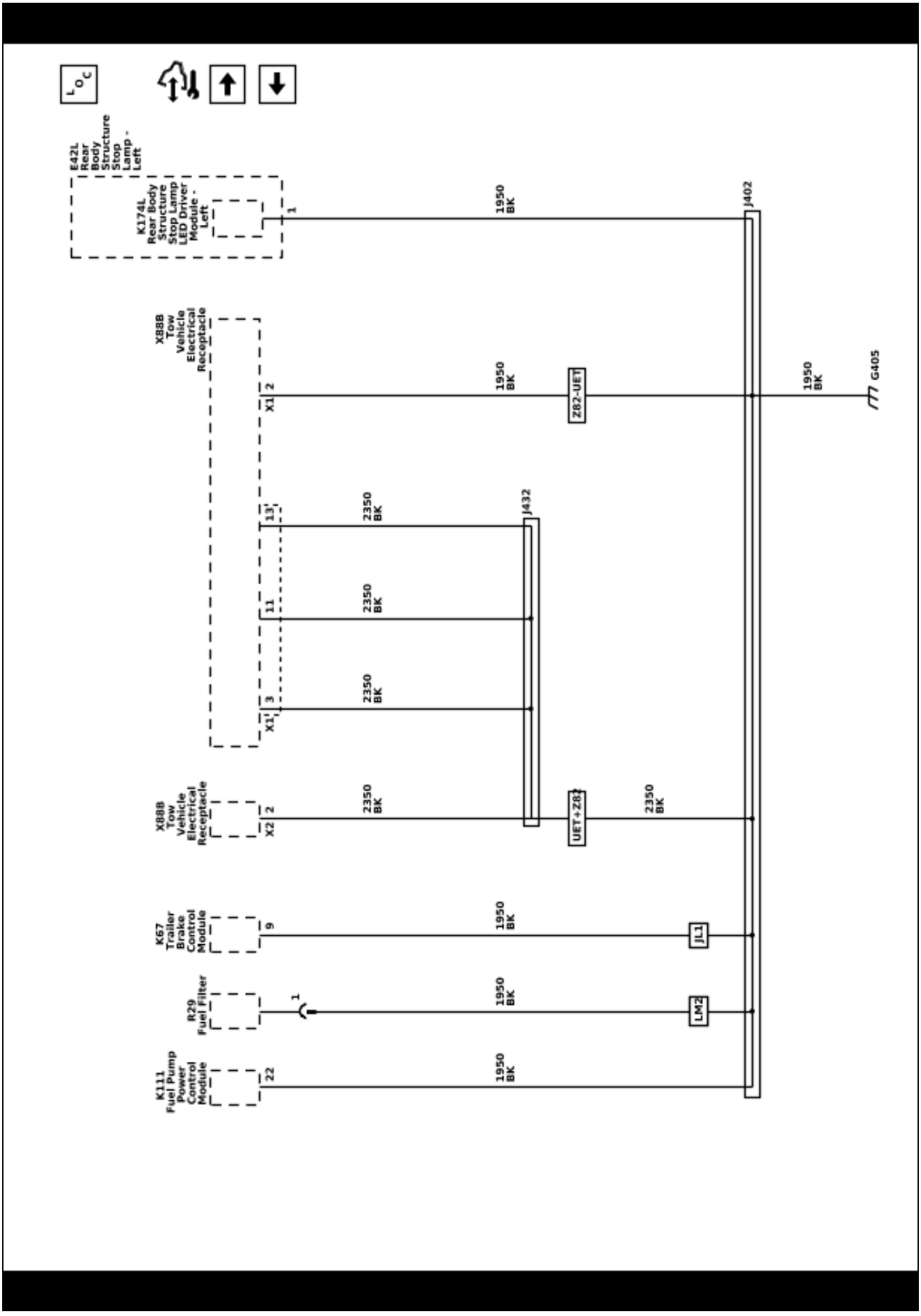
Ground Distribution Schematics (G402 (B3L / LM2))



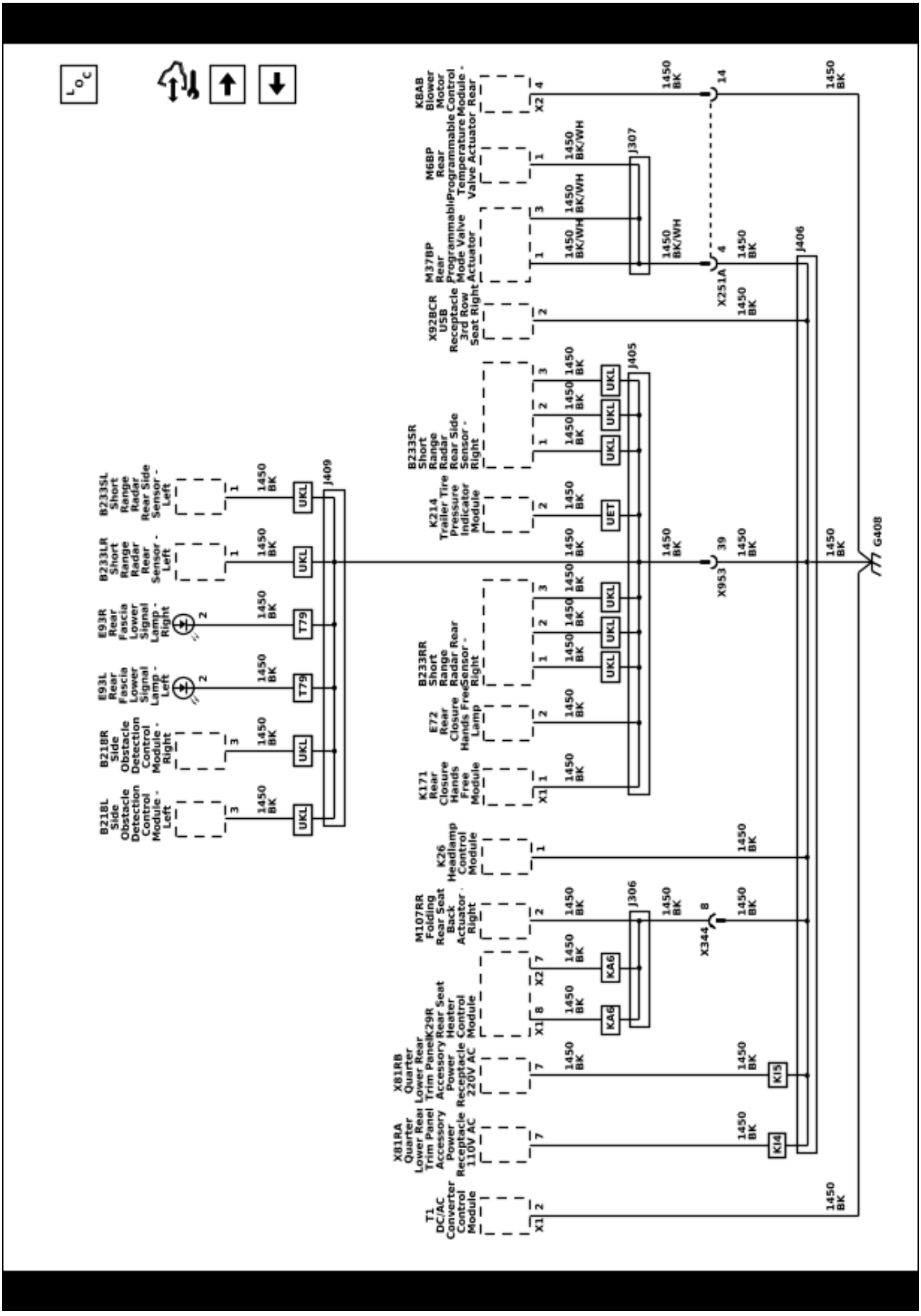
Ground Distribution Schematics (G404)



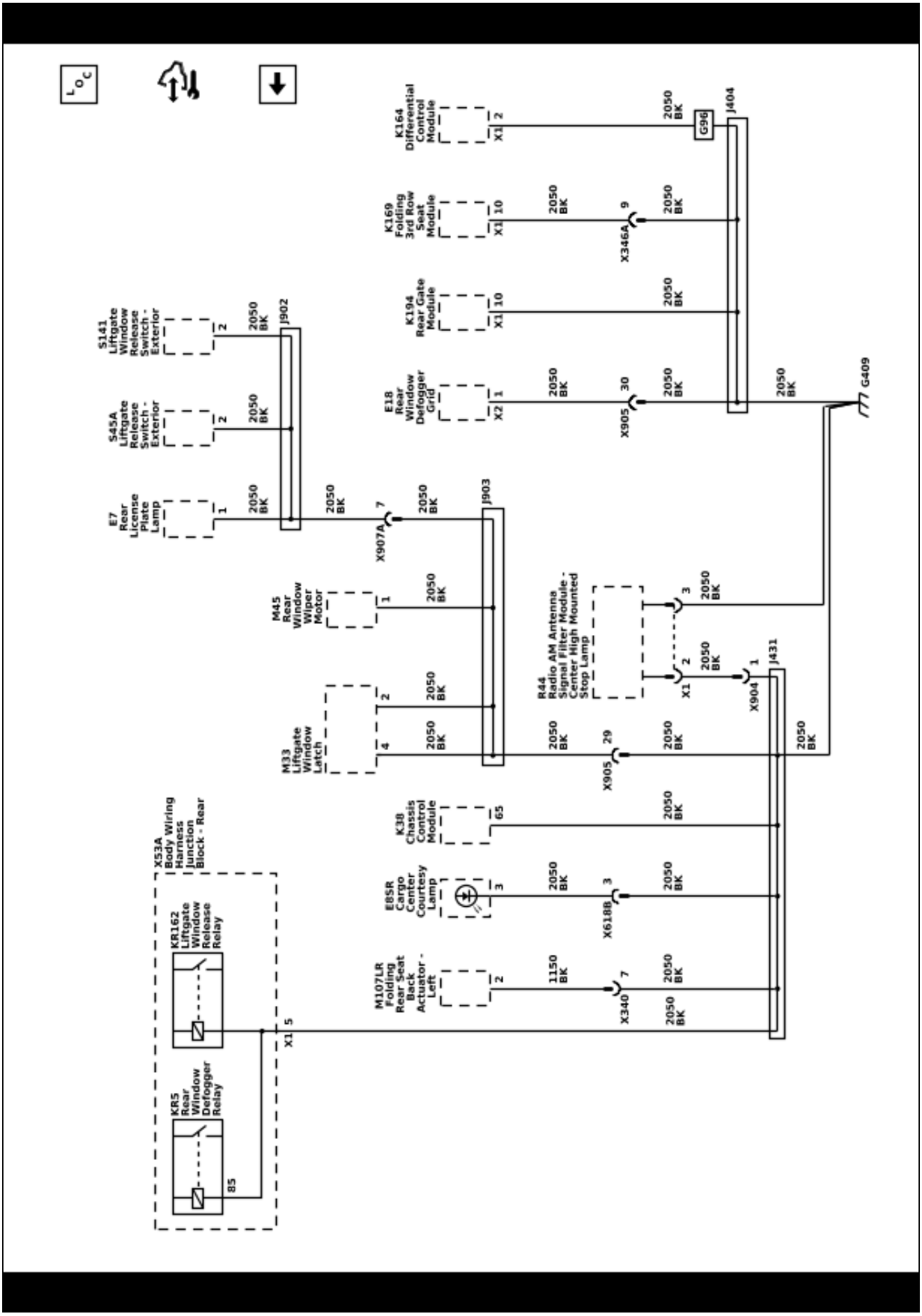
Ground Distribution Schematics (G405)



Ground Distribution Schematics (G408)



Ground Distribution Schematics (G409)



Description and Operation

Power Mode Description and Operation

Serial Data Power Mode Master

The K9 Body Control Module (BCM) is the Power Mode Master and the K56 Serial Data Gateway Module is the Back-Up Power Mode Master.

The Power Mode Master uses various vehicle status conditions and inputs to determine the desired vehicle power mode state. The Power Mode (Off, Accessory, Run, Propulsion, Start) is communicated to other modules via Serial Data and other electrical signals in order to provide the proper feature operation for the appropriate power mode.

If the Power Mode Master cannot control or determine the correct Power Mode, the Backup Power Mode Master will take over and become the vehicle Power Mode Master and place the vehicle into the proper Power Mode by communicating with other modules via Serial Data to provide the proper electrical signals to provide the proper feature operation for the appropriate power mode.

S38 On/Off Vehicle Switch

There are 5 power modes to convey driver intent:

- OFF – A low power mode that allows maximum stand time until next start
- ACCY – Allows use of certain features that require operator authorization (Power windows for example). Propulsion is specifically disallowed.
- RUN – All features enabled except propulsion (motive force)
- PROPULSION – All features enabled
- START - This will transition to PROPULSION, including turning off non-essential loads to provide additional power for starting.

Power Mode States

Customer Action	Expected Vehicle Power Mode	S38 Vehicle On/Off Switch BCM Scan Tool Parameter	S38 Vehicle On/Off Switch Voltages
Vehicle OFF, S38 On/Off Vehicle Switch not pressed, Transmitter in Range	Vehicle Off Mode	Inactive	1.4 – 3.0 V (Switch Pressed) 3.35 – 4.26 V (Switch Released) 4.5 — 5.0 V (Switch Disconnected)
Vehicle OFF, S38 On/Off Vehicle Switch not pressed, Transmitter out of Range/ Away from vehicle	Vehicle Off Mode	Inactive	
Vehicle in any Power Mode EXCEPT OFF, then Press the S38 On/Off Vehicle Switch Foot On or Off the Brake Pedal, Transmitter in Vehicle	Vehicle Off Mode	Active (pushed) / Inactive (not pushed)	
Vehicle in Propulsion Mode, momentarily Press and Release the S38 On/Off Vehicle Switch Foot On or Off the Brake Pedal, Transmitter out of Range/Away from vehicle	Run Mode, With DIC Message No Remote Detected Press Brake to Restart	Active (pushed) Inactive (not pushed)	
Vehicle Off Power Mode, then Press the S38 On/Off Vehicle Switch for less than 5 s with foot Off the Brake Pedal; Transmitter in Vehicle	Vehicle Accessory Mode	Active (pushed) / Inactive (not pushed)	
Vehicle Off Power Mode, then S38 On/Off Vehicle Switch with foot On the Brake Pedal; Transmitter in Vehicle	Vehicle Start/Propulsion Mode (vehicle cranks then engine running (for Internal Combustion Engine) or Propulsion System Active for EV) power mode timeout is enabled	Active (pushed) / Inactive (not pushed)	
Vehicle Off Power Mode, then S38 On/Off Vehicle Switch with foot On the Brake Pedal for 5 to 10 s; Transmitter in Vehicle	Vehicle Start/Propulsion Mode (vehicle cranks then Propulsion Mode Active) power mode timeout will be disabled.	Active (pushed) / Inactive (not pushed)	
Vehicle OFF Power Mode, then Press and Hold the S38 On/Off Vehicle Switch for 5 s with foot Off the Brake Pedal; Transmitter in Vehicle	Vehicle Run Mode (Ignition ON without the Propulsion system Active)	Active (pushed) / Inactive (not pushed)	
Vehicle OFF Power Mode, then Press and Hold the S38 On/Off Vehicle Switch for 5 s with foot Off the Brake Pedal; Transmitter in Vehicle	Vehicle Start/Propulsion Mode (vehicle cranks then Propulsion Active) power mode timeout is disabled	Active (pushed) / Inactive (not pushed)	
Vehicle Propulsion Mode with vehicle speed detected above 4 km/h (2.5 MPH) press and hold S38 On/Off Vehicle Switch for 2 s or press and release it 2 times within 5 S.	Vehicle will transition from Propulsion Mode to Run Mode (Ignition On Propulsion system Inactive).	Active (pushed) / Inactive (not pushed)	
NOTE: If the transmitter is not moved for more than 1 hour it will become inactive.			

Service Mode

Service Mode is the Run Power Mode with power mode timeout disabled. This can only be done with the Service Tool.

Automatic Power Mode Timeouts

Note: If the Transmitter/Fob remains stationary and is not moved for one hour, it will go to sleep and may create a fob not in range condition.

This system is designed to prevent batteries from going dead in the event the ignition is left on while unattended, it is also designed to shut the vehicle off if left running unattended. After a Power Mode timeout, the Power Mode Master is responsible for shutting down the or transitioning the vehicle into the low parasitic sleep state “OFF” Power Mode. This Power Mode timeout strategy uses Vehicle Speed, Vehicle Power Mode, Parked Status and other Vehicle Conditions to make the timeout determination.

Accessory Power Mode

The Accessory Power Mode will timeout after approximately 5 minutes. The timer will Start once the system has determined it is in the Accessory Power Mode status. After the timer expires the Power Mode will change to the OFF Power Mode.

Run Power Mode

if the conditions listed below are met the Run Power Mode will timeout after approximately 40 minutes if the transmitter is in range, or 20 minutes if the transmitter is out of range. The timer will Start once the system has determined it is in the Run Power Mode status and all of the following conditions are met. After the timer expires the Power mode will change to OFF Power Mode.

If any of the following conditions are not met and/or if there is a change in the Brake Pedal or Clutch Pedal status, the Run Mode timeout timer will be disabled, and the timer will restart after all of the conditions are met again.

- Vehicle in Run Mode (Vehicle powered up S38 On/Off Vehicle Switch Green indicator on Propulsion Mode Inactive)
- Propulsion is Inactive
- Vehicle in Park.
- Vehicle Speed is 0 KM/MPH.
- Fast Idle is inactive (If Equipped).
- PTO Remote Start Status is inactive (If Equipped).
- Particulate Filter Cleaning Status is Inactive (if Equipped)
- S38 Vehicle On/Off switch was held for more than 5 to 10 seconds while starting the vehicle the actual time may vary based on model and/or year.

Propulsion Power Mode

If the following conditions listed below are met the Propulsion Power Mode will timeout after approximately 30 minutes if the transmitter is in range, or 15 minutes if the transmitter is out of range. The timer will Start once the system has determined it is in the Propulsion Power Mode status and all of the following conditions are met. After he timer expires the Power mode will change to the OFF Power Mode.

The Propulsion Power Mode timeout can be disabled with then vehicle in Off Power Mode, apply and continue to hold the brake pedal, then press and hold the S38 Vehicle On/Off switch for 5 to 10 seconds (the actual time may vary based on model and/or year). A DIC message will be displayed when Power Mode timeout is disabled.

If any of the following conditions are not met and/or if there is a change in the Brake Pedal or Clutch Pedal status, the Propulsion Mode timeout timer will be disabled, and the timer will restart after all of the conditions are met again.

- Vehicle in Propulsion Mode (Propulsion Active).
- Vehicle in Park.
- Vehicle Speed is 0 KM/MPH.
- Fast Idle is Inactive (If Equipped).
- PTO Remote Start Status is inactive (If Equipped).
- Particulate Filter Cleaning Status is Inactive (if Equipped)
- S38 Vehicle On/Off switch was held for more than 5 to 10 seconds while starting the vehicle the actual time may vary based on model and/or year.

Relay Controlled Power Mode

The BCM uses discrete push button switch inputs, transmitter in range status, current power mode state, and brake pedal position state to distinguish the correct power mode (Off, Accessory Mode, Run Mode, Start/Propulsion Mode). The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay remains on for a timed period after the Ignition Mode is OFF. Refer to *Retained Accessory Power Description and Operation on page 6-1055* for more information on the retained accessory power function.

Push Button Start

The ignition mode switch has 2 LEDs that indicate the vehicle power mode Amber for Accessory Mode and Green for Run or Start/Propulsion Modes. When the vehicle is in the OFF mode, both LED’s will be OFF. Momentarily pressing the S38 On/Off Vehicle Switch button once, brake pedal not applied, the vehicle will enter into the Accessory Mode and the Amber LED will illuminate. The Accessory Mode will timeout after approximately 5 min to help reduce battery drain. With the ignition OFF, brake pedal not pressed, then pressing and holding the S38 On/Off Vehicle Switch for 5 s will place the vehicle in Run Mode (Ignition ON without the Propulsion Mode Active). The vehicle will stay powered up for approximately 40 minutes if the transmitter is in range, or 20 minutes if the transmitter is out of range, and the Green LED will illuminate.

With the ignition OFF brake pedal pressed, then press and release the iS38 On/Off Vehicle Switch, the vehicle will enter Start/Propulsion Mode and the Green LED will illuminate, the engine will crank and the engine will be running for Internal combustion engines (ICE), or Propulsion mode will go Active on Electric Vehicles (EV). The Propulsion Mode will timeout after

approximately 30 minutes if the transmitter is in range, or 15 minutes if the transmitter is out of range. The timer will stop when the vehicle is shifted out of PARK or the brake pedal is pressed and released, the timer will reset after the vehicle is placed back in PARK with the Propulsion Mode Active.

Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the passive entry passive start module (PEPS) and to the BCM. The PEPS module sends a redundant signal to the BCM with the ignition mode switch status.

Transport Mode

Transport Mode is designed to reduce the parasitic load of some modules during shipping and/or during vehicle storage. Some features may be disabled or have reduced functionality while Transport Mode is ON. Transport Mode is enabled and disabled by either of the following methods:

- With the Scan Tool Diagnostics > Body Control Module > Control Functions > Power Mode.
- Turning the hazard flashers ON, apply and hold the brake pedal, then press and hold the ignition mode switch for greater than 15 s. For vehicles equipped with a DIC a message Transport Mode On when it is enabled and Transport Mode Off when it is disabled will be displayed for a predetermined amount of time. For vehicles equipped without a DIC, the battery indicator light will constantly flash on the Instrument Cluster when Transport Mode is enabled.

Battery Saver Mode

There are 7 different Battery Saver Modes. Battery Saver Modes 1 to 3 occur in Accessory and Run Power Modes (vehicle on propulsion system Inactive) if the battery voltage drops below approximately 11.5 V. Battery Saver Modes 4 to 7 occur in the Off Power Mode only. Battery Saver Modes 4 to 7 may set DTC's.

- Battery Saver Mode 1: DIC message "Battery Low, Start Vehicle", 4 chimes
- Battery Saver Mode 2: DIC message "Battery Low, Start Vehicle", Load Shed Level 3 is activated
- Battery Saver Mode 3: DIC message "Battery Low, Start Vehicle", Radio/Infotainment shut off, Load Shed Level 3 active
- Battery Saver Mode 4: Battery Saver Mode Ignition Off – Parasitic Current draw of 100 mA or greater
- Battery Saver Mode 5: Battery Saver Mode Ignition Off – Parasitic Current draw of 1 A or greater
- Battery Saver Mode 6: Battery Saver Mode Ignition Off – Battery Voltage less than 12.0 V
- Battery Saver Mode 7: Battery Saver Mode Ignition Off – Battery Voltage less than 11.6 V

Load Shedding

Prior to Load shedding Idle Boost will occur, the idle speeds will be increased by 25 to 300 RPM to help maintain a normal battery voltage. Idle Boost may be noticeable to the driver. If the battery voltage continues to drop below a normal state then load shedding will go active and it will start to reduce electric loads for components that will not impact the safe operation of vehicle. At load shed levels 2 and 3 a DIC message will be displayed "Reducing Features To Save Battery". When load shedding is active the customer may begin to notice features starting to have reduced functions or may become inoperative. Examples of affected loads are radio, HVAC blower(s) front and rear (if equipped), heated/ventilated seats, heated mirrors, rear defogger and other devices with heavy electrical draws. Idle Boost and load shed levels can be observed with the scan tool.

Idle Boost 1

Idle is increased by 25-100 RPM and generally is not noticeable to most drivers.

Idle Boost 2

Idle is increased by 50–200 RPM and generally is not noticeable to most drivers.

Idle Boost 3

Idle is increased by 100–300 RPM and may be noticeable to most drivers.

Load Shed Level 1

Reduces load current by 25%.

Load Shed Level 2

Reduces load current by 50%.

Load Shed Level 3

Electric loads for components that will not impact the safe operation of vehicle will be turned Off.

BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Retained Accessory Power Description and Operation

Retained Accessory Power

The Retained Accessory Power (RAP) & Interruptible RAP (IRAP) Circuits are controlled by the K9 Body Control Module (BCM). The BCM is the Power Mode Master, it utilizes various Vehicle inputs to determine the Vehicle Power Mode and sends this information via Serial Data and providing associated electrical signals to the entire vehicle for proper feature operation.

The BCM monitors the vehicles power modes, and door ajar/open switch status to determine whether the retained accessory power should be initiated and remain active or be terminated. The RAP output is optional based on the vehicles option contents. When utilized, the RAP Output control can be used to control a RAP Relay, it may provide direct power, or s serial data message to vehicle devices/modules from the BCM.

Retained Accessory Power Relay Coil Control Circuit (If Equipped)

The BCM keeps the device or relay (if equipped) energized during all power modes, except Off-Awake and Crank. The device(s) remain active for approximately 10 min after the Vehicle is placed into the OFF Power Mode, provided none of the doors are opened.

Retained accessory power will end when one of the following conditions are met:

- The BCM receives an input from any door ajar switch indicating the opening of the door after the OFF Power Mode is achieved.

  Note: If the BCM is receives a door open/ajar active signal when the vehicle is placed into the OFF Power Mode, the retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 min.

Systems powered by the retained accessory power control circuit during the retained accessory power mode are as follows:

Note: The vehicle may not be equipped with all components as listed below.

- 12 V Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Window Switches
- Sunroof Control Module (If Equipped)
- Sunroof Switch (If Equipped)
- Mobile Device Wireless Charger Module
- Mobile Telephone Control Module (If Equipped)
- Traffic Data Receiver (If Equipped)
- Transmission Shift Lever Position Indicator (w/ floor mounted console gear shift)

Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

Radio

Radio retained accessory power activation/termination is the same as relay operation with one exception; the only door that will turn the radio off during retained accessory power is the driver door open/ajar switch. The USB Ports will function the same as the radio.

Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call and the vehicle is placed in the OFF Power Mode, the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

Interruptible Retained Accessory Power

The Power Mode Master (PMM) Controls components as needed If equipped with a RAP relay, the BCM controls the Retained Accessory Power with an exception, Interruptible Retained Accessory Power (IRAP) is deactivated during transmitter authentication. During Transmitter Authentication the PMM will deactivate components including IRAP to prevent Radio Frequency (RF) Interference (RFI) that may cause a “NO REMOTE DETECTED” message to be displayed on the drivers information center.

Note: If transmitter Authentication occurs while in Run or Propulsion Modes, it is normal to for IRAP to be interrupted momentarily (i.e. items connected to auxiliary power ports or chargers may momentarily go off then come back on).

If a remote transmitter was not been previously detected, Transmitter Authentication can occurs under any of the following conditions:

- The drivers side front door is opened.
- The drivers side rear door is opened.
- The S38 Vehicle On/Off Switch is pressed.

BLANK

A

Automatic Day-Night Mirror
Description and Operation 2-58
Automatic HVAC Description and
Operation 5-16

B

Battery
Description and Operation 4-8

C

Charging System
Description and Operation 4-8
Component Connector End Views 6-78

D

Data Link Communications
Description and Operation 6-31
Door Ajar Indicator
Description and Operation 2-92

E

Electrical Center Identification Views 6-34
Electrical Power Management Description and
Operation 4-11
Exterior Lighting Systems
Description and Operation 2-47

F

Fuel Fill Door
Description and Operation 2-92

H

Heater and Air Conditioning
System Description and Operation 5-3
Hood Ajar Indicator
Description and Operation 2-92
Horn
System Description and Operation 2-11

I

Inline Harness Connector End Views 6-835
Interior Lighting System
Description and Operation 2-51

L

Liftgate
Ajar Indicator Description and Operation 2-92
Description and Operation 2-93
Luggage Compartment Description and
Operation 2-94

M

Mobile Device Wireless Charger
Description and Operation 6-994

N

Night Vision
Camera Description and Operation 3-9

O

Outside Mirror
Description and Operation 2-58

P

Power Door Latch
Description and Operation 2-94
Power Door Locks
Description and Operation 2-95
Power Mode Description and Operation 6-1051
Power Outlets
Description and Operation 6-994
Power Windows
Description and Operation 2-8

R

Rear Vision Camera
Description and Operation 3-11
Rear Window Defogger
Description and Operation 2-8
Rearview Camera
Camera Full Display Mirror Description and
Operation 3-11
Retained Accessory Power
Description and Operation 6-1055
RPO Code List 1-7

S

Schematics
Body Control Systems 6-28
Cigar Lighter/Power Outlet 6-988
Data Communications 6-4
Defogger 2-7
Door Lock/Indicator 2-75
Exterior Lamps 2-20
Fog Lamps 2-19
Ground Distribution 6-1028
Headlamps/Daytime Running Lamps 2-13
Hood Latch 2-88
Horns 2-10
HVAC Systems - Automatic 5-5
Image Display Cameras 3-4
Inside Rearview Mirror 2-54
Interior Lamps 2-33
Interior Lamps Dimming 2-44
Liftgate 2-89
Moveable Window 2-4
Outside Rearview Mirror 2-55
Power Distribution 6-998
Power Moding 6-1026
Release Systems 2-86
Starting and Charging 4-4
Trailering Systems 2-61
Wiper and Washer Systems 2-98

Starting System
Description and Operation 4-13
Stationary Window
Description 2-8
Stop/Start System
Description and Operation 4-14
Surround Vision Camera
Description and Operation 3-11, 3-12

T

Trailering Description and Operation 2-67
Trailering Systems Schematics 2-61

V

Vehicle Certification, Tire Placard, and Anti-Theft
Label 1-5
Vehicle, Engine and Transmission ID and VIN
Location, Derivative and Usage 1-3

W

Wiper/Washer
System Description and Operation 2-103