General Motors Upfitter Integration



BODY BUILDER MANUAL

FOR

2018

FULL SIZE VANS

(CHEVROLET EXPRESS/GMC SAVANA)

ELECTRICAL SECTION

General Motors Upfitter Integration



Note to User:
As part of our mission to provide an up-to-date website that includes detailed Body Builder Manuals, Technical Bulletins, and Best Practice Manuals, we are now using sectional excerpts directly from the General Motors Service Information publications for our Electrical Body Builder Manuals.

You will note that the section numbers are non-sequential as we have provided only those that are believed to be the most pertinent to the Upfitter community and best suited to their needs.*

This new usage of the Service Information provides the opportunity for us to remain consistent with the changes that take place throughout the model year and to provide you updated information in a more timely fashion.

**** If you would like to have access to all of the electrical Service Information, please apply for a subscription from ACDelco at http://acdelcotechconnect.com/html/tss_tech_esi.jsp***

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Section 1

General Information

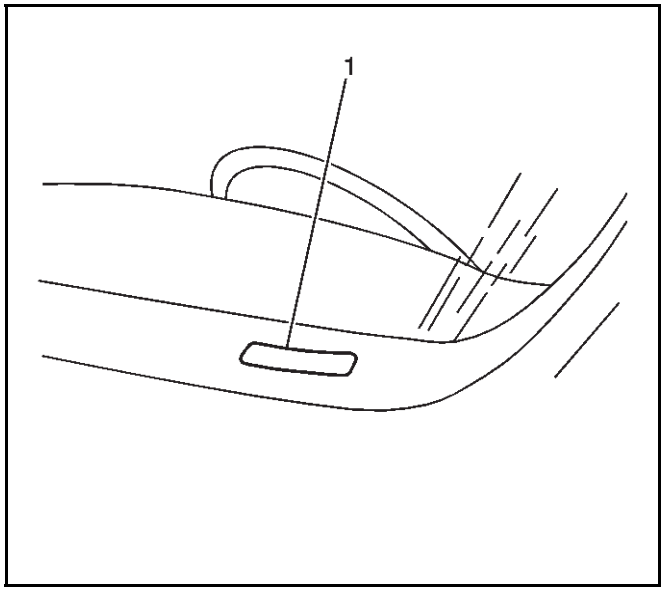
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General Information

Introduction

Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage (Chevrolet)



65474

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

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Region of Build	1	United States
2	Manufacturer	G	General Motors
		H	Navistar Inc.
3	Vehicle Brand/Type	A	Chevrolet Bus (Non School Bus)
		B	Chevrolet Incomplete Truck
		C	Chevrolet Truck
		A	Chevrolet Incomplete Truck (Navistar Only)

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

Position	Definition	Character	Description
4	GVWR/Brake System/Body Style	W	8,001–9,000 lbs/Hydraulic/Cargo Van/Four Door Cab/ Utility or Passenger Van
		Y	8,001–9,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		Z	9,001–10,000 lbs/Hydraulic/Cargo Van/Four Door Cab/ Utility or Passenger Van
		0	9,001–10,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		3	10,001–14,000 lbs/HydraulicCommercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		6	14,001–16,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
5–6	Chassis/Series	G/A	Chevrolet Express 2500 Cargo
		G/B	Chevrolet Express 2500 Cargo EXT
		G/E	Chevrolet Express 2500 Passenger LS
		G/F	Chevrolet Express 2500 Passenger LT
		G/G	Chevrolet Express 3500 Cargo
		G/H	Chevrolet Express 3500 Cargo EXT
		G/L	Chevrolet Express 3500 Passenger LS
		G/M	Chevrolet Express 3500 Passenger LT
		G/N	Chevrolet Express 3500 Passenger LS EXT
		G/P	Chevrolet Express 3500 Passenger LT EXT
		G/R	Chevrolet Express 3500 Cutaway 139" Wheelbase
		G/S	Chevrolet Express 3500 Cutaway 159" Wheelbase
		G/T	4x2, Chevrolet Express 3500 Cutaway 177" Wheelbase
		G/U	Chevrolet Express 4500 Cutaway 159" Wheelbase
		G/V	Chevrolet Express 4500 Cutaway 177" Wheelbase
		G/9	Chevrolet Express (Non-US, Non-Canada)
7	Restraint System	B	AJ3 − Active Manual Belts, Airbag − Driver only − Front
		C	AK5 − Active Manual Belts, Airbag – Driver and Passenger – Front (1st row)
		F	AK5 & ASF −Active Manual Belts, Airbags-Driver & Passenger - H: Navistar Inc. 1HA (Navistar Only) Front (1st row), Front Seat Side (1st row), Roof Side (All seating 3: Vehicle Brand/Type rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd A: Chevrolet Bus (Non School Bus) row for vehicles with 4 or more seating rows)
		H	AJ3 & ASF - Active Manual Belts, Airbag - Driver only - Front, Front C: Chevrolet Truck Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 A: Chevrolet Incomplete Truck (Navistar Only) or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)

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

Position	Definition	Character	Description
8	Engine Type	B	RPO LC8 – Flexible Fuel, (CNG/LPG), 8 CYL, V8, 6.0L, SFI, GEN 1, GMNA
		G	RPO L96 – Flexible Fuel, (Gas/Ethanol), 8 CYL, 6.0L SFI, Iron, GM
		P	RPO LV1 – ENGINE GAS, 6 CYL, 4.3L, SIDI, V6, VVT, E85 MAX, IRON
		1	RPO LWN - ENGINE DIESEL, 2.8L, DI, L4, DOHC, TURBO, XLDE
9	Check Digit	0~9, X	Calculated by POMS
10	Model Year	J	2018
11	Plant Location	1	Wentzville
		N	Springfield
12–17	Plant Sequence Number	—	Plant Sequence Number

2.8L RPO LWN Engine ID and VIN Derivative Location

Refer to Engine Identification.

4.3L RPO LV1 Engine ID and VIN Derivative Location

Refer to Engine Identification.

6.0L RPO L96, LC8 Engine ID and VIN Derivative Location

Refer to Engine Identification.

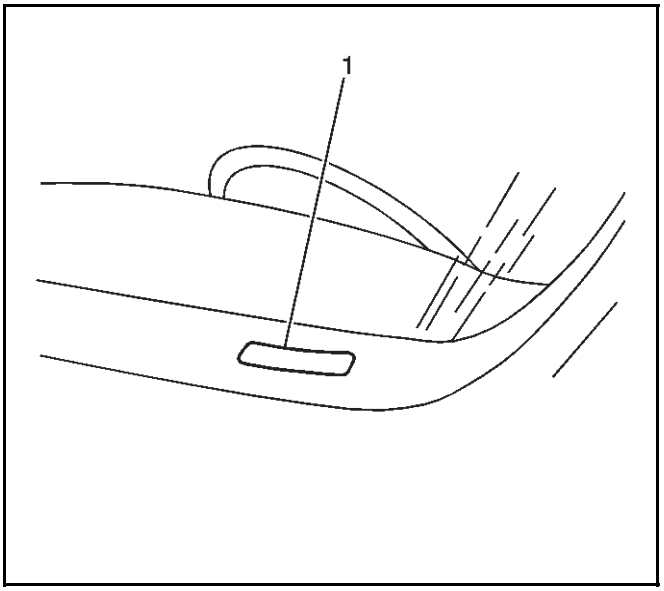
6L90 (MYD) Transmission ID and VIN Derivative Location

Refer to Transmission Identification Information.

8L90 (M5U) Transmission ID and VIN Derivative Location

Refer to Transmission Identification Information.

Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage (GMC Truck)



65474

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

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Region of Build	1	United States
		7	United States
2	Manufacturer	G	General Motors
		G	Navistar Inc. (7GZ Only)
3	Vehicle Brand/Type	D	GMC Incomplete Truck
		J	GMC Bus (Non School Bus)
		T	GMC Truck
		Z	GMC Incomplete Truck (Navistar Only)
4	GVWR/Brake System/Body Style	W	8,001–9,000 lbs/Hydraulic/CargoVan/Four Door Cab/ Utility, Passenger Van
		Y	8,001–9,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up, Motor Home Chassis
		Z	9,001–10,000 lbs/Hydraulic/CargoVan/Four Door Cab/ Utility, Passenger Van
		0	9,001–10,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up, Motor Home Chassis
		3	10,001–14,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up, Motor Home Chassis
		6	14,001–16,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up, Motor Home Chassis
5–6	Chassis/Series	7/A	GMC Savana 2500 Cargo
		7/B	GMC Savana 2500 Cargo EXT
		7/E	GMC Savana 2500 Passenger LS
		7/F	GMC Savana 2500 Passenger LT
		7/G	GMC Savana 3500 Cargo
		7/H	GMC Savana 3500 Cargo EXT
		7/L	GMC Savana 3500 Passenger LS
		7/M	GMC Savana 3500 Passenger LT
		7/N	GMC Savana 3500 Passenger LS EXT
		7/P	GMC Savana 3500 Passenger LT EXT
		7/R	GMC Savana 3500 Cutaway 139" Wheelbase
		7/S	GMC Savana 3500 Cutaway 159" Wheelbase
		7/T	GMC Savana 3500 Cutaway 177" Wheelbase
		7/U	GMC Savana 4500 Cutaway 159" Wheelbase
		7/V	GMC Savana 4500 Cutaway 177" Wheelbase
		7/9	GMC Savana (Non-US, Non-Canada)

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

Position	Definition	Character	Description
7	Restraint System	B	AJ3 − Active Manual Belts, Airbag − Driver only − Front
		C	AK5 − Active Manual Belts, Airbag – Driver and Passenger – Front (1st row)
		F	AK5 & ASF − Active Manual Belts, Airbags-Driver & Passenger - Front (1st row), Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd 3 row for vehicles with 4 or more seating rows)
		H	AJ3 & ASF — Active Manual belts, Airbag - Driver only - Front, Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)
8	Engine Type	B	RPO LC8, ENGINE FLEXIBLE FUEL, (CNG/LPG), 8 CYL, V8, 6.0L, SFI
		G	RPO L96, ENGINE FLEXIBLE FUEL, (GAS/ ETHANOL), 8 CYL, 6.0L, SFI IRON
		P	RPO LV1, ENGINE GAS, 6 CYL, 4.3L, SIDI, V6, VVT, E85 MAX, IRON
		1	RPO LWN , ENGINE DIESEL, 2.8L, DI, L4, DOHC, TURBO, XLDE
9	Check Digit	0~9, X	Calculated by POMS
10	Model Year	J	2018
11	Plant Location	1	Wentzville
		N	Springfield
12–17	Plant Sequence Number	—	Plant Sequence Number

2.8L RPO LWN Engine ID and VIN Derivative Location

Refer to Engine Identification.

4.3L RPO LV1 Engine ID and VIN Derivative Location

Refer to Engine Identification.

6.0L RPO L96, LC8 Engine ID and VIN Derivative Location

Refer to Engine Identification.

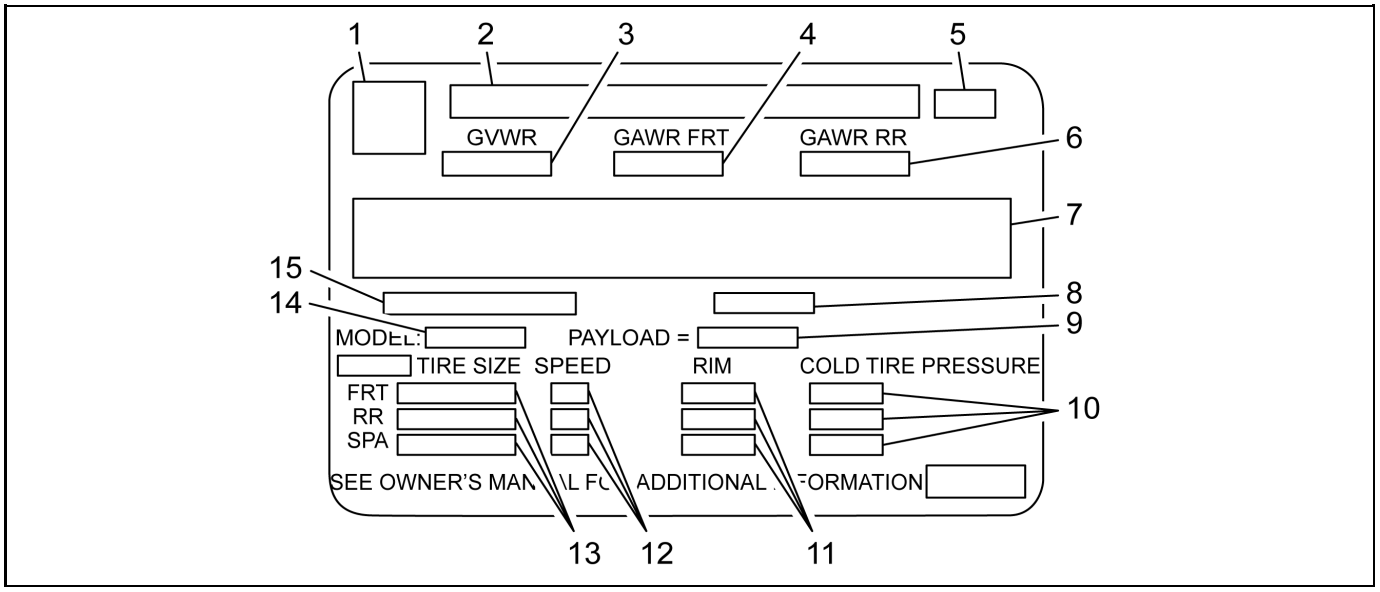
6L90 Transmission ID and VIN Derivative Location

Refer to Transmission Identification Information.

8L90 Transmission ID and VIN Derivative Location

Refer to Transmission Identification Information.

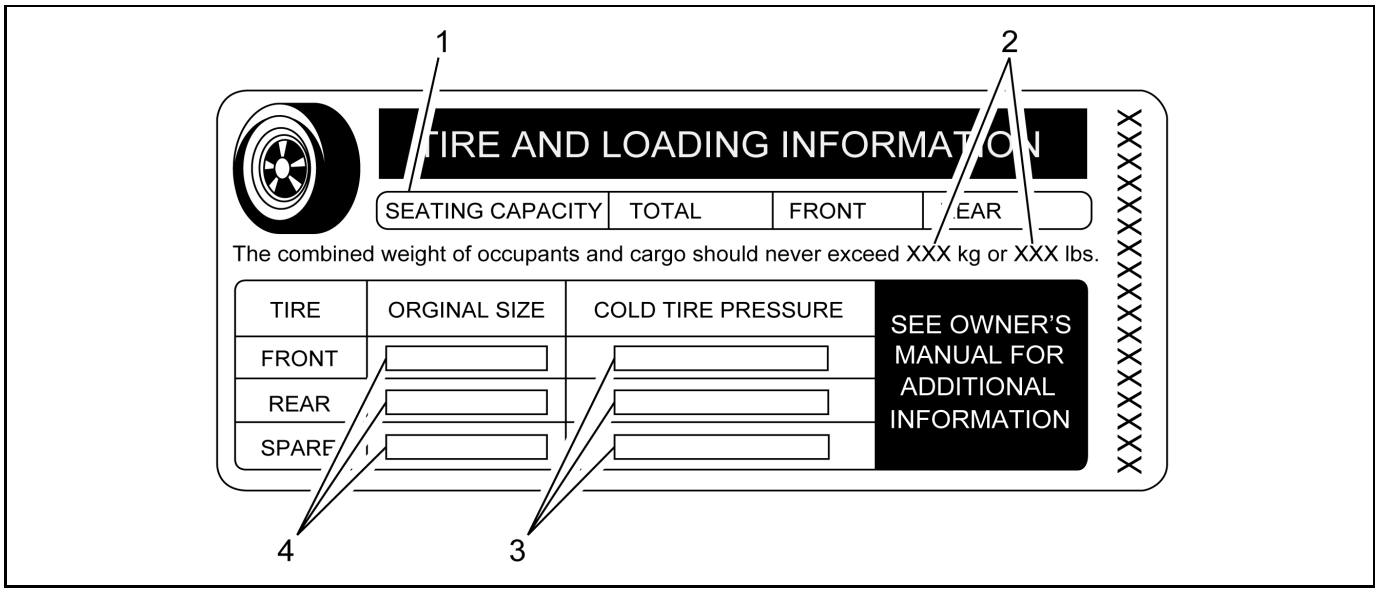
Vehicle Certification, Tire Placard, Anti-Theft, and Service Parts ID Label



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Vehicle Certification Label

Callout	Description
The vehicle certification label is attached to the rear edge of the driver door and displays the following assessments:	
1	Logo
2	Name of Manufacturer
3	Maximum Gross Vehicle Weight Rating (GVWR)
4	Maximum Gross Axle Weight Rating (GAWR) - Front
5	Final Date of Manufacture (Month and Year MM/YY) Date of manufacture callout C 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.
6	Maximum Gross Axle Weight Rating (GAWR) - Rear
7	Certification Statement
8	Vehicle Class Type (Pass Car, etc.)
9	Payload
10	Tire Pressure, Front, Rear, and Spare (Cold)
11	Original Tire Rim Size
12	Tire Speed Rating
13	Original Equipment Tire Size
14	Engineering Model Number
15	Vehicle Identification Number (VIN)


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

Anti-Theft Label

Callout	Description
1	The Federal law requires that General Motors label certain body parts on this vehicle with the VIN. The purpose of the law is to reduce the number of motor vehicle thefts by helping in the tracing and recovery of parts from stolen vehicles. Labels are permanently affixed to an interior surface of the part. The label on the replacement part contains the letter R, the manufacturer's logo, and the DOT symbol. The anti-theft label must be covered before any painting, rustproofing procedures, and uncovered after the procedures. Failure to follow the precautionary steps may result in liability for violation of the Federal Vehicle Theft Prevention Standard and possible suspicion to the owner that the part was stolen.

Service Parts ID Label

This label may be located on the rear edge of the passenger side front door and contains the Vehicle Identification Number (VIN), the model designation, the paint information, production options, and special equipment. If there is no label, there is a barcode on the certification label on the center (B-pillar) to scan for this same information.

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
01U	PRIMARY COLOR-EXTERIOR, SPECIAL (02)
40P	WHEEL COLOR-WHITE (91)
52G	TRIM COMBINATION-CLOTH, MED NEUTRAL II (G) (00)
52I	INTERIOR TRIM-MED NEUTRAL II (I) (96)
52W	TRIM COMBINATION-VINYL, MED NEUTRAL II (W) (00)
5AZ	ACCESSORY-SAFETY KIT - UNIVERSAL
5BV	PROVISIONS-ELEC - UPFITTER
5C6	HOOK-CARGO TIE-DN
93G	TRIM COMBINATION-CLOTH, MED DK PEWTER II (G) (03) (GMT610 - "G" VAN)
93I	INTERIOR TRIM-MED DK PEWTER II (03) (GMT610 - "G" VAN)
93W	TRIM COMBINATION-VINYL, MED DK PEWTER II (W) (03) (GMT610 - "G" VAN)
9D9	MIRROR I/S R/V-(NONE)
9EL	GOVERNOR-VEHICLE SPEED - 95 MPH
9L7	EQUIPMENT-ACSRY WRG JUNC BLK
A07	WINDOW-BODY
A08	WINDOW-BODY, RH
A12	WINDOW RR-DR, STA
A13	WINDOW SIDE DR-RR, STA
A17	WINDOW SIDE BODY-SWING OUT, LH
A18	WINDOW RR-DR, SWING OUT
A19	WINDOW SIDE DR-RR, SWING OUT
A31	WINDOW-POWER OPERATED, ALL DOORS

RPO	Description
AG1	ADJUSTER FRT ST-POWER, MULTI-DIRECTIONAL, DRIVER
AG2	ADJUSTER PASS ST-POWER, MULTI-DIRECTIONAL
AJ1	WINDOW TINTED-DEEP, ALL EXCEPT W/S AND DRS
AJ3	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER, FRT
AK5	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT
ANC	SALES PACKAGE-SHUTTLE BUS
AR7	SEAT-FRT BKT, STANDARD
AS5	SEAT-FRT BKT, DELUXE,
ASB	EQUIPMENT-SECURITY BAR, REAR SIDE DOOR
ASF	RESTRAINT-ROOF SIDE (LH & RH), SEAT SIDE (FRONT 1ST ROW), INFLATABLE
AT8	RESTRAINT PROVISIONS-CHILD, RR SEAT, RR FACING
ATG	LOCK CONTROL, ENTRY-REMOTE ENTRY, STANDARD RANGE
AU3	LOCK CONTROL-SIDE DR, ELEC
AXK	VEHICLE TYPE-TRUCK
AXP	VEHICLE TYPE-MULTI-PURPOSE PASSENGER VEHICLE
AXW	VEHICLE TYPE-BUS- (NOT SCHOOL BUS)
B30	COVERING FLOOR-CARPET
B31	COVERING FLOOR-VINYL, FRT, FULL WIDTH
B32	COVERING FRT-FLOOR MATS, AUX
B33	COVERING REAR-FLOOR MATS, AUX
B38	COVERING FLOOR-VINYL, FRT & RR, FULL WIDTH
B3D	SALES PACKAGE-SCHOOL BUS
B46	TRIM EQUIPMENT-SPECIAL ORDER
BA0	ORNAMENTATION-EXTR, DOOR, NAMEPLATE
BA3	COMPARTMENT-STOWAGE, I/P LOWER EXTENSION DELUXE
BAG	PARTS PKG-EXPORT
BNC	PARTS PKG-BODY MOUNT CUSHIONS
BTV	REMOTE START-ENGINE
BUE	KIT-EXHAUST DIESEL

RPO	Description
C36	HEATER-AUXILIARY
C42	HVAC SYSTEM-HEATER, OUTSIDE AIR, DELUXE
C49	DEFOGGER-RR WINDOW, ELECTRIC
C4K	GVW RATING-9,925 LBS
C4M	GVW RATING-9,900 LBS/4,500 KG
C60	HVAC SYSTEM-AIR CONDITIONER FRT, MAN CONTROLS
C69	HVAC SYSTEM RR-AIR CONDITIONER
C6P	GVW RATING-8,600 LBS/3,900 KG
C6Y	GVW RATING-9,600 LBS
C7A	GVW RATING-10,000 LBS
C7I	GVW RATING-14,200 LBS.
C7N	GVW RATING-12,300 LBS
C7Q	GVW RATING-8,800 LBS/4,000 KG
C99	SWITCH-INFL RST I/P MDL MAN SUPPRESSION
CGN	LINER-PUBX, SPRAY ON
CU7	COUNTRY-KUWAIT
CU8	COUNTRY-SAUDI ARABIA
CV3	COUNTRY-MEXICO
CV4	COUNTRY-ISRAEL
CW2	COUNTRY-GULF AREAS (BAHRAIN, KUWAIT, OMAN, QATAR, SAUDI ARABIA, UAE)
CW9	COUNTRY-MISCELLANEOUS
D28	MIRROR O/S-(-NONE)
D2O	COUNTRY-CURACAO
D31	MIRROR I/S R/V-TILT
D3J	COUNTRY-CAYMAN ISLANDS
D3K	COUNTRY-DOMINICAN REPUBLIC
D3L	COUNTRY-EL SALVADOR
D3M	COUNTRY-GUATEMALA
D3P	COUNTRY-HAITI
D3Q	COUNTRY-HONDURAS
D3U	COUNTRY-ST MAARTEN
D4G	COUNTRY-BAHAMAS
D4N	COUNTRY-COSTA RICA
D4X	COUNTRY-ARUBA
D5D	COUNTRY-NICARAGUA
DAA	SUNSHADE-VINYL
DE2	MIRROR O/S-LH & RH, MANUAL CONTROL, FOLDING, COLOR
DE5	MIRROR O/S-LH & RH, REMOTE CONTROL, ELECTRIC, HEATED, FOLDING, COLOR.
DEB	MIRROR O/S-LH & RH, REMOTE CONTROL, ELECTRIC, HEATED, FOLDING, COLOR. SINGLE PANE

RPO	Description
DH6	MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM
DHC	MIRROR O/S-LH & RH, MANUAL CONTROL, AUX WFOV, COLOR
DNS	EQUIPMENT-SUPPLIER INSTALLED
DPU	COUNTRY-BONAIRE
DRJ	MIRROR I/S R/V-TILT, PARTIAL VIDEO DISPLAY
DSB	EQUIPMENT-SECURITY BAR DELETE, REAR SIDE DOOR
DT4	ASHTRAY-CIGARETTE LIGHTER
E24	DOOR SIDE-REAR, HINGED
E3T	HANDLE-I/S, DOOR RELEASE
E48	COVER-RADIATOR GRILLE OPG - COLD CLIMATE
EF7	COUNTRY-UNITED STATES OF AMERICA (USA)
ENC	HVAC PROVISIONS-AUXILLIARY HEATER PLUMBING & WIRING
EVA	TEST-DVT, EVAP EMISSION REQUIREMENT
EXP	EXPORT-
FE9	CERTIFICATION-EMISSION, FEDERAL
FHO	VEHICLE FUEL-GASOLINE E10
FHS	VEHICLE FUEL-GASOLINE E85
FHX	VEHICLE FUEL-DIESEL B20
G7C	PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X)
G7K	EQUIPMENT-ANTENNA, CABLE AND GROUNDPLATE
G80	AXLE POSITRACTION-LIMITED SLIP
G9K	PRIMARY COLOR-EXTERIOR, SATIN STEEL GRAY MET-3 (464C)
GAN	PRIMARY COLOR-EXTERIOR, SWITCHBLADE SILVER MET (G) 636R
GAZ	PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624
GBA	PRIMARY COLOR-EXTERIOR, BLACK (G) 8555
GD1	PRIMARY COLOR-BLUE ME AWAY MET (388A)
GPA	PRIMARY COLOR-EXTERIOR, GASOLINE MET-2 (457B)
GT4	AXLE REAR-3.73 RATIO
GT5	AXLE REAR-4.10 RATIO
GU6	AXLE REAR-3.42 RATIO
I18	ENGINEERING YEAR-2018
IVR	VEHICLE-VRIDE
JFF	GVW RATING-10,100 LBS
JH6	BRAKE-HYD POWER, 4 WHL DISC.
JH9	BRAKE-HYD POWER, 4 WHL DISC, 14, 200 LBS
JL4	CONTROL,-ACTIVE BRAKE

RPO	Description
K05	HEATER ENG-BLOCK
K08	HEATER-AUXILIARY, FUEL FIRED
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K50	FUEL-FITTING, LINE TAKE-OFF
K68	GENERATOR-105 AMP
KC4	COOLING SYSTEM-ENG OIL
KD1	COOLING SYSTEM-TRANS, OIL
KG3	GENERATOR-145 AMP
KG4	GENERATOR-150 AMP
KI4	RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT
KUP	THROTTLE CONTROL-ELECTRONIC
KW5	GENERATOR-220 AMP
KYN	GOVERNOR-VEHICLE SPEED - 85 MPH
L96	ENGINE-GAS, 8 CYL, 6.0L, SFI, E85 MAX, IRON, GM
LC8	ENGINE-LPG/CNG, 8 CYL, V8, 6.0L, SFI, GEN 1, GMNA
LV1	ENGINE-GAS, 6 CYL, 4.3L, GEN 5, SIDI, V6, VVT, OHV, ALUM
LWN	ENGINE-DIESEL, 2.8L, DI, L4, DOHC, TURBO, XLDE
M5U	TRANSMISSION-AUTO 8 SPD, 8L90
MTF	PROVISIONS-FIRE EXTINGUISHER MOUNTING
MYD	TRANSMISSION-AUTO 6 SPD, HMD, 6L90
N12	EXHAUST SYSTEM-REAR EXIT
N33	STEERING COLUMN-TILT TYPE
NAV	PLANT CODE-NAVISTAR, SPRINGFIELD, OH, USA
NCF	LOCK-CHILD SECURITY FEATURE - NONE
NE1	CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION FOR VEHICLES UP TO 14, 000 LBS GVW (USE 2003 MDL YR
NE7	FUEL TANK-216L, 57 GAL
NHT	PERFORMANCE PACKAGE-ENHANCED TOWING
NP5	STEERING WHEEL-LEATHER WRAPPED
NPL	PLATE-NAME - NONE
NTB	EMISSION SYSTEM-FEDERAL, TIER 3
NUK	EMISSION SYSTEM-CALIFORNIA, ULEV250
NUM	EMISSION SYSTEM-CALIFORNIA, LEV3 MDV 10-14K GVW
P03	COVER, WHEEL-VAR 3
PNC	PANEL-TRIM, FRT DOORS & SI RR DOOR(S) & RR DOORS
PPC	PANEL-TRIM, RR DOORS
PRP	SALES PACKAGE-COMMERCIAL TRADESMAN

RPO	Description
QB5	WHEEL-16 X 6.5, J, STEEL
QT4	WHEEL-16 X 6.5, STEEL H.D.
R04	WHEEL CONFIGURATION-RR, SINGLE
R05	WHEEL CONFIGURATION-RR, DUAL
R25	APPEARANCE PACKAGE-EXTERIOR, CHROME GRILLE & PAINTED BUMPER
R26	APPEARANCE PACKAGE-EXTERIOR, CHROME GRILLE & FRONT BUMPER
RVG	ACCESSORY-ADAPTER - TRAILER HARNESS
RYS	ACCESSORY-FIRE EXTINGUISHER
RYT	ACCESSORY-FIRST AID KIT
RYY	ACCESSORY-FLOOR MATS - MOLDED VINYL
RZW	ACCESSORY-HARNESS - TRAILER HITCH
S08	ACCESSORY-HIGHWAY SAFETY KIT
S52	ACCESSORY-MOLDED HOOD PROTECTOR - SMOKED
S6N	ACCESSORY-RECEIVER COVER - TRAILER HITCH
SAO	ACCESSORY-SMOKERS PACKAGE
SDD	ACCESSORY-TRAILER HITCH - FIXED
SDI	ACCESSORY-TRIANGLE - REFLECTIVE
SDS	ACCESSORY-WEATHER DEFLECTORS - SIDE WINDOW - SMOKED
SFE	ACCESSORY-WHEEL LOCKS
SFV	ACCESSORY-WIRELESS NETWORK INTERFACE MODULE
T74	CONTROL, HEADLAMPS-AUTOMATIC, DELAY
TGA	LANGUAGE CONTROL-ENGLISH, FRENCH, SPANISH
TGG	LANGUAGE CONTROL-ENGLISH, ARABIC, FRENCH
TP2	BATTERY-AUXILIARY
TR9	LAMP GROUP-
U05	HORN-DUAL
U0F	RADIO-AM/FM STEREO, CAF, RSA, MUSIC NAVIGATOR, GRAPHICS
U0H	RADIO-AM/FM STEREO, USB, GMNA
U19	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER
U2J	DIGITAL AUDIO SYSTEM-S-BAND - NONE
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U73	ANTENNA-FIXED, RADIO
U80	DISPLAY-COMPASS
UA1	BATTERY-HIGH CAPACITY, WET
UA7	THEFT DETERENT SYS-EXPORT SPECIFIC, VAR #02
UBS	DIGITAL AUDIO SYSTEM-S-BAND AND TRAFFIC

RPO	Description
UC2	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER, POSITIVE BIAS
UD4	ALARM-VEHICLE SPEED, 120 K/H
UD7	PARK ASSIST-REAR
UE0	COMMUNICATION SYSTEM-VEHICLE - NONE
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UF2	LAMP-CARGO
UF3	SWITCH-HIGH IDLE
UFA	DISPLAY-OUTSIDE TEMPERATURE
UFT	SIDE ACTIVE SAFETY-OBSTACLE DETECTION
UI8	RADIO-AM/FM, TOUCHSCREEN, NAVIGATION, CONNECTED, CD, AUX JACK, USB PORT
UJ1	INDICATOR-SYSTEM, BRAKE WARNING
UJM	TIRE PRESS INDICATOR-MANUAL LEARN
UL2	FREQUENCIES-EUROPEAN
UL8	FREQUENCIES-SAUDI ARABIAN
UPF	WIRELESS INTERFACE-SHORT RANGE, VOICE REC
US8	RADIO-AM/FM STEREO, SEEK/SCAN, CD, AUTO TONE, CLOCK, ETR, MP3, RDS
USR	RECEPTACLE-USB
UTN	PROVISIONS-UPFITTER CONTROL AND MONITORING
UVC	VISION-REAR VIEW, MONO, ANALOG
UXZ	RADIO-PROVISIONS FOR
UY7	WIRING HARNESS-TRUCK TRAILER, HD
V10	PROVISION OPTIONS-COLD WEATHER
V14	COOLER-OIL, TRANSMISSION, AUX
V22	GRILLE-RADIATOR, CHROME
V37	BUMPER-FRT & RR, CHROME
V46	BUMPER FRT-CHROME
V4D	CALIBRATION-SEPARATED STOP/TURN SIGNAL CIRCUITS
V78	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT (ENGLISH TEXT)
V87	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - GULF STATES ORGANIZATION
V8C	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT
V8D	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS
V8I	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - ISRAEL FMVSS
VBX	LANGUAGE LABEL-ARABIC
VC5	LABEL-SHIPPING, EXCEPT US, US POSSESSIONS, OR JAPAN
VG8	VEHICLE-LABEL, NOTICE TO BUYER

RPO	Description
VH6	BUMPER FRT-BLACK
VJG	BUMPER RR-BLACK
VK3	LICENSE PLATE FRONT-FRT MOUNTING PKG
VK5	SEAT-TEMPORARY, FOR SHIPPING
VLL	ACCESSORY-CROSS RAILS - ROOF RACK - REMOVABLE
VLP	ACCESSORY-BULKHEAD DIVIDER
VLU	ACCESSORY-SECURITY SCREEN PACKAGE - REAR WINDOW W/O POP - OUT
VLV	ACCESSORY-LADDER RACK - ROOF MOUNTED - SWING OUT
VLW	ACCESSORY-BULKHEAD DIVIDER WITH DOOR
VP6	NOISE CONTROL-
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY
VQK	ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED
VR4	TRAILER HITCH-WEIGHT DISTRIBUTING PLATFORM
VR6	HOOK-TIE-DN SHPG
VT7	OWNERS MANUAL-ENGLISH LANGUAGE
VV4	COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY
VXT	VEHICLE TYPE-INCOMPLETE
VXW	ACCESSORY-ASSIST STEPS - MOLDED
W1Y	CONTROL-STEERING WHEEL, RADIO, REDUNDANT CONTROLS
WEN	PLANT CODE-WENTZVILLE, MO, USA
WMJ	VIN MODEL YEAR-2018
WRF	WIRING PROVISIONS-ELECTRICAL ACCESSORY
X88	MARKET BRAND-CHEVROLET
XHF	TIRE FRONT-LT225/75R16 E 115/112 S BL ALS
XIW	TIRE FRONT-LT245/75R16 E 120/116R BW OOR
XL7	FREQUENCIES RATING-315 MHZ, LONG DISTANCE
XL8	FREQUENCIES RATING-433 MHZ
XLP	TIRE FRONT-LT245/75R16 E 120/116 S BW ALS
Y3H	SALES PACKAGE-HANDICAPPED, MOBILITY, PARATRANSIT
YA2	DOOR SIDE-REAR, SLIDING
YB9	PAINT PROCESS-INTERIOR - NONE
YC6	PACKAGE, CONVENIENCE-DECOR LEVEL #6
YF1	SALES PACKAGE-CUTAWAY UPFITTER
YF2	SALES PACKAGE-AMBULANCE UPFITTER
YF5	CERTIFICATION-EMISSION, CALIFORNIA

RPO	Description
YHF	TIRE REAR-LT225/75R16 E 115/112 S BL ALS
YIW	TIRE REAR-LT245/75R16 E 120/116R BW OOR
YLP	TIRE REAR-LT245/75R16 E 120/116 S BW ALS
YM8	IDENTIFICATION-LIMITED PERSONALIZATION OPTION (LPO)
Z49	COUNTRY-CANADA
Z5X	MIRROR PROVISIONS-ARABIC LANGUAGE
Z82	TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D.
Z88	MARKET BRAND-GMC
ZHF	TIRE SPARE-LT225/75R16 E 115/112 S BL ALS
ZIW	TIRE SPARE-LT245/75R16 E 120/116R BW OOR
ZLP	TIRE SPARE-LT245/75R16 E 120/116 S BW ALS
ZP0	SEATING ARRANGEMENT-TEMPORARY DRIVER
ZP3	SEATING ARRANGEMENT-15 PASS
ZP6	SEATING ARRANGEMENT-5 PASS CARGO
ZP8	SEATING ARRANGEMENT-8 PASS
ZQ2	SALES PACKAGE-DRIVER CONVENIENCE
ZQ3	SALES PACKAGE-DRIVER CONVENIENCE II
ZR7	APPEARANCE PACKAGE-GRILLE & BUMPER CHROME
ZW2	WINDOW PKG-RR DRS
ZW3	WINDOW PKG-RR DRS, SIDE RR DR
ZW4	WINDOW PKG-RH SIDE, RR DRS
ZW6	WINDOW PKG-COMPLETE BODY
ZW9	BODY EQUIPMENT-BASE BODY OR CHASSIS
ZX1	SEATING ARRANGEMENT-DRIVER ONLY, HIGH BACK
ZX2	SEATING ARRANGEMENT-DRIVER & PASS, HIGH BACK
ZX5	SEATING ARRANGEMENT-12 PASS
ZX9	TIRE SPARE-W/WHEEL - NONE
ZY1	COLOR COMBINATION-SOLID

Section 2

Body Systems

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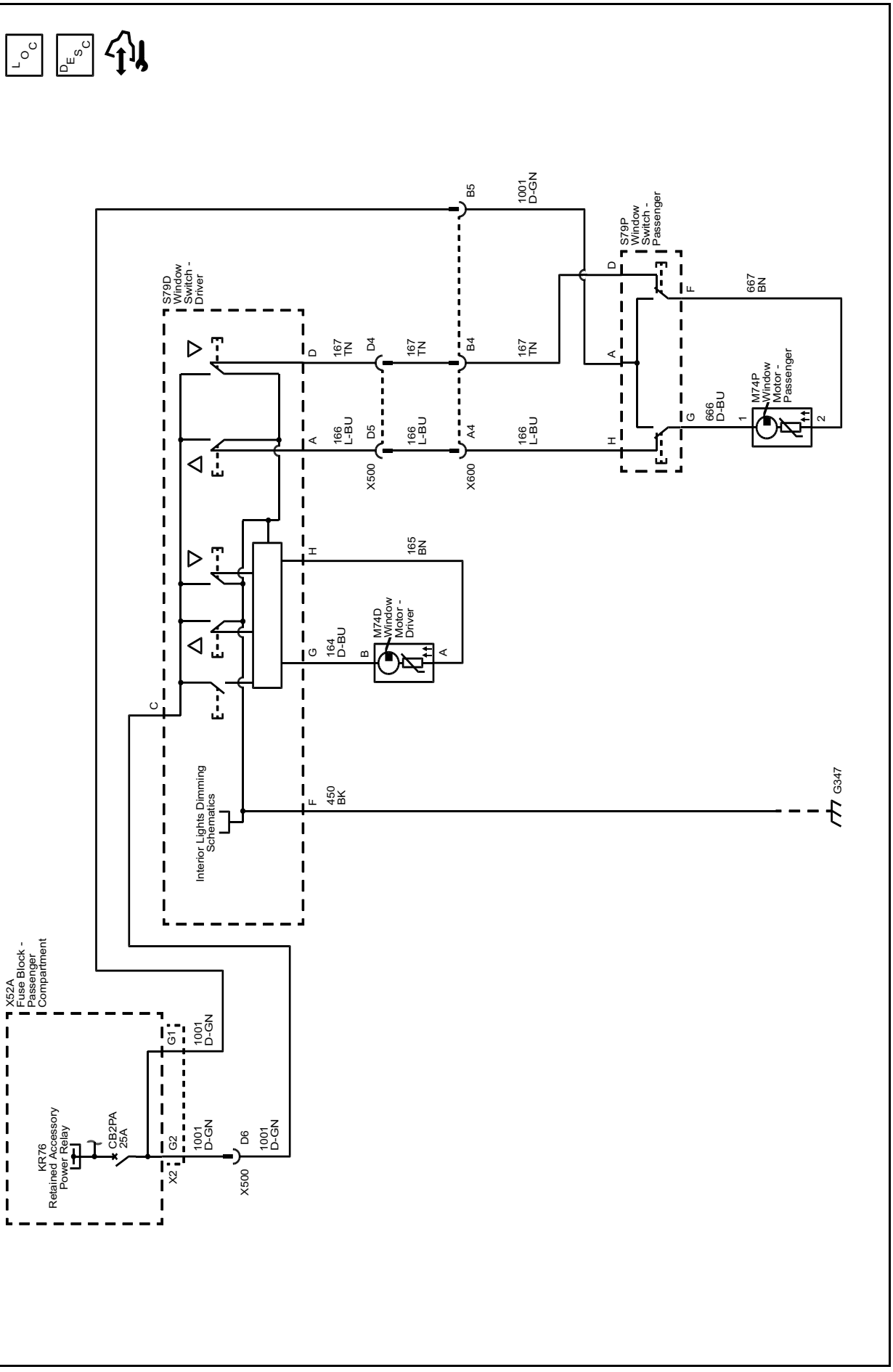
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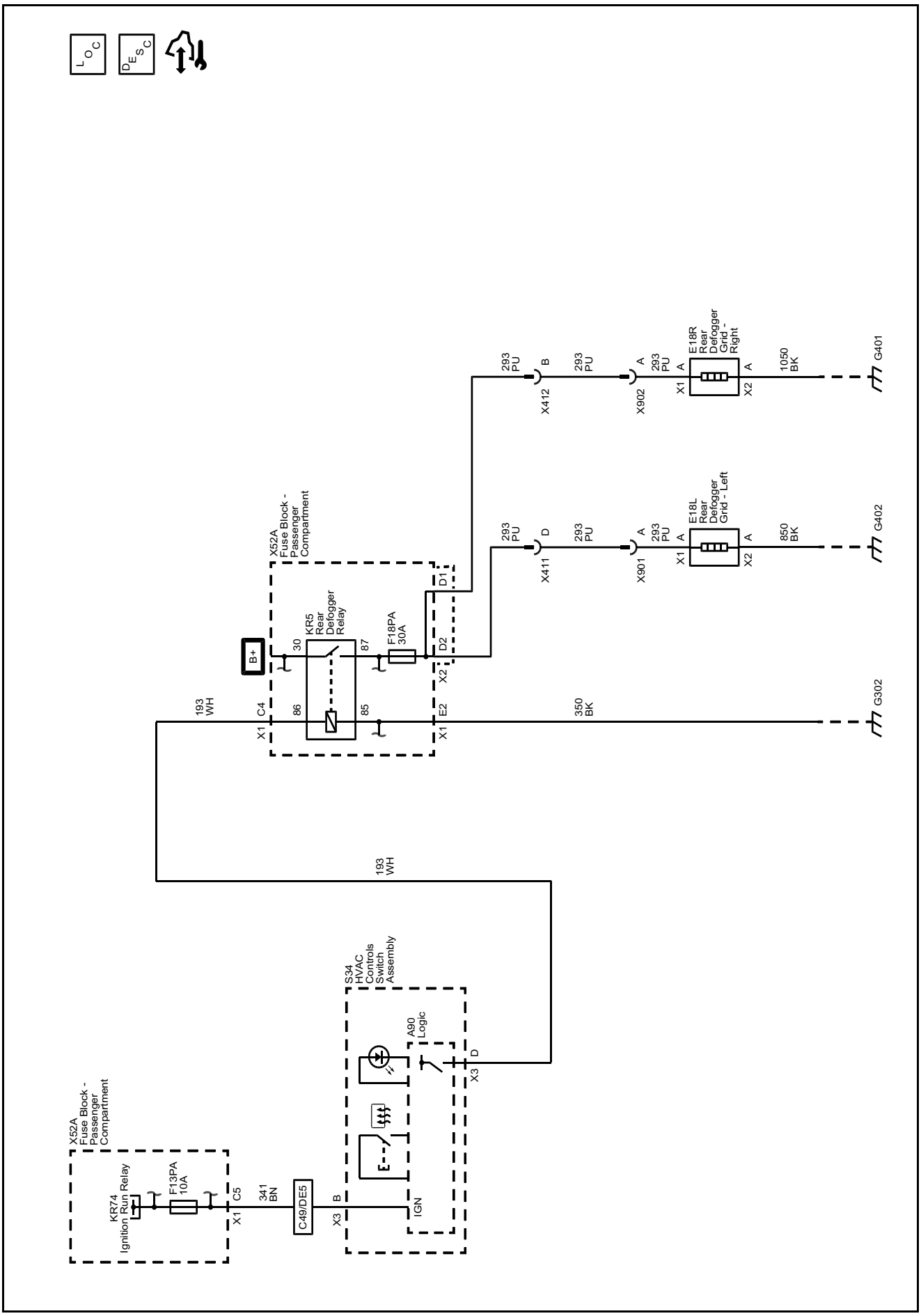
Fixed and Moveable Windows

Schematic and Routing Diagrams

Moveable Window Schematics (Moveable Windows (A31))



Defogger Schematics (Defogger (C49))



Description and Operation

Power Windows Description and Operation

Power Window System Components

The power window system consists of the following components:

- LF power window master switch
- RF power window switch
- Reversible power window motors in each of the doors (circuit breaker protected)
- PWR WNDW 25A circuit breaker

Power Window System Controls

The power window system will operate anytime the ignition switch is in the ACCY or ON position or when RAP is activated.

The LF power window master switch can control the up and down functions of both the windows in the vehicle. The passenger door power window switch can only control the up and down functions of the passenger window.

Power Window Motor Operation

A permanent magnet motor operates each of the power side windows. Each motor raises or lowers the glass when the motor receives voltage. The direction the motor turns depends on the polarity of the supply voltage. The power window switches control the polarity of the supply voltage. A built-in circuit breaker protects each motor. The circuit breaker opens when the switch is depressed for a extended period of time under the following conditions:

- The window has an obstruction.
- The window is fully open or fully closed.

The circuit breaker will reset automatically as the circuit breaker cools.

Power Window Operation

The normally closed contacts of the switch are connected to ground and the center pole is connected to the accessory voltage circuit. By placing the left power window switch in the down position, voltage is applied to the power window motor left front down circuit and to the power window motor. The other side of the power window motor is connected to ground through the normally closed contacts of the left power window switch through the power window motor left front up circuit and drives the window down.

By placing the power window switch in the up position the polarity of the motor is reversed and the motor drives the window up.

Rear Window Defogger Description and Operation

Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- HVAC control assembly
- Rear window defogger relay
- Rear window defogger grid

Rear Window Defogger Operation

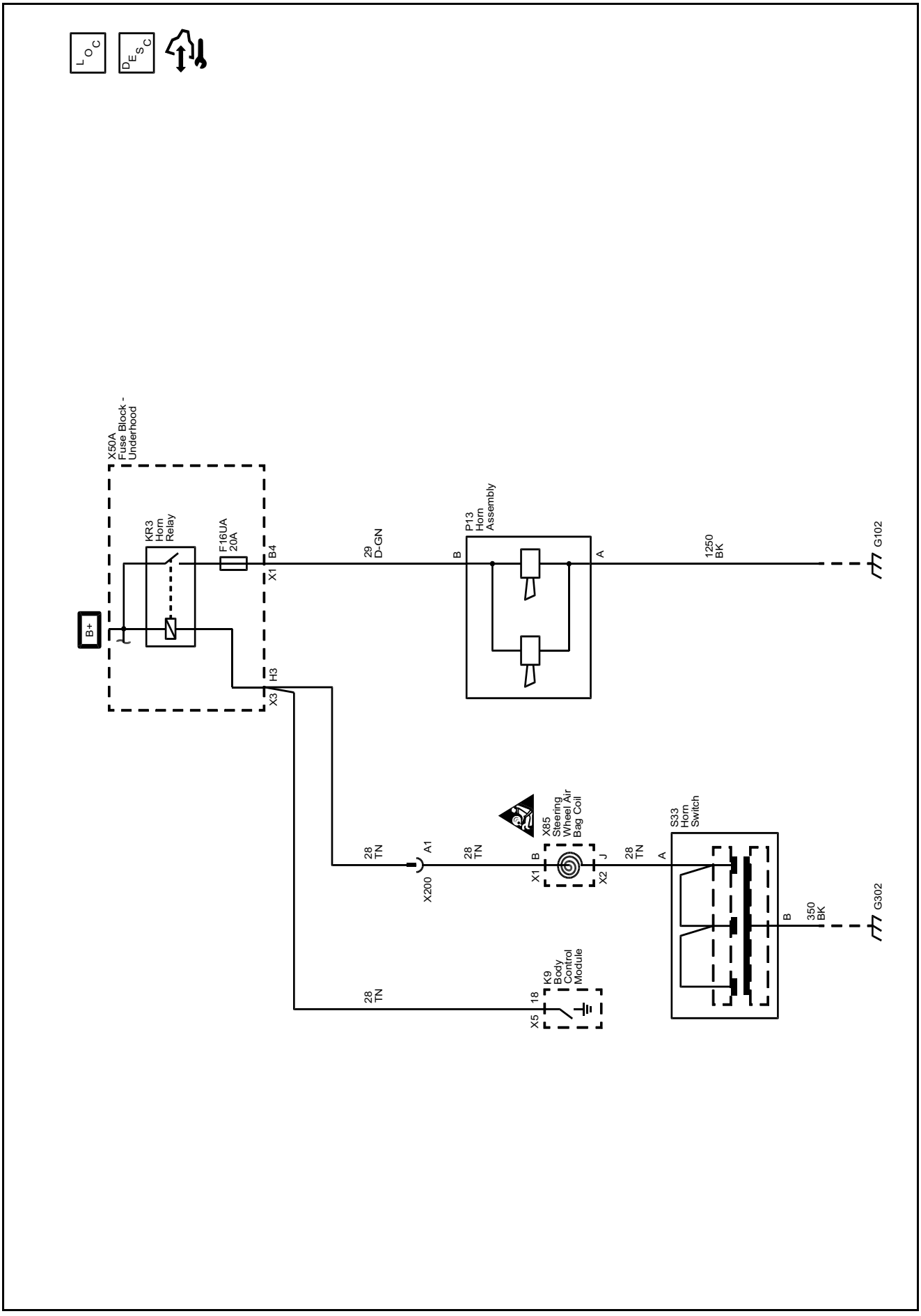
When you turn the ignition to the ON position, battery positive voltage is supplied through the HTD MIR DEFOG fuse to the rear window defogger relay switched input. Ground is for the rear window defogger relay coil is provided by G302. Battery positive voltage and ignition voltage is supplied to the HVAC control assembly for rear window defogger operation. When the rear window defogger switch is depressed, the HVAC control assembly energizes the rear window defogger relay by supplying battery positive voltage to the rear window defogger relay coil. This allows battery positive voltage from the relay switched input through the switch contacts and out the relay switched output to the rear window defogger grids. The HVAC control assembly also illuminates the rear window defogger indicator upon this request. Ground for the left rear window defogger grid is provided by G401. Ground for the right rear window defogger grid is provided by G402.

When you turn ON the ignition and press the rear window defogger switch for the first time, the defogger cycle lasts 10 minutes. Further operation results in 5 minute defogger cycles. The defogger cycle resets to 10 minutes when you cycle the ignition to the OFF position and then back to the ON position.

Horns and Pedestrian Alerts

Schematic and Routing Diagrams

Horn Schematics (Horn Schematics)



Description and Operation

Horns System Description and Operation

System Description

The horn system consists of the following components:

- The HORN fuse
- The Horn relay
- The Horn Contact
- The Horn Assembly
- Body Control Module (BCM)

System Operation

- The vehicle horns are activated whenever the horn switch is depressed.
- The BCM commands the horns ON under any of the following conditions:
  - When the panic button is depressed on the remote control door lock transmitter. For further information refer to *Keyless Entry System Description and Operation on page 7-13*.
  - When the keyless entry system is used to lock the vehicle, a horn chirp may sound to notify the driver that the vehicle has been locked. The notification feature may be enabled or disabled through personalization. For further information refer to *Keyless Entry System Description and Operation on page 7-13*.

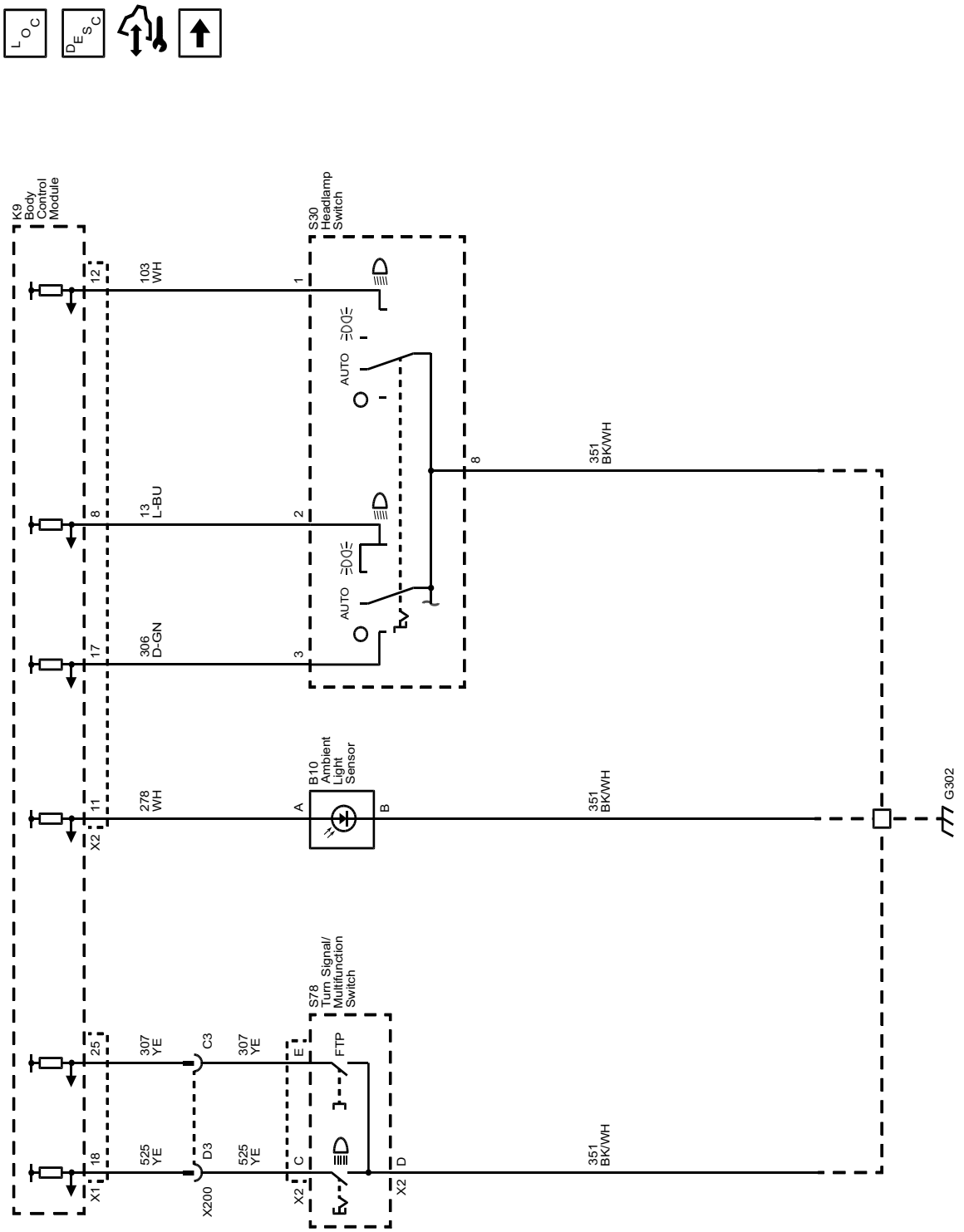
Circuit Operation

Battery positive voltage is applied at all times to the horn relay coil and the horn relay switch. Pressing the horn switch applies ground to the horn relay control circuit. 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.

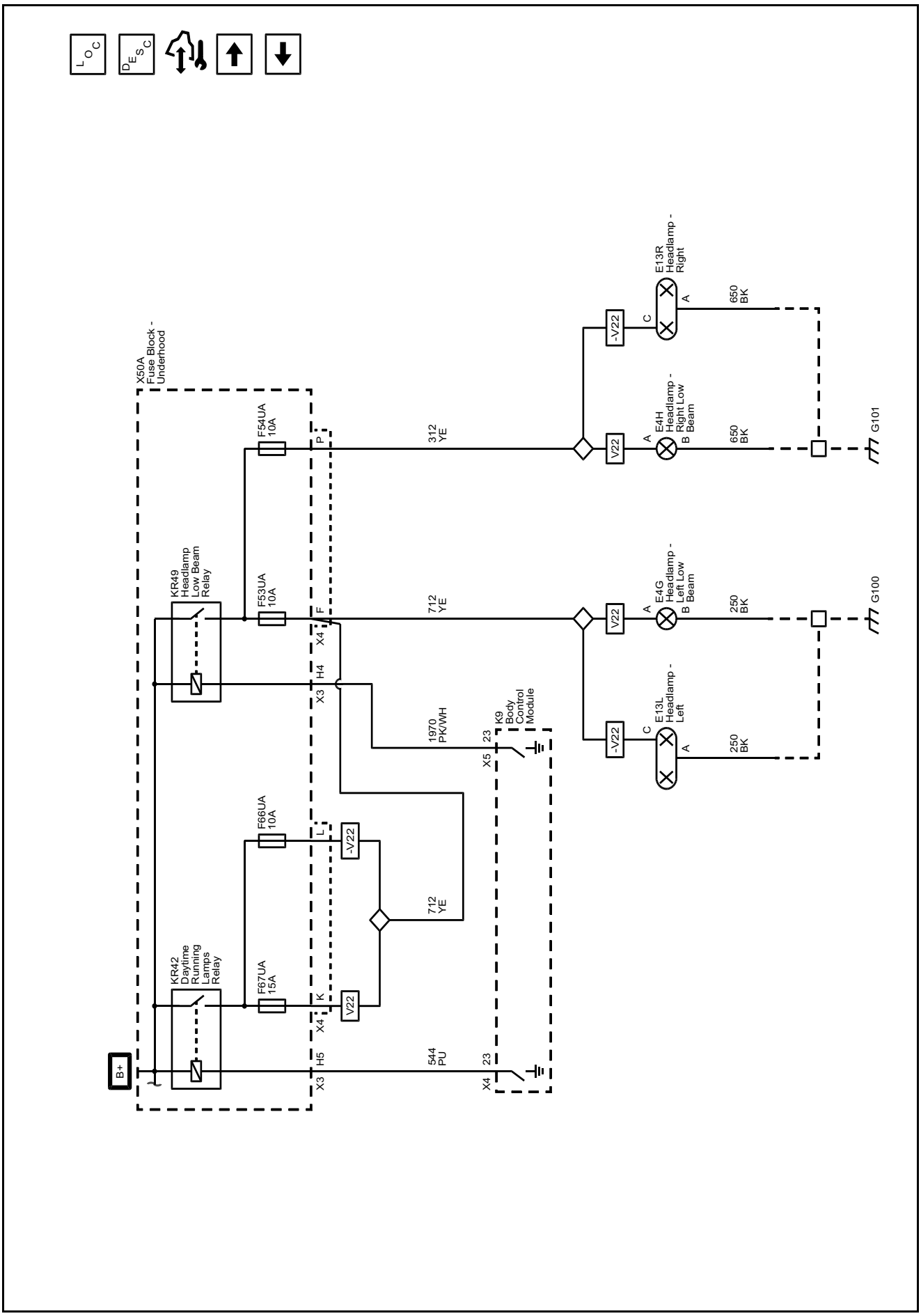
Lighting

Schematic and Routing Diagrams

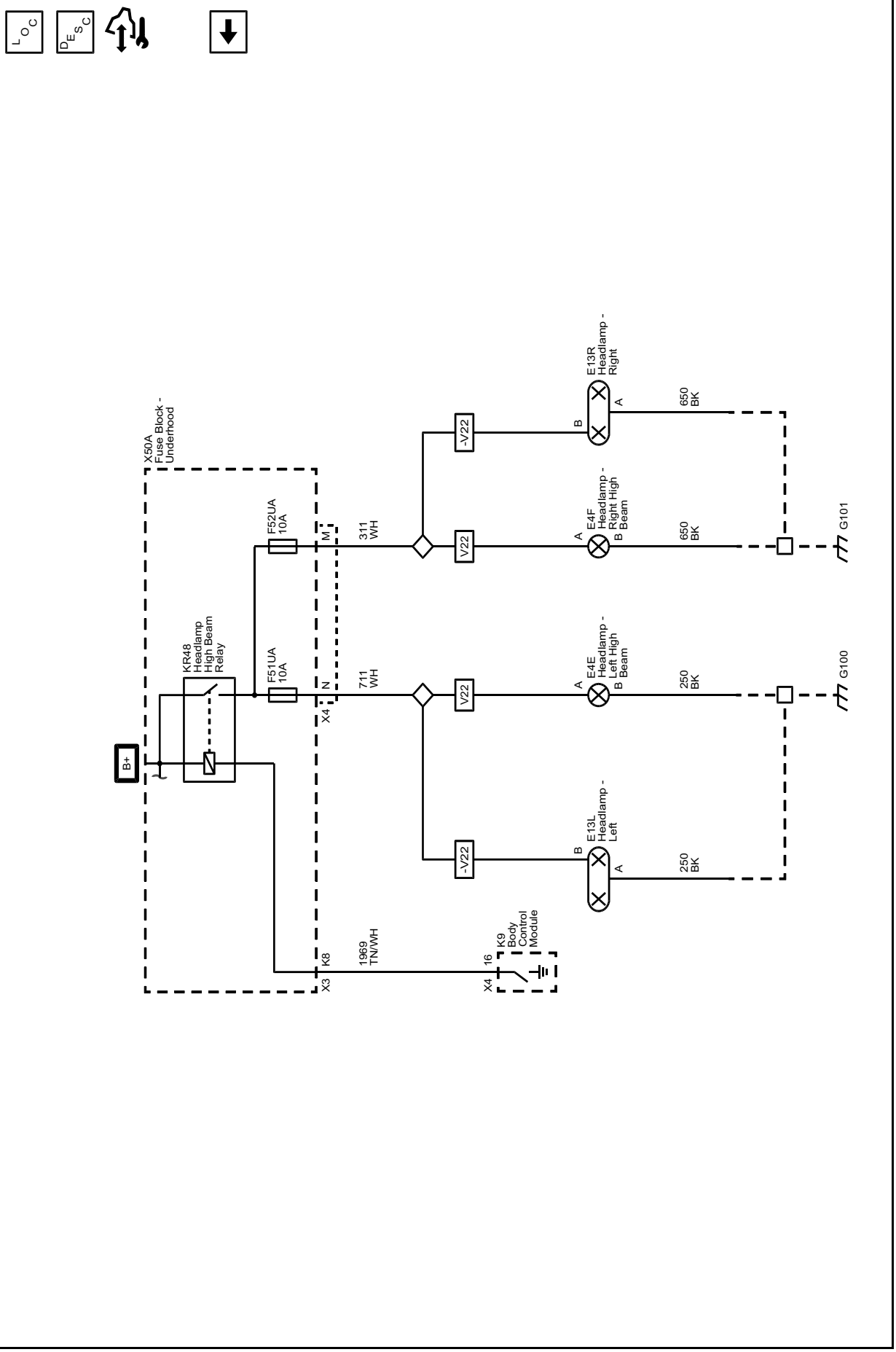
Headlights/Daytime Running Lights (DRL) Schematics (Headlamp and Daytime Running Lamp Controls)



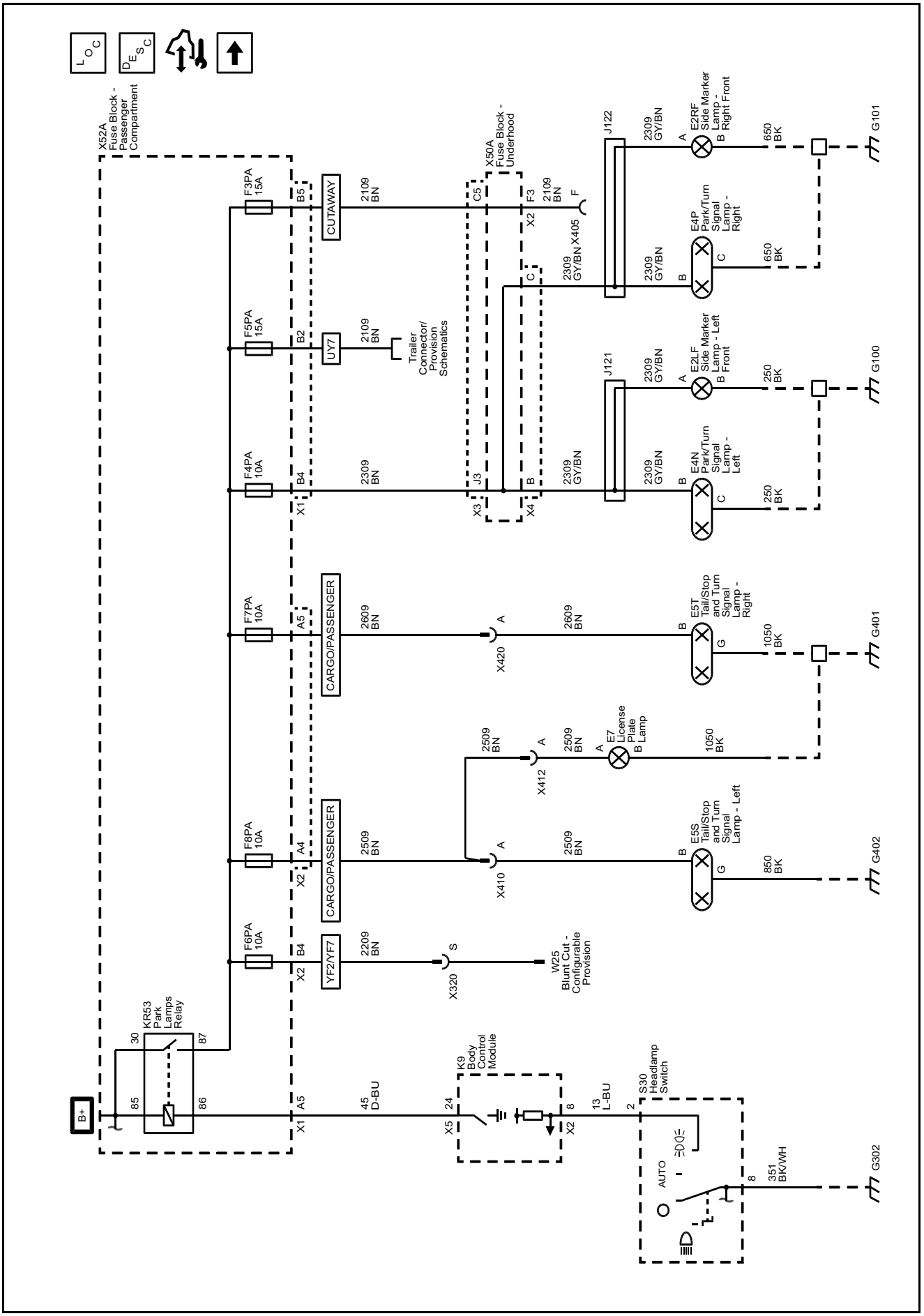
Headlights/Daytime Running Lights (DRL) Schematics (Low Beam and Daytime Running Lights (DRL))



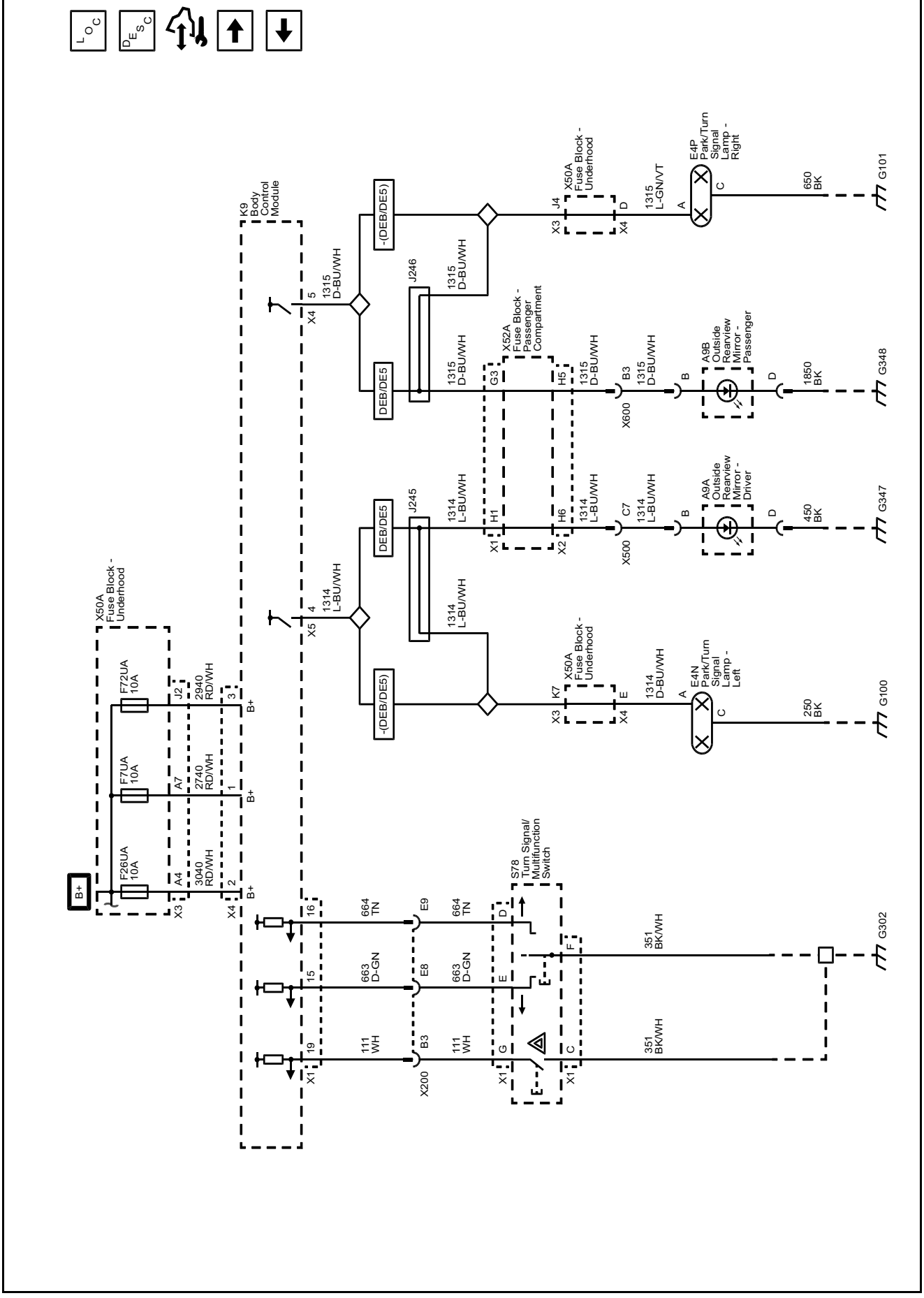
Headlights/Daytime Running Lights (DRL) Schematics (High Beams)



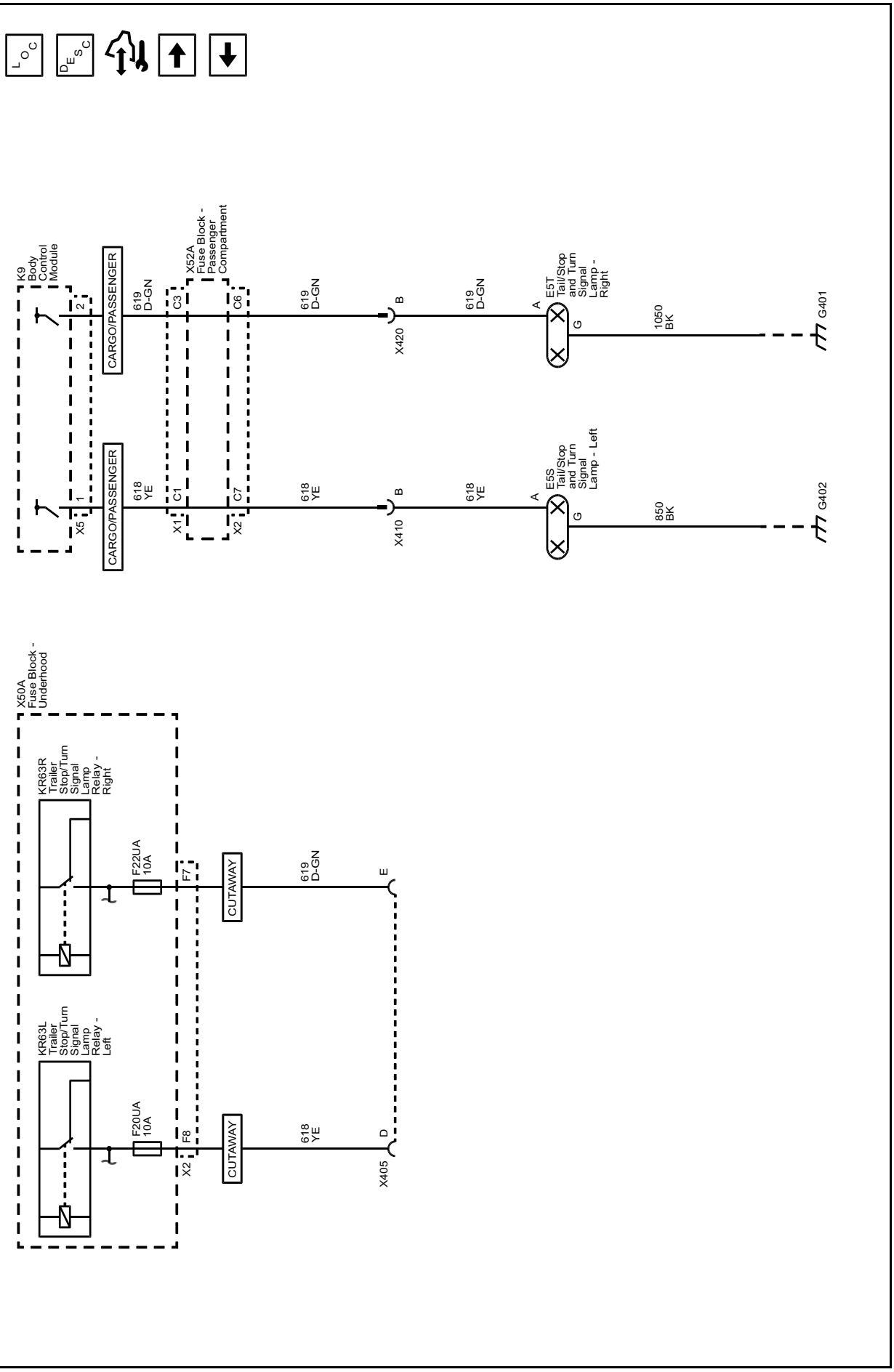
Exterior Lights Schematics (Park Lamp Controls and Park Lamps)



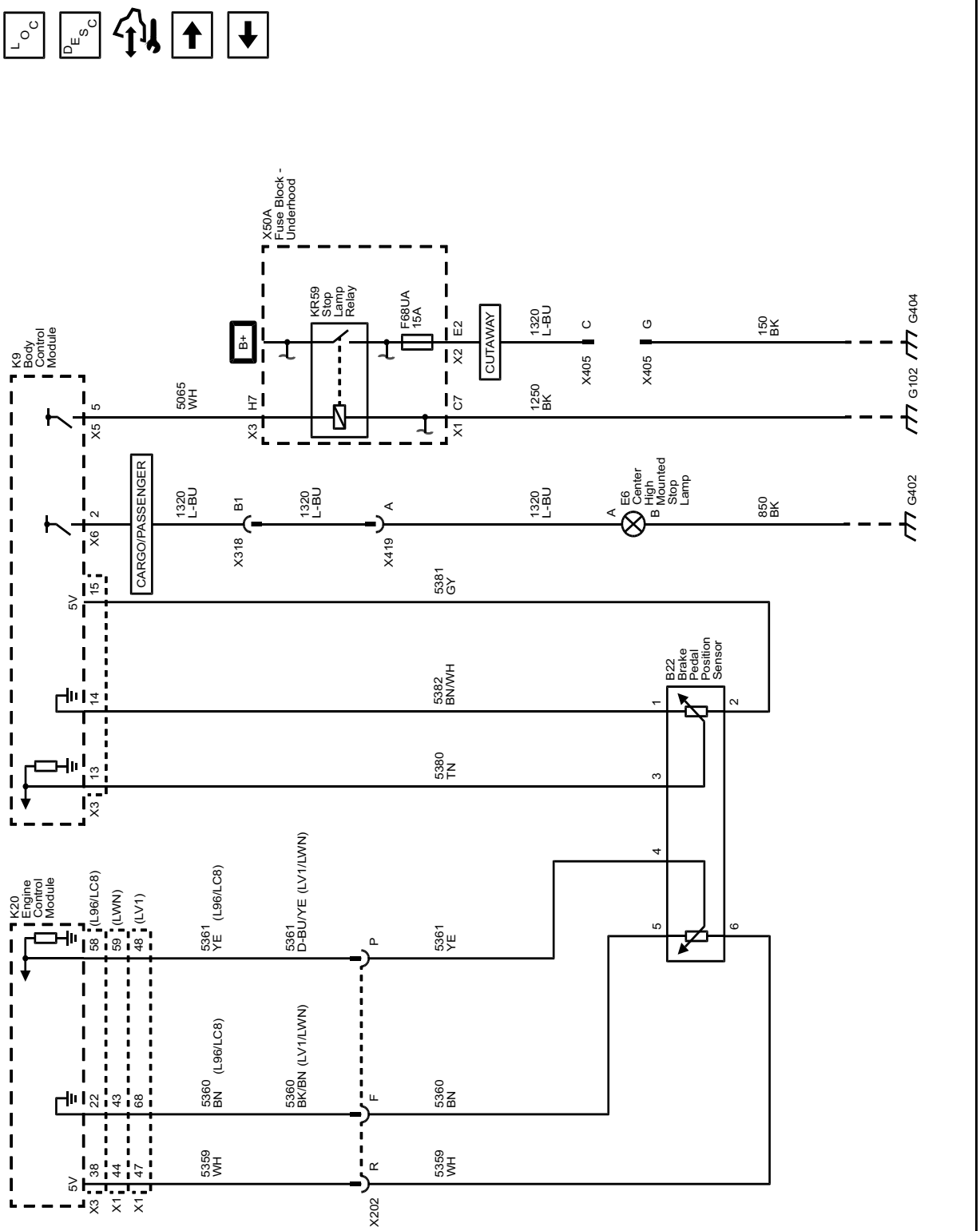
Exterior Lights Schematics (Turn Signal Controls and Front Turn Signal Lamps)



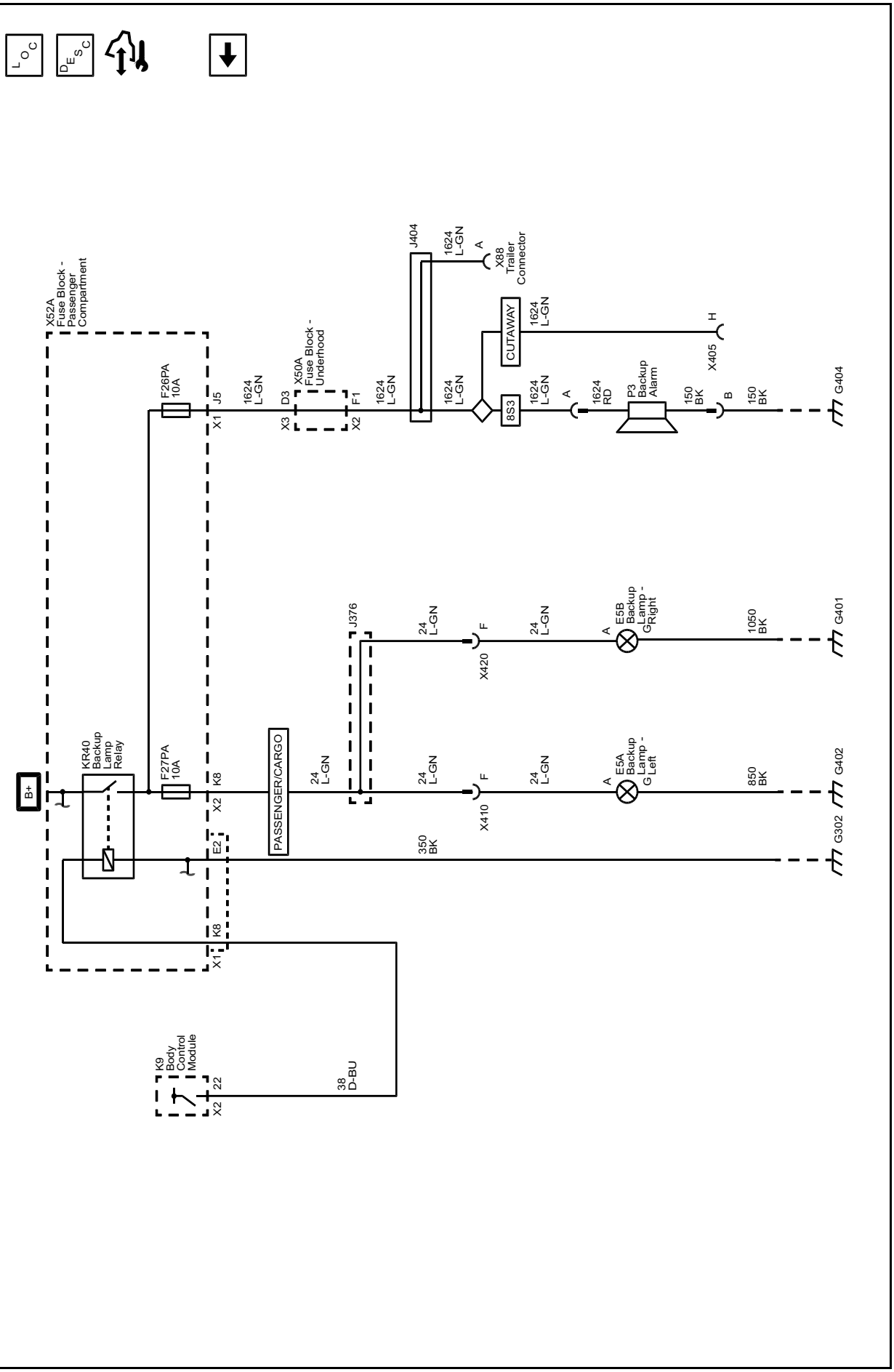
Exterior Lights Schematics (Rear Turn Signal Lamps)



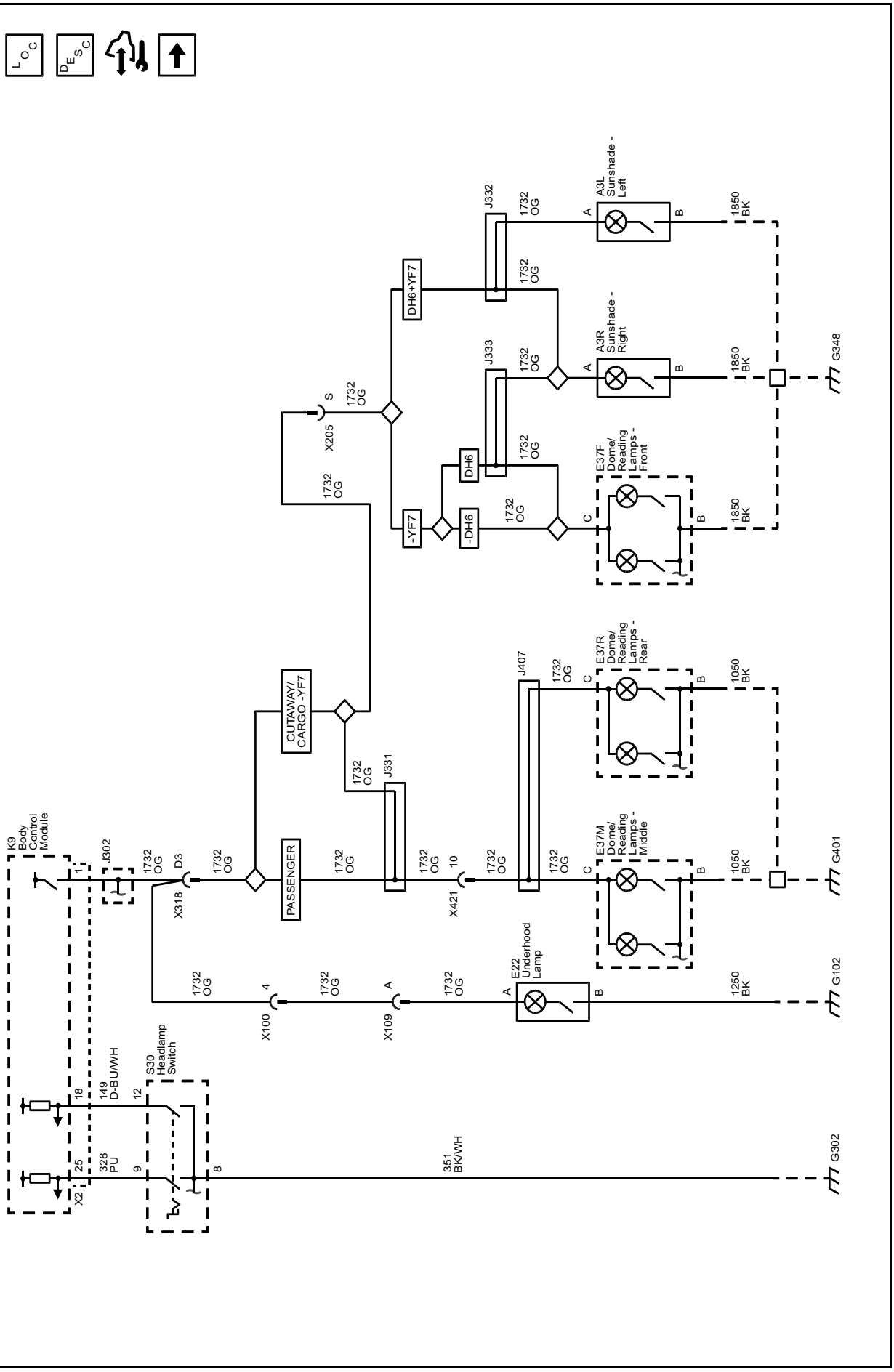
Exterior Lights Schematics (Stop Lamp Controls and CHMSL)



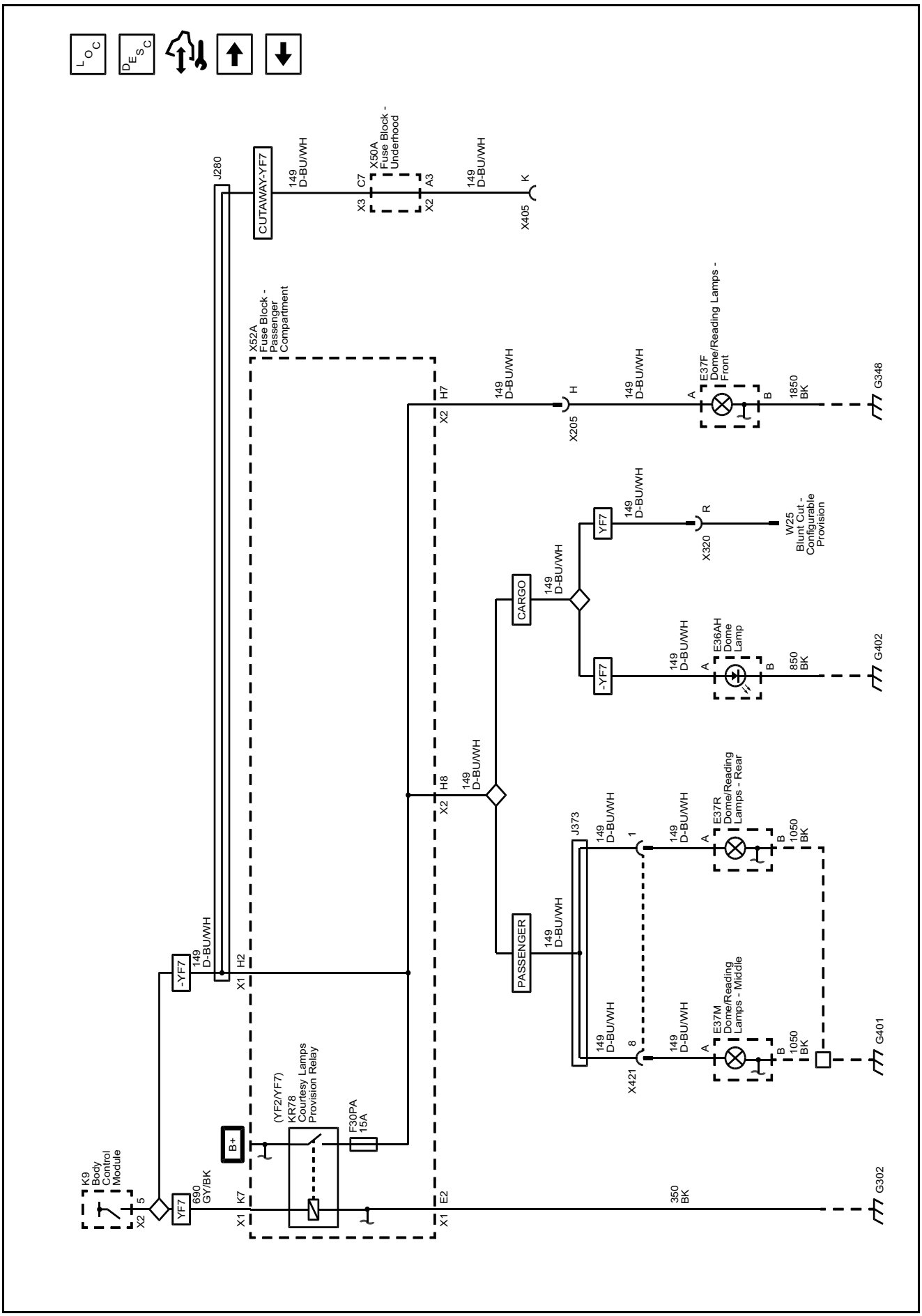
Exterior Lights Schematics (Backup Lamps and Backup Alarm)



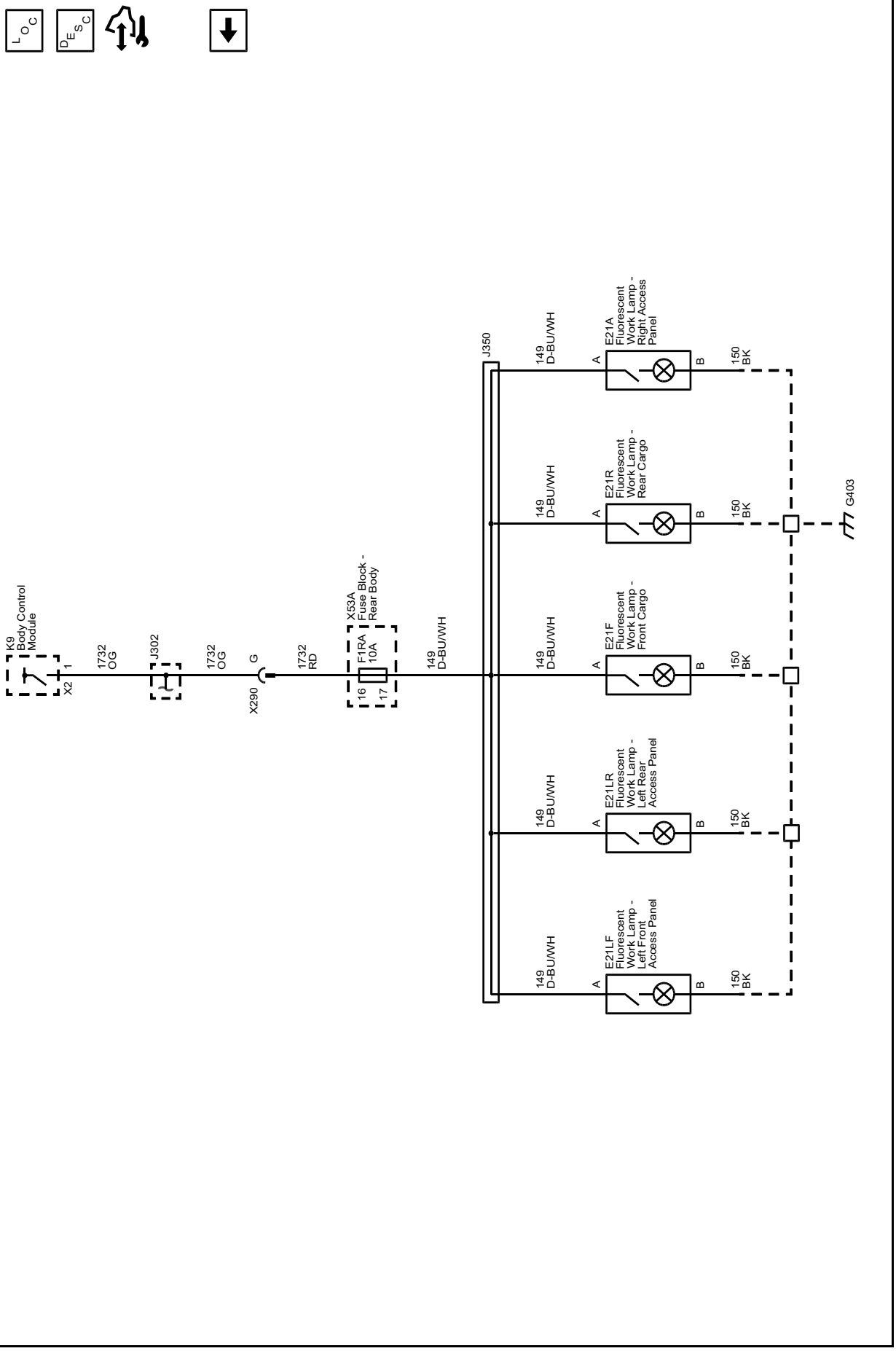
Interior Lights Schematics (Inadvertent Lamp Control)



Interior Lights Schematics (Courtesy Lamp Control)



Interior Lights Schematics (Side Access Panel and Cargo Work Lamps (PRP with UF2))



Description and Operation
Exterior Lighting Systems Description and Operation

Exterior Lamps

The exterior lighting consist of the following lamps:

- Headlamps
- Daytime running lamps (DRL)
- Park lamps
- Tail lamps
- License lamps
- Marker lamps
- Turn signal lamps
- Stop lamps
- Center high mounted stop lamp (CHMSL)
- Backup lamps

Low Beam Headlamp Operation

The headlamps may be turned ON in 3 different ways:

- When the headlamp switch in the HEAD position for normal operations
- When the headlamp switch is in the AUTO position, for automatic lamp control (ALC)
- When the headlamp switch is placed in the AUTO position, with the windshield wipers ON in daylight conditions, after a 6 second delay

Battery voltage is applied at all times to the coil and switch sides of the LOW BEAM PCB Relay located in the underhood fuse block. With the headlamp switch in the headlamps ON position, ground is applied through the headlamps ON switch signal circuit to the body control module (BCM) signaling the headlamps ON request. In response to this signal, the BCM applies ground through the low beam relay control circuit energizing the LOW BEAM PCB Relay. With the relay energized, battery voltage is applied through the switch side of the relay, the LT and RT LOW BEAM fuses, and the low beam supply voltage circuits illuminating the low beam headlamps.

High Beam Headlamp Operation

Battery voltage is applied at all times to the coil and switch sides of the HIGH BEAM PCB Relay located in the underhood fuse block. When the headlamp dimmer switch is placed in the high beam position, the headlamp dimmer switch signal circuit to the BCM is pulled low signaling the headlamp high beam request. In response to this signal, the BCM applies ground through the high beam relay control circuit energizing the high beam relay. With the relay energized, battery voltage is applied through the switch side of the relay, the LT and RT HIGH BEAM fuses, and the high beam supply voltage circuits illuminating the high beam headlamps. At the same time the BCM sends a serial data message to the instrument panel cluster (IPC) requesting the IPC to illuminate the high beam indicator.

Flash to Pass (FTP)

When the headlamp dimmer switch is pulled toward the driver, the flash to pass signal circuit to the BCM is pulled low signaling the flash to pass request. The BCM then turns ON the high beam headlamps as described above until the headlamp dimmer switch is released. If the low beam headlamps were ON during FTP operation they will remain ON.

Daytime Running Lamps (DRL) and Automatic Lamp Control (ALC)

The low beam headlamps are used for DRL operation at a reduced intensity. The DRLs will operate only with the ignition ON, the headlamp switch in the AUTO position, and the gear selector out of the park position. No other exterior lamps such as the parking lamps, tail lamps, etc. will be on when the DRL are being used. The instrument panel will not be illuminated either.

DRL operation is determined by the ambient light sensor and controlled by the body control module (BCM). The ambient light sensor is a light-sensitive transistor used to monitor outside lighting conditions. The BCM provides a 5-volt reference signal to the sensor. The sensor will vary this voltage signal between 0.2 and 4.9 volts depending on outside lighting conditions. The BCM monitors the ambient light sensor signal circuit to determine if outside lighting conditions are correct for either DRL or ALC operation. When the BCM determines the conditions are met for DRL operation, it applies ground to the DRL relay control circuit energizing the DRL PCB Relay. With the relay energized, battery voltage is applied through the switch side of the relay, the DRL 1 fuse, the DRL 2 fuse, both low beam headlamp fuses, and the low beam supply voltage circuits illuminating the headlamps at a reduced intensity. Any function or condition that turns on the headlamps will cancel DRL operation.

When the BCM detects low light conditions, it will turn OFF the daytime running lamps and turn ON the low beam headlamps as described above in Low Beam Headlamp Operation. The BCM will also turn ON the low beam headlamps in daylight conditions when the windshield wipers are turned ON.

HDLPS Suggested Indicator

If the park lamps are turned ON manually and the ambient light sensor detects a low light condition then the body control module (BCM) will send a message to the instrument panel cluster (IPC) to display the HEADLAMPS SUGGESTED message.

Lights ON Warning

The body control module (BCM) activates the lights ON warning as requested by the headlamp dimmer switch. The lights ON warning sounds when the following occurs:

- The key is out of the ignition.
- The BCM determines that the drivers door is open, signal is low.
- The BCM determines that the headlamp switch is in the PARK or HEAD position.

Park, Tail, Marker and License Lamps

The park, tail, and marker lamps are turned ON when the headlamp switch is placed in either the HEAD or PARK lamp positions, or anytime the automatic light control (ALC) turns the headlamps ON. When the headlamp switch is placed in the park lamp or headlamp positions, ground is applied through the switch signal circuit to the BCM indicating the park lamp ON request. In response to this signal, the BCM applies ground through the park lamp relay control circuit energizing the PRK LAMP Relay. With the relay energized, battery voltage is applied through the switch side of the relay, the park lamp fuses, and the supply voltage circuits illuminating the park, license, side marker, and tail lamps.

Turn Signal Lamps

The BCM 3, BCM 5, and BCM 6 fuses located in the underhood fuse block supply battery voltage to the body control module (BCM) for turn signal, hazard lamp, and stop lamp operation. Voltage from the BCM 5 fuse used for the front and rear left turn signals, voltage from the BCM 3 for the right front turn signal, while voltage from the BCM 6 fuse is used for the right rear turn signal. When the turn signal switch is place in either the LEFT or RIGHT position, ground is applied through the turn signal switch signal circuit to the BCM indicating the turn signal request. In response to this signal, the BCM applies a pulsating voltage to the front and rear turn signal lamps supply voltage circuits cycling the lamps ON and OFF. The BCM also sends a message via to the instrument panel cluster (IPC) to cycle the turn signal indicator ON and OFF depending on the position of the turn signal switch.

Hazard Lamps

The hazard flashers may be activated in any power mode. When the hazard lamp switch is placed in the ON position, ground is applied through the hazard switch signal circuit to the body control module (BCM) indicating the hazard lamps ON request. In response to this signal, the BCM applies a pulsating voltage though all front and rear turn signal supply voltage circuits cycling the lamps ON and OFF. The BCM also sends a serial data message to the instrument panel cluster (IPC) to cycle both turn signal indicators ON and OFF.

Stop Lamps (cargo/passenger)

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5-volt reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will apply battery voltage to the right and left stop lamp control circuits, transmission control module (TCM), engine control module (ECM), center high mounted stop lamp (CHMSL) control circuit, and trailer brake control module if equipped.

Stop Lamps (cutaway)

The BCM controls the stop lamps based on the input from the stop lamp switch. When the BCM detects the brake pedal is depressed, B+ is applied to the stop lamp relay control circuit energizing the Stop Lamp PCB Relay. With the relay energized, B+ is applied to the stop/turn lamp supply voltage circuits illuminating both stop lamps.

Backup Lamps

When the gear selector is placed in the REVERSE position, the powertrain control module (PCM) sends a serial data message to the BCM indicating the backup lamps ON request. The BCM then applies battery voltage through the backup relay control circuit energizing the BCK/UP LAMP PCB Relay. With the relay energized, battery voltage is applied through the switch side of the relay, the T/LAMP BCK/UP fuse, the AUX/TRLR BCK/UP fuse and the supply voltage circuits illuminating the left and right backup lamps and the backup alarm. The engine may need to be running for the backup lamps to function.

Rear Fog Lamps

The rear fog lamps are located in the rear bumper. The fog lamps will operate only when the ignition in the RUN or CRANK positions. When the rear fog lamp switch is turned ON, ground is applied through the rear fog lamp switch signal circuit to the body control module (BCM) indicating the rear fog lamps ON request. In response to this signal, the BCM applies ground to the rear fog lamp relay control circuit energizing the REAR FOG LP PCB Relay. With the relay energized, battery voltage is applied through the switch side of the relay, the RR FOG LP fuse and the rear fog lamp supply voltage circuit to the left and right rear fog lamps. The BCM sends a serial data message to the instrument panel cluster (IPC) requesting the rear fog lamp indicator be illuminated. The rear fog lamps will deactivate if the headlamps are turned OFF, if the ignition is turned to the OFF position upon a key cycle, or if the driver turns the rear fog lamp switch OFF.

Battery Rundown Protection/ Inadvertent Power

The BCM controls the lighting system through circuits that enable the exterior lamp functions of the park lamps, the head lamps, the fog lamps, and the interior lamps. The BCM will open these enabling circuits 10 minutes after the ignition switch is turned OFF with no lamp switch activity. If the ignition switch is turned to any position other than OFF, or if a lamp switch is activated during this time period, the timer will reset for another 10 minutes.

Interior Lighting Systems Description and Operation

The interior lighting consist of two groups; lamps that may not be manually dimmed (Interior Lamps) and lamps that may be dimmed (Interior Lamps Dimming).

The first group listed below includes lamps that may not be dimmed:

- Front dome/reading lamps
- Middle dome/reading lamps
- Rear dome/reading lamps
- Sunshade Mirror Lamps
- Underhood Lamp

Interior Lamps Features

The interior lamps system features the following functions:

- An illuminated entry feature that illuminates the courtesy lamps when entering the vehicle or activating the remote keyless entry system.
- An illuminated exit feature that illuminates the courtesy lamps when the ignition key has been removed from the ignition.
- An inadvertent power feature that supplies voltage to all interior lamps after the ignition is turned OFF. The inadvertent power feature will deactivate all interior lamps after 10 minutes to prevent battery rundown.
- A theater dimming feature that will slowly dim the interior lamps from full brightness to OFF.
- Individual switches for control of each interior lamp that is not illuminate with the interior lamp switch.

Courtesy Lamps (−YF2/YF7)

When any one of the doors is opened, ground is applied through the door latch door open switch and the door open switch signal circuit to the BCM indicting the door open position. In response to this signal, the BCM then applies battery voltage through the courtesy lamp supply voltage circuits illuminating the courtesy lamps.

Courtesy Lamps (+YF2/YF7)

When any one of the doors is opened, ground is applied through the door latch door open switch and the door open switch signal circuit to the BCM indicting the door open position. In response to this signal, the BCM then applies battery voltage to the courtesy lamp relay control circuit energizing the UPFITTR CTSY LAMPS PCB Relay. With the relay energized. battery voltage is applied through the switch side of the relay and the supply voltage circuits illuminating the courtesy lamps.

Courtesy Lamps Manual Operation

The courtesy lamps can be manually turned ON by the IP dimmer switch. When the dimmer switch is placed in the DOME position, ground is applied through the dimmer switch and the courtesy lamp switch ON signal circuit to the BCM indicating the courtesy lamps ON request. In response to this signal, the BCM then applies battery positive voltage through the courtesy lamp supply voltage circuits illuminating the courtesy lamps listed above. The courtesy lamps ON operation of the dimmer switch will override any BCM operation of the interior lamps already in progress.

Keyless Entry Interior Illumination

When the remote function actuator transmitter is used to unlock the doors, the BCM receives a door-unlock signal. The BCM must have inputs that indicate that the ignition switch is OFF, the courtesy lamp switch is OFF, and all the doors are closed. The BCM will then illuminate the courtesy lamps and will remain illuminated for approximately 25 seconds after the door is closed. If the door locks are activated to the LOCK position, or if the ignition switch is turned to either the RUN or START position, the BCM will turn OFF the courtesy lamps immediately.

Courtesy/Illuminated Exit

The illuminated exit feature will activate the courtesy lamps when the key IN input of the BCM transitions from an active state to an inactive state (removing the ignition key). When the key is removed from the ignition, the key IN input to the BCM becomes inactive. The BCM will illuminate the courtesy lamps for approximately 25 seconds.

Theater Dimming

The theater dimming feature that will slowly dim the interior lamps from full brightness to OFF. The following actions will over ride the theater dimming feature causing the courtesy lamps to deactivate immediately if no other BCM function commands the courtesy lamps ON:

- A transition from active to inactive of the interior lamps switch, turning OFF the interior lamps switch
- A LOCK command from the remote keyless entry system
- A last door closed locking function, locking and closing all the doors

Underhood Compartment Lamp

The BCM supplies battery positive voltage through the inadvertent power courtesy lamps circuit to the underhood compartment lamp. When the hood is opened, the underhood compartment lamp switch closes to ground and the lamp illuminates.

Dome/Reading Lamps

The dome/reading lamp is a duel purpose lamp that can be illuminated two different ways. First, the lamp can be turned ON during courtesy lamp operation as described above. Second, the lamps can be turned ON individually for reading lamp operation by the lamp switch. The BCM supplies battery voltage through the inadvertent power courtesy lamp circuit to the dome/reading lamp for reading lamp operation only.

Sunshade Vanity Mirror Lamps

The BCM supplies battery voltage through the inadvertent power courtesy lamps circuit to the left and right vanity mirror lamps. When the vanity mirror cover on the sunshade is opened, the vanity mirror lamp switch is closed to ground and the lamp illuminates.

Interior Lamps Dimming

The second interior lighting group includes lamps which may be dimmed. This group may use a combination of vacuum fluorescent (VF) illumination, LED illumination and incandescent lamps.

- Headlamp switch
- Tow/haul switch
- Traction control switch
- HVAC control module
- Driver window switch
- Driver power door lock switch
- Auxiliary blower motor switch
- Front passenger window switch
- Front passenger door lock switch
- Front auxiliary HVAC control assembly

- Rear auxiliary HVAC control assembly
- Steering wheel controls
- Inflatable restraint I/P module disable switch
- Driver information center (DIC) display switch
- Radio

When the ignition switch is turned to the RUN position, the instrument panel cluster (IPC), radio VF display, and the HVAC control assembly turns ON at maximum brightness. When the headlamp switch is in the PARK or HEADLAMP ON position, all incandescent and LED back lighting turn ON at the dimming level indicated by the instrument panel (I/P) dimmer switch. The dimmer switch is used to increase and decrease the brightness of the interior backlighting components. The BCM supplies a voltage reference through the I/P dimming voltage reference circuit to the interior lamp dimmer switch, which is part of the headlamp switch. When the dimmer switch is placed in a desired brightness position, reference voltage is applied through the dimmer switch rheostat and the I/P lamps dimmer switch signal circuit to the BCM. The BCM interprets this voltage signal, then applies a pulse width modulated (PWM) voltage through the I/P lamps supply voltage circuits and the LED dimming supply circuit to all related interior backlighting lamps illuminating them to the desired level of brightness.

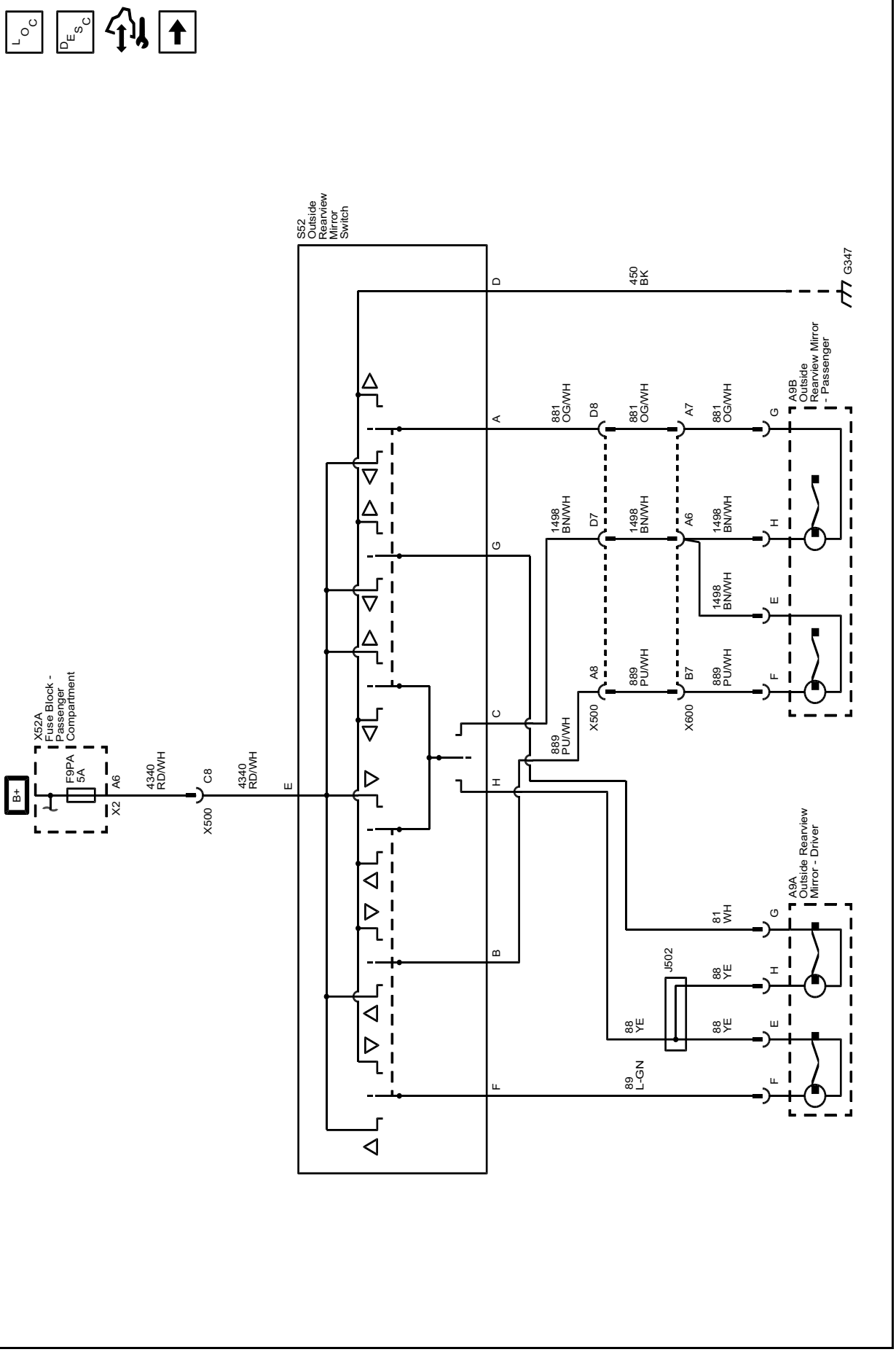
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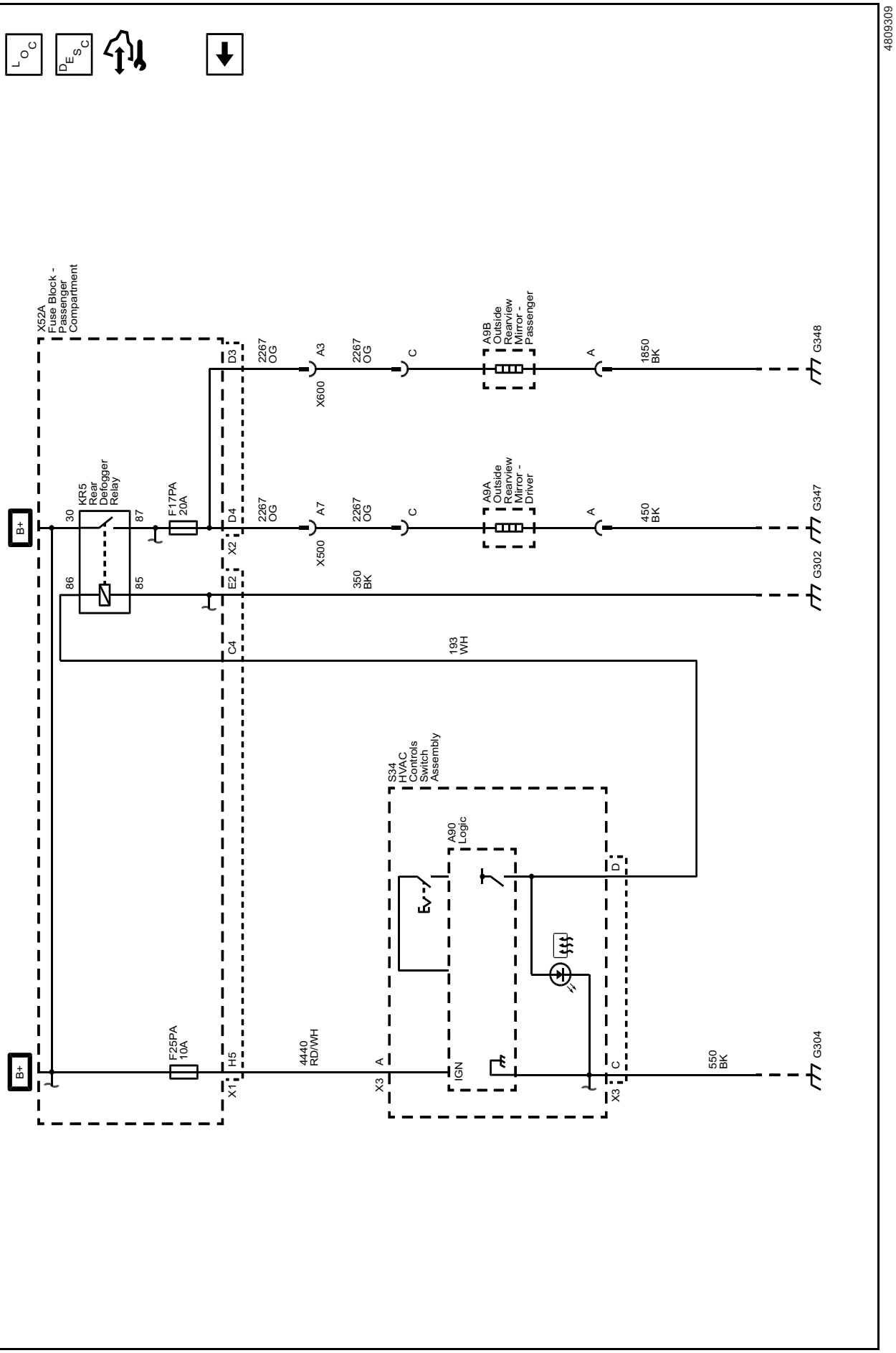
Mirrors

Schematic and Routing Diagrams

Outside Rearview Mirror Schematics (Pan and Tilt (DEB or DE5))



Outside Rearview Mirror Schematics (Heated Mirrors (DEB or DE5))



Description and Operation

Outside Mirror Description and Operation

Outside Mirror System Components

The power mirror system consists of the following components:

- Power mirror switch
- Selector switch
- Left outside power mirror
- Right outside power mirror
- OSRVM 10A fuse
- HVAC control module
- Left outside power mirror
- Right outside power mirror

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

Power Mirror System Controls

The power mirror switch incorporates a mirror select switch and a four position mirror direction switch.

The mirror select switch allows the operator to select the mirror to be moved by rotating counterclockwise to the L position, left outside power mirror, or rotating clockwise to the R position, right outside power mirror.

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

Power Mirror System Operation

The power mirror switch receives power through the battery supply voltage circuit and the OSRVM fuse. The power mirror switch also receives a constant ground.

The four positions of the direction switch have dual switch contacts. Each of the contacts are connected to opposing sides of the appropriate power mirror motors through the selector switch. The selector switch interrupts or completes these circuits depending on the position of the selector switch (L or R).

If the selector switch is placed in the L position and the up switch is depressed, battery voltage will be supplied to the left outside power mirror vertical motor through the left mirror motor up direction circuit and return to the power mirror switch through the mirror motor common circuit then to ground and the mirror will move up. If the down switch is depressed, the common circuit supplies battery voltage and the left mirror motor up direction circuit completes the path to the power mirror switch then to ground and the mirror will move down.

The remainder of the mirror functions operate in the same manner as described above. The thing to remember is, that by placing the power mirror switch in opposing positions (left/right or up/down) will reverse the polarity of the mirror motor, utilizing the same circuits and the power mirror will move accordingly.

Heated Mirror System Controls

The heated mirror system is activated by depressing the rear window defogger switch, which is part of the HVAC control module. For further information on the rear window defogger operation, refer to *Rear Window Defogger Description and Operation on page 2-6*.

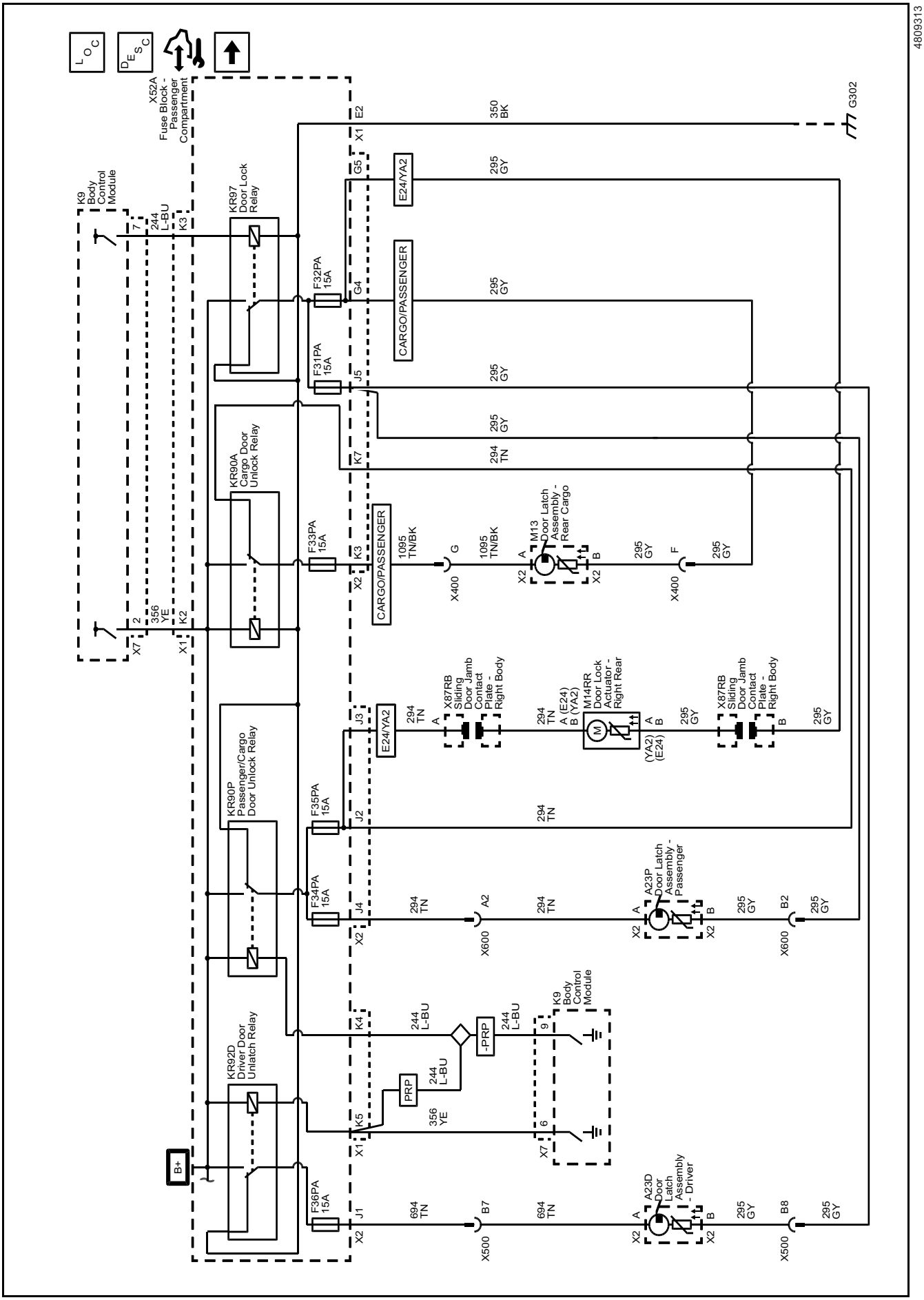
Heated Mirror System Operation

The heated mirror system operates in parallel to the rear window defogger. Each outside rearview mirror contains a heating element that is connected to a constant ground source. When the rear window defogger system is active, battery voltage is available to the outside rearview mirrors through the heated mirror supply voltage circuit. The mirrors will heat up to remove ice, snow or frost and will automatically deactivate when the rear defogger system has timed out, approximately 10 minutes.

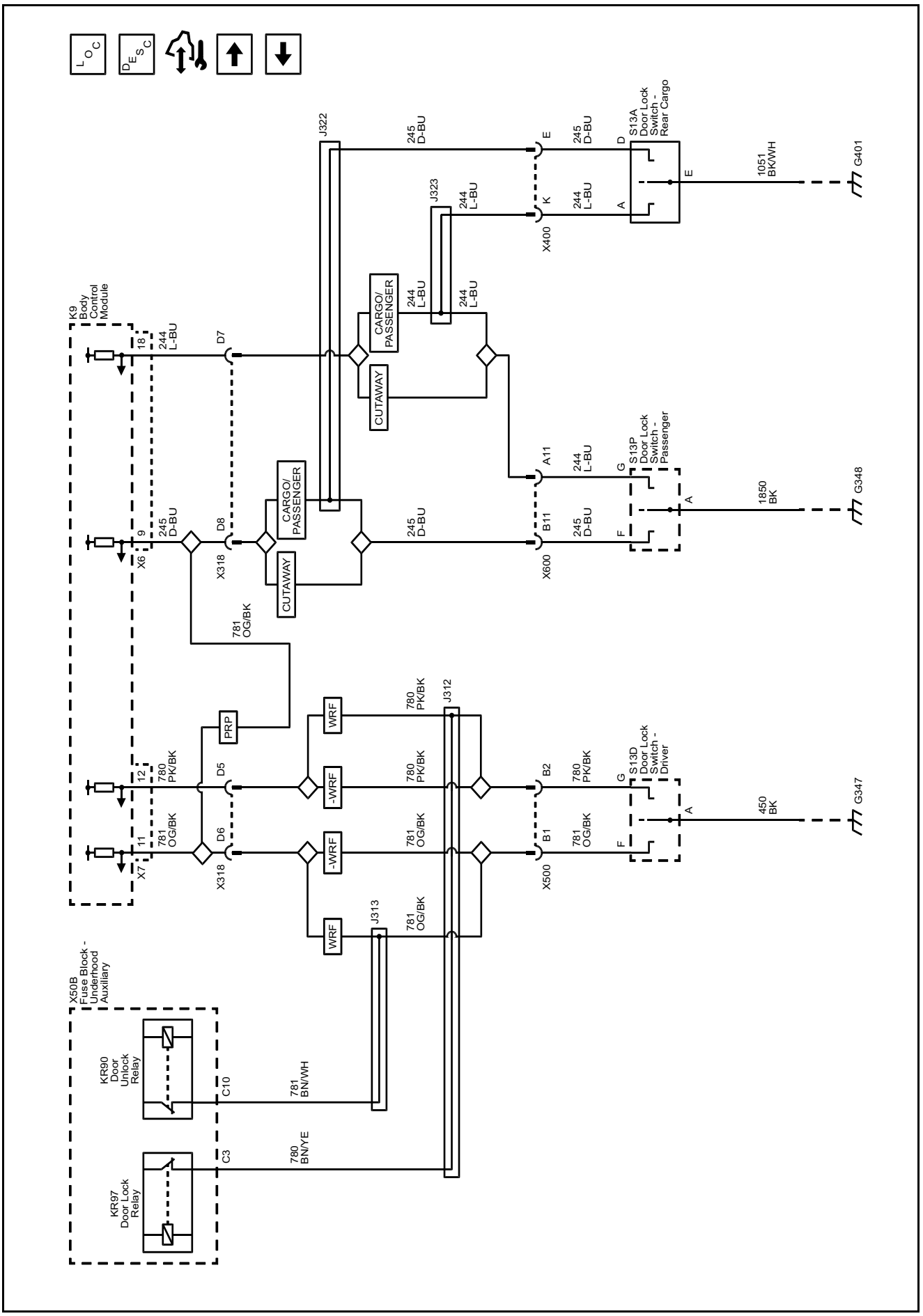
Vehicle Access

Schematic and Routing Diagrams

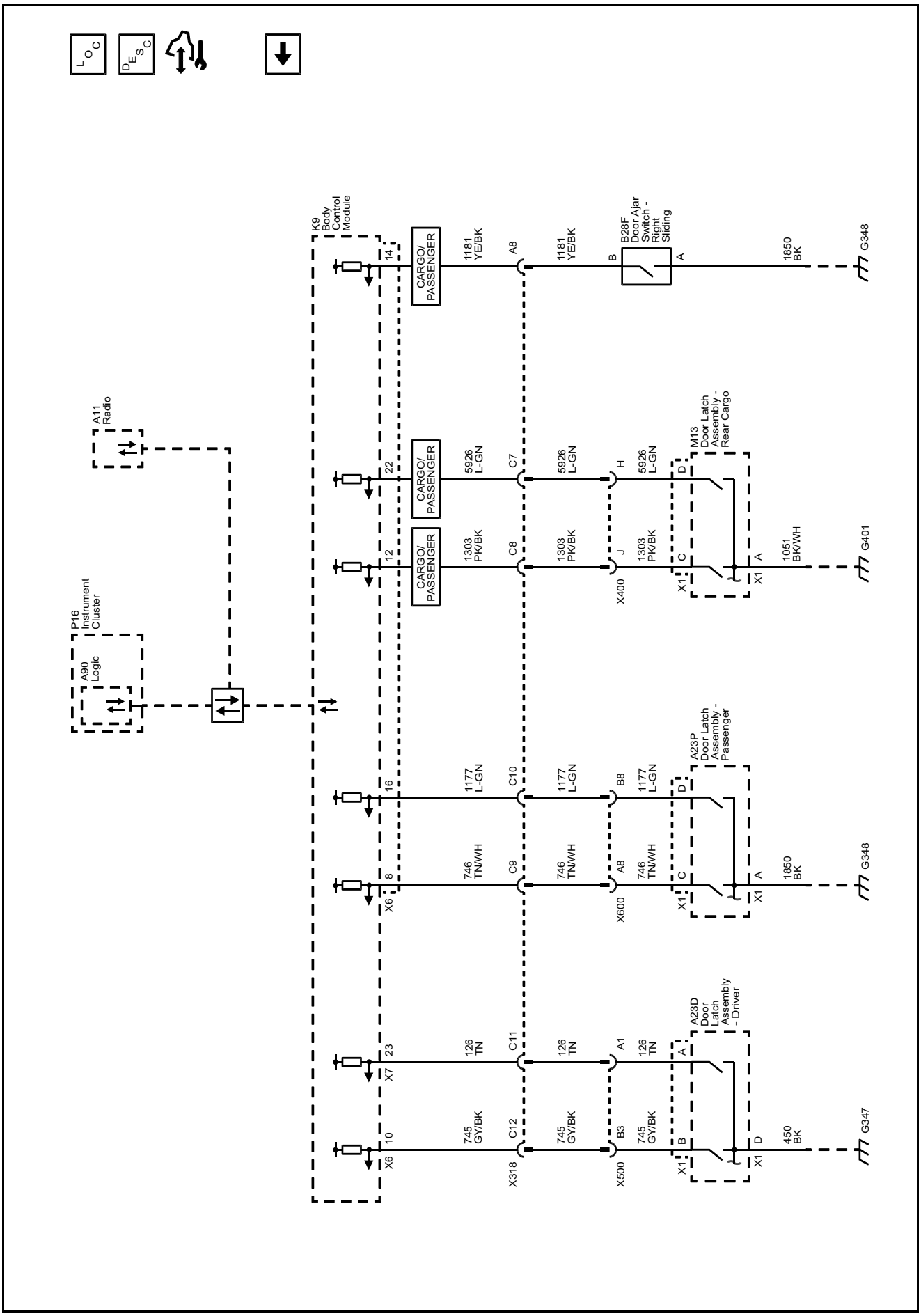
Door Lock/Indicator Schematics (Lock/Unlock Control)



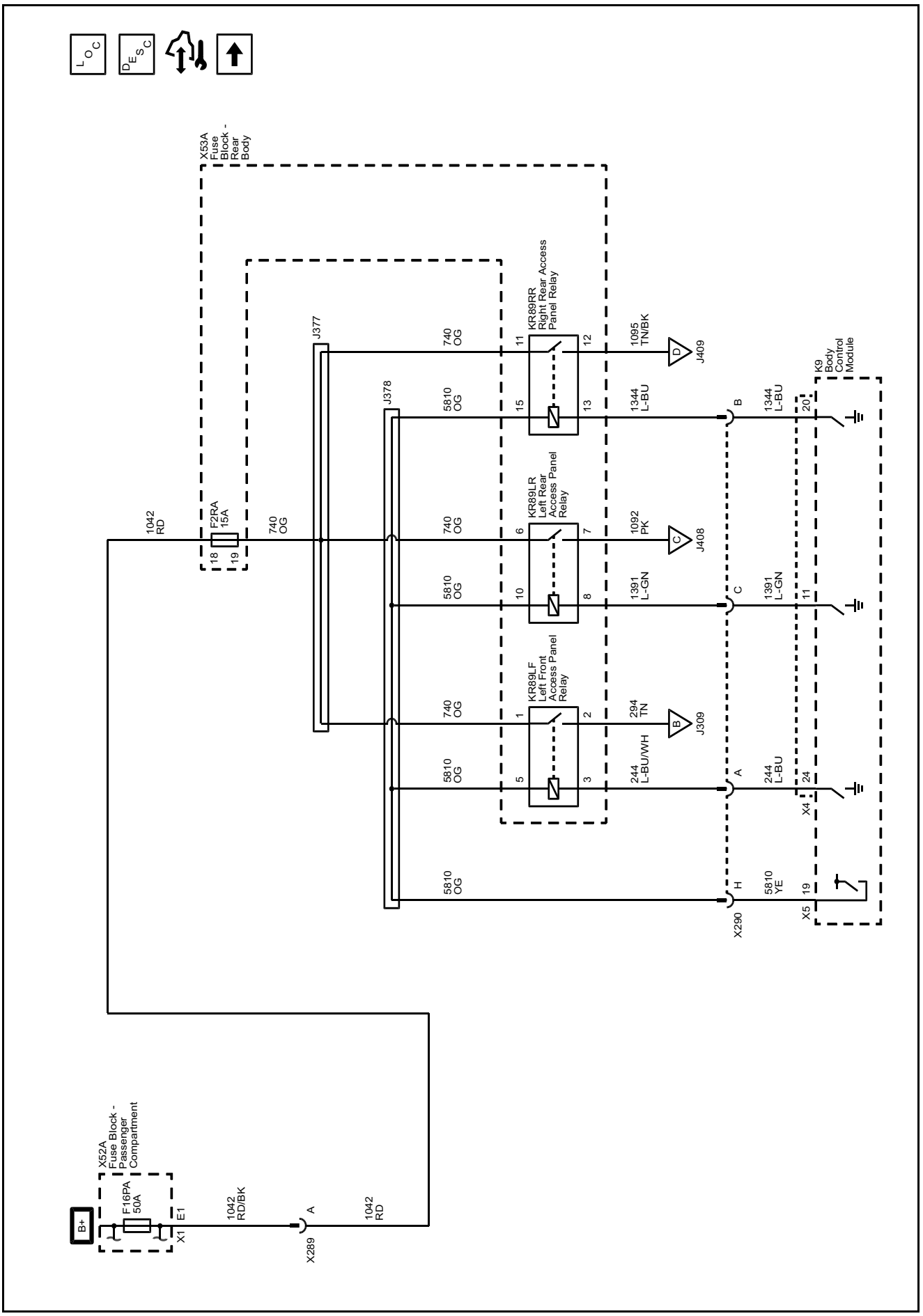
Door Lock/Indicator Schematics (Door Lock Switches (AU3))



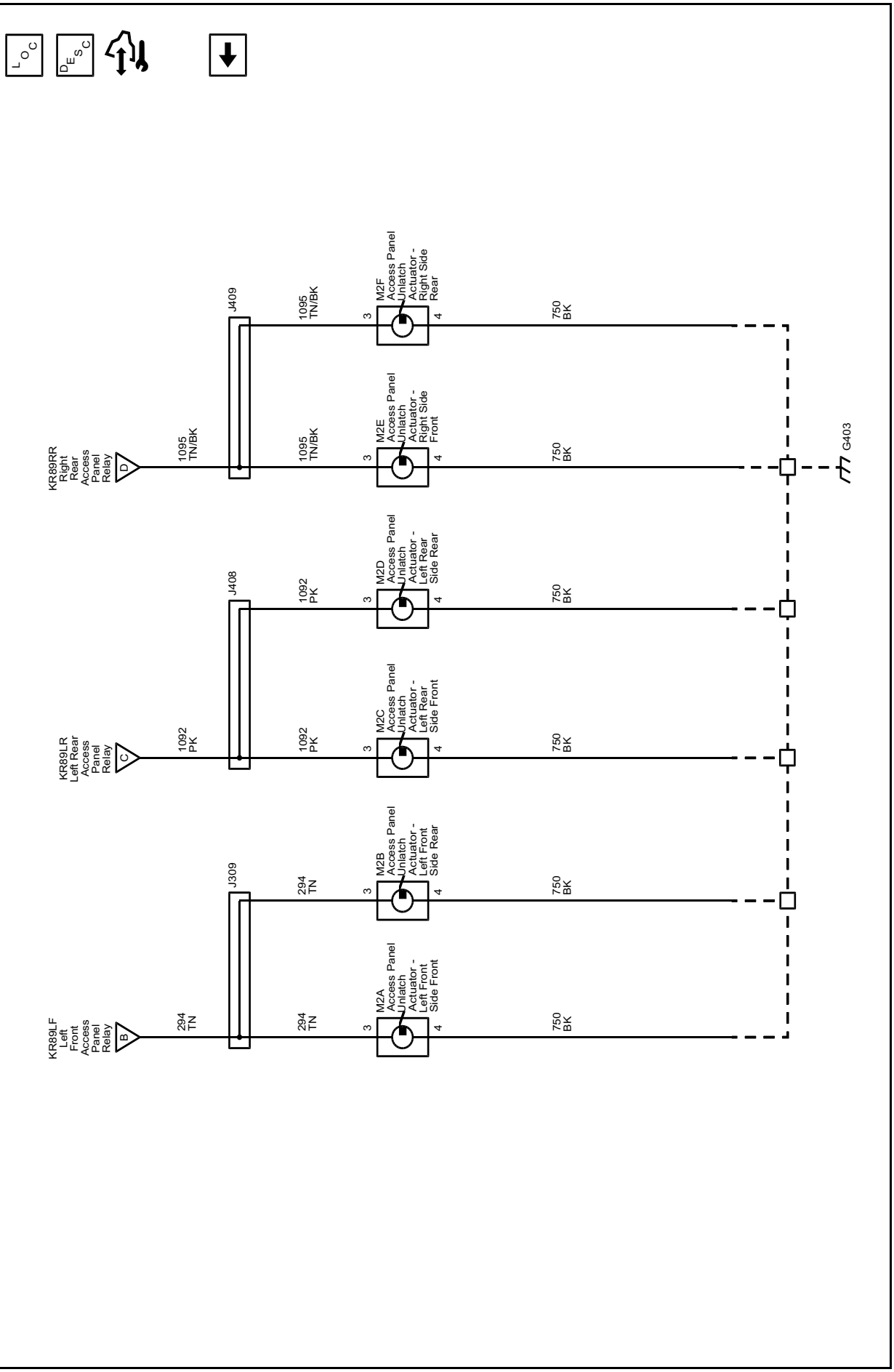
Door Lock/Indicator Schematics (Door Ajar Switches)



Release Systems Schematics (Side Access Panel Relay Controls (PRP))



Release Systems Schematics (Side Access Panel Actuators (PRP))



Description and Operation

Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- The body control module (BCM)
- The instrument panel cluster (IPC)
- The driver information center (DIC)
- The door ajar switch

Door Ajar Operation

The body control module (BCM) receives a discrete input from the door ajar switch to indicate the status of the door. The BCM then communicates this status to the instrument panel cluster (IPC) via GMLAN serial data. The IPC, upon receipt of this message, will illuminate the door ajar message in the driver information center (DIC) and also send a GMLAN serial data message to the radio to activate the door ajar audible warning when the following conditions are met:

- The transmission is shifted out of PARK.
- The vehicle speed is greater than 8 km/h (5 mph).

Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Front passenger door lock switch
- Rear cargo door lock switch
- Door lock relay
- Passenger door unlock relay
- Driver door unlock relay
- Cargo door unlock relay
- Body Control Module (BCM)
- Reversible door lock actuators in each of the doors
- DRV LKS 10A fuse, driver door unlock relay supply voltage
- CARGO UNLK 10A fuse, cargo door unlock relay supply voltage
- DOOR LKS 20A fuse, door lock relay and passenger door unlock relay supply voltage

Door Lock System Controls

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

- A power door lock or unlock switch activation
- A keyless entry transmission
- A lock out prevention function
- A last door locking function

Driver, Passenger and Cargo Door Lock Operation

When any of the door lock switches are placed in the lock position, a ground signal is applied to the BCM through the door lock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the door lock relay through the door lock relay control circuit. Since the other side of the door lock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DOOR LKS fuse through the battery voltage circuit. Voltage is then applied to the lock side of the door lock actuators through the door lock actuator lock circuits. Since the other side of the all the door lock actuators are connected to the normally closed contacts of their respective unlock relays to ground, the doors lock.

The lock function can also be accomplished by the BCM supplying ground to the door lock relay control circuit by either of the following:

- A keyless entry lock transmission
- A last door lock function

Driver Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the driver door unlock relay through the driver door unlock relay control circuit. Since the other side of the driver door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DRV LKS fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the driver door lock actuator through the driver door lock actuator unlock control circuit. Since the other side of the the driver door lock actuator is connected to the normally closed contacts of the door lock relay to ground, the driver door unlocks.

The driver door unlock function can also be accomplished by the BCM supplying ground to the driver door unlock relay control circuit by either of the following:

- A keyless entry unlock transmission
- A lock out prevention function

Passenger Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the passenger door unlock relay through the door unlock relay control circuit. Since the other side of the door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DOOR LKS fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the passenger door lock actuators through the door lock actuator unlock control circuits. Since the other side of the the door lock actuators are connected to the normally closed contacts of the door lock relay to ground, the passenger doors unlock.

The door unlock function can also be accomplished by the BCM supplying ground to the passenger door unlock relay control circuit during a keyless entry unlock transmission.

Cargo Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the cargo door unlock relay through the cargo door unlock relay control circuit. Since the other side of the cargo door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the CARGO UNLK fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the cargo door lock actuator through the door lock actuator unlock control circuit. Since the other side of the the cargo door lock actuator is connected to the normally closed contacts of the door lock relay to ground, the cargo door unlocks.

The cargo door unlock function can also be accomplished by the BCM supplying ground to the cargo door unlock relay control circuit during a keyless entry unlock transmission.

Delay Locking Operation

This feature allows the operator to lock all the doors from a door lock switch with the side doors(s) open. The side cargo doors have contact plates that complete the power door lock and unlock control circuits, among others, when the side cargo doors are closed, and interrupt these circuits when the doors are open. When a lock function occurs and the BCM senses an active state on any door ajar switch signal circuit the driver, front passenger and cargo doors will lock as described. The BCM continues to monitor door ajar switch signal circuits. When the BCM senses an inactive state, door closed, the BCM will cycle the door lock relay again after approximately 5 seconds to perform another lock function, thus locking the side cargo door(s).

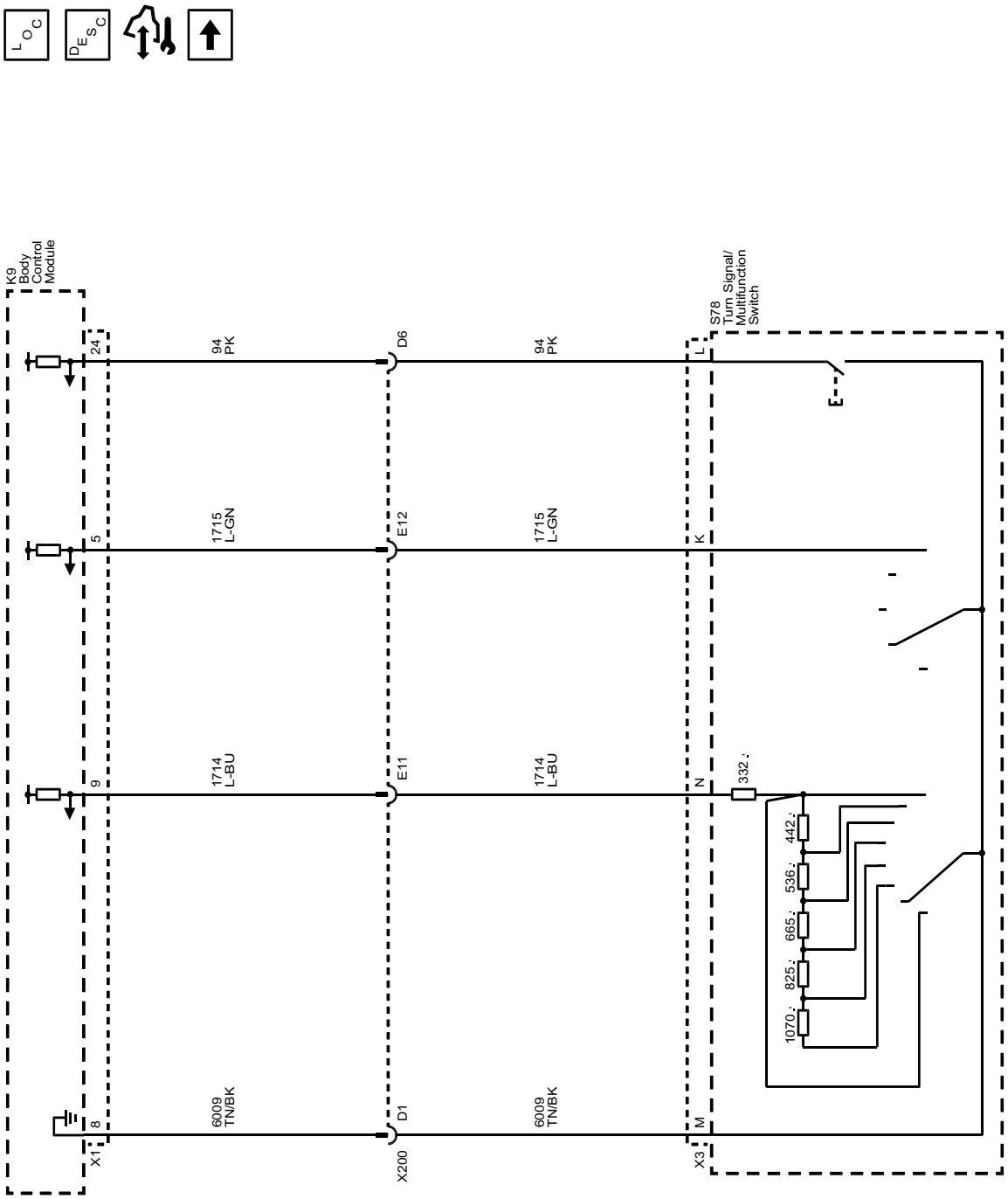
Lockout Prevention

This feature prevents the locking of the driver door if the ignition key is left in the ignition lock cylinder. If a lock function occurs from any door lock switch and the BCM senses a door ajar and the key in ignition switch signal circuit is in the yes state, the BCM will cycle the door lock relay to lock the doors and then cycle the driver door unlock relay to unlock the driver door.

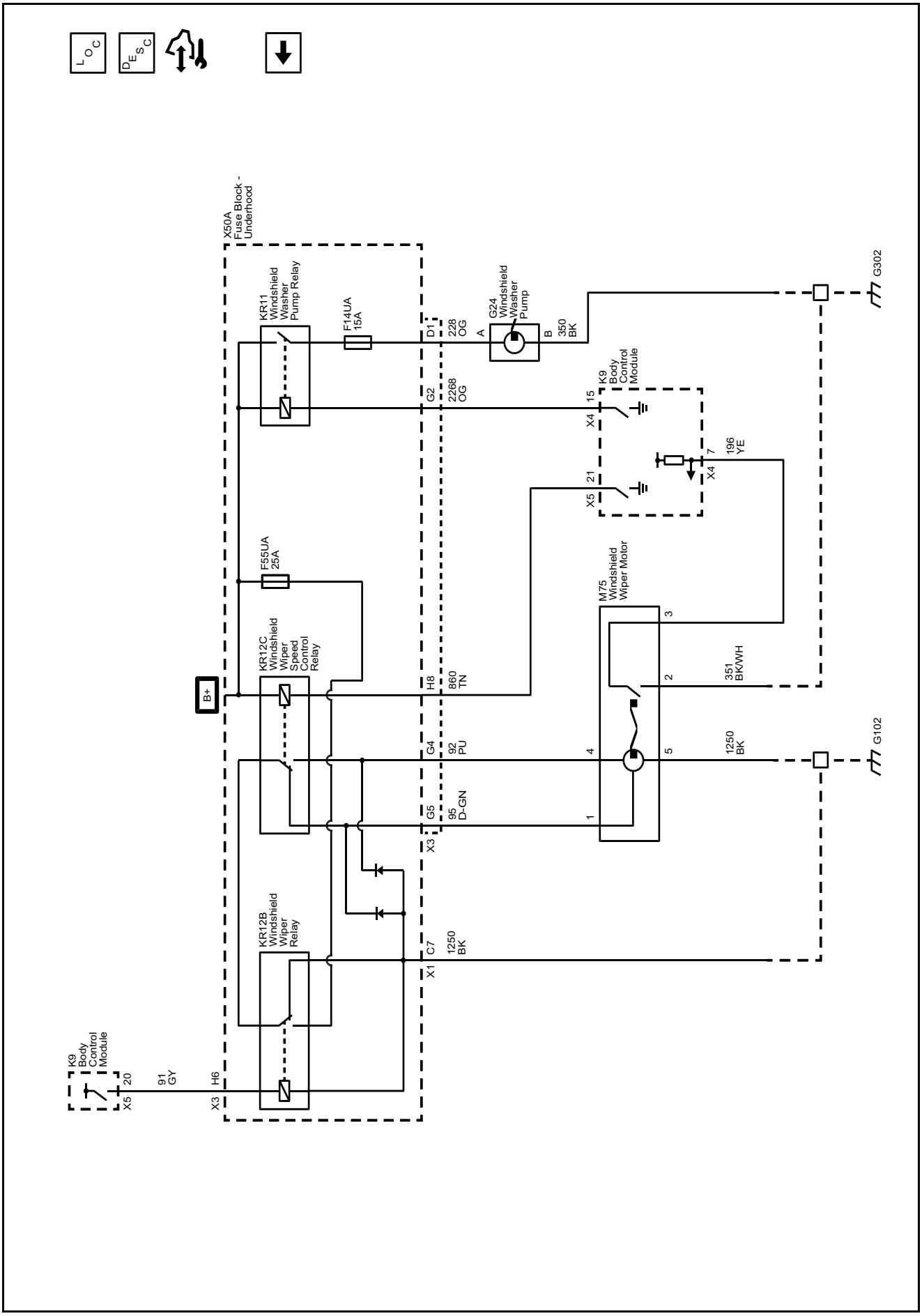
Wipers and Washers

Schematic and Routing Diagrams

Wiper/Washer Schematics (Wiper Controls)



Wiper/Washer Schematics (Wiper and Washer Motor Control)



Description and Operation

Wiper/Washer System Description and Operation (Wiper and Washers)

Wiper/Washer System Components

The Wiper/Washer System consists of the following components:

- Windshield wiper/washer switch
- Body control module (BCM)
- WPR Relay
- WPR HI Relay
- Windshield wiper motor
- Windshield washer fluid pump
- Windshield washer fluid level switch
- Rain sensor module
- Instrument panel cluster (IPC)
- WPR Fuse 25 A
- WSW/PUMP Fuse 10 A
- RAP Fuse 10 A

Refer to *Master Electrical Component List on page 6-92*.

Power and Grounds

With the ignition in the ON position, accessory voltage is supplied through the 25A WPR fuse to the WIPER relay, the WIPER HI relay and the WSH relay that are all located in the underhood fuse block. Refer to *Wiper/Washer Schematics on page 2-39*.

G101 provides ground for the windshield wiper motor. G104 provides ground for the WPR relay, the WPR HI relay, the windshield washer fluid pump and the windshield washer fluid level switch.

Modes of Operation

The normal wiper system function positions are as follows:

- MIST
- DELAY
- MANUAL LOW
- MANUAL HIGH
- WASH

Automatic Modes of Operation

- AUTOMATIC DELAY
- AUTOMATIC LOW
- AUTOMATIC HIGH

Automatic low speed and automatic high speed wiper modes are continuous wiper operations that are controlled by the outside moisture sensor. Automatic low and high speed operation is utilized when the amount of precipitation on the windshield exceeds the automatic delay or low threshold.

Moisture Sensitive Wipers

The outside moisture sensor monitors moisture accumulation on the windshield and uses a windshield wiper/washer switch status input to provide wipe commands to the body control module (BCM). The DELAY positions on the wiper/washer switch are used to activate the AUTOMATIC rain sensing operating mode. They are also used to adjust the level of sensitivity to moisture accumulation, which determines the dwell time for commanding a wiper motor wipe cycle.

Accessory voltage is supplied to the outside moisture sensor through the 10A RAP Fuse, located in the rear fuse block. The sensor is grounded through the ground circuit and G402. Whenever the ignition is in the run or accessory positions, the BCM sends the wiper/washer switch status using a pulse width modulation (PWM) signal through the outside moisture sensor signal 1 circuit to the outside moisture sensor. When a wipe cycle is needed, the moisture sensor sends a PWM voltage signal through the moisture sensor signal 2 circuit back to the BCM requesting the wiper operation.

The outside moisture sensor uses the moisture sensor signal 2 circuit to command wiper motor wipe cycles and to confirm the moisture sensor signal 1 is being received. If at anytime communication between the outside moisture sensor and BCM is lost, the BCM will use the inputs from the windshield wiper/washer switch in the delay positions to operate the wiper motor at continuous variable delay intervals.

Low Speed Operation

When the wiper switch is in the low speed position, ground is applied through a resistor internal to the switch and the wiper switch low signal circuit to the body control module (BCM). In response to this signal, the BCM energizes the WPR relay by applying battery voltage through the wiper relay control circuit to the coil side of the relay. This allows battery positive voltage from the WPR fuse to flow through the switch input side of the WPR relay and out to the switch input side of the WPR HI relay. Since the wiper high relay is de-energized and its switch contacts are normally closed to the low speed control circuit of the windshield wiper motor, the motor will operate at low speed.

Wiper motor low speed operation and the WPR relay can also be commanded ON/OFF by using a scan tool. Refer to Control Module References.

Mist Operation

Windshield wiper/washer system MIST operation is identical to wiper Low operation, except that the mist switch is a press and release type switch. When the wiper switch is moved to the mist position and released, low speed wiper motor operation is started and will continue until 1 wipe cycle is complete. If the wiper switch is moved to the mist position and held, the wiper motor will operate in the low mode until the switch is released.

Delay Operation

Windshield wiper delay operation is a low speed wiper motor function with a variable delay interval between the wiper motor cycles. The delay interval is determined by a series of 6 resistors within the wiper/washer switch. The body control module (BCM) monitors the wiper switch low signal circuit to determine the delay interval between the low speed wiper motor wipe cycles.

High Speed Operation

When the wiper switch is in the high speed position, ground is applied through the windshield wiper switch high signal circuit to the body control module (BCM) indicating the wiper high speed request. In response to this signal, the BCM then energizes the WPR relay, as stated above, and the WPR HI relay by applying ground through the control circuit to the coil side of the relay. With the wiper high relay energized and its switch contacts closed to the high speed control circuit of the wiper motor, the motor will operate at high speed.

The wiper high speed relay can also be commanded ON/OFF by using a scan tool. However, before commanding the wiper motor high speed mode ON/OFF using a scan tool, the WPR relay must be energized by placing the wiper switch in the low speed position. Refer to Control Module References.

Wash Operation

When the windshield Wash switch is pressed, ground is applied through the switch contacts and the windshield washer switch signal circuit to the body control module (BCM) indicating the windshield wash request. The BCM then energizes the WPR relay, as stated above, and the WSH relay by applying ground through the control circuit to the coil side of the relay. With the wash relay energized, battery voltage from the WPR fuse is applied through the switch side of the relay and out to the control circuit of the windshield washer fluid pump. The wiper motor will operate for 2 wipe cycles after the wash switch is released.

The WSH relay can also be commanded ON/OFF by using a scan tool. Refer to Control Module References.

Park Position Operation

Windshield wiper motor park operation is controlled by the body control module (BCM) using an input from the park switch that is located within the wiper motor assembly. The BCM monitors the windshield wiper motor park switch signal circuit, to determine if the windshield wiper blades are at the bottom of the glass. During wiper operation, each time the wiper blades are at the bottom of the glass, the park switch is momentarily closed to ground signaling the BCM the wiper position. When the wiper switch is turned to the OFF position while the wiper motor is somewhere in mid-cycle, the BCM 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 where they are. The BCM will park the wipers the next time the ignition is turned ON.

Washer Fluid LOW ADD FLUID Message

The WASHER FLUID LOW ADD FLUID message is controlled by the instrument panel cluster (IPC) using an input from the washer fluid level switch. With the ignition in the ON position, the IPC applies ignition voltage through an internal resistor and the windshield washer fluid level signal circuit to the windshield washer fluid level switch. The IPC then monitors this voltage to determine the washer fluid level. With the washer fluid above a determined level, the washer fluid level switch is open and the IPC detects voltage on the signal circuit. When the washer fluid reaches the point where the driver should be informed that the washer fluid is low, the washer fluid level switch closes. When the washer fluid level switch is closed, the washer fluid level signal circuit is pulled low and the IPC displays the WASHER FLUID LOW ADD FLUID message on the driver information center (DIC). In order to prevent the WASHER FLUID LOW ADD FLUID message from being displayed while sloshing is occurring in the washer fluid container, the IPC is programed with a 1 minute delay before changing states of the WASHER FLUID LOW ADD FLUID message during an ignition cycle.

Section 3

Driver Information and Entertainment

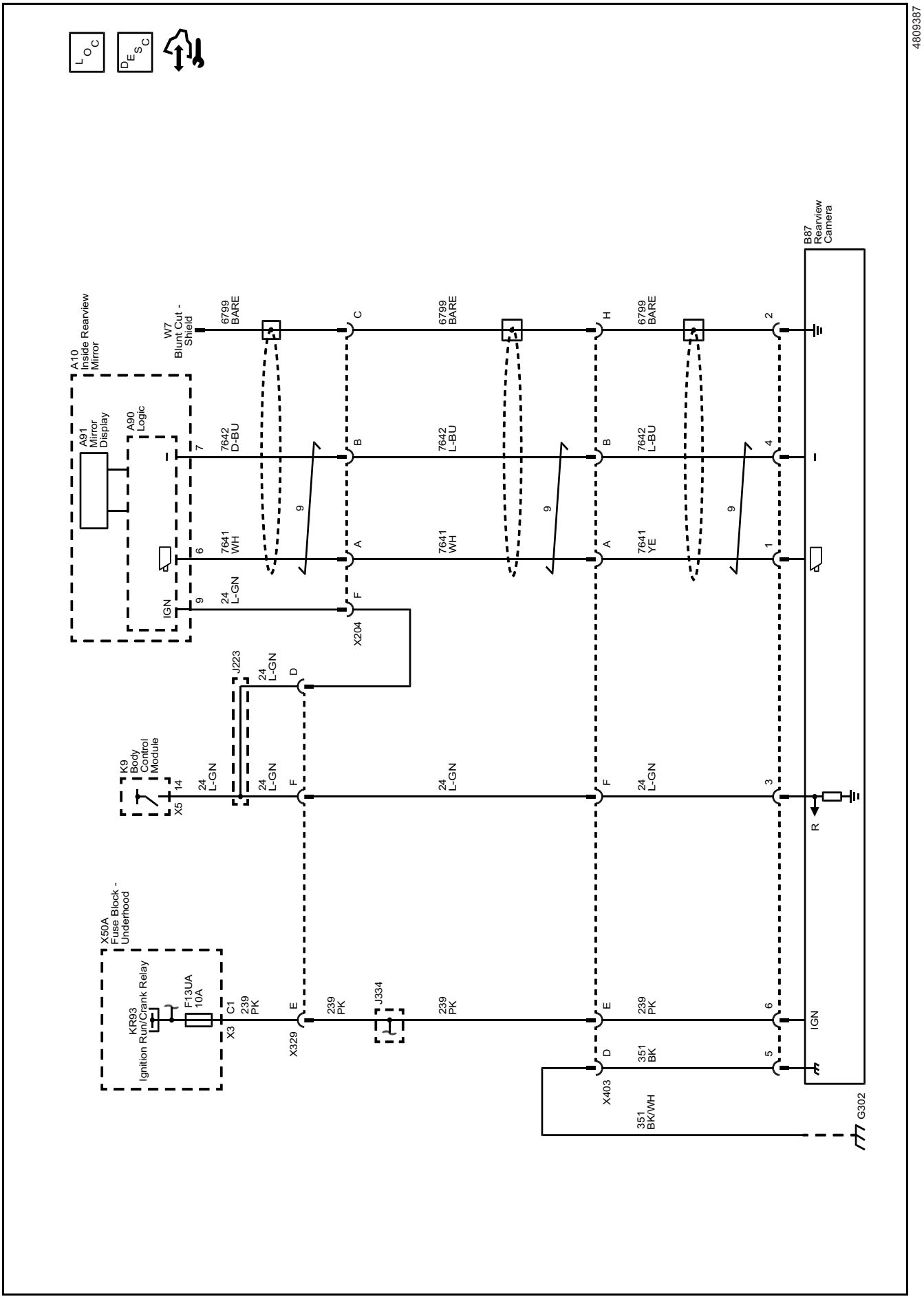
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Image Display Camera Schematics 3-4
Description and Operation 3-5
Rear Vision Camera Description and Operation 3-5

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Image Display Cameras

Schematic and Routing Diagrams

Image Display Camera Schematics (Rear Vision Camera (UVC))



Description and Operation

Rear Vision Camera Description and Operation

The rear vision camera system consists of the rearview camera and the infotainment system.

When the transmission is placed into R, 12 V is applied to the reverse lamp control circuit by the body control module (BCM). The rearview camera monitors this circuit and when 12 V is seen, indicating that the transmission is in R, the rearview camera will activate. The rearview camera receives ignition voltage and a constant ground to power the camera. Video signal + and video signal – circuits carry the video image from the rearview camera to the infotainment system.

Additionally, the video signal circuits are shielded to prevent any interference which may lead to a loss of video signal resolution and cause a degraded video image. The shield is grounded by 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

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Section 4

Engine/Propulsion

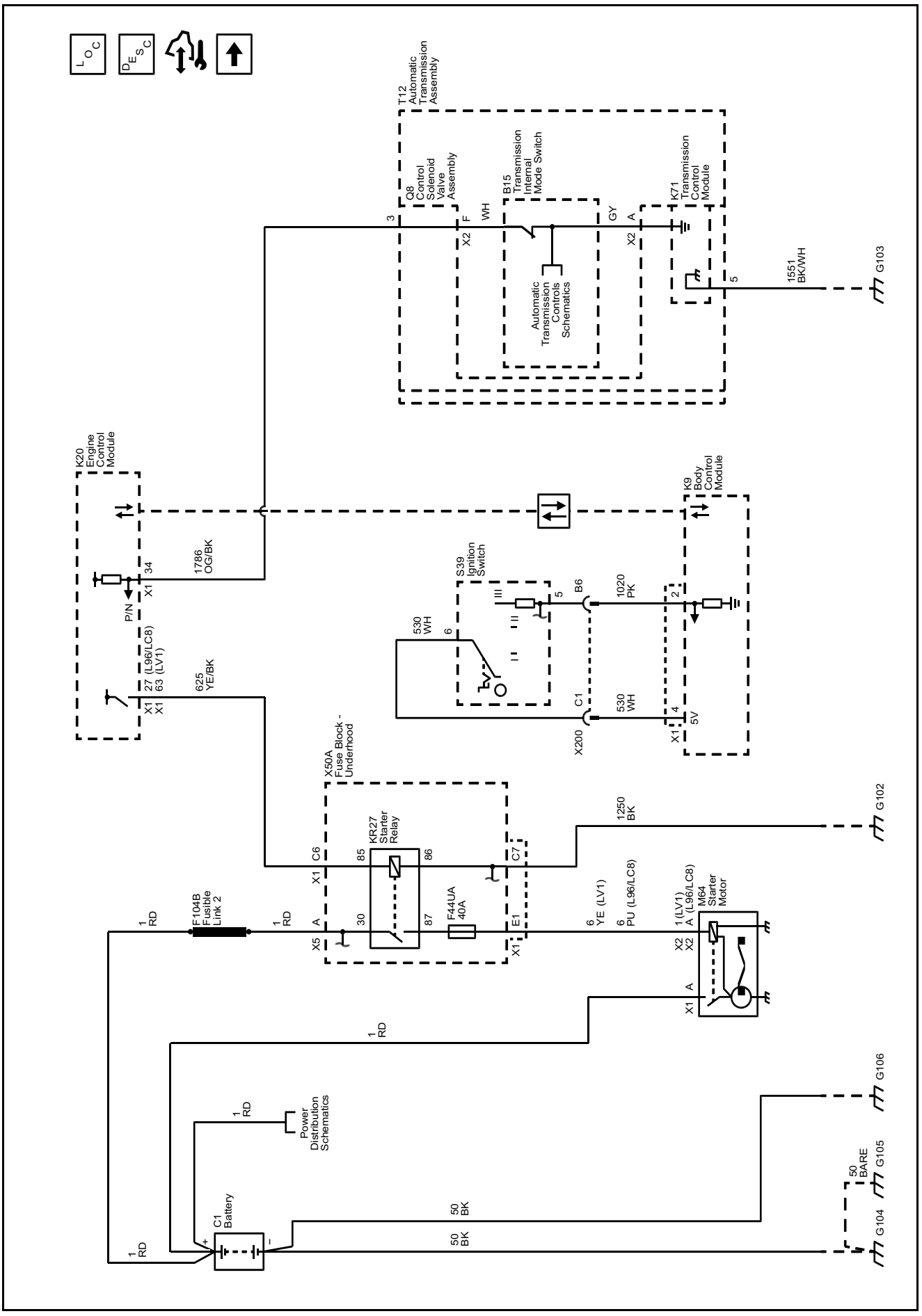
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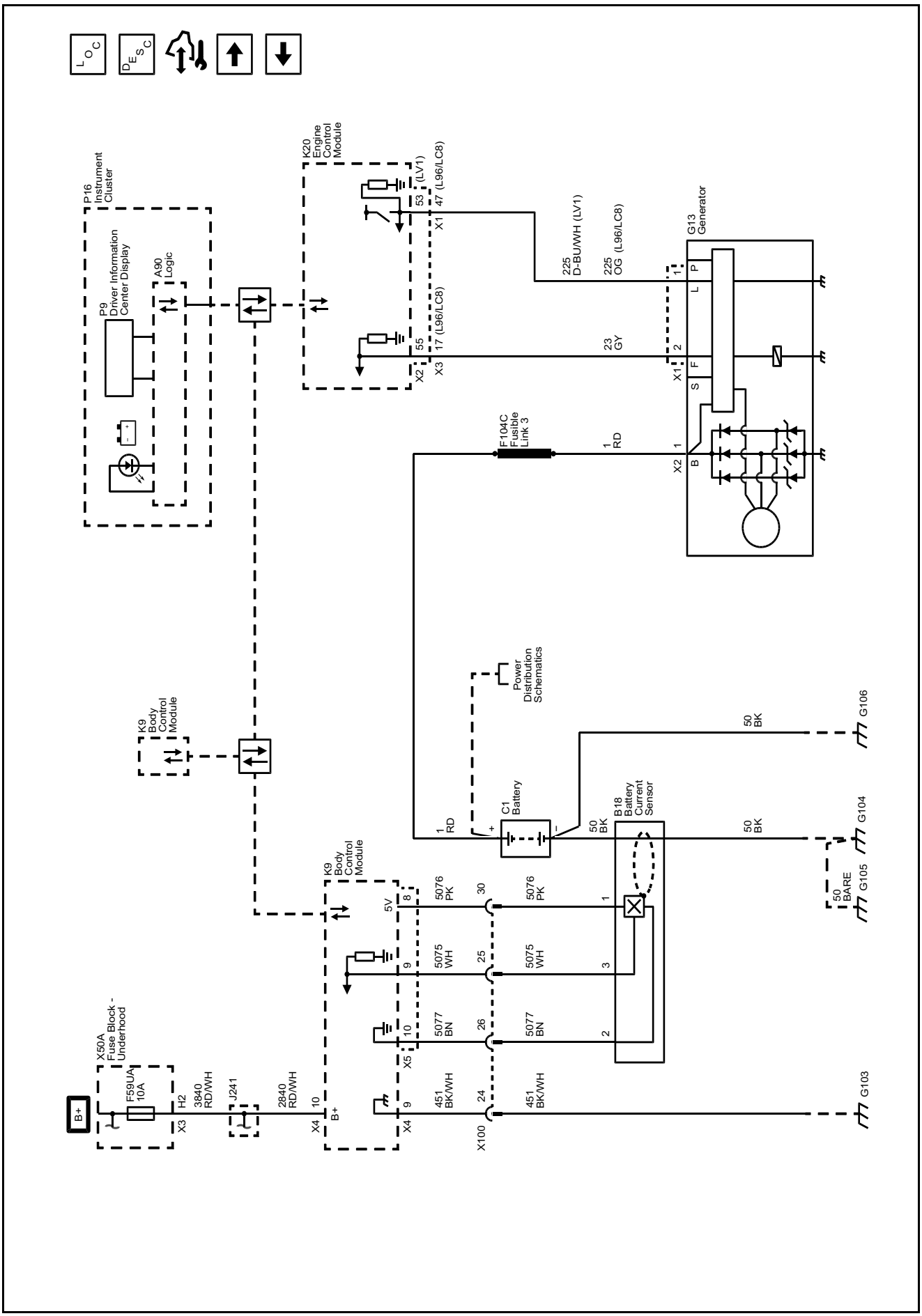
12 V Starting and Charging

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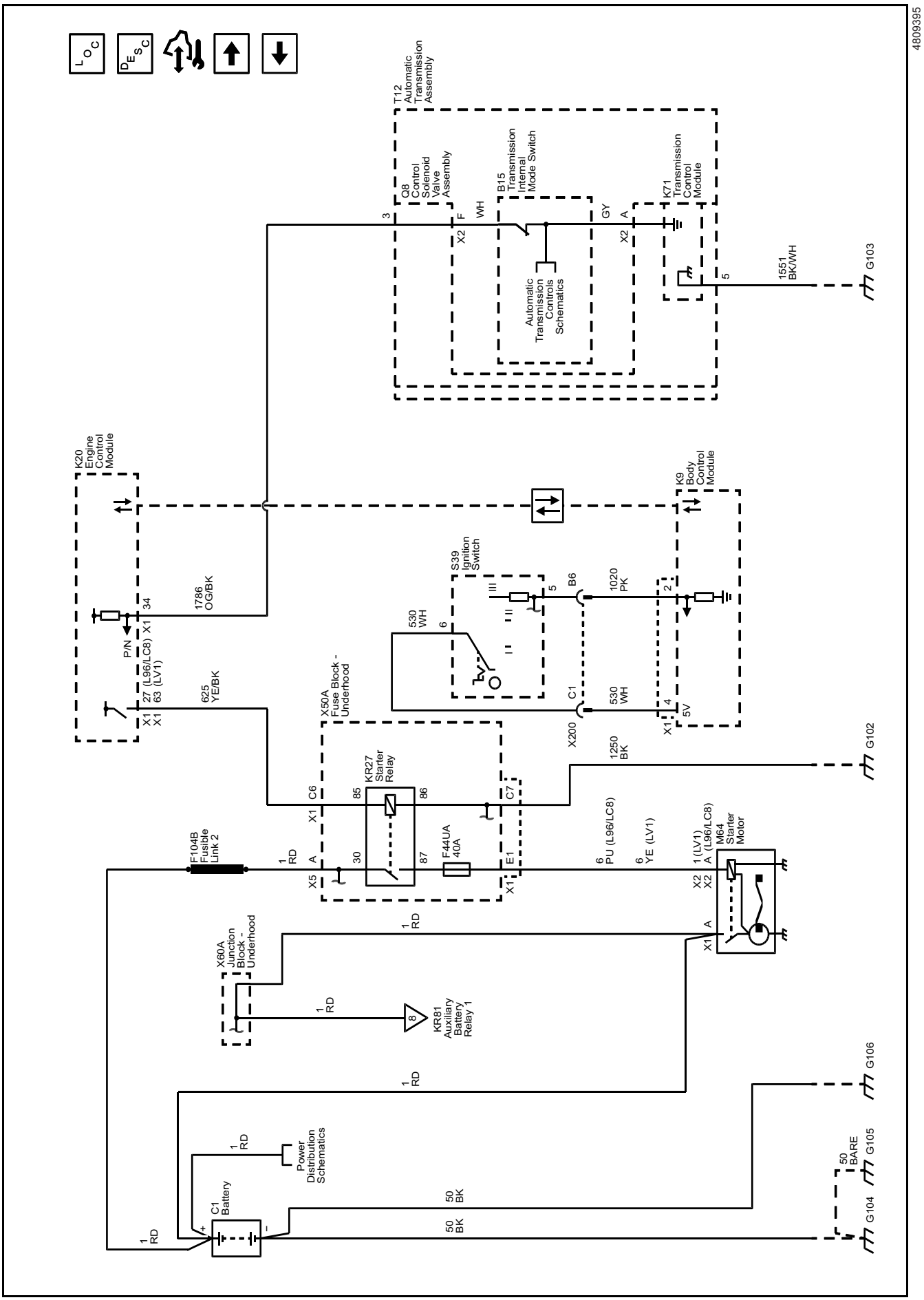
Starting and Charging Schematics (Starting System (Gas with One Battery))



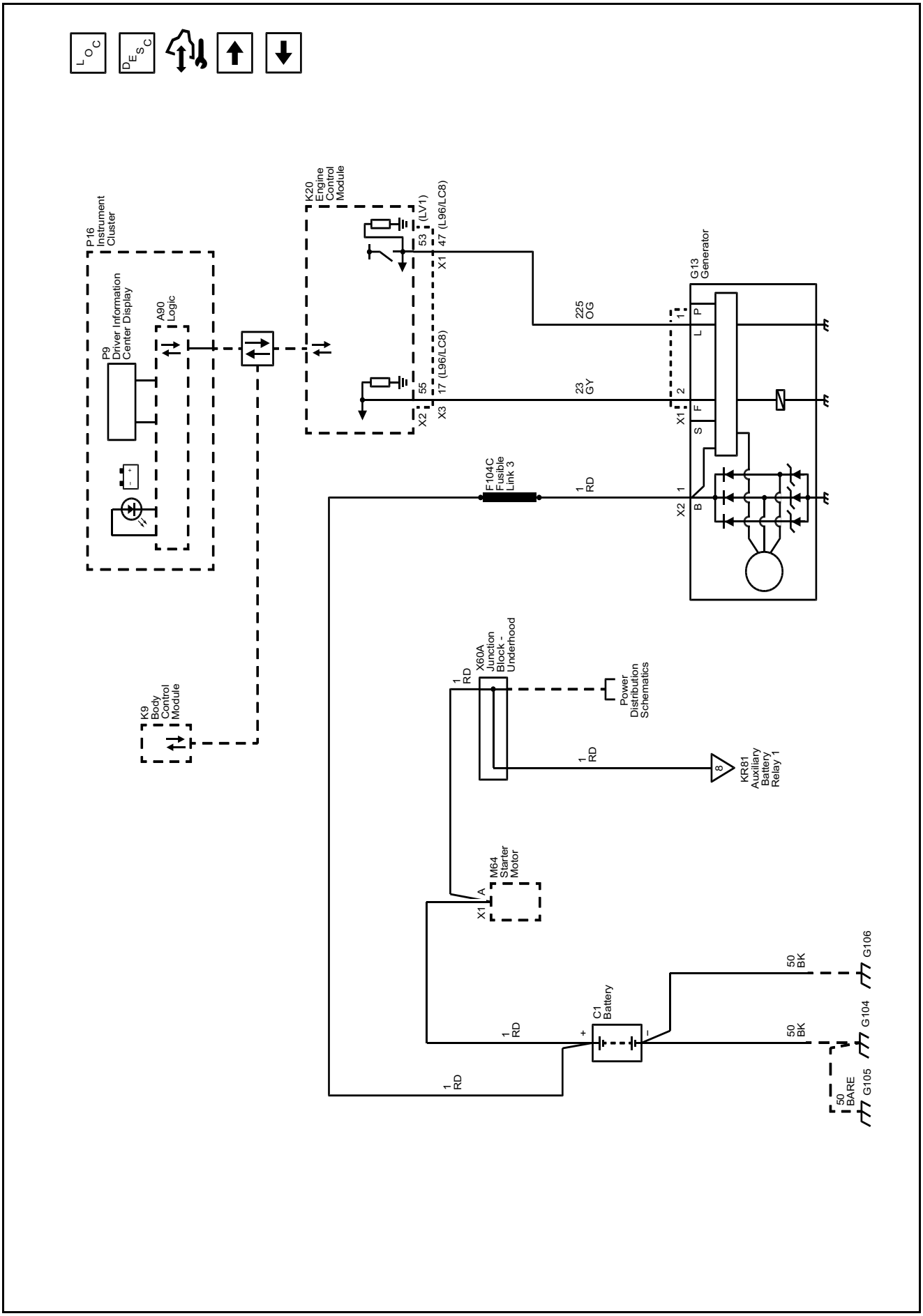
Starting and Charging Schematics (Charging System (Gas with One Battery))



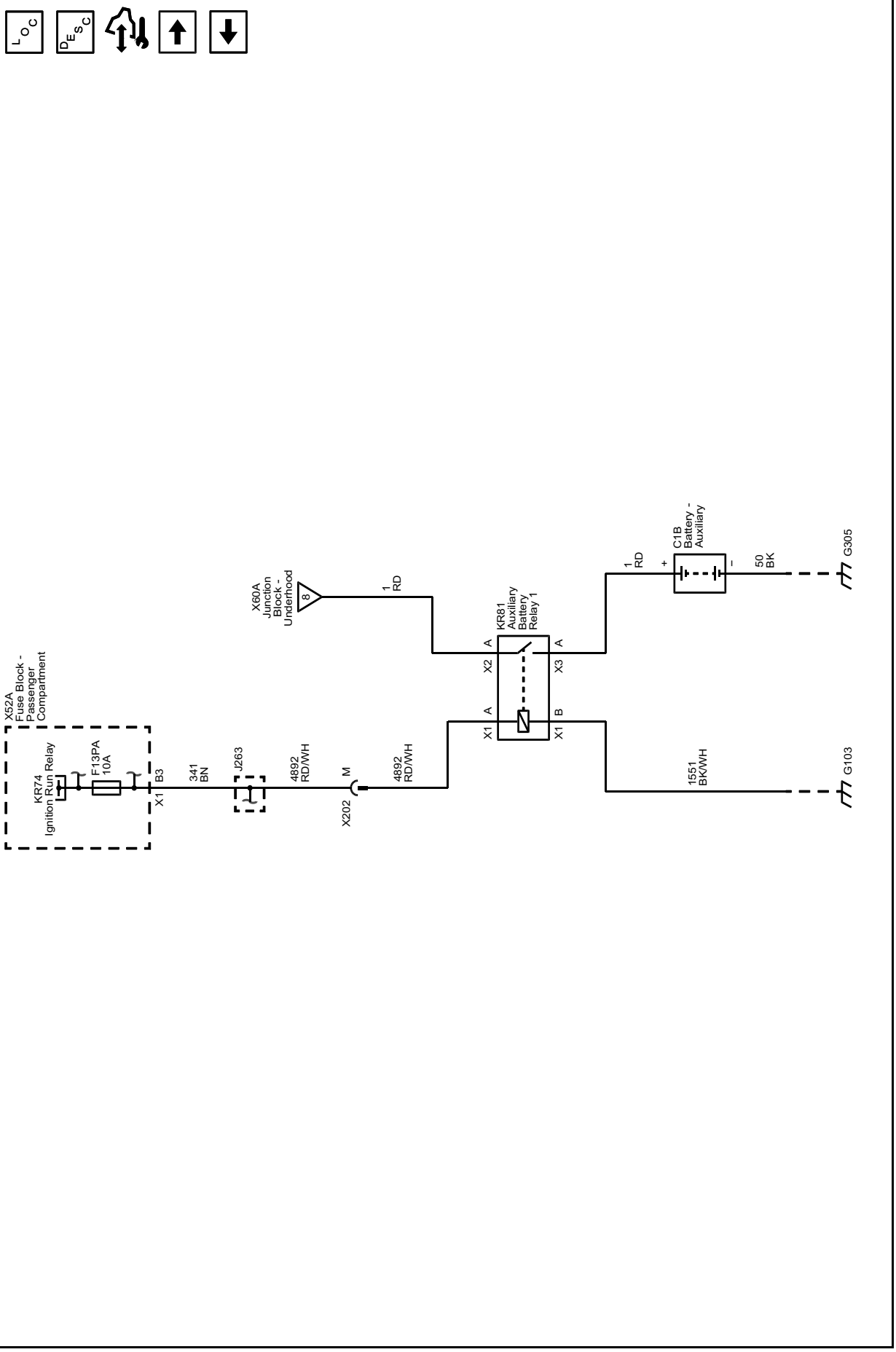
Starting and Charging Schematics (Starting System (Gas with Two Batteries))



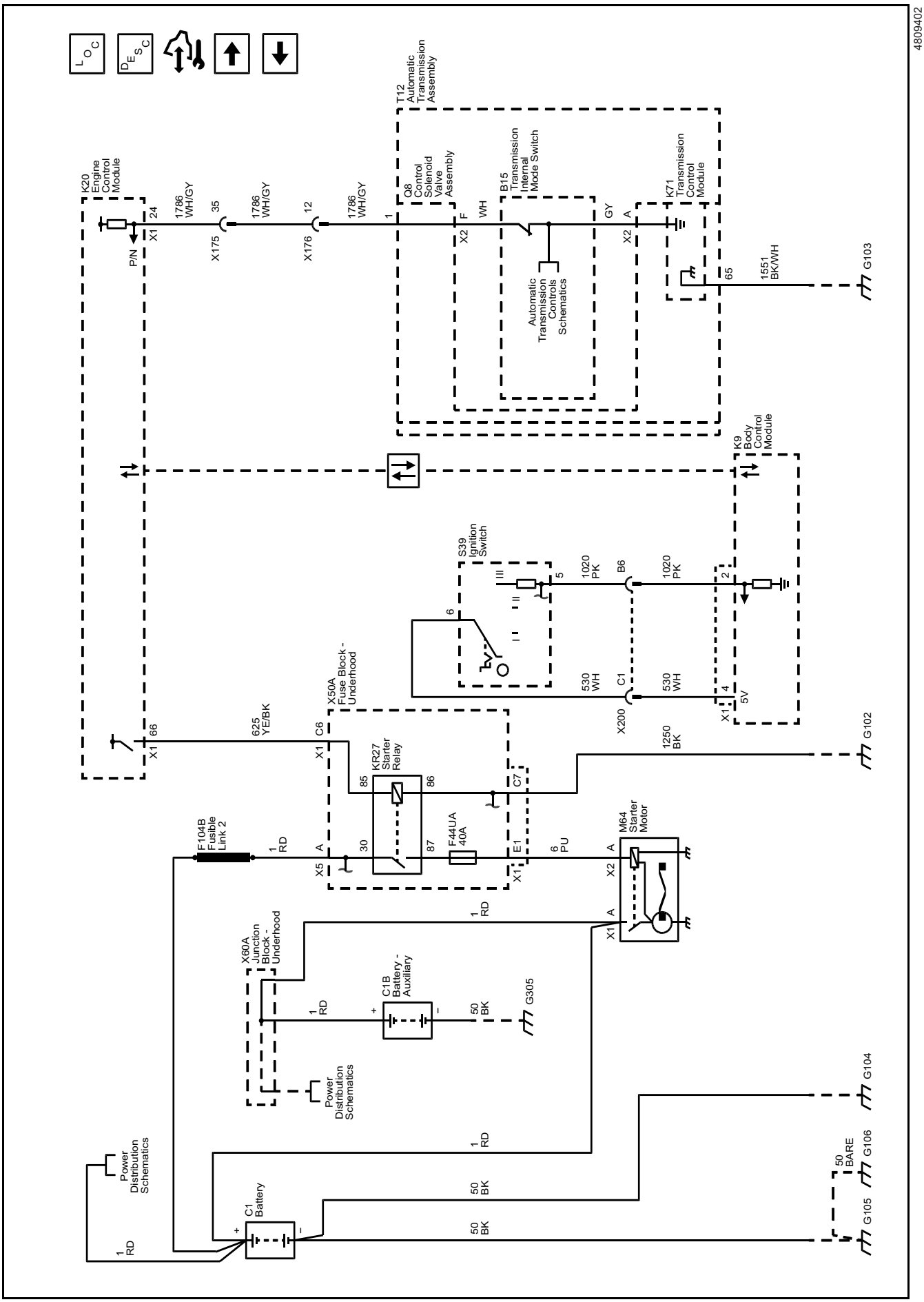
Starting and Charging Schematics (Charging System (Gas with Two Batteries))



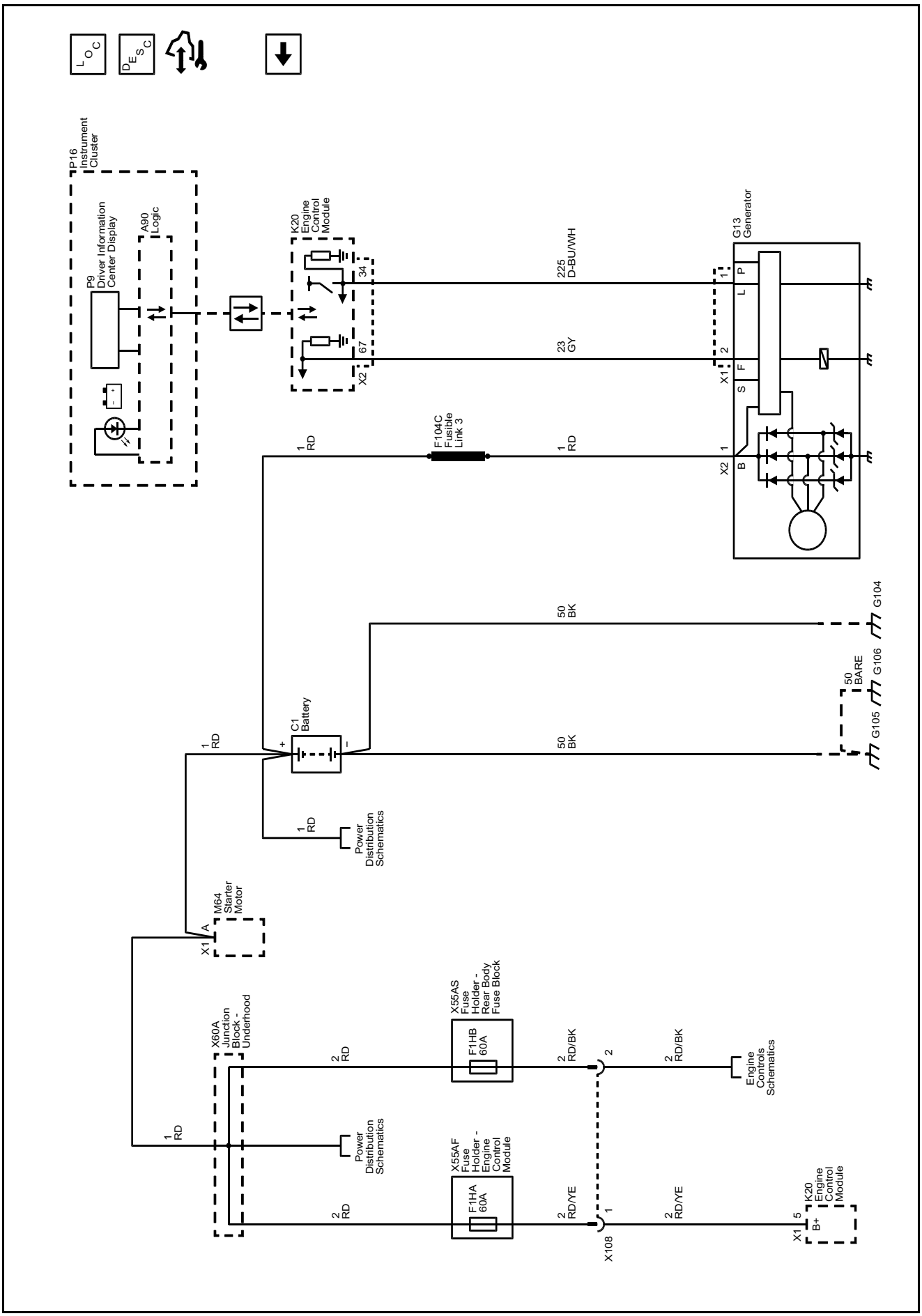
Starting and Charging Schematics (Auxiliary Battery Relay and Auxiliary Battery (Gas with Two Batteries))



Starting and Charging Schematics (Starting System (Diesel))



Starting and Charging Schematics (Charging System (Diesel))



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:

- It monitors the battery voltage and estimates the battery condition.
- It takes corrective actions by boosting idle speeds, and adjusting the regulated voltage.
- It performs diagnostics and driver notification.

The battery condition is estimated during ignition-off and during ignition-on. During ignition-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.

The state-of-charge can be used as a diagnostic tool to tell the customer or the dealer the condition of the battery. Throughout ignition-on, the algorithm continuously estimates state-of-charge based on adjusted net amp hours, battery capacity, initial state-of-charge, and temperature.

While running, the battery degree of discharge is primarily determined by a battery current sensor, which is integrated 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.

The Charging System Description and Operation is divided into 3 sections. The first section describes the charging system components and their integration into the electrical power management. The second section describes charging system operation. The third section describes the instrument panel cluster operation of the charge indicator, driver information center messages, and voltmeter operation.

Charging System Components

Generator

The generator is a serviceable component. If there is a diagnosed failure of the generator it must be replaced as an assembly. 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 failure, the generator defaults to an output voltage of 13.8 V.

Body Control Module (BCM)

The body control module (BCM) is a GMLAN device. It communicates with the engine control module (ECM) and the instrument panel cluster for electrical power management (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 a battery current sensor, the battery positive voltage circuit, and estimated battery temperature to determine battery state of charge. The BCM performs idle boost.

Battery Current Sensor

The battery current sensor is a serviceable component that is connected to either the negative or positive battery cable at the battery. The battery current sensor is a 3-wire hall effect current sensor. The battery current sensor monitors the battery current. It directly inputs to the BCM. It creates a 5-volt pulse width modulation (PWM) signal of 128 Hz with a duty cycle of 0–100 percent. Normal duty cycle is between 5–95 percent. Between 0–5 percent and 95–100 percent are for diagnostic purposes.

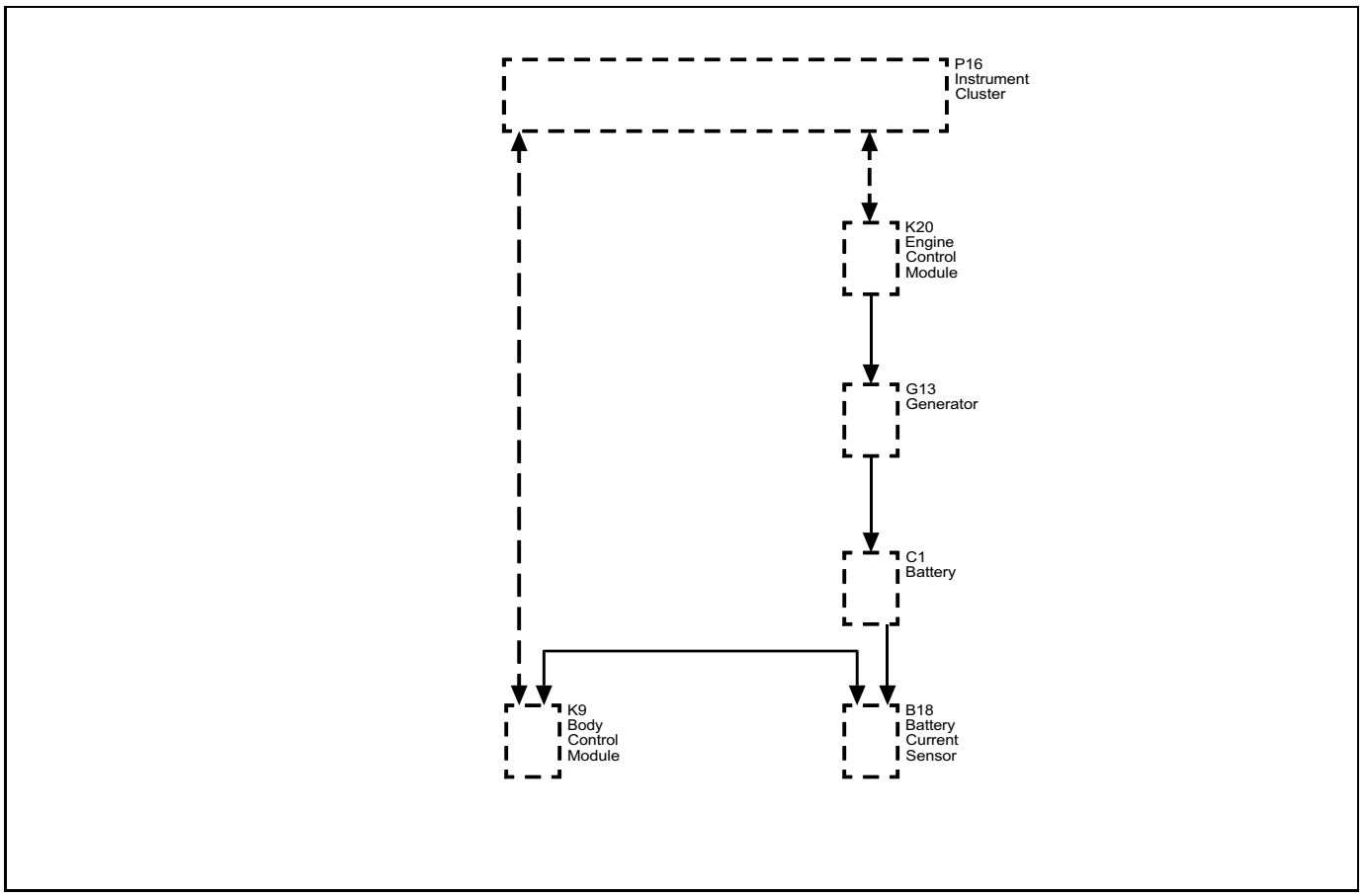
Engine Control Module (ECM)

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

Instrument Panel Cluster

The instrument panel cluster provides the customer notification in case a concern with the charging system. There are 2 means of notification, a charge indicator and a driver information center message of SERVICE BATTERY CHARGING SYSTEM if equipped.

Charging System Block Diagram



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Charging System Operation

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

- Battery Sulfation Mode
- Charge Mode
- Fuel Economy Mode
- Headlamp Mode
- Start Up Mode
- Voltage Reduction Mode

The engine control module (ECM) controls the generator through the generator turn ON signal circuit. The ECM monitors the generator performance though the generator field duty cycle signal circuit. The signal is a pulse width modulation (PWM) signal of 128 Hz with a duty cycle of 0–100 percent. Normal duty cycle is between 5–95 percent. Between 0–5 percent and 95–100 percent are for diagnostic purposes. The following table shows the commanded duty cycle and output voltage of the generator:

Commanded Duty Cycle	Generator Output Voltage
10%	11 V
20%	11.56 V
30%	12.12 V
40%	12.68 V
50%	13.25 V
60%	13.81 V
70%	14.37 V
80%	14.94 V
90%	15.5 V

The generator provides a 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 signal is PWM signal of 128 Hz with a duty cycle of 0–100 percent. Normal duty cycle is between 5–99 percent. Between 0–5 percent and 100 percent are for diagnostic purposes.

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.

- The wipers are ON for more than 3 seconds.
- GMLAN (Climate Control Voltage Boost Mode Request) is true, as sensed by the HVAC control head. 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 percent.
- Vehicle speed is greater than 145 km/h (90 mph)
- Current sensor fault exists.
- System voltage was 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 amperes and greater than −8 amperes, and the battery state-of-charge is greater than or equal to 80 percent. Its targeted generator output voltage is the open circuit voltage of the battery and can be between 12.5–13.1 V. 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 headlamps 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 seconds.

Voltage Reduction Mode

The BCM will enter Voltage Reduction Mode when the calculated ambient air temperature is above 0°C (32° F). The calculated battery current is less than 1 ampere and greater than −7 amperes, and the generator field duty cycle is less than 99 percent. Its targeted generator output voltage is 12.9 V. The BCM will exit this mode once the criteria are met for Charge Mode.

Instrument Panel Cluster Operation

Charge Indicator Operation

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

Display 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 commanded ON when a charging system DTC is a current DTC. The message is turned OFF when the conditions for clearing the DTC have been met.

Electrical Power Management Description and Operation (Gasoline)

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

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

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

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 AH	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 10.9 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 AH	Clear Load Shed 1
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 AH	Second level Idle boost request cancelled
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 AH	Third level Idle boost request cancelled
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 AH	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 15 AH	Clear Load Shed 3

Electrical Power Management Description and Operation (Diesel)

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. Idle boost consists of three steps: idle boost 1, idle boost 2, and idle boost 3 (approximately 725, 850, and 850 rpm respectively). Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active.

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 AH	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 10.9 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 AH	Clear Load Shed 1
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 AH	Second level Idle boost request cancelled
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 AH	Third level Idle boost request cancelled
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 AH	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 15 AH	Clear Load Shed 3

Starting System Description and Operation

The starter motors are non-repairable starter motors. 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 ignition switch is released from the START position, the START 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.

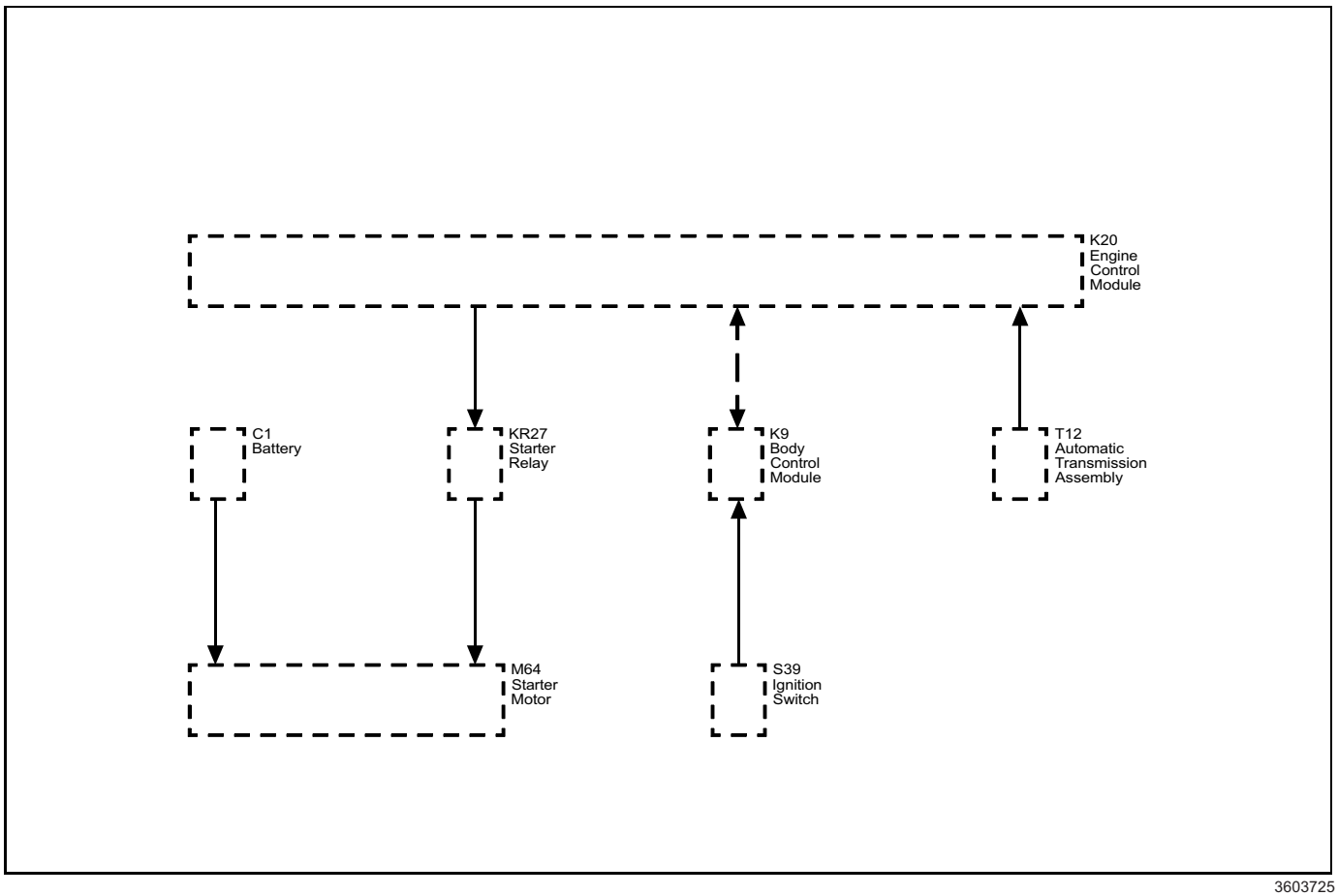
Circuit Description (Key Start)

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.

With KL9

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.

Starting System Block Diagram



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Section 5

HVAC

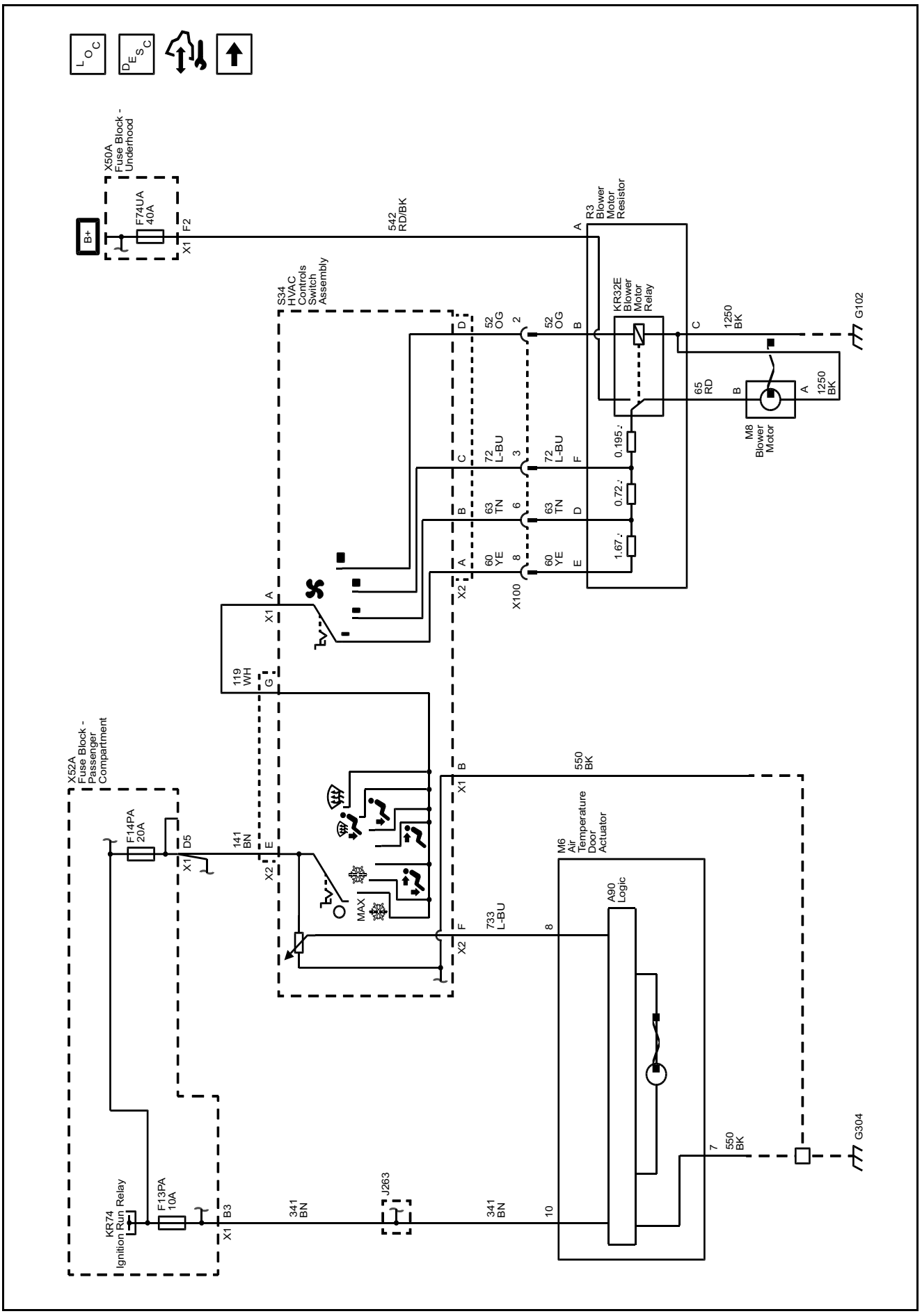
HVAC - Manual 5-3
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Description and Operation 5-13
Air Delivery Description and Operation 5-13
Air Temperature Description and Operation 5-14

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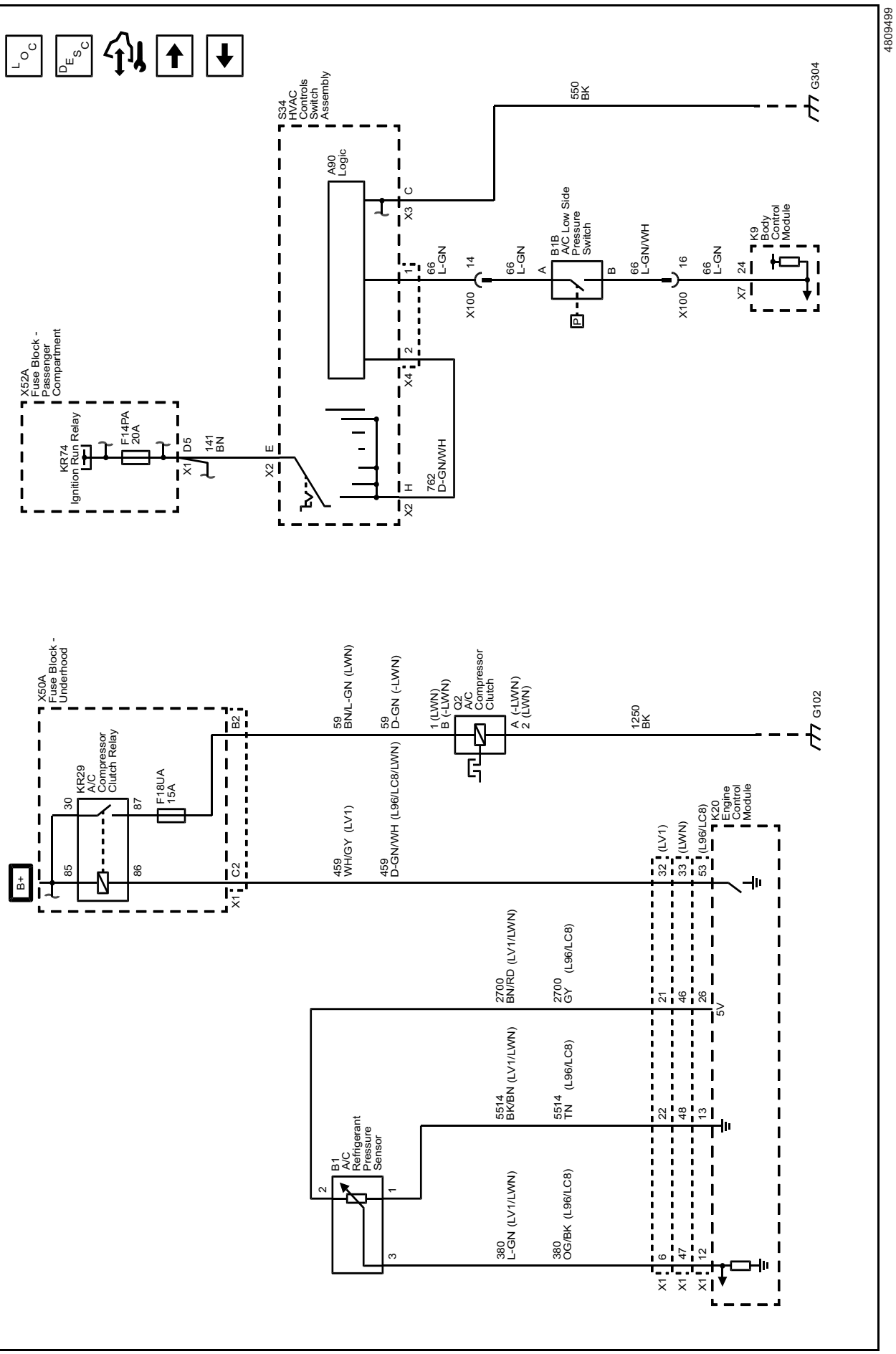
HVAC - Manual

Schematic and Routing Diagrams

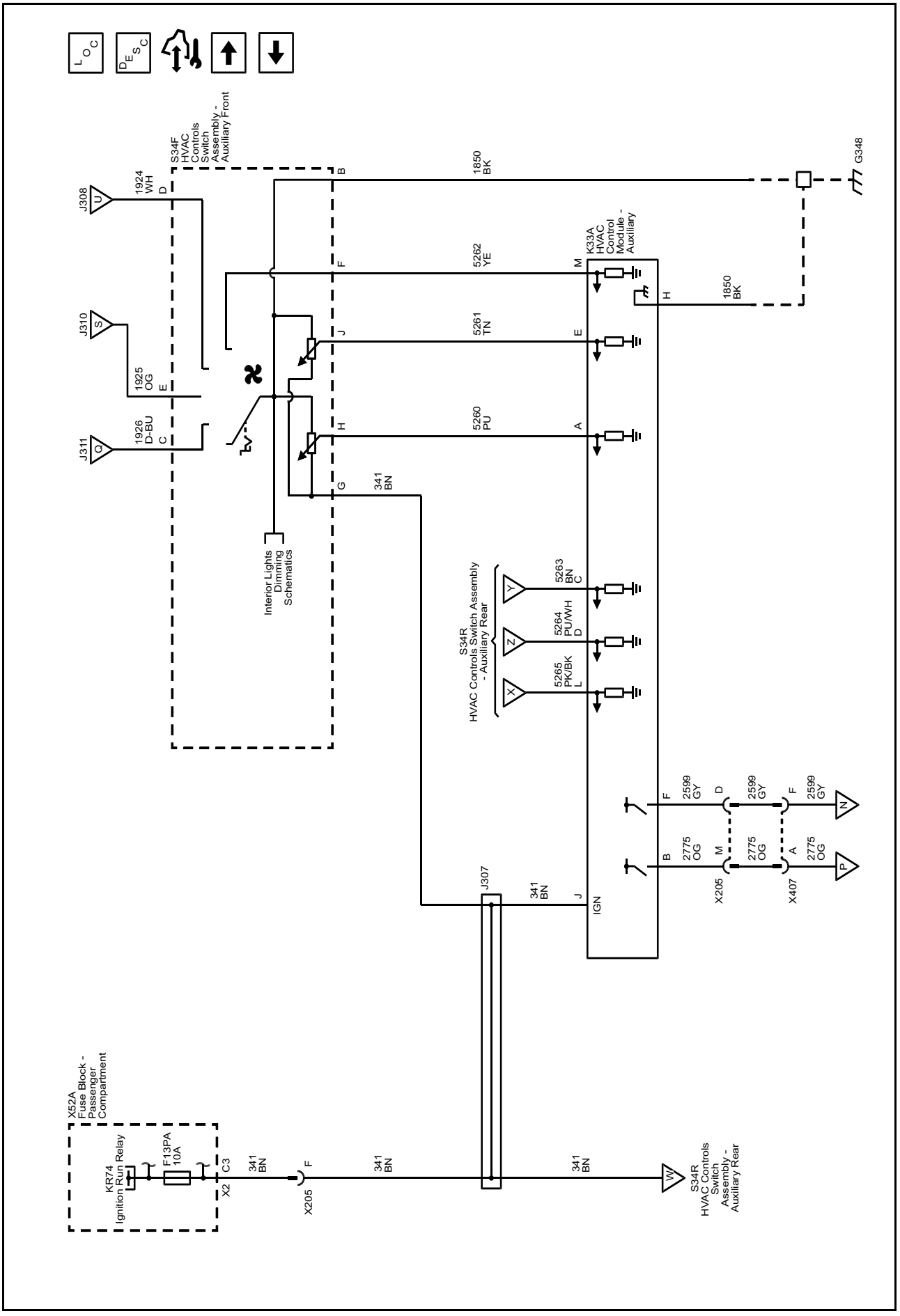
HVAC Schematics (Front Air Delivery Controls and Front Blower Motor)



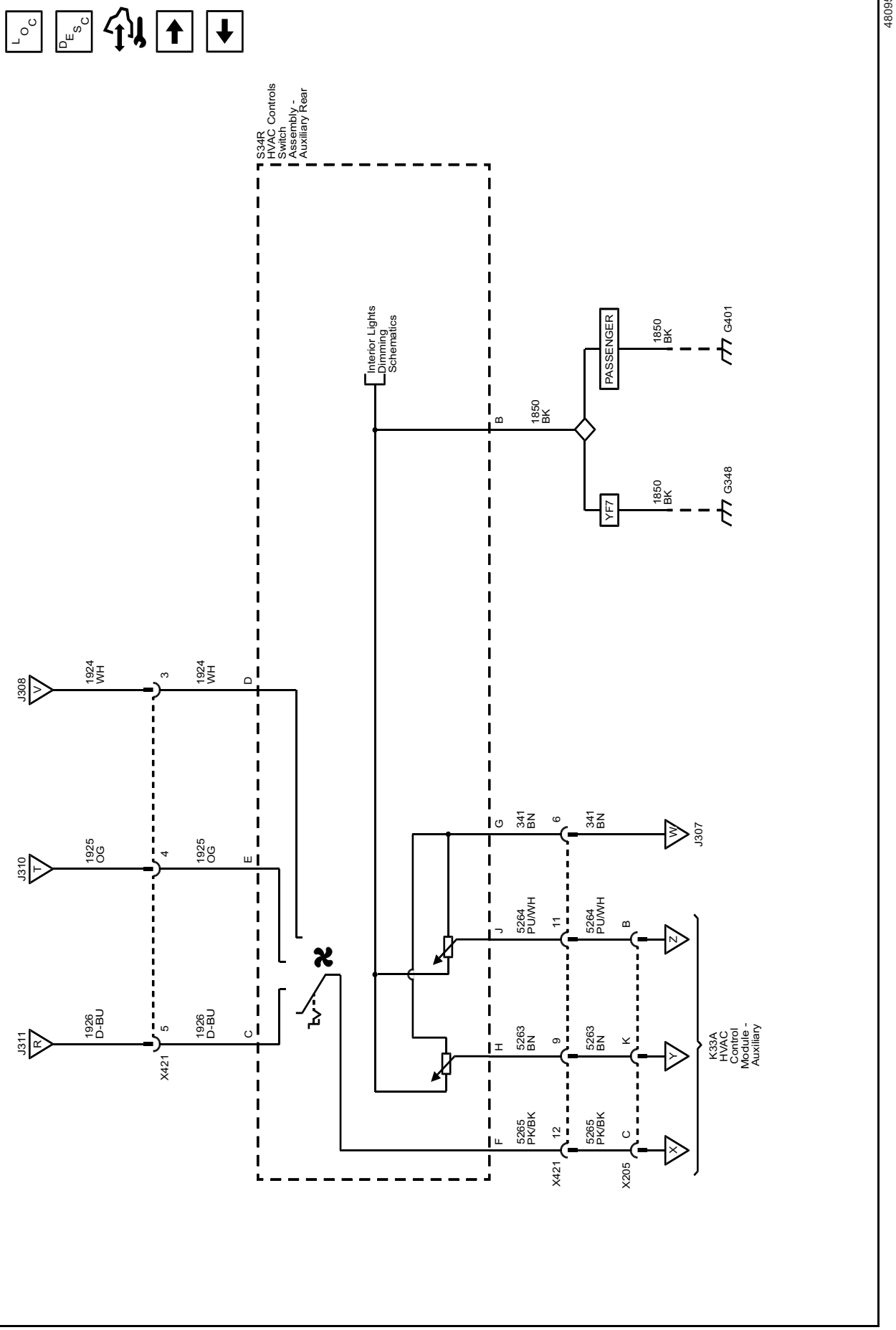
HVAC Schematics (Compressor Controls (C60))



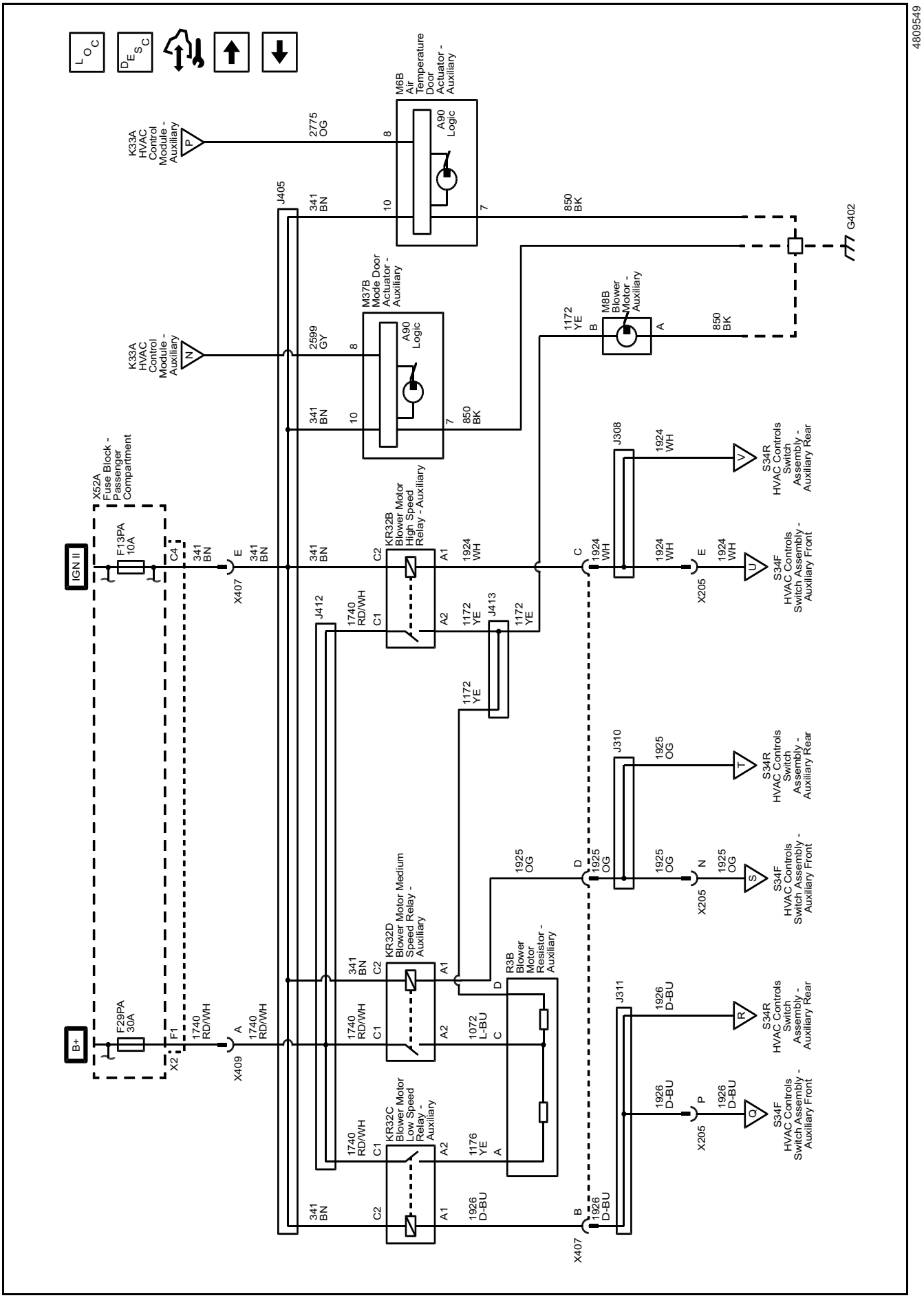
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Air Delivery Controls)



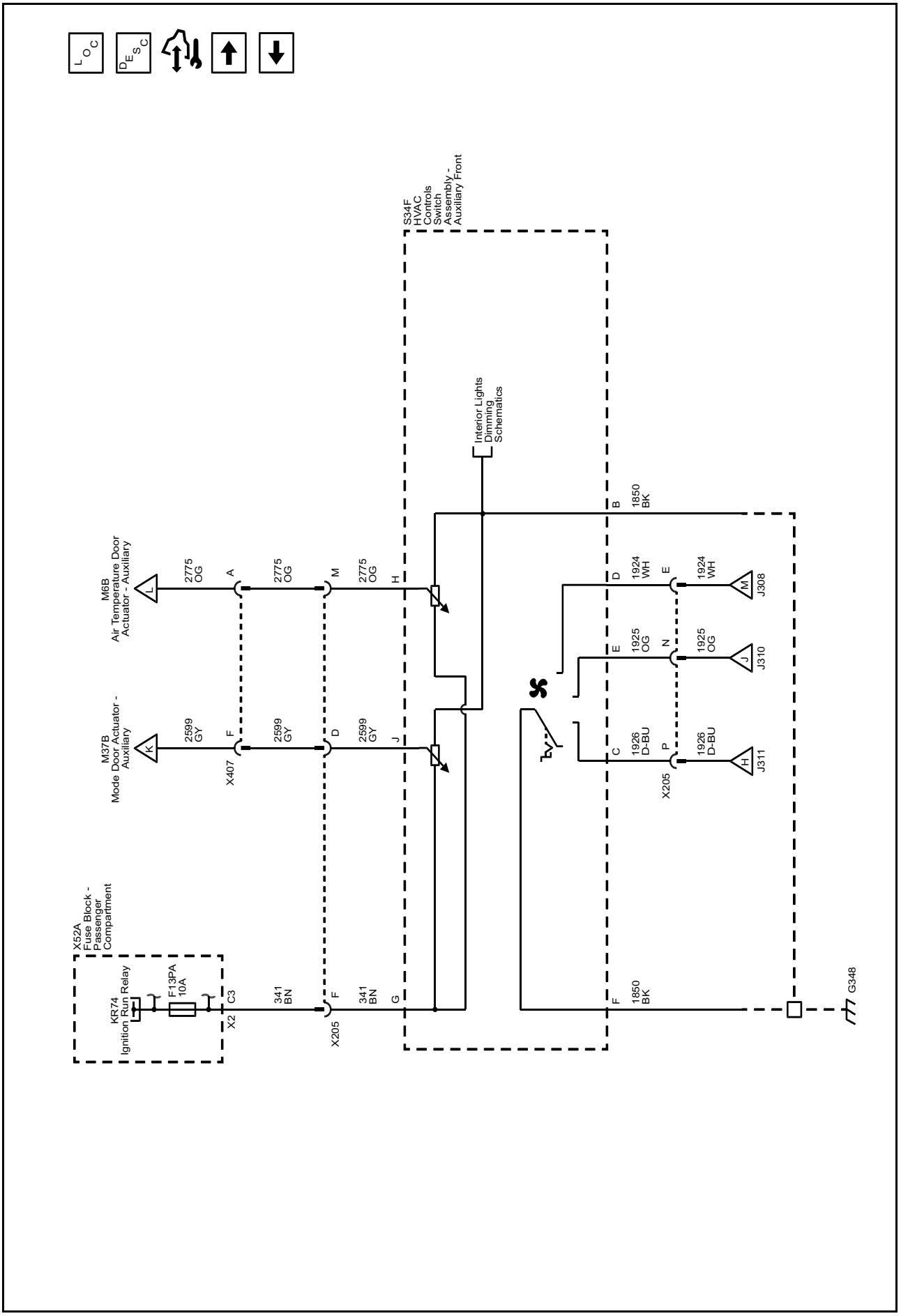
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Rear Controls)



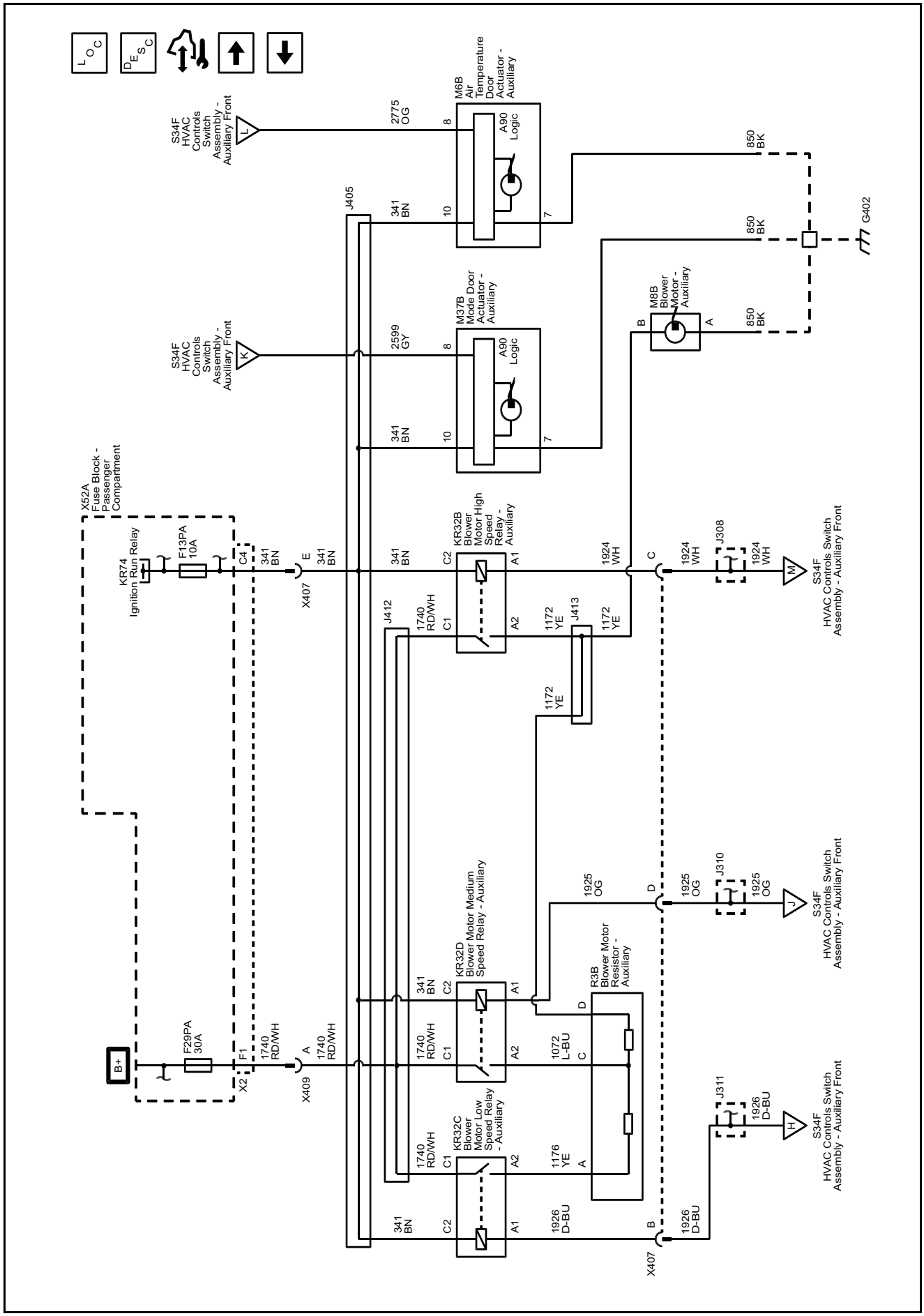
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Front Controls)



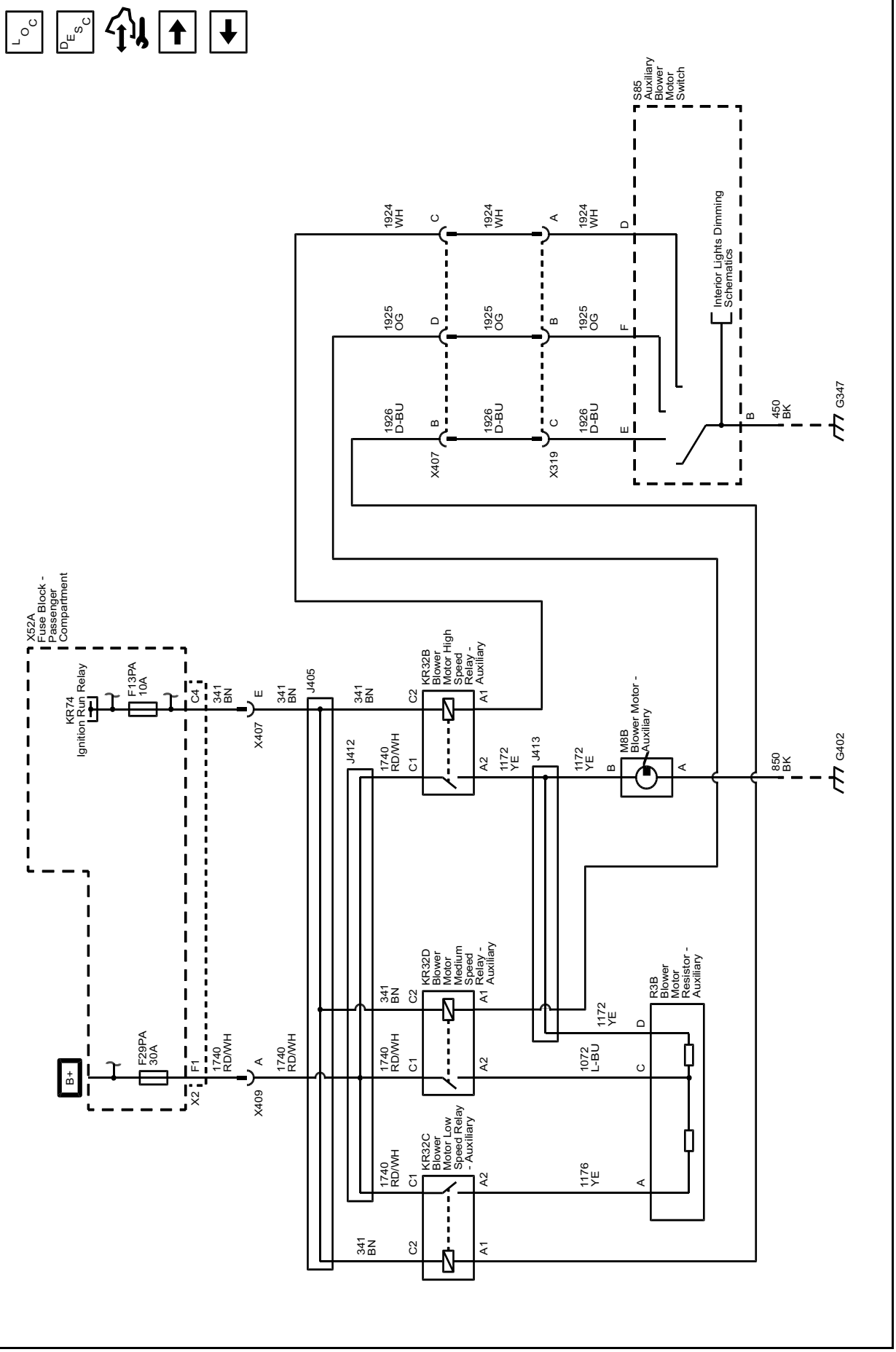
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), without Rear HVAC Controls - Air Delivery Controls)



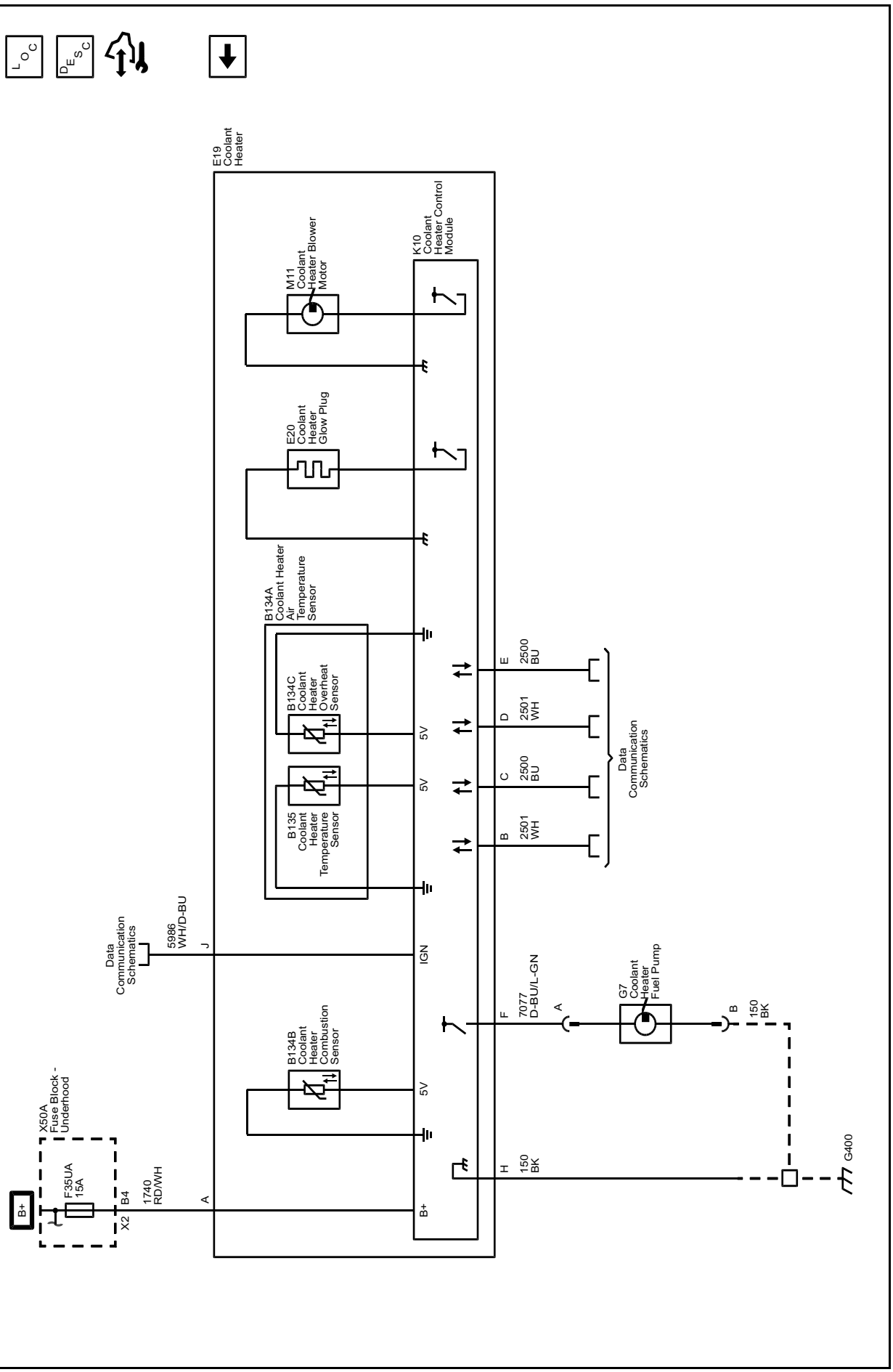
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), without Rear HVAC Controls - Front Controls)



HVAC Schematics (Rear HVAC without Rear Air Conditioning (C36 without C69))



HVAC Schematics (Coolant Heater (K08))



Description and Operation

Air Delivery Description and Operation

The air delivery description and operation is divided into 6 areas:

- HVAC Control Components
- Air Speed
- Auxiliary Air Speed
- Air Distribution
- Auxiliary Air Delivery
- Recirculation Operation

HVAC Control Components

HVAC Control Assembly

The HVAC control assembly is a non-class 2 device that interfaces between the operator and the HVAC system to maintain air temperature and distribution settings. The ignition 3 voltage circuit provides power to the control assembly. Two integrated potentiometers control air temperature door position and blower motor speed. The integrated vacuum system controls the mode door position. The control assembly supports the following features:

Feature	Availability
Afterblow	No
Purge	No
Personalization	No
Actuator Calibration	No

Auxiliary HVAC Control Processor

The auxiliary HVAC control processor controls all outputs for the auxiliary HVAC system. The auxiliary HVAC control processor receives inputs from the front and rear auxiliary HVAC control assemblies. The auxiliary HVAC control processor does not utilize Class 2 communications. If the auxiliary HVAC control processor receives a 12 volt varied voltage input for an auxiliary air temperature actuator change request. Then the auxiliary HVAC control processor creates a 12 volt varied output for control of the auxiliary air temperature actuator.

Auxiliary Mode Actuator

The auxiliary mode actuator is a 3 wire bi-directional electric motor. Ignition 3 voltage, ground and control circuits enable the actuator to operate. The control circuit uses a 0-12 volt linear-ramped signal to command the actuator movement. The 0 and 12 volt control values represent the opposite limits of the actuator range of motion. The values in between 0 and 12 volts correspond to the positions between the limits. When the HVAC control assembly sets a commanded, or targeted, value, the control signal is set to a value between 0-12 volts. The actuator shaft rotates until the commanded position is reached. The module will maintain the control value until a new commanded value is needed.

Air Speed

The HVAC control assembly applies voltage to the blower motor control circuit that corresponds to the selected blower speed. The resistors and the blower motor are in a series circuit. The following list represents the number of resistors in series with the blower motor per particular speed request:

- Low speed-3 resistors
- Medium 1 speed-2 resistors
- Medium 2 speed-1 resistor

When the operator requests High speed, the HVAC control assembly applies voltage to the blower motor relay through the high blower motor control circuit. The voltage energizes the blower motor relay, connecting the blower motor to battery positive voltage.

Auxiliary Air Speed

The auxiliary HVAC control assembly applies voltage to the auxiliary blower motor control circuit that corresponds to the selected blower speed. The resistors and the blower motor are in a series circuit. The following list represents the number of resistors in series with the blower motor per particular speed request:

- Low speed-2 resistors
- Medium speed-1 resistor

When the operator requests High speed, the HVAC control assembly applies voltage to the blower motor relay through the auxiliary high blower motor control circuit. The voltage energizes the blower motor relay, connecting the blower motor to battery positive voltage.

Air Distribution

The HVAC control assembly uses vacuum to control the mode door position. Vacuum is supplied to the control assembly and a vacuum tank by either an engine vacuum source, or a vacuum pump when the vehicle is equipped with a diesel engine..

Vacuum Pump (Diesel Engines)

The electric vacuum pump supplies vacuum to the HVAC control assembly and vacuum tank. When the ignition is ON, voltage is supplied to the vacuum pump from the HVAC fuse. The ground is supplied to the vacuum pump from the chassis.

Mode Switch

The mode switch is a rotary vacuum valve that directly applies vacuum to the appropriate vacuum actuator. Use the mode switch to change the air delivery mode in the vehicle.

MAX A/C–If Equipped

When the operator selects MAX A/C, the mode actuator has vacuum applied to it through the Brown vacuum line, making the vent door open. The recirculation actuator has vacuum applied to it through the Orange vacuum line, making the recirculation door close and allowing air to be recirculated. A/C is forced ON.

A/C–If Equipped

When the operator selects A/C, the mode actuator has vacuum applied to it through the Brown vacuum line, making the vent door open. A/C is forced ON.

Bi-Level Mode

When the operator selects Bi-Level, the following occurs:

- The mode actuator is in neutral position.
- The defrost actuator has vacuum applied to it through the Yellow vacuum line.
- The defrost actuator closes the defrost door, thus opening the heater door though mechanical linkage.
- Vacuum is bled off the mode actuator and the vent door is held stationary in the half open position.

Vent Mode

When the operator selects VENT, the mode actuator has vacuum applied to it through the Yellow vacuum line, making the vent door open.

Floor Mode

When the operator selects FLOOR, the defrost actuator has vacuum applied to it through the Pink vacuum line, pulling the defrost door closed and opening the heater door through mechanical linkage.

Mix-Blend Mode

When the operator selects Mix-Blend, the following occurs:

- Vacuum is bled off the defrost actuator, holding the defrost door stationary in the half-open position. The heater door is also held stationary in the half-open position through mechanical linkage.
- A/C is forced ON.
- Recirculation is not available.

Defrost Mode

When the operator selects Defrost, the following occurs:

- The defrost actuator has vacuum applied to it through the Blue vacuum line, pushing the defrost door open and closing the heater door through mechanical linkage.
- A/C is forced ON.
- Recirculation is not available.

Auxiliary Air Distribution

The HVAC control assembly controls the mode actuator in order to distribute airflow to a desired outlet. When the mode door is moved to the defrost position, the A/C compressor clutch engages and the recirculation actuator will be moved to the outside air position. Regardless of the mode setting, a small amount of air will be diverted to the defrost ducts to reduce windshield fogging. When VENT is selected, the following will occur:

- The mode actuator will be moved to the panel position.
- The recirculation actuator will be placed in the outside air position.
- The A/C compressor will be commanded off.

Recirculation Operation

When the operator selects Recirculation, the HVAC control assembly connects the recirculation door vacuum actuator to the vacuum source. The recirculation actuator retracts, closing the recirculation door. The recirculation operation can function with blower motor in either the ON or OFF position. Recirculation will continue until either outside air is selected or the next ignition cycle. Recirculation is not available in Defrost and Mix-Blend mode.

Air Temperature Description and Operation

The air temperature controls are divided into five areas.

- HVAC Control Components
- Heating and A/C Operation
- Auxiliary Heating and A/C Operation
- Engine Coolant
- A/C Cycle

HVAC CONTROL COMPONENTS

HVAC Control Assembly

The HVAC control assembly is a non-class 2 device that interfaces between the operator and the HVAC system to maintain air temperature and distribution settings. The ignition 3 voltage circuits provide power to the control assembly. Two integrated potentiometers control air temperature door position and blower motor speed. The integrated vacuum system controls the mode door position. The control assembly supports the following features:

Feature	Availability
Afterblow	No
Purge	No
Personalization	No
Actuator Calibration	No

Auxiliary HVAC Control Processor

The auxiliary HVAC control processor controls all outputs for the auxiliary HVAC system. The auxiliary HVAC control processor receives inputs from the front and rear auxiliary HVAC control assemblies. The auxiliary HVAC control processor does not utilize Class 2 communications.

If the auxiliary HVAC control processor receives a 12-volt varied voltage input for an auxiliary air temperature actuator change request. Then the auxiliary HVAC control processor creates a 12-volt varied output for control of the auxiliary air temperature actuator.

Air Temperature Actuator

The air temperature actuator and auxiliary air temperature actuator are a 3-wire bi-directional electric motor. Ignition 3 voltage, ground and control circuits enable the actuator to operate. The control circuit uses a 0–12-volt linear-ramped signal to command the actuator movement. The 0 and 12-volt control values represent the opposite limits of the actuator range of motion. The values in between 0 and 12 volts correspond to the positions between the limits.

When the HVAC control assembly sets a commanded, or targeted, value, the control signal is set to a value between 0–12 volts. The actuator shaft rotates until the

commanded position is reached. The module will maintain the control value until a new commanded value is needed.

A/C Pressure Switches

The A/C system is protected by two A/C pressure switches.

- A/C low pressure switch
- A/C high pressure switch

The A/C high pressure switch interrupts the A/C request signal when the A/C line pressure is more than a predetermined value. The A/C low pressure switch interrupts the A/C low pressure switch signal when the A/C line pressure is less than or more than a predetermined value. When the powertrain control module (PCM) stops receiving the required signals, the A/C compressor clutch relay control circuit is no longer grounded, disengaging the A/C compressor clutch. The A/C compressor clutch is disengaged under the following conditions:

- A/C low pressure switch is less than 124 kPa (18 psi).
- A/C low pressure switch is more than 338 kPa (49 psi).
- A/C high pressure switch is more than 2896 kPa (420 psi).

Bypass Valves

The bypass valves included in the air temperature system are:

- Coolant Bypass Valve
- Hot Water Bypass Valve

The bypass valve is a normally open valve, which closes when vacuum is applied to the valve. When the MAX A/C mode is selected, vacuum from the HVAC control assembly is applied to the bypass valve. The vacuum must be strong enough to overcome the tension of the valve's internal return spring in order to close the bypass valve. The return spring forces the valve to return to the open position, when any of the other HVAC modes are selected. In the closed position, the flow of coolant to the heater core is bypassed, allowing maximum cooling to the passenger compartment.

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. The vehicle operator can determine the passenger compartment temperature by adjusting the air temperature switch. Regardless of the temperature setting, the following can effect the rate that the HVAC system can achieve the desired temperature:

- Recirculation
- Difference between inside and desired temperature
- Difference between ambient and desired temperature
- Blower motor speed setting
- Mode setting
- Auxiliary HVAC settings

The A/C system can be engaged by placing the mode switch in one of the following positions:

- Max A/C
- A/C
- Bi-Level
- Blend
- Defrost

The A/C system can operate regardless of the temperature setting. Regardless of the selected A/C mode setting, a request is sent to the PCM to turn on the A/C compressor clutch.

The following conditions must be met in order for the PCM to turn on the compressor clutch:

- Ambient air temperature is greater than 3°C (38°F)
- Engine coolant temperature (ECT) is less than 123°C (253°F)
- Engine speed is less than 5000 RPM
- The A/C compressor cycling switch pressure is between 124-388 kPa (18-49 psi)
- The A/C high pressure cutout switch is less than 2896 kPa (420 psi)

Once engaged, the compressor clutch will be disengaged for the following conditions:

- Throttle position is 100 percent
- The A/C compressor cycling switch pressure is less than 124 kPa (18 psi) or more than 338 kPa (49 psi)
- The A/C high pressure cutout switch is more than 2896 kPa (420 psi)
- Engine coolant temperature (ECT) is more than 123°C (253°F)
- Engine speed is more than 5000 RPM
- Transmission shift
- PCM detects excessive torque load
- PCM detects insufficient idle quality
- PCM detects a hard launch condition

When the compressor clutch disengages, the compressor clutch diode protects the electrical system from a voltage spike.

Heater Mode – Auxiliary Heater without A/C

The auxiliary blower motor recycles air from the vehicle's interior. The vehicle operator can determine the intensity of the auxiliary heater by placing the auxiliary blower motor in one of the following positions:

- Low
- Med
- High

Since there is no temperature switch, the temperature is controlled by the speed of the auxiliary blower motor. The auxiliary blower motor will only operate when the ignition is in the RUN position, and the auxiliary blower motor switch is in any position other than OFF.

Heater Mode – Front Auxiliary HVAC Control Assembly Only

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control

assembly and the auxiliary air temperature actuator from the instrument panel (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

Heater Mode – Front Auxiliary HVAC Control Assembly with Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a varied resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature

Heater Mode – Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the rear auxiliary HVAC control assembly allows the rear seat passengers to adjust the temperature in the rear of the vehicle. Power is provided to the rear auxiliary HVAC control assembly, auxiliary HVAC control processor and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

To activate the rear auxiliary HVAC control assembly, the front auxiliary HVAC control assembly must be placed in the REAR CNTL position. Ignition 3 voltage is sent to the auxiliary HVAC control processor. When the switch is placed in the REAR CNTL position, the voltage is grounded through the auxiliary blower motor switch control, front auxiliary HVAC control assembly and the ground circuit to allow the rear auxiliary HVAC control assembly to operate the auxiliary temperature actuator. Voltage delivered to the rear auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Front Auxiliary HVAC Control Assembly Only

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Front Auxiliary HVAC Control Assembly with Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the rear auxiliary HVAC control assembly allows the rear seat passengers to adjust the temperature in the rear of the vehicle. Power is provided to the rear auxiliary HVAC control assembly, auxiliary HVAC control processor and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

To activate the rear auxiliary HVAC control assembly, the front auxiliary HVAC control assembly must be placed in the REAR CNTL position. Ignition 3 voltage is sent to the auxiliary HVAC control processor. When the switch is placed in the REAR CNTL position, the voltage is grounded through the auxiliary blower motor switch control, front auxiliary HVAC control assembly and the ground circuit to allow the rear auxiliary HVAC control assembly to operate the auxiliary temperature actuator. Voltage delivered to the rear auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a varied resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

Engine Coolant

Engine coolant is the key element of the heating system. The thermostat controls engine operating coolant temperature. The thermostat also creates a restriction for the cooling system that promotes a positive coolant flow and helps prevent cavitation. Coolant enters the heater core through the inlet heater hose, in a pressurized state.

The heater core is located inside the HVAC module. The heat of the coolant flowing through the heater core is absorbed by the ambient air drawn through the HVAC module. Heated air is distributed to the passenger compartment, through the HVAC module, for passenger comfort.

The amount of heat delivered to the passenger compartment is controlled by opening or closing the HVAC module air temperature door. The coolant exits the heater core through the return heater hose and recirculated back through the engine cooling system.

Coolant Heater (K08)

The coolant heater function is to provide additional heat to the passenger compartment. The coolant heater burns diesel fuel, to heat up the engine coolant when the vehicle is running and will only operate during conditions where ambient temperature is below 4°C (39°F) and a fuel tank level greater than 12.5 percent. The heat of the hot engine coolant is transferred to the HVAC module to heat the passenger compartment. The coolant heater does not heat up instantly. It must go through a self test and start up procedure before normal operation. The vehicle must be running to start the unit but after the unit is no longer commanded on a two minute shut down (purge) procedure starts. The coolant flow is from the engine to the fuel operated heater through the heat exchanger back to the engine.

Battery voltage and ground is supplied to the coolant heater. The electronic control unit inside the coolant heater determines when the unit will turn ON and OFF as well as how it will function. The electronic control unit also uses GMLAN communication and the engine control module (ECM) to transfer coolant heater information that the scan tool can read. The fuel operated heater contains flame sensors to disable the glow plug once the flame is established or to abort the startup attempt if the flame is not established.

Inputs to the coolant heater electronic control unit:

- Coolant sensor
- Overheat sensor
- Combustion sensor
- GMLAN ECM

Outputs from the coolant heater electronic control unit:

- Fuel pump
- Glow plug
- Blower motor
- GMLAN ECM

The coolant heater controls the coolant temperature with 3 operating modes.

- HIGH—If coolant temperature is in a range between −40 to +75°C (−40 to +176°F), the coolant heater fuel pump will pump fuel at maximum capacity to increase the coolant temperature as fast as possible. Note: Ambient temperature must be below 4°C (39°F), fuel tank level greater than 12.5 percent and the engine should be running.
- LOW—If coolant temperature is in a range between 85–90°C (185–194°F), the coolant heater fuel pump will pump fuel at minimum capacity to increase the coolant temperature at a slower rate.
- OFF—If coolant temperature is above 90°C (195°F), the coolant heater fuel pump will stop pumping fuel and allow the remaining fuel in the combustion chamber to burn out. The coolant heater fuel pump will not start pumping fuel again until the coolant temperature reaches 75°C (167°F).

FUNCTIONAL PRINCIPLES:

- The vehicle coolant pump continuously circulates the coolant over the heat exchanger inside the fuel operated heater and throughout the coolant system.
- The coolant heater fuel pump pumps the fuel from the vehicle fuel tank to the combustion chamber.
- Coolant heater blower blows the oxygen, which is necessary for the combustion process, into the combustion chamber.
- A Coolant heater glow plug generates the evaporation energy and creates the temperature which is necessary to ignite the Air-Fuel mixture
- The heat exchanger inside the fuel operated heater transfers the energy of the combustion process into the engine coolant.
- Depending on the coolant temperature, which is detected by the coolant sensors, the heater chooses either high or low setting or gets shut off.

SELF TEST OF THE UNIT:

Before every start of the heater, the operation of the individual components is tested.

- Fuel operated heater control unit check
- Flame sensor
- Coolant sensor
- Overheating sensor
- Glow plug
- Fuel pump
- Blower motor

The fuel operated heater will only start after the self test of the heating unit is successful. Should a fault be detected, a fault notification will be output through the vehicle diagnosis.

DESCRIPTION OF SAFETY MECHANISM :

During start up the ECU is performing a random access memory (RAM), read-only memory (ROM) and electrically erasable programmable read-only memory (EEPROM) test. If failures occur during a self test of the unit, the unit will not start.

- If the power supply voltage exceeds 16 volts the unit will not start or shut off with after purge time of 120 seconds.
- If the power supply voltage goes below 10.2 V for more than 40 seconds the unit will shut off and try to restart after a purge time of 120 seconds. If the failure occurs 3 times, then unit is not going to restart till next key off.

Description of component checks:

- Coolant Heater Blower Motor—After the unit is commanded on and before normal operation the blower is tested for an open circuit. While the heater is activated the blower is tested for a short to ground.
- Flame sensor—The flame sensor is tested continuously during operation for a short to ground, short to voltage or open circuit.
- Glow plug—After the unit is commanded and before normal operation the glow plug is tested for an open circuit. While the heater is activated the glow plug is tested for a short to ground.
- Coolant Heater Fuel Pump—After the coolant heater is commanded on and before normal operation is activated, the fuel pump is tested for an open circuit. While the coolant heater is activated the fuel pump is tested for a short to ground.
- Overheating Sensor and Coolant sensor—The overheat sensor and coolant sensor are tested continuously during operation for a short to ground, short to voltage or open circuit.

FIRST START OF THE UNIT (125 seconds):

After the self test was successfully completed a first start procedure sequence is attempted.

1. The ceramic glow plug starts to heat the combustion chamber.
2. After a delay, the blower switches on. During the start procedure, the blower continuously increases blowing speed.
3. The fuel pump pumps fuel into the combustion chamber. The cycle frequency of the fuel pump is also continuously increased during the start procedure.
4. The glow plug starts to vaporize the fuel, and creates the temperature to ignite the fuel.
5. After ignition, the heater runs continuously to reach the maximum heating power.
6. After the flame sensor has detected the flame, the start procedure is complete, and the glow plug switches off.

SECOND START OF THE UNIT (125 seconds):

If the first start is not successful, the heater attempts a second restart process. In doing this, the glow plug voltage is increased, in order to obtain better starting conditions. The first start sequence is then repeated.

UNSUCCESSFUL SECOND START:

If the second start is not successful in igniting the heater, a fault code is output from the heater.

- A new attempt to start will only occur after the ignition switch is cycled.
- After 10 failed ignition cycles one after the other, all further start attempts are stopped by the control unit. This inhibit state can only be released by clearing the codes with a scan tool.

A/C Cycle

Refrigerant is the key element in an air conditioning system. R-134a is presently the only EPA approved refrigerant for automotive use. R-134a is an very low temperature gas that can transfer the undesirable heat and moisture from the passenger compartment to the outside air.

The A/C compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure on the vapor refrigerant. 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 balance of the A/C system. The A/C system is mechanically protected with the use of a high pressure relief valve. If the high pressure switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief 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 orifice tube.

The orifice tube is located in the liquid line between the condenser and the evaporator. The orifice tube is the dividing point for the high and the low pressure sides of the A/C system. As the refrigerant passes through the orifice tube, the pressure on the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to vaporize at the orifice tube. The orifice tube also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the orifice tube 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 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 compressor, in a vapor state, and completing 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 HVAC module for passenger comfort. The heat and moisture removed from the passenger compartment will also change form, or condense, and is discharged from the HVAC module as water.

A/C Cycle 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.

Refrigerant is the key element in an air conditioning system. R-134a is presently the only EPA approved refrigerant for automotive use. R-134a is an very low temperature gas that can transfer the undesirable heat and moisture from the passenger compartment to the outside air.

The A/C system used on this vehicle is a non cycling system. Non cycling A/C systems use a high pressure switch to protect the A/C system from excessive pressure. The high pressure switch will OPEN the electrical signal, to the compressor clutch, in the event that the refrigerant pressure becomes excessive. After the high and low side of the A/C system pressure equalize, the high pressure switch will CLOSE. Closing the high pressure switch will complete the electrical circuit to the compressor clutch. The A/C system is also mechanically protected with the use of a high pressure relief valve. If the high pressure switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief will pop open and release refrigerant from the system.

The A/C compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure on the vapor refrigerant. 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 balance of the A/C 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. The liquid line flow is split and the liquid refrigerant flows to both the front or primary A/C system, and to the liquid line for the rear A/C system.

The liquid refrigerant, flowing to the rear A/C system, flows into the rear 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 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.

BLANK

Section 6

Power and Signal Distribution

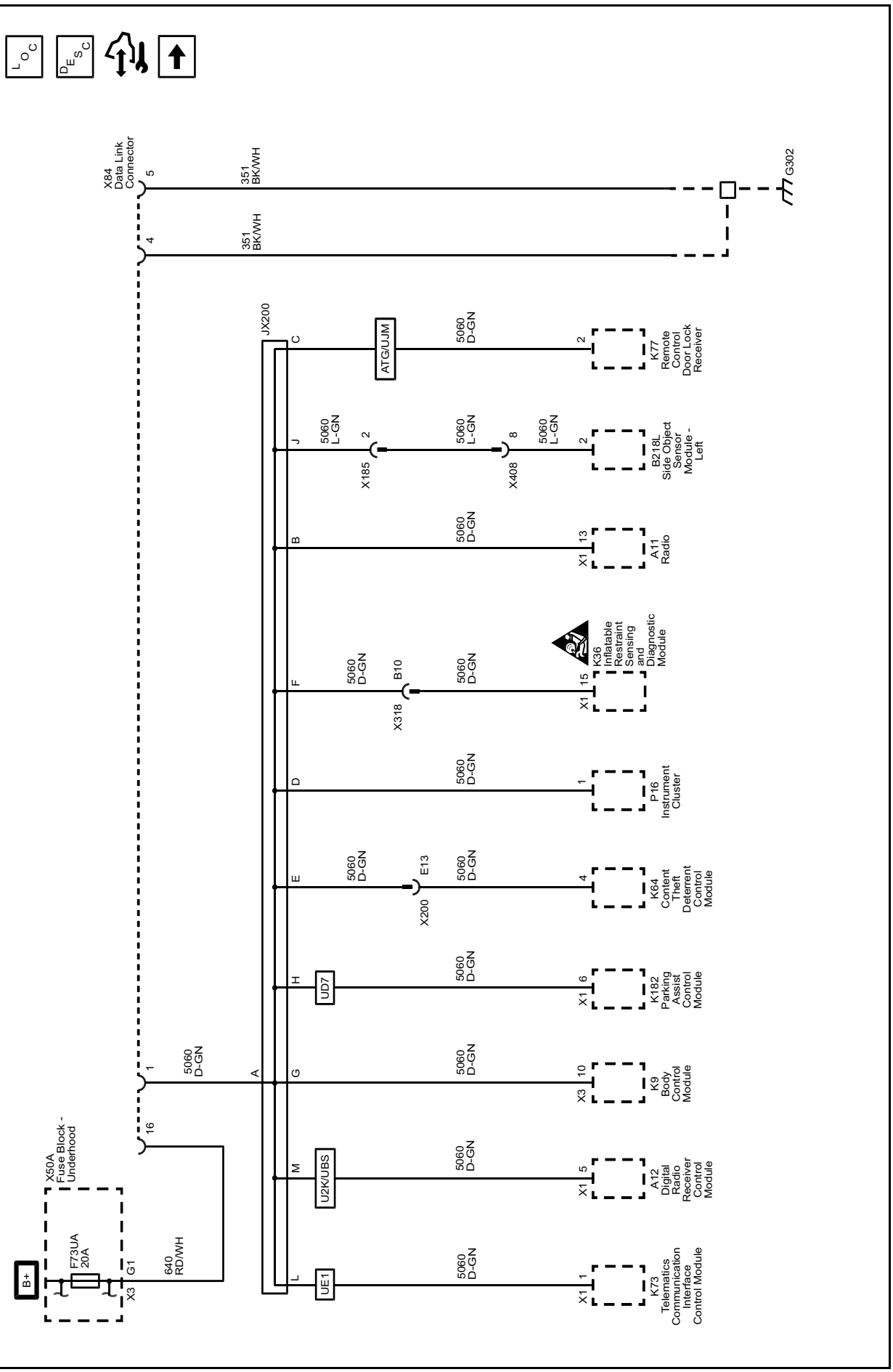
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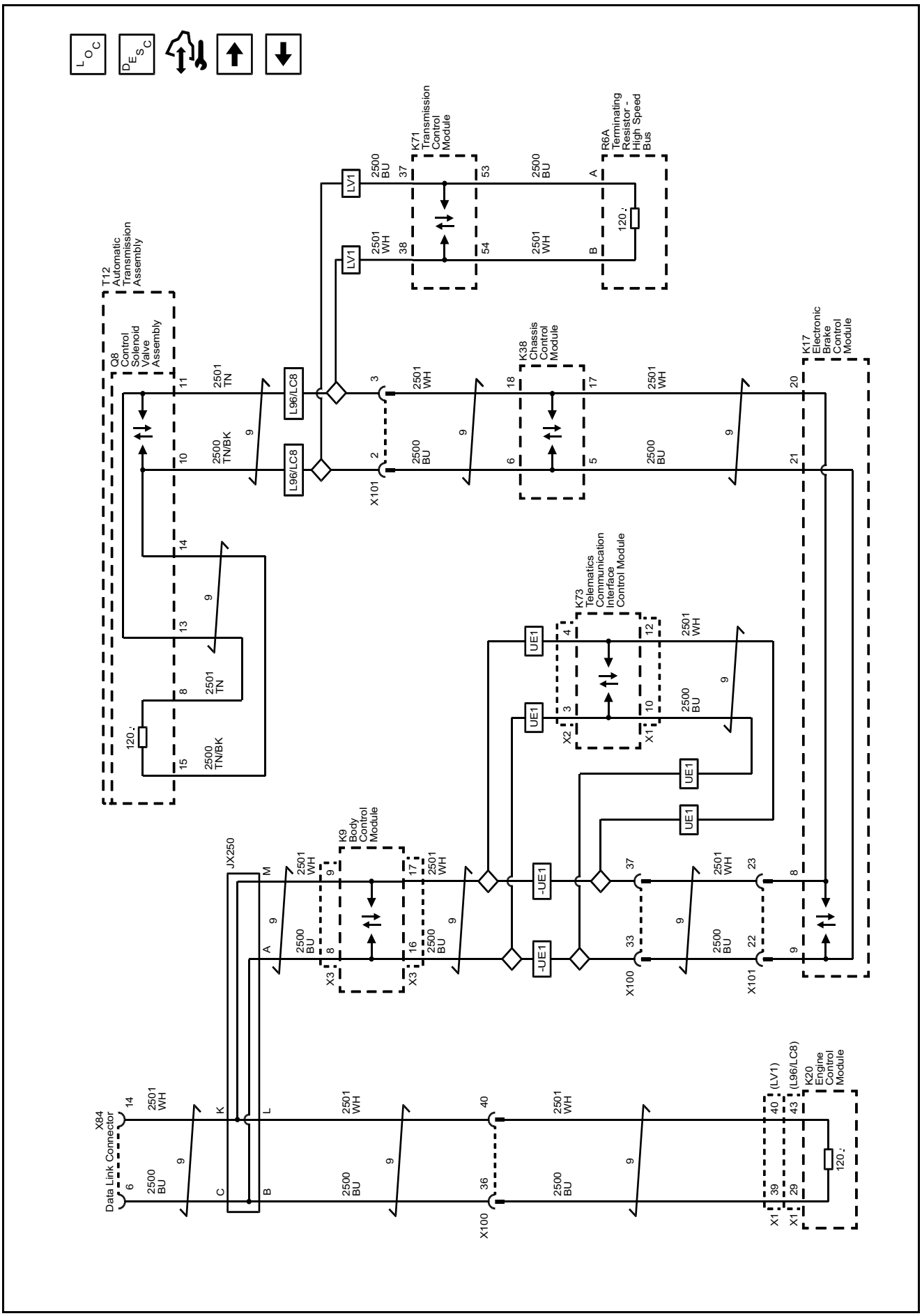
Data Communications

Schematic and Routing Diagrams

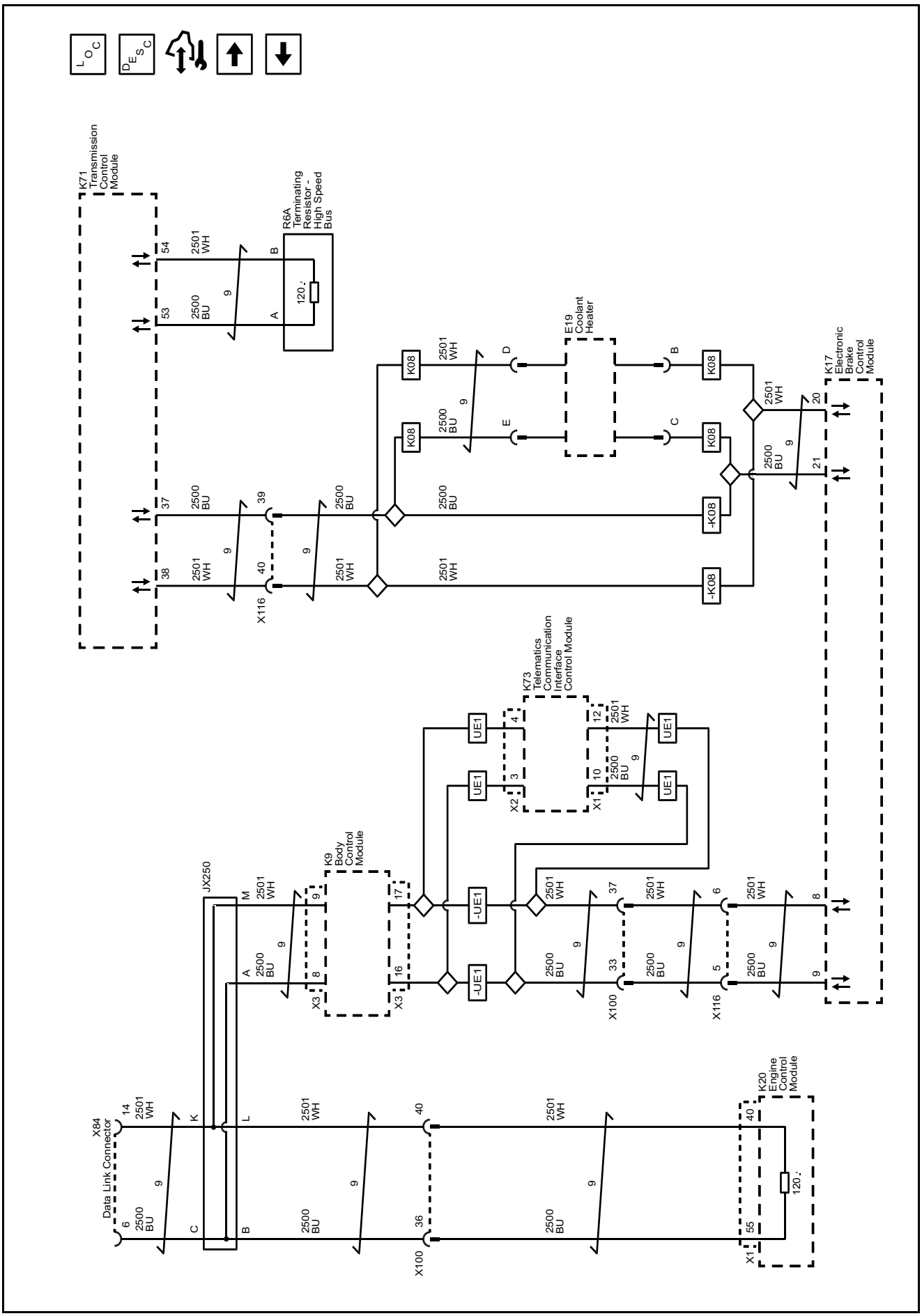
Data Communication Schematics (Low Speed GMLAN)



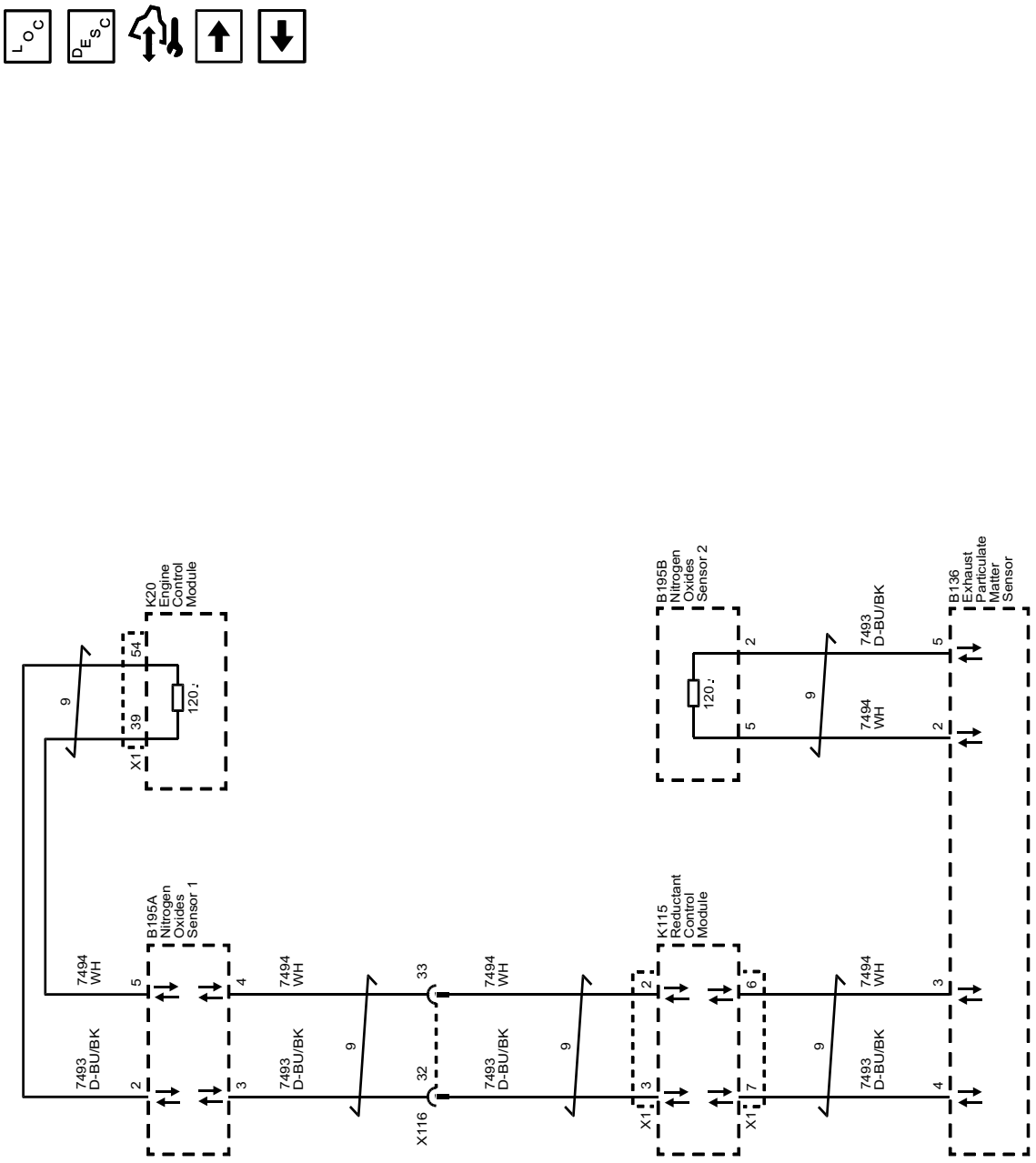
Data Communication Schematics (High Speed GMLAN (Gas))



Data Communication Schematics (High Speed GMLAN (Diesel))

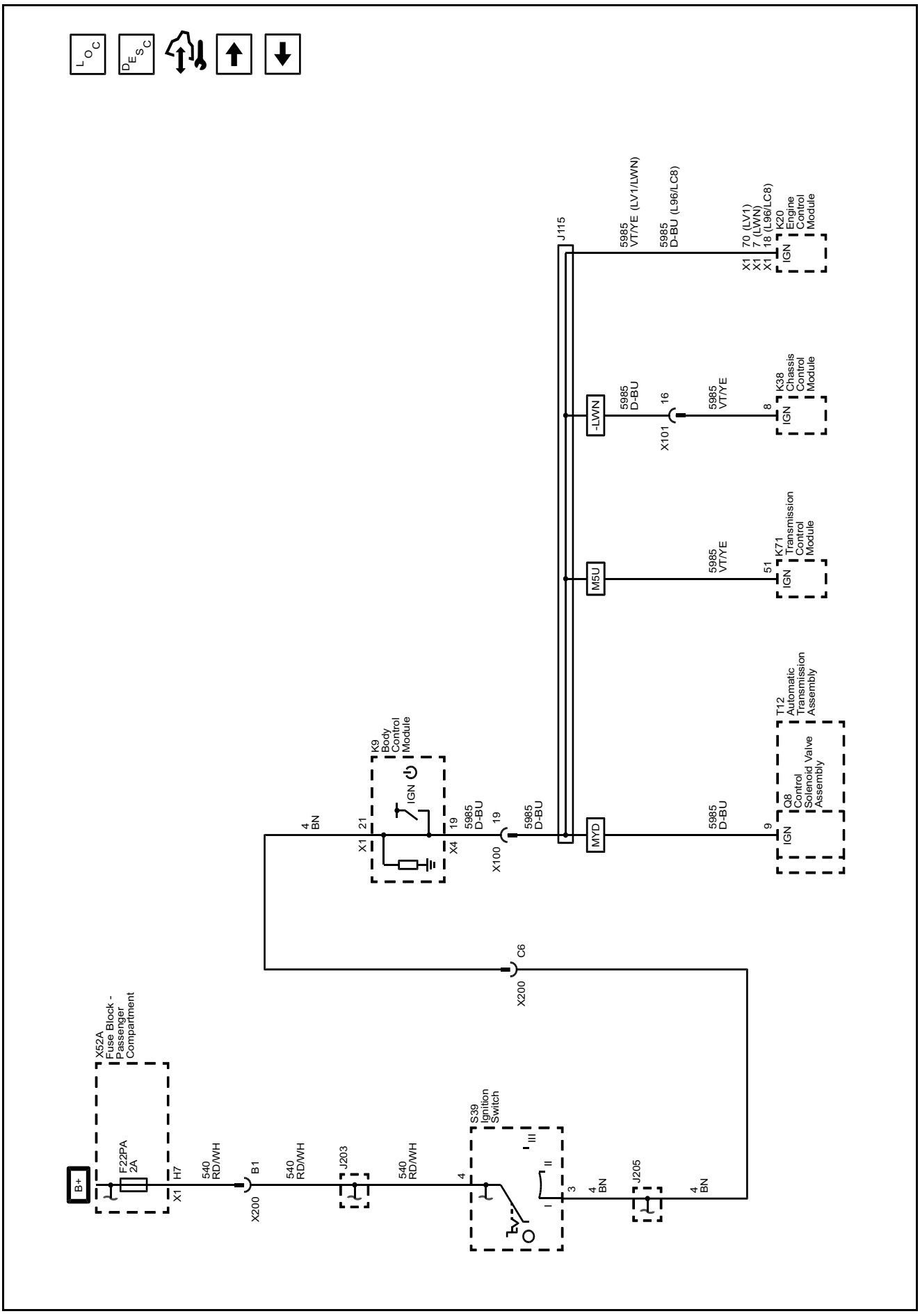


Data Communication Schematics (Powertrain High Speed GMLAN (LWN))

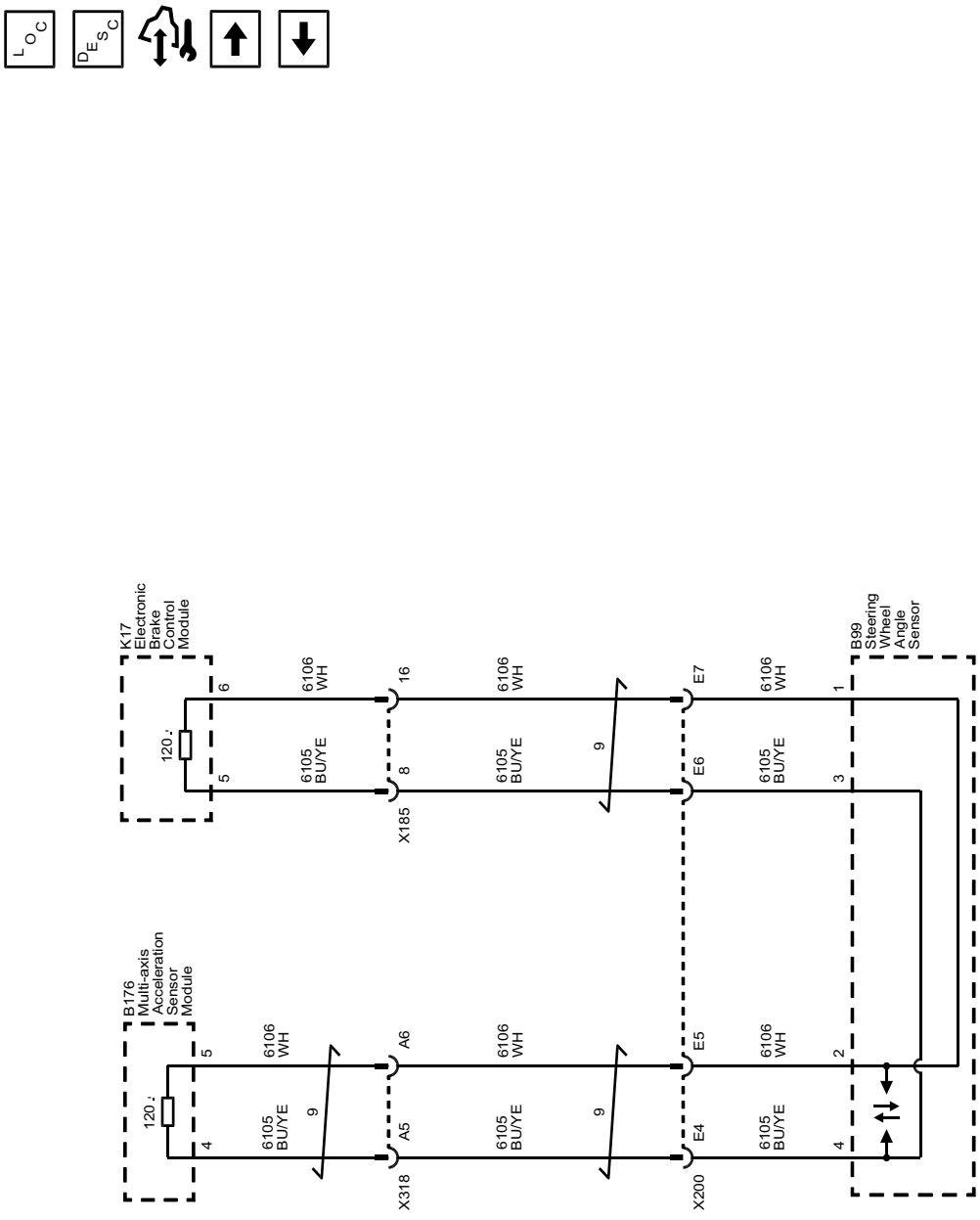


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Data Communication Schematics (Accessory Wakeup)

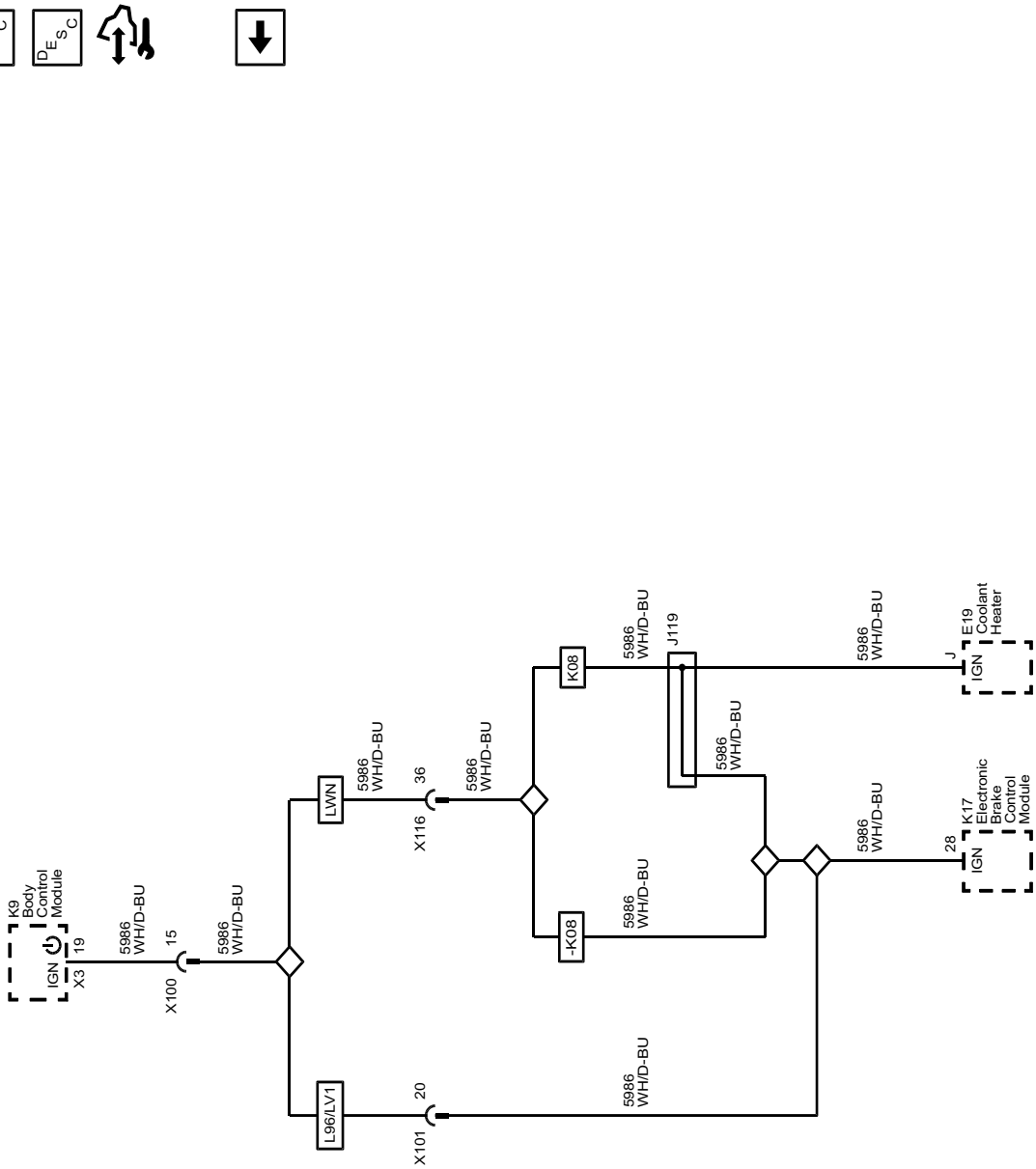


Data Communication Schematics (Chassis High Speed GMLAN)



4842726

Data Communication Schematics (Communications Enable)



Description and Operation
Data Link Communications Description and Operation

Circuit Description

The communication among control modules is performed primarily through the GMLAN high speed serial data circuit and the GMLAN low speed serial data circuits. The modules that need real time communication are attached to the high speed GMLAN network. The body control module (BCM) is the serial data gateway between the networks. The purpose of the gateway is to translate serial data messages between the GMLAN high speed bus and the GMLAN low speed bus. The Local Interconnect Network (LIN) is another serial data communication network used on this vehicle which is dedicated to the remote compass module (RCM) subsystem. Below are more detailed descriptions of the individual networks. The gateway will interact with each network according to that network's transmission protocol. Refer to Body Control System Description and Operation for more information about the gateway.

GMLAN High Speed Circuit Description

The data link connector (DLC) allows a scan tool to communicate with the high speed GMLAN serial data circuit. The serial data is transmitted on two twisted wires that allow speed up to 500 Kb/s. The twisted pair is terminated with two 120 ohms resistors. The resistors are used to reduce noise on the High Speed GMLAN bus during normal vehicle operation. The high speed GMLAN is a differential bus. The high speed GMLAN serial data (+) and high speed GMLAN serial data (−) are driven to opposite extremes from a rest or idle level. The idle level, which is approximately 2.5 volts, is considered recessive transmitted data and is interpreted as a logic 1. Driving the lines to their extremes, adds one volt to the high speed GMLAN serial data (+) and subtracts one volt from the high speed GMLAN serial data (−) wire. This dominant state is interpreted as a logic 0. GMLAN network management supports selective start up and is based on virtual networks. A virtual network is a collection of signals started in response to a vehicle event. The starting of a virtual network signifies that a particular aspect of the vehicles functionality has been requested. A virtual network is supported by virtual devices, which represents a collection of signals owned by a single physical device. So, any physical device can have one or more virtual devices. The signal supervision is the process of determining whether an expected signal is being received or not. Failsofting is the ability to substitute a signal with a default value or a default algorithm, in the absence of a valid signal. Some messages are also interpreted as a heartbeat of a virtual device. If such a signal is lost, the application will set a no communication code against the respective virtual device. This code is displayed on the Tech 2 screen as a code against the physical device. Note: a loss of serial data DTC does not represent a failure of the module that the code is set in.

GMLAN Low Speed Circuit Description

The data link connector (DLC) allows a scan tool to communicate with the low speed GMLAN serial data circuit. The serial data is transmitted over a single wire to the appropriate control modules. The transmission speed for GMLAN low speed is up to 83.33 Kb/s. Under normal vehicle operating conditions, the speed of the bus is 33.33 Kb/s. This protocol produces a simple pulse train sent out over the GMLAN low speed serial data bus. When a module pulls the bus high, 5 volts, this creates a dominant logic state or 0 on the bus. When the bus is pulled low, 0 volts, it is translated as a recessive logic state or 1. To wake the control modules connected to the GMLAN low speed serial data bus, a high voltage wake up pulse is sent out over the bus, the voltage level of the pules is +10 volts. Modules connected to the GMLAN low speed bus can be part of a virtual network as described in the previous paragraph. Most modules on the GMLAN low speed serial data bus are connected to the bus in a parallel configuration. Refer to the schematics to determine modules that are not in parallel

Local Interconnect Network (LIN) Description

The remote compass module (RCM) communicates with the BCM utilizing a single wire LIN communication link. The BCM is the gateway for the GMLAN network. All data is communicated on the LIN bus, therefore there are only 3 circuits to the RCM as follows:

- Ground
- LIN bus
- Voltage

Data Link Connector (DLC)

The data link connector (DLC) is a standardized 16-cavity connector. Connector design and location is dictated by an industry wide standard, and provides the following:

- Pin 1 GMLAN low speed communications terminal
- Pin 4 Scan tool power ground terminal
- Pin 5 Common signal ground terminal
- Pin 6 High speed GMLAN serial data bus (+) terminal
- Pin 14 High speed GMLAN serial data bus (−) terminal
- Pin 16 Scan tool power, battery positive voltage terminal

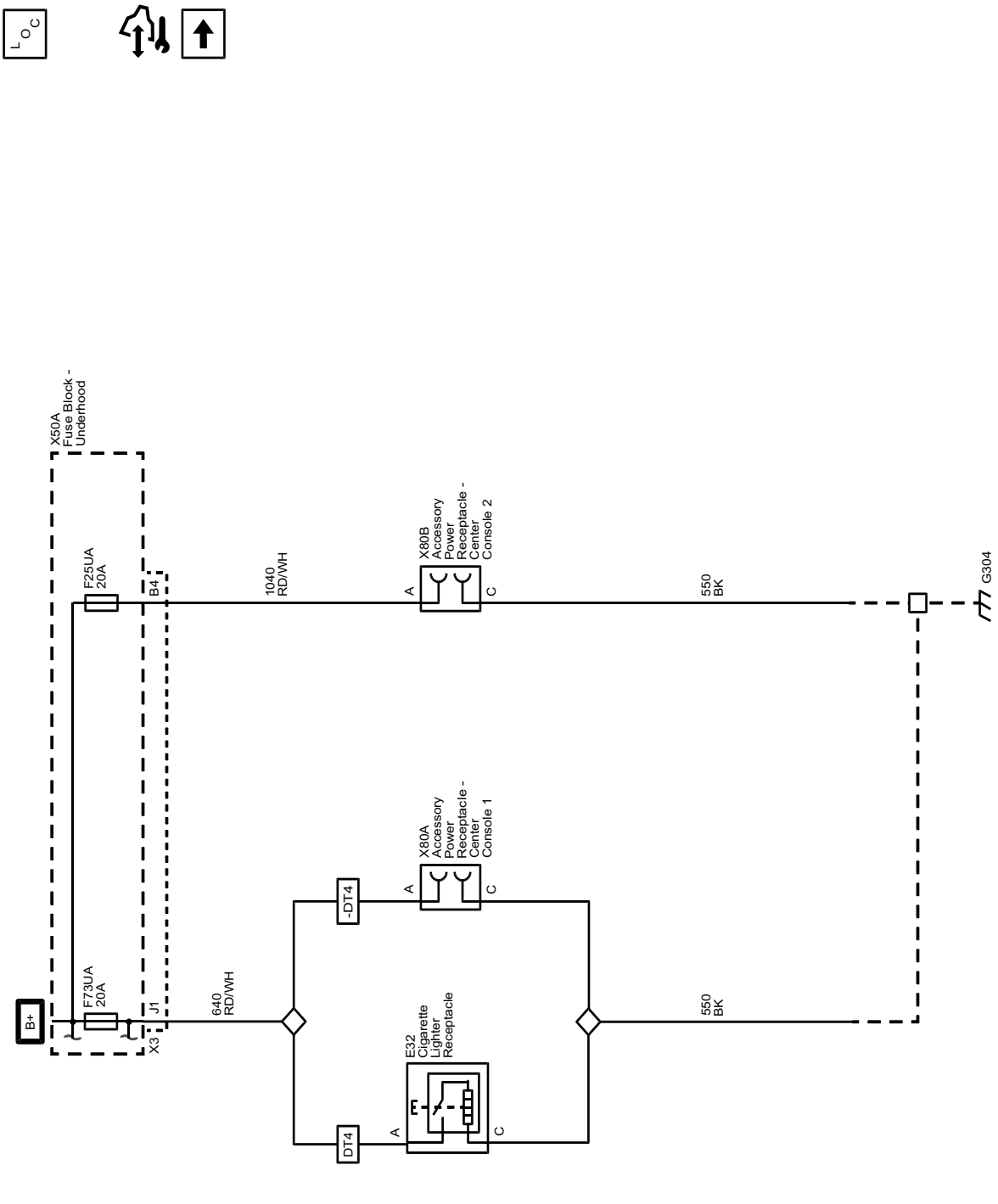
Serial Data Reference

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

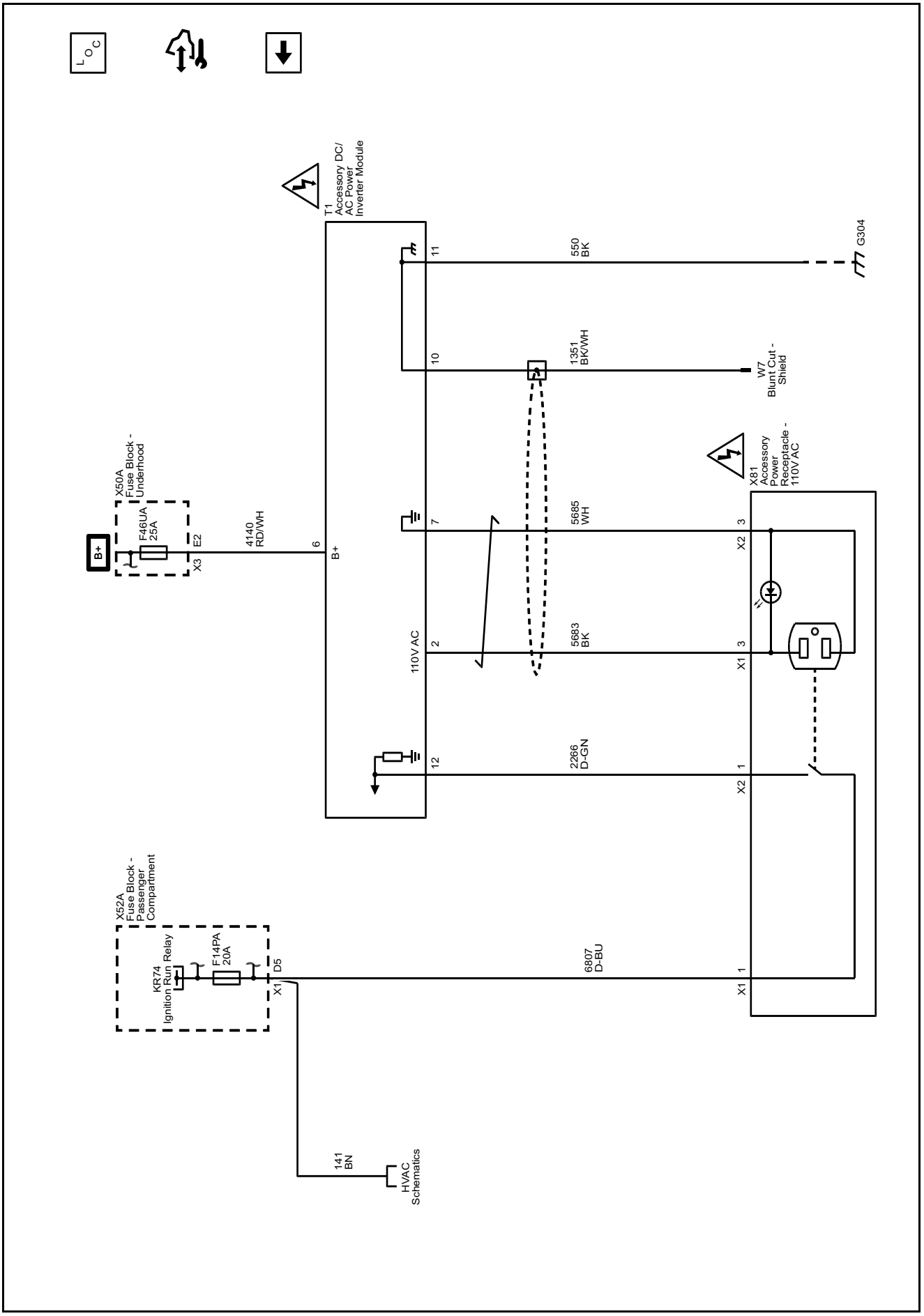
Power Outlets

Schematic and Routing Diagrams

Cigar Lighter/Power Outlet Schematics (Cigar Lighter/Power Outlet)



Cigar Lighter/Power Outlet Schematics (110V AC Outlet (KI4))



Description and Operation

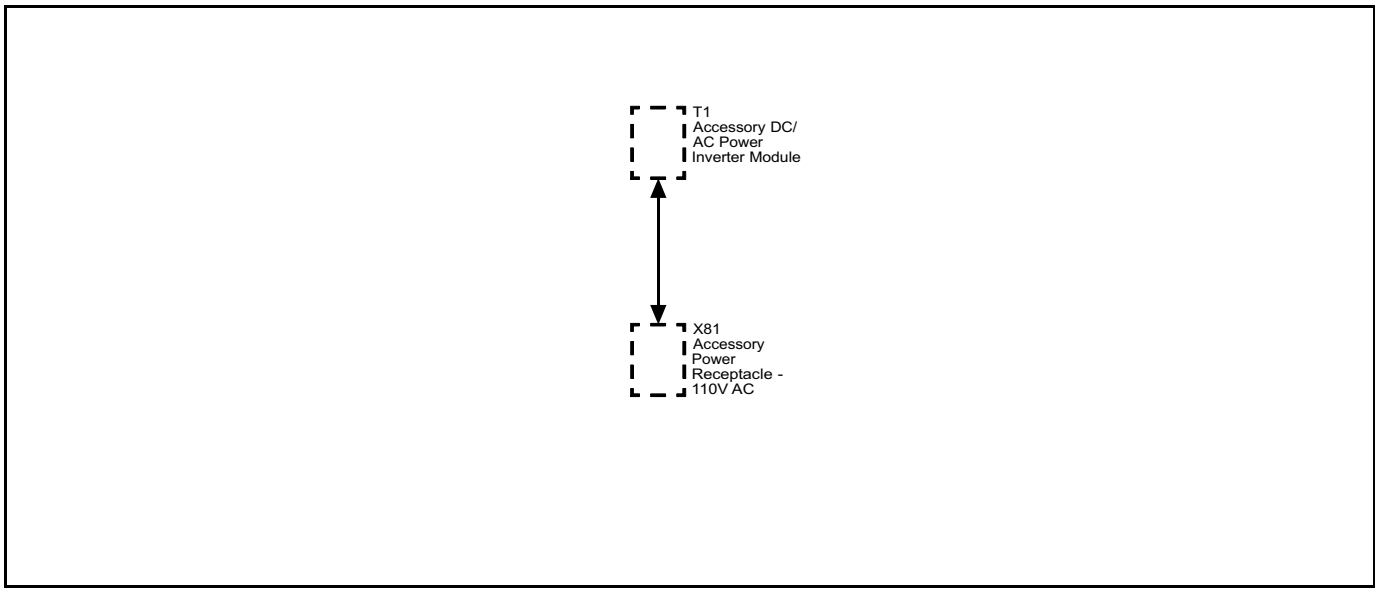
Power Outlets Description and Operation

12 Volt Power Outlet Receptacle Description and Operation

The 12 V accessory power receptacles are supplied B+ all the time.

110 Volt Power Outlet Receptacle System Description

Power Outlets Block Diagram



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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 second 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 second 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 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.

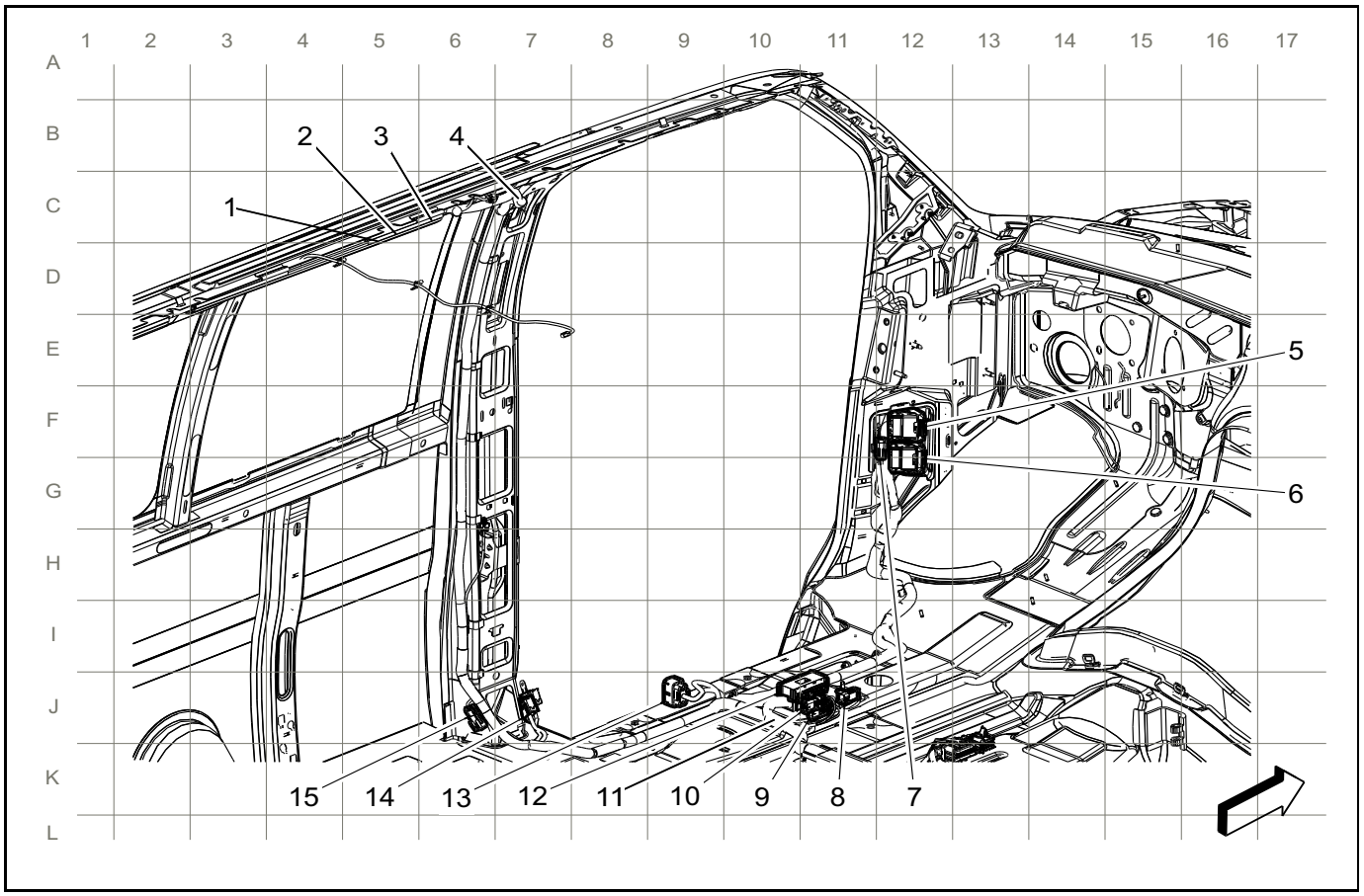
110 Volt Power Outlet Receptacle Internal Shutdown

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.

Wiring Systems and Power Management

Schematic and Routing Diagrams

Harness Routing Views (Body Harness Routing - Left Front of Passenger Compartment)

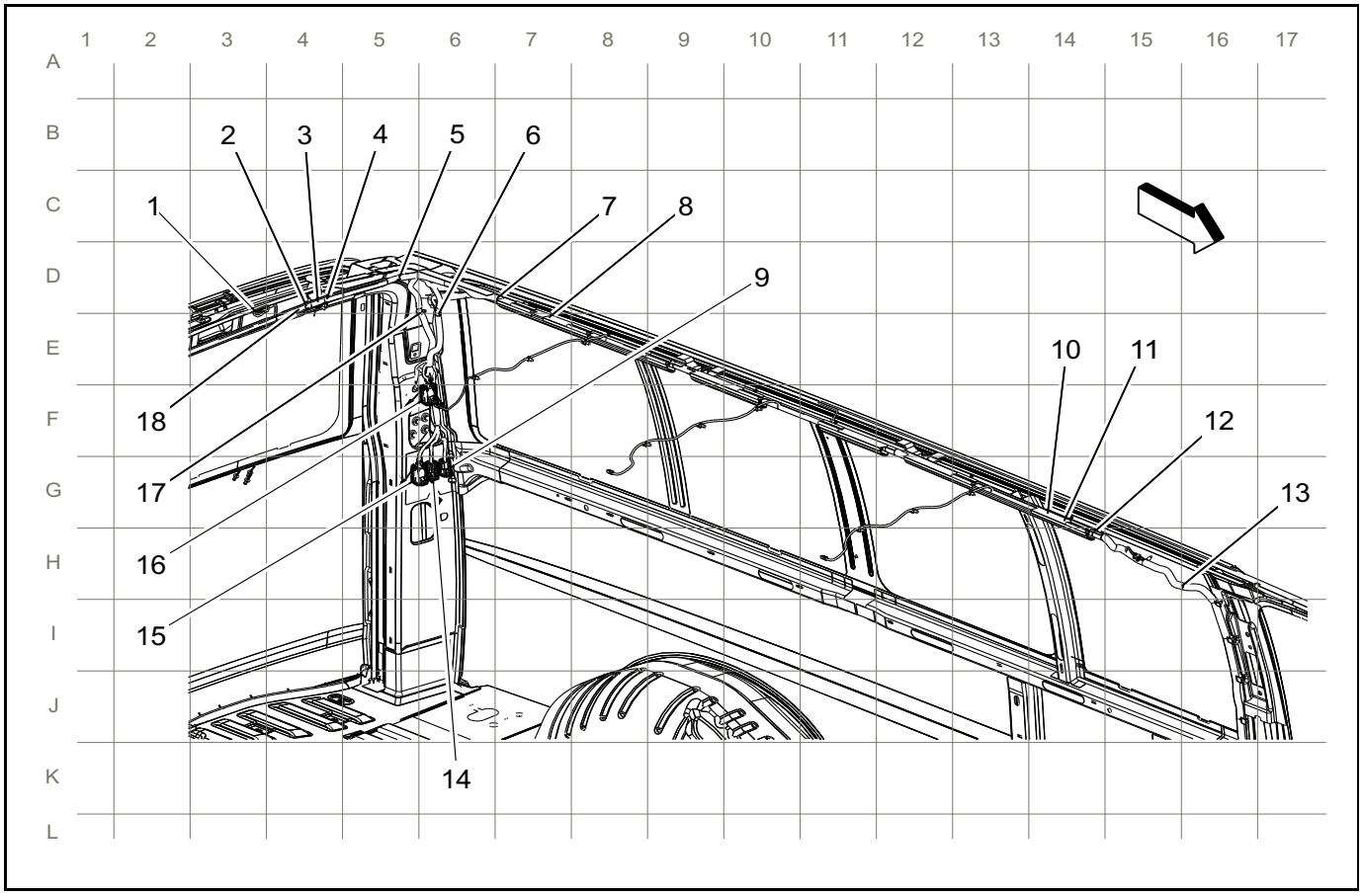


4861789

Items

(1) J316 Body Harness (WRF)
(2) J356 Body Harness
(3) J313 Body Harness (WRF)
(4) J312 Body Harness (WRF)
(5) X318 Instrument Panel Harness to Body Harness
(6) X500 Driver Door Harness to Body Harness
(7) X319 Rear Heater Switch Harness to Body Harness (ENC, C69, or C36)
(8) X329 Instrument Panel Harness to Body Harness (UVC)
(9) X330 Instrument Panel Harness to Body Harness
(10) X331 Instrument Panel Harness to Body Harness
(11) J334 Body Harness (UVC)
(12) X52A Fuse Block - Passenger Compartment
(13) X307 Body Harness to Driver Seat Harness
(14) JX347 Body Harness
(15) X323 Left Rear Side Impact Sensor Jumper to Body Harness (ASF)

Harness Routing Views (Body Harness Routing - Left Rear (Passenger or Cargo))

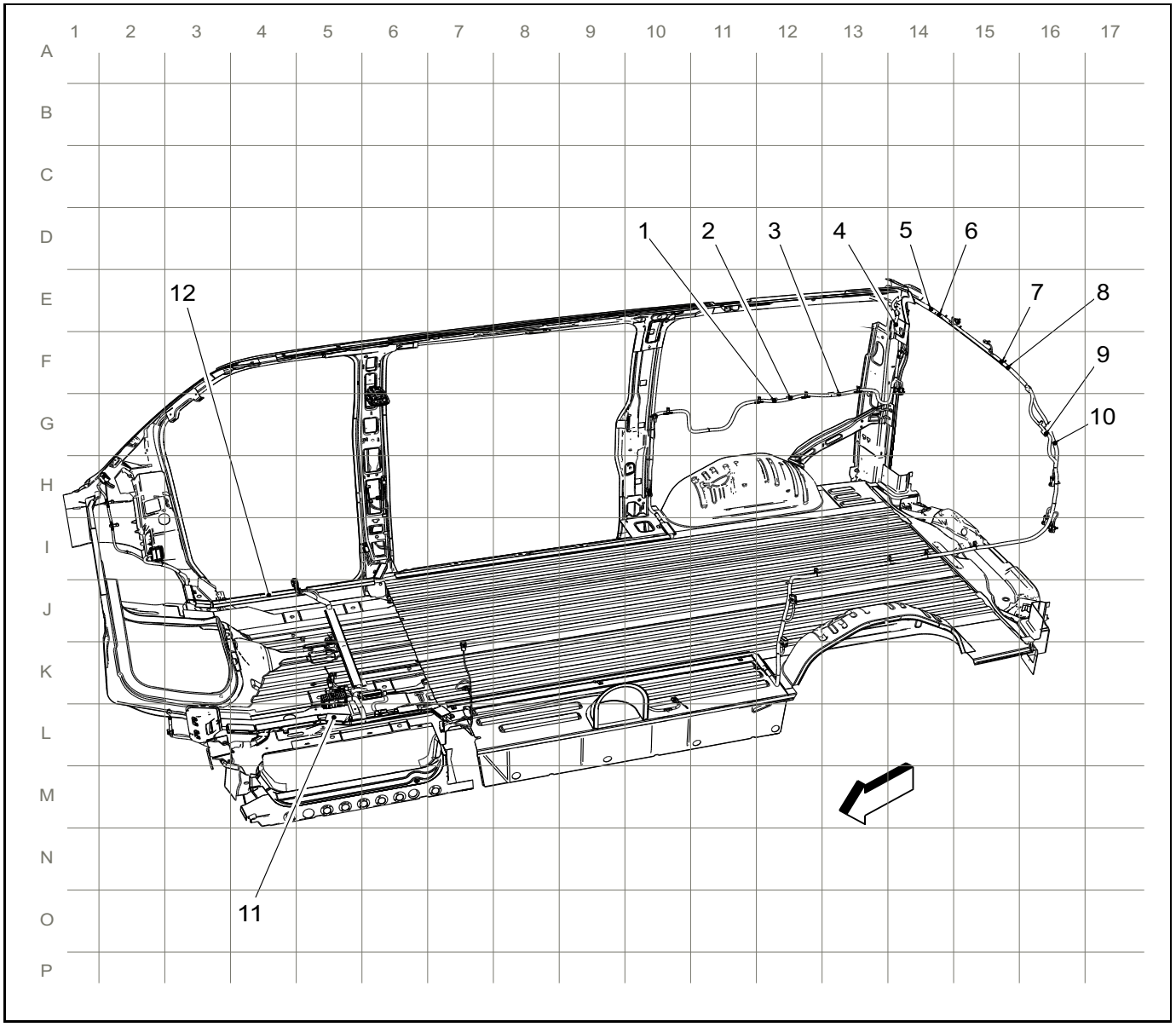


4861790

Items

(1) X419 Center High Mounted Stop Lamp Harness to Body Harness (Passenger or Cargo)
(2) J452 Body Harness (US8, YF2, or YF7)
(3) J401 Body Harness (C36, C49, or C69)
(4) J410 Body Harness
(5) J318 Body Harness (WRF)
(6) J310 Body Harness (C69)
(7) J317 Body Harness (WRF)
(8) J308 Body Harness (C69)
(9) X407 Rear HVAC Harness to Body Harness (C36 or C69)
(10) J316 Body Harness (WRF)
(11) J356 Body Harness
(12) J313 Body Harness (WRF)
(13) J312 Body Harness (WRF)
(14) X409 Rear HVAC Harness to Body Harness (C36 or C69)
(15) X411 Left Rear Cargo Door Harness to Body Harness (Passenger or Cargo)
(16) X410 Left Tail Lamp Assembly Harness to Body Harness (Passenger or Cargo)
(17) J311 Body Harness (C69)
(18) J453 Body Harness (YF2 or YF7)

Harness Routing Views (Body Harness Routing - Rear Overview (Passenger or Cargo))

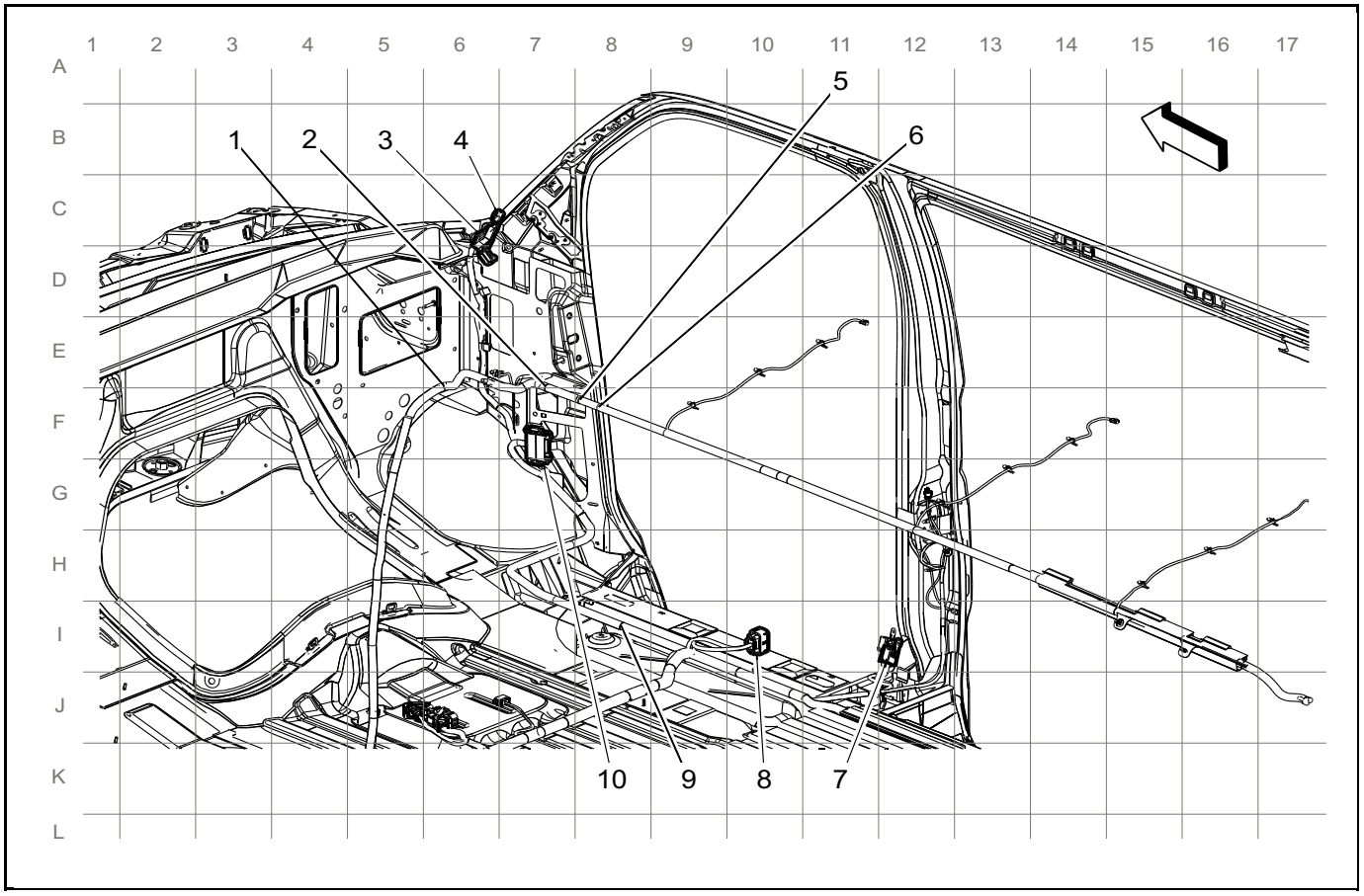


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Items

(1) J308 Body Harness (C69)
(2) J310 Body Harness (C69)
(3) J311 Body Harness (C69)
(4) J403 Body Harness
(5) J451 Body Harness (YF2 or YF7)
(6) J450 Body Harness (US8, YF2, or YF7)
(7) J453 Body Harness (YF2 or YF7)
(8) J452 Body Harness (US8, YF2, or YF7)
(9) J410 Body Harness
(10) J401 Body Harness (C36, C49, or C69)
(11) J356 Body Harness
(12) J331 Body Harness (Passenger)

Harness Routing Views (Body Harness Routing - Right Front of Passenger Compartment (1 of 2))



4861791

Items

(1) J312 Body Harness (WRF)

(2) J313 Body Harness (WRF)

(3) X205 Front Headliner Harness to Body Harness

(4) X204 Body Harness to Headliner Harness (UVC)

(5) J356 Body Harness

(6) J316 Body Harness (WRF)

(7) JX348 Body Harness

(8) X306 Body Harness to Passenger Seat Harness

(9) J370

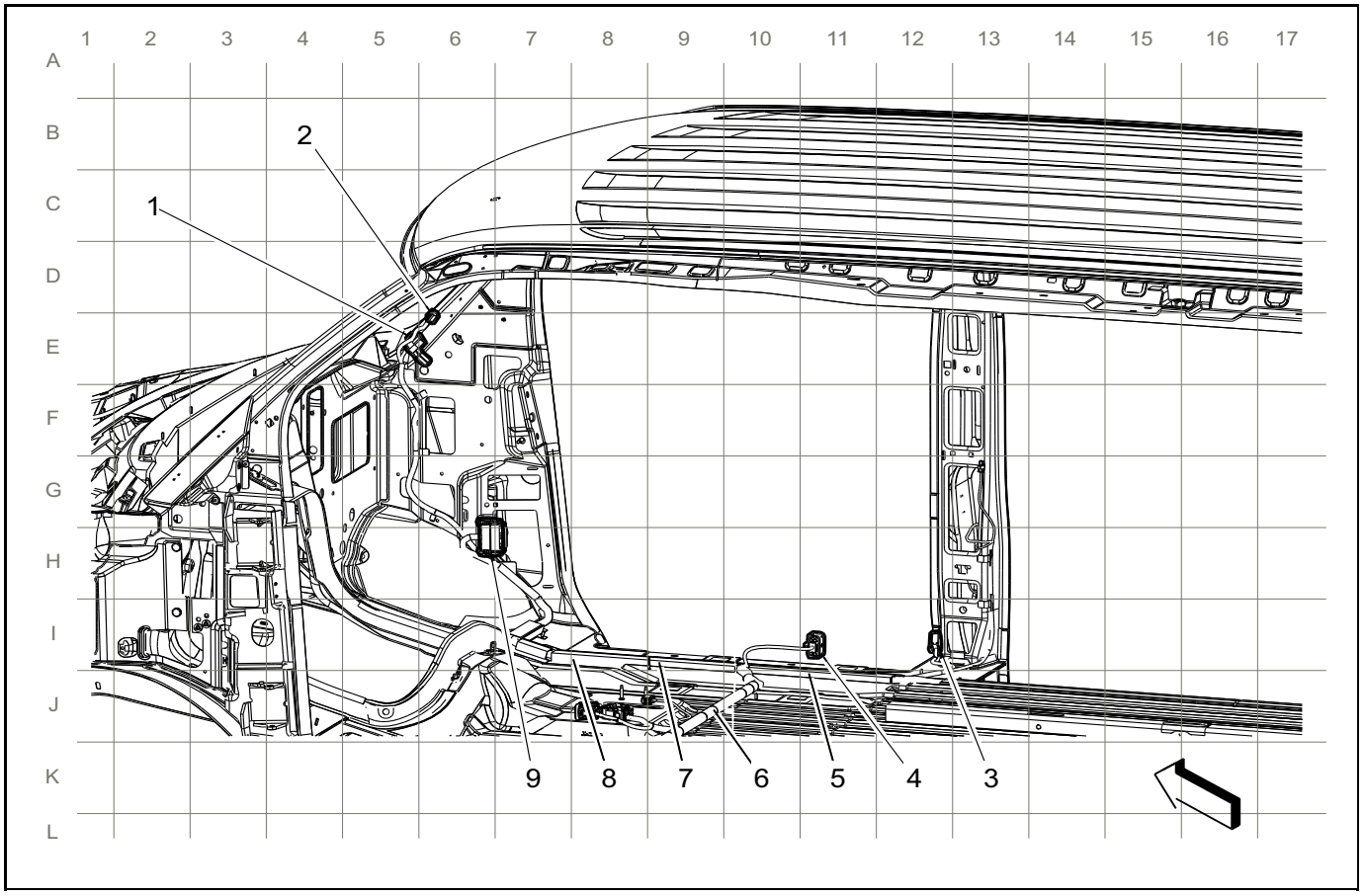
(10) J334 Body Harness (UVC)

(11) J372

(12) J371

(13) X600 Passenger Door Harness to Body Harness

Harness Routing Views (Body Harness Routing - Right Front of Passenger Compartment (2 of 2))



4861792

Items

(1) X205 Front Headliner Harness to Body Harness

(2) X204 Body Harness to Headliner Harness (UVC)

(3) JX347 Body Harness

(4) X306 Body Harness to Passenger Seat Harness

(5) J410 Body Harness

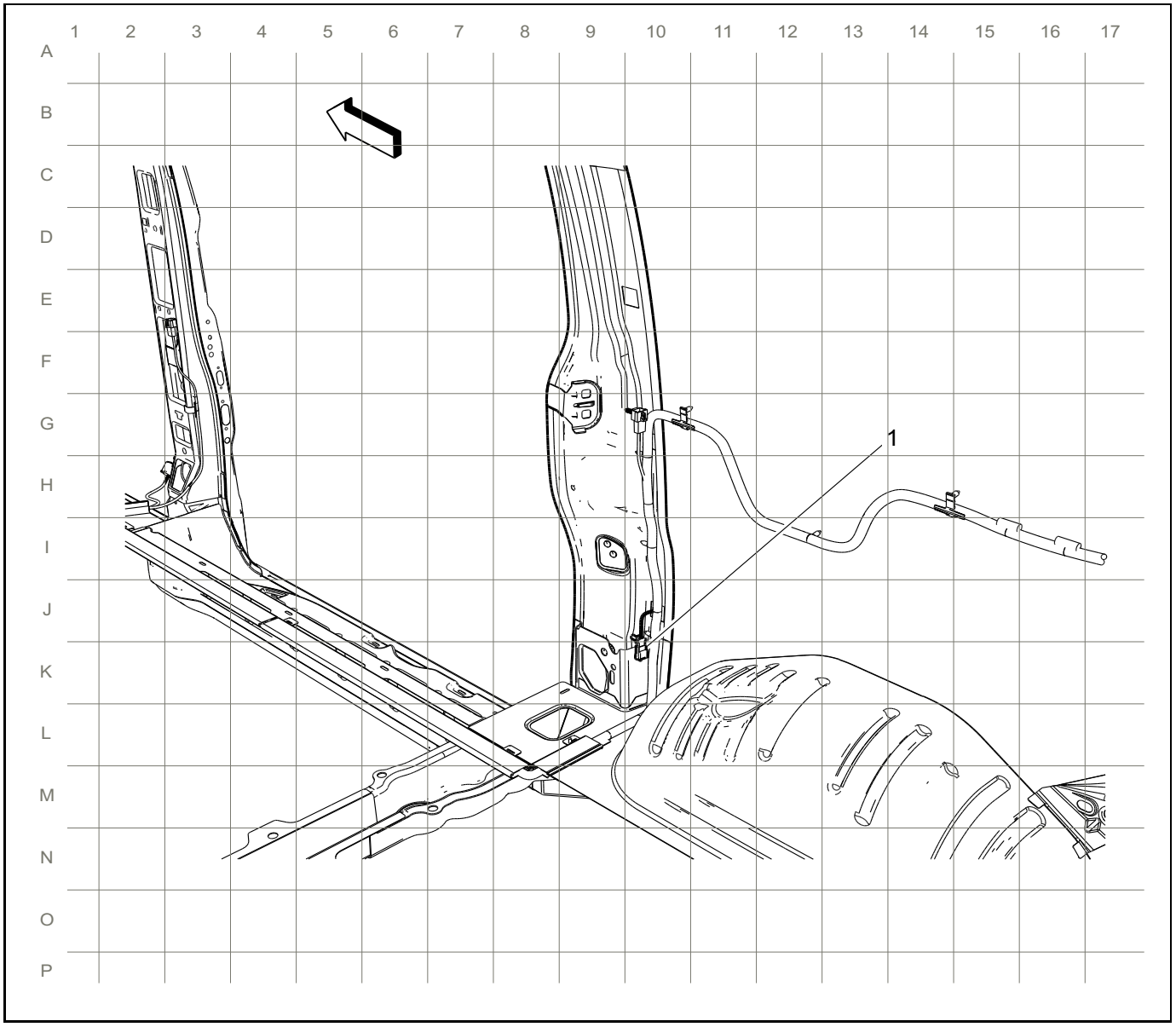
(6) J335 Body Harness (U80)

(7) J376 Body Harness (Cargo or Passenger)

(8) J375 Body Harness (Cargo without YF7)

(9) X600 Passenger Door Harness to Body Harness

Harness Routing Views (Body Harness Routing - Right C-Pillar)

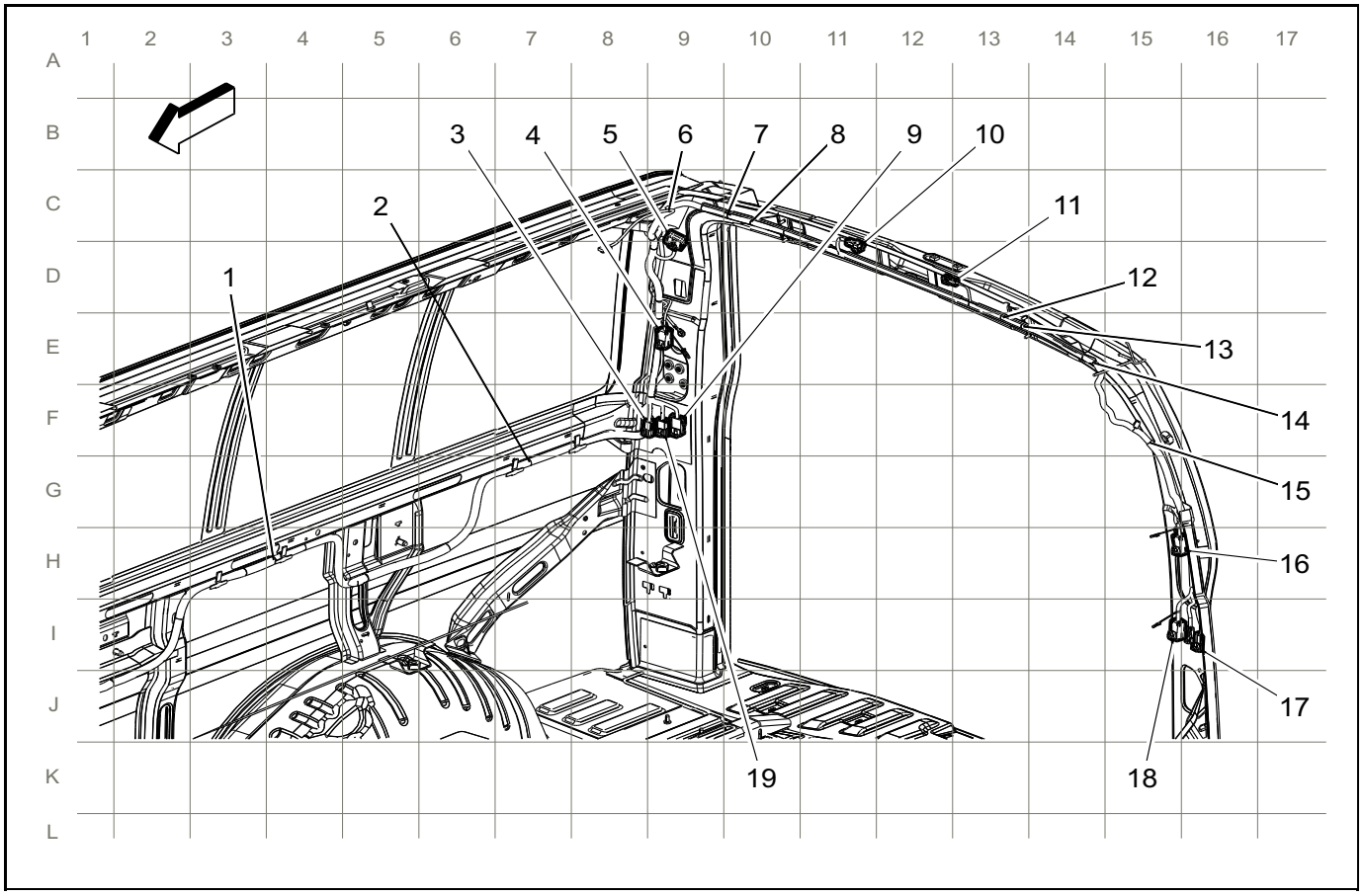


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Items

(1) X324 Right Rear Side Impact Sensor Jumper to Body Harness (ASF)

Harness Routing Views (Body Harness Routing - Right Rear Passenger Compartment (1 of 2))

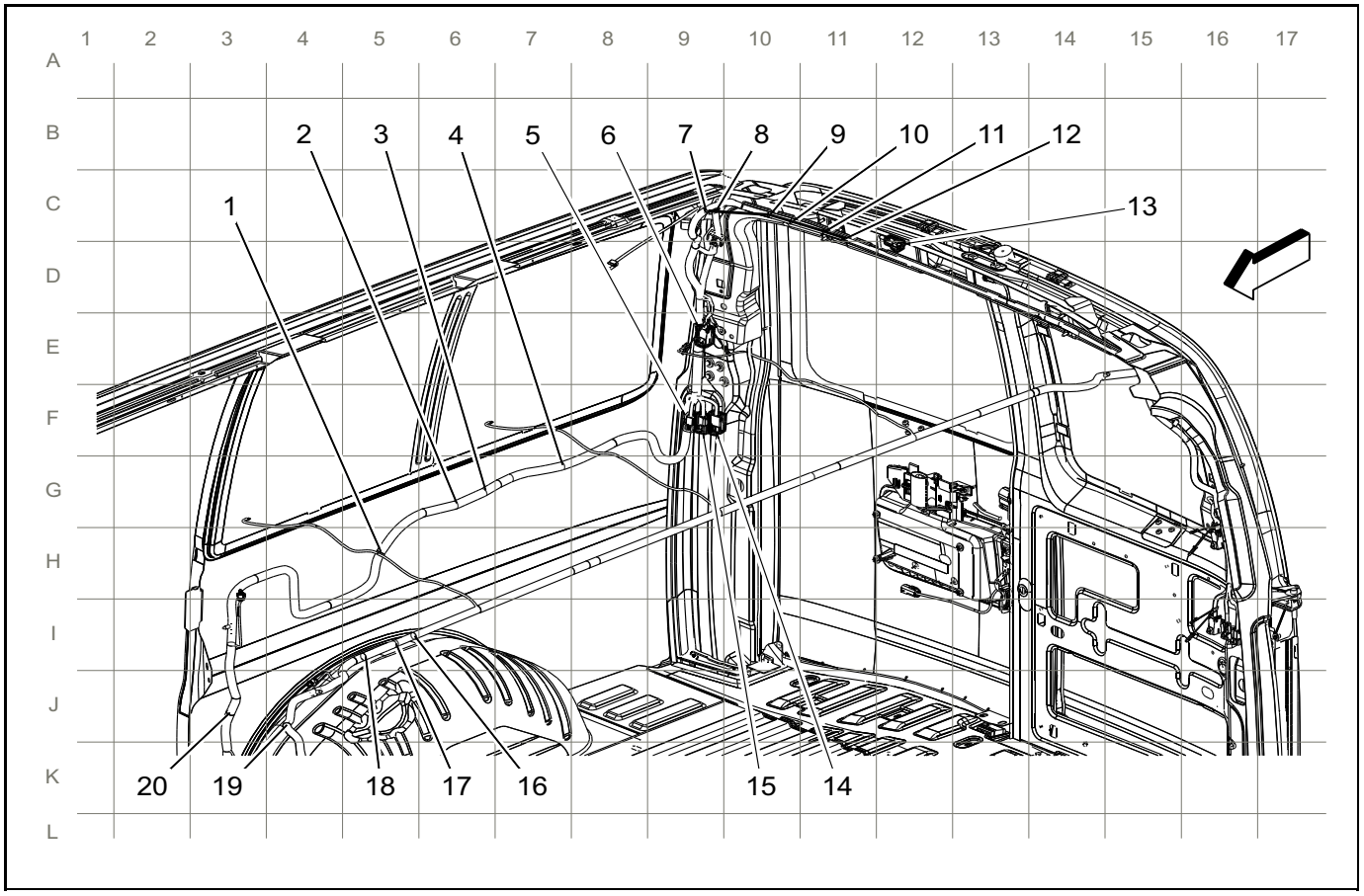


4861797

Items

(1) J380
(2) J310 Body Harness (C69)
(3) J311 Body Harness (C69)
(4) X403 Rear Cargo Door Harness to Body Harness (UVC)
(5) X420 Right Tail Lamp Assembly Harness to Body Harness (Passenger or Cargo)
(6) X421 Body Harness to Rear Headliner Harness
(7) J403 Body Harness
(8) J451 Body Harness (YF2 or YF7)
(9) J450 Body Harness (US8, YF2, or YF7)
(10) X412 Right Rear Cargo Door Harness to Body Harness (Passenger or Cargo)
(11) X415 Roof Center Speaker Harness to Body Harness (Passenger or Cargo)
(12) X419 Center High Mounted Stop Lamp Harness to Body Harness (Passenger or Cargo)
(13) J452 Body Harness (US8, YF2, or YF7)
(14) J453 Body Harness (YF2 or YF7)
(15) J410 Body Harness
(16) J401 Body Harness (C36, C49, or C69)
(17) X410 Left Tail Lamp Assembly Harness to Body Harness (Passenger or Cargo)
(18) X407 Rear HVAC Harness to Body Harness (C36 or C69)
(19) X411 Left Rear Cargo Door Harness to Body Harness (Passenger or Cargo)
(20) X400 Right Rear Cargo Door to Body Harness (Passenger or Cargo)

Harness Routing Views (Body Harness Routing - Right Rear Passenger Compartment (2 of 2))

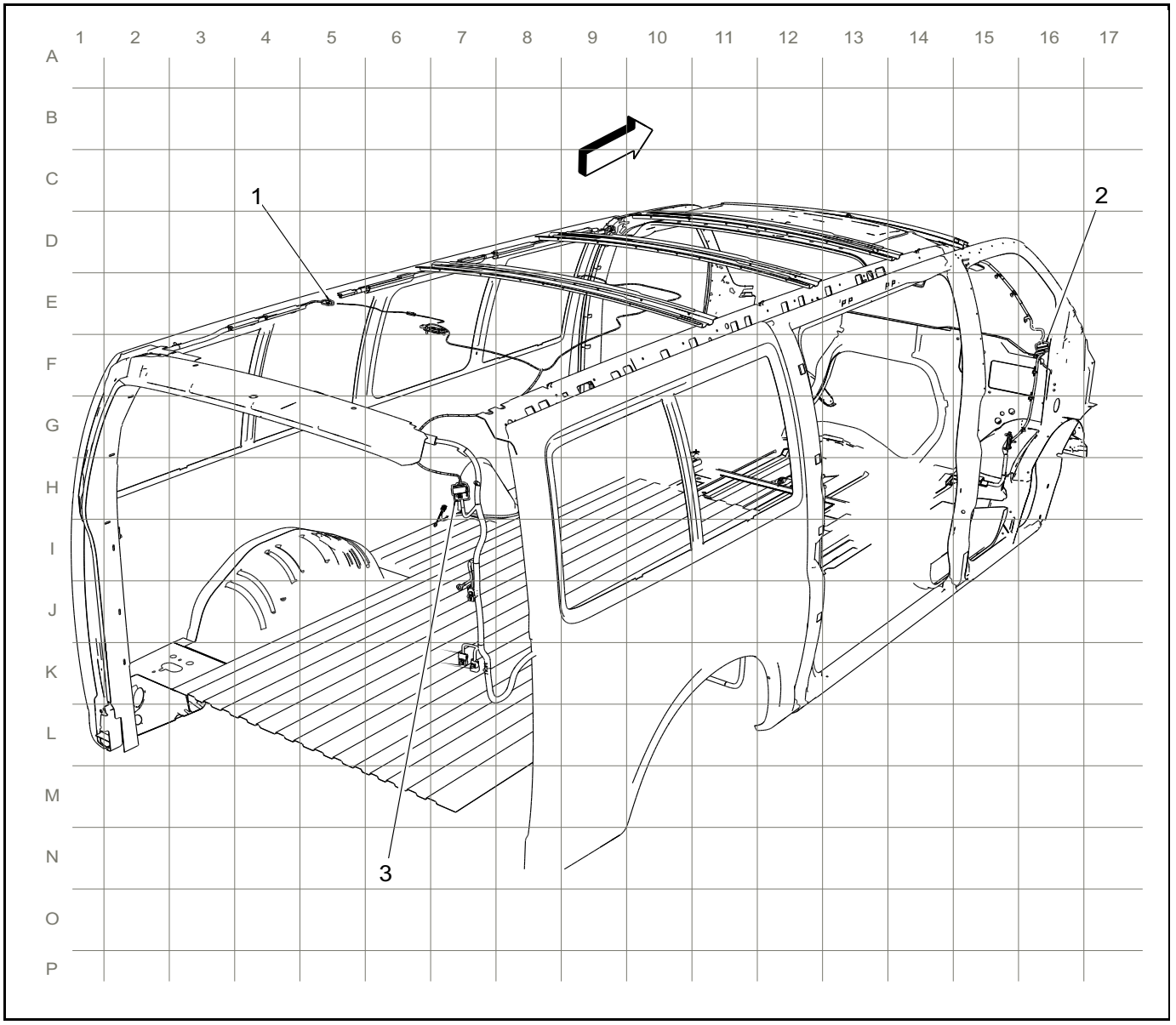


4861798

Items

(1) J376 Body Harness (Cargo or Passenger)
(2) J308 Body Harness (C69)
(3) J310 Body Harness (C69)
(4) J311 Body Harness (C69)
(5) X403 Rear Cargo Door Harness to Body Harness (UVC)
(6) X420 Right Tail Lamp Assembly Harness to Body Harness (Passenger or Cargo)
(7) J403 Body Harness
(8) J451 Body Harness (YF2 or YF7)
(9) J450 Body Harness (US8, YF2, or YF7)
(10) J452 Body Harness (US8, YF2, or YF7)
(11) J453 Body Harness (YF2 or YF7)
(12) J410 Body Harness
(13) X415 Roof Center Speaker Harness to Body Harness (Passenger or Cargo)
(14) X412 Right Rear Cargo Door Harness to Body Harness (Passenger or Cargo)
(15) X400 Right Rear Cargo Door to Body Harness (Passenger or Cargo)
(16) J316 Body Harness (WRF)
(17) J356 Body Harness
(18) J313 Body Harness (WRF)
(19) J312 Body Harness (WRF)
(20) J373 Body Harness (Passenger)

Harness Routing Views (Body Harness Routing - Roof Area)



4664694

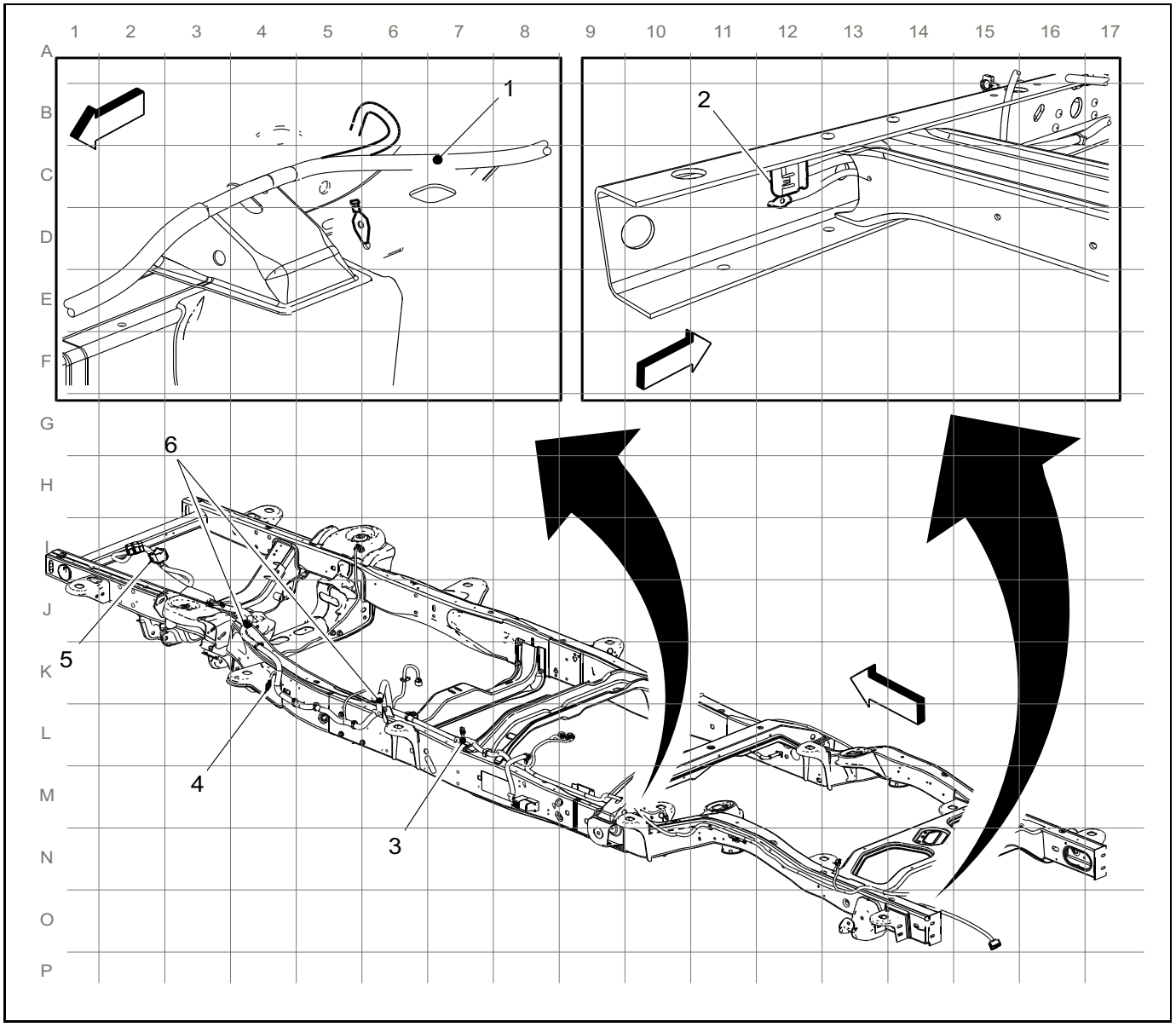
Items

(1) X421 Body Harness to Rear Headliner Harness

(2) X205 Front Headliner Harness to Body Harness

(3) X420 Right Tail Lamp Assembly Harness to Body Harness (Passenger or Cargo)

Harness Routing Views (Chassis Harness Routing (L96 or LC8))



2830812

Items

(1) J402 Chassis Harness

(2) X405 Cutaway Rear Lighting Connector to Chassis Harness (Cutaway)

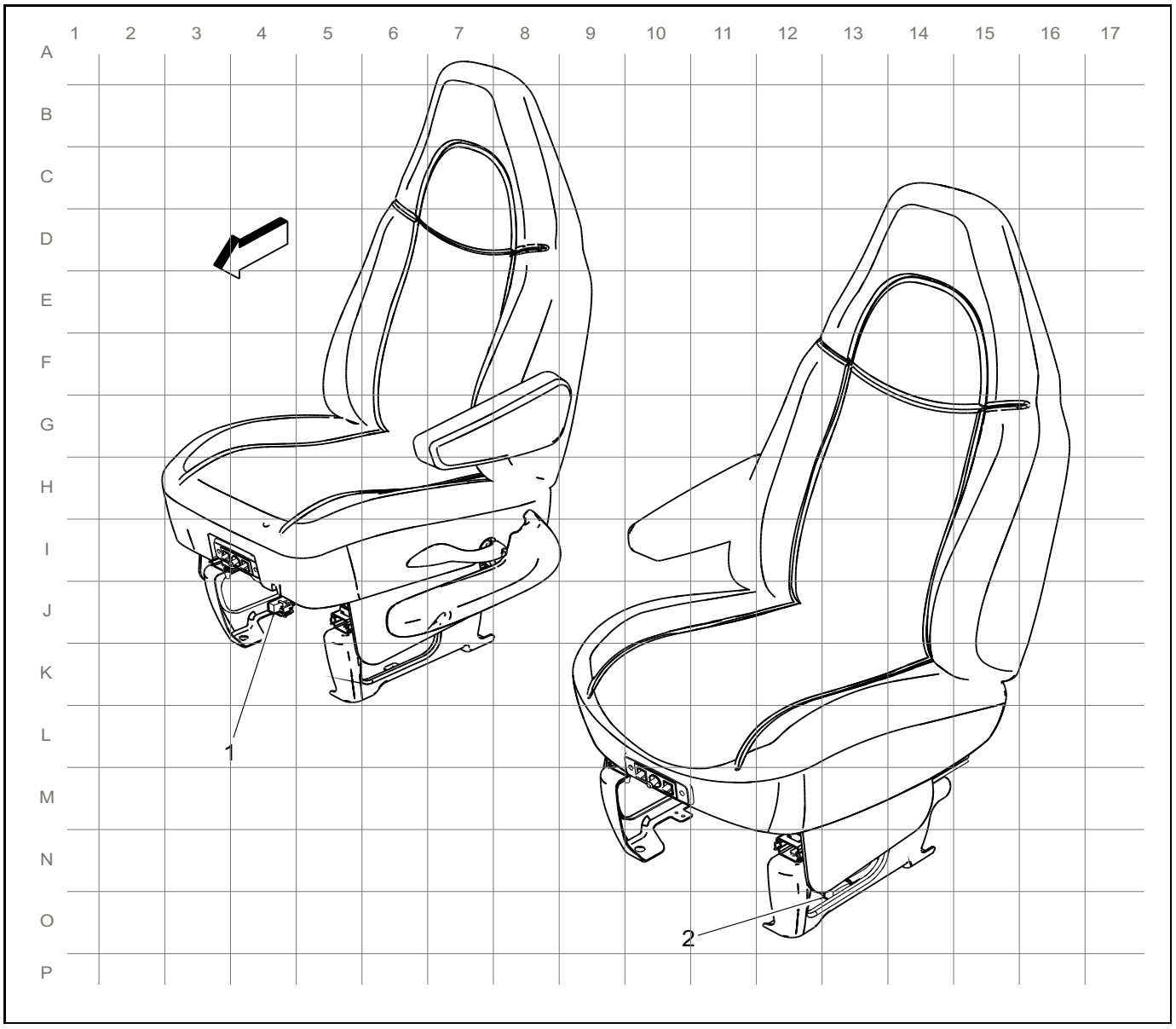
(3) J301 Chassis Harness (LV1, L96, or LC8)

(4) G300 Chassis Harness

(5) X101 Chassis Harness to Engine Harness (LV1, L96, or LC8)

(6) J315 Chassis Harness

Harness Routing Views (Driver Seat Harness Routing and Front Passenger Seat Harness Routing)



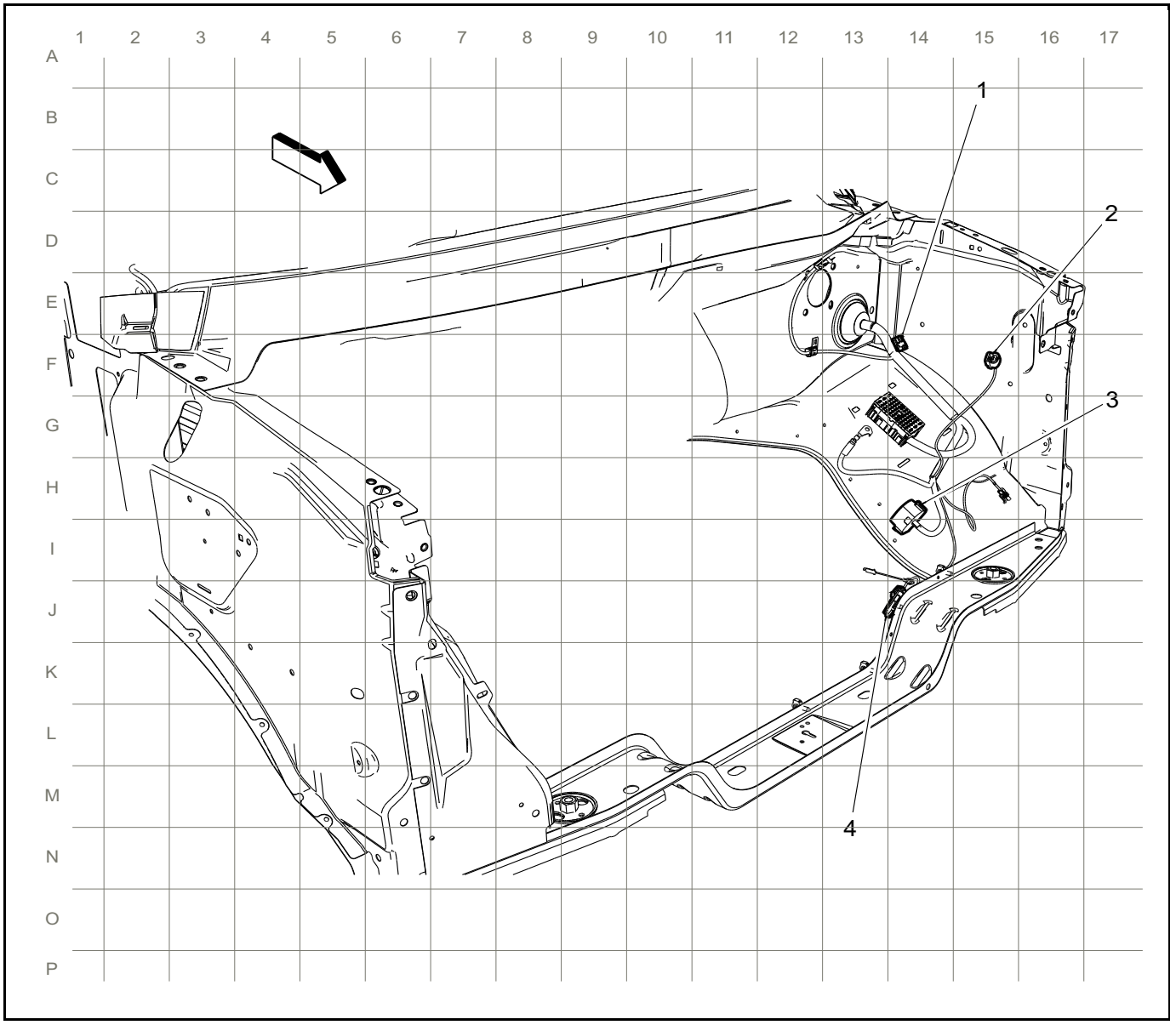
2830793

Items

(1) X306 Body Harness to Passenger Seat Harness

(2) X307 Body Harness to Driver Seat Harness

Harness Routing Views (Engine Harness Routing - Engine Compartment)



2830756

Items

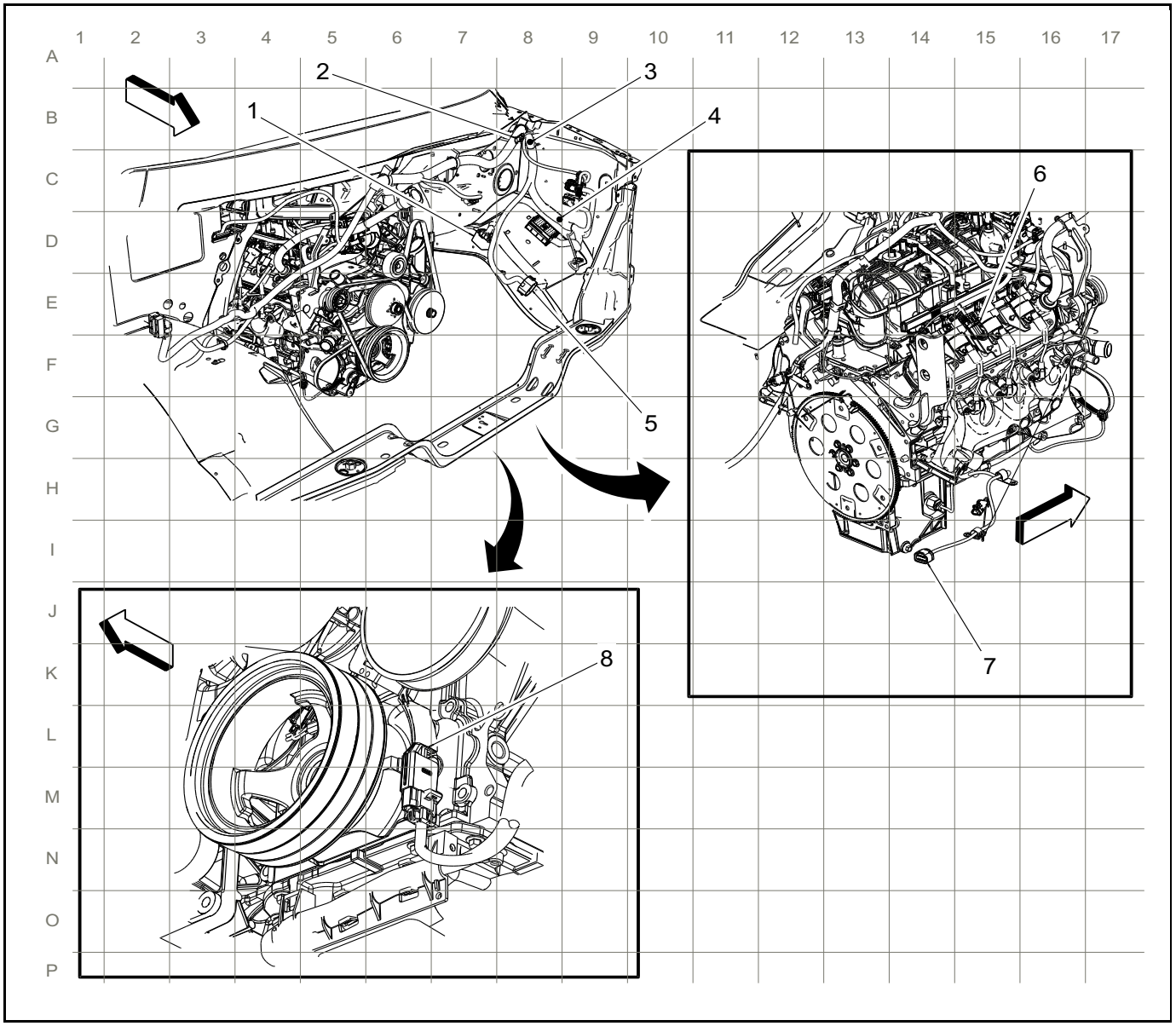
(1) X141 Instrument Panel Harness to Brake Fluid Level Jumper Harness (UJ1)

(2) X150 Instrument Panel Harness to Forward Lamp Harness

(3) X100 Instrument Panel Harness to Engine Harness

(4) X104 Instrument Panel Harness to Front Impact Sensor Jumper

Harness Routing Views (Engine Harness Routing - Front (L96 or LC8))



4664701

Items

(1) X101 Chassis Harness to Engine Harness (LV1, L96, or LC8)

(2) X109 Engine Harness to Underhood Lamp Harness

(3) J115 Engine Harness

(4) J123 Engine Harness

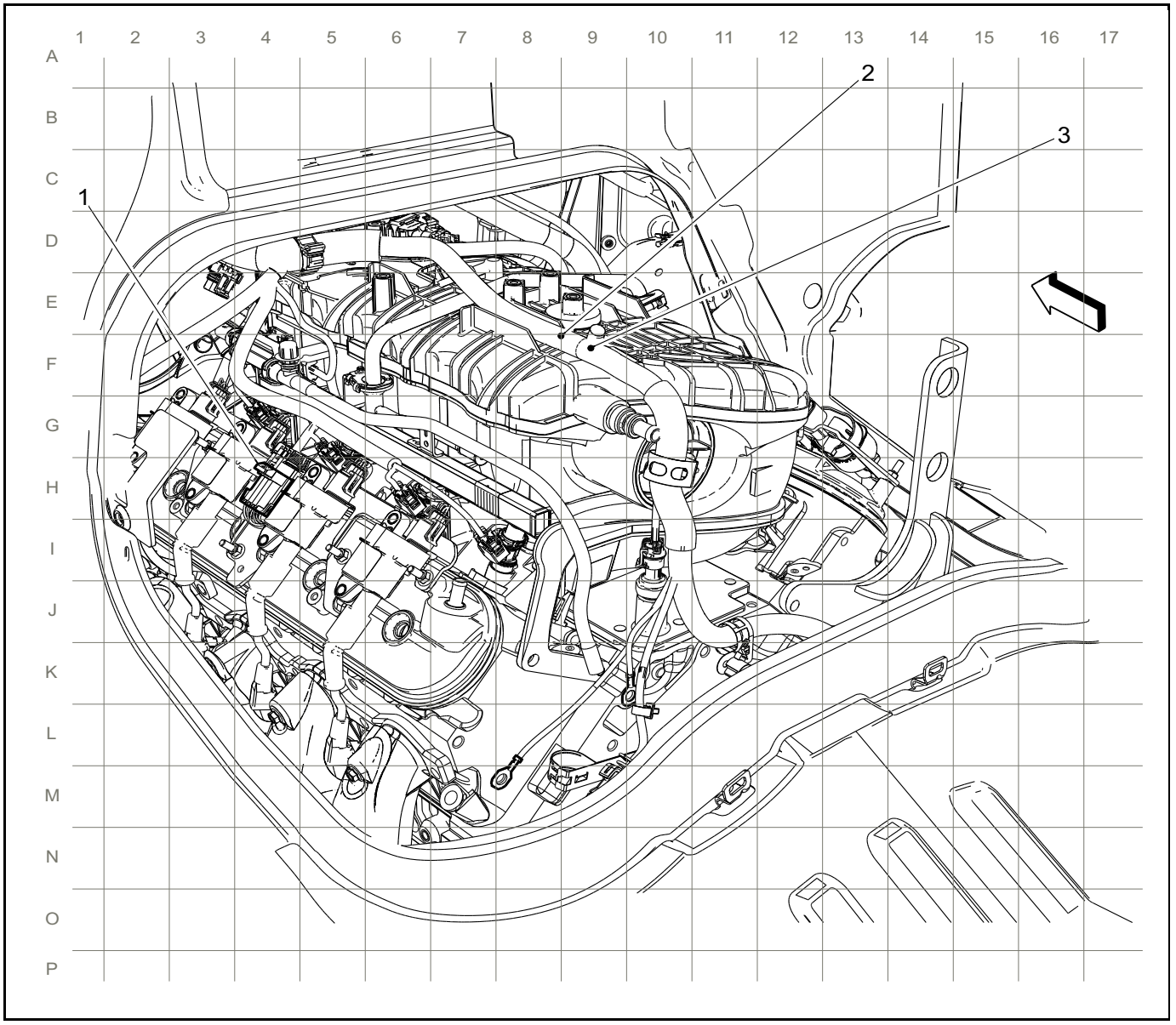
(5) X100 Instrument Panel Harness to Engine Harness

(6) X126 Engine Harness to Left Ignition Coil Harness (L96, or LC8)

(7) X202 Instrument Panel Harness to Engine Harness (UD7)

(8) X177 Engine Harness to Camshaft Position Sensor Jumper Harness (L96, or LC8)

Harness Routing Views (Engine Harness Routing - Left Rear of Engine (L96 or LC8))



4005938

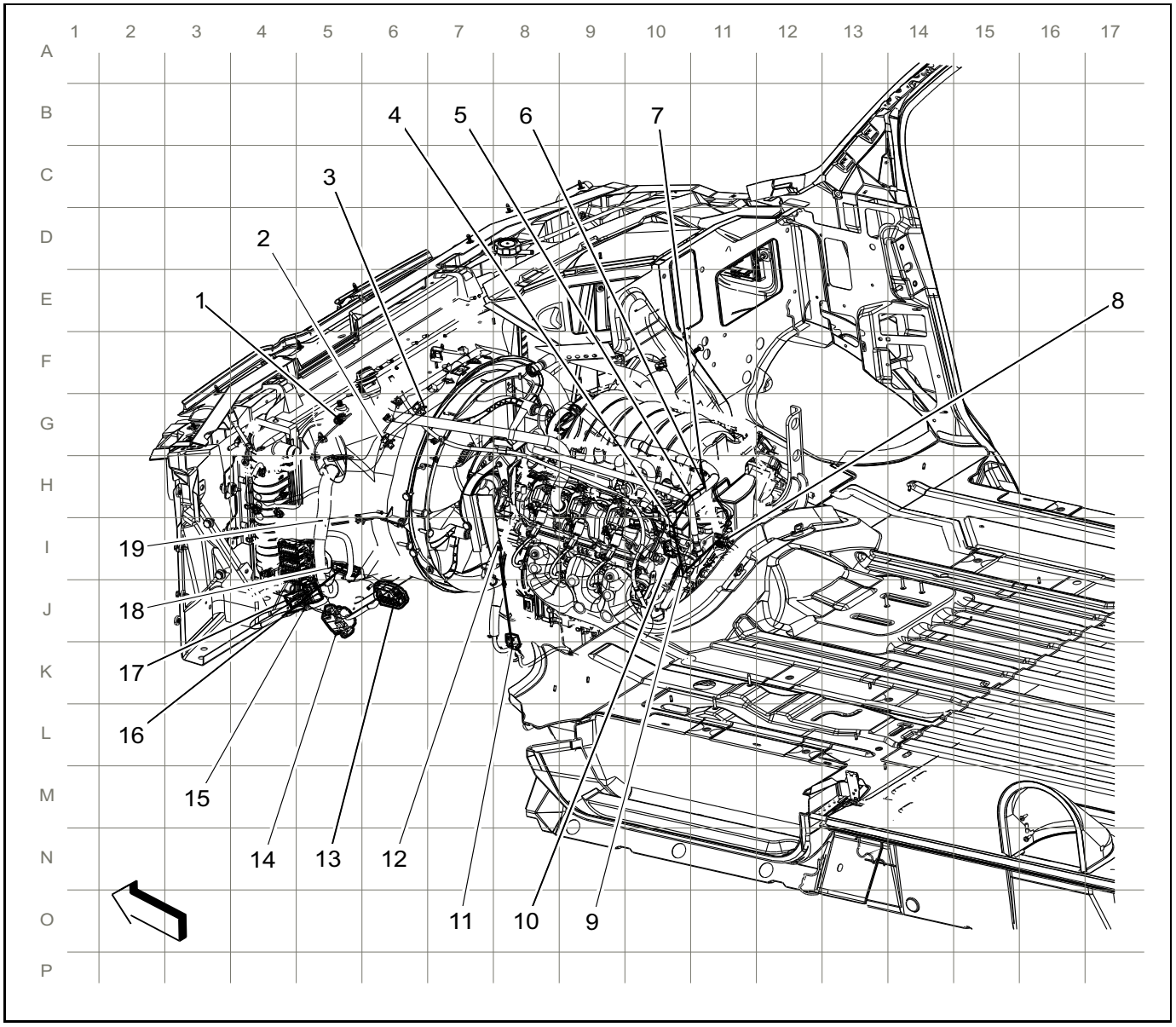
Items

(1) X126 Engine Harness to Left Ignition Coil Harness (L96, or LC8)

(2) J101 Engine Harness

(3) J102 Engine Harness

Harness Routing Views (Engine Harness Routing - Engine Compartment (LV1))



4861803

Items

(1) X109 Engine Harness to Underhood Lamp Harness

(2) J182 Left Ignition Coil Harness (LV1, L96, or LC8)

(3) J188 Right Ignition Coil Harness (LV1, L96, or LC8)

(4) J143 Engine Harness (LV1, L96, or LC8)

(5) J170 Engine Harness (LV1)

(6) J171 Engine Harness (LV1)

(7) J102 Engine Harness

(8) X161 Engine Harness to Fuel Injector Rail Jumper Harness (LV1)

(9) J144 Engine Harness (LV1, L96, or LC8)

(10) X160 Engine Harness to Fuel Injector Rail Jumper Harness (LV1)

(11) X130 Engine Harness to Camshaft Position Sensor Jumper Harness (LV1)

(12) J101 Engine Harness

(13) X101 Chassis Harness to Engine Harness (LV1, L96, or LC8)

(14) X100 Instrument Panel Harness to Engine Harness

(15) J185 Right Ignition Coil Harness (LV1, L96, or LC8)

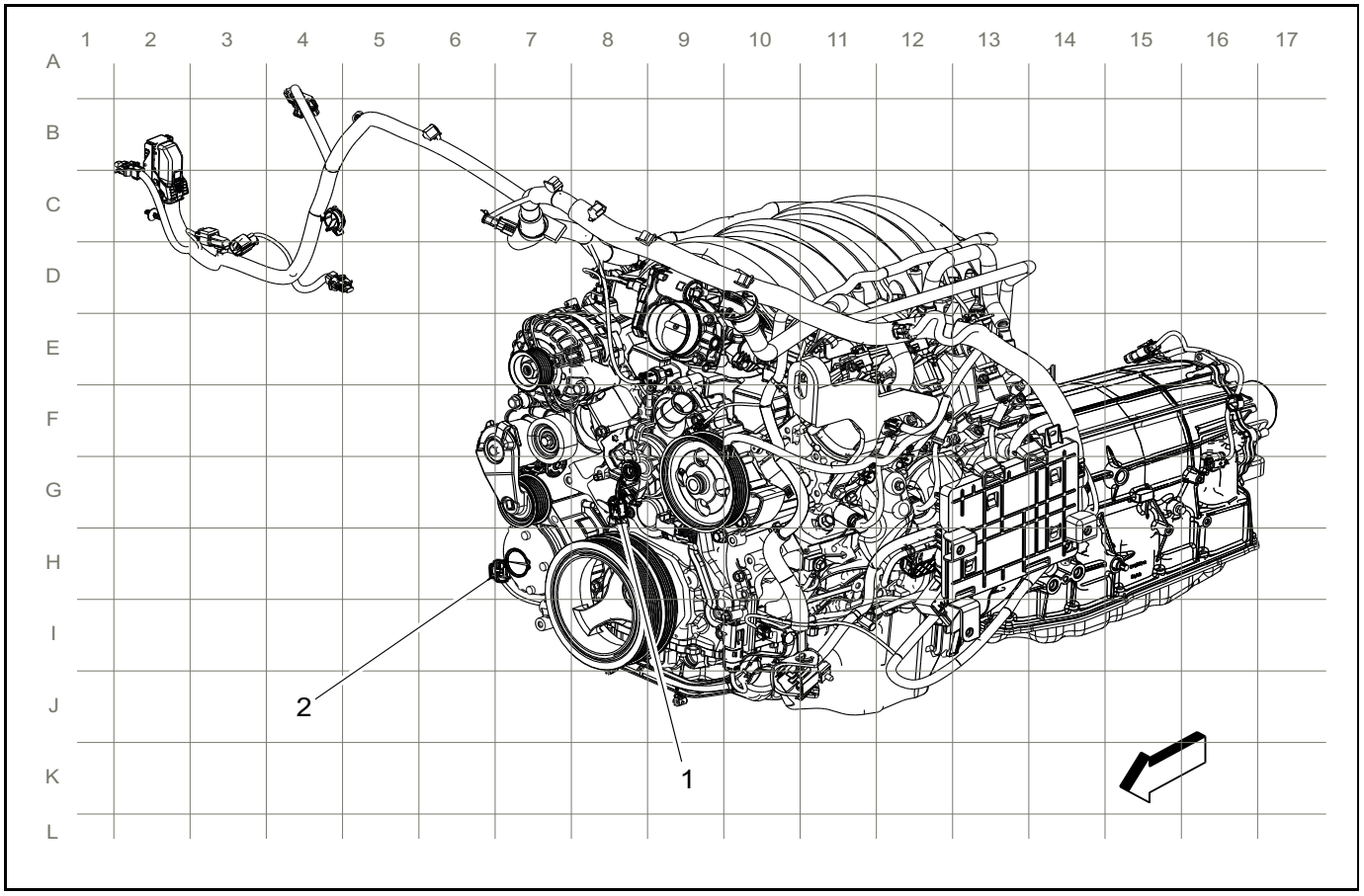
(16) J184 Left Ignition Coil Harness (LV1, L96, or LC8)

(17) X50A Fuse Block - Underhood

(18) X202 Instrument Panel Harness to Engine Harness (UD7)

(19) J115 Engine Harness

Harness Routing Views (Engine Harness Routing - Front (LV1))



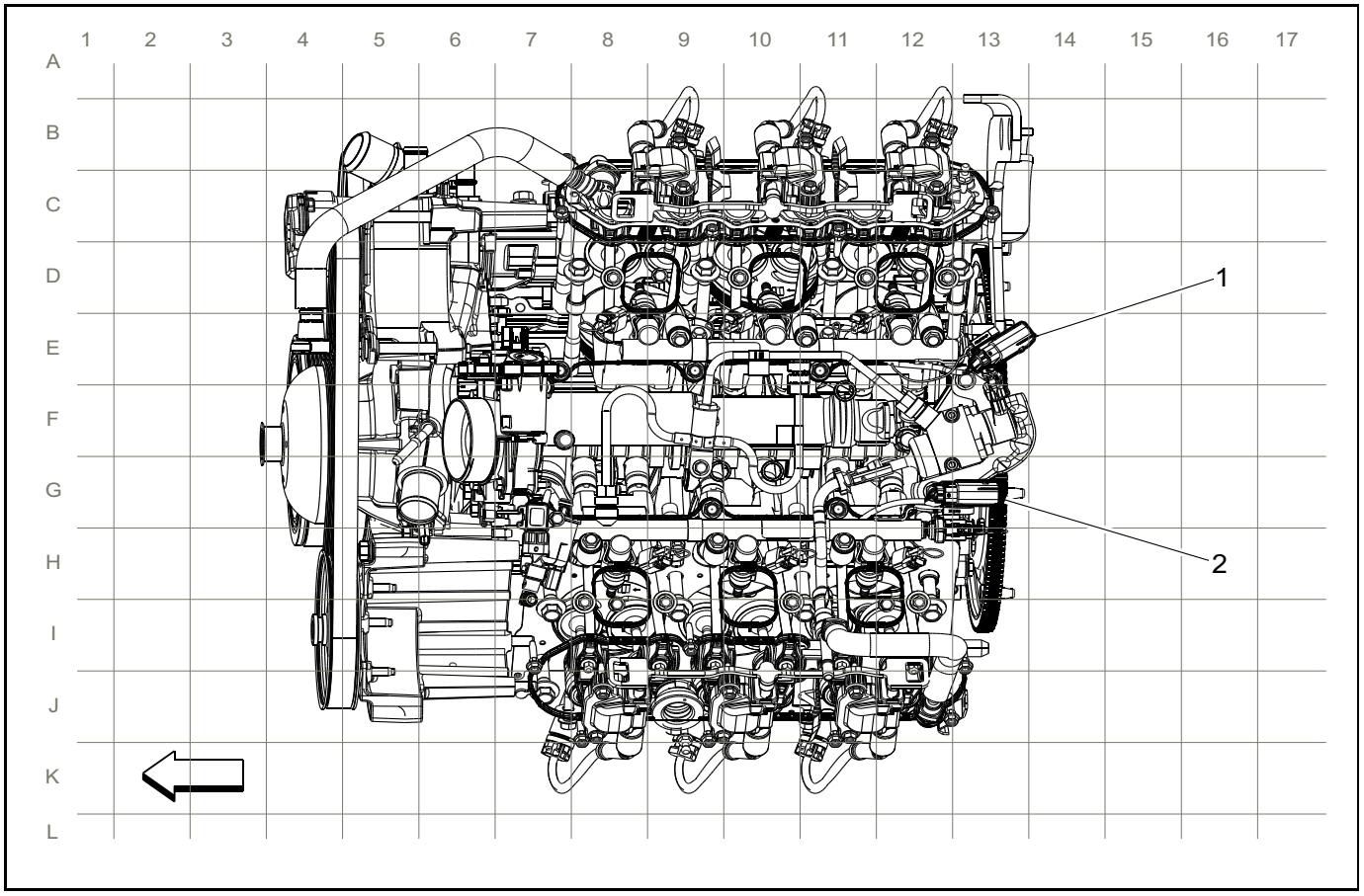
4861804

Items

(1) X135 Camshaft Position Sensor Jumper Harness to Oil Control Solenoid Valve Jumper Harness (LV1)

(2) X130 Engine Harness to Camshaft Position Sensor Jumper Harness (LV1)

Harness Routing Views (Fuel Injector Harness Routing (LV1))



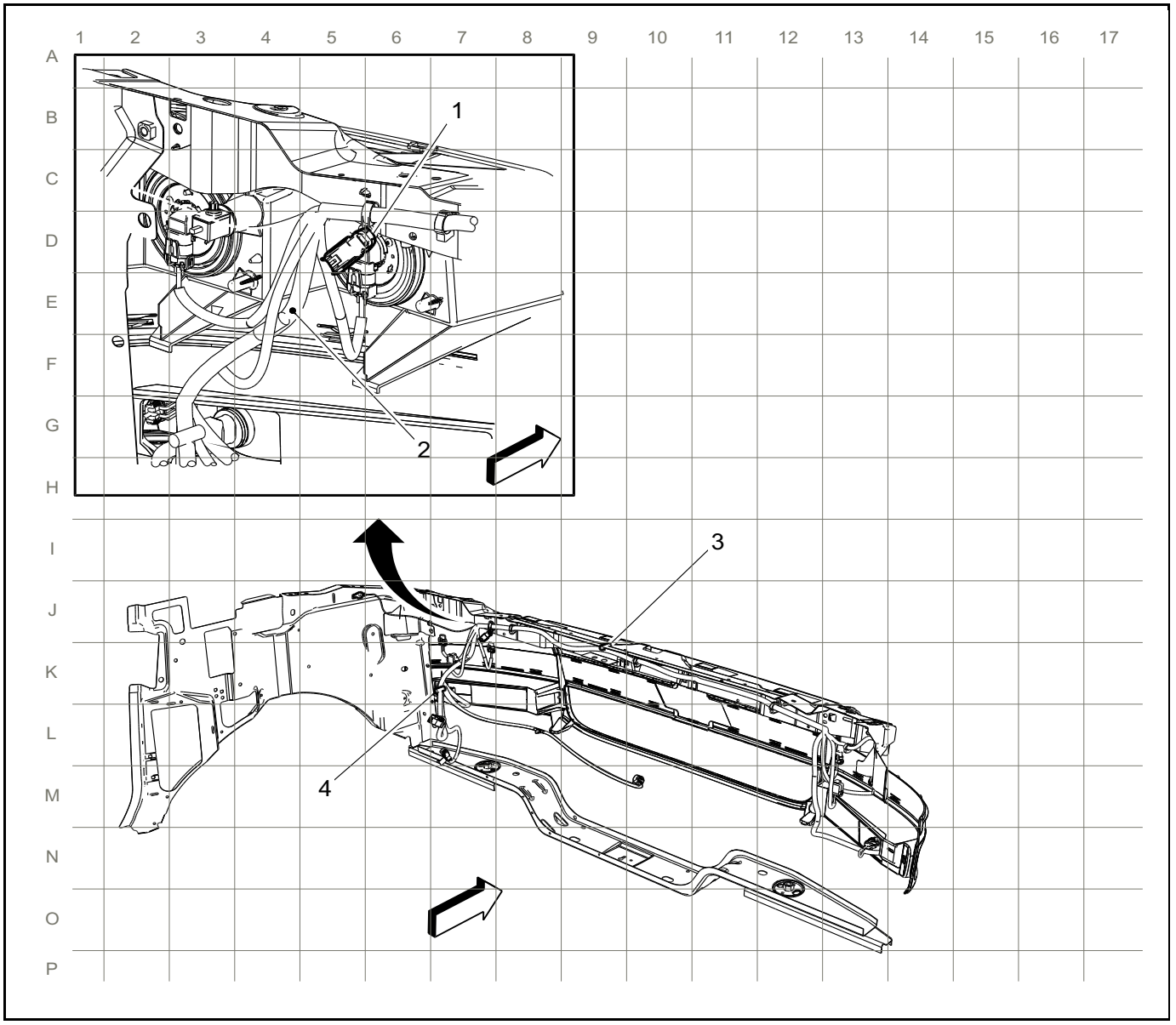
4861805

Items

(1) X161 Engine Harness to Fuel Injector Rail Jumper Harness (LV1)

(2) X160 Engine Harness to Fuel Injector Rail Jumper Harness (LV1)

Harness Routing Views (Forward Lamp Harness Routing)



4006152

Items

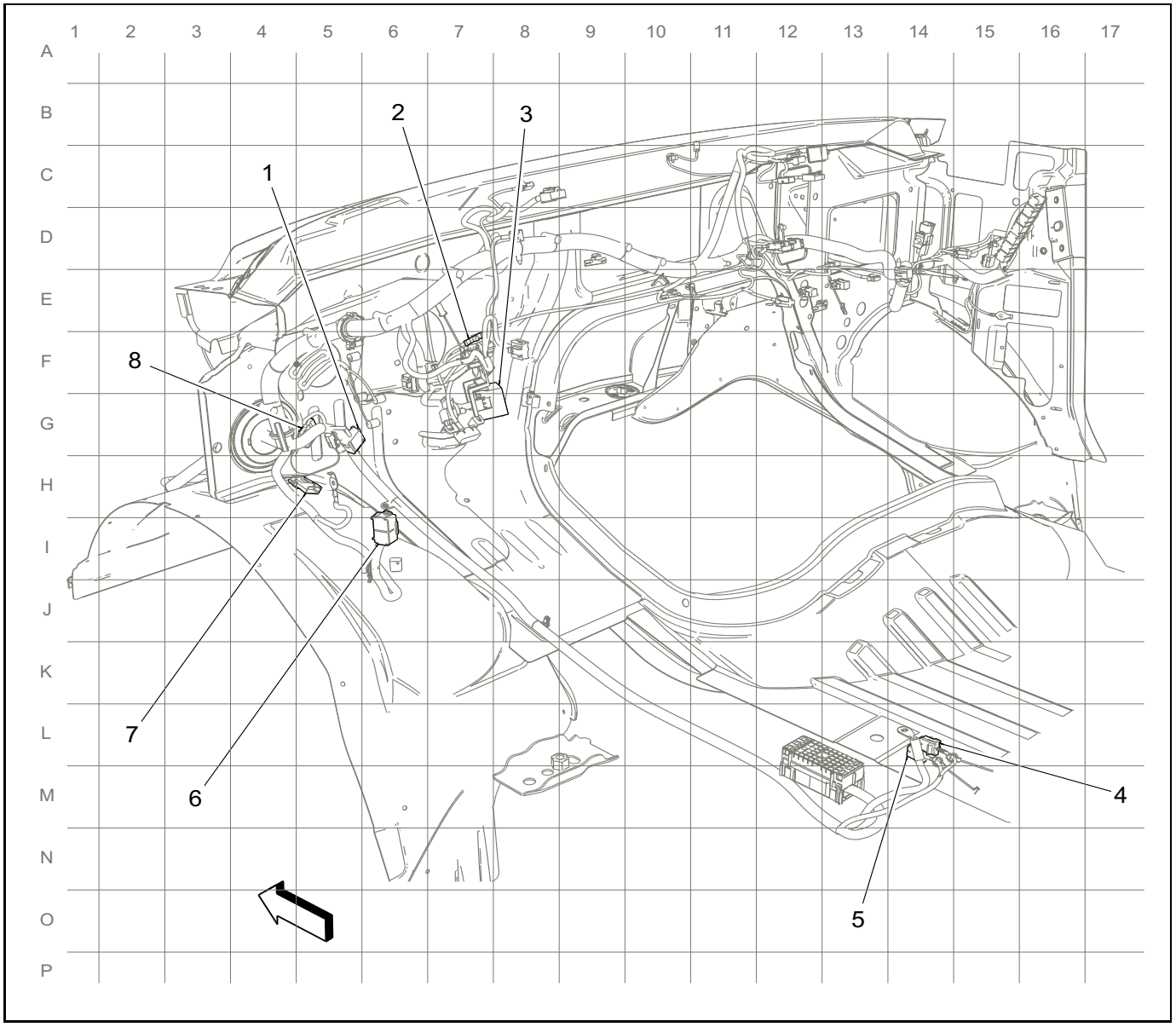
(1) X150 Instrument Panel Harness to Forward Lamp Harness

(2) J110 Forward Lamp Harness

(3) J121 Forward Lamp Harness

(4) J122 Forward Lamp Harness

Harness Routing Views (Instrument Panel Harness Routing - Dash Area (1 of 2))



4664697

Items

(1) JX250 Instrument Panel Harness

(2) X276 Steering Wheel Harness to Instrument Panel Harness

(3) X200 Steering Column Harness to Instrument Panel Harness

(4) X331 Instrument Panel Harness to Body Harness

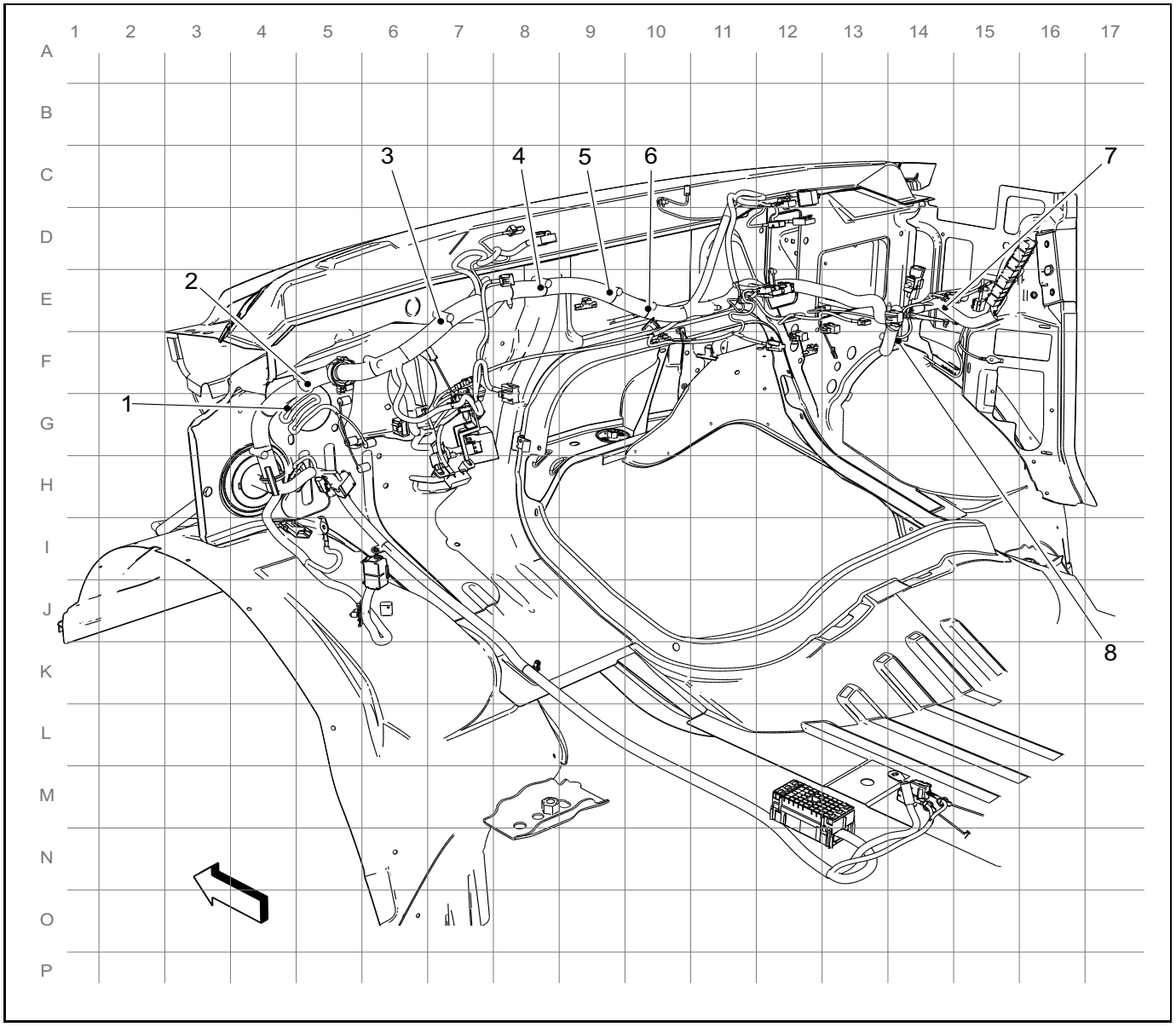
(5) X330 Instrument Panel Harness to Body Harness

(6) X318 Instrument Panel Harness to Body Harness

(7) X222 Upfitter Provision Harness to Instrument Panel Harness (YF2 or YF7)

(8) JX200 Instrument Panel Harness

Harness Routing Views (Instrument Panel Harness Routing - Dash Area (2 of 2))

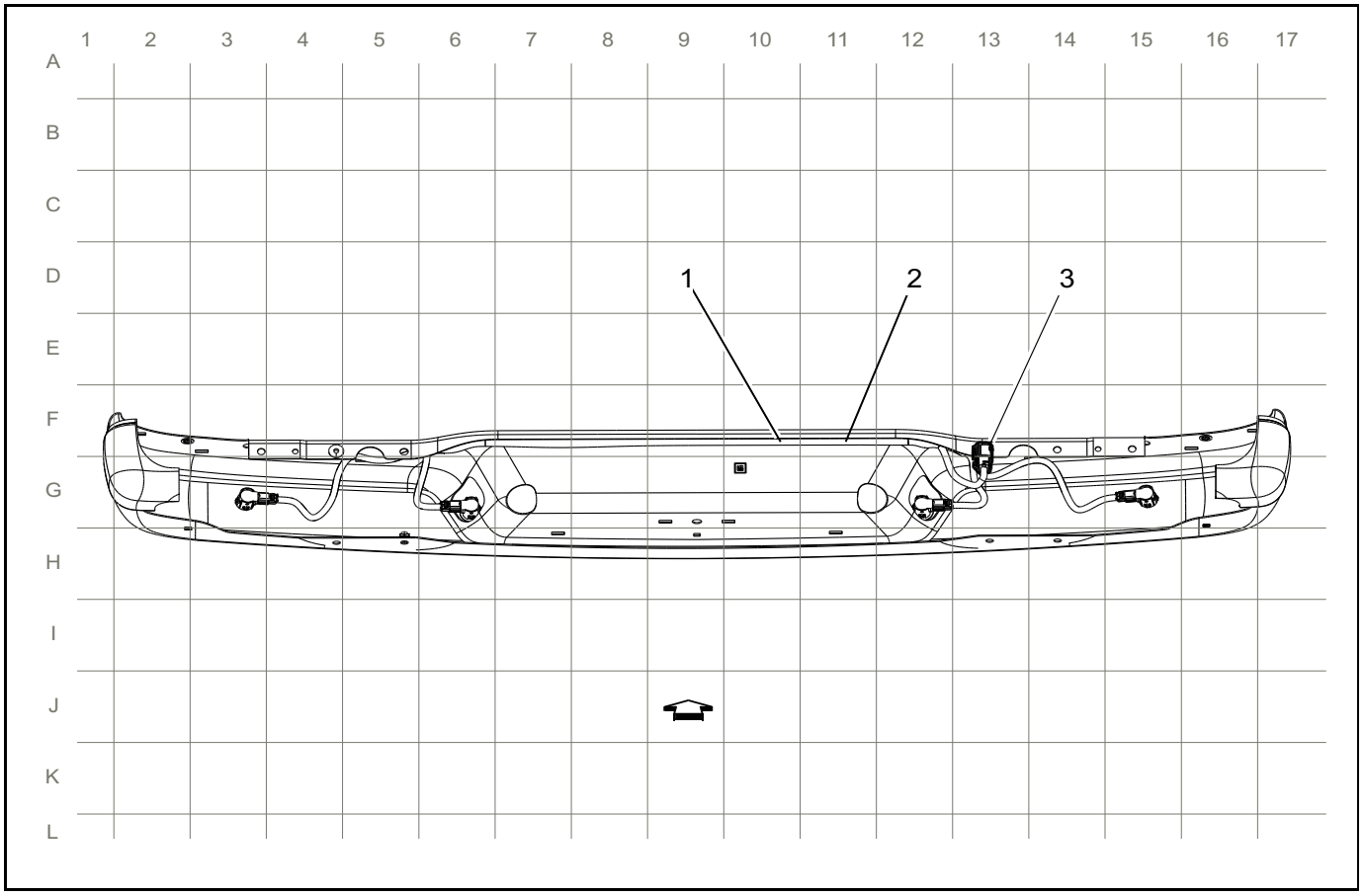


4866088

Items

(1) J247 Instrument Panel
(2) J244 Instrument Panel
(3) J231
(4) J248 Instrument Panel
(5) J207 Instrument Panel
(6) J246 Instrument Panel (DEB or DE5)
(7) J245 Instrument Panel (DEB or DE5)
(8) J249 Instrument Panel
(9) J250 Instrument Panel

Harness Routing Views (Rear Bumper Harness Routing)



4861830

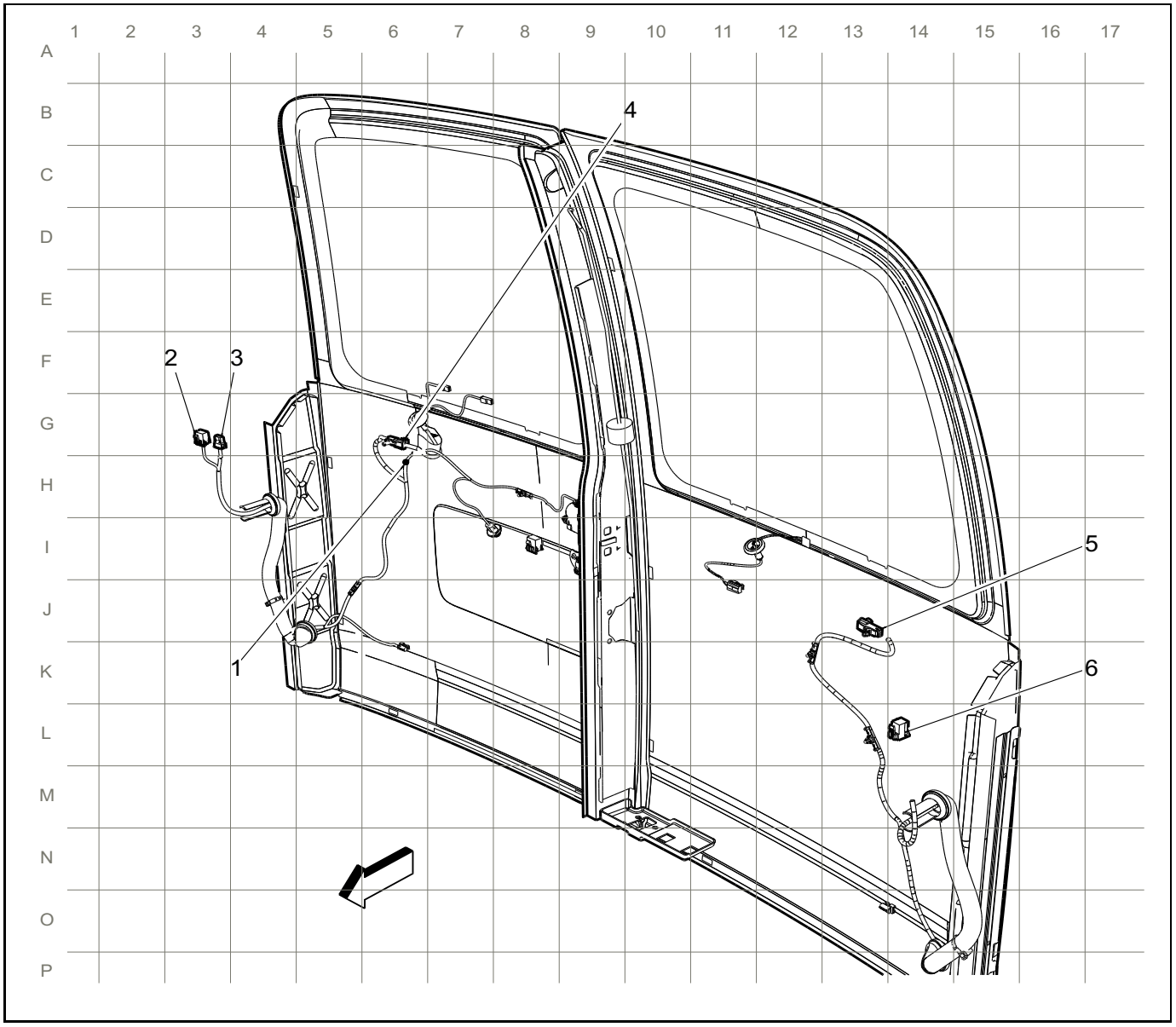
Items

(1) J426 Parking Aid Jumper Harness (UFT)

(2) J425 Parking Aid Jumper Harness (UFT)

(3) X408 Rear Bumper Harness to Chassis Harness (UD7)

Harness Routing Views (Rear Cargo Doors Harness Routing (Passenger or Cargo))



2830810

Items

(1) J902 Right Rear Cargo Door Harness (C49)

(2) X400 Right Rear Cargo Door to Body Harness (Passenger or Cargo)

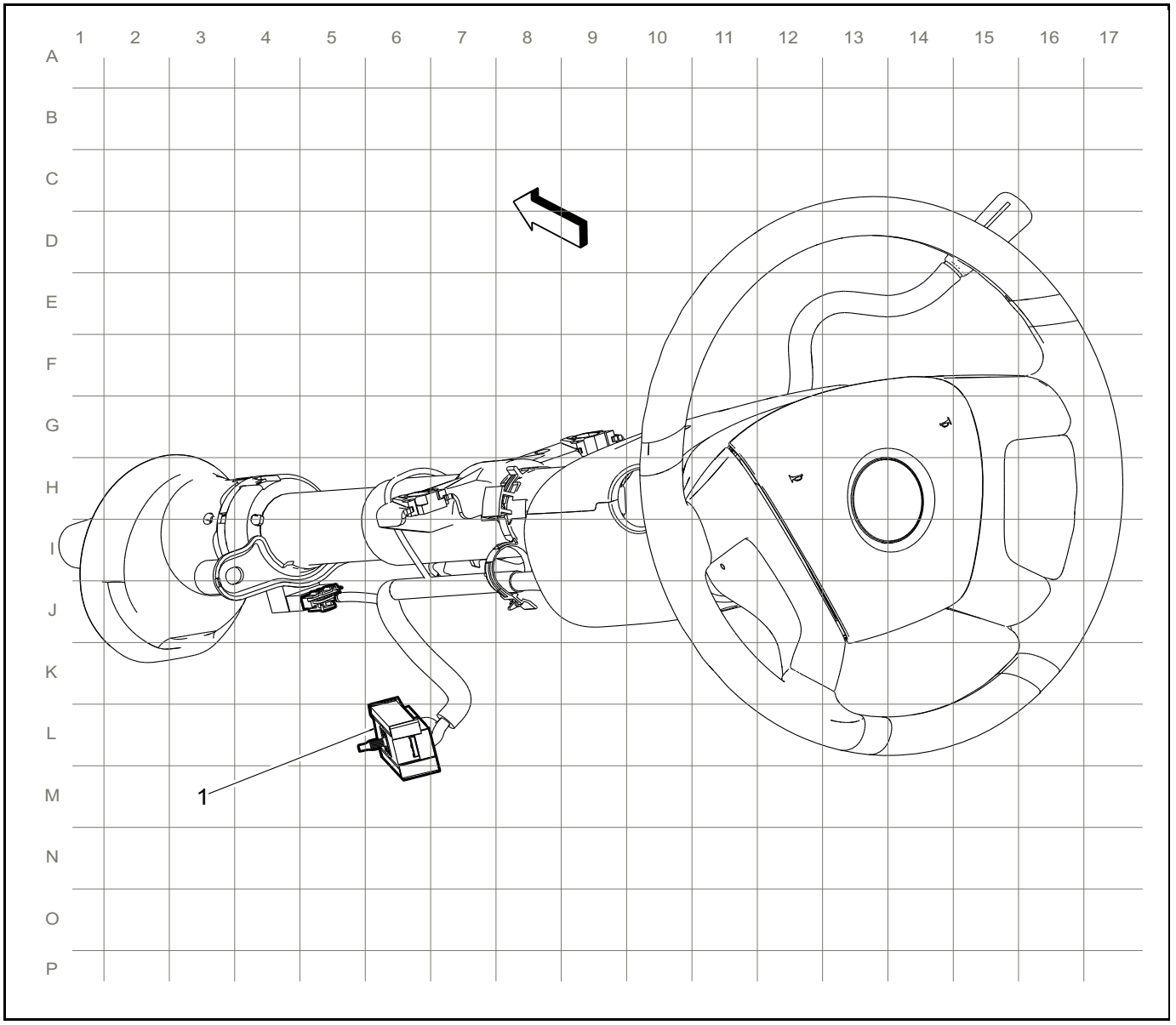
(3) X412 Right Rear Cargo Door Harness to Body Harness (Passenger or Cargo)

(4) X902 Rear Window Defogger Jumper Harness to Right Rear Cargo Door Harness (C49)

(5) X901 Defogger Jumper Harness to Left Rear Cargo Door Harness (C49)

(6) X411 Left Rear Cargo Door Harness to Body Harness (Passenger or Cargo)

Harness Routing Views (Steering Column Harness Routing)



4004323

Items

(1) X200 Steering Column Harness to Instrument Panel Harness

Schematics RPO Code List

RPO	Option Name
8S3	BACKUP ALARM
8S8	SEO
9L7	EQUIPMENT-ACSRY WRG JUNC BLK
A31	WINDOW-POWER OPERATED, ALL DOORS (DO NOT USE ON NEW/MAJOR PROGRAMS)
AG1	ADJUSTER FRT ST-POWER, MULTI-DIRECTIONAL, DRIVER (DO NOT USE ON NEW PROGRAMS AFTER MY18)
AG2	ADJUSTER PASS ST-POWER, MULTI-DIRECTIONAL (DO NOT USE ON NEW PROGRAMS AFTER MY18)
AK5	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER and PASS FRT

Schematics RPO Code List (cont'd)

RPO	Option Name
ASF	RESTRAINT-ROOF SIDE (LH and RH), SEAT SIDE (FRONT 1ST ROW), INFLATABLE (DO NOT USE. USE RES FAMILY.)
ATG	LOCK CONTROL, ENTRY-REMOTE ENTRY, STANDARD RANGE
AU3	LOCK CONTROL-SIDE DR, ELEC
BTV	REMOTE START-ENGINE
C36	HEATER-AUXILIARY
C49	DEFOGGER-RR WINDOW, ELECTRIC
C60	HVAC SYSTEM-AIR CONDITIONER FRT, MAN CONTROLS
C69	HVAC SYSTEM RR-AIR CONDITIONER
C99	SWITCH-INFL RST I/P MDL MAN SUPPRESSION
CARGO	CARGO
	CUTAWAY
	CUTAWAY
DE5	MIRROR O/S-LH and RH, REMOTE CONTROL, ELECTRIC, HEATED, FOLDING, COLOR.
DEB	MIRROR O/S-LH and RH, REMOTE CONTROL, ELECTRIC, HEATED, FOLDING, COLOR. SINGLE PANE
DH6	MIRROR I/S FRT VAN-LH and RH, SUNSHADE, ILLUM
DT4	ASHTRAY-CIGARETTE LIGHTER
E24	DOOR SIDE-REAR, HINGED
ENC	HVAC PROVISIONS-AUXILLIARY HEATER PLUMBING and WIRING
K08	HEATER-AUXILIARY, FUEL FIRED
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
KI4	RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT
L96	ENGINE-GAS, 8 CYL, 6.0L, SFI, E85 MAX, IRON, GM
LC8	ENGINE-LPG/CNG, 8 CYL, V8, 6.0L, SFI, GEN 1, GMNA
LV1	ENGINE-GAS, 6 CYL, 4.3L, GEN 5, SIDI, V6, VVT, OHV, ALUM
LWN	ENGINE-DIESEL, 2.8L, DI, L4, DOHC, TURBO, XLDE
M5U	TRANSMISSION-AUTO 8 SPD, 8L90
MYD	TRANSMISSION-AUTO 6 SPD, HMD, 6L90
NE7	FUEL TANK-216L, 57 GAL
	PASSENGER
	PASSENGER
PRP	SALES PACKAGE-COMMERCIAL TRADESMAN
	REARHVACCONTROLS
	REARHVACCONTROLS
TP2	BATTERY-AUXILIARY (DO NOT USE AFTER 2011 ON NEW/MAJOR PROGS, USE K4B)
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U80	DISPLAY-COMPASS
UBS	DIGITAL AUDIO SYSTEM-S-BAND AND TRAFFIC
UD7	PARK ASSIST-REAR
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UF2	LAMP-CARGO
UFA	DISPLAY-OUTSIDE TEMPERATURE
UFT	SIDE ACTIVE SAFETY-OBSTACLE DETECTION
UI8	RADIO-AM/FM, TOUCHSCREEN, NAVIGATION, CONNECTED, CD, AUX JACK, USB PORT
UJ1	INDICATOR-SYSTEM, BRAKE WARNING
UJM	TIRE PRESS INDICATOR-MANUAL LEARN

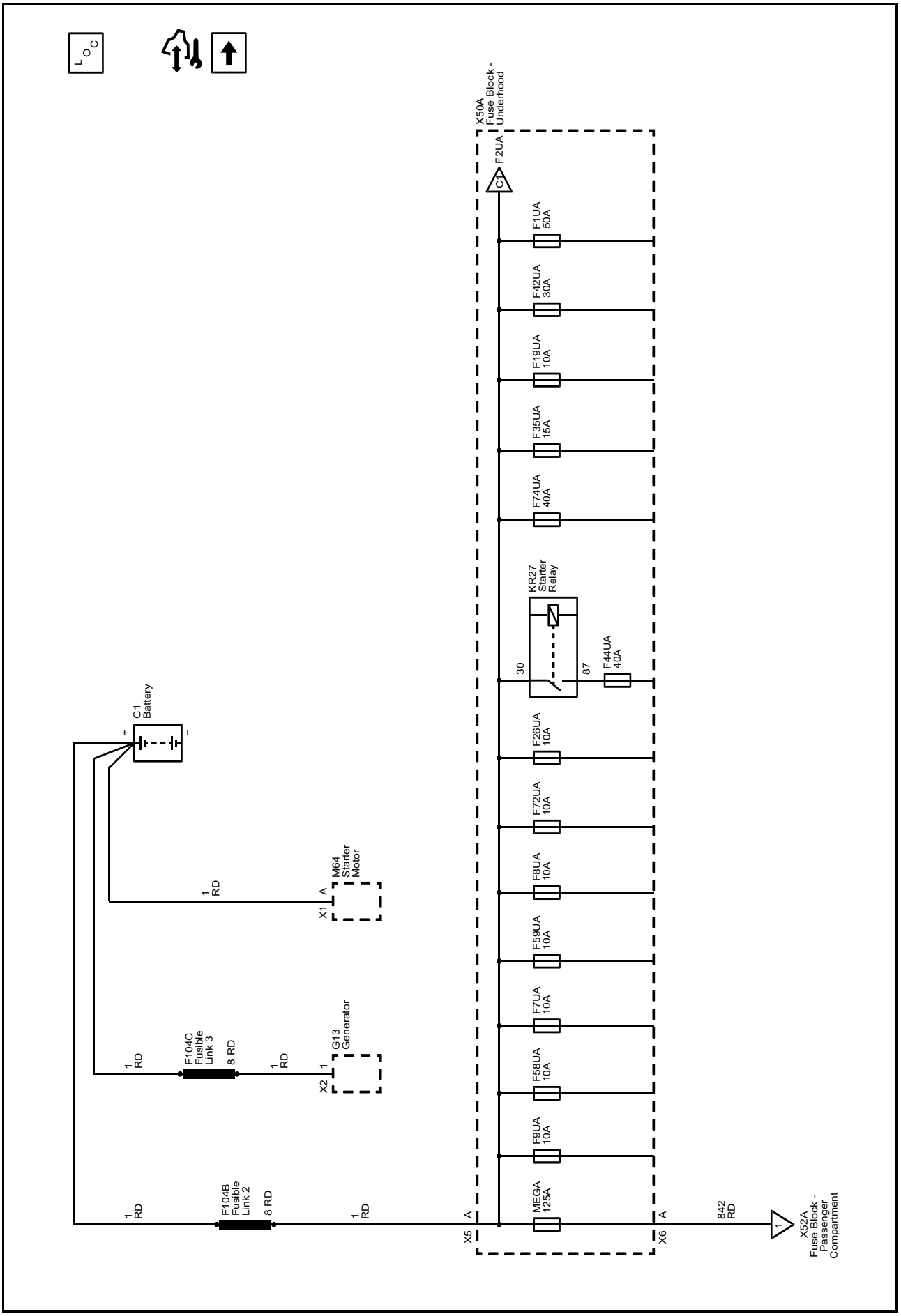
Schematics RPO Code List (cont'd)

RPO	Option Name
US8	RADIO-AM/FM STEREO, SEEK/SCAN, CD, AUTO TONE, CLOCK, ETR, MP3, RDS
USR	RECEPTACLE-USB
UVC	VISION-REAR VIEW, MONO, ANALOG
UY7	WIRING HARNESS-TRUCK TRAILER, HD
V22	GRILLE-RADIATOR, CHROME
W1Y	CONTROL-STEERING WHEEL, RADIO, REDUNDANT CONTROLS
WITH	WITH
	WITHOUT
	WITHOUT
WRF	WIRING PROVISIONS-ELECTRICAL ACCESSORY
YA2	DOOR SIDE-REAR, SLIDING
YF1	SALES PACKAGE-CUTAWAY UPFITTER
YF2	SALES PACKAGE-AMBULANCE UPFITTER

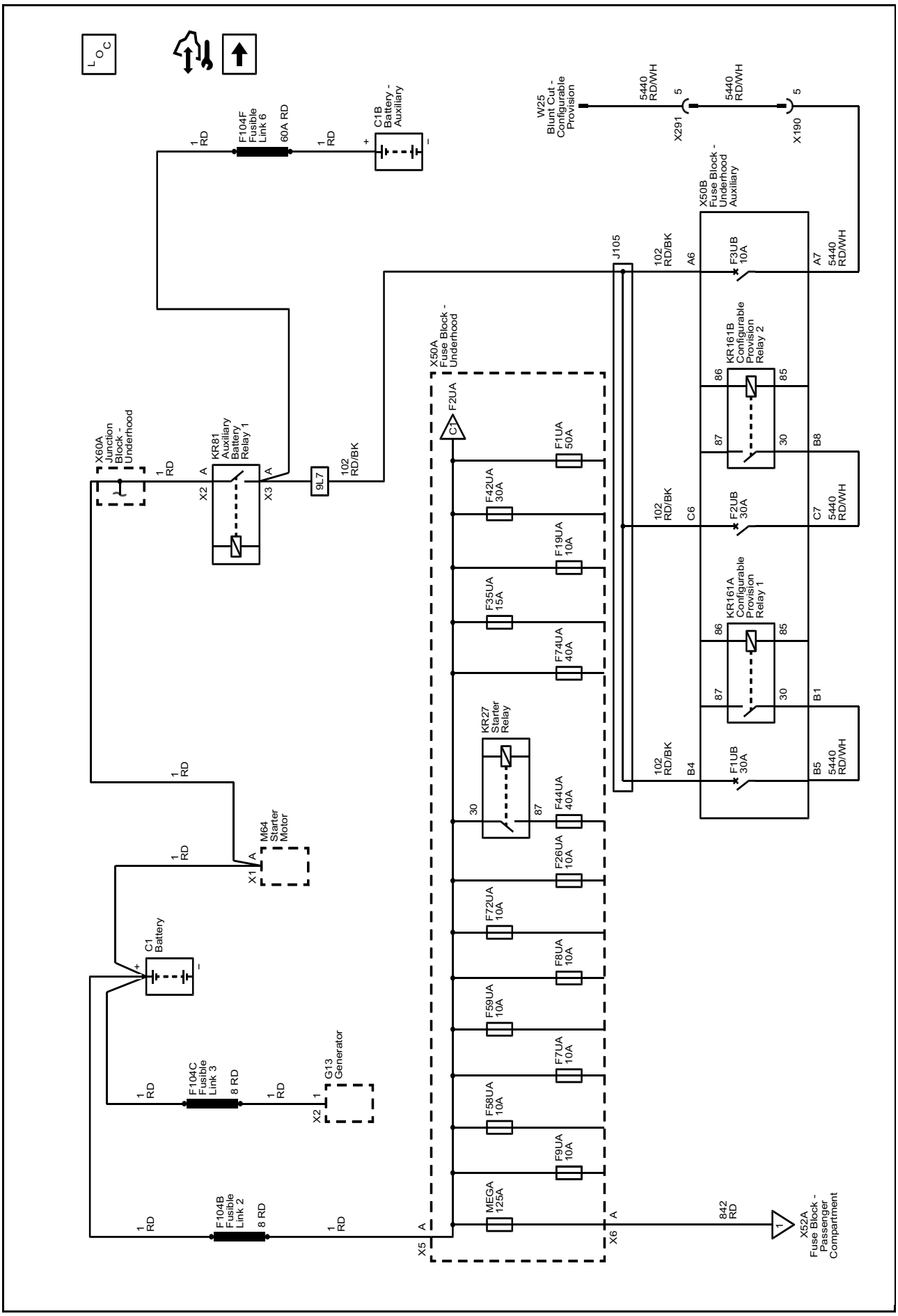
Master Electrical Schematic Icons

Icon	Icon Definition
 19386	***Warning: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling . Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.***
 902886	**Note:** Twisted wires provide an effective shield that helps protect sensitive electronic components from electrical interference. In order to prevent electrical interference from degrading the performance of the connected components, you must maintain the proper specification when making any repairs to the twisted wires shown : • The wires must be twisted a minimum of 10 turns per 31 cm (12 in) as measured anywhere along the length of the wires. • The outside diameter of the twisted wires must not exceed 6.0 mm (0.25 in).
 1822496	**Note:** Pinout indexing on ground splice pack connectors JX347 and JX348 may vary.

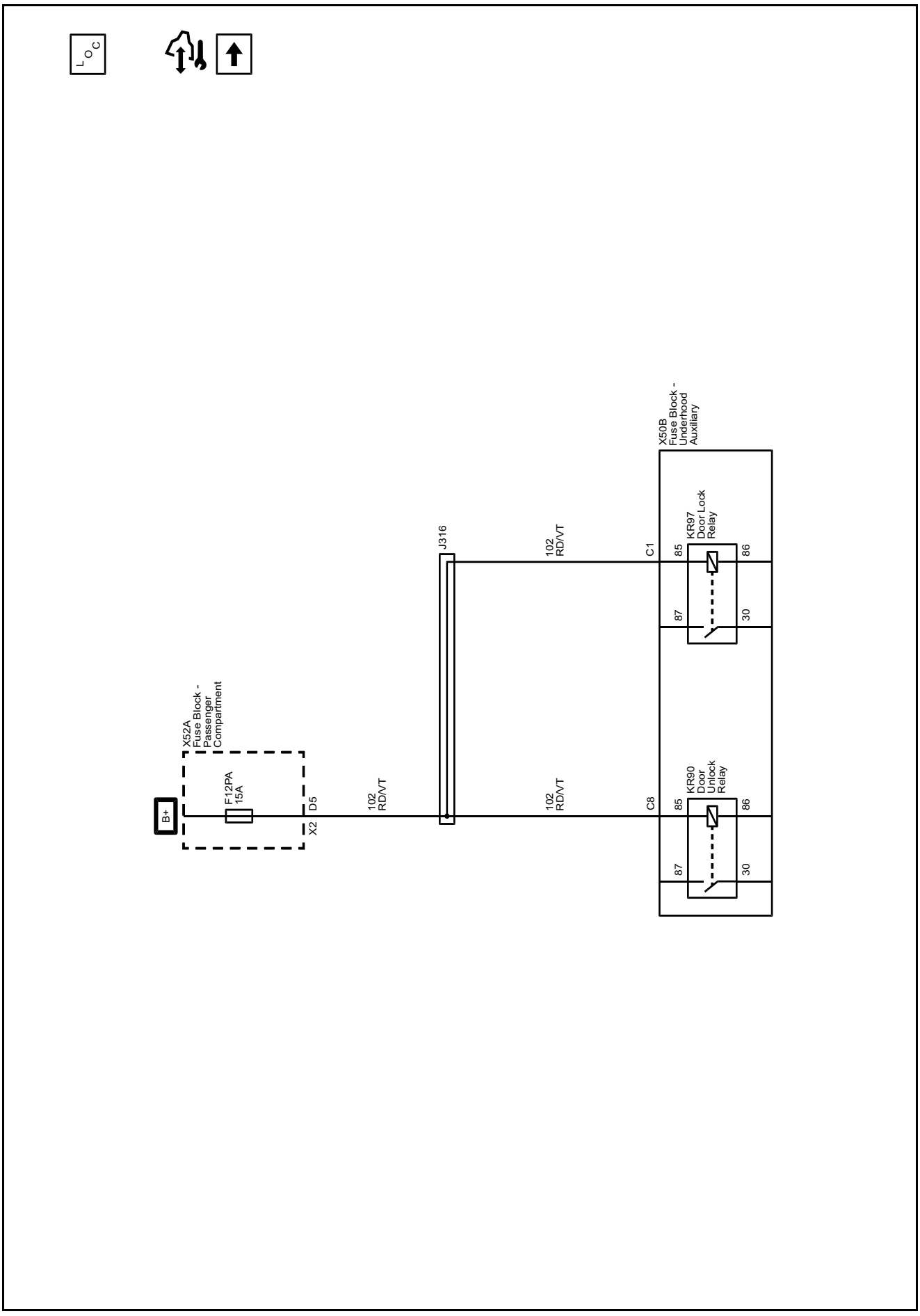
Power Distribution Schematics (Fusible Links and B+ Bus - Underhood Fuse Block (Gas with One Battery, 1 of 3))



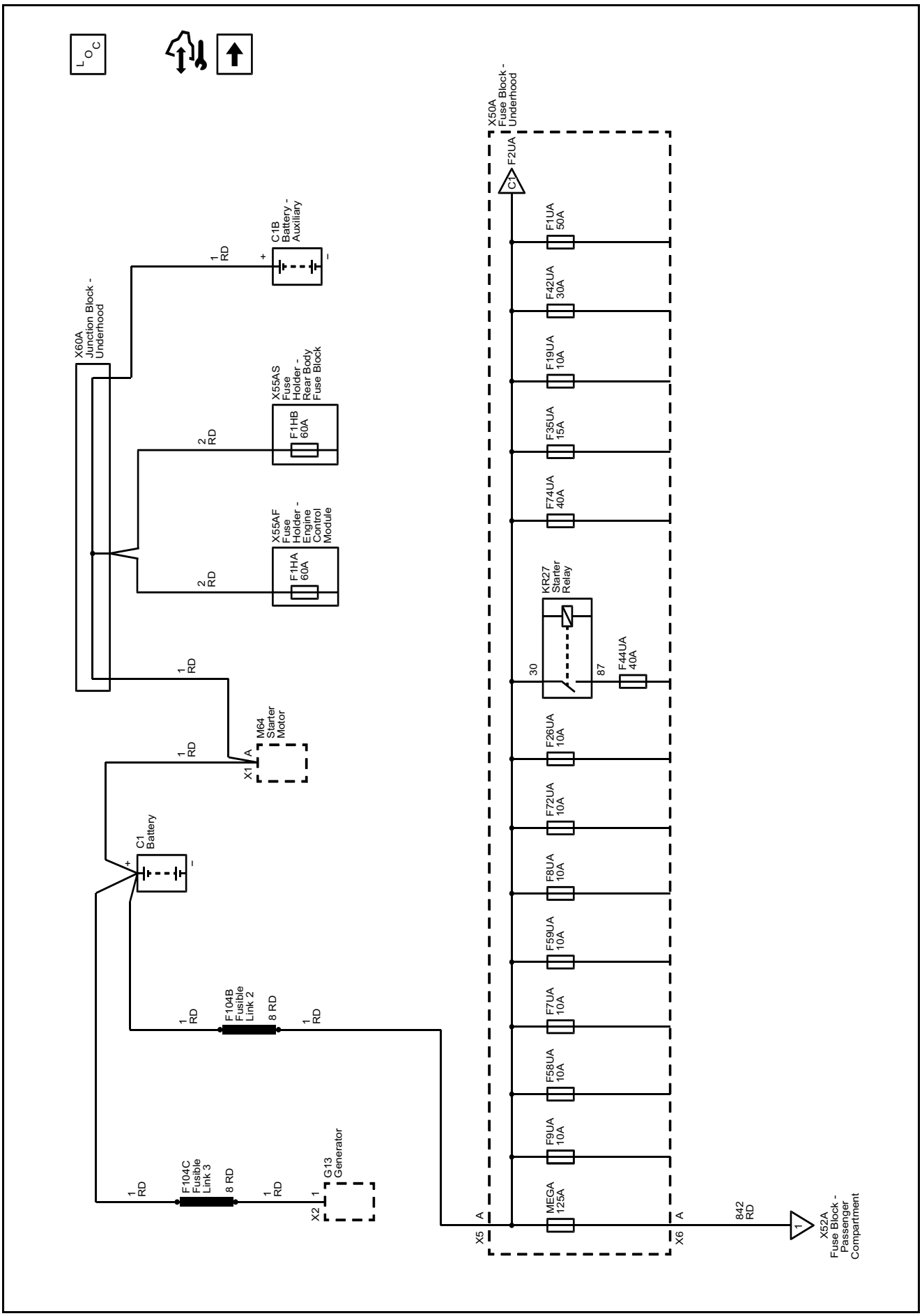
Power Distribution Schematics (Fusible Links and B+ Bus - Underhood Fuse Block (Gas with Two Batteries, 1 of 3) and Fuse Block - Underhood Auxiliary (9L7))



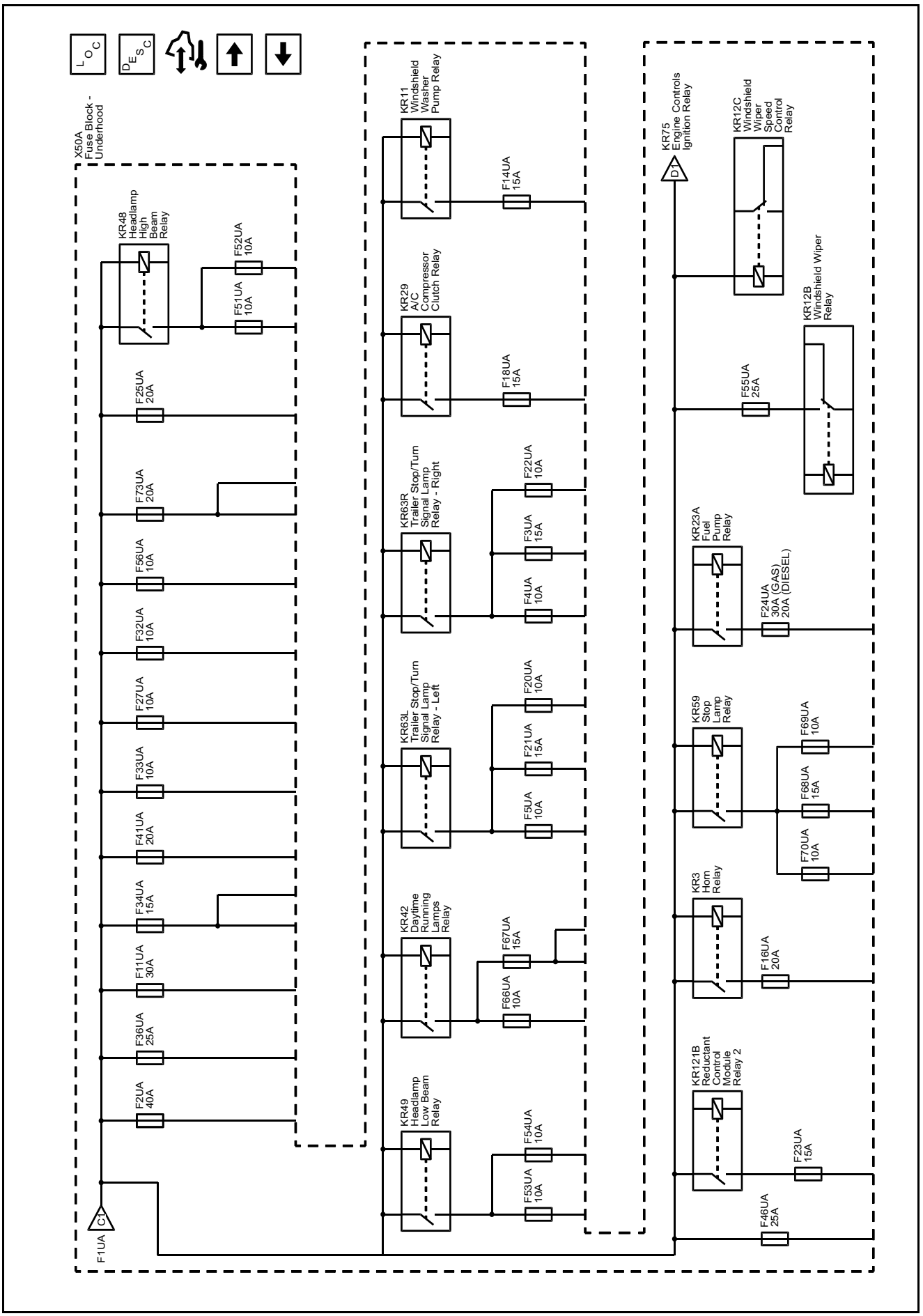
Power Distribution Schematics (Fuse Block - Underhood Auxiliary (AU3&WRF))

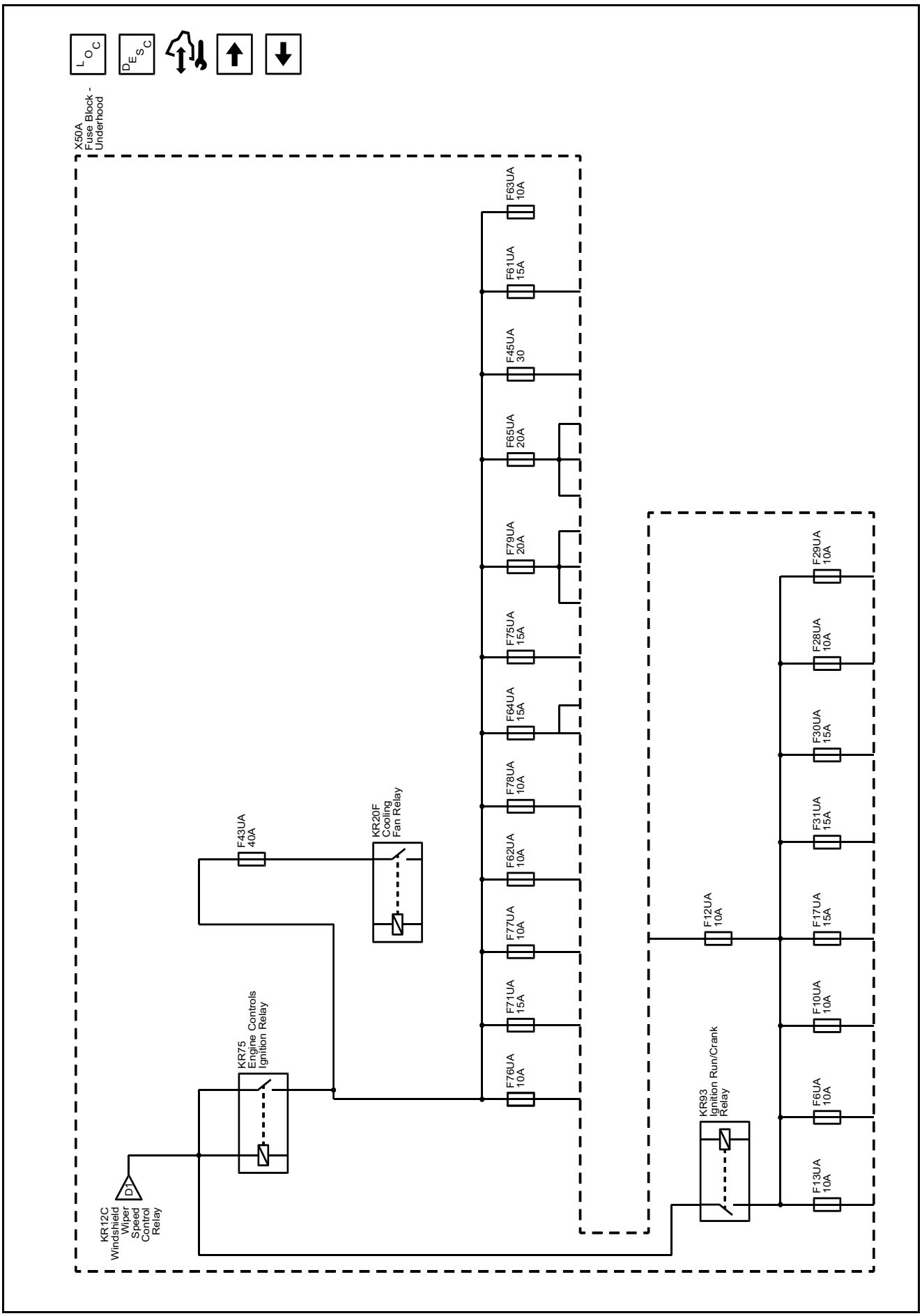


Power Distribution Schematics (Fusible Links and B+ Bus - Underhood Fuse Block (Diesel, 1 of 3))



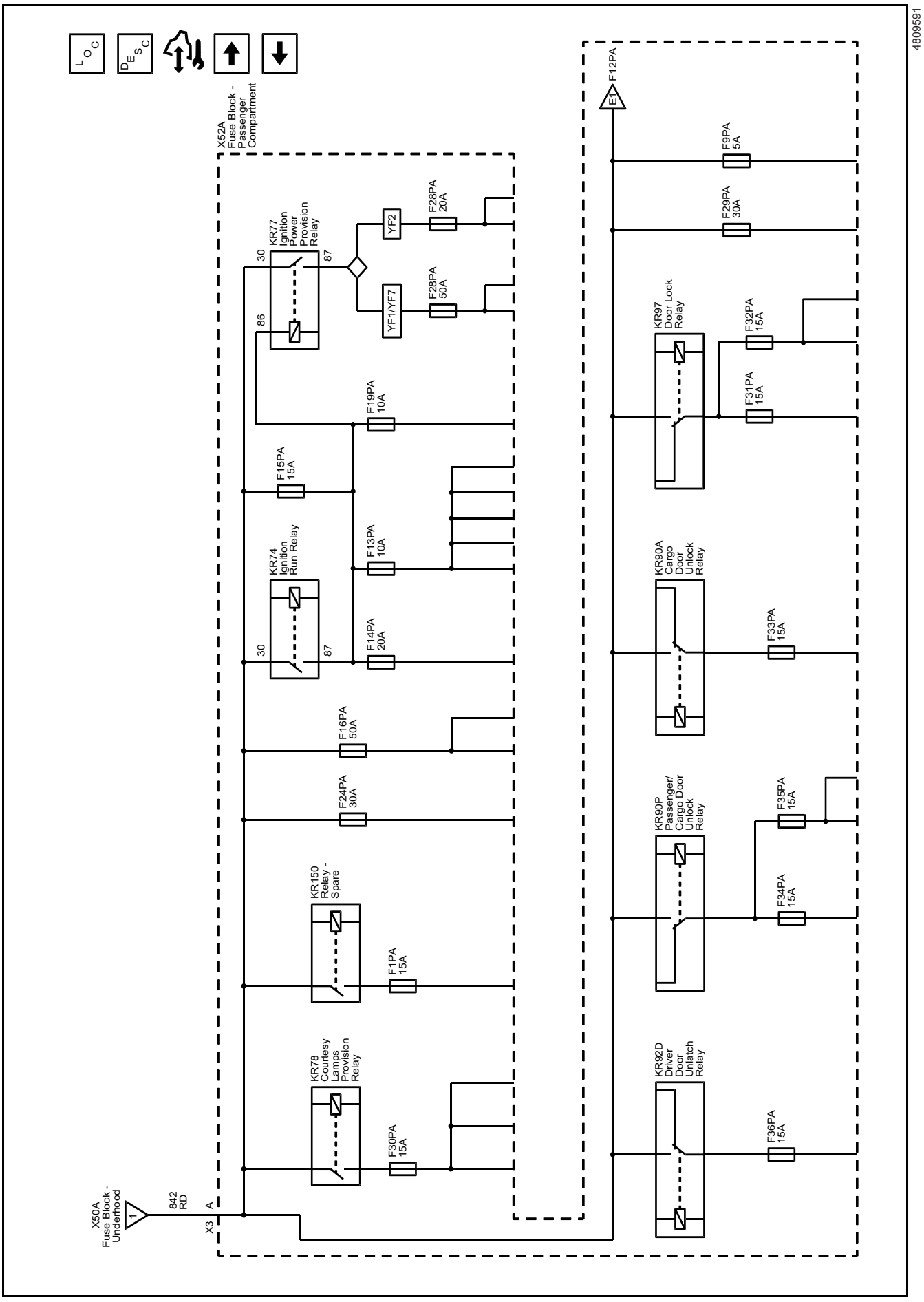
Power Distribution Schematics (B+ Bus - Underhood Fuse Block (2 of 3))



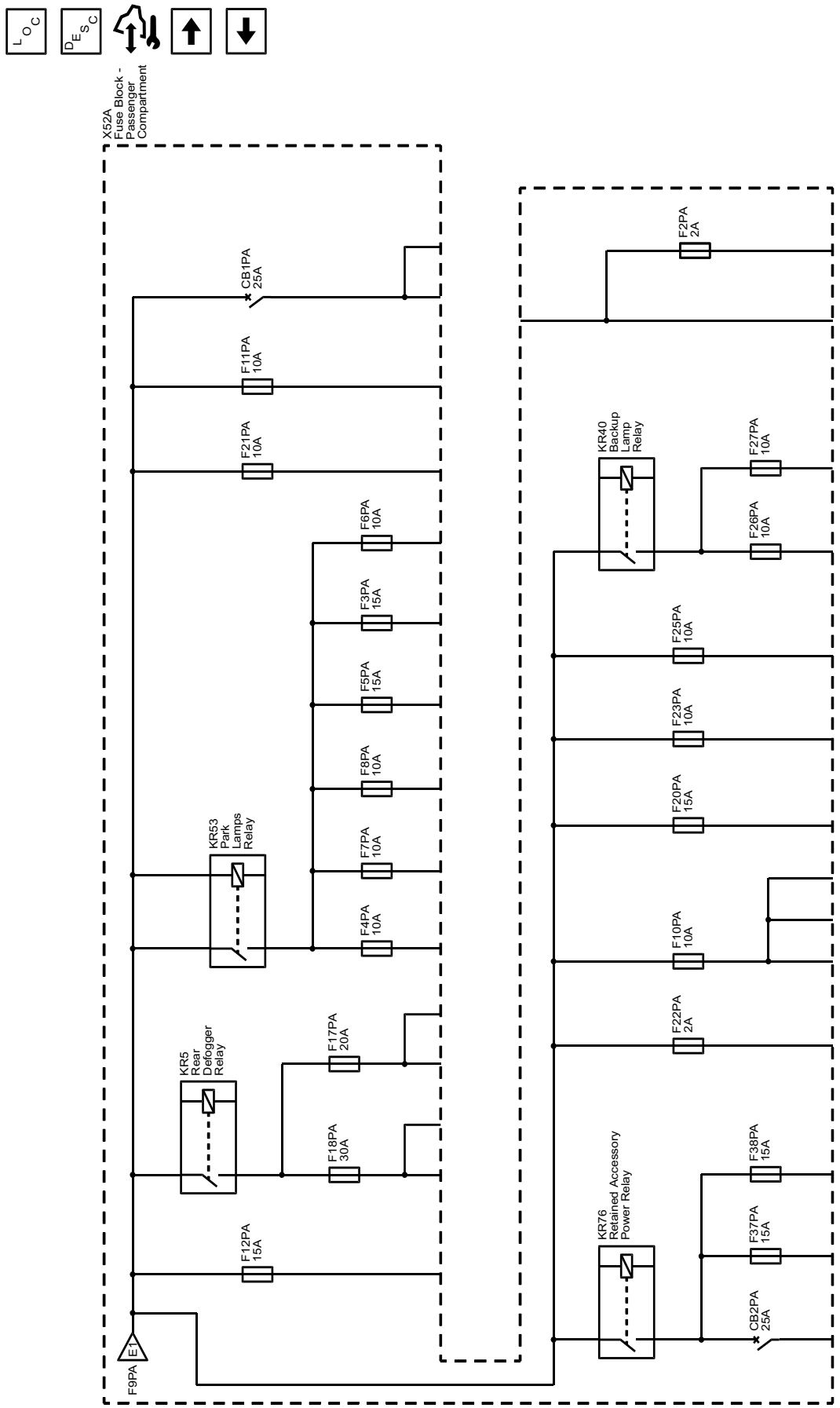


Power Distribution Schematics (B+ Bus - Underhood Fuse Block (3 of 3))

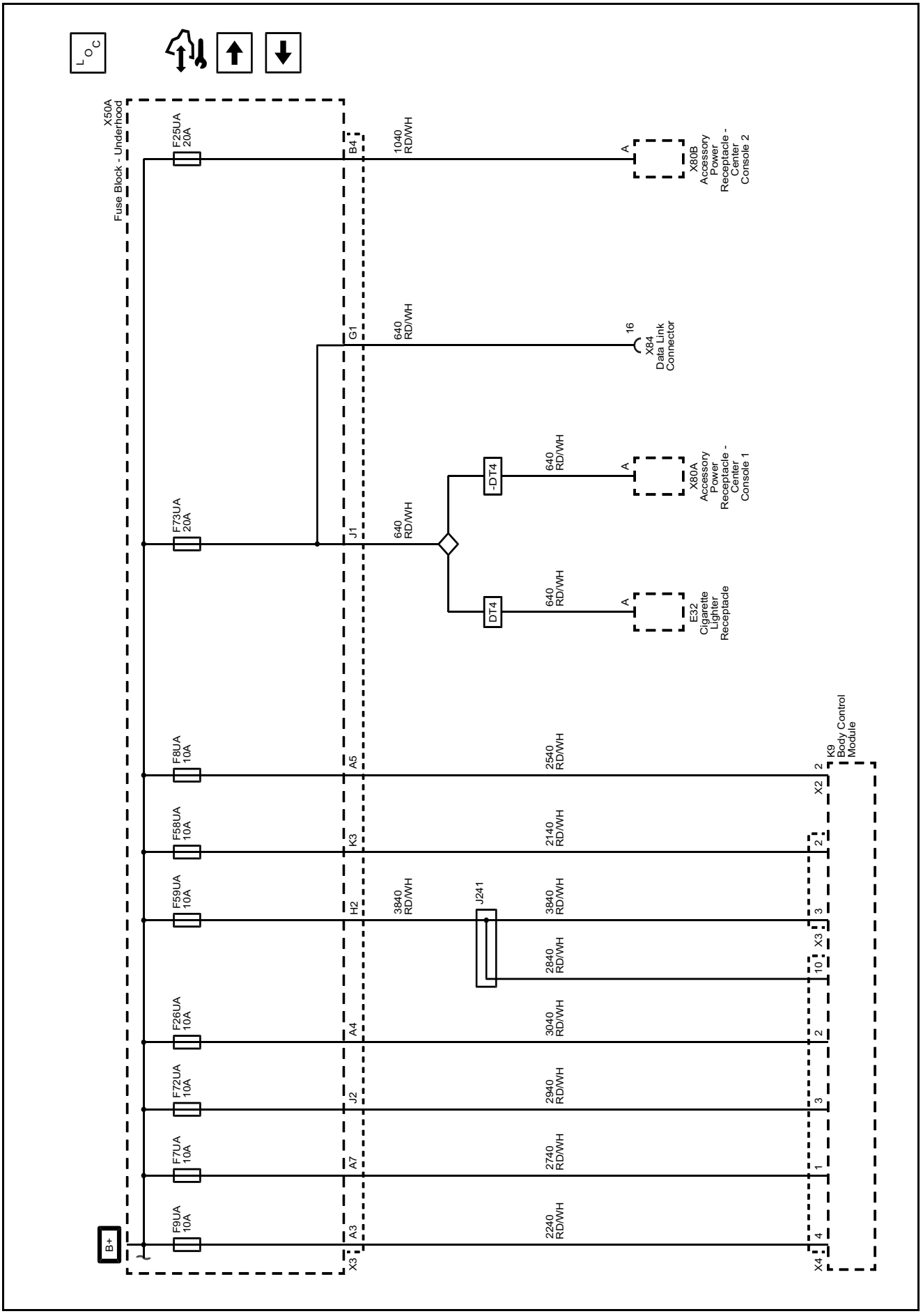
Power Distribution Schematics (B+ Bus - Passenger Compartment Fuse Block (1 of 2))



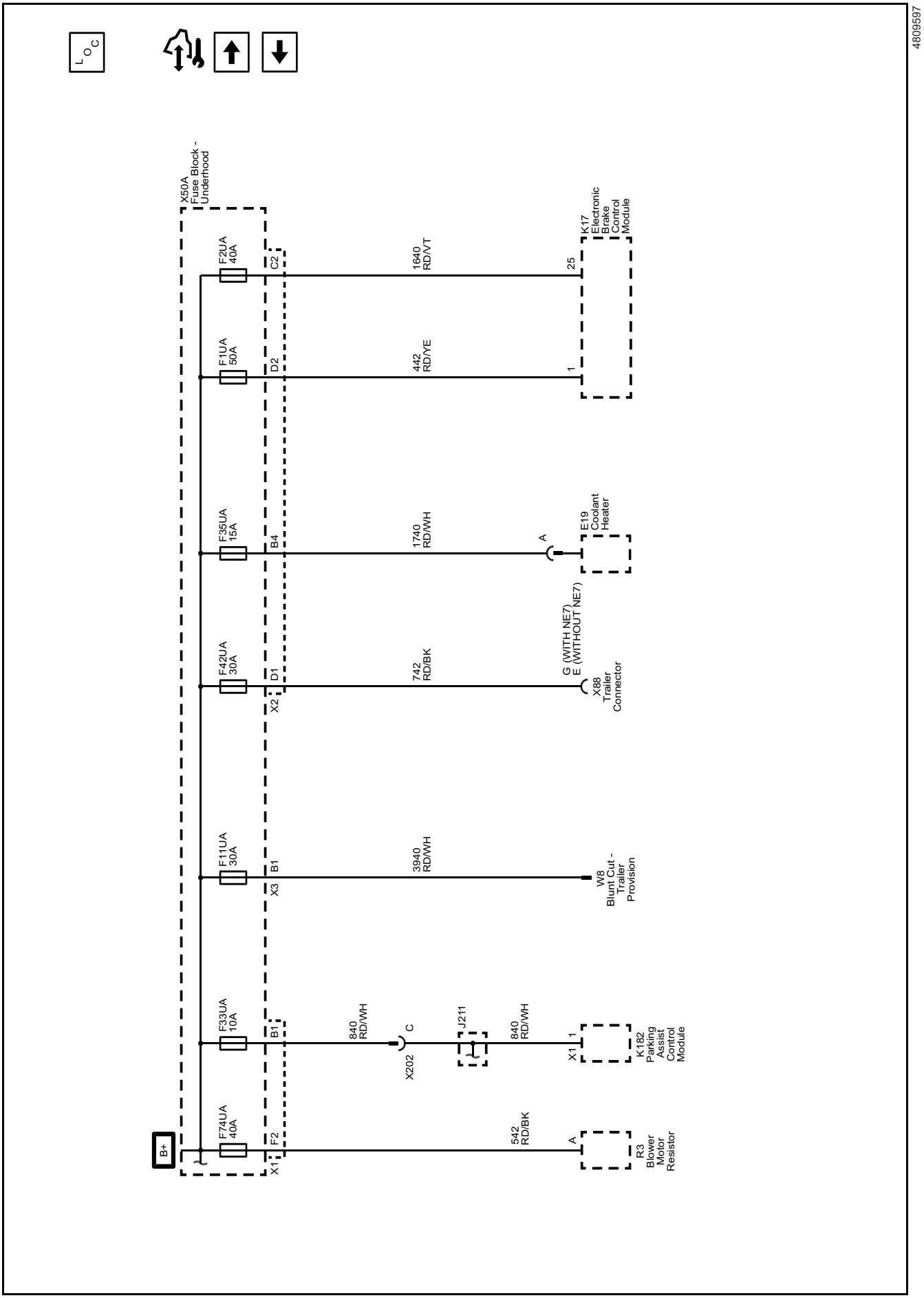
Power Distribution Schematics (B+ Bus - Passenger Compartment Fuse Block (2 of 2))



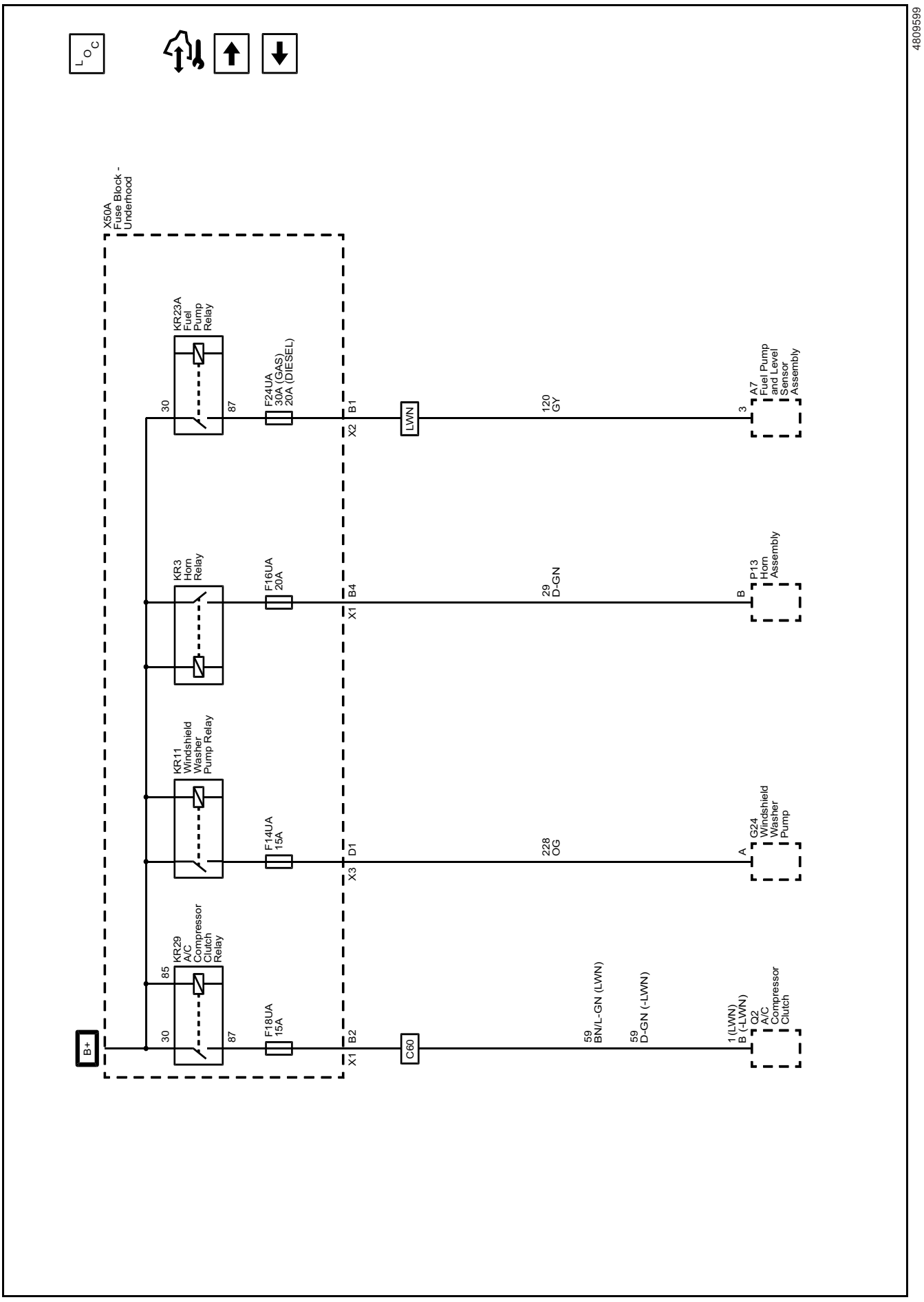
Power Distribution Schematics (Fuses F7UA, F8UA, F9UA, F25UA, F26A, F58UA, F59UA, F72UA, and F73UA)



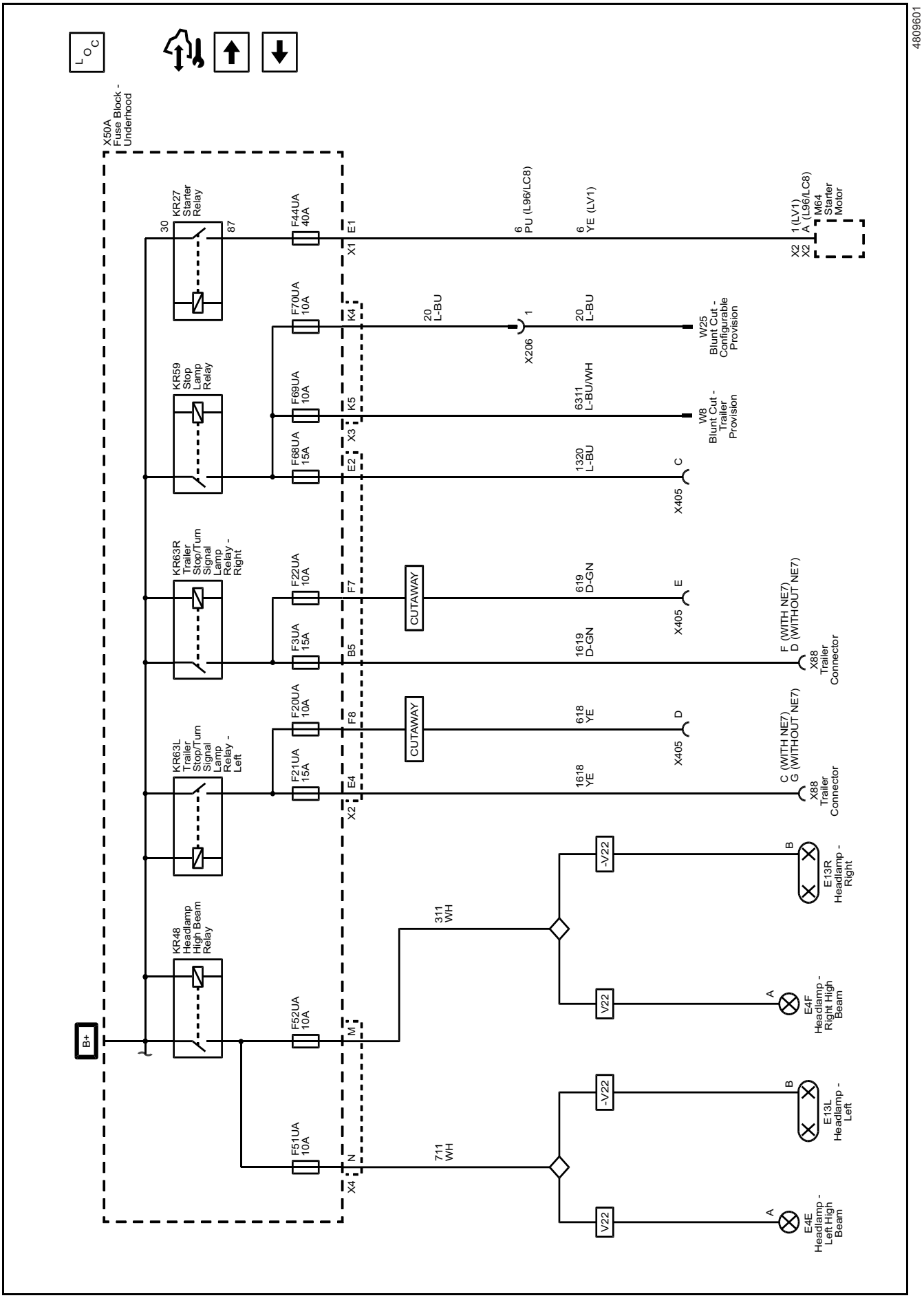
Power Distribution Schematics (Fuses F1UA, F2UA, F11UA, F33UA, F35UA, F42UA, and F74UA)



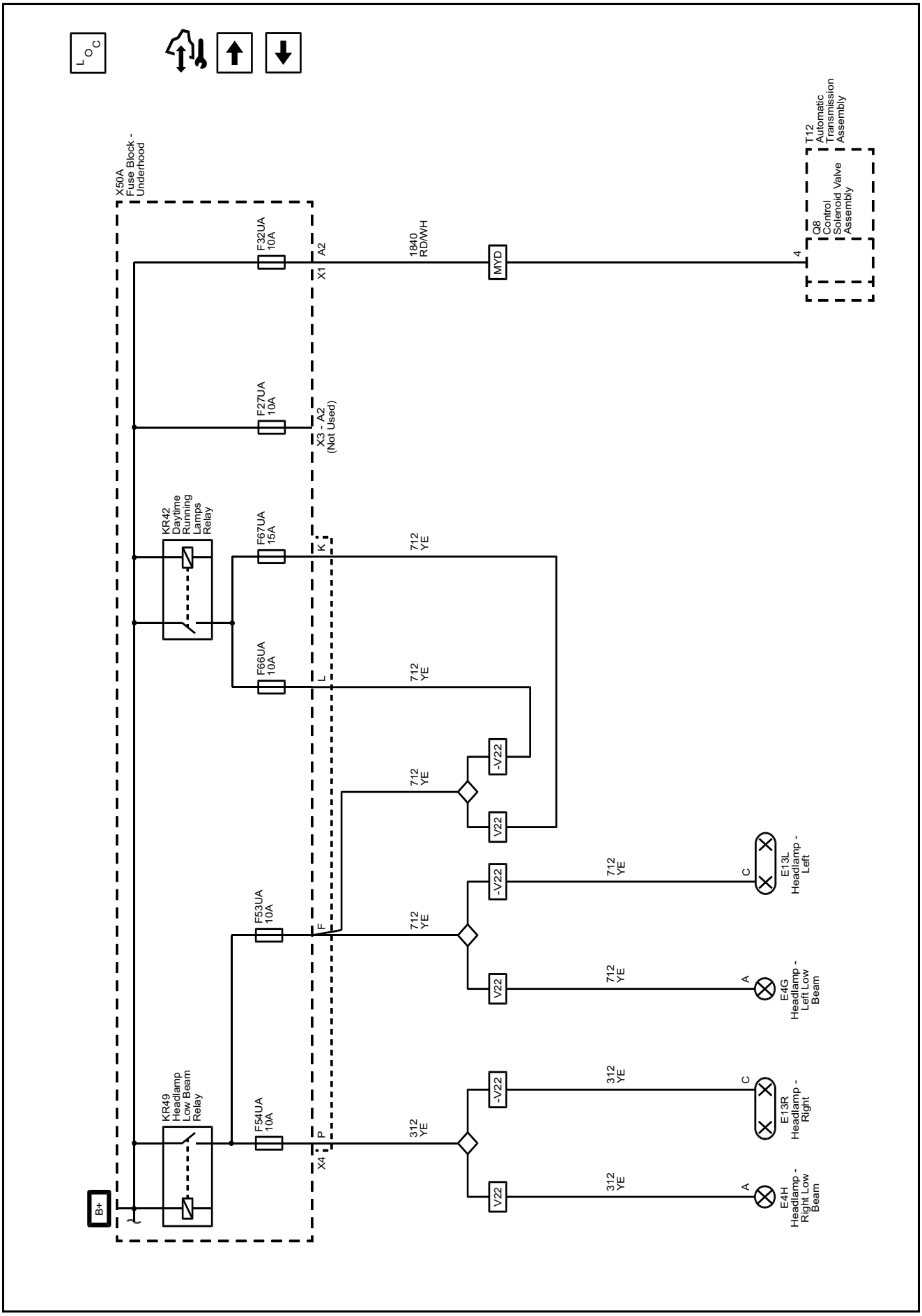
Power Distribution Schematics (Fuses F14UA, F16UA, F18UA, and F24UA)



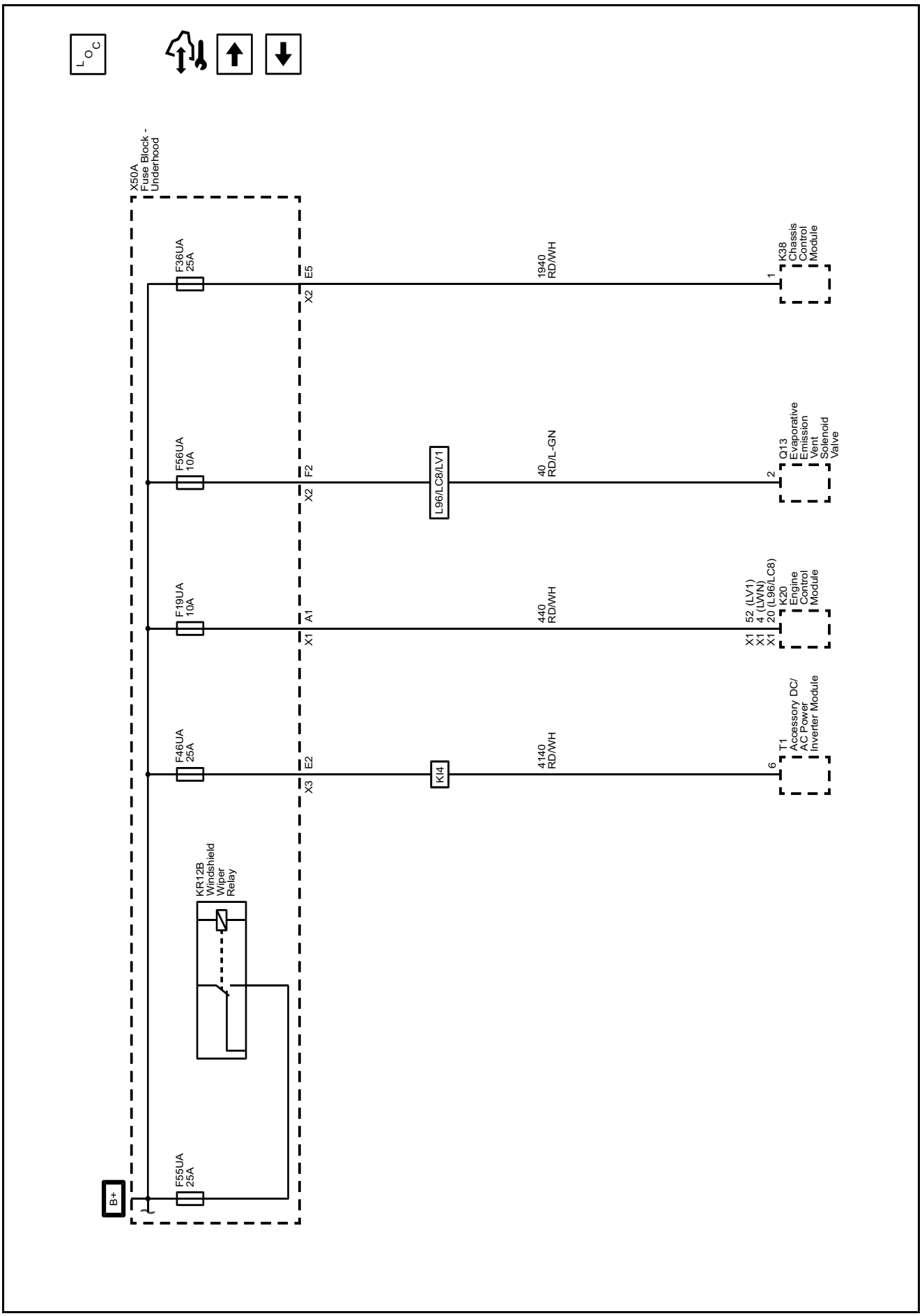
Power Distribution Schematics (Fuses F3UA, F21UA, F44UA, F51UA, F52UA, F68UA, F69UA, and F70UA)



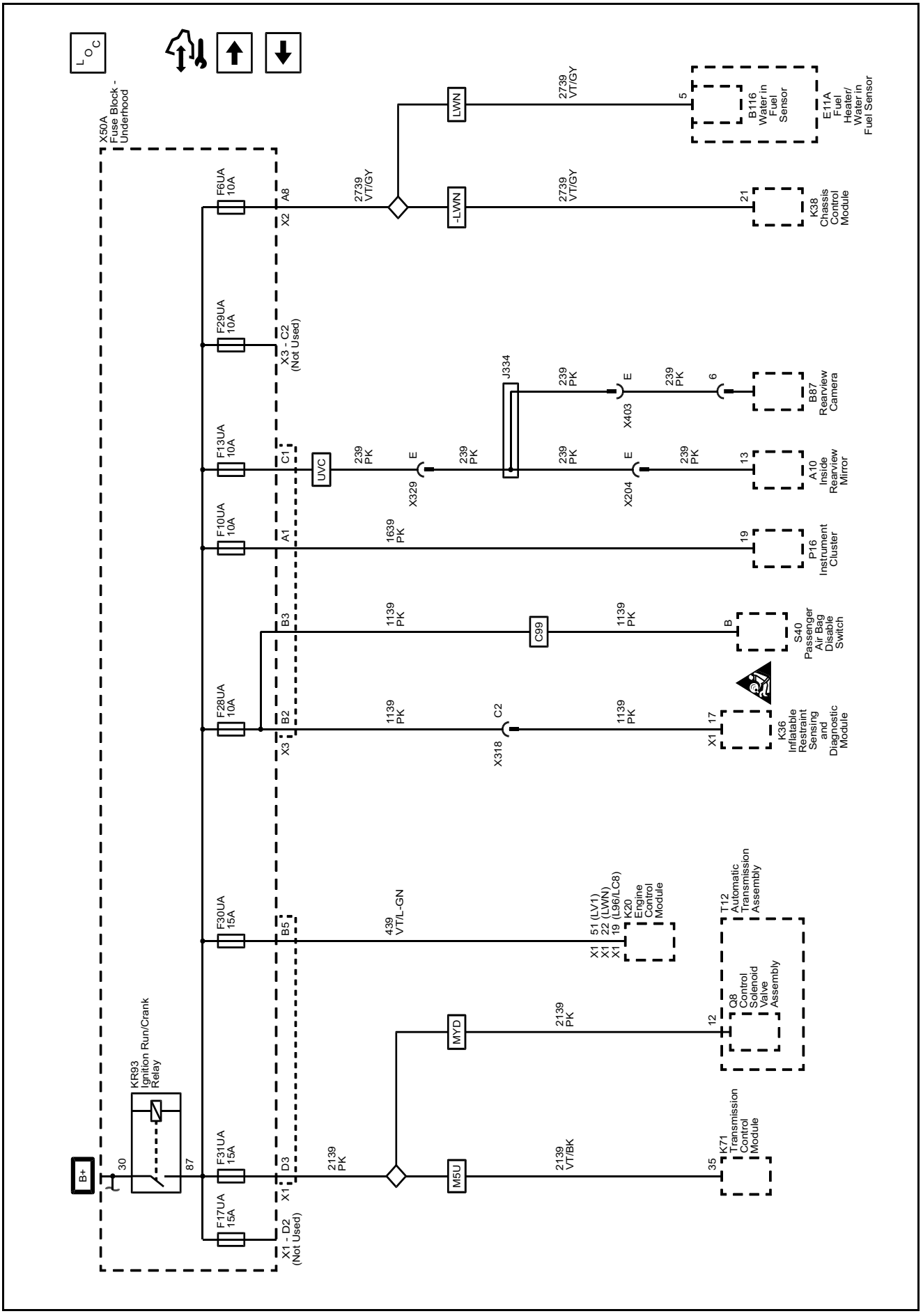
Power Distribution Schematics (Fuses F27UA, F32UA, F53UA, F54UA, F66UA, and F67UA)



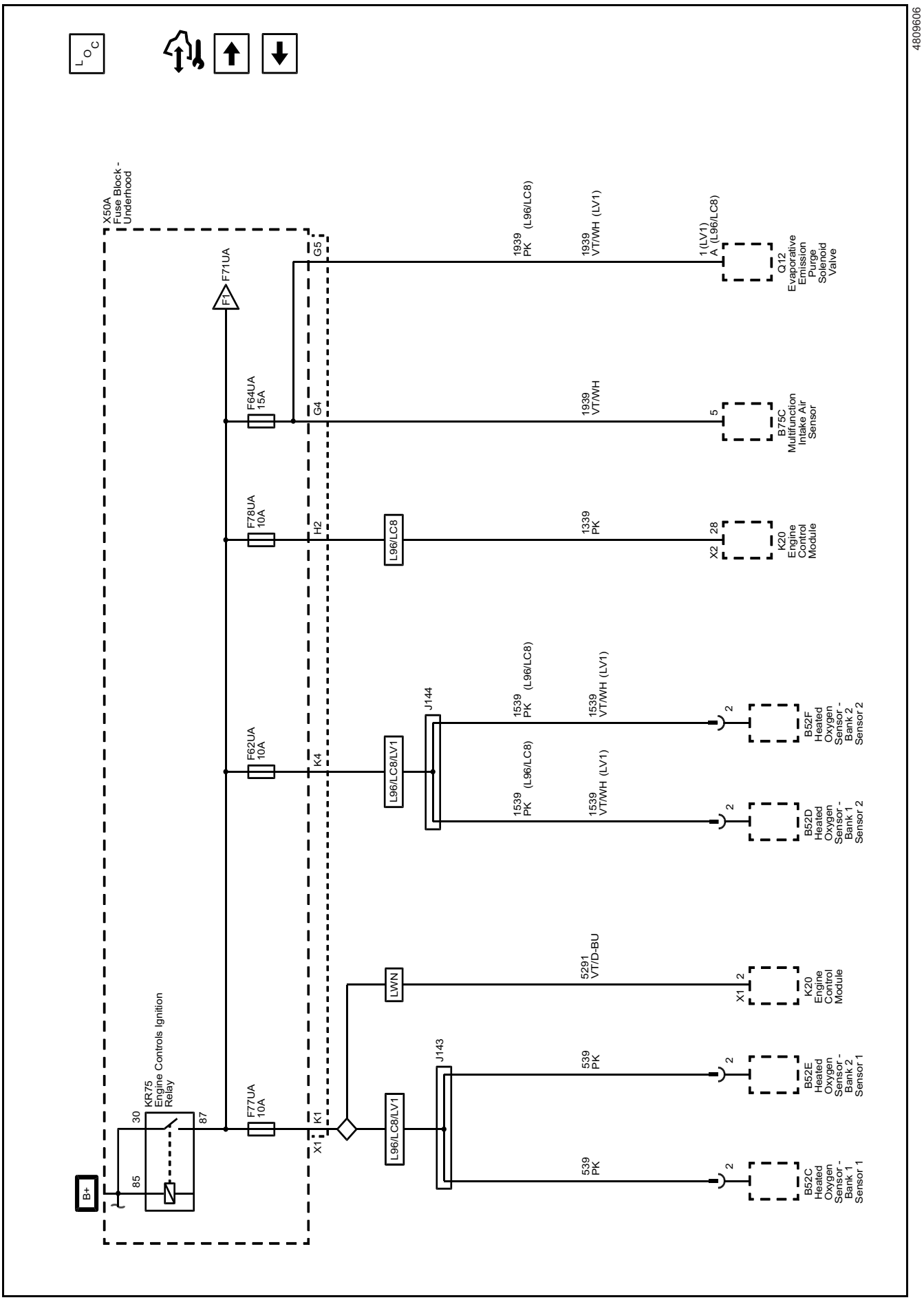
Power Distribution Schematics (Fuses F19UA, F36UA, F46UA, and F56UA)



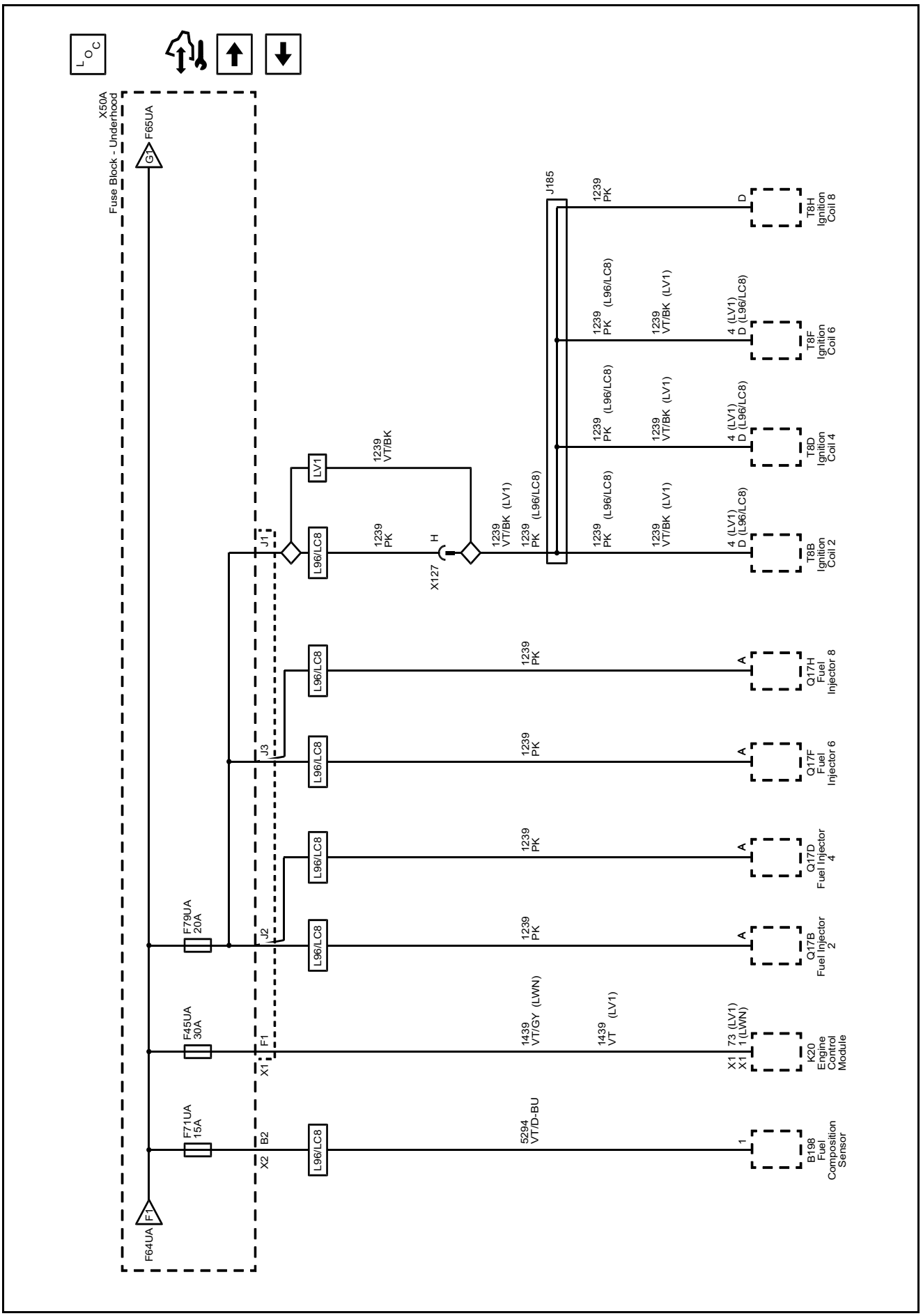
Power Distribution Schematics (Fuses F6UA, F10UA, F17UA, F28UA, F29UA, F30UA, and F31UA)



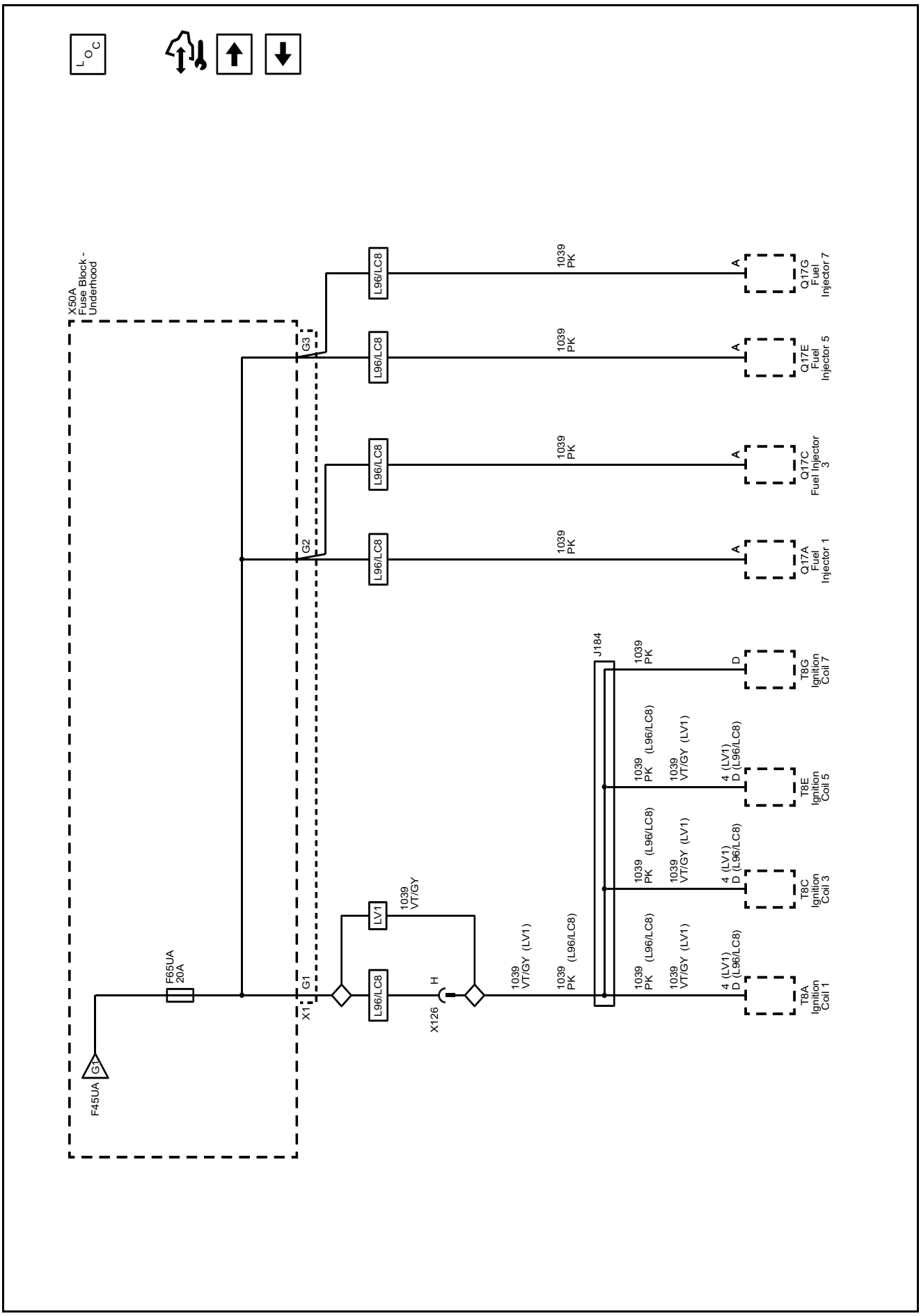
Power Distribution Schematics (Fuses F62UA, F64UA, F76UA, F77UA, and F78UA)



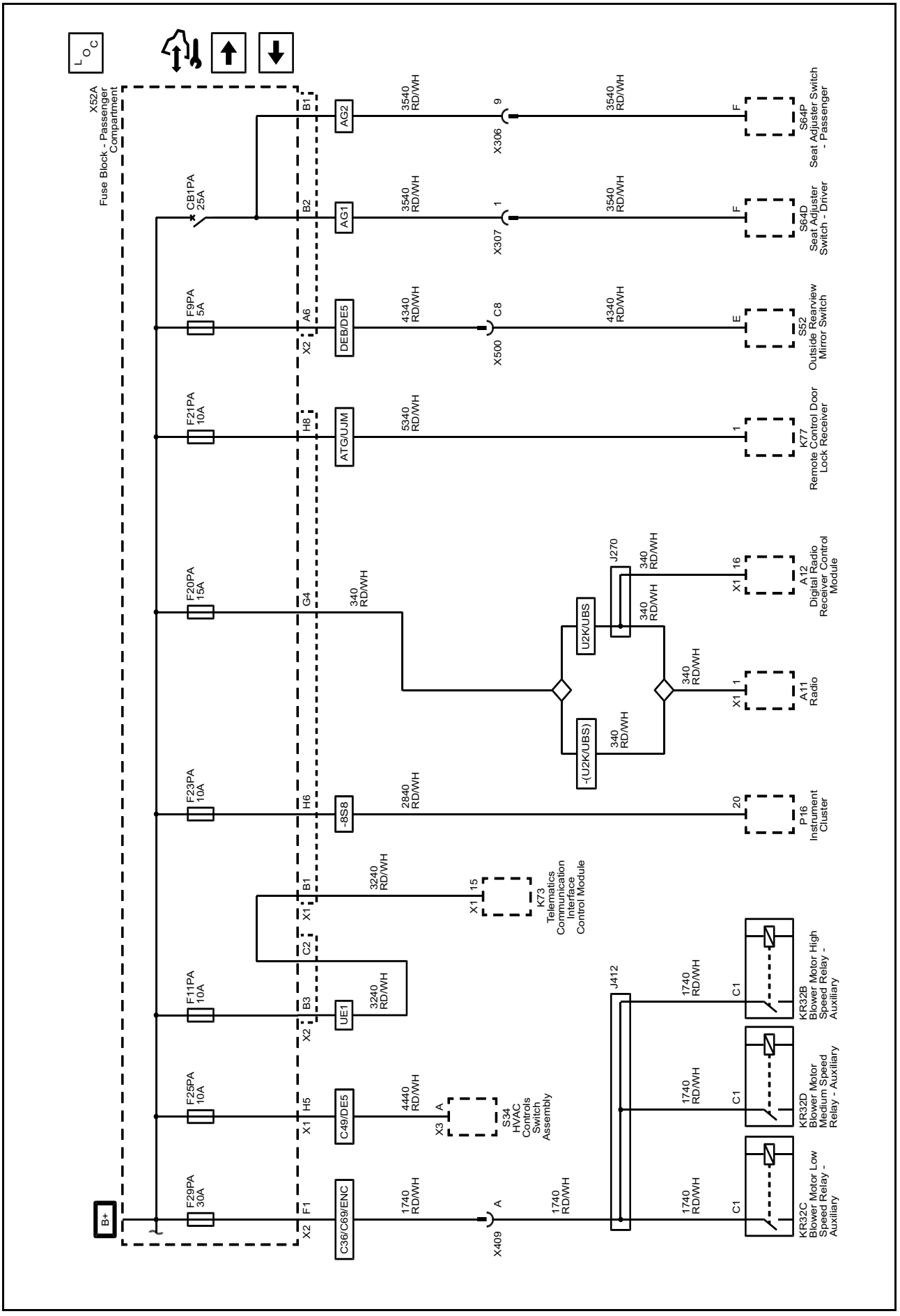
Power Distribution Schematics (Fuses F45UA, F71UA, and F79UA)



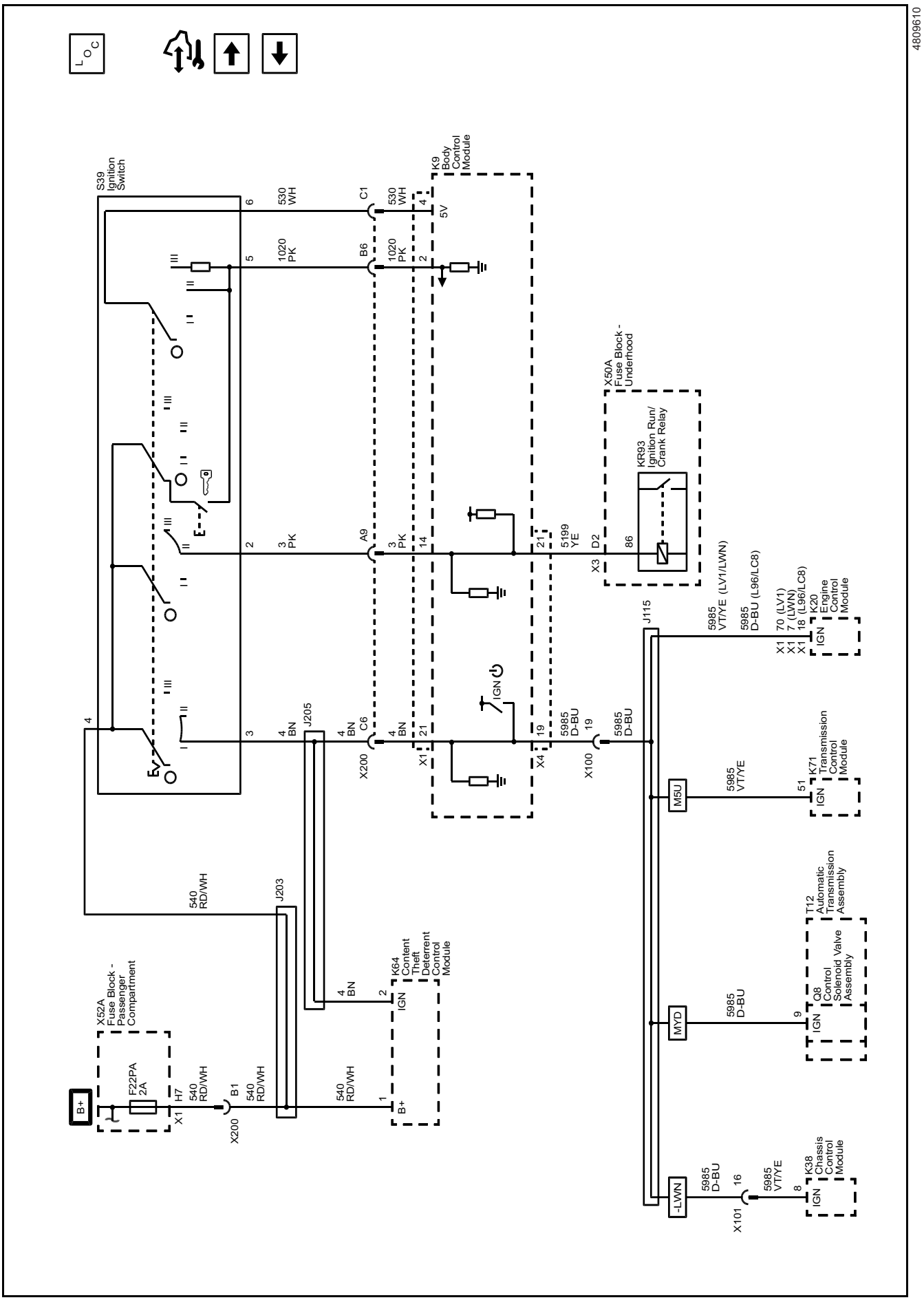
Power Distribution Schematics (Fuse F65UA)



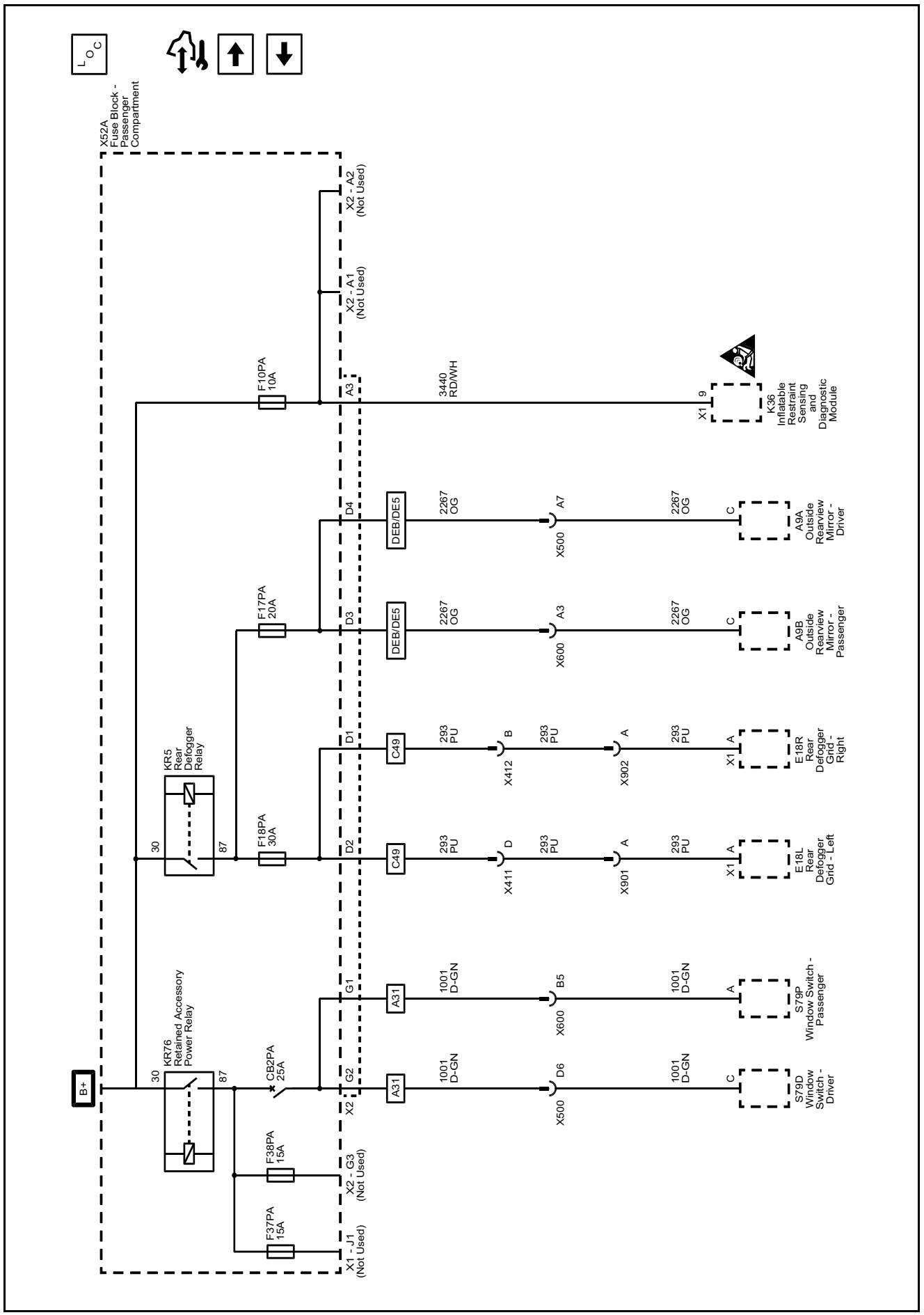
Power Distribution Schematics (Fuses F9PA, F11PA, F20PA, F21PA, F23PA, F25PA, F29PA, and Circuit Breaker CB1PA)



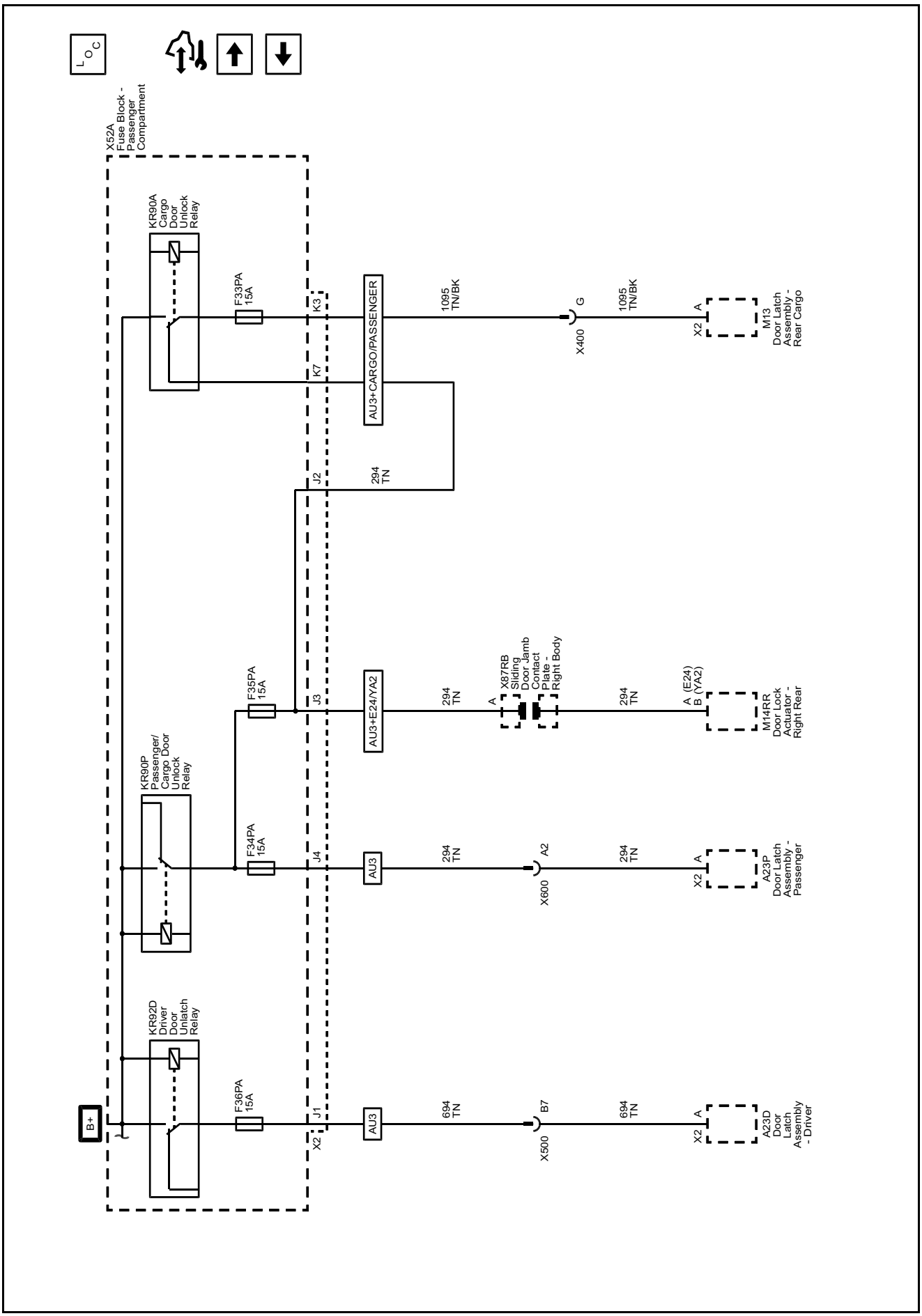
Power Distribution Schematics (Ignition Switch and Fuse F22PA)



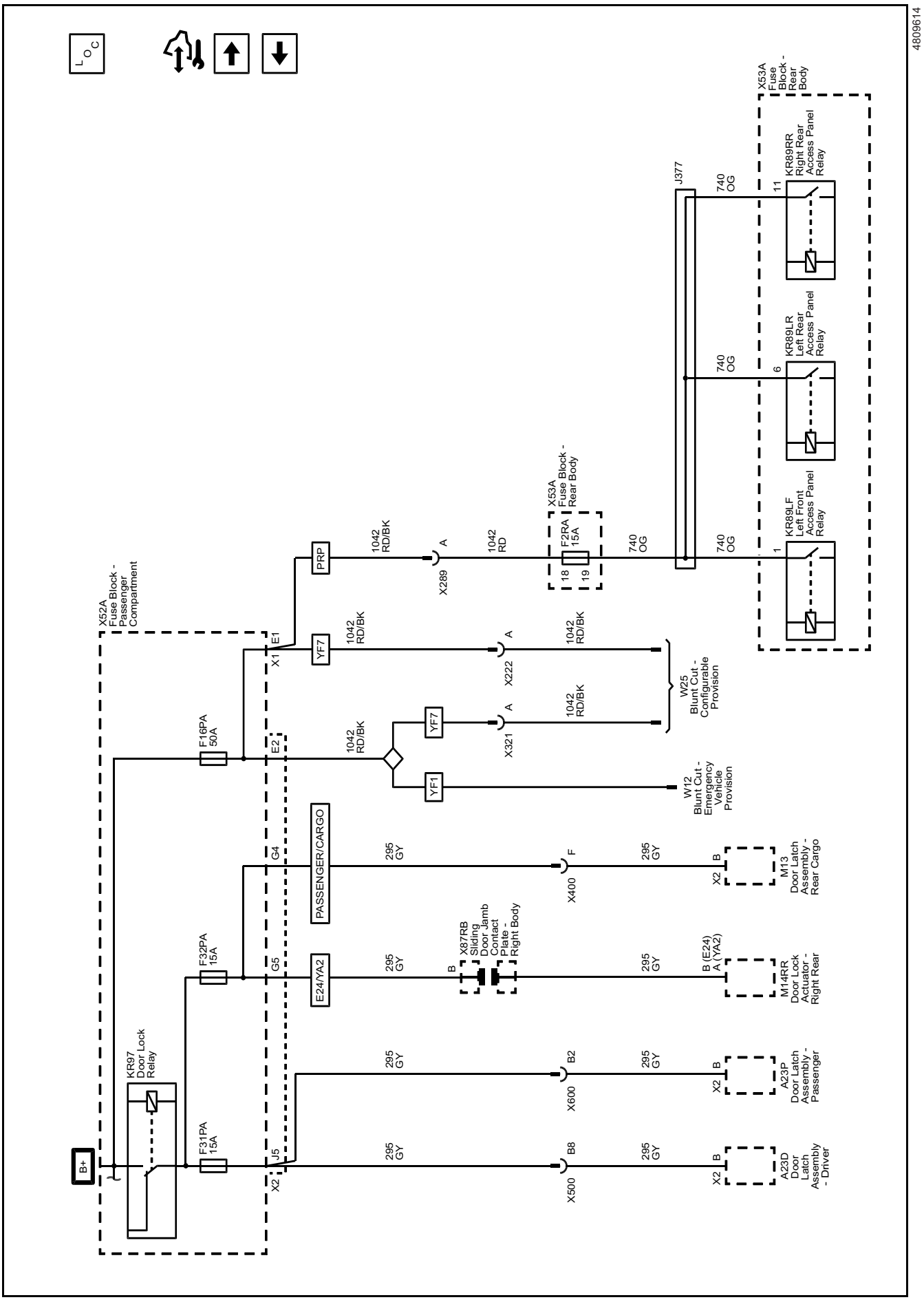
Power Distribution Schematics (Fuses F10PA, F17PA, F18PA, F37PA, F38PA, and Circuit Breaker CB2PA)



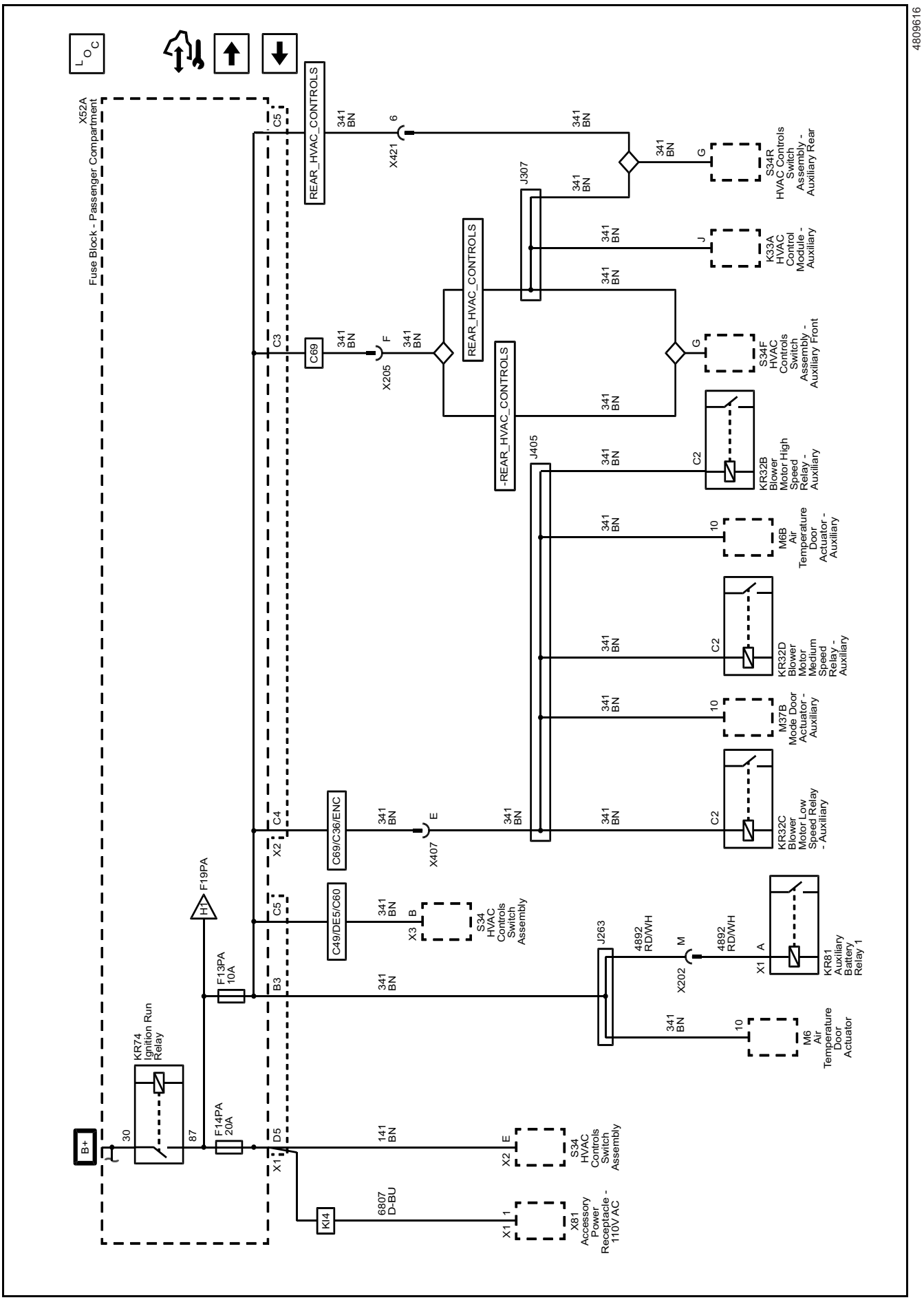
Power Distribution Schematics (Fuses F33PA, F34PA, F35PA, and F36PA)



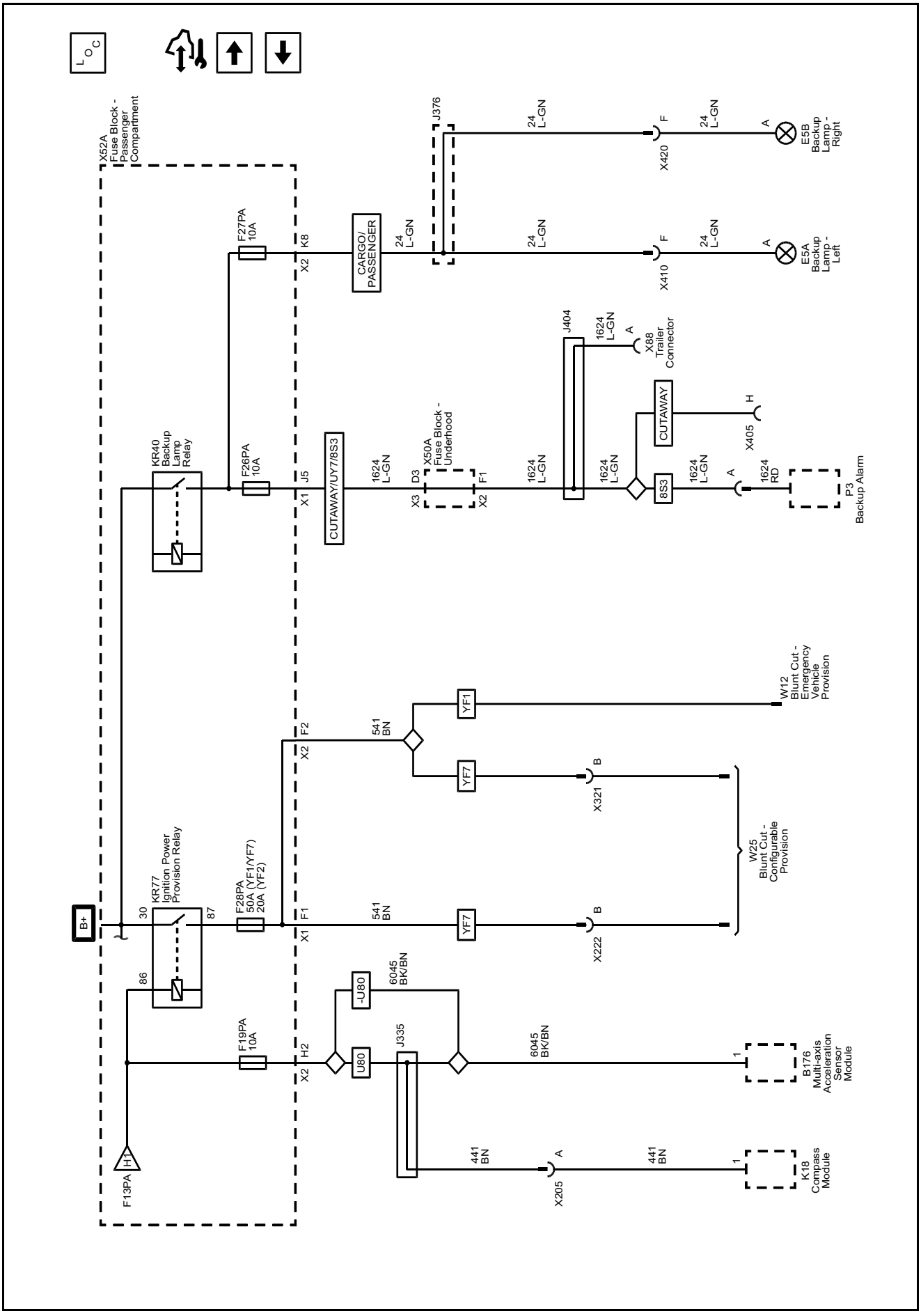
Power Distribution Schematics (Fuses F16PA, F31PA, F32PA, and F2RA)



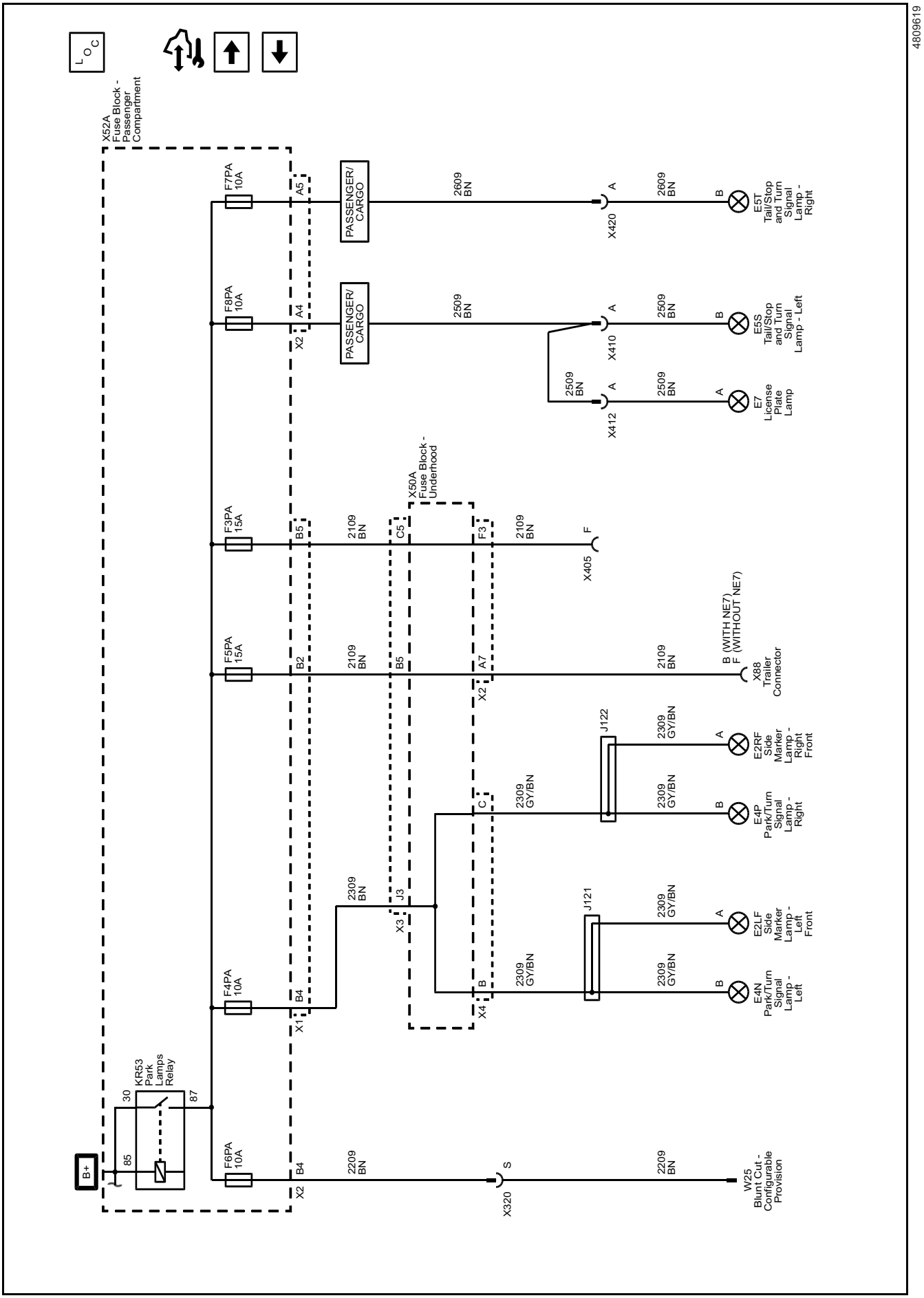
Power Distribution Schematics (Fuses F13PA and F14PA)



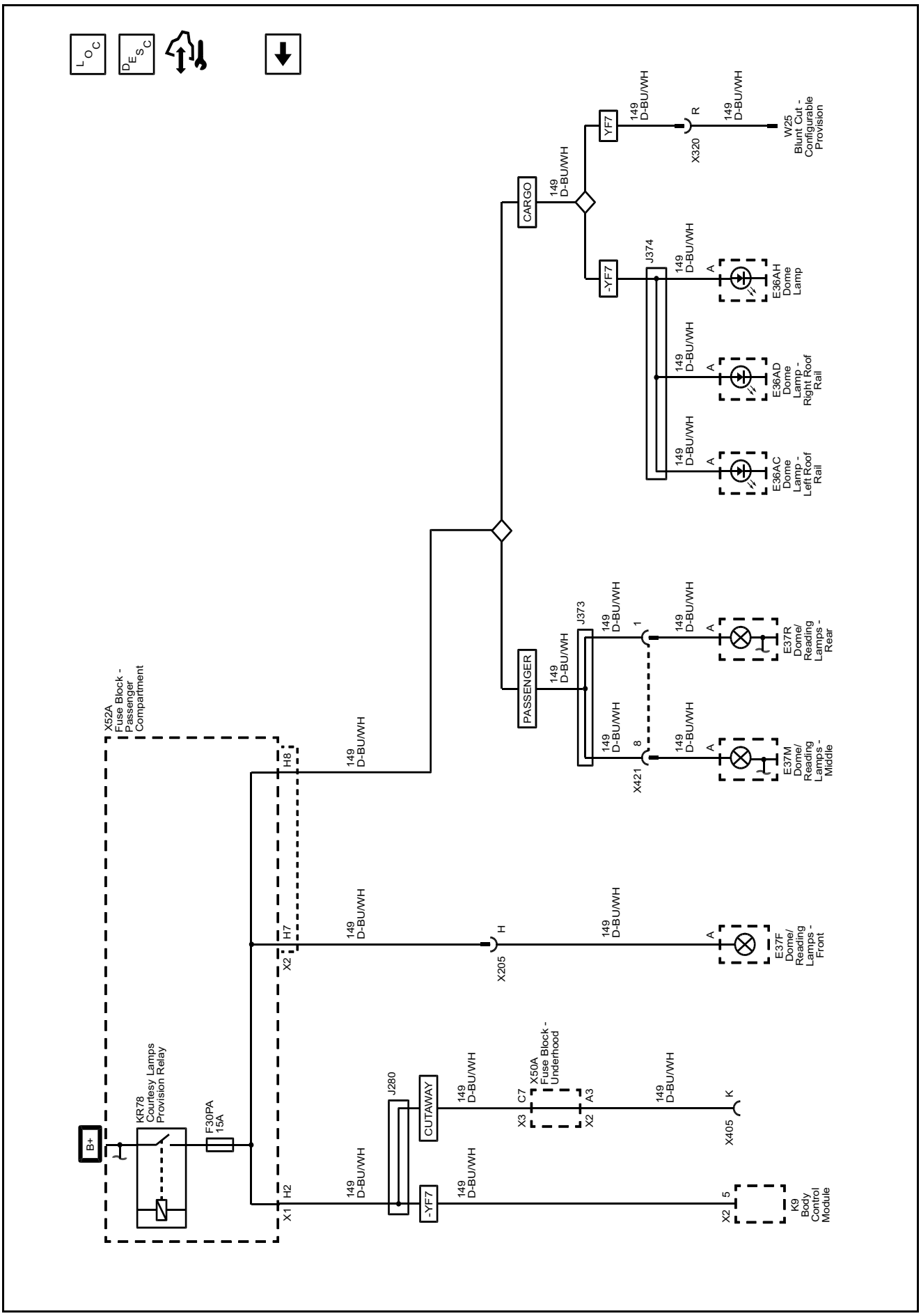
Power Distribution Schematics (Fuses F19PA, F26PA, F27PA, and F28PA)



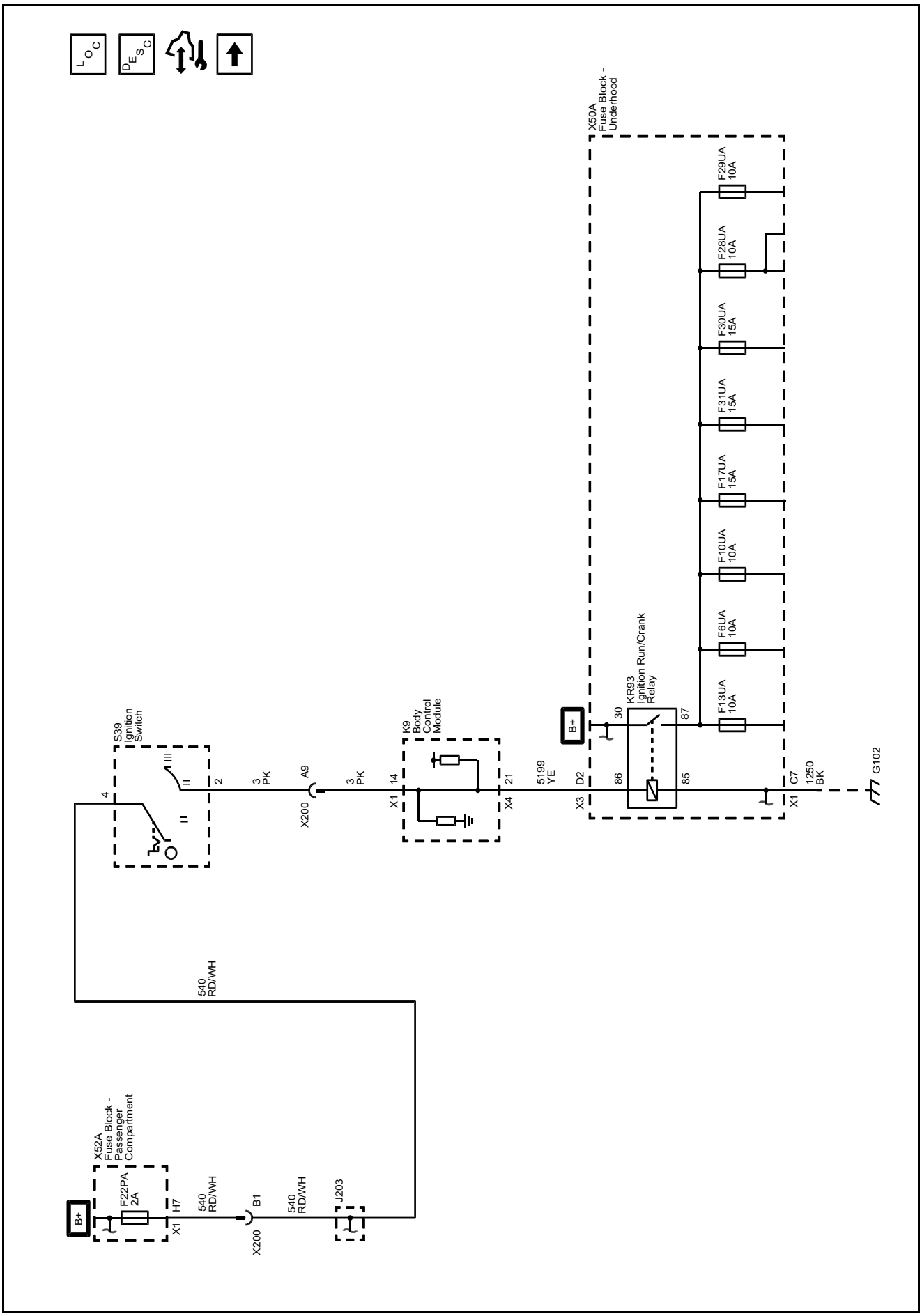
Power Distribution Schematics (Fuses F3PA, F4PA, F5PA, F6PA, F7PA, and F8PA)



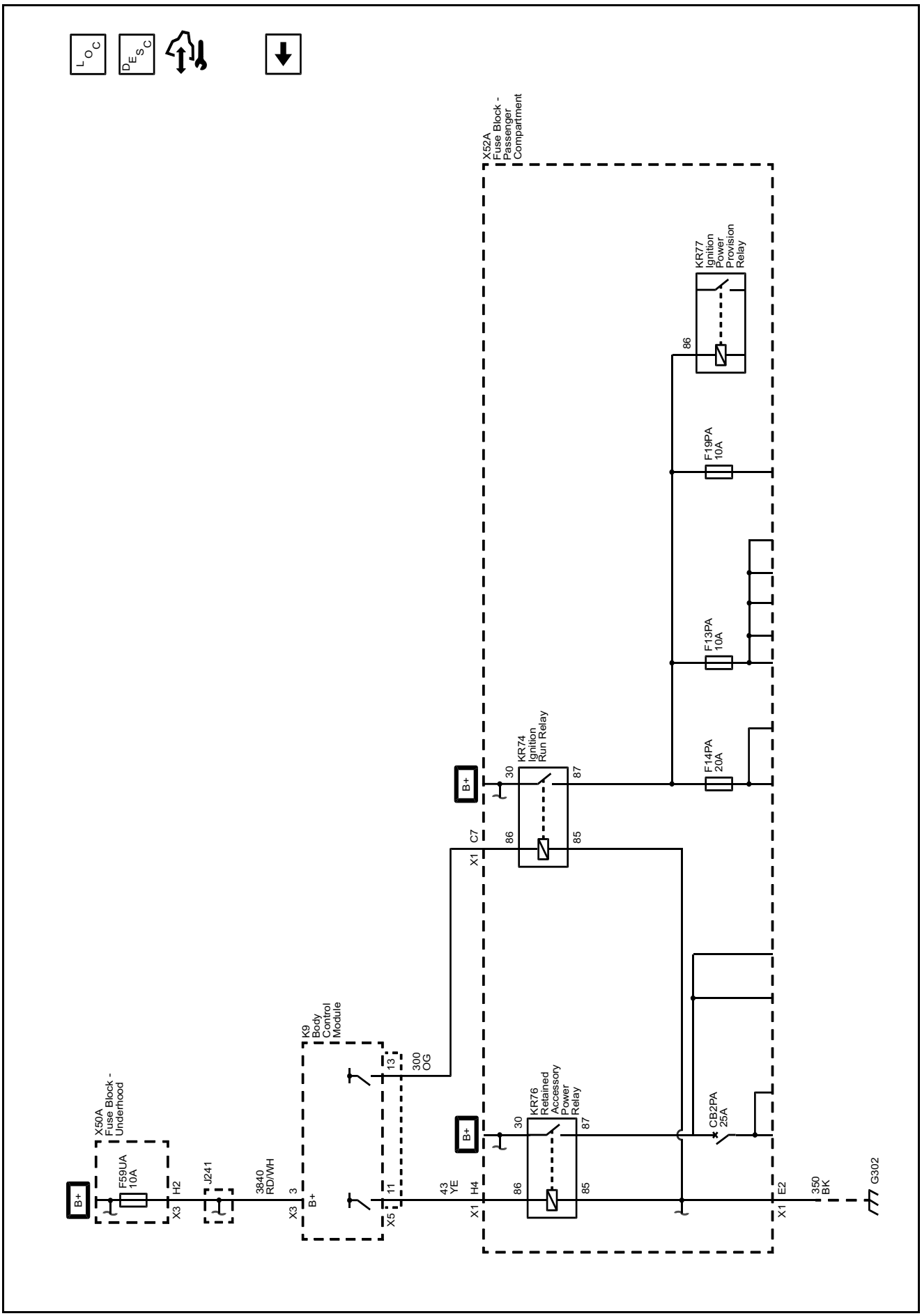
Power Distribution Schematics (Fuse F30PA)



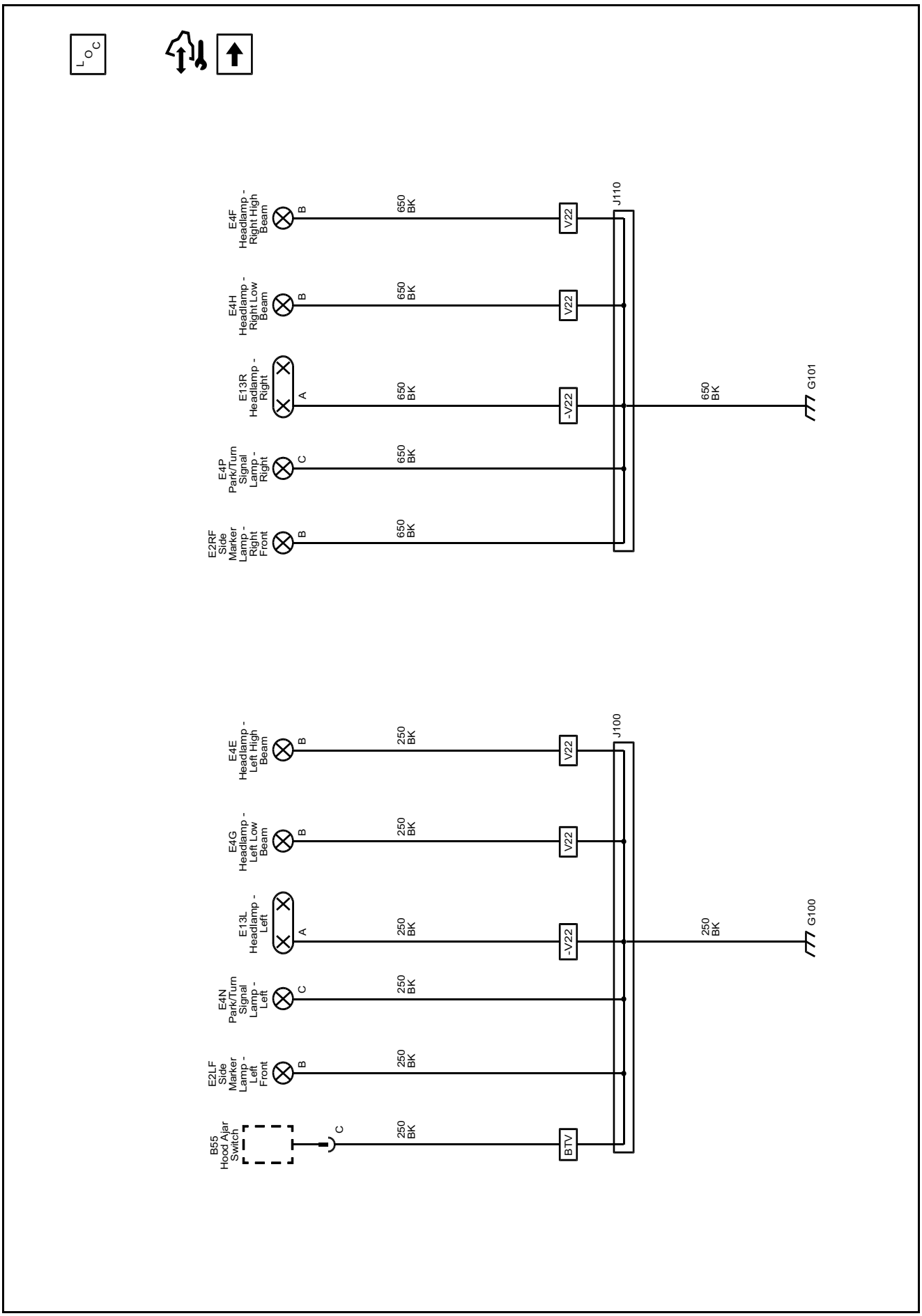
Power Moding Schematics (Ignition Run/Crank Relay)



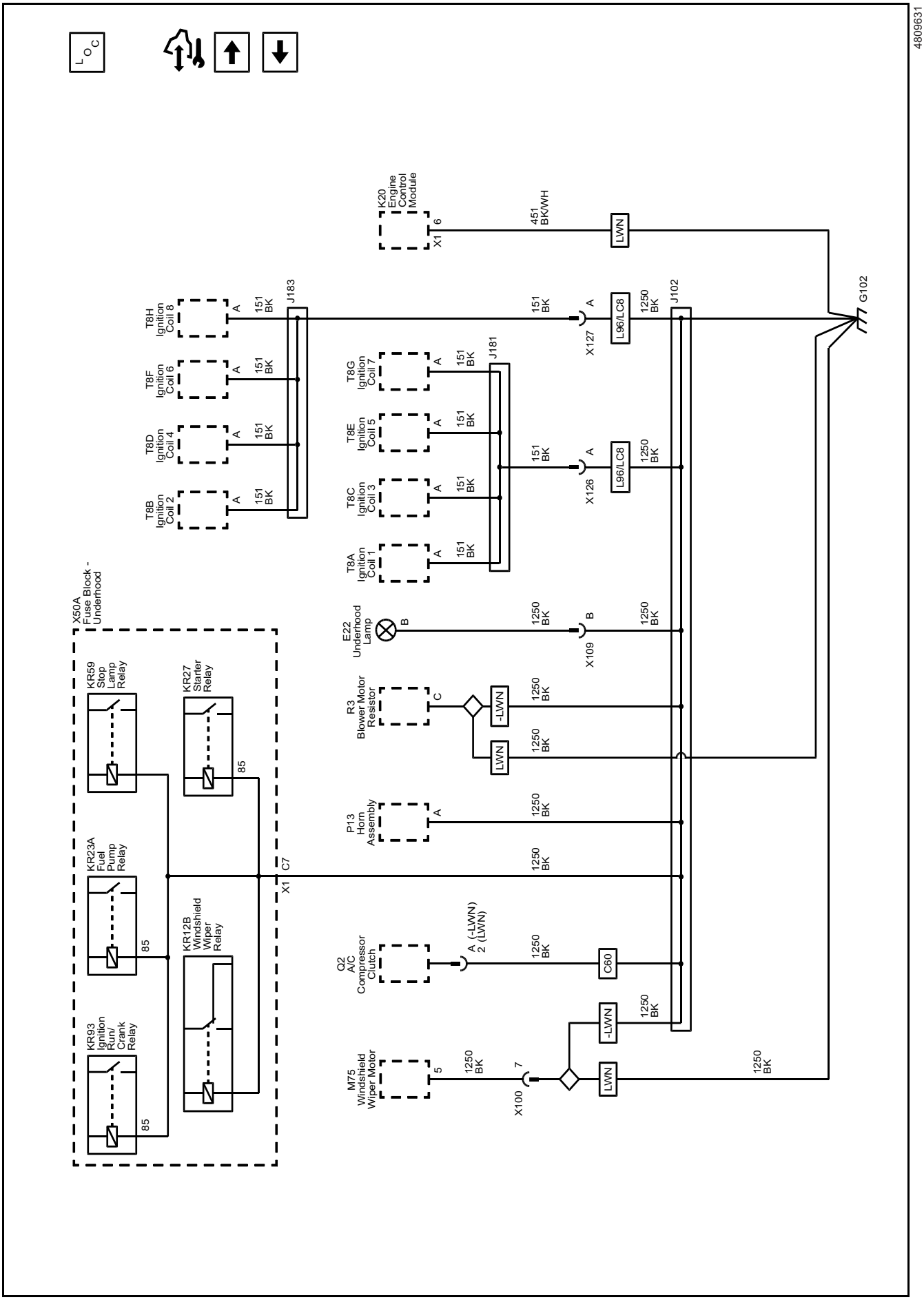
Power Moding Schematics (Retained Accessory Power Relay and Ignition Run Relay)



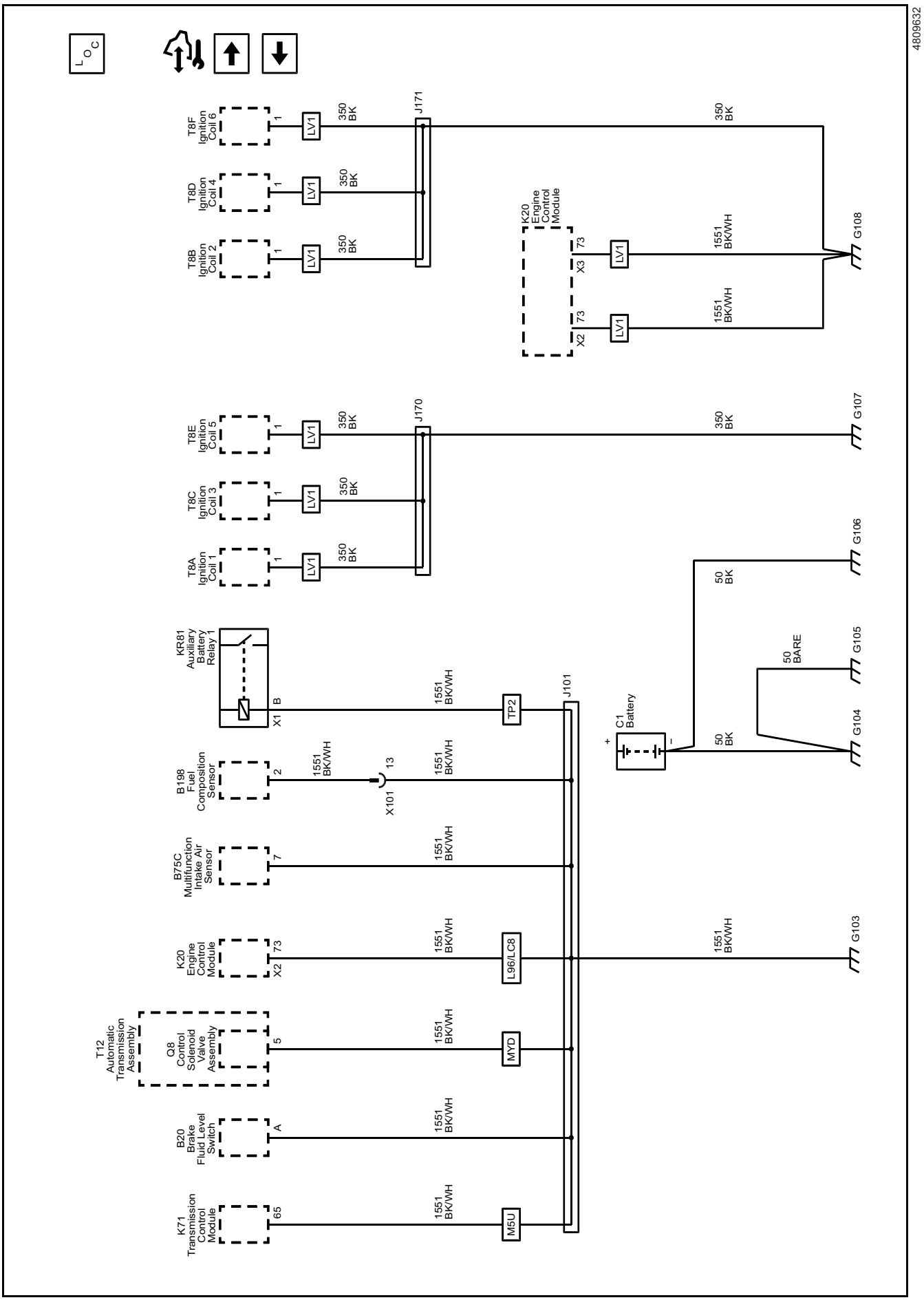
Ground Distribution Schematics (G100 and G101)

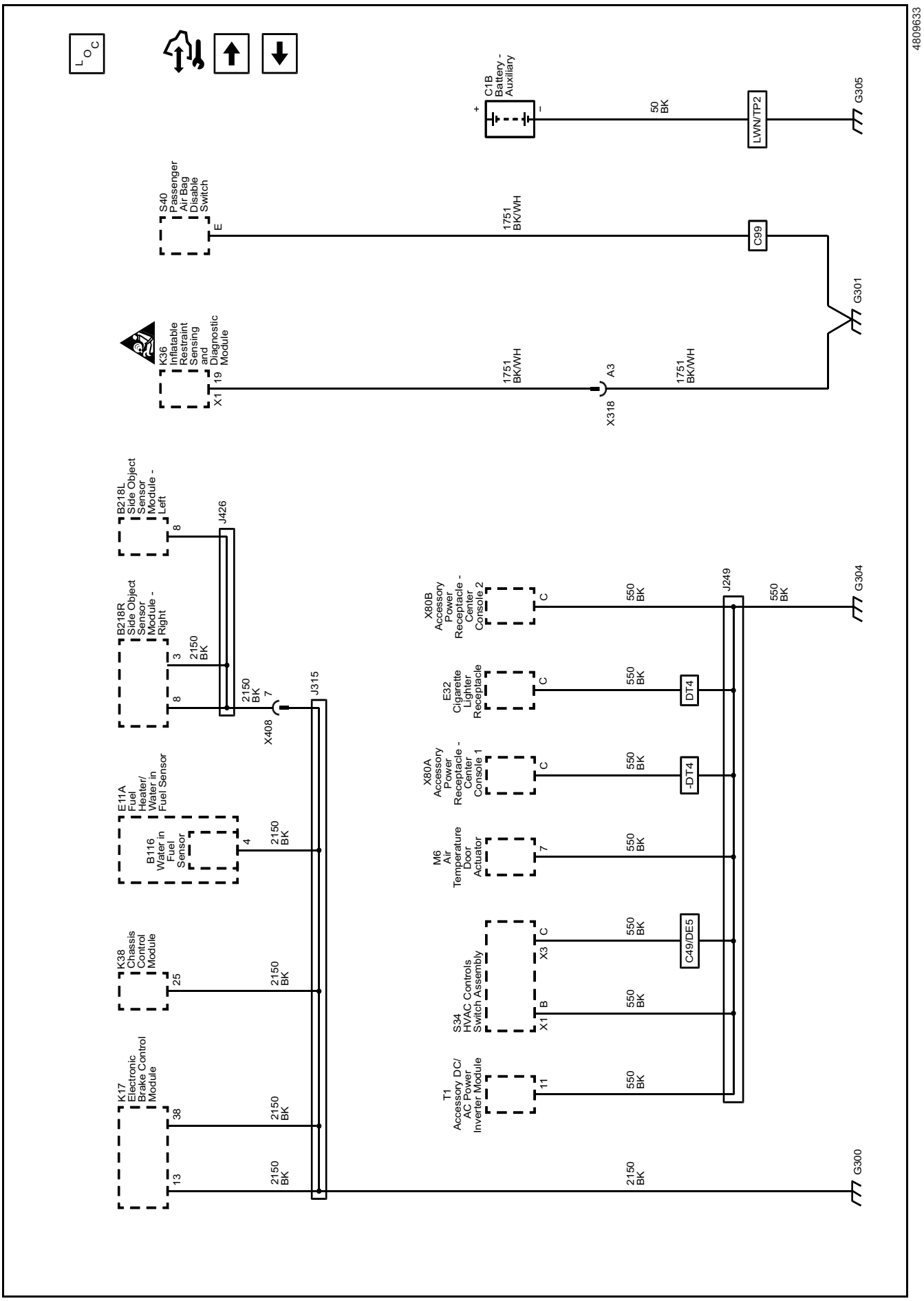


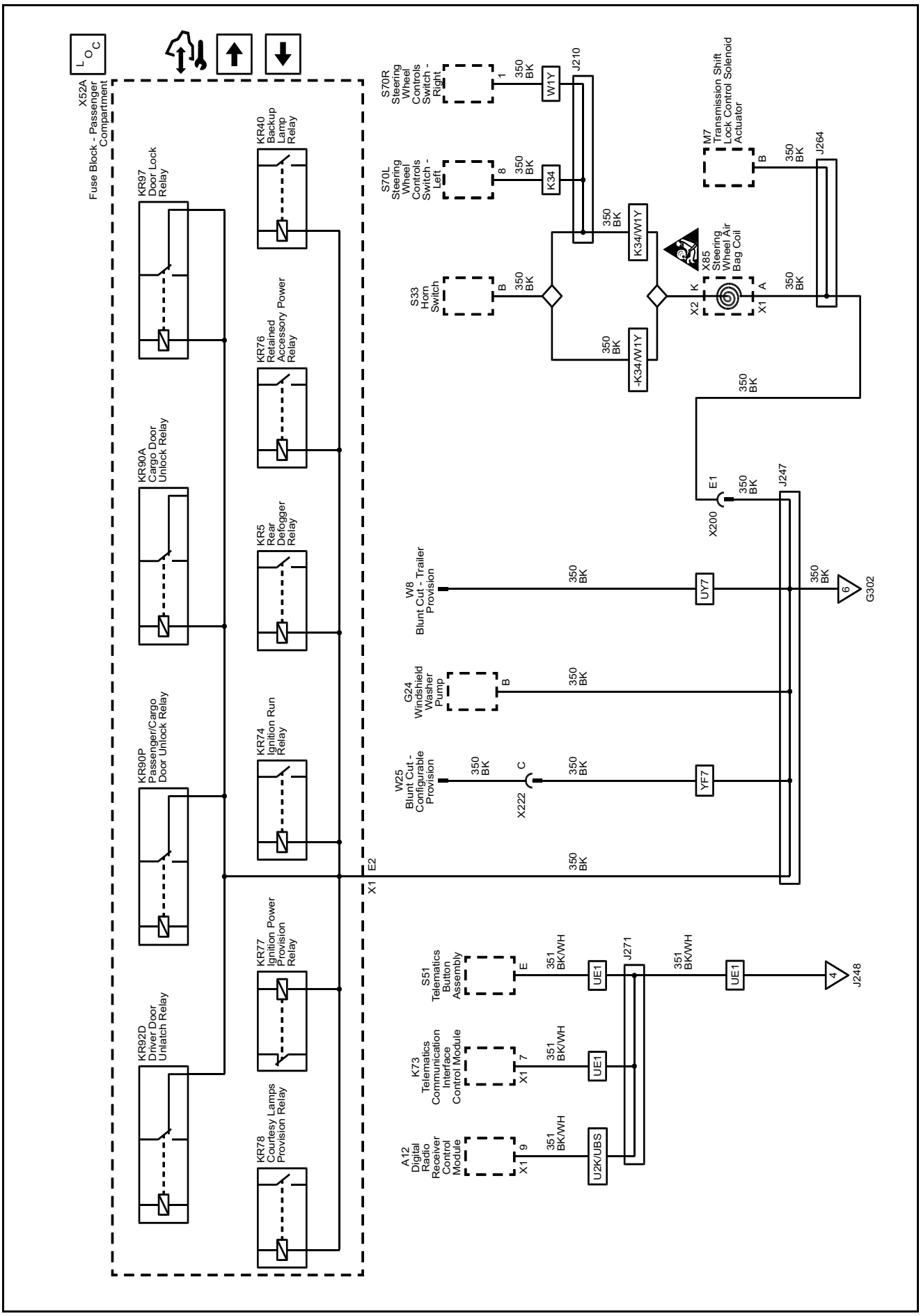
Ground Distribution Schematics (G102)



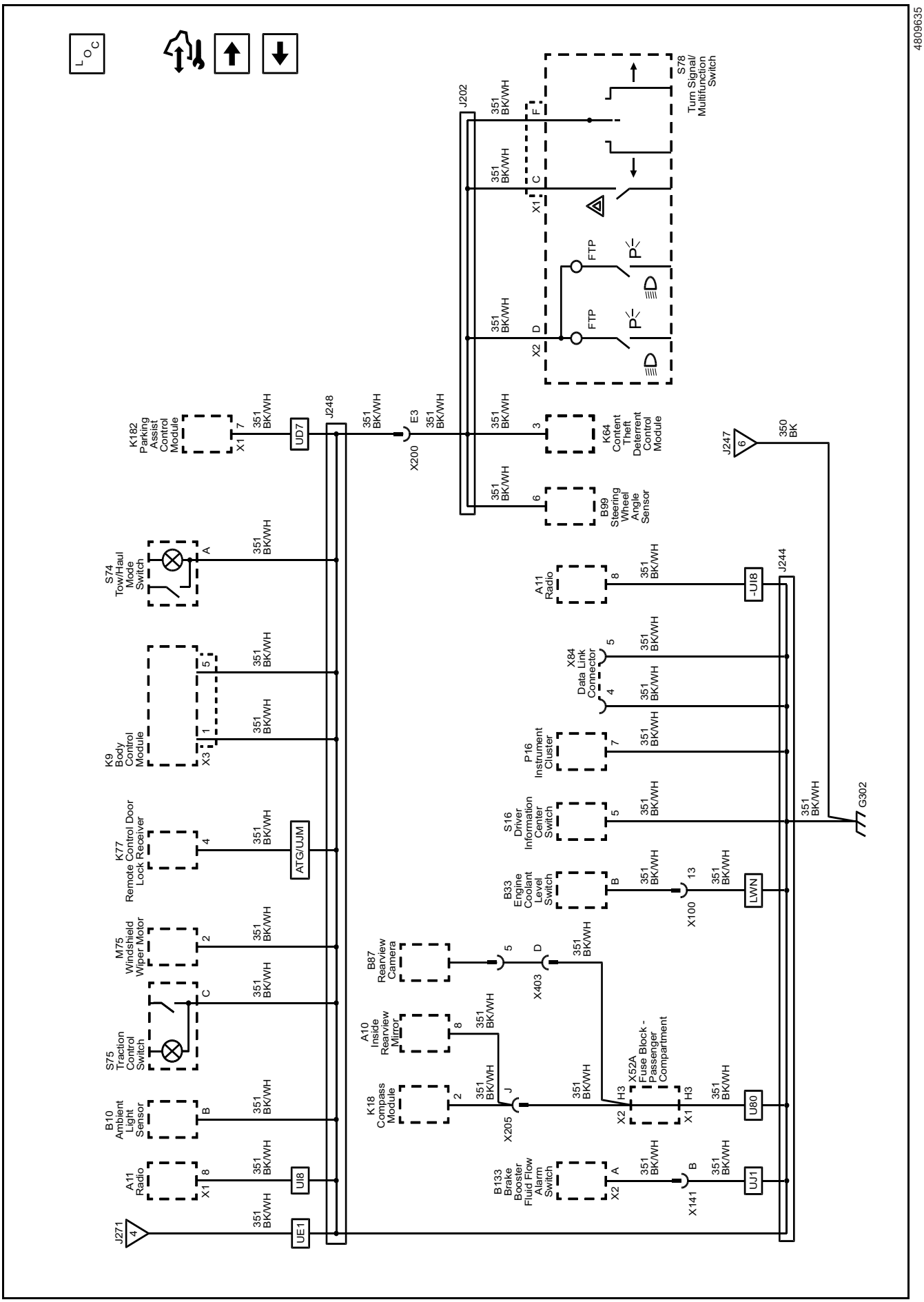
Ground Distribution Schematics (G103, G104, G105, G106, G107 and G108)



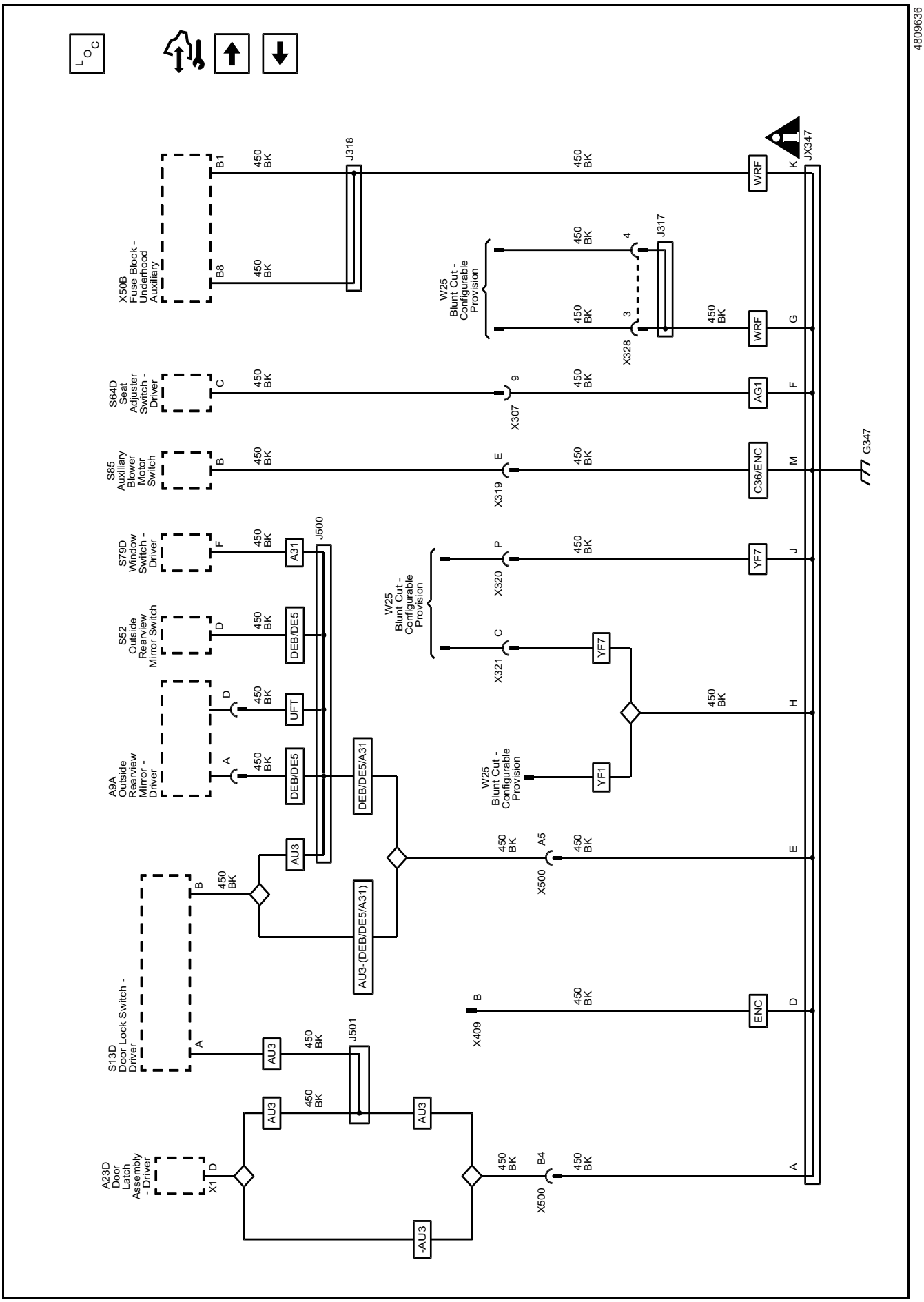

Ground Distribution Schematics (G300, G301, G304, and G305)
4809633
C1B Battery - Auxiliary
50 BK
LWN/TP2
G305
S40 Passenger Air Bag Disable Switch
E
1751 BK/WH
C99
G301
K36 Inflatable Restraint Sensing and Diagnostic Module
X1
19
1751 BK/WH
A3
X318
1751 BK/WH
B218L Side Object Sensor Module - Left
8
J426
B218R Side Object Sensor Module - Right
3
2150 BK
8
2150 BK
7
X408
J315
E11A Fuel Heater/ Water in Fuel Sensor
B116 Water in Fuel Sensor
4
2150 BK
K38 Chassis Control Module
25
2150 BK
K17 Electronic Brake Control Module
38
2150 BK
13
2150 BK
G300
X80B Accessory Power Receptacle - Center Console 2
C
550 BK
J249
550 BK
G304
E32 Cigarette Lighter Receptacle
C
550 BK
DT4
X80A Accessory Power Receptacle - Center Console 1
C
550 BK
DT4
M6 Air Temperature Door Actuator
7
550 BK
S34 HVAC Controls Switch Assembly
X1
B
X3
C
550 BK
C49/DE5
550 BK
T1 Accessory DC/ AC Power Inverter Module
11
550 BK
2150 BK


Ground Distribution Schematics (G302 (1 of 2))
4809634
X52A
Fuse Block - Passenger Compartment
KR97
Door Lock Relay
KR90A
Cargo Door Unlock Relay
KR90P
Passenger/Cargo Door Unlock Relay
KR92D
Driver Door Unlatch Relay
KR40
Backup Lamp Relay
KR76
Retained Accessory Power Relay
KR5
Rear Defogger Relay
KR74
Ignition Run Relay
KR77
Ignition Power Provision Relay
KR78
Courtesy Lamps Provision Relay
X1
E2
S70R
Steering Wheel Controls Switch - Right
S70L
Steering Wheel Controls Switch - Left
S33
Horn Switch
X85
Steering Wheel Air Bag Coil
M7
Transmission Shift Lock Control Solenoid Actuator
J210
J264
J247
W1Y
K34
K34/W1Y
-K34/W1Y
W8
Blunt Cut - Trailer Provision
UY7
G24
Windshield Washer Pump
W25
Blunt Cut - Configurable Provision
YF7
X200
X222
G302
S51
Telematics Button Assembly
K73
Telematics Communication Interface Control Module
A12
Digital Radio Receiver Control Module
UE1
U2K/UBS
J271
J248
350 BK
351 BK/WH

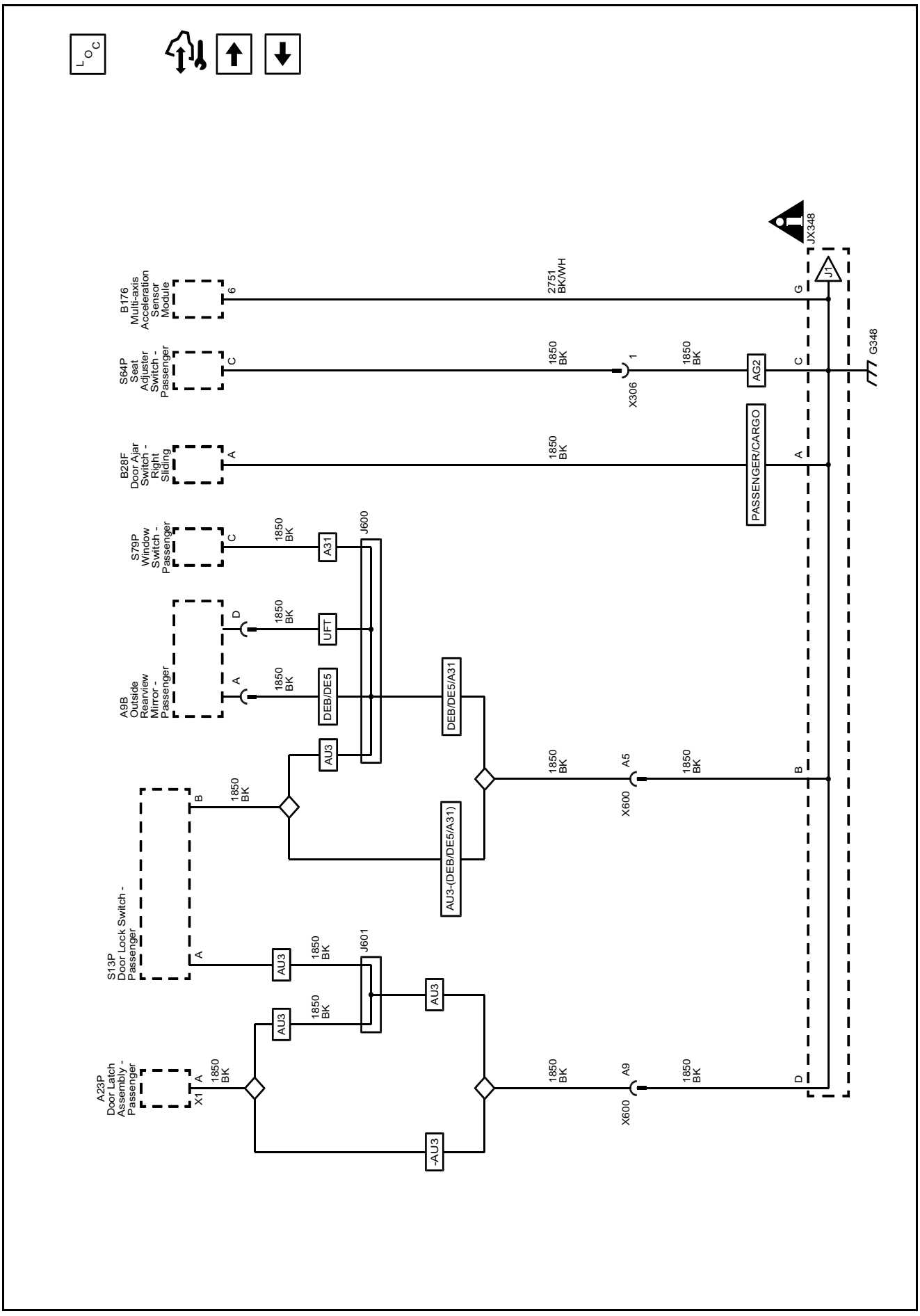
Ground Distribution Schematics (G302 (2 of 2))



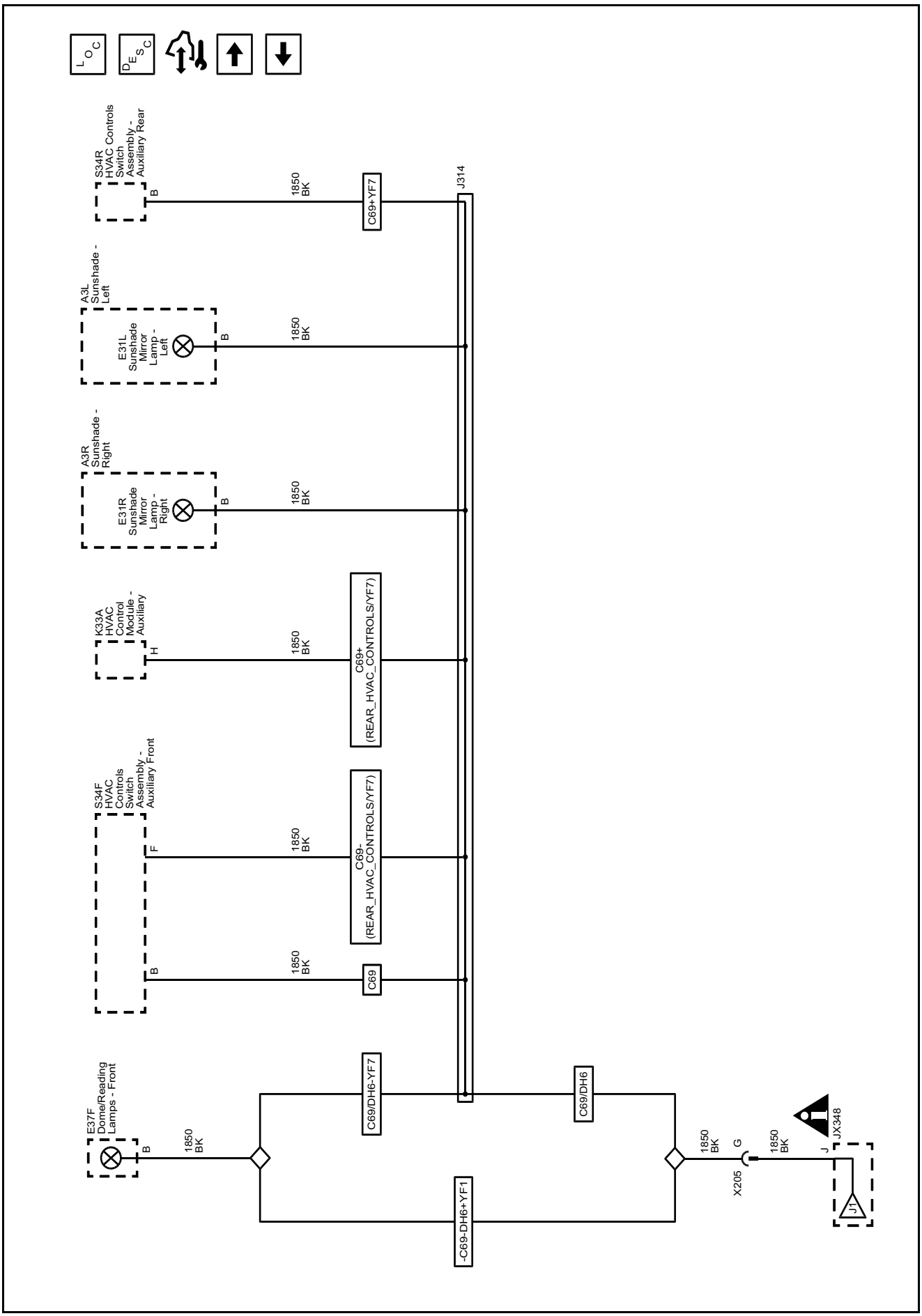
Ground Distribution Schematics (G347)



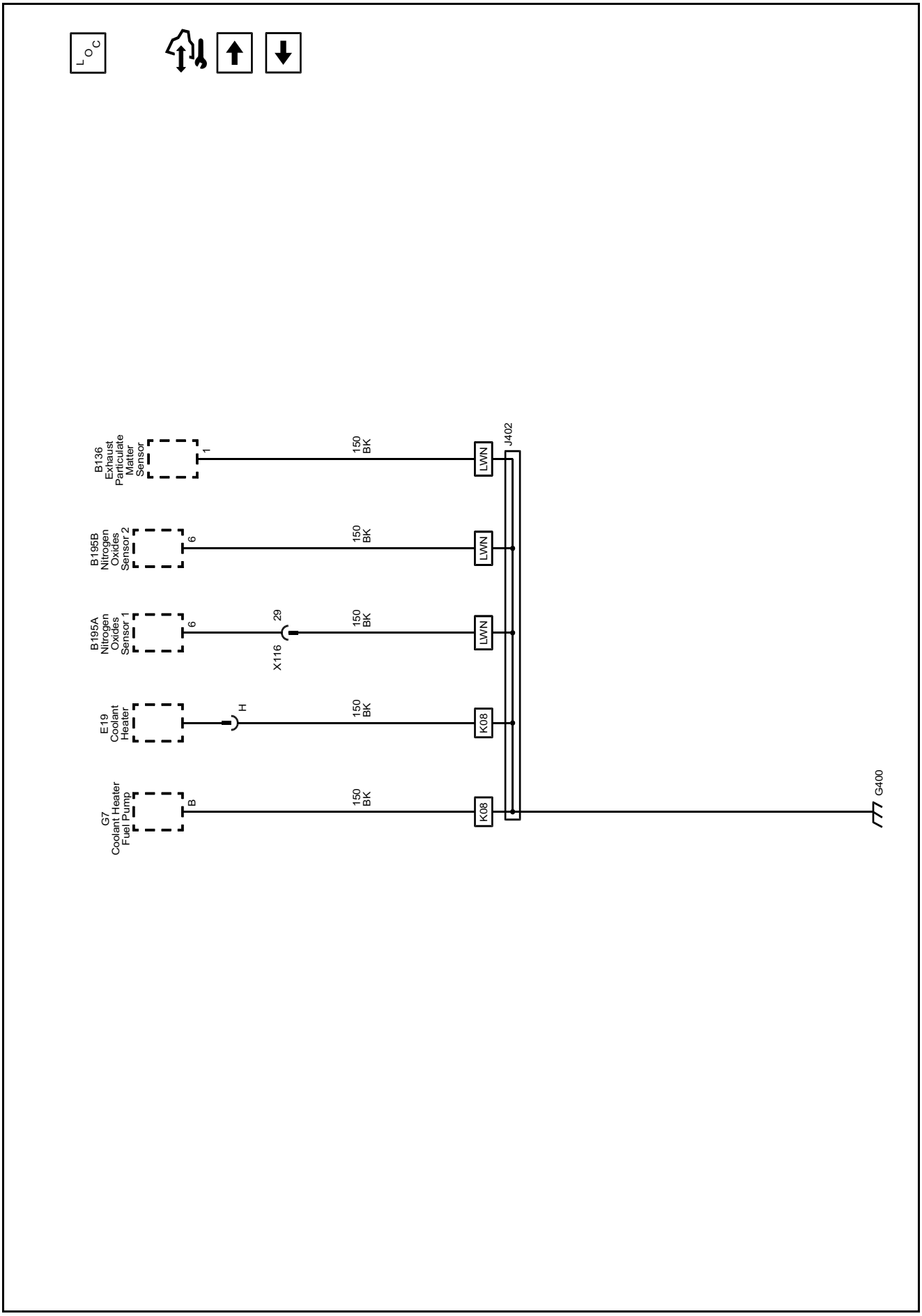
Ground Distribution Schematics (G348 (1 of 2))



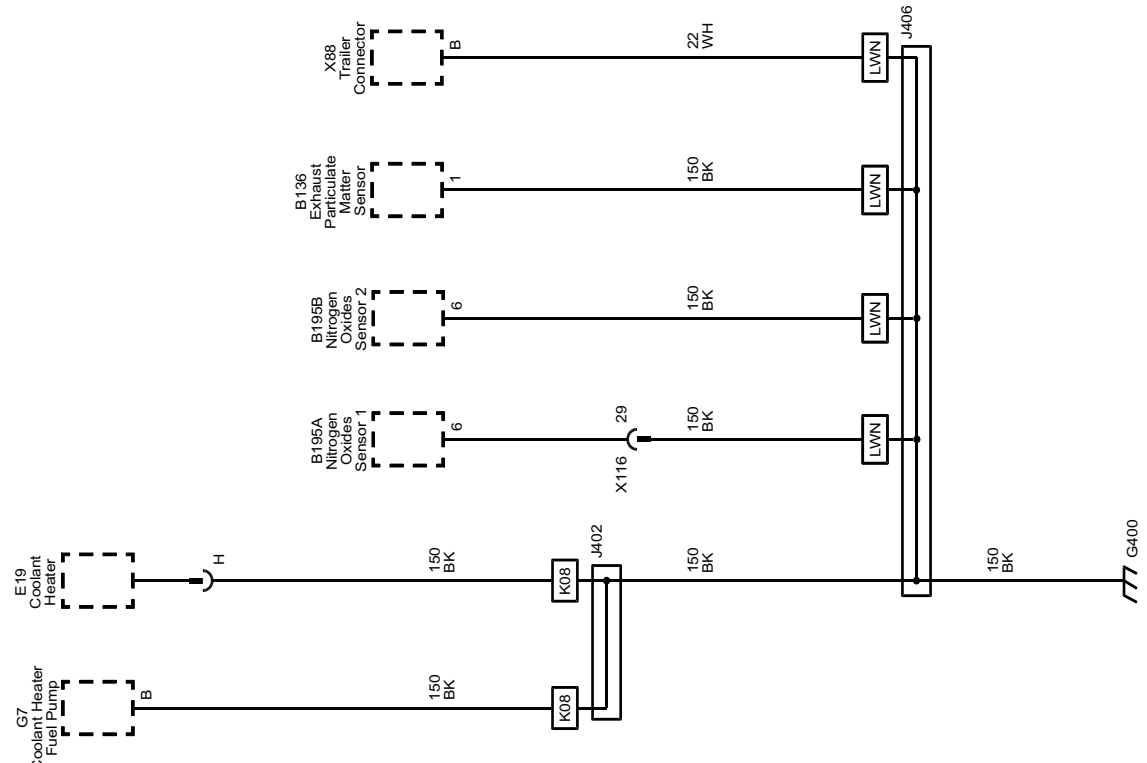
Ground Distribution Schematics (G348 (2 of 2))



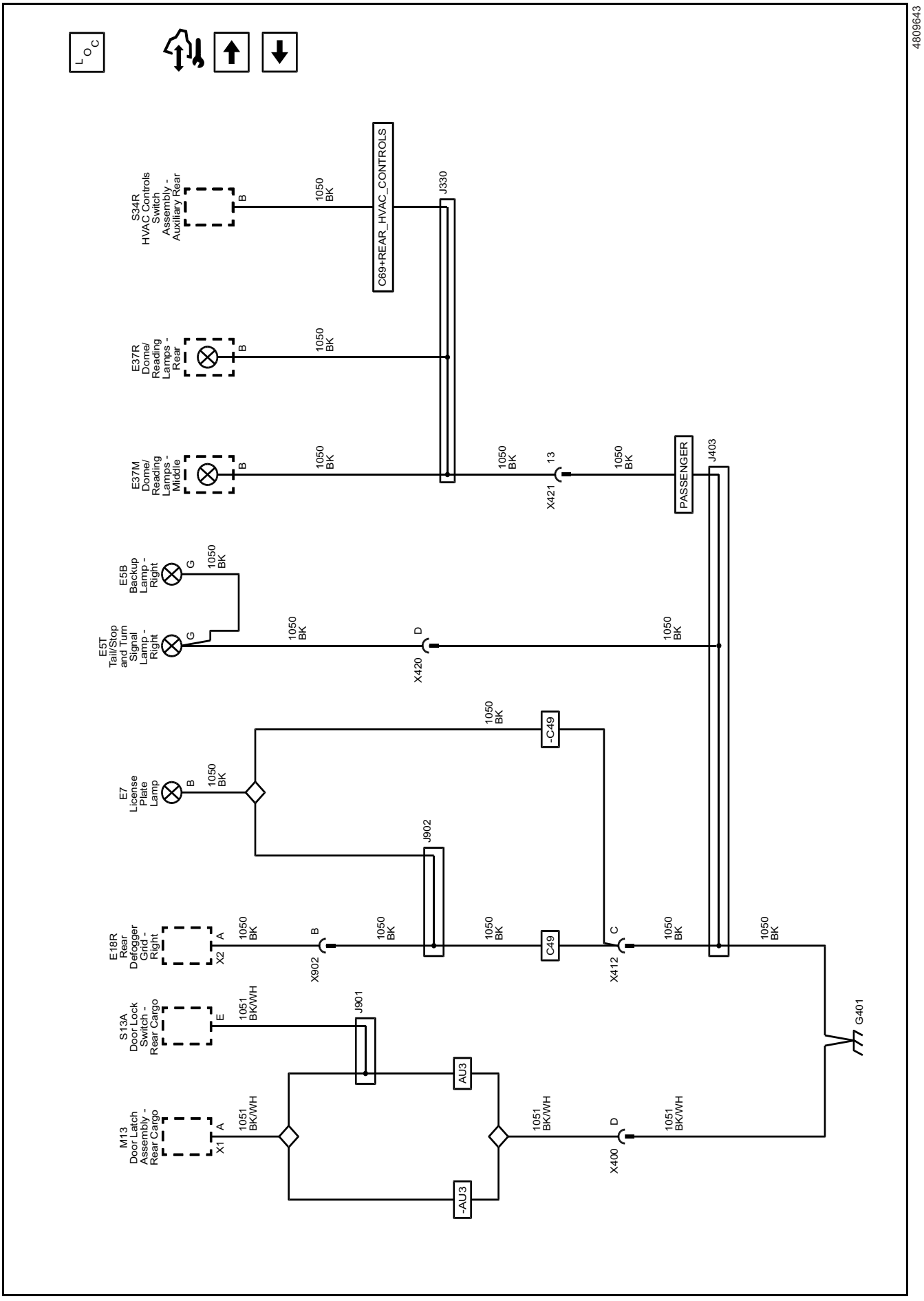
Ground Distribution Schematics (G400 (Without UY7))



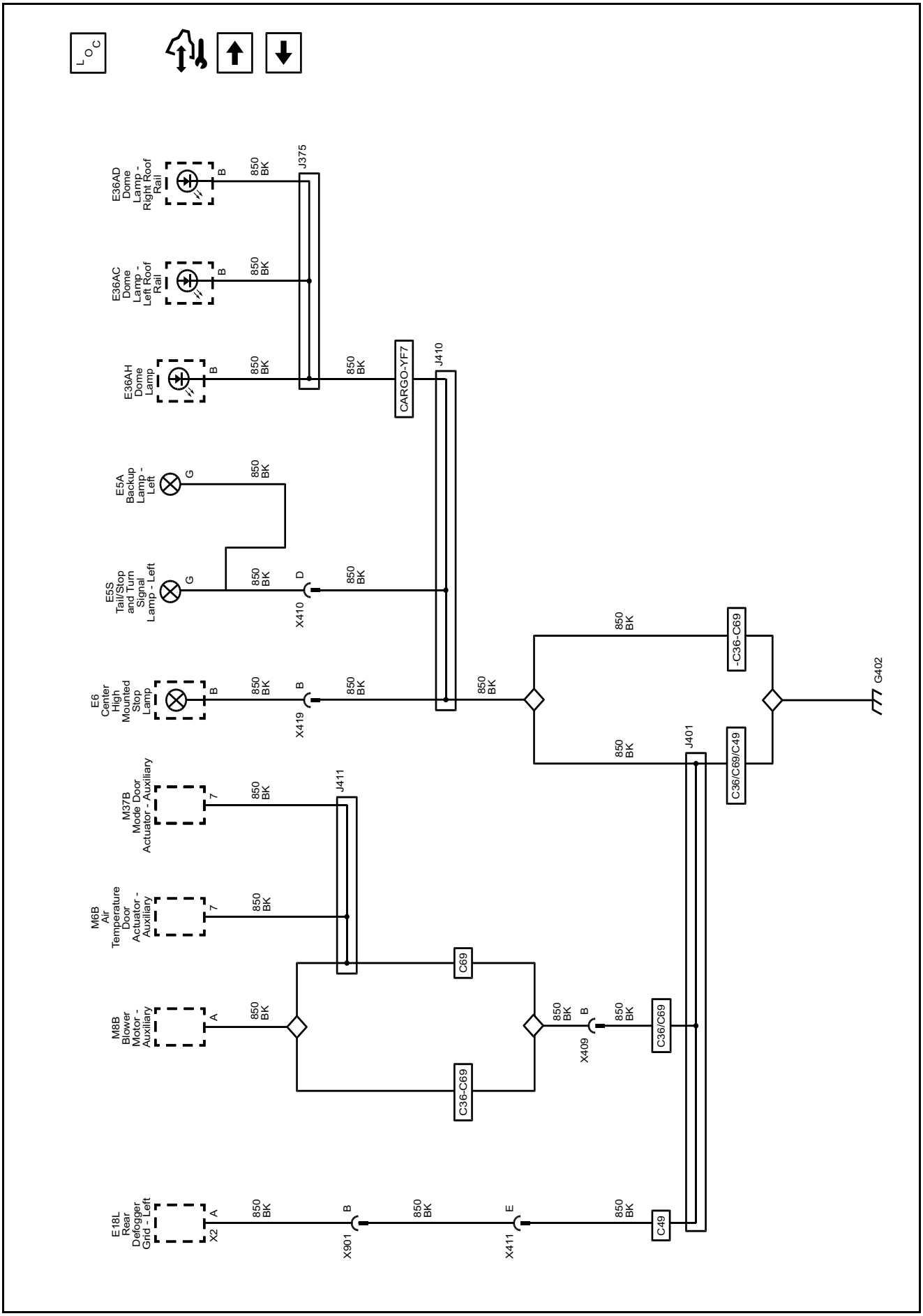
Ground Distribution Schematics (G400 (With UY7))



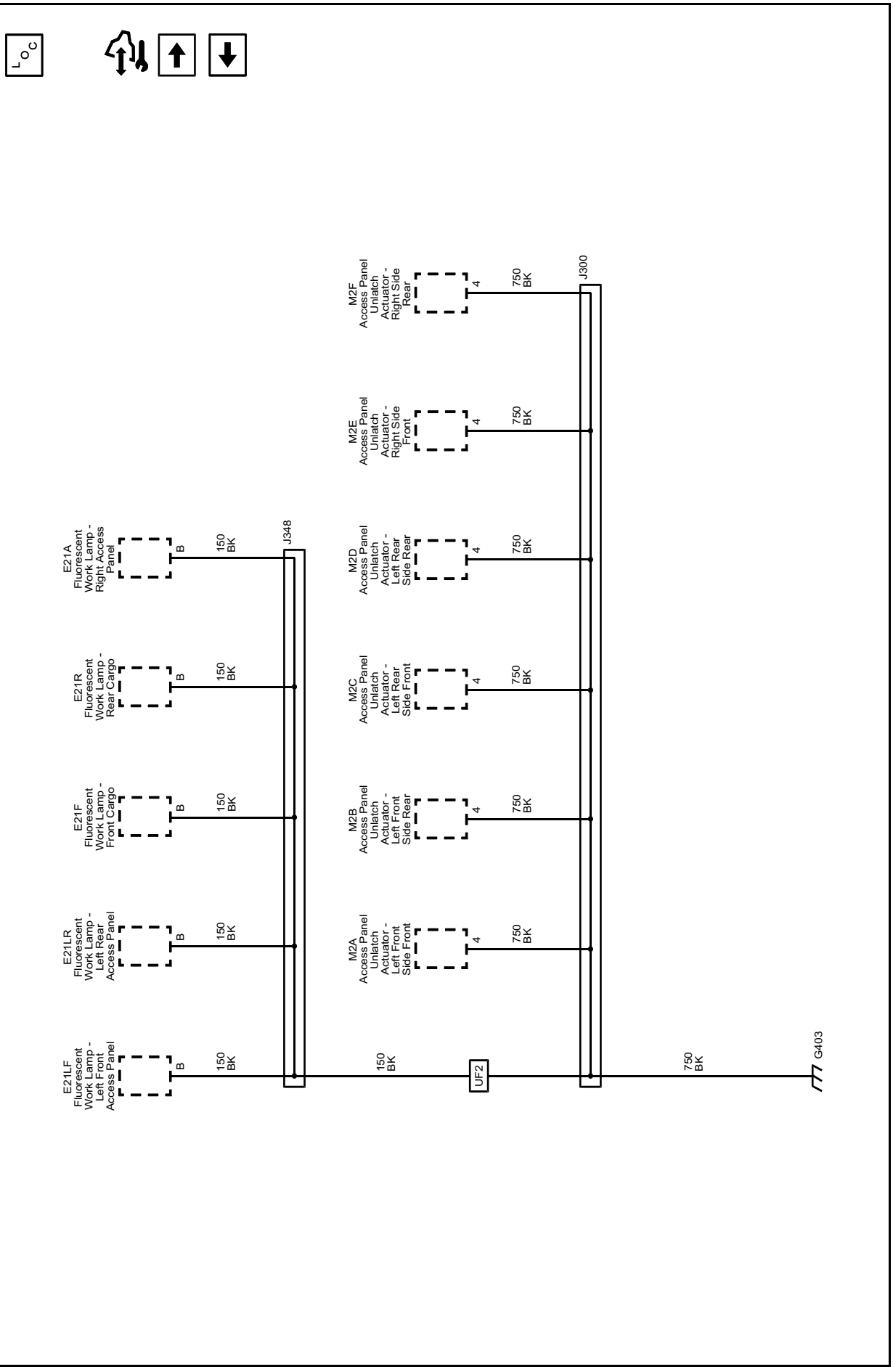
Ground Distribution Schematics (G401 (Passenger or Cargo))



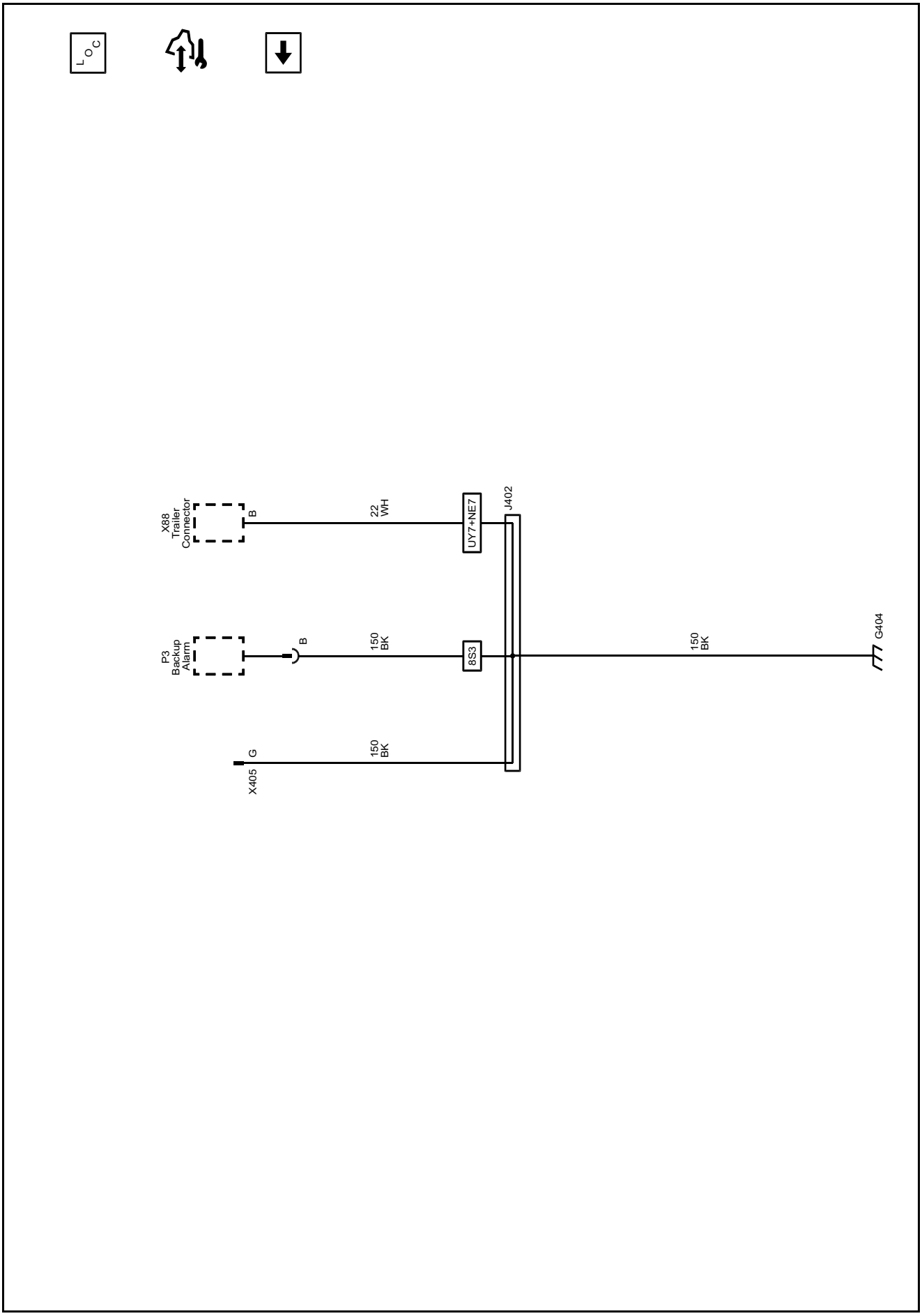
Ground Distribution Schematics (G402 (Passenger or Cargo))



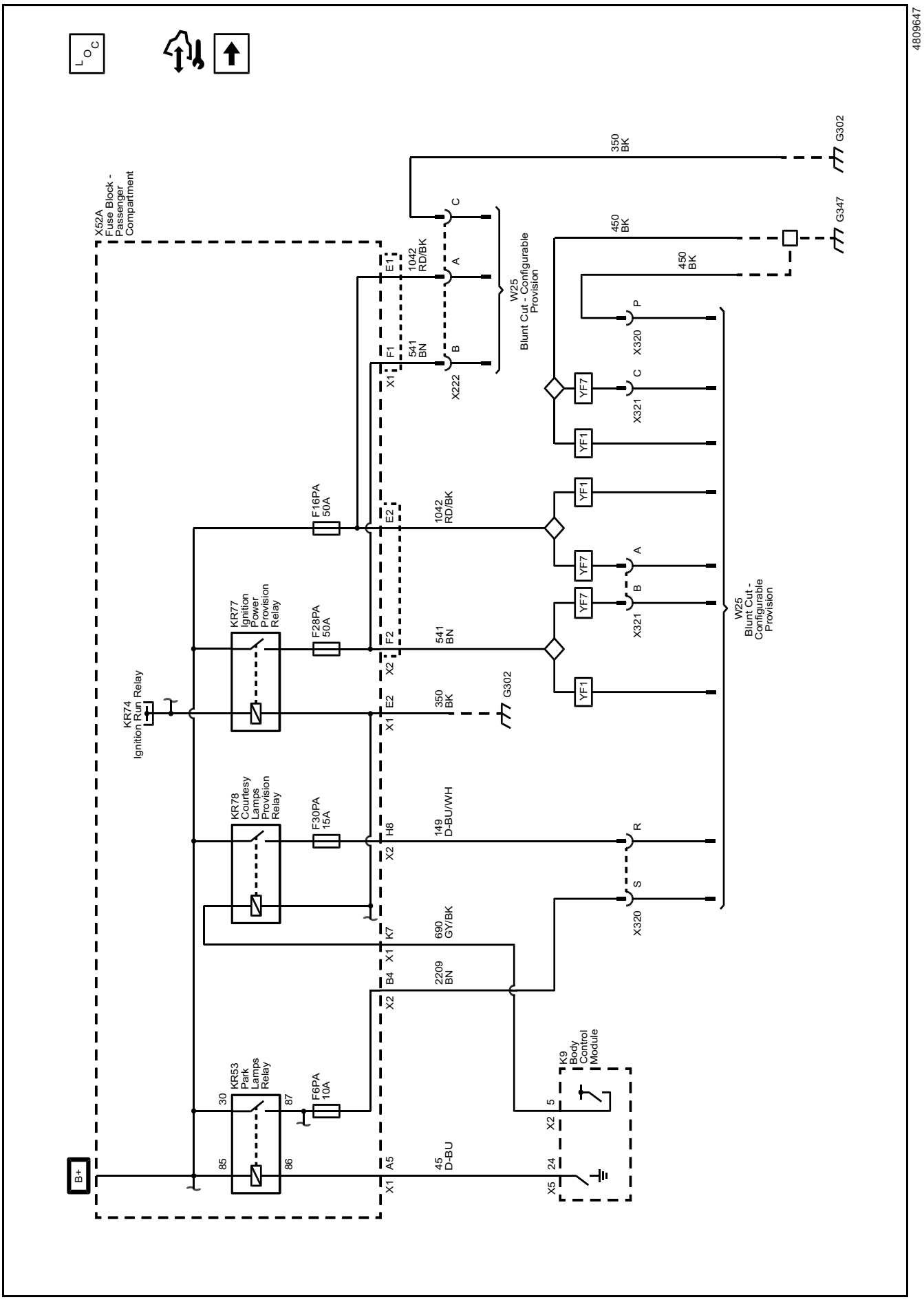
Ground Distribution Schematics (G403 (PRP))



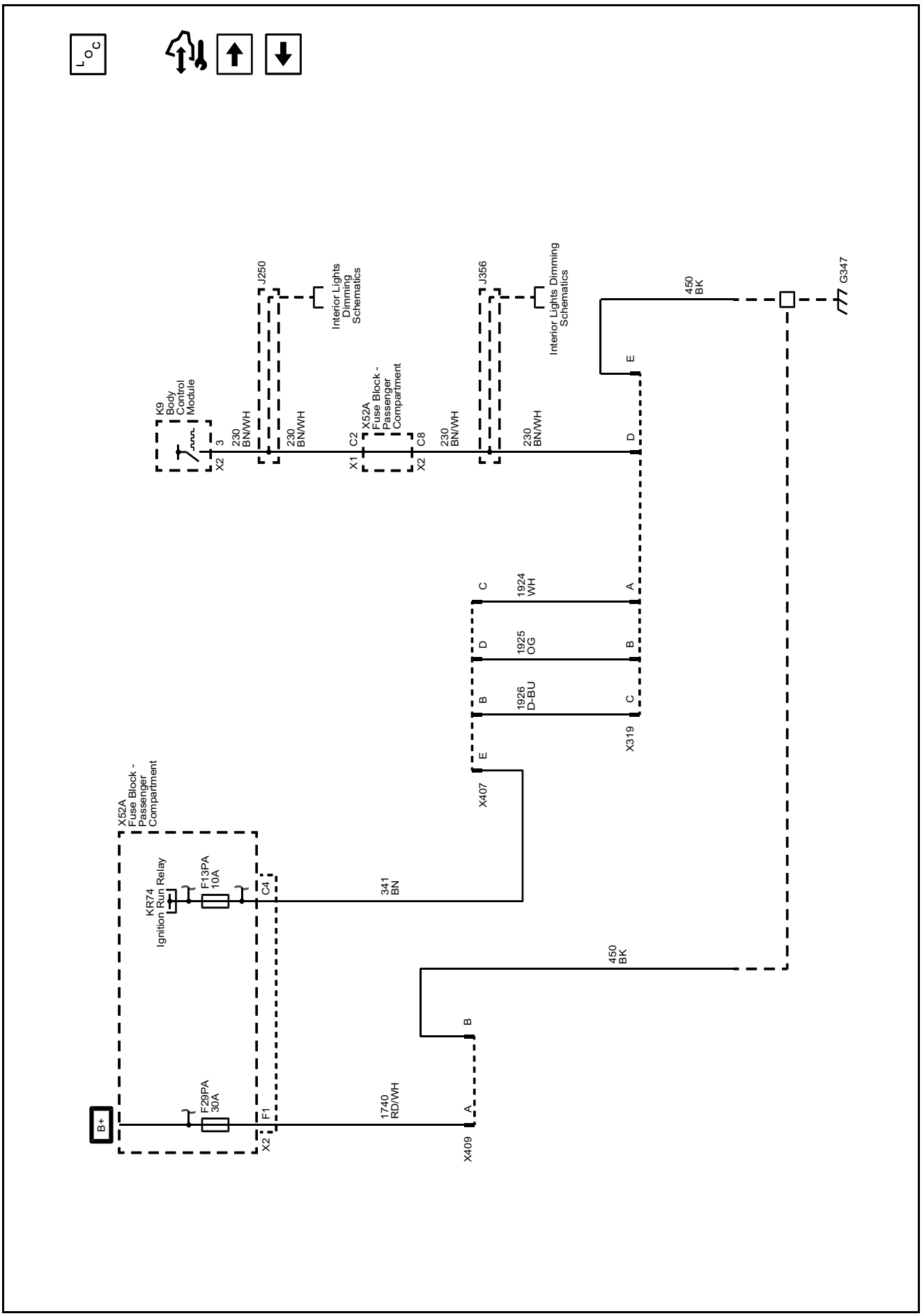
Ground Distribution Schematics (G404)



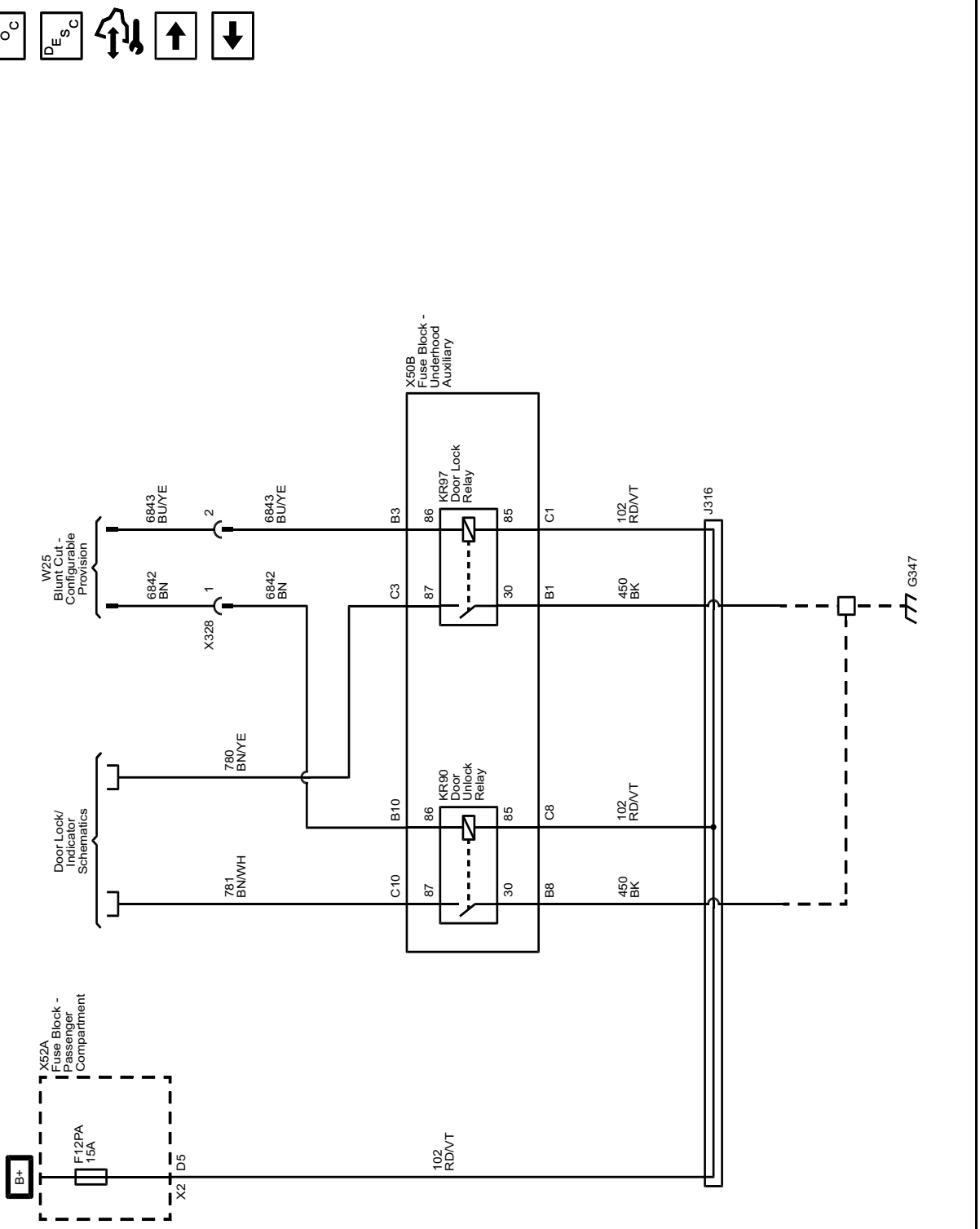
Upfitter Provision Schematics (Power, Ground, and Relay Controls)



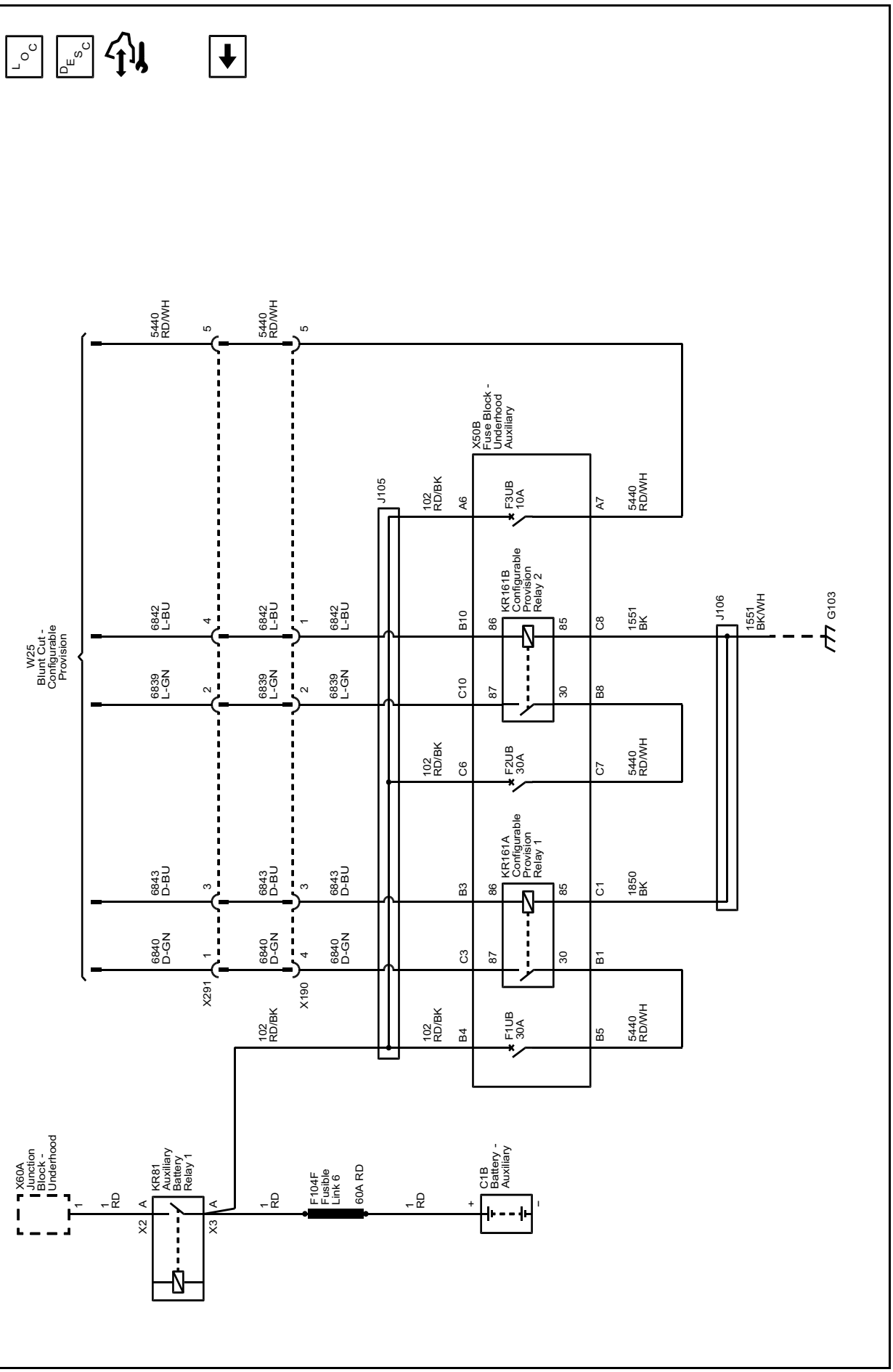
Upfitter Provision Schematics (Rear Heat Auxiliary (ENC))



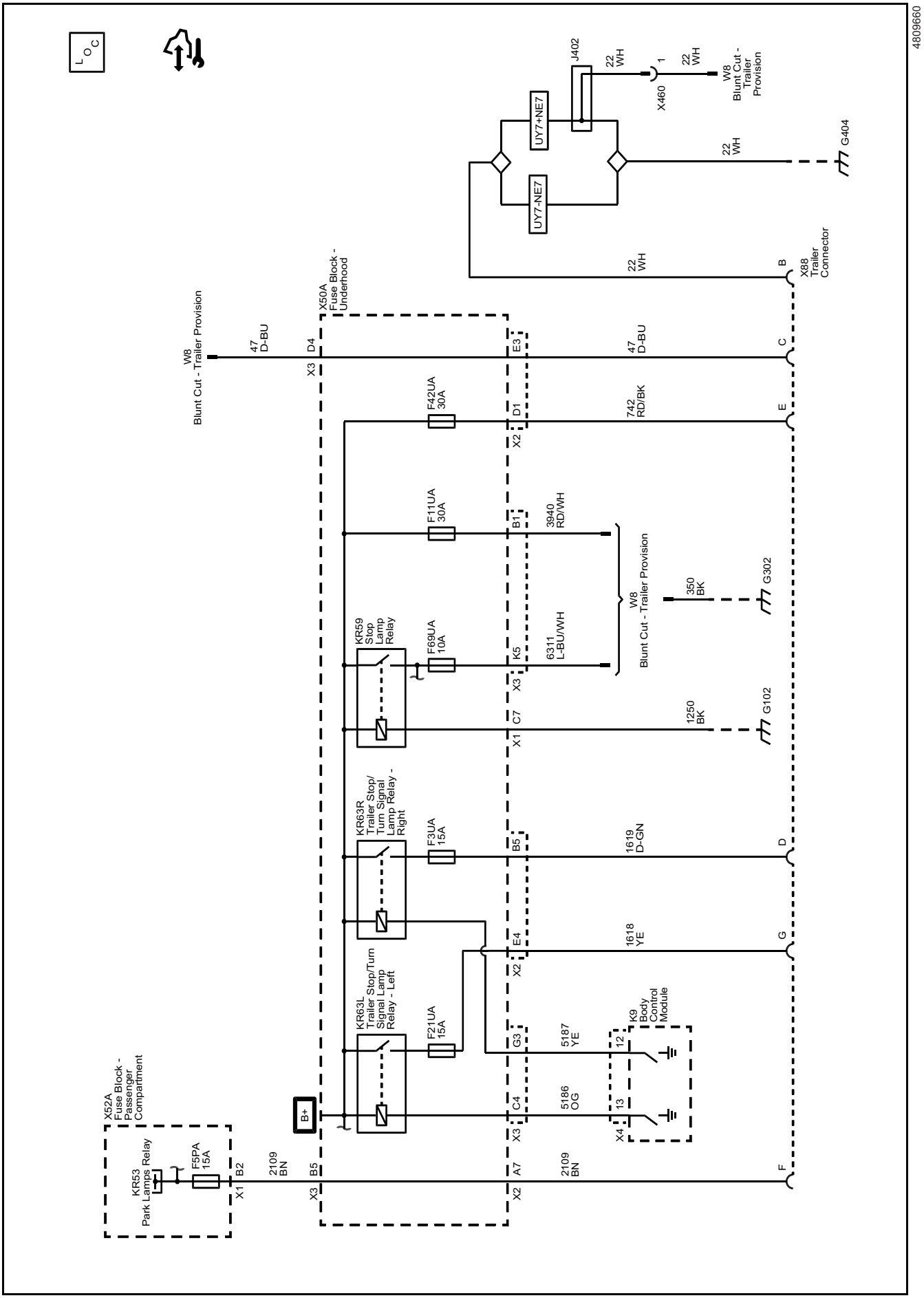
Upfitter Provision Schematics (Upfitter Fuse Block (AU3&WRF))



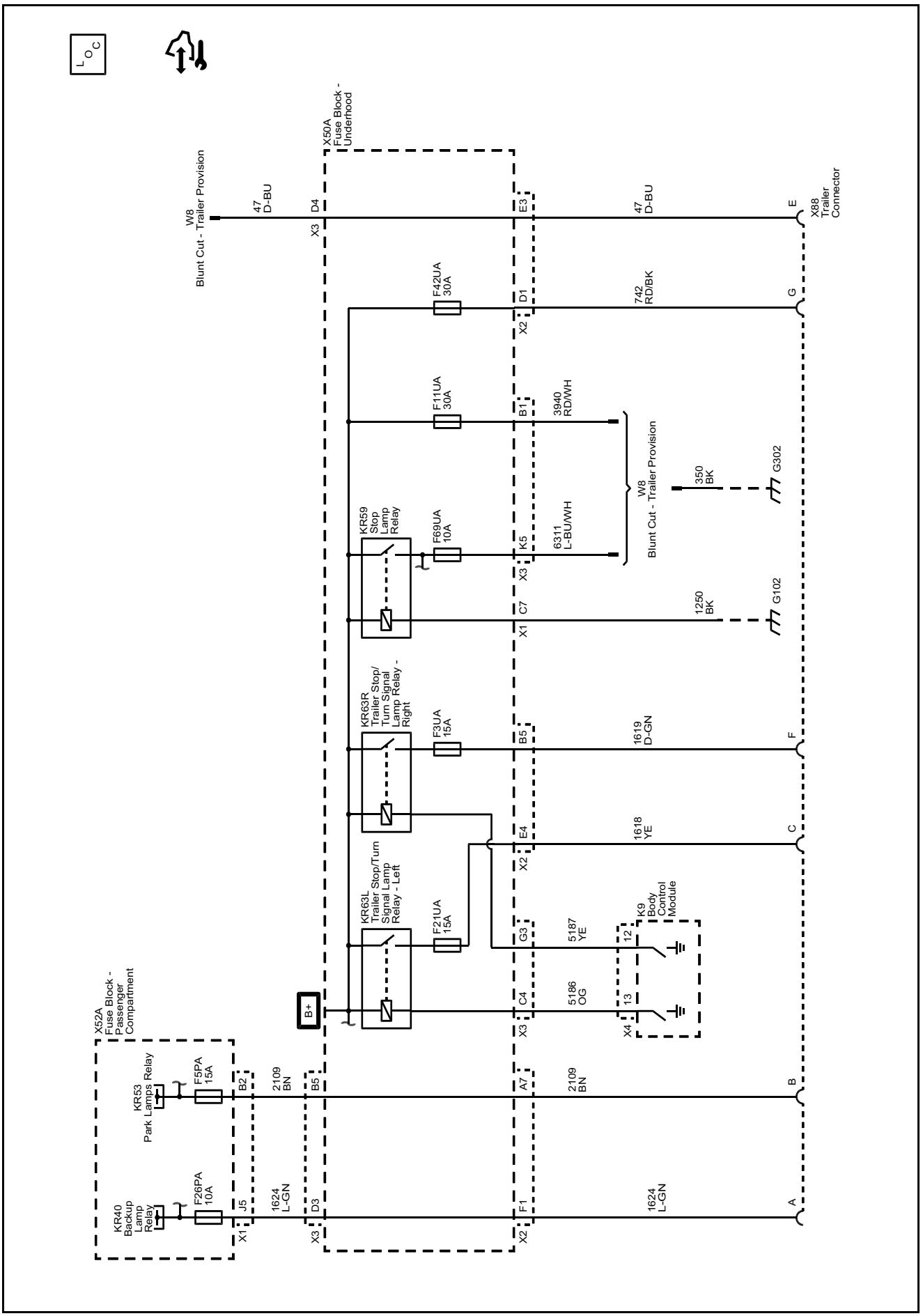
Upfitter Provision Schematics (Upfitter Fuse Block (9L7))



Trailer Connector/Provision Schematics (Trailer Connector/Provision (UY7 without NE7))



Trailer Connector/Provision Schematics (Trailer Connector/Provision (UY7 with NE7))



Component Locator

Master Electrical Component List

Code	Name	Option	Location	Locator View	Connector End View
A3L	Sunshade - Left	DH6	On the upper left of the headliner	—	*A3L Sunshade - Left*
A3R	Sunshade - Right	DH6	On the upper right of the headliner	—	*A3R Sunshade - Right*
A5	Driver Information Center	—	Integral to P16 Instrument Cluster	—	—
A7	Fuel Pump and Level Sensor Assembly	—	In the vehicle underbody, in the fuel tank	• *Fuel Tank Components (Without NE7)* • *Fuel Tank Components (NE7)*	*A7 Fuel Pump and Level Sensor Assembly*
A9A	Outside Rearview Mirror - Driver	DEB or DE5	Attached to the exterior of the left front door	*Driver Door Components*	*A9A Outside Rearview Mirror - Driver*
A9B	Outside Rearview Mirror - Passenger	DEB or DE5	Attached to the exterior of the right front door	*Front Passenger Door Components*	*A9B Outside Rearview Mirror - Passenger*
A10	Inside Rearview Mirror	—	In the passenger compartment, mounted at the top center of the windshield	—	*A10 Inside Rearview Mirror*
A11	Radio	—	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	• *A11 Radio X1* • *A11 Radio X2*
A12	Digital Radio Receiver Control Module	U2K or UBS	In the passenger compartment, mounted on a bracket under driver knee bolster panel	*Underside of Instrument Panel Components*	*A12 Digital Radio Receiver Control Module X1*
A23D	Door Latch Assembly - Driver	—	Towards the rear of the driver door	*Driver Door Components*	• *A23D Door Latch Assembly - Driver X1* • *A23D Door Latch Assembly - Driver X2*
A23P	Door Latch Assembly - Passenger	—	Towards the rear of the passenger door	*Front Passenger Door Components*	• *A23P Door Latch Assembly - Passenger X1* • *A23P Door Latch Assembly - Passenger X2*
A39	Reductant Fluid Reservoir Assembly	—	Under the vehicle, toward the rear, inside the reductant fluid tank	*Reductant Tank Components*	*A39 Reductant Fluid Reservoir Assembly*
A91	Mirror Display	UVC	Internal to A10 Inside Rearview Mirror	—	—
B1	A/C Refrigerant Pressure Sensor	C60	On the engine harness in the left rear side of the engine compartment	• *Front of Engine Compartment Components (1 of 2)* • *Engine Compartment Components (2 of 2)* • *Left Front of the Engine Components (LWN)*	*B1 A/C Refrigerant Pressure Sensor*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B1B	A/C Low Side Pressure Switch	C60	Right rear side of the engine compartment, on the side of the accumulator	• *Front of Engine Compartment Components (1 of 2)* • *Front of Engine Compartment Components (2 of 2)*	*B1B A/C Low Side Pressure Switch*
B5LF	Wheel Speed Sensor - Left Front	—	At the left front wheel	• *Front Wheel Speed Sensor Components* • *Frame and Underbody Components (1 of 2)*	*B5LF Wheel Speed Sensor - Left Front*
B5LR	Wheel Speed Sensor - Left Rear	—	At the left rear wheel, attached to the backing plate	*Frame and Underbody Components (1 of 2)*	*B5LR Wheel Speed Sensor - Left Rear*
B5RF	Wheel Speed Sensor - Right Front	—	At the right front wheel	• *Front Wheel Speed Sensor Components* • *Frame and Underbody Components (1 of 2)*	• *B5RF Wheel Speed Sensor - Right Front (LV1/LC8)* • *B5RF Wheel Speed Sensor - Right Front (LWN)*
B5RR	Wheel Speed Sensor - Right Rear	—	At the right rear wheel, attached to the backing plate	*Frame and Underbody Components (1 of 2)*	*B5RR Wheel Speed Sensor - Right Rear*
B9	Ambient Air Temperature Sensor	—	Attached to the front center of the radiator support	*Ambient Air Temperature Sensor (UFA)*	• *B9 Ambient Air Temperature Sensor (UFA)* • *B9 Ambient Air Temperature Sensor (V22)* • *B9 Ambient Air Temperature Sensor (-V22)*
B10	Ambient Light Sensor	—	On the top of the instrument panel	*Instrument Panel Components (2 of 2)*	*B10 Ambient Light Sensor*
B12A	Transmission Fluid Pressure Switch	—	Internal to T12 Automatic Transmission Assembly	—	—
B13	Transmission Fluid Temperature Sensor	—	Internal to T12 Automatic Transmission Assembly	—	—
B14A	Transmission Output Shaft Speed Sensor	—	Internal to T12 Automatic Transmission Assembly	*Automatic Transmission Internal Electrical Components*	—
B14C	Transmission Input Shaft Speed Sensor	—	Internal to T12 Automatic Transmission Assembly	—	—
B14D	Transmission Intermediate Shaft Speed Sensor	—	Under the vehicle, internal to the Transmision Assembly	—	—
B15	Transmission Internal Mode Switch	—	Internal to T12 Automatic Transmission Assembly	—	*B15 Transmission Internal Mode Switch (M5U)*
B18	Battery Current Sensor	—	Attached to the negative terminal of the battery	—	*B18 Battery Current Sensor*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B19A	Brake Booster Fluid Pressure Alarm Switch	UJ1	In the power steering inlet hose, near the power steering pump	*Brake Booster Fluid Alarm Switches (UJ1)*	*B19A Brake Booster Fluid Pressure Alarm Switch*
B20	Brake Fluid Level Switch	—	Left rear of the engine compartment, attached to the left lower side of the brake fluid reservoir	• *Upper Left Side of the Engine Components (LV1)* • *Engine Compartment Components (1 of 2)*	• *B20 Brake Fluid Level Switch (LC8/L96)* • *B20 Brake Fluid Level Switch (LWN/LV1)*
B22	Brake Pedal Position Sensor	—	Attached to brake pedal assembly	*Instrument Panel Components (2 of 2)*	*B22 Brake Pedal Position Sensor*
B23	Camshaft Position Sensor	—	Front of the engine between the water pump and the crank pulley	• *Left Front Side of the Engine Components (L96 or LC8)* • *Right Front of Engine Components (LWN)* • *Left Front Side of the Engine Components (LV1)* • *Left Front Side of the Engine Components (L96 or LC8)*	• *B23 Camshaft Position Sensor (LV1)* • *B23 Camshaft Position Sensor (LWN)* • *B23 Camshaft Position Sensor (L96/LC8)*
B24	Mobile Telephone Microphone	UE1 or UI8	In the passenger compartment, in the overhead console	—	*B24 Mobile Telephone Microphone*
B26	Crankshaft Position Sensor	—	Attached to the lower right rear side of the engine, behind the starter	• *Left Front of the Engine Components (LWN)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *B26 Crankshaft Position Sensor (LC8/L96)* • *B26 Crankshaft Position Sensor (LWN/LV1)*
B28F	Door Ajar Switch - Right Sliding	Cargo or Passenger	Mounted towards the bottom of the right rear door	• *Right Sliding Door Components (YA2)* • *Right Side Hinged Door Components (E24)* • *Front of the Passenger Compartment Components*	*B28F Door Ajar Switch - Right Sliding*
B33	Engine Coolant Level Switch	LWN	Right front of the engine compartment, attached to the bottom of the coolant surge tank	• *Front of Engine Compartment Components (2 of 2)* • *Front of Engine Compartment Components (1 of 2)*	*B33 Engine Coolant Level Switch*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B34	Engine Coolant Temperature Sensor	—	On the left cylinder head at exhaust port 1	• *Left Side of Engine Components (LWN)* • *Right Front Side of the Engine Components (LV1)* • *Left Front Side of the Engine Components (LV1)* • *Left Front Side of the Engine Components (L96 or LC8)*	• *B34 Engine Coolant Temperature Sensor (LC8/L96)* • *B34 Engine Coolant Temperature Sensor (LV1)*
B35	Engine Oil Level Switch	—	Attached to the left side of the oil pan	• *Right Front Side of the Engine Components (LV1)* • *Right Front of Engine Components (LWN)*	• *B35 Engine Oil Level Switch (LV1)* • *B35 Engine Oil Level Switch (LWN)*
B37B	Engine Oil Pressure Sensor	—	In engine compartment, on the rear lower left side of the engine	• *Left Front Side of the Engine Components (LV1)* • *Right Front Side of the Engine Components (L96 or LC8)* • *Right Front of Engine Components (LWN)*	• *B37B Engine Oil Pressure Sensor (LC8/L96)* • *B37B Engine Oil Pressure Sensor (LWN/LV1)*
B46	Fuel Level Sensor	LV1, L96, or LC8	Under the vehicle, in the fuel tank	• *Inside of Fuel Tank Components* • *Frame and Underbody Components (2 of 2)*	—
B47	Fuel Pressure Sensor	—	Under the vehicle , near the fuel tank	—	• *B47 Fuel Pressure Sensor (CUTAWAY)* • *B47 Fuel Pressure Sensor (-CUTAWAY)*
B47B	Fuel Rail Pressure Sensor	—	In the engine compartment, on top of the engine, mounted to the rear of the right fuel rail	• *Right Rear of Engine Components (LWN)* • *Top of the Engine Components (LV1)*	• *B47B Fuel Rail Pressure Sensor (LV1)* • *B47B Fuel Rail Pressure Sensor (LWN)*
B48	Fuel Temperature Sensor	—	Under the vehicle, near the transmission, located with the fuel filter	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B52C	Heated Oxygen Sensor - Bank 1 Sensor 1	—	Attached to the left front exhaust pipe, front of the catalytic converter	• *Exhaust Components (L96 or LC8)* • *Exhaust Components (LV1)*	*B52C Heated Oxygen Sensor - Bank 1 Sensor 1*
B52D	Heated Oxygen Sensor - Bank 1 Sensor 2	—	Attached to the left front exhaust pipe, back of the catalytic converter	• *Exhaust Components (L96 or LC8)* • *Exhaust Components (LV1)*	*B52D Heated Oxygen Sensor - Bank 1 Sensor 2*
B52E	Heated Oxygen Sensor - Bank 2 Sensor 1	—	Attached to the right front exhaust pipe, front of the catalytic converter	• *Exhaust Components (LV1)* • *Exhaust Components (L96 or LC8)*	*B52E Heated Oxygen Sensor - Bank 2 Sensor 1*
B52F	Heated Oxygen Sensor - Bank 2 Sensor 2	—	Attached to the right front exhaust pipe, rear of the catalytic converter	• *Exhaust Components (LV1)* • *Exhaust Components (L96 or LC8)*	*B52F Heated Oxygen Sensor - Bank 2 Sensor 2*
B55	Engine Hood Switch	BTV	In the center front of the engine compartment, attached to the hood latch assembly	—	*B55 Engine Hood Switch*
B59	Front Impact Sensor	—	On the lower center of the radiator support	*Front of Engine Compartment Components (1 of 2)*	*B59 Front Impact Sensor*
B63LF	Side Impact Sensor - Left Front	ASF	In the left front side door	*Driver Door Components*	• *B63LF Side Impact Sensor - Left Front (ASF)* • *B63LF Side Impact Sensor - Left Front (-ASF)*
B63LR	Side Impact Sensor - Left Rear	ASF	In the left center of the vehicle behind the body panel trim	*Left Rear Cargo Area Components (Passenger or Cargo)*	*B63LR Side Impact Sensor - Left Rear*
B63RF	Side Impact Sensor - Right Front	ASF	In the right front side door	*Front Passenger Door Components*	*B63RF Side Impact Sensor - Right Front*
B63RR	Side Impact Sensor - Right Rear	ASF	In the lower right side of the vehicle near the rear side door	• *Right Rear Frame Rail Components (Passenger with E24)* • *Right Rear Frame Rail Components (Passenger with YA2)*	*B63RR Side Impact Sensor - Right Rear*
B65	Intake Manifold Pressure and Air Temperature Sensor	LWN	In the engine compartment, attached to the intake manifold, on top of the engine	*Top of Engine Components (LWN)*	*B65 Intake Manifold Pressure and Air Temperature Sensor*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B68A	Knock Sensor 1	—	Mounted to the lower right side of the engine in-between the engine oil pan and the right bank exhaust manifold	• *Lower Right Side of the Engine Components (L96 or LC8)* • *Left Side of the Engine Components (LV1)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *B68A Knock Sensor 1 (LC8/L96)* • *B68A Knock Sensor 1 (LV1)*
B68B	Knock Sensor 2	—	Mounted to the lower left of the engine, in-between the engine oil filter and the left bank exhaust manifold	• *Right Front Side of the Engine Components (LV1)* • *Left Front Side of the Engine Components (L96 or LC8)*	• *B68B Knock Sensor 2 (LC8/L96)* • *B68B Knock Sensor 2 (LV1)*
B74	Manifold Absolute Pressure Sensor	—	In the engine compartment, attached to the intake manifold, on top of the engine	• *Top of the Engine Components (L96 or LC8)* • *Left Front Side of the Engine Components (L96 or LC8)* • *Upper Left Side of the Engine Components (LV1)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *B74 Manifold Absolute Pressure Sensor (L96/LC8)* • *B74 Manifold Absolute Pressure Sensor (LV1)*
B75C	Multifunction Intake Air Sensor	—	Right front of the engine compartment, mounted in the air cleaner duct	• *Engine Compartment Components (2 of 2)* • *Upper Left Side of the Engine Components (LV1)* • *Right Rear of Engine Components (LWN)*	*B75C Multifunction Intake Air Sensor*
B80	Park Brake Switch	—	Left lower side of the instrument panel on the brake pedal assembly	*Instrument Panel Components (2 of 2)*	*B80 Park Brake Switch*
B87	Rearview Camera	UVC	On the right rear cargo door, in license plate trim	*Rear Exterior Lights (Passenger or Cargo)*	• *B87 Rearview Camera (CUTAWAY)* • *B87 Rearview Camera (-CUTAWAY)*
B88D	Seat Belt Switch - Driver	—	Right side of the driver seat, inside Seat Belt Buckle — Driver	—	—
B88P	Seat Belt Switch - Passenger	AK5	Left side of the front passenger seat, inside Seat Belt Buckle — Passenger	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B99	Steering Wheel Angle Sensor	—	Attached the lower steering column jacket assembly	*Steering Column Components (2 of 2)*	*B99 Steering Wheel Angle Sensor*
B107	Accelerator Pedal Position Sensor	—	Left lower side of the instrument panel, above the accelerator pedal	*Instrument Panel Components (2 of 2)*	*B107 Accelerator Pedal Position Sensor*
B116	Water in Fuel Sensor	—	In the engine compartment, at the right rear of the engine, mounted in the bottom of the fuel filter	—	—
B130A	Exhaust Gas Recirculation Temperature Sensor 1	LWN	In the engine compartment, on the top left rear side of the engine	*Right Rear of Engine Components (LWN)*	*B130A Exhaust Gas Recirculation Temperature Sensor 1*
B130B	Exhaust Gas Recirculation Temperature Sensor 2	LWN	In the engine compartment, on the top right front side of the engine	*Right Rear of Engine Components (LWN)*	*B130B Exhaust Gas Recirculation Temperature Sensor 2*
B131A	Exhaust Temperature Sensor 1	LWN	In the engine compartment, attached to the exhaust pipe, on the top left rear side of the engine	*Right Rear of Engine Components (LWN)*	*B131A Exhaust Temperature Sensor 1*
B131B	Exhaust Temperature Sensor 2	LWN	Under the vehicle, attached to the exhaust pipe, near the rear of the catalytic converter	*Right Rear of Engine Components (LWN)*	*B131B Exhaust Temperature Sensor 2*
B131C	Exhaust Temperature Sensor 3	LWN	Under the vehicle, attached to the exhaust pipe, at the middle of the diesel particulate filter	—	*B131C Exhaust Temperature Sensor 3*
B131D	Exhaust Temperature Sensor 4	LWN	Under the vehicle, attached to the exhaust pipe, near the rear of the diesel particulate filter	—	*B131D Exhaust Temperature Sensor 4*
B131E	Exhaust Temperature Sensor 5	LWN	Under the vehicle, attached to the exhaust pipe, after the diesel particulate filter	—	*B131E Exhaust Temperature Sensor 5*
B133	Brake Booster Fluid Flow Alarm Switch	UJ1	In the power steering outlet hose, near the power steering pump	*Brake Booster Fluid Alarm Switches (UJ1)*	• *B133 Brake Booster Fluid Flow Alarm Switch X1* • *B133 Brake Booster Fluid Flow Alarm Switch X2*
B134A	Coolant Heater Air Temperature Sensor	K08	Internal to E19 Coolant Heater	*Coolant Heater Components (K08)*	—
B134B	Coolant Heater Combustion Sensor	K08	Internal to E19 Coolant Heater	*Coolant Heater Components (K08)*	—
B134C	Coolant Heater Overheat Sensor	K08	Internal to E19 Coolant Heater	*Coolant Heater Components (K08)*	—
B135	Coolant Heater Temperature Sensor	K08	Internal to E19 Coolant Heater	—	—
B136	Exhaust Particulate Matter Sensor	LWN	Mounted to the exhaust, towards the rear of the engine harness	—	*B136 Exhaust Particulate Matter Sensor*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B150	Fuel Tank Pressure Sensor	L96/LC8/LV1	Attached to the top of the fuel sender assembly	• *Fuel Tank Components (NE7)* • *Fuel Tank Components (Without NE7)*	*B150 Fuel Tank Pressure Sensor*
B153D	Seat Belt Buckle - Driver	—	Right side of the driver seat	*Driver Seat Components*	*B153D Seat Belt Buckle - Driver*
B153P	Seat Belt Buckle - Passenger	AK5	Left side of the front passenger seat	*Passenger Seat Components*	*B153P Seat Belt Buckle - Passenger*
B154	Diesel Particulate Filter Exhaust Differential Pressure Sensor	LWN	Under the vehicle, near the rear of the catalytic converter	—	*B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor*
B176	Multi-axis Acceleration Sensor Module	—	In the passenger compartment, on the front center on the floor board between the front seats	• *Front of the Passenger Compartment Components* • *Frame and Underbody Components (1 of 2)*	*B176 Multi-axis Acceleration Sensor Module*
B193A	Charge Air Cooler Inlet Temperature Sensor	LWN	In the engine compartment, attached to the intake manifold, front of the turbocharger	*Right Rear of Engine Components (LWN)*	*B193A Charge Air Cooler Inlet Temperature Sensor*
B193B	Charge Air Cooler Outlet Temperature Sensor	LWN	On the top right front of the engine compartment, near the coolant surge tank	• *Left Side of Engine Components (LWN)* • *Front of Engine Compartment Components (2 of 2)*	*B193B Charge Air Cooler Outlet Temperature Sensor*
B194	Reductant Pressure Sensor	LWN	Under the vehicle, above the reductant tank	—	—
B195A	Nitrogen Oxides Sensor 1	LWN	Under the vehicle	*Right Rear of Engine Components (LWN)*	*B195A Nitrogen Oxides Sensor 1*
B195B	Nitrogen Oxides Sensor 2	LWN	Under the vehicle	—	*B195B Nitrogen Oxides Sensor 2*
B198	Fuel Composition Sensor	L96	Under the vehicle	—	*B198 Fuel Composition Sensor*
B203	Radiator Coolant Temperature Sensor	LWN	Mounted to the radiator	—	*B203 Radiator Coolant Temperature Sensor (LWN)*
B213	Reductant Level Sensor	LWN	Under the vehicle, toward the rear, inside the reductant fluid tank	—	—
B214	Reductant Temperature Sensor	LWN	Under the vehicle, toward the rear, inside the reductant fluid tank	—	—
B218L	Side Object Sensor Module - Left	UFT	At the rear of the vehicle, in the rear bumper, at the left corner	—	*B218L Side Object Sensor Module - Left*
B218R	Side Object Sensor Module - Right	UFT	At the rear of the vehicle, in the rear bumper, at the right corner	—	*B218R Side Object Sensor Module - Right*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B295	Reductant Quality Sensor	LWN	Under the vehicle, mounted to the outboard side of the frame, below the passenger side of the cab attached to the reductant fluid inlet line near the reductant pump and sensor assembly	*Reductant Tank Components*	*B295 Reductant Quality Sensor*
B306E	Parking Assist Sensor - Rear Left Outer	UD7	At the rear of the vehicle, housed in the rear fascia	*Rear Exterior Lights (Passenger or Cargo)*	*B306E Parking Assist Sensor - Rear Left Outer*
B306F	Parking Assist Sensor - Rear Left Middle	UD7	At the rear of the vehicle, housed in the rear fascia	*Rear Exterior Lights (Passenger or Cargo)*	*B306F Parking Assist Sensor - Rear Left Middle*
B306G	Parking Assist Sensor - Rear Right Middle	UD7	At the rear of the vehicle, housed in the rear fascia	*Rear Exterior Lights (Passenger or Cargo)*	*B306G Parking Assist Sensor - Rear Right Middle*
B306H	Parking Assist Sensor - Rear Right Outer	UD7	At the rear of the vehicle, housed in the rear fascia	*Rear Exterior Lights (Passenger or Cargo)*	*B306H Parking Assist Sensor - Rear Right Outer*
C1	Battery	—	At the right front side of the engine compartment	• *Engine Compartment Components (1 of 2)* • *Front of Engine Compartment Components (2 of 2)*	• *C1 Battery ((LC8/L96)+TP2)* • *C1 Battery ((LC8/L96)-TP2)* • *C1 Battery (LC8/L96)* • *C1 Battery (LV1)* • *C1 Battery (LWN)*
C1B	Battery - Auxiliary	LWN or TP2	Left frame rail, center of the vehicle	*Frame and Underbody Components (2 of 2)*	*C1B Battery - Auxiliary*
E2LF	Side Marker Lamp - Left Front	—	In the left front corner of the vehicle	• *Front Exterior Lighting (Base)* • *Front Exterior Lighting (Uplevel)*	*E2LF Side Marker Lamp - Left Front*
E2RF	Side Marker Lamp - Right Front	—	In the right front corner of the vehicle	• *Front Exterior Lighting (Base)* • *Front Exterior Lighting (Uplevel)*	*E2RF Side Marker Lamp - Right Front*
E4E	Headlamp - Left High Beam	V22	At the left front of the vehicle	*Front Exterior Lighting (Uplevel)*	*E4E Headlamp - Left High Beam (V22)*
E4F	Headlamp - Right High Beam	V22	At the right front of the vehicle	*Front Exterior Lighting (Uplevel)*	*E4F Headlamp - Right High Beam (V22)*
E4G	Headlamp - Left Low Beam	V22	At the left front of the vehicle	*Front Exterior Lighting (Uplevel)*	*E4G Headlamp - Left Low Beam (V22)*
E4H	Headlamp - Right Low Beam	V22	At the right front of the vehicle	*Front Exterior Lighting (Uplevel)*	*E4H Headlamp - Right Low Beam (V22)*
E4N	Park/Turn Signal Lamp - Left	—	In the left front corner of the vehicle	• *Front Exterior Lighting (Base)* • *Front Exterior Lighting (Uplevel)*	*E4N Park/Turn Signal Lamp - Left*
E4P	Park/Turn Signal Lamp - Right	—	In the right front corner of the vehicle	• *Front Exterior Lighting (Base)* • *Front Exterior Lighting (Uplevel)*	*E4P Park/Turn Signal Lamp - Right*
E5A	Backup Lamp - Left	—	Attached to the left tail lamp assembly	*Rear Exterior Lights (Passenger or Cargo)*	*E5A Backup Lamp - Left*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E5B	Backup Lamp - Right	—	Attached to the right tail lamp assembly	*Rear Exterior Lights (Passenger or Cargo)*	*E5B Backup Lamp - Right*
E5S	Tail/Stop and Turn Signal Lamp - Left	Passenger or Cargo	Attached to the left tail lamp assembly, upper bulb	*Rear Exterior Lights (Passenger or Cargo)*	*E5S Tail/Stop and Turn Signal Lamp - Left*
E5T	Tail/Stop and Turn Signal Lamp - Right	Passenger or Cargo	Attached to the right tail lamp assembly, upper bulb	*Rear Exterior Lights (Passenger or Cargo)*	*E5T Tail/Stop and Turn Signal Lamp - Right*
E6	Center High Mounted Stop Lamp	Passenger or Cargo	At the top rear center of the vehicle	*Rear Exterior Lights (Passenger or Cargo)*	*E6 Center High Mounted Stop Lamp*
E7	License Plate Lamp	Passenger or Cargo	Attached to the outer right cargo door, above the license plate mount	*Rear Exterior Lights (Passenger or Cargo)*	*E7 License Plate Lamp*
E11	Fuel Heater	LWN	In the engine compartment, at the right rear of the engine, mounted in the bottom of the fuel filter	—	—
E11A	Fuel Heater/Water in Fuel Sensor	LWN	Under the vehicle, near the transmission, located with the fuel filter	—	*E11A Fuel Heater/ Water in Fuel Sensor*
E12A	Glow Plug 1	LWN	In the engine compartment, on the top left of the engine	*Top of Engine Components (LWN)*	*E12A Glow Plug 1*
E12B	Glow Plug 2	LWN	In the engine compartment, on the top left of the engine	*Top of Engine Components (LWN)*	*E12B Glow Plug 2*
E12C	Glow Plug 3	LWN	In the engine compartment, on the top left of the engine	*Top of Engine Components (LWN)*	*E12C Glow Plug 3*
E12D	Glow Plug 4	LWN	In the engine compartment, on the top left of the engine	*Top of Engine Components (LWN)*	*E12D Glow Plug 4*
E13L	Headlamp - Left	Without V22	At the left front of the vehicle	*Front Exterior Lighting (Base)*	*E13L Headlamp - Left (-V22)*
E13R	Headlamp - Right	Without V22	At the right front of the vehicle	*Front Exterior Lighting (Base)*	*E13R Headlamp - Right (-V22)*
E18L	Rear Defogger Grid - Left	C49	Attached to the left cargo door window	*Rear Door Components (Passenger or Cargo)*	• *E18L Rear Defogger Grid - Left X1* • *E18L Rear Defogger Grid - Left X2*
E18R	Rear Defogger Grid - Right	C49	Attached to the right cargo door window	*Rear Door Components (Passenger or Cargo)*	• *E18R Rear Defogger Grid - Right X1* • *E18R Rear Defogger Grid - Right X2*
E19	Coolant Heater	K08	Attached to the left front inner frame rail	• *Frame and Underbody Components (2 of 2)* • *Coolant Heater Components (K08)*	*E19 Coolant Heater (K08)*
E20	Coolant Heater Glow Plug	K08	Internal to E19 Coolant Heater	*Coolant Heater Components (K08)*	—
E21A	Fluorescent Work Lamp - Right Access Panel	PRP	Mounted towards the right of the top access panel	—	*E21A Fluorescent Work Lamp - Right Access Panel*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E21F	Fluorescent Work Lamp - Front Cargo	PRP	Mounted towards the top front of the cargo area	—	*E21F Fluorescent Work Lamp - Front Cargo*
E21LF	Fluorescent Work Lamp - Left Front Access Panel	PRP	At the front and towards the top of the left access panel	—	*E21LF Fluorescent Work Lamp - Left Front Access Panel*
E21LR	Fluorescent Work Lamp - Left Rear Access Panel	PRP	Mounted towards the top of the right access panel	—	*E21LR Fluorescent Work Lamp - Left Rear Access Panel*
E21R	Fluorescent Work Lamp - Rear Cargo	PRP	Mounted towards the top rear of the cargo area	—	*E21R Fluorescent Work Lamp - Rear Cargo*
E22	Underhood Lamp	—	In the engine compartment, attached to the left inner hood panel	*Underside of Hood Components*	• *E22 Underhood Lamp (L96/LC8)* • *E22 Underhood Lamp (TR9)*
E31L	Sunshade Mirror Lamp - Left	DH6	On the upper left of the headliner, inside the Sunshade — Left	*Headliner Components*	—
E31R	Sunshade Mirror Lamp - Right	DH6	On the upper right of the headliner, in the Sunshade — Right	*Headliner Components*	—
E32	Cigarette Lighter Receptacle	DT4	Slightly below and to the left of the radio	*Instrument Panel Components (1 of 2)*	*E32 Cigarette Lighter Receptacle (DT4)*
E36AC	Dome Lamp - Left Roof Rail	Cargo Without YF7	In the rear of the roof panel	—	*E36AC Dome Lamp - Left Roof Rail*
E36AD	Dome Lamp - Right Roof Rail	Cargo Without YF7	In the rear of the roof panel	—	*E36AD Dome Lamp - Right Roof Rail*
E36AH	Dome Lamp	Cargo Without YF7	In the rear of the roof panel	—	*E36AH Dome Lamp*
E37F	Dome/Reading Lamps - Front	Without YF7	In the front of the roof panel	*Headliner Components*	*E37F Dome/Reading Lamps - Front*
E37M	Dome/Reading Lamps - Middle	Passenger	In the center of the roof panel	*Headliner Components*	*E37M Dome/Reading Lamps - Middle*
E37R	Dome/Reading Lamps - Rear	Passenger	In the rear of the roof panel	*Headliner Components*	*E37R Dome/Reading Lamps - Rear*
E45	Positive Crankcase Ventilation Heater	LWN	In the engine compartment, attached to the top front of the engine	*Right Front of Engine Components (LWN)*	*E45 Positive Crankcase Ventilation Heater*
E52	Reductant Line Heater	LWN	Under the vehicle, above the reductant tank	*Reductant Tank Components*	*E52 Reductant Line Heater*
E53	Reductant Tank Heater	LWN	Under the vehicle, inside the reductant tank	—	—
F101	Passenger Instrument Panel Air Bag	—	Right side of the instrument panel	• *Instrument Panel Components (1 of 2)* • *Instrument Panel Components (2 of 2)*	*F101 Passenger Instrument Panel Air Bag*
F105LF	Roof Rail Air Bag - Left Front	ASF	Behind the left side of the headliner trim	*Front of the Passenger Compartment Components*	*F105LF Roof Rail Air Bag - Left Front*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
F105RF	Roof Rail Air Bag - Right Front	ASF	Behind the right side of the headliner trim	*Front of the Passenger Compartment Components*	*F105RF Roof Rail Air Bag - Right Front*
F105RR	Roof Rail Air Bag - Right Rear	ASF	Behind the right rear side of the headliner trim	—	*F105RR Roof Rail Air Bag - Right Rear*
F106D	Seat Side Air Bag - Driver	AK5	Within the driver seat back, towards the outside	—	*F106D Seat Side Air Bag - Driver*
F106P	Seat Side Air Bag - Passenger	AK5	Within the passenger seat back, towards the outside	—	*F106P Seat Side Air Bag - Passenger*
F107	Steering Wheel Air Bag	—	Attached to the center of the steering wheel	• *Steering Column Components (1 of 2)* • *Instrument Panel Components (1 of 2)*	*F107 Steering Wheel Air Bag*
F109D	Seat Belt Buckle Pretensioner - Driver	—	Part of the seat belt buckle	*Driver Seat Components*	*F109D Seat Belt Buckle Pretensioner - Driver*
F109P	Seat Belt Buckle Pretensioner - Passenger	AK5	Part of the seat belt buckle	*Passenger Seat Components*	*F109P Seat Belt Buckle Pretensioner - Passenger*
G7	Coolant Heater Fuel Pump	K08	Attached to the left inner frame rail, near the fuel pump assembly	• *Frame and Underbody Components (2 of 2)* • *Coolant Heater Components (K08)*	*G7 Coolant Heater Fuel Pump*
G12	Fuel Pump	LV1, L96, or LC8	Under the vehicle, internally attached to the middle of the fuel pump assembly	*Frame and Underbody Components (2 of 2)*	—
G12A	Fuel Pump - Primary	—	Under the vehicle, in the fuel tank, part of the fuel pump and level sensor assembly	—	—
G13	Generator	—	Attached to the right front of the engine	• *Left Front of the Engine Components (LWN)* • *Left Front Side of the Engine Components (L96 or LC8)*	• *G13 Generator X1 (L96/LC8)* • *G13 Generator X1 (LWN/LV1)* • *G13 Generator X2 (K68+TP2)* • *G13 Generator X2 (K68-TP2)* • *G13 Generator X2 (KW5/KG4)*
G18	High Pressure Fuel Pump	LV1	In the engine compartment, at the top rear of the engine, between the cylinder heads	*Top of the Engine Components (LV1)*	*G18 High Pressure Fuel Pump (LV1)*
G24	Windshield Washer Pump	—	Attached to the windshield washer fluid reservoir in the right front of the engine compartment	*Front of Engine Compartment Components (1 of 2)*	*G24 Windshield Washer Pump*
G33	Reductant Pump	LWN	Under the vehicle, above the reductant tank	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K9	Body Control Module	—	Lower right side of the instrument panel behind the knee bolster	*Instrument Panel Components (2 of 2)*	• *K9 Body Control Module X1* • *K9 Body Control Module X2* • *K9 Body Control Module X3* • *K9 Body Control Module X4* • *K9 Body Control Module X5* • *K9 Body Control Module X6* • *K9 Body Control Module X7*
K10	Coolant Heater Control Module	K08	Internal to the coolant heater assembly	*Coolant Heater Components (K08)*	—
K17	Electronic Brake Control Module	—	Attached to the left frame rail, near the center of the vehicle	*Frame and Underbody Components (1 of 2)*	*K17 Electronic Brake Control Module*
K18	Compass Module	U80	In the front of the headliner	*Headliner Components*	*K18 Compass Module*
K20	Engine Control Module	—	At the left front side of the engine compartment, near the underhood fuse block on the inner left front fender	• *Engine Compartment Components (2 of 2)* • *Engine Compartment Components (1 of 2)*	• *K20 Engine Control Module X1 (L96/LC8)* • *K20 Engine Control Module X1 (LV1)* • *K20 Engine Control Module X1 (LWN)* • *K20 Engine Control Module X2 (L96/LC8)* • *K20 Engine Control Module X2 (LV1)* • *K20 Engine Control Module X2 (LWN)* • *K20 Engine Control Module X3 (L96/LC8)* • *K20 Engine Control Module X3 (LV1)* • *K20 Engine Control Module X3 (LWN)*
K33A	HVAC Control Module - Auxiliary	—	In the front of the headliner	—	*K33A HVAC Control Module - Auxiliary*
K36	Inflatable Restraint Sensing and Diagnostic Module	—	Below the driver seat under the carpet on the floor board	*Front of the Passenger Compartment Components*	• *K36 Inflatable Restraint Sensing and Diagnostic Module X1* • *K36 Inflatable Restraint Sensing and Diagnostic Module X2*
K38	Chassis Control Module	—	Under the vehicle, attached to the left frame rail, apprximately midpoint of vehicle	—	*K38 Chassis Control Module*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K64	Content Theft Deterrent Control Module	—	In the steering column around the ignition key cylinder housing	*Steering Column Components (1 of 2)*	*K64 Content Theft Deterrent Control Module*
K71	Transmission Control Module	M5U	Internal to T12 Automatic Transmission Assembly	*Engine Compartment Components (1 of 2)*	*K71 Transmission Control Module*
K73	Telematics Communication Interface Control Module	UE1	In the passenger compartment, mounted on a bracket under driver knee bolster panel	*Underside of Instrument Panel Components*	• *K73 Telematics Communication Interface Control Module X1* • *K73 Telematics Communication Interface Control Module X2*
K77	Remote Control Door Lock Receiver	ATG or UJM	Attached to the upper left side of the instrument panel carrier, above the instrument panel cluster (IPC)	*Instrument Panel Components (2 of 2)*	*K77 Remote Control Door Lock Receiver*
K115	Reductant Control Module	LWN	Under the vehicle, mounted on the top of the reductant fluid tank	*Reductant Tank Components*	• *K115 Reductant Control Module X1* • *K115 Reductant Control Module X2*
K182	Parking Assist Control Module	UD7	In the passenger compartment, mounted within the instrument panel on the right side if the steering column	—	• *K182 Parking Assist Control Module X1* • *K182 Parking Assist Control Module X2*
M2A	Access Panel Unlatch Actuator - Left Front Side Front	PRP	Inside the left access panel area	—	*M2A Access Panel Unlatch Actuator - Left Front Side Front*
M2B	Access Panel Unlatch Actuator - Left Front Side Rear	PRP	Inside the left access panel area	—	*M2B Access Panel Unlatch Actuator - Left Front Side Rear*
M2C	Access Panel Unlatch Actuator - Left Rear Side Front	PRP	Inside the left access panel area	—	*M2C Access Panel Unlatch Actuator - Left Rear Side Front*
M2D	Access Panel Unlatch Actuator - Left Rear Side Rear	PRP	Inside the left access panel area	—	*M2D Access Panel Unlatch Actuator - Left Rear Side Rear*
M2E	Access Panel Unlatch Actuator - Right Side Front	PRP	Inside the right access panel area	—	*M2E Access Panel Unlatch Actuator - Right Side Front*
M2F	Access Panel Unlatch Actuator - Right Side Rear	PRP	Inside the right access panel area	—	*M2F Access Panel Unlatch Actuator - Right Side Rear*
M6	Air Temperature Door Actuator	—	Lower right side of the instrument panel, attached to the HVAC module	*HVAC Case Components*	*M6 Air Temperature Door Actuator*
M6B	Air Temperature Door Actuator - Auxiliary	C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	*Left Rear Cargo Area Components (Passenger or Cargo)*	*M6B Air Temperature Door Actuator - Auxiliary*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M7	Transmission Shift Lock Control Solenoid Actuator	—	Attached to the right side of the steering column	*Steering Column Components (1 of 2)*	*M7 Transmission Shift Lock Control Solenoid Actuator (MYD)*
M8	Blower Motor	—	Right rear of the engine compartment, attached to the evaporator case	*Engine Compartment Components (1 of 2)*	*M8 Blower Motor*
M8B	Blower Motor - Auxiliary	C36 or C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	*Left Rear Cargo Area Components (Passenger or Cargo)*	*M8B Blower Motor - Auxiliary*
M11	Coolant Heater Blower Motor	K08	Internal to the coolant heater assembly	*Coolant Heater Components (K08)*	—
M13	Door Latch Assembly - Rear Cargo	Passenger or Cargo	Attached to the right cargo door latch, in the right cargo door	*Rear Door Components (Passenger or Cargo)*	• *M13 Door Latch Assembly - Rear Cargo X1* • *M13 Door Latch Assembly - Rear Cargo X2*
M14RR	Door Lock Actuator - Right Rear	AU3	Attached to the right rear door latch, in the right rear door	• *Right Sliding Door Components (YA2)* • *Right Side Hinged Door Components (E24)*	• *M14RR Door Lock Actuator - Right Rear (E24)* • *M14RR Door Lock Actuator - Right Rear (YA2)*
M37B	Mode Door Actuator - Auxiliary	C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	*Left Rear Cargo Area Components (Passenger or Cargo)*	*M37B Mode Door Actuator - Auxiliary*
M49D	Seat Motor Assembly - Driver	AG1	Below the left front seat, attached to the seat frame	*Driver Seat Components*	*M49D Seat Motor Assembly - Driver (AG1)*
M49P	Seat Motor Assembly - Passenger	AG2	Below the right front seat, attached to the seat frame	*Passenger Seat Components*	*M49P Seat Motor Assembly - Passenger (AG2)*
M64	Starter Motor	—	Attached to the lower right rear of the engine	• *Right Front Side of the Engine Components (LV1)* • *Left Front of the Engine Components (LWN)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *M64 Starter Motor X1 (LV1)* • *M64 Starter Motor X1 (TP2)* • *M64 Starter Motor X1 (-TP2)* • *M64 Starter Motor X2 (L96/LC8)* • *M64 Starter Motor X2 (LWN/LV1)*
M74D	Window Motor - Driver	A31	Attached to the interior of the left front door	*Driver Door Components*	*M74D Window Motor - Driver*
M74P	Window Motor - Passenger	A31	Attached to the interior of the right front door	*Front Passenger Door Components*	*M74P Window Motor - Passenger (AU3)*
M75	Windshield Wiper Motor	—	In the left side of the cowl, near the engine compartment	*Front of Engine Compartment Components (1 of 2)*	*M75 Windshield Wiper Motor*
M103	Turbocharger Vane Position Actuator	LWN	In the engine compartment, attached to the turbocharger	*Right Rear of Engine Components (LWN)*	*M103 Turbocharger Vane Position Actuator*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
P3	Backup Alarm	8S3	In the rear of the vehicle on the frame	—	• *P3 Backup Alarm (CUTAWAY)* • *P3 Backup Alarm (-CUTAWAY)*
P13	Horn Assembly	—	In the left front engine compartment behind the left headlamp	• *Engine Compartment Components (2 of 2)* • *Front of Engine Compartment Components (1 of 2)*	*P13 Horn Assembly*
P16	Instrument Cluster	—	Attached to the left side of the instrument panel	*Instrument Panel Components (1 of 2)*	*P16 Instrument Cluster*
P19AG	Speaker - Left Front Door	—	Attached to the left front door	*Driver Door Components*	*P19AG Speaker - Left Front Door*
P19AH	Speaker - Right Front Door	—	Attached to the right front door	*Front Passenger Door Components*	*P19AH Speaker - Right Front Door*
P19F	Speaker - Left Rear Cargo Door	US8	Attached to the left cargo door	*Rear Door Components (Passenger or Cargo)*	*P19F Speaker - Left Rear Cargo Door*
P19LR	Speaker - Left Rear Roof	Cargo or Passenger	In the left rear headliner of the vehicle	*Rear Door Components (Passenger or Cargo)*	*P19LR Speaker - Left Rear Roof*
P19RR	Speaker - Right Rear Roof	Cargo or Passenger	In the right rear upper headliner of the vehicle	*Rear Door Components (Passenger or Cargo)*	*P19RR Speaker - Right Rear Roof*
P19T	Speaker - Right Rear Cargo Door	US8	Attached to the right cargo door	*Rear Door Components (Passenger or Cargo)*	*P19T Speaker - Right Rear Cargo Door*
P34D	Side Object Detection Indicator - Driver	UFT	Internal to the outside rearview mirror - driver	—	—
P34P	Side Object Detection Indicator - Passenger	UFT	Internal to the outside rearview mirror - passenger	—	—
Q1A	1-2 Shift Solenoid Valve	—	Internal T12 Automatic Transmission Assembly	—	—
Q1B	2-3 Shift Solenoid Valve	—	Internal T12 Automatic Transmission Assembly	—	—
Q2	A/C Compressor Clutch	C60	On the front of the A/C compressor lower right front of engine	• *Front of Engine Compartment Components (1 of 2)* • *Left Front of the Engine Components (LWN)*	• *Q2 A/C Compressor Clutch (L96/ LC8/LV1)* • *Q2 A/C Compressor Clutch (LWN)*
Q6	Camshaft Position Actuator Solenoid Valve	LV1, L96, or LC8	Front of the engine behind the center of the water pump	• *Left Front Side of the Engine Components (L96 or LC8)* • *Left Front Side of the Engine Components (LV1)*	• *Q6 Camshaft Position Actuator Solenoid Valve (LV1)* • *Q6 Camshaft Position Actuator Solenoid Valve (L96/LC8)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q8	Control Solenoid Valve Assembly	—	Internal to T12 Automatic Transmission Assembly	*Automatic Transmission Internal Electrical Components*	—
Q12	Evaporative Emission Purge Solenoid Valve	LV1, L96, or LC8	On the top of the engine, rear of the throttle body	• *Top of the Engine Components (L96 or LC8)* • *Upper Left Side of the Engine Components (LV1)* • *Left Front Side of the Engine Components (L96 or LC8)*	• *Q12 Evaporative Emission Purge Solenoid Valve (L96/LC8)* • *Q12 Evaporative Emission Purge Solenoid Valve (LV1)*
Q13	Evaporative Emission Vent Solenoid Valve	LV1, L96, or LC8	Attached to the side of the EVAP canister, front of the fuel tank	—	*Q13 Evaporative Emission Vent Solenoid Valve*
Q14	Exhaust Gas Recirculation Valve	LWN	In the engine compartment, on the top right of the engine	*Left Front of the Engine Components (LWN)*	*Q14 Exhaust Gas Recirculation Valve*
Q17A	Fuel Injector 1	—	On the left side of the intake manifold, at the #1 cylinder intake port	• *Right Rear of Engine Components (LWN)* • *Top of the Engine Components (LV1)*	• *Q17A Fuel Injector 1 (LC8/L96)* • *Q17A Fuel Injector 1 (LV1)* • *Q17A Fuel Injector 1 (LWN)*
Q17B	Fuel Injector 2	—	On the right side of the intake manifold, at the #2 cylinder intake port	• *Top of the Engine Components (LV1)* • *Upper Right Side of the Engine Components (L96 or LC8)* • *Right Rear of Engine Components (LWN)*	• *Q17B Fuel Injector 2 (LC8/L96)* • *Q17B Fuel Injector 2 (LV1)* • *Q17B Fuel Injector 2 (LWN)*
Q17C	Fuel Injector 3	—	On the left side of the intake manifold, at the #3 cylinder intake port	• *Right Rear of Engine Components (LWN)* • *Top of the Engine Components (LV1)*	• *Q17C Fuel Injector 3 (LC8/L96)* • *Q17C Fuel Injector 3 (LV1)* • *Q17C Fuel Injector 3 (LWN)*
Q17D	Fuel Injector 4	—	On the right side of the intake manifold, at the #4 cylinder intake port	• *Top of the Engine Components (LV1)* • *Upper Right Side of the Engine Components (L96 or LC8)* • *Right Rear of Engine Components (LWN)*	• *Q17D Fuel Injector 4 (LC8/L96)* • *Q17D Fuel Injector 4 (LV1)* • *Q17D Fuel Injector 4 (LWN)*
Q17E	Fuel Injector 5	—	On the left side of the intake manifold, at the #5 cylinder intake port	*Top of the Engine Components (LV1)*	• *Q17E Fuel Injector 5 (LC8/L96)* • *Q17E Fuel Injector 5 (LV1)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17F	Fuel Injector 6	—	On the right side of the intake manifold, at the #6 cylinder intake port	• *Upper Right Side of the Engine Components (L96 or LC8)* • *Top of the Engine Components (LV1)*	• *Q17F Fuel Injector 6 (LC8/L96)* • *Q17F Fuel Injector 6 (LV1)*
Q17G	Fuel Injector 7	L96, or LC8	On the left side of the intake manifold, at the #7 cylinder intake port	—	*Q17G Fuel Injector 7*
Q17H	Fuel Injector 8	L96, or LC8	On the right side of the intake manifold, at the #8 cylinder intake port	*Upper Right Side of the Engine Components (L96 or LC8)*	*Q17H Fuel Injector 8*
Q18A	Fuel Pressure Regulator 1	LWN	In the engine compartment, mounted on top of the fuel injection pump	*Left Front of the Engine Components (LWN)*	*Q18A Fuel Pressure Regulator 1*
Q18B	Fuel Pressure Regulator 2	LWN	In the engine compartment, mounted to the front of the left fuel rail	*Left Front of the Engine Components (LWN)*	*Q18B Fuel Pressure Regulator 2*
Q27A	Pressure Control Solenoid Valve 1	—	Internal to T12 Automatic Transmission Assembly	—	—
Q27B	Pressure Control Solenoid Valve 2	—	Internal to T12 Automatic Transmission Assembly	—	—
Q27C	Pressure Control Solenoid Valve 3	—	Internal to T12 Automatic Transmission Assembly	—	—
Q27D	Pressure Control Solenoid Valve 4	—	Internal to T12 Automatic Transmission Assembly	—	—
Q27E	Pressure Control Solenoid Valve 5	—	Internal to T12 Automatic Transmission Assembly	—	—
Q38	Throttle Body	—	Attached to the center front of the intake manifold	• *Left Front Side of the Engine Components (L96 or LC8)* • *Top of the Engine Components (L96 or LC8)* • *Left Front of the Engine Components (LWN)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *Q38 Throttle Body (L96/LC8/LV1)* • *Q38 Throttle Body (LWN)*
Q39A	Torque Converter Clutch Pressure Control Solenoid Valve	—	Internal to T12 Automatic Transmission Assembly	—	—
Q44	Engine Oil Pressure Control Solenoid Valve	LV1	In the engine compartment, at the front of the engine, behind the front cover	—	*Q44 Engine Oil Pressure Control Solenoid Valve (LV1)*
Q47	Exhaust Gas Recirculation Cooler Bypass Solenoid Valve	LWN	In the engine compartment, on the left side of the engine attached to the EGR valve	*Right Front of Engine Components (LWN)*	*Q47 Exhaust Gas Recirculation Cooler Bypass Solenoid Valve*
Q61	Reductant Injector	LWN	Under the vehicle, attached to the exhaust pipe, near the rear of the catalytic converter	—	*Q61 Reductant Injector*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q67	Exhaust After-treatment Fuel Injector	LWN	In the engine compartment, on the right rear side of the engine	—	*Q67 Exhaust After-treatment Fuel Injector*
Q77A	Transmission Control Solenoid Valve 1	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77A Transmission Control Solenoid Valve 1 (M5U)*
Q77B	Transmission Control Solenoid Valve 2	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77B Transmission Control Solenoid Valve 2 (M5U)*
Q77C	Transmission Control Solenoid Valve 3	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77C Transmission Control Solenoid Valve 3 (M5U)*
Q77D	Transmission Control Solenoid Valve 4	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77D Transmission Control Solenoid Valve 4 (M5U)*
Q77E	Transmission Control Solenoid Valve 5	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77E Transmission Control Solenoid Valve 5 (M5U)*
Q77F	Transmission Control Solenoid Valve 6	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77F Transmission Control Solenoid Valve 6 (M5U)*
Q77G	Transmission Control Solenoid Valve 7	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77G Transmission Control Solenoid Valve 7 (M5U)*
Q77H	Transmission Control Solenoid Valve 8	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77H Transmission Control Solenoid Valve 8 (M5U)*
Q77J	Transmission Control Solenoid Valve 9	M5U	Under the vehicle, internal to the Transmision Assembly	—	*Q77J Transmission Control Solenoid Valve 9 (M5U)*
Q85	Cooling Fan Clutch	LWN	In the engine compartment, attached to the cooling fan	• *Left Side of Engine Components (LWN)* • *Front of Engine Compartment Components (1 of 2)*	*Q85 Cooling Fan Clutch (LWN)*
R3	Blower Motor Resistor	—	Right rear of the engine compartment, attached to the evaporator case	*Engine Compartment Components (1 of 2)*	*R3 Blower Motor Resistor*
R3B	Blower Motor Resistor - Auxiliary	C36 or C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	*Left Rear Cargo Area Components (Passenger or Cargo)*	*R3B Blower Motor Resistor - Auxiliary*
R6A	Terminating Resistor - High Speed Bus	—	In the engine compartment	—	*R6A Terminating Resistor - High Speed Bus*
R10	Cooling Fan Resistor	LWN	In the engine compartment	—	*R10 Cooling Fan Resistor*
S2	Transmission Manual Shift Switch	MYD	Mounted on the shift lever, extending from the right side of the steering column	—	*S2 Transmission Manual Shift Switch (MYD)*
S13A	Door Lock Switch - Rear Cargo	Passenger or Cargo with AU3	Attached to the right cargo door accessory mount plate	*Rear Door Components (Passenger or Cargo)*	*S13A Door Lock Switch - Rear Cargo*
S13D	Door Lock Switch - Driver	AU3	Attached to the left front door accessory mount plate	*Driver Door Components*	*S13D Door Lock Switch - Driver*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S13P	Door Lock Switch - Passenger	AU3	Attached to the right front door accessory mount plate	*Front Passenger Door Components*	*S13P Door Lock Switch - Passenger*
S16	Driver Information Center Switch	—	On the dash, just to the left of P16 Instrument Cluster	*Instrument Panel Components (1 of 2)*	*S16 Driver Information Center Switch*
S30	Headlamp Switch	—	At the left side of the instrument panel	*Instrument Panel Components (1 of 2)*	*S30 Headlamp Switch*
S33	Horn Switch	—	Inside the upper steering column, behind the inflatable restraint steering wheel module	*Steering Column Components (1 of 2)*	*S33 Horn Switch*
S34	HVAC Controls Switch Assembly	—	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	• *S34 HVAC Controls Switch Assembly X1* • *S34 HVAC Controls Switch Assembly X2* • *S34 HVAC Controls Switch Assembly X3* • *S34 HVAC Controls Switch Assembly X4*
S34F	HVAC Controls Switch Assembly - Auxiliary Front	C36 or C69	On the front of the overhead console	*Headliner Components*	• *S34F HVAC Controls Switch Assembly - Auxiliary Front (REAR HVAC CONTROLS)* • *S34F HVAC Controls Switch Assembly - Auxiliary Front (-REAR HVAC CONTROLS)*
S34R	HVAC Controls Switch Assembly - Auxiliary Rear	C36 or C69 with Rear HVAC Controls	In the headliner, near the center of the vehicle	*Headliner Components*	*S34R HVAC Controls Switch Assembly - Auxiliary Rear*
S39	Ignition Switch	—	On the right side of the steering column	*Steering Column Components (1 of 2)*	*S39 Ignition Switch*
S40	Passenger Air Bag Disable Switch	C99	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	*S40 Passenger Air Bag Disable Switch*
S51	Telematics Button Assembly	UE1	In the center of the instrument panel, just below the radio	—	*S51 Telematics Button Assembly*
S52	Outside Rearview Mirror Switch	DEB or DE5	Attached to the left front door accessory mount plate	*Driver Door Components*	*S52 Outside Rearview Mirror Switch*
S64D	Seat Adjuster Switch - Driver	AG1	Attached to the front panel of the driver seat	*Driver Seat Components*	*S64D Seat Adjuster Switch - Driver (AG1)*
S64P	Seat Adjuster Switch - Passenger	AG2	Attached to the front panel of the front passenger seat	*Passenger Seat Components*	*S64P Seat Adjuster Switch - Passenger (AG2)*
S70L	Steering Wheel Controls Switch - Left	K34	On the left steering wheel spoke	*Instrument Panel Components (1 of 2)*	*S70L Steering Wheel Controls Switch - Left (K34)*
S70R	Steering Wheel Controls Switch - Right	W1Y	On the right steering wheel spoke	*Instrument Panel Components (1 of 2)*	*S70R Steering Wheel Controls Switch - Right (W1Y)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S74	Tow/Haul Mode Switch	—	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	*S74 Tow/Haul Mode Switch*
S75	Traction Control Switch	—	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	*S75 Traction Control Switch*
S78	Turn Signal/Multifunction Switch	—	On the left side of the steering column	• *Instrument Panel Components (1 of 2)* • *Steering Column Components (1 of 2)*	• *S78 Turn Signal/ Multifunction Switch X1* • *S78 Turn Signal/ Multifunction Switch X2* • *S78 Turn Signal/ Multifunction Switch X3*
S79D	Window Switch - Driver	A31	Attached to the left front door accessory mount plate	*Driver Door Components*	*S79D Window Switch - Driver*
S79P	Window Switch - Passenger	A31	Attached to the right front door accessory mount plate	*Front Passenger Door Components*	*S79P Window Switch - Passenger*
S85	Auxiliary Blower Motor Switch	C36 or C69	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	*S85 Auxiliary Blower Motor Switch*
T1	Accessory DC/AC Power Inverter Module	KI4	Attached to the Instrument Panel Harness	—	*T1 Accessory DC/AC Power Inverter Module*
T4G	Cellular Phone, Navigation, and Digital Radio Antenna	U2K, UBS, or UI8	Mounted towards the left front of the roof	—	—
T4M	Radio Antenna	—	Mounted on top of the right front fender, adjacent to the hood	*Right Rear of the Engine Compartment Components*	*T4M Radio Antenna*
T4S	Wireless Communication Antenna - Bluetooth	UE1	Internal to K73 Telematics Communication Interface Control Module	—	—
T8A	Ignition Coil 1	—	On the left rocker cover center at cylinder 1	*Upper Left Side of the Engine Components (LV1)*	• *T8A Ignition Coil 1 (L96/LC8)* • *T8A Ignition Coil 1 (LV1)*
T8B	Ignition Coil 2	—	On the right rocker cover center at cylinder 2	• *Upper Right Side of the Engine Components (L96 or LC8)* • *Right Front Side of the Engine Components (L96 or LC8)*	• *T8B Ignition Coil 2 (L96/LC8)* • *T8B Ignition Coil 2 (LV1)*
T8C	Ignition Coil 3	—	On the left rocker cover center at cylinder 3	*Upper Left Side of the Engine Components (LV1)*	• *T8C Ignition Coil 3 (L96/LC8)* • *T8C Ignition Coil 3 (LV1)*
T8D	Ignition Coil 4	—	On the right rocker cover center at cylinder 4	• *Right Front Side of the Engine Components (L96 or LC8)* • *Upper Right Side of the Engine Components (L96 or LC8)*	• *T8D Ignition Coil 4 (L96/LC8)* • *T8D Ignition Coil 4 (LV1)*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T8E	Ignition Coil 5	—	On the left rocker cover center at cylinder 5	*Upper Left Side of the Engine Components (LV1)*	• *T8E Ignition Coil 5 (L96/LC8)* • *T8E Ignition Coil 5 (LV1)*
T8F	Ignition Coil 6	—	On the right rocker cover center at cylinder 6	• *Right Front Side of the Engine Components (L96 or LC8)* • *Upper Right Side of the Engine Components (L96 or LC8)*	• *T8F Ignition Coil 6 (L96/LC8)* • *T8F Ignition Coil 6 (LV1)*
T8G	Ignition Coil 7	L96, or LC8	On the left rocker cover rear at cylinder 7	—	*T8G Ignition Coil 7*
T8H	Ignition Coil 8	L96, or LC8	On the right rocker cover rear at cylinder 8	• *Right Front Side of the Engine Components (L96 or LC8)* • *Upper Right Side of the Engine Components (L96 or LC8)*	*T8H Ignition Coil 8*
T12	Automatic Transmission Assembly	—	Under the vehicle attached to the rear of the engine	—	*T12 Automatic Transmission Assembly*
W12	Blunt Cut - Emergency Vehicle Provision	—	Near the instrument panel	—	—
W22	Blunt Cut - Rear Speaker Provision	—	Near the instrument panel	—	—
W25	Blunt Cut - Configurable Provision	—	Near the instrument panel	—	—
X50A	Fuse Block - Underhood	—	In the engine compartment, attached to the left front fender	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Compartment Components (2 of 2)* • *Engine Compartment Components (1 of 2)*	*Electrical Center Identification Views on page 6-202*
X50B	Fuse Block - Underhood Auxiliary	—	In the engine compartment	—	*Electrical Center Identification Views on page 6-202*
X52A	Fuse Block - Passenger Compartment	—	Below the driver seat	*Body Harness Routing - Left Front of Passenger Compartment*	*Electrical Center Identification Views on page 6-202*
X53A	Fuse Block - Rear Body	PRP	Within the cargo area	—	*Electrical Center Identification Views on page 6-202*
X54D	Fuse Block - Fuel Heater	LWN	Within the engine compartment	—	*Electrical Center Identification Views on page 6-202*
X55AF	Fuse Holder - Engine Control Module	LWN	Within the engine compartment	—	*Electrical Center Identification Views on page 6-202*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X55AS	Fuse Holder - Rear Body Fuse Block	LWN	Within the engine compartment	—	*Electrical Center Identification Views on page 6-202*
X60A	Junction Block - Underhood	LWN or TP2	In the engine compartment, in-between M64 Starter Motor and X50A Fuse Block - Underhood	—	*Electrical Center Identification Views on page 6-202*
X80A	Accessory Power Receptacle - Center Console 1	Without DT4	In the center of the instrument panel	*Instrument Panel Components (1 of 2)*	*X80A Accessory Power Receptacle - Center Console 1 (-DT4)*
X80B	Accessory Power Receptacle - Center Console 2	—	In the right center of the instrument panel	*Instrument Panel Components (1 of 2)*	*X80B Accessory Power Receptacle - Center Console 2*
X81	Accessory Power Receptacle - 110V AC	KI4	Within the passenger compartment	—	• *X81 Accessory Power Receptacle - 110V AC X1* • *X81 Accessory Power Receptacle - 110V AC X2*
X84	Data Link Connector	—	Left lower side of the instrument panel, near the park brake pedal assembly	*Instrument Panel Components (1 of 2)*	*X84 Data Link Connector*
X85	Steering Wheel Air Bag Coil	—	Inside the upper steering column	—	• *X85 Steering Wheel Air Bag Coil X1* • *X85 Steering Wheel Air Bag Coil X2*
X87RB	Sliding Door Jamb Contact Plate - Right Body	AU3 and E24 or YA2	Attached to the right B-pillar	• *Right Sliding Door Components (YA2)* • *Right Side Hinged Door Components (E24)*	• *X87RB Sliding Door Jamb Contact Plate - Right Body (AU3)* • *X87RB Sliding Door Jamb Contact Plate - Right Body (CARGO)* • *X87RB Sliding Door Jamb Contact Plate - Right Body (CUTAWAY)* • *X87RB Sliding Door Jamb Contact Plate - Right Body (PASSENGER)*
X88	Trailer Connector	UY7	Below the rear bumper, near the center	—	• *X88 Trailer Connector (-LWN)* • *X88 Trailer Connector (NE7)* • *X88 Trailer Connector (-NE7)*
X92	USB Receptacle	USR	Slightly below and to the right of A11 Radio	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X100	Instrument Panel Harness to Engine Harness	—	Left rear of the engine compartment near the underhood fuse block and the horn	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Engine Compartment* • *Engine Harness Routing - Front (L96 or LC8)*	*X100 Instrument Panel Harness to Engine Harness*
X101	Engine Harness to Chassis Harness	LV1, L96, or LC8	Left rear of the engine compartment behind the underhood fuse block	• *Engine Harness Routing - Front (L96 or LC8)* • *Engine Harness Routing - Engine Compartment (LV1)* • *Chassis Harness Routing (L96 or LC8)*	*X101 Engine Harness to Chassis Harness*
X104	Instrument Panel Harness to Front Impact Sensor Jumper Harness	—	Instrument panel harness to the inflatable restraint front end sensor jumper harness, bottom left side of the radiator support	*Engine Harness Routing - Engine Compartment*	*X104 Instrument Panel Harness to Front Impact Sensor Jumper Harness*
X108	Battery Cable Harness to Engine Harness	LWN	Battery cable harness to the engine harness, near the front of the engine compartment	—	*X108 Battery Cable Harness to Engine Harness*
X109	Engine Harness to Underhood Lamp Harness	TR9	Engine harness to the underhood lamp jumper harness, left rear of the engine compartment	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Front (L96 or LC8)*	*X109 Engine Harness to Underhood Lamp Harness*
X111	Engine Harness to Glow Plug Jumper Harness	LWN	In the engine compartment, on the left side of the engine toward the top	—	*X111 Engine Harness to Glow Plug Jumper Harness*
X112	Engine Harness to Fuel Rail Jumper Harness	LWN	Fuel rail jumper harness to the engine harness, in the engine compartment, near the upper rear corner of the left valve cover	—	*X112 Engine Harness to Fuel Rail Jumper Harness (LWN)*
X116	Engine Harness to Chassis Harness	LWN	In the engine compartment	—	*X116 Engine Harness to Chassis Harness*
X126	Engine Harness to Ignition Coil Harness	L96, or LC8	Engine harness to the left ignition coils jumper harness, top center of the left valve cover	• *Engine Harness Routing - Left Rear of Engine (L96 or LC8)* • *Engine Harness Routing - Front (L96 or LC8)*	*X126 Engine Harness to Ignition Coil Harness*
X127	Engine Harness to Ignition Coil Harness	L96, or LC8	Engine harness to the right ignition coils jumper harness, top center of the right valve cover	*Upper Right Side of the Engine Components (L96 or LC8)*	*X127 Engine Harness to Ignition Coil Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X130	Engine Harness to Camshaft Position Sensor Jumper Harness	LV1	In the engine compartment, on the left rear side of engine block	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Front (LV1)*	*X130 Engine Harness to Camshaft Position Sensor Jumper Harness*
X135	Camshaft Position Sensor Jumper Harness to Oil Control Solenoid Valve Jumper Harness	LV1	In the engine compartment, on the left rear side of engine block	*Engine Harness Routing - Front (LV1)*	*X135 Camshaft Position Sensor Jumper Harness to Oil Control Valve Harness*
X141	Instrument Panel Harness to Brake Fluid Level Jumper Harness	UJ1	Instrument panel harness to the brake fluid alarm switch jumper harness, left rear of the engine compartment near the cowl	• *Engine Harness Routing - Engine Compartment* • *Brake Booster Fluid Alarm Switches (UJ1)*	*X141 Instrument Panel Harness to Brake Fluid Level Jumper Harness*
X142	Engine Harness to Cooling Fan Jumper Harness	LWN	Engine chassis harness to the fan jumper harness, near the front of the engine	*Front of Engine Compartment Components (2 of 2)*	*X142 Engine Harness to Cooling Fan Jumper Harness*
X150	Instrument Panel Harness to Forward Lamp Harness	—	Instrument panel harness to the forward lamp harness, near the upper radiator hose at the radiator entry point	• *Forward Lamp Harness Routing* • *Engine Harness Routing - Engine Compartment*	*X150 Instrument Panel Harness to Forward Lamp Harness*
X160	Engine Harness to Fuel Injector Rail Jumper Harness	LV1	In the engine compartment, rear of the engine near the top center	• *Engine Harness Routing - Engine Compartment (LV1)* • *Fuel Injector Harness Routing (LV1)*	*X160 Engine Harness to Fuel Injector Rail Jumper Harness*
X161	Engine Harness to Fuel Injector Rail Jumper Harness	LV1	In the engine compartment, rear of the engine near the top right	• *Fuel Injector Harness Routing (LV1)* • *Engine Harness Routing - Engine Compartment (LV1)*	*X161 Engine Harness to Fuel Injector Rail Jumper Harness*
X175	Engine Harness to Transmission Jumper Harness	M5U	Engine harness to the transmission jumper harness	—	*X175 Engine Harness to Transmission Jumper Harness (M5U)*
X176	Transmission Case Harness to Transmission Control Harness	M5U	Internal to the transmission	—	*X176 Transmission Case Harness to Transmission Control Harness (M5U)*
X177	Engine Harness to Camshaft Position Sensor Jumper Harness	L96, or LC8	Engine harness to the camshaft harness, left front of the engine near the crank pulley	*Engine Harness Routing - Front (L96 or LC8)*	*X177 Engine Harness to Camshaft Position Sensor Jumper Harness*
X178	Transmission Case Harness to Speed Sensor Assembly Harness	M5U	Transmission harness to the transmission speed sensor harness	—	*X178 Transmission Case Harness to Speed Sensor Assembly Harness (M5U)*
X185	Instrument Panel Harness to Chassis Harness	—	In the engine compartment, near the X50A fuse block - underhood	—	*X185 Instrument Panel Harness to Chassis Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X190	Accessory Harness to Accessory Power Fuse Block Rear Extension Harness	—	In the engine compartment	—	*X190 Accessory Harness to Accessory Power Fuse Block Rear Extension Harness*
X200	Steering Column Harness to Instrument Panel Harness	—	Steering column harness to the instrument panel harness, at the base of the steering column	• *Steering Column Harness Routing* • *Instrument Panel Harness Routing - Dash Area (1 of 2)*	*X200 Steering Column Harness to Instrument Panel Harness*
X202	Instrument Panel Harness to Engine Harness	—	Instrument panel harness to engine harness, about 8.8 inches (225 mm) from I/P underhood break out after pass through grommet	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Front (L96 or LC8)*	*X202 Instrument Panel Harness to Engine Harness*
X204	Body Harness to Headliner Harness	—	Body harness to headliner harness,	• *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	*X204 Body Harness to Headliner Harness*
X205	Front Headliner Harness to Body Harness	—	Front headliner harness to the body harness, behind the A-pillar	• *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)* • *Body Harness Routing - Roof Area* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	*X205 Front Headliner Harness to Body Harness*
X206	Instrument Panel Harness to Instrument Panel Harness	—	Instrument Panel Harness to Instrument Panel Harness, left side of the instrument panel near the headlamp switch	—	*X206 Instrument Panel Harness to Instrument Panel Harness*
X220	Instrument Panel Harness to Park Brake Jumper Harness	—	Instrument panel harness to the parking brake jumper harness, left side of the instrument panel, center of the parking brake pedal assembly	—	*X220 Instrument Panel Harness to Park Brake Jumper Harness*
X222	Upfitter Provision Harness to Instrument Panel Harness	YF2 or YF7	Upfitter harness to the instrument panel harness, left side of the instrument panel near the parking brake lever assembly	*Instrument Panel Harness Routing - Dash Area (1 of 2)*	*X222 Upfitter Provision Harness to Instrument Panel Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X225	Accelerator Pedal Position (APP) Sensor Jumper Harness to Instrument Panel Harness	—	Accelerator Pedal Position (APP) Jumper Harness to Instrument Panel Harness, located between Accelerator Pedal Position (APP) sensor and Instrument Panel Harness	—	*X225 Accelerator Pedal Position (APP) Sensor Jumper Harness to Instrument Panel Harness*
X276	Steering Wheel Harness to Instrument Panel Harness	—	Steering wheel harness to the instrument panel harness, in the back of the left instrument panel knee bolster above X200	*Instrument Panel Harness Routing - Dash Area (1 of 2)*	*X276 Steering Wheel Harness to Instrument Panel Harness*
X289	Side Access Panel Harness to Instrument Panel Harness	PRP	Inside the vehicle, towards the left front	—	*X289 Side Access Panel Harness to Instrument Panel Harness*
X290	Instrument Panel Harness to Side Access Panel Harness	PRP	Inside the vehicle, towards the left front	—	*X290 Instrument Panel Harness to Side Access Panel Harness*
X291	Accessory Power Fuse Block Rear Extension Harness to Accessory Power Fuse Block Rear Extension Harness	—	In the engine compartment	—	*X291 Accessory Power Fuse Block Rear Extension Harness to Accessory Power Fuse Block Rear Extension Harness*
X306	Body Harness to Passenger Seat Harness	—	Body harness to the front passenger seat harness, right side of the passenger compartment below the passenger seat	• *Driver Seat Harness Routing and Front Passenger Seat Harness Routing* • *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)* • *Passenger Seat Components* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	*X306 Body Harness to Passenger Seat Harness*
X307	Body Harness to Driver Seat Harness	—	Body harness to the driver seat harness, left side of the passenger compartment below the driver seat	• *Body Harness Routing - Left Front of Passenger Compartment* • *Driver Seat Harness Routing and Front Passenger Seat Harness Routing* • *Driver Seat Components*	*X307 Body Harness to Driver Seat Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X318	Instrument Panel Harness to Body Harness	—	Instrument panel harness to the body harness, behind the left kick panel	• *Body Harness Routing - Left Front of Passenger Compartment* • *Instrument Panel Harness Routing - Dash Area (1 of 2)*	*X318 Instrument Panel Harness to Body Harness*
X319	Rear Heater Switch Harness to Body Harness	ENC, C69, or C36	Rear heater switch harness to the body harness, behind the left kick panel	*Body Harness Routing - Left Front of Passenger Compartment*	*X319 Rear Heater Switch Harness to Body Harness*
X320	Upfitter Provision Harness to Body Harness	YF2 or YF7	Upfitter harness to the body harness, left side of the passenger compartment lower left C-pillar	—	*X320 Upfitter Provision Harness to Body Harness*
X321	Upfitter Provision Harness to Body Harness	YF2 or YF7	Upfitter harness to the body harness, left side of the passenger compartment center of the left C-pillar	—	*X321 Upfitter Provision Harness to Body Harness*
X323	Body Harness to Left Rear Side Impact Sensor Jumper Harness	ASF	At the base of the left C-pillar	*Body Harness Routing - Left Front of Passenger Compartment*	*X323 Body Harness to Left Rear Side Impact Sensor Jumper Harness*
X324	Body Harness to Right Rear Side Impact Sensor Jumper Harness	ASF	At the base of the right C-pillar	*Body Harness Routing - Right C-Pillar*	*X324 Body Harness to Right Rear Side Impact Sensor Jumper Harness*
X328	Body Harness to Upfitter Jumper Harness	WRF	Near the instrument panel	—	*X328 Body Harness to Upfitter Jumper Harness*
X329	Instrument Panel Harness to Body Harness	UVC	Instrument panel harness to the body harness, in the passenger compartment under the driver seat	*Body Harness Routing - Left Front of Passenger Compartment*	*X329 Instrument Panel Harness to Body Harness*
X330	Instrument Panel Harness to Body Harness	—	Instrument panel harness to the body harness, under the driver seat	• *Instrument Panel Harness Routing - Dash Area (1 of 2)* • *Body Harness Routing - Left Front of Passenger Compartment*	*X330 Instrument Panel Harness to Body Harness*
X331	Instrument Panel Harness to Body Harness	—	Instrument panel harness to the body harness, under the driver seat	• *Body Harness Routing - Left Front of Passenger Compartment* • *Instrument Panel Harness Routing - Dash Area (1 of 2)*	*X331 Instrument Panel Harness to Body Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X400	Right Rear Cargo Door Harness to Body Harness	Passenger or Cargo	Right cargo door harness to the body harness, right rear of the passenger compartment center of the right D-pillar	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Rear Cargo Doors Harness Routing (Passenger or Cargo)*	*X400 Right Rear Cargo Door Harness to Body Harness*
X403	Rear Cargo Door Harness to Body Harness	UVC	Rear cargo door harness to body harness,	• *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	• *X403 Right Rear Cargo Door Harness to Body Harness (CARGO)* • *X403 Rearview Camera Harness to Body Harness (CUTAWAY)* • *X403 Right Rear Cargo Door Harness to Body Harness (CUTAWAY+5BV)* • *X403 Right Rear Cargo Door Harness to Body Harness (PASSENGER)*
X405	Cutaway Rear Lighting Connector to Chassis Harness	Cutaway	Cutaway rear lighting connector to the chassis harness, left rear frame rail	*Chassis Harness Routing (L96 or LC8)*	• *X405 Rear Lamp Harness to Chassis Rear Extension Harness (8S3)* • *X405 Chassis Harness to Chassis Harness (-8S3)* • *X405 Chassis Harness to Chassis Harness (-K08)* • *X405 Chassis Rear Extension Harness to Chassis Harness (CUTAWAY+8S3)*
X407	Auxiliary HVAC Harness to Body Harness	C36 or C69	Rear HVAC harness to the body harness, left rear of the passenger compart-ment upper back side of the auxiliary HVAC module at the D-pillar	• *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)*	*X407 Auxiliary HVAC Harness to Body Harness*
X408	Rear Bumper Harness to Chassis Harness	UD7 or UFT	Rear bumper harness to chassis harness,	*Rear Bumper Harness Routing*	*X408 Rear Bumper Harness to Chassis Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X409	Auxiliary HVAC Harness to Body Harness	C36 or C69	Rear HVAC harness to body harness, left rear of the passenger compartment upper back side of the auxiliary HVAC module	*Body Harness Routing - Left Rear (Passenger or Cargo)*	*X409 Auxiliary HVAC Harness to Body Harness*
X410	Left Rear Lamp Harness to Body Harness	Passenger or Cargo	Left Tail Lamp Assembly Harness to Body Harness, left rear of the passenger compartment at the D-pillar	• *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)*	• *X410 Left Rear Lamp Harness to Body Harness (CUTAWAY)* • *X410 Left Rear Lamp Harness to Body Harness (-CUTAWAY)*
X411	Left Rear Cargo Door Harness to Body Harness	Passenger or Cargo	Left cargo door harness to the body harness, left rear of the passenger compartment center of the left D-pillar	• *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Rear Cargo Doors Harness Routing (Passenger or Cargo)*	*X411 Left Rear Cargo Door Harness to Body Harness*
X412	Right Rear Cargo Door Harness to Body Harness	Passenger or Cargo	Right cargo door harness to the body harness, right rear of the passenger compartment center of the right D-pillar	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Rear Cargo Doors Harness Routing (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)*	*X412 Right Rear Cargo Door Harness to Body Harness*
X415	Rear Speaker Harness to Body Harness	Passenger or Cargo	Rear overhead speakers jumper harness to the body harness, rear of the passenger compartment center of the rear roof rail	• *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	*X415 Rear Speaker Harness to Body Harness*
X419	Center High Mounted Stop Lamp Harness to Body Harness	Passenger or Cargo	CHMSL harness to the body harness, rear of the passenger compartment center of the rear roof rail	• *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)*	*X419 Center High Mounted Stop Lamp Harness to Body Harness*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X420	Right Rear Lamp Harness to Body Harness	Passenger or Cargo	Right Tail Lamp Assembly Harness to Body Harness, right rear of the passenger compartment at the D-pillar	• *Body Harness Routing - Roof Area* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	• *X420 Right Rear Lamp Harness to Body Harness (CUTAWAY)* • *X420 Right Rear Lamp Harness to Body Harness (-CUTAWAY)*
X421	Body Harness to Rear Headliner Harness	—	Body harness to rear headliner harness	• *Body Harness Routing - Roof Area* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)*	*X421 Body Harness to Rear Headliner Harness*
X460	Chassis Harness to Trailer Provision Harness	Cutaway with UY7 and NE7	Trailer Provision to Chassis Harness, in rear near Trailer Harness	—	*X460 Chassis Harness to Trailer Provision Harness*
X500	Driver Door Harness to Body Harness	—	Driver door harness to the body harness, behind the left kick panel	*Body Harness Routing - Left Front of Passenger Compartment*	*X500 Driver Door Harness to Body Harness*
X501	Driver Door Harness to Driver Side Impact Sensor Jumper Harness	ASF	Driver side impact sensor harness to the driver door harness, in the driver door behind the trim panel	—	*X501 Driver Door Harness to Driver Side Impact Sensor Jumper Harness*
X600	Passenger Door Harness to Body Harness	—	Passenger door harness to the body harness, behind the right kick panel	• *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)*	*X600 Passenger Door Harness to Body Harness*
X601	Passenger Side Impact Sensor Jumper Harness to Passenger Door Harness	ASF	Passenger side impact sensor harness to the passenger door harness, in the passenger door behind the trim panel	—	*X601 Passenger Side Impact Sensor Jumper Harness to Passenger Door Harness*
X901	Defogger Jumper Harness to Left Rear Cargo Door Harness	C49	Rear window defogger jumper harness to the left cargo door harness, in the left cargo door	*Rear Cargo Doors Harness Routing (Passenger or Cargo)*	*X901 Defogger Jumper Harness to Left Rear Cargo Door Harness*
X902	Defogger Jumper Harness to Right Rear Cargo Door Harness	C49	Rear window defogger jumper harness to the right cargo door harness, in the right cargo door	*Rear Cargo Doors Harness Routing (Passenger or Cargo)*	*X902 Defogger Jumper Harness to Right Rear Cargo Door Harness*
G100	Forward Lamp Harness	—	Left front of the engine compartment, attached to the front of the left fender	*G100 and G101*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G101	Forward Lamp Harness	—	Right front of the engine compartment, attached near the front of the right fender	*G100 and G101*	—
G102	Engine Harness	—	Rear of the engine compartment, left rear of the engine on the left cylinder head	*G102 and G103 (L96 or LC8)*	—
G103	Engine Harness	—	Rear of the engine compartment, left rear of the engine on the left cylinder head	*G102 and G103 (L96 or LC8)*	—
G104	Negative Battery Cable	—	Mounted on the engine, extending towards the battery	—	—
G105	Negative Battery Cable	—	Front of the engine compartment, right front of the inner frame rail	—	—
G106	Negative Battery Cable	—	Front of the engine compartment, right front fender	—	—
G107	Engine Harness	LV1	Rear of the engine compartment, left rear of the engine on the left cylinder head	*G107 and G108 (LV1)*	—
G108	Engine Harness	LV1	Rear of the engine compartment, towards top of the engine	*G107 and G108 (LV1)*	—
G300	Chassis Harness	—	Left side outer frame, near the EBCM	• *G300, G400, G404 and G405* • *Chassis Harness Routing (L96 or LC8)*	—
G301	Instrument Panel	—	Left front of the passenger compartment, behind the kick panel next to G302	—	—
G302	Instrument Panel	—	Left front of the passenger compartment, behind the kick panel next to G301	*G302 and G347*	—
G304	Instrument Panel	—	Right front of the passenger compartment, behind the kick panel	*G304*	—
G305	Auxiliary Battery Negative Cable	TP2 or LWN	Left center outer frame rail, near the auxiliary battery	• *G305* • *Frame and Underbody Components (2 of 2)*	—
G347	Body Harness	—	Left side of the passenger compartment, lower left B-pillar part of JX347	*G302 and G347*	—
G348	Body Harness	—	Right side of the passenger compartment, lower right B-pillar part of JX348	—	—
G400	Chassis Harness	LWN	Left rear inner side frame rail	*G300, G400, G404 and G405*	—
G401	Body Harness	Passenger or Cargo	Right rear of the passenger compartment, upper right D-pillar	*G401 and G402 (Passenger or Cargo)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G402	Body Harness	Passenger or Cargo	Left rear of the passenger compartment, center left D-pillar	*G401 and G402 (Passenger or Cargo)*	—
G403	Side Access Panel Harness	PRP	Left rear of the passenger compartment, center left D-pillar	—	—
G404	Chassis Harness	—	In vehicle underbody, near center, on left frame rail	*G300, G400, G404 and G405*	—
G405	Chassis Harness	LWN	In vehicle underbody, near center, on left frame rail	*G300, G400, G404 and G405*	—
J100	Forward Lamp Harness	—	At the left front of the engine compartment, just behind the left front headlamp assembly	—	—
J101	Engine Harness	—	In the engine harness, on the right side of the engine, approximately 5 cm (2 in) from the MAP sensor breakout	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Left Rear of Engine (L96 or LC8)*	—
J102	Engine Harness	—	In the engine harness, on the right side of the engine, approximately 6 cm (2 in) from the MAP sensor breakout	• *Engine Harness Routing - Left Rear of Engine (L96 or LC8)* • *Engine Harness Routing - Engine Compartment (LV1)*	—
J105	Fuse Block Jumper Harness	9L7	In the fuse block jumper harness, between KR81 Auxiliary Battery Relay 1 and X50B Fuse Block – Underhood Auxiliary	—	—
J106	Fuse Block Jumper Harness	9L7	In the fuse block jumper harness	—	—
J110	Forward Lamp Harness	—	In the forward lamp harness, Left front of the vehicle, approximately 12 cm (5 in) from the left headlamp connector breakout	*Forward Lamp Harness Routing*	—
J115	Engine Harness	—	In the engine harness, in the right front of the engine compartment, approximately 15 cm (6 in) from the X101 breakout	• *Engine Harness Routing - Engine Compartment (LV1)* • *Engine Harness Routing - Front (L96 or LC8)*	—
J117	Engine Harness	M5U	In the engine harness, approximately 6 cm (2.4 in) from the exhaust temperature sensor 1 breakout	—	—
J118	Engine Harness	M5U	In the engine harness, approximately 7 cm (2.75 in) from the reductant injector breakout	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J119	Chassis Harness	K08	In the chassis harness, near the left front inner frame rail, approximately 15 cm (6 in) from the coolant heater breakout	—	—
J121	Forward Lamp Harness	—	In the forward lamp harness, near the front center of the vehicle, approximately 48 cm (19 in) from the left headlamp breakout	*Forward Lamp Harness Routing*	—
J122	Forward Lamp Harness	—	In the forward lamp harness, near the left front of the vehicle, approximately 12 cm (5 in) from the underhood fuse block X4 breakout	*Forward Lamp Harness Routing*	—
J123	Engine Harness	L96, or LC8	In the engine harness, near the left front side of the vehicle, approximately 16 cm (6 in) from the underhood fuse block X1 breakout	*Engine Harness Routing - Front (L96 or LC8)*	—
J125	Engine Harness	LWN	In the engine harness, approximately 24.5 cm (9.6 in) from the cooling fan resistor breakout	—	—
J126	Engine Harness	LWN	In the engine harness, approximately 25.5 cm (10 in) from the horn assembly breakout	—	—
J127	Engine Harness	LWN	In the engine harness, approximately 12.0 cm (4.7 in) from the brake fluid level switch breakout	—	—
J128	Engine Harness	LWN	In the engine harness, approximately 14.5 cm (5.7 in) from the fuse block – fuel heater breakout	—	—
J135	Engine Harness	LWN	In the engine harness, approximately 24.5 cm (9.6 in) from the fuse block – fuel heater breakout	—	—
J143	Engine Harness	LV1, L96, or LC8	Adjacent to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52E Heated Oxygen Sensor - Bank 2 Sensor 1	*Engine Harness Routing - Engine Compartment (LV1)*	—
J144	Engine Harness	LV1, L96, or LC8	Adjacent to B52D Heated Oxygen Sensor - Bank 1 Sensor 2 and B52F Heated Oxygen Sensor - Bank 2 Sensor 2	*Engine Harness Routing - Engine Compartment (LV1)*	—
J170	Engine Harness	LV1	In the engine harness, approximately 24.5 cm (9.6 in) from ignition coil 5	*Engine Harness Routing - Engine Compartment (LV1)*	—
J171	Engine Harness	LV1	In the engine harness, approximately 26 cm (10.2 in) from ignition coil 6	*Engine Harness Routing - Engine Compartment (LV1)*	—
J175	Transmission Internal Harness	M5U	Within the automatic transmission assembly	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J176	Transmission Internal Harness	M5U	Within the automatic transmission assembly	—	—
J177	Transmission Internal Harness	M5U	Within the automatic transmission assembly	—	—
J181	Ignition Coil Jumper Harness	L96, or LC8	In the ignition coil jumper harness for bank 1, approximately 5 cm (2.0 in) from the X126 breakout	—	—
J182	Left Ignition Coil Harness	LV1, L96, or LC8	In the odd ignition/coil module jumper harness, top left of the engine	*Engine Harness Routing - Engine Compartment (LV1)*	—
J183	Right Ignition Coil Harness	L96, or LC8	In the even ignition/coil module jumper harness, top right of the engine	—	—
J184	Left Ignition Coil Harness	LV1, L96, or LC8	In the odd ignition/coil module jumper harness, top left of the engine	*Engine Harness Routing - Engine Compartment (LV1)*	—
J185	Right Ignition Coil Harness	LV1, L96, or LC8	In the even ignition/coil module jumper harness, top right of the engine	*Engine Harness Routing - Engine Compartment (LV1)*	—
J188	Right Ignition Coil Harness	LV1, L96, or LC8	In the even ignition/coil module jumper harness, top right of the engine	*Engine Harness Routing - Engine Compartment (LV1)*	—
J202	Steering Column Harness	—	In the steering column harness, approximately 25 cm (9 in) from the X200 connector	—	—
J203	Steering Column Harness	—	In the steering column harness, approximately 27 cm (10.5 in) from the X200 connector	—	—
J205	Steering Column Harness	—	In the steering column harness, approximately 30 cm (12 in) from the X200 connector	—	—
J207	Instrument Panel	—	In the instrument panel harness, center of the instrument panel, approximately 70 cm (27 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J208	Steering Wheel Harness	K34 with W1Y	In the steering wheel harness, near the X200 connector	—	—
J209	Steering Wheel Harness	K34 with W1Y	In the steering wheel harness, near the X200 connector	—	—
J210	Steering Wheel Harness	K34 or W1Y	In the steering wheel harness, near the X200 connector	—	—
J211	Instrument Panel	UD7 or UFT	In the engine compartment, approximately 30 cm (11.8 in) from the windshield washer pump	—	—
J223	Instrument Panel	UVC	Adjacent to K9 Body Control Module	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J241	Instrument Panel	—	In the instrument panel harness, center of the instrument panel, approximately 13.5 cm (5.3 in) from the parking assist control module breakout	—	—
J244	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 12 cm (5 in) from the X200 breakout towards the instrument panel cluster connector	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J245	Instrument Panel	DEB or DE5	In the instrument panel harness, center of the instrument panel, approximately 30 cm (12 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J246	Instrument Panel	DEB or DE5	In the instrument panel harness, center of the instrument panel, approximately 43.5 cm (17 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J247	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 36 cm (14.37 in) from the C200 breakout towards the underhood fuse block	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J248	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 8 cm (3.14 in) from the C200 breakout towards the instrument panel cluster connector	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J249	Instrument Panel	—	In the instrument panel harness, right side of the instrument panel, approximately 21 cm (8 in) from the G304 breakout	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J250	Instrument Panel	—	In the instrument panel harness, right side of the instrument panel, approximately 5 cm (2.16 in) from the air temperature actuator connector breakout towards the inflatable restraint instrument panel module connector	*Instrument Panel Harness Routing - Dash Area (2 of 2)*	—
J263	Instrument Panel	TP2	In the instrument panel harness, left side of the instrument panel, approximately 36 cm (14.37 in) from the C200 breakout towards the underhood fuse block	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J264	Steering Column Harness	—	In the steering wheel harness, approximately 20 cm (8 in) from the X200 connector	—	—
J270	Instrument Panel	U2K or UBS	In the instrument panel harness, approximately 15 cm (6 in) from the digital radio receiver and cigar lighter connectors breakout	—	—
J271	Instrument Panel	U2K, UBS, or UE1	In the instrument panel harness, approximately 7.5 cm (3 in) from the vehicle communication interface module and cigar lighter connectors breakout	—	—
J280	Instrument Panel	Cutaway without YF7	In the instrument panel harness, approximately 20 cm (7.9 in) from the body fuse block and air bag module connectors breakout	—	—
J300	Side Access Panel Harness	PRP	Slightly forward of X53A Fuse Block - Rear Body	—	—
J301	Chassis Harness	LV1, L96, or LC8	In the chassis harness, left side frame, approximately 21 cm (8 in) from the fuel pump connector breakout	*Chassis Harness Routing (L96 or LC8)*	—
J302	Instrument Panel	PRP	Adjacent to K9 Body Control Module	—	—
J307	Front Headliner Harness	C69 with YF7	In the front headliner harness, center of the headliner, approximately 15 cm (6 in) from the X205 breakout towards the left vanity mirror lamp connector	—	—
J308	Body Harness	C69	In the body harness, left side of the passenger compartment, approximately 22 cm (9 in) from the breakout for the door jamb switch LR side	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)*	—
J309	Side Access Panel Harness	PRP	Adjacent to X53A Fuse Block - Rear Body	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J310	Body Harness	C69	In the body harness, left side of the passenger compartment, approximately 32 cm (12.79 in) from the breakout for the door jamb switch left rear side	• *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)*	—
J311	Body Harness	C69	In the body harness, left side of the passenger compartment, approximately 5 cm (2 in) from the door jamb switch LR side breakout	• *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	—
J312	Body Harness	WRF	In the body harness, approximately 37.5 cm (14.8 in) from the X307 breakout	• *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Left Front of Passenger Compartment*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J313	Body Harness	WRF	In the body harness, approximately 28 cm (11 in) from the X307 breakout	• *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Front of Passenger Compartment*	—
J314	Front Headliner Harness	—	In the front headliner harness, center of the headliner, approximately 22 cm (8.5 in) from the X205 breakout towards the left vanity mirror lamp connector	—	—
J315	Chassis Harness	—	In the chassis harness, left side frame, approximately 31 cm (12 in) from the G300 breakout	*Chassis Harness Routing (L96 or LC8)*	—
J316	Body Harness	WRF	In the body harness, approximately 9 cm (3.5 in) from the X307 breakout	• *Body Harness Routing - Left Front of Passenger Compartment* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	—
J317	Body Harness	WRF	In the body harness, approximately 16 cm (6.3 in) from the X307 breakout	*Body Harness Routing - Left Rear (Passenger or Cargo)*	—
J318	Body Harness	WRF	In the body harness, approximately 26 cm (10.2 in) from the X307 breakout	*Body Harness Routing - Left Rear (Passenger or Cargo)*	—
J322	Body Harness	Cargo or Passenger with AU3	In the body harness, near the front passenger seat, approximately 40 cm (16 in) from the X306 breakout	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J323	Body Harness	Cargo or Passenger with AU3	In the body harness, near the front passenger seat, approximately 20 cm (8 in) from the X306 breakout	—	—
J330	Rear Headliner Harness	Passenger	In the rear headliner harness, center of the headliner, approximately 30 cm (12 in) to the courtesy reading lamp rear breakout	—	—
J331	Body Harness	Passenger	In the body harness, near the front passenger seat, approximately 15 cm (6 in) from the X306 breakout	*Body Harness Routing - Rear Overview (Passenger or Cargo)*	—
J332	Front Headliner Harness	DH6 with YF7	In the front headliner harness, center of the headliner, approximately 11 cm (4 in) from the front right sunshade breakout	—	—
J333	Front Headliner Harness	DH6 without YF7	In the front headliner harness, center of the headliner, approximately 20 cm (8 in) from the right sunshade breakout	—	—
J334	Body Harness	UVC	Approximately 5 inches rearward of X53A Fuse Block - Rear Body	• *Body Harness Routing - Left Front of Passenger Compartment* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	—
J335	Body Harness	U80	In the body harness, approximately 12 cm (4.7 in) from the Multi-axis acceleration sensor module breakout	*Body Harness Routing - Right Front of Passenger Compartment (2 of 2)*	—
J348	Side Access Panel Harness	PRP	In the cargo area, in-between the headliner and the roof, in-between the left side access panel and the right side access panel	—	—
J350	Side Access Panel Harness	PRP with UF2	In the cargo area, in-between the headliner and the roof, in-between the left side access panel and the right side access panel	—	—
J355	Front Headliner Harness	C69 with YF7	In the front headliner harness, center of the headliner, approximately 61 cm (24 in) from the X205 breakout towards the left vanity mirror lamp connector	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J356	Body Harness	—	In the body harness, on the left front side of the vehicle, approximately 20 cm (7.87 in) from the underhood fuse block breakout	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Left Front of Passenger Compartment* • *Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	—
J373	Body Harness	Passenger	At the base of the right C-pillar	*Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	—
J374	Body Harness	Cargo without YF7	In the body harness, approximately 20 cm (7.9 in) from the dome lamp – left roof rail breakout	—	—
J375	Body Harness	Cargo without YF7	In the body harness, approximately 20 cm (7.9 in) from the dome lamp – right roof rail breakout	*Body Harness Routing - Right Front of Passenger Compartment (2 of 2)*	—
J376	Body Harness	Cargo or Passenger	In the body harness, approximately 72.5 cm (28.5 in) from the X410 breakout	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)*	—
J377	Side Access Panel Harness	PRP	Adjacent to X53A	—	—
J378	Side Access Panel Harness	PRP	Adjacent to X53A	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J401	Body Harness	C36, C49, or C69	In the body harness, in the left rear of the vehicle, approximately 21 cm (8 in) from the X401 breakout	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)*	—
J402	Chassis Harness	—	In the chassis harness, left frame, approximately 20 cm (7.87 in) from the G400 breakout towards the EBCM connector	*Chassis Harness Routing (L96 or LC8)*	—
J403	Body Harness	Cargo or Passenger	In the body harness, left rear of the passenger compartment, approximately 18.5 cm (7 in) from the X402 breakout	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	—
J404	Chassis Harness	—	In the chassis harness, left frame, approximately 10 cm (4 in) from the G400 breakout towards the EBCM connector	—	—
J405	Rear HVAC Harness	C36 or C69	In the rear HVAC harness, left rear of the passenger compartment, approximately 13 cm (5.31 in) from the auxiliary blower motor relay breakout towards X409	—	—
J406	Chassis Harness	LWN	Within the chassis harness	—	—
J407	Rear Headliner Harness	Passenger	In the rear headliner harness, center of the headliner, approximately 6.5 cm (2.5 in) from X304 towards the rear courtesy/ reading lamp connector	—	—
J408	Side Access Panel Harness	PRP	In the Left Side Access Panel compartment	—	—
J409	Side Access Panel Harness	PRP	In the Right Side Access Panel compartment	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J410	Body Harness	Cargo or Passenger	In the body harness, in the left rear of the vehicle, approximately 47 cm (18 in) from the X401 breakout	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)* • *Body Harness Routing - Rear Overview (Passenger or Cargo)*	—
J411	Rear HVAC Harness	C69	In the rear HVAC harness, left rear of the passenger compartment, approximately 20 cm (8 in) from the blower motor relay breakout, towards X409	—	—
J412	Rear HVAC Harness	C36 or C69	In the rear HVAC harness, left rear of the passenger compartment, approximately 7 cm (2.8 in) from the blower motor relay breakout towards X409	—	—
J413	Rear HVAC Harness	C36 or C69	In the rear HVAC harness, left rear of the passenger compartment, approximately 10 cm (4 in) from the auxiliary blower motor resistor assembly breakout	—	—
J420	Rear Bumper Harness	UD7	In the rear bumper harness, approximately 57 cm (22 in) from the right rear middle object alarm sensor towards the left rear corner object alarm sensor	—	—
J421	Rear Bumper Harness	UD7	In the rear bumper harness, approximately 15 cm (6 in) from the left rear corner object alarm sensor towards the right rear middle object alarm sensor	—	—
J422	Chassis Harness	LWN	In the chassis harness, approximately 11.5 cm (4.5 in) from the wheel speed sensor - left front breakout	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J425	Parking Aid Jumper Harness	UFT	At the rear of the vehicle	*Rear Bumper Harness Routing*	—
J426	Parking Aid Jumper Harness	UFT	At the rear of the vehicle	*Rear Bumper Harness Routing*	—
J450	Body Harness	YF2 or YF7	In the body harness, in the rear of the vehicle, approximately 10 cm (3.93 in) from the X415 breakout	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	—
J451	Body Harness	YF2 or YF7	In the body harness, in the rear of the vehicle, approximately 17 cm (6.5 in) from the X415 breakout	• *Body Harness Routing - Rear Overview (Passenger or Cargo)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)*	—
J452	Body Harness	YF2 or YF7	In the body harness, approximately 17 cm (6.5 in) from the X419 breakout	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Rear Overview (Passenger or Cargo)*	—

Master Electrical Component List (cont'd)

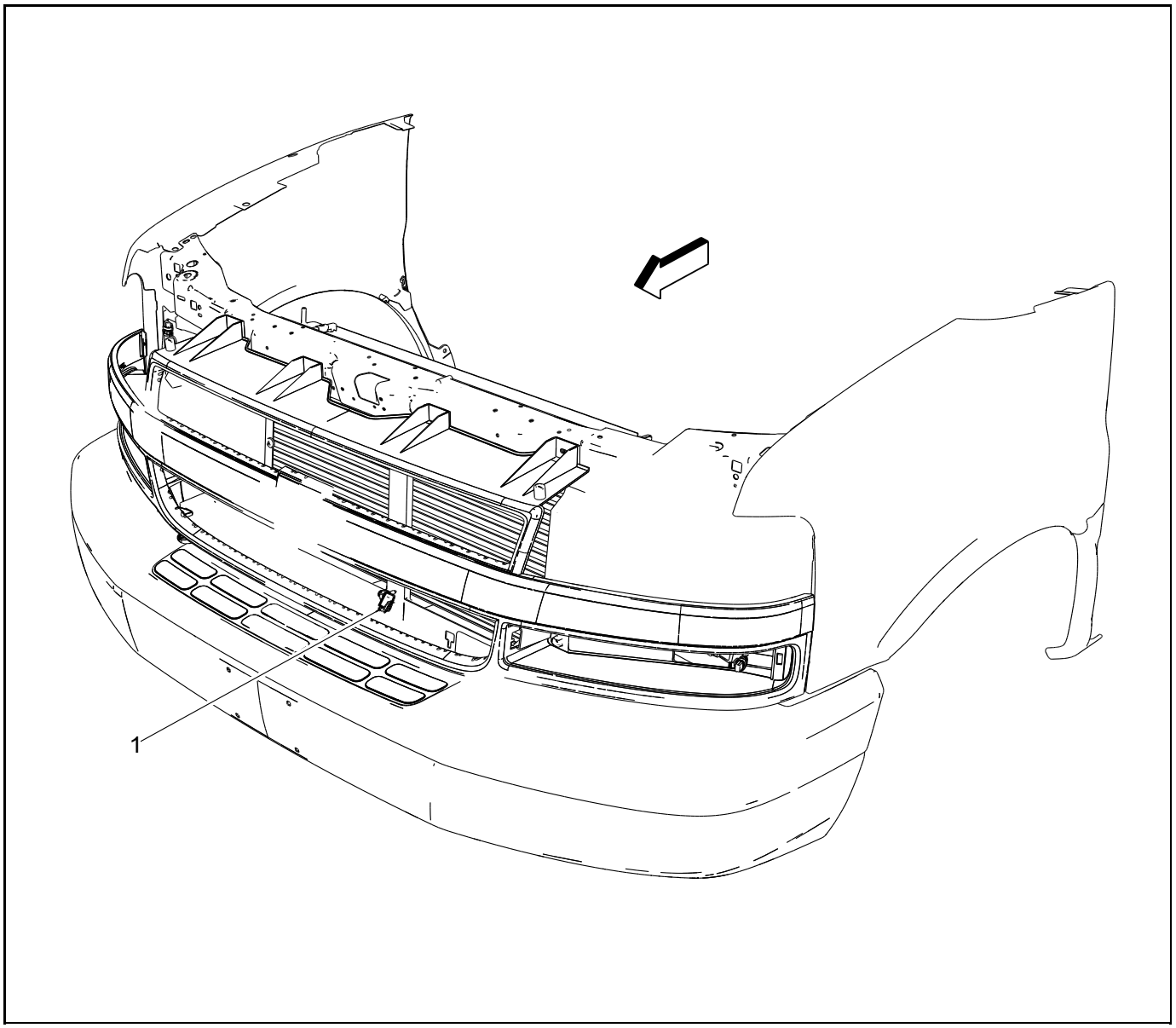
Code	Name	Option	Location	Locator View	Connector End View
J453	Body Harness	YF2 or YF7	In the body harness, in the left rear of the vehicle, approximately 10 cm (4 in) from the X419 breakout	• *Body Harness Routing - Right Rear Passenger Compartment (2 of 2)* • *Body Harness Routing - Right Rear Passenger Compartment (1 of 2)* • *Body Harness Routing - Left Rear (Passenger or Cargo)* • *Body Harness Routing - Rear Overview (Passenger or Cargo)*	—
J500	Driver Door Harness	AU3, DEB, DE5, or A31	In the left front door harness, driver door, approximately 7 cm (3 in) from the left front door speaker breakout	—	—
J501	Driver Door Harness	AU3	In the left front door harness, driver door, approximately 6 cm (2.36 in) from the driver outside rearview mirror breakout	—	—
J502	Driver Door Harness	DEB or DE5	In the left front door harness, driver door, approximately 4 cm (2 in) from the left front door speaker breakout	—	—
J600	Passenger Door Harness	AU3, DEB, DE5, or A31	In the right front door harness, front passenger door, approximately 4 cm (2 in) from the passenger outside rearview mirror breakout	—	—
J601	Passenger Door Harness	AU3	In the right front door harness, front passenger door, approximately 5 cm (2 in) from the passenger outside rearview mirror breakout	—	—
J901	Right Rear Cargo Door Harness	Cargo or Passenger with AU3	In the rear cargo door harness, approximately 4 cm (1.5 in) from the X902 breakout	—	—
J902	Right Rear Cargo Door Harness	Cargo or Passenger with C49	In the right rear door harness, right rear cargo door, approximately 12 cm (4.7 in) from the X902 breakout	*Rear Cargo Doors Harness Routing (Passenger or Cargo)*	—
JX200	Instrument Panel Harness	—	In the instrument panel harness, left front side of the floor, where the carpet ends behind the brake pedal next to JX250	*Instrument Panel Harness Routing - Dash Area (1 of 2)*	*JX200 Splice Pack*

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
JX250	Instrument Panel Harness	—	In the instrument panel harness, left front side of the floor, where the carpet ends behind the brake pedal next to JX200	*Instrument Panel Harness Routing - Dash Area (1 of 2)*	*JX250 Splice Pack*
JX347	Body Harness	—	In the body harness, left side of the passenger compartment, attached to the lower left B-pillar part of G347	• *Body Harness Routing - Left Front of Passenger Compartment* • *Body Harness Routing - Right Front of Passenger Compartment (2 of 2)*	*JX347 Splice Pack*
JX348	Body Harness	—	In the body harness, right side of the passenger compartment, attached to the lower right B-pillar part of G348	*Body Harness Routing - Right Front of Passenger Compartment (1 of 2)*	*JX348 Splice Pack*

Front of Vehicle/Engine Compartment Component Views

Ambient Air Temperature Sensor (UFA)

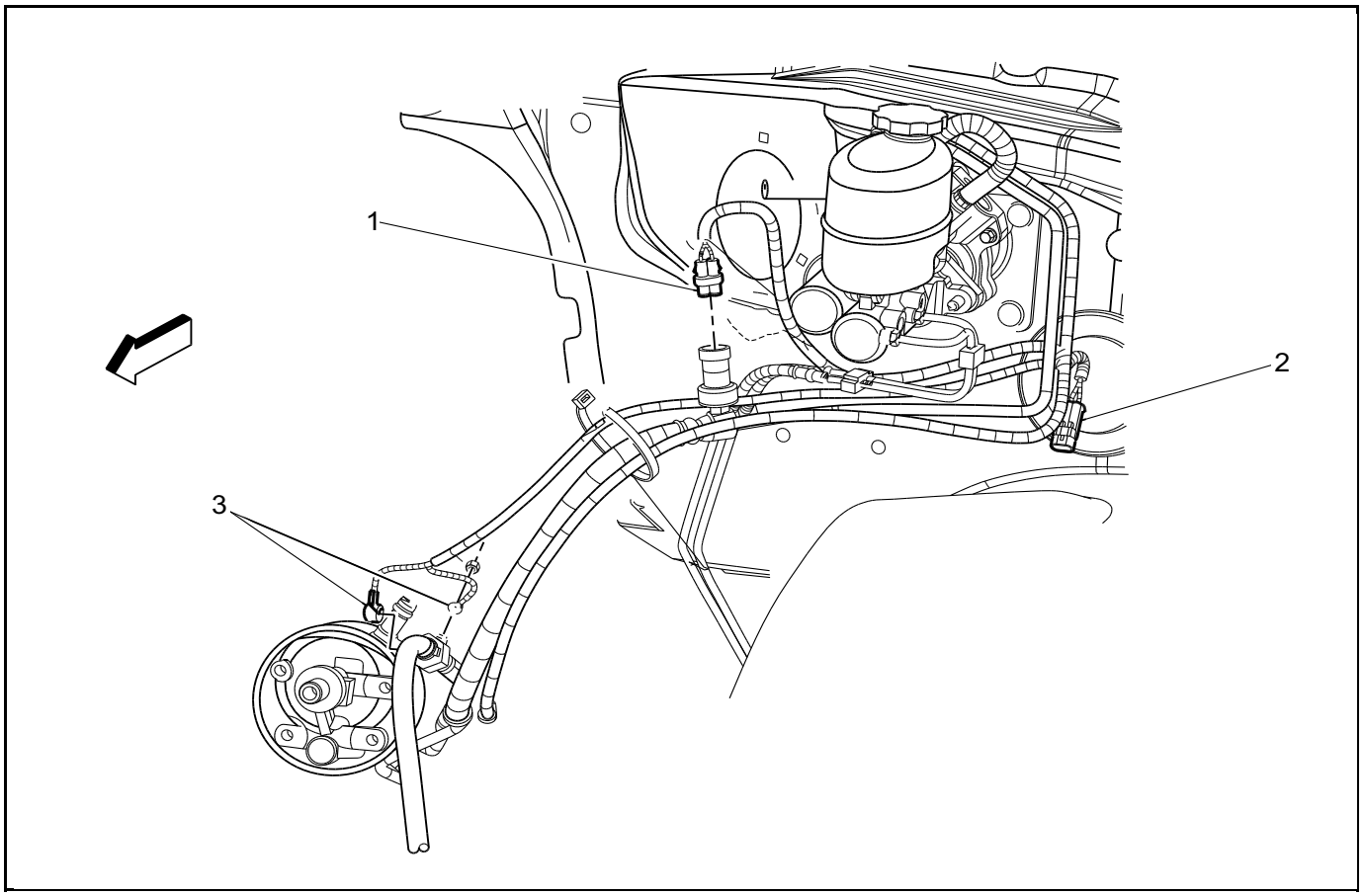


2831211

Items

(1) B9 Ambient Air Temperature Sensor

Brake Booster Fluid Alarm Switches (UJ1)



2831205

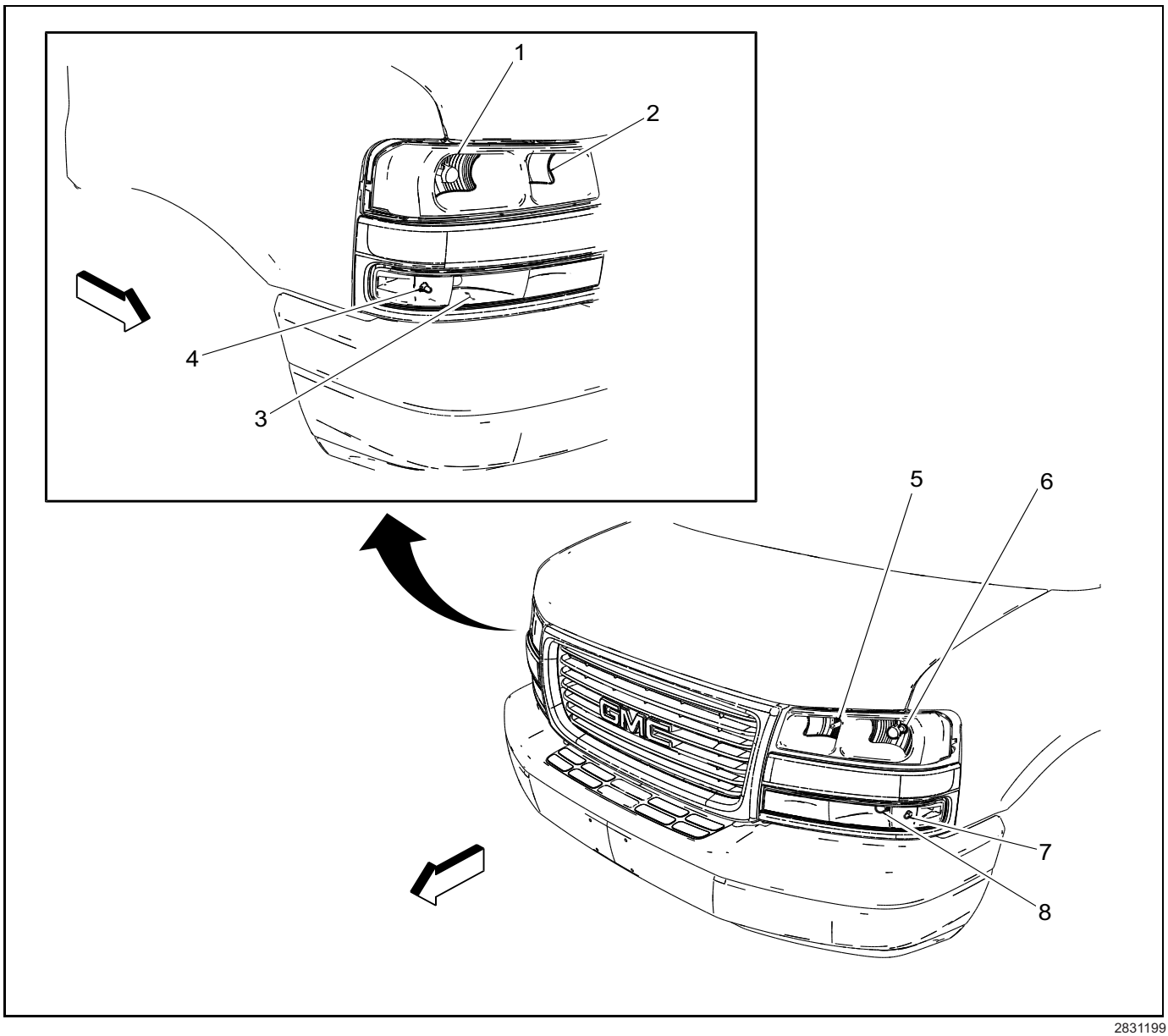
Items

(1) B19A Brake Booster Fluid Pressure Alarm Switch (UJ1)

(2) X141 Instrument Panel Harness to Brake Fluid Level Jumper Harness (UJ1)

(3) B133 Brake Booster Fluid Flow Alarm Switch (UJ1)

Front Exterior Lighting (Uplevel)

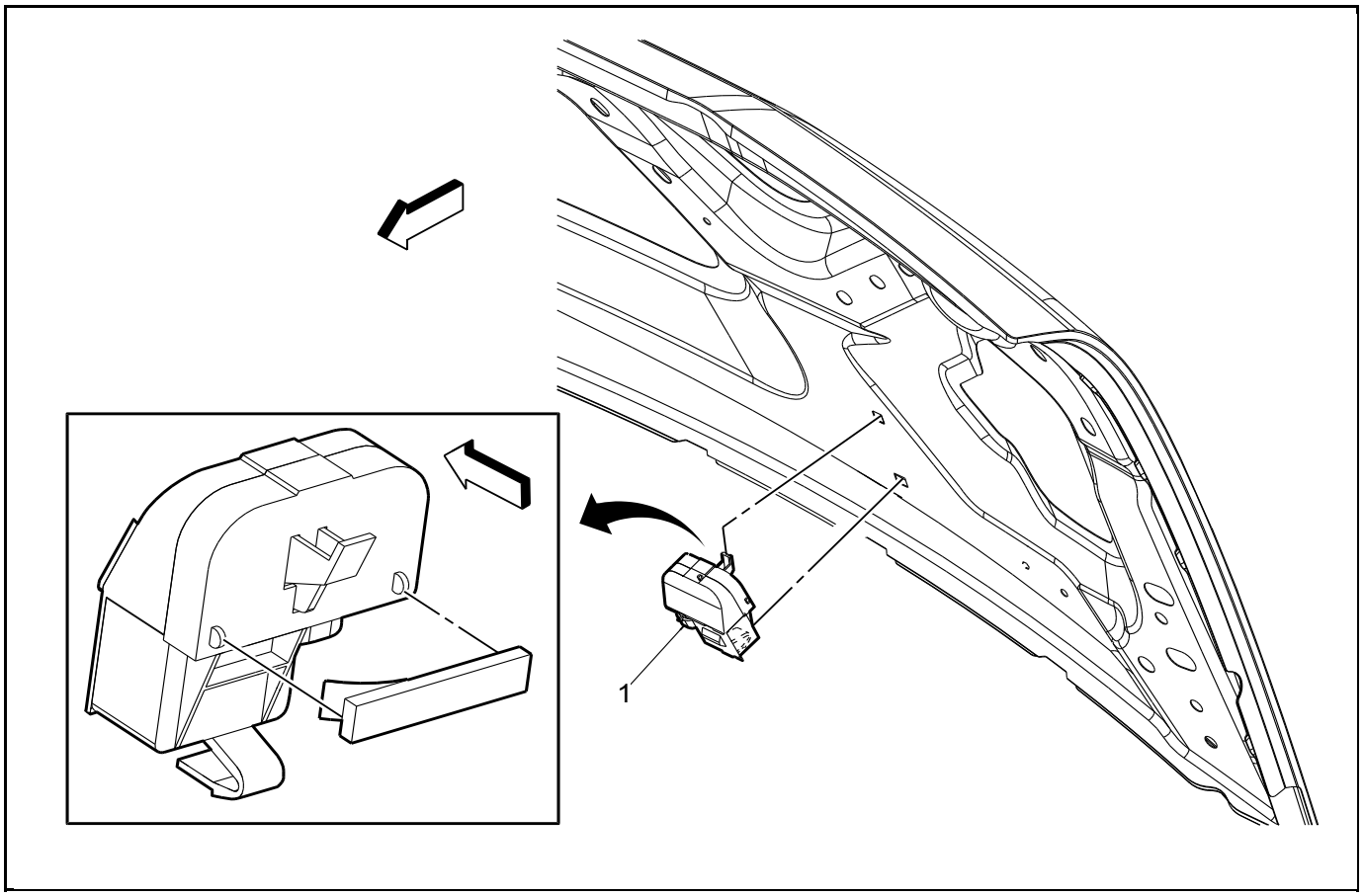


2831199

Items

(1) E4H Headlamp - Right Low Beam (V22)
(2) E4F Headlamp - Right High Beam (V22)
(3) E4P Park/Turn Signal Lamp - Right
(4) E2RF Side Marker Lamp - Right Front
(5) E4E Headlamp - Left High Beam (V22)
(6) E4G Headlamp - Left Low Beam (V22)
(7) E2LF Side Marker Lamp - Left Front
(8) E4N Park/Turn Signal Lamp - Left

Underside of Hood Components

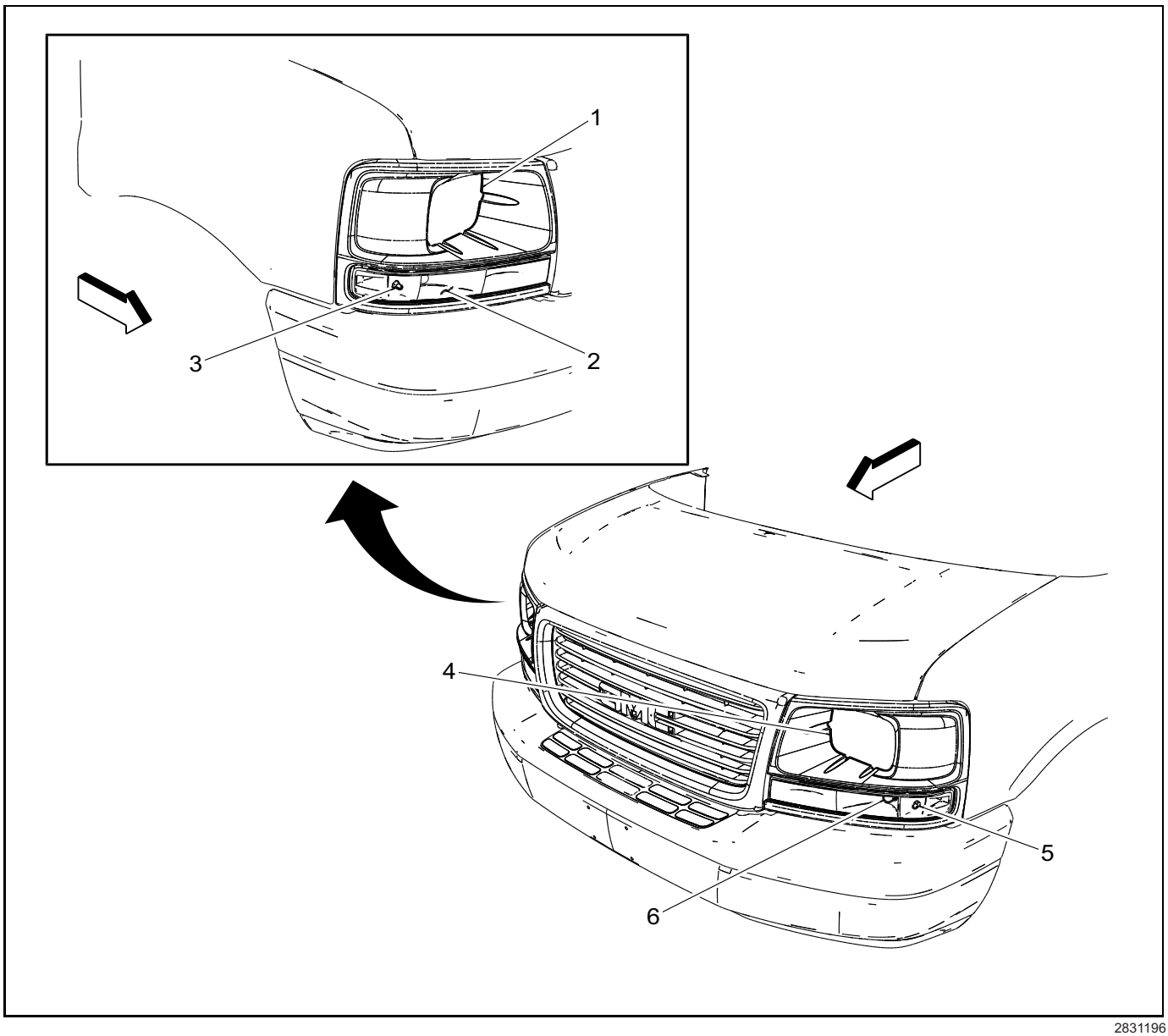


2831210

Items

(1) E22 Underhood Lamp

Front Exterior Lighting (Base)

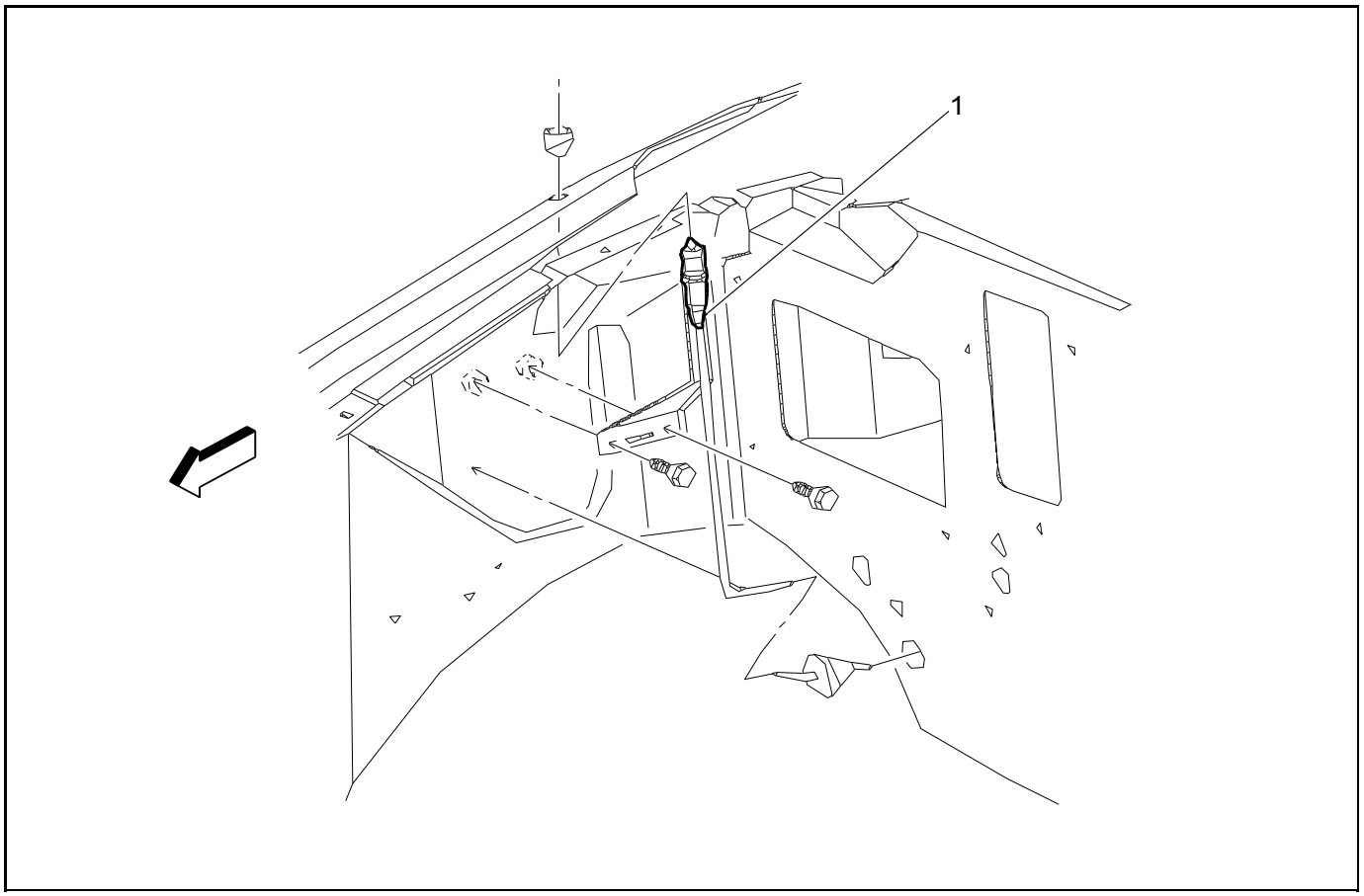


2831196

Items

(1) E13R Headlamp - Right (Without V22)
(2) E4P Park/Turn Signal Lamp - Right
(3) E2RF Side Marker Lamp - Right Front
(4) E13L Headlamp - Left (Without V22)
(5) E2LF Side Marker Lamp - Left Front
(6) E4N Park/Turn Signal Lamp - Left

Right Rear of the Engine Compartment Components

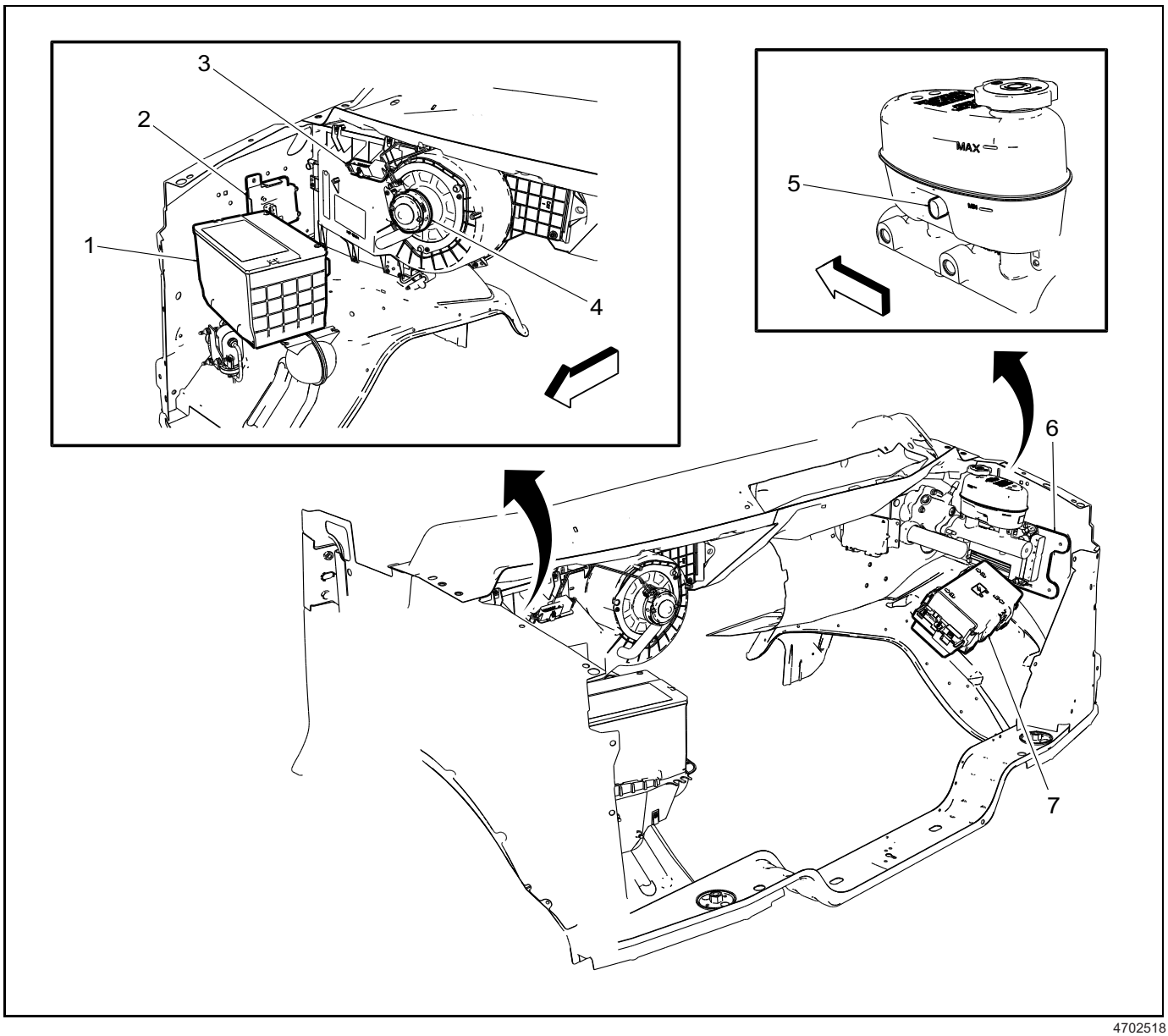


4003764

Items

(1) T4M Radio Antenna (U73)

Engine Compartment Components (1 of 2)

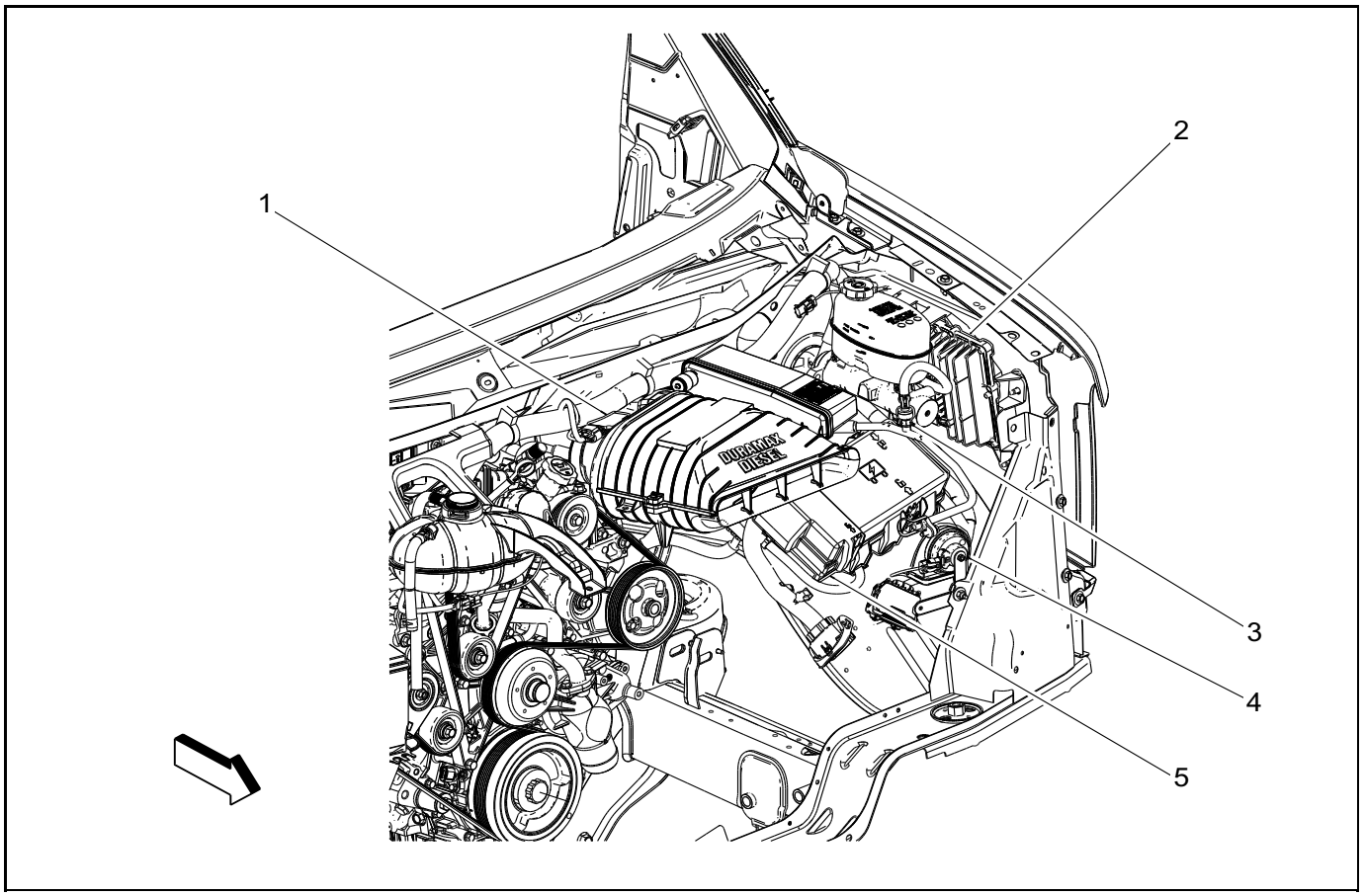


4702518

Items

(1) C1 Battery
(2) K71 Transmission Control Module
(3) R3 Blower Motor Resistor
(4) M8 Blower Motor
(5) B20 Brake Fluid Level Switch
(6) K20 Engine Control Module
(7) X50A Fuse Block - Underhood

Engine Compartment Components (2 of 2)

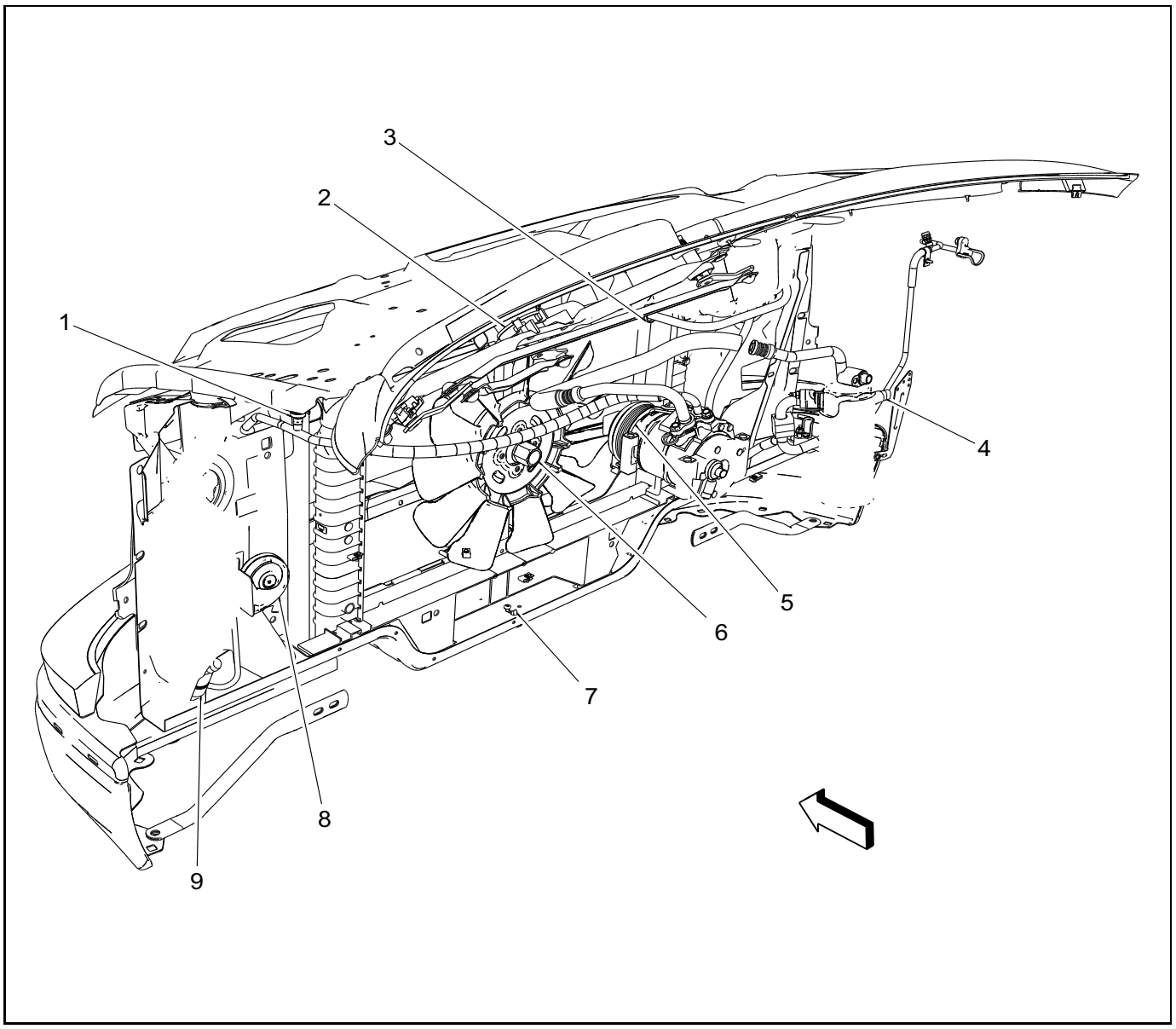


4655852

Items

(1) B75C Multifunction Intake Air Sensor
(2) K20 Engine Control Module
(3) B1 A/C Refrigerant Pressure Sensor (C60)
(4) P13 Horn Assembly
(5) X50A Fuse Block - Underhood

Front of Engine Compartment Components (1 of 2)

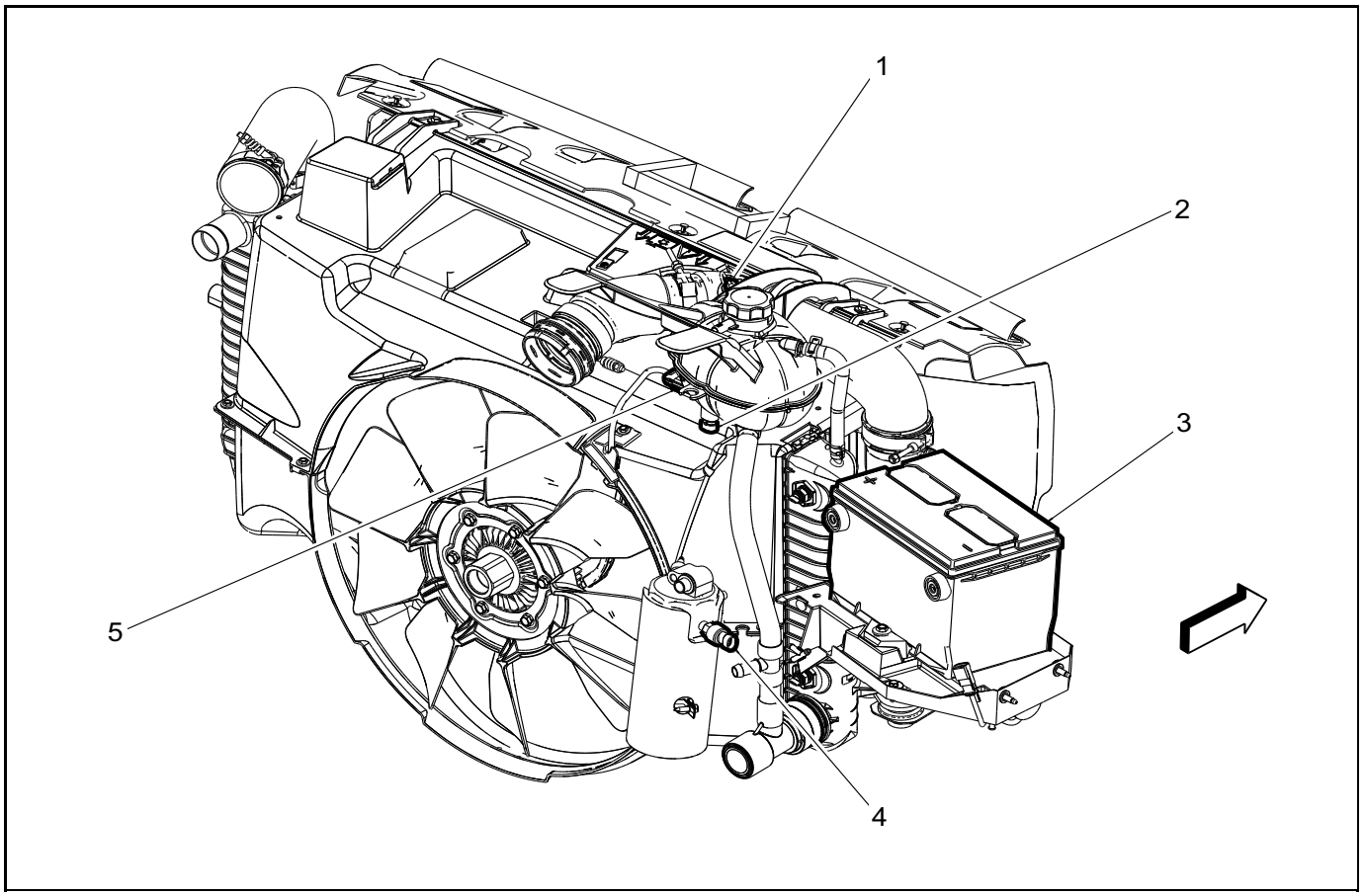


4656505

Items

(1) B1 A/C Refrigerant Pressure Sensor (C60)
(2) M75 Windshield Wiper Motor
(3) B33 Engine Coolant Level Switch (LWN)
(4) B1B A/C Low Side Pressure Switch (C60)
(5) Q2 A/C Compressor Clutch (C60)
(6) Q85 Cooling Fan Clutch (LWN)
(7) B59 Front Impact Sensor
(8) P13 Horn Assembly
(9) G24 Windshield Washer Pump

Front of Engine Compartment Components (2 of 2)



4702520

Items

(1) B193B Charge Air Cooler Outlet Temperature Sensor (LWN)

(2) B33 Engine Coolant Level Switch (LWN)

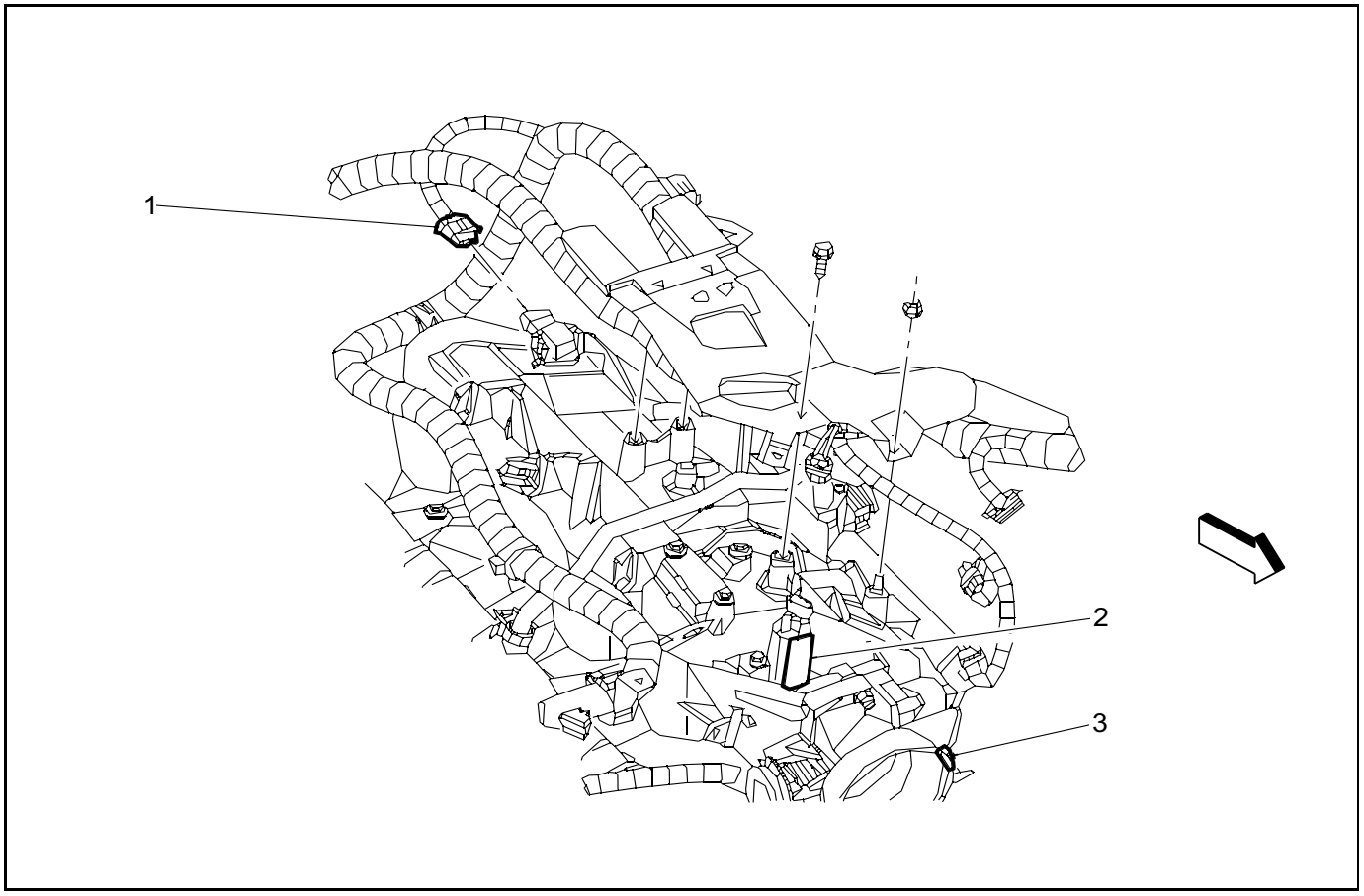
(3) C1 Battery

(4) B1B A/C Low Side Pressure Switch (C60)

(5) X142 Engine Chassis Harness to Fan Jumper Harness (LWN)

Powertrain Component Views

Top of the Engine Components (L96 or LC8)



4003767

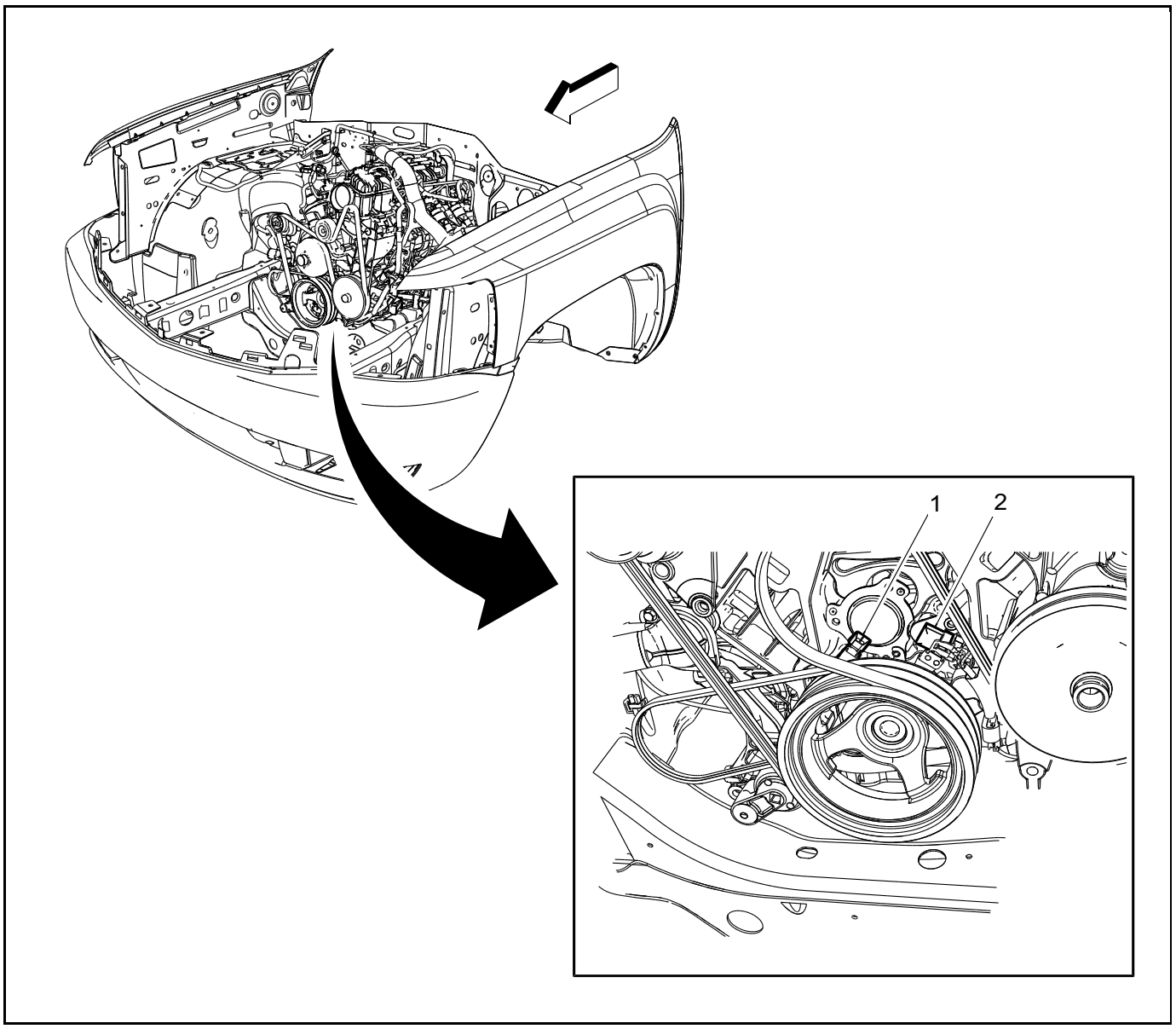
Items

(1) B74 Manifold Absolute Pressure Sensor (LV1, L96, or LC8)

(2) Q12 Evaporative Emission Purge Solenoid Valve (LV1, L96, or LC8)

(3) Q38 Throttle Body

Left Front Side of the Engine Components (L96 or LC8)



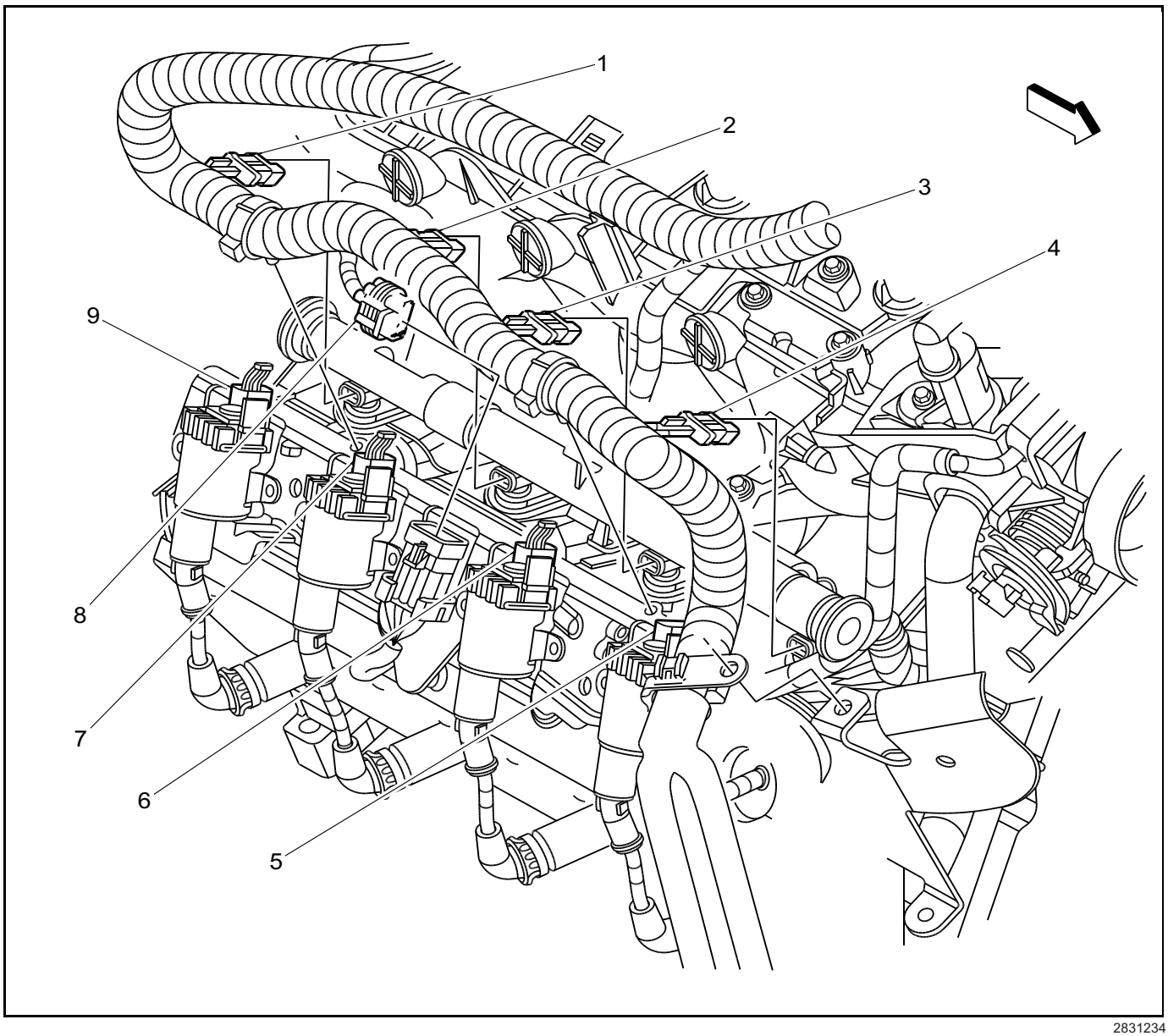
2831225

Items

(1) Q6 Camshaft Position Actuator Solenoid Valve (LV1, L96, or LC8)

(2) B23 Camshaft Position Sensor

Upper Right Side of the Engine Components (L96 or LC8)

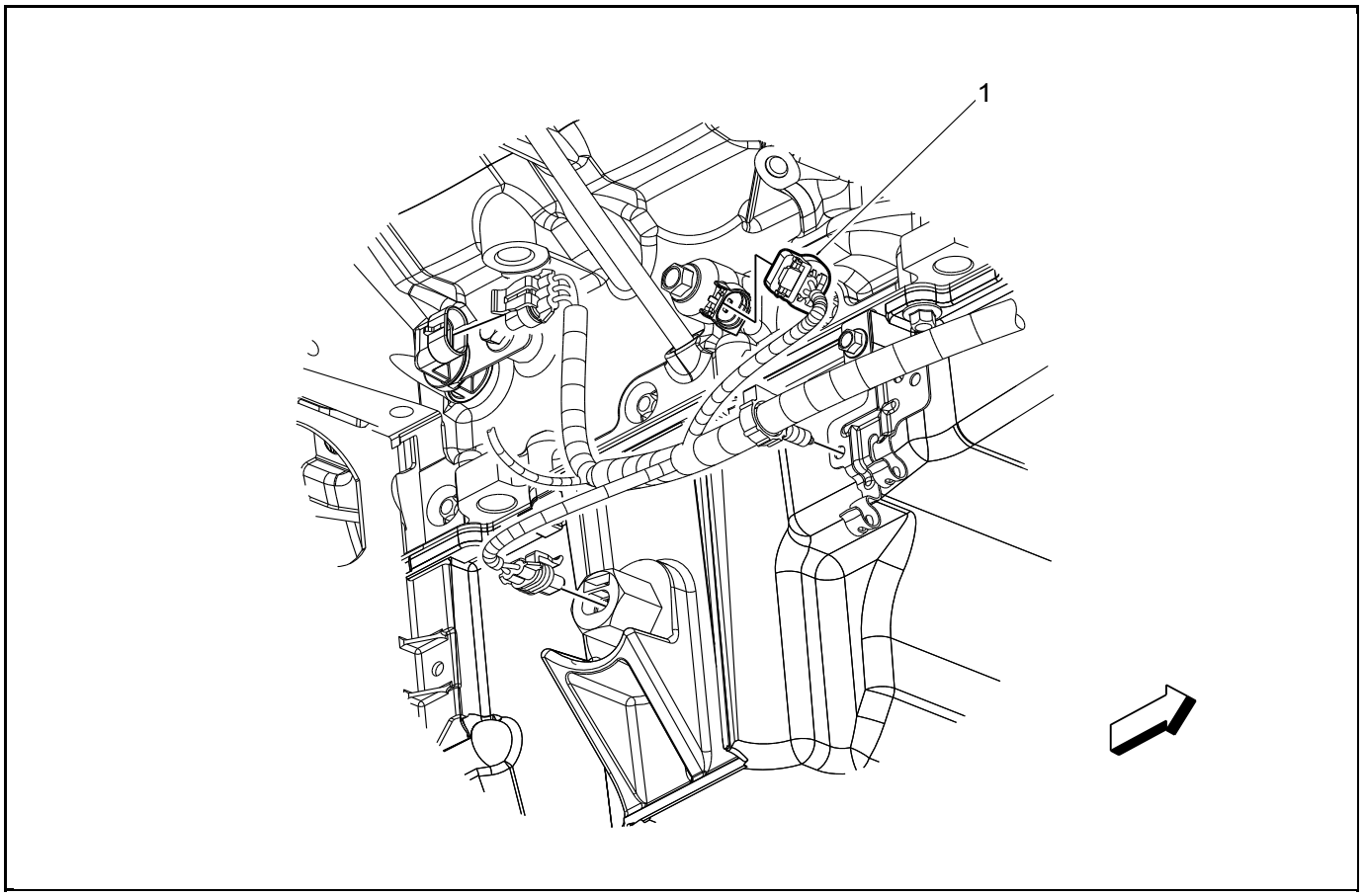


2831234

Items

(1) Q17H Fuel Injector 8 (L96, or LC8)
(2) Q17F Fuel Injector 6 (LV1, L96, or LC8)
(3) Q17D Fuel Injector 4
(4) Q17B Fuel Injector 2
(5) T8B Ignition Coil 2 (LV1, L96, or LC8)
(6) T8D Ignition Coil 4 (LV1, L96, or LC8)
(7) T8F Ignition Coil 6 (LV1, L96, or LC8)
(8) X127 Engine Harness to Right Ignition Coil Harness (L96, or LC8)
(9) T8H Ignition Coil 8 (L96, or LC8)

Lower Right Side of the Engine Components (L96 or LC8)

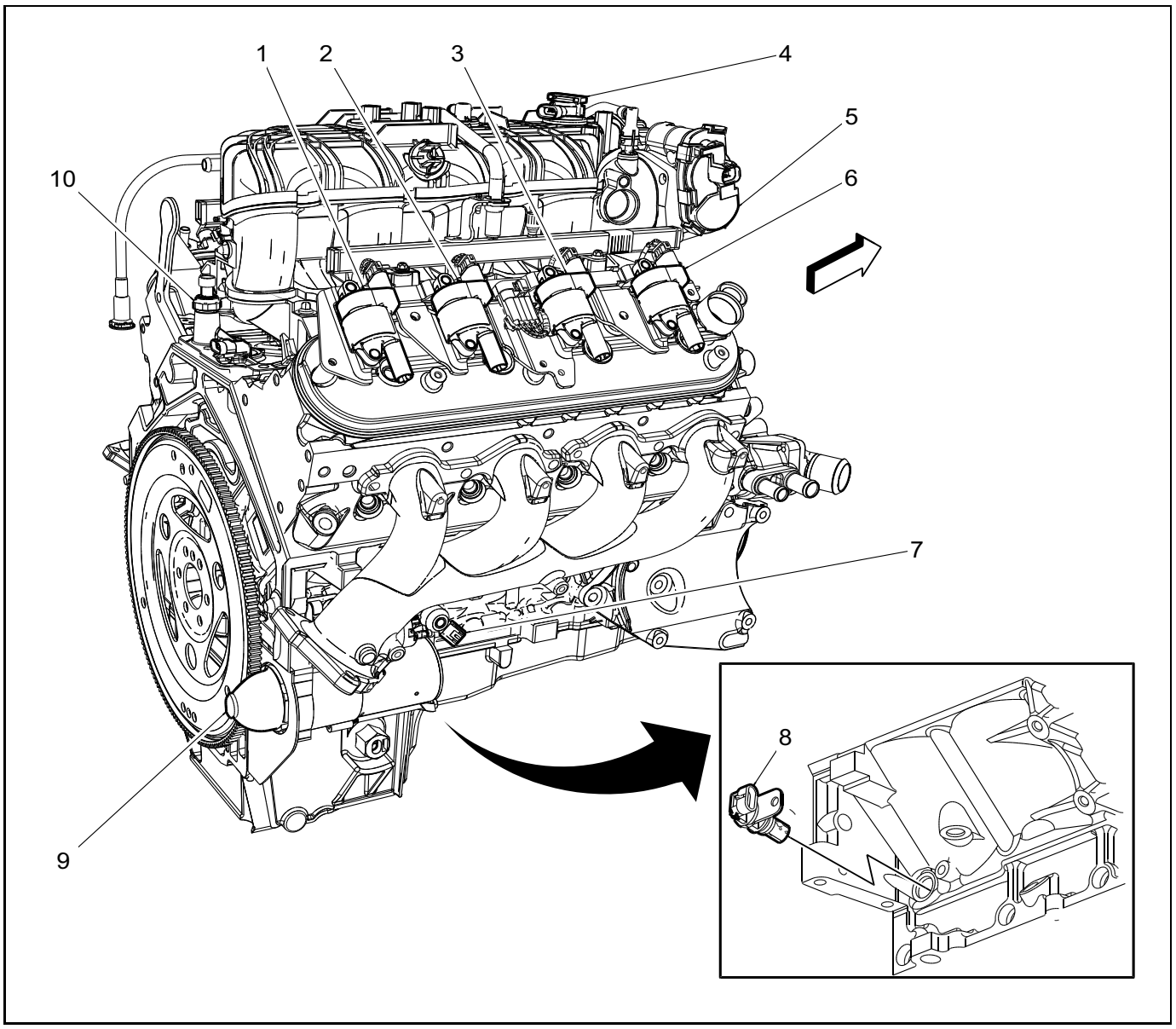


4059789

Items

(1) B68A Knock Sensor 1 (LV1, L96, or LC8)

Right Front Side of the Engine Components (L96 or LC8)

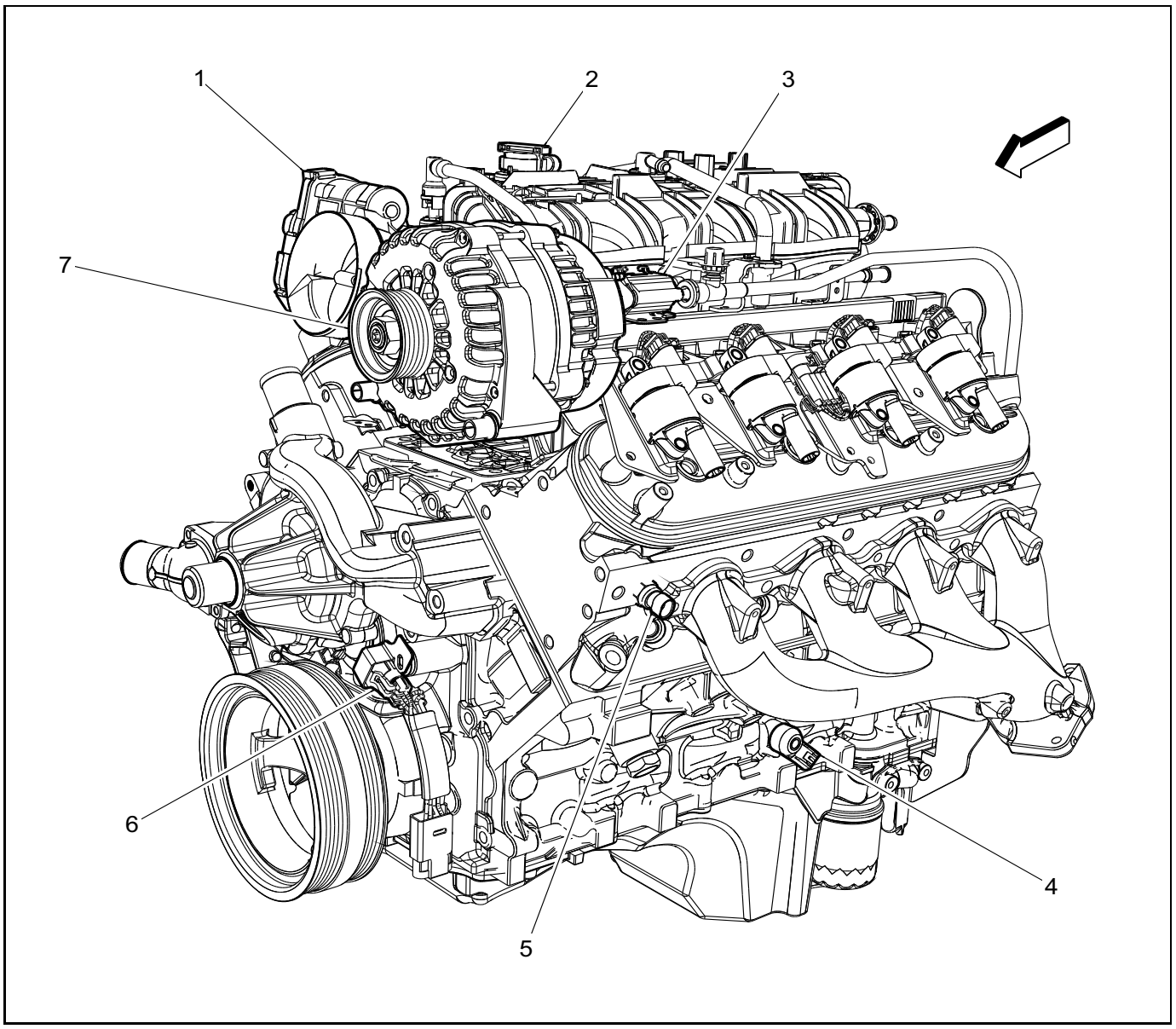


2831227

Items

(1) T8H Ignition Coil 8 (L96, or LC8)
(2) T8F Ignition Coil 6 (LV1, L96, or LC8)
(3) T8D Ignition Coil 4 (LV1, L96, or LC8)
(4) B74 Manifold Absolute Pressure Sensor (LV1, L96, or LC8)
(5) Q38 Throttle Body
(6) T8B Ignition Coil 2 (LV1, L96, or LC8)
(7) B68A Knock Sensor 1 (LV1, L96, or LC8)
(8) B26 Crankshaft Position Sensor
(9) M64 Starter Motor
(10) B37B Engine Oil Pressure Sensor

Left Front Side of the Engine Components (L96 or LC8)



2831224

Items

(1) Q38 Throttle Body

(2) B74 Manifold Absolute Pressure Sensor (LV1, L96, or LC8)

(3) Q12 Evaporative Emission Purge Solenoid Valve (LV1, L96, or LC8)

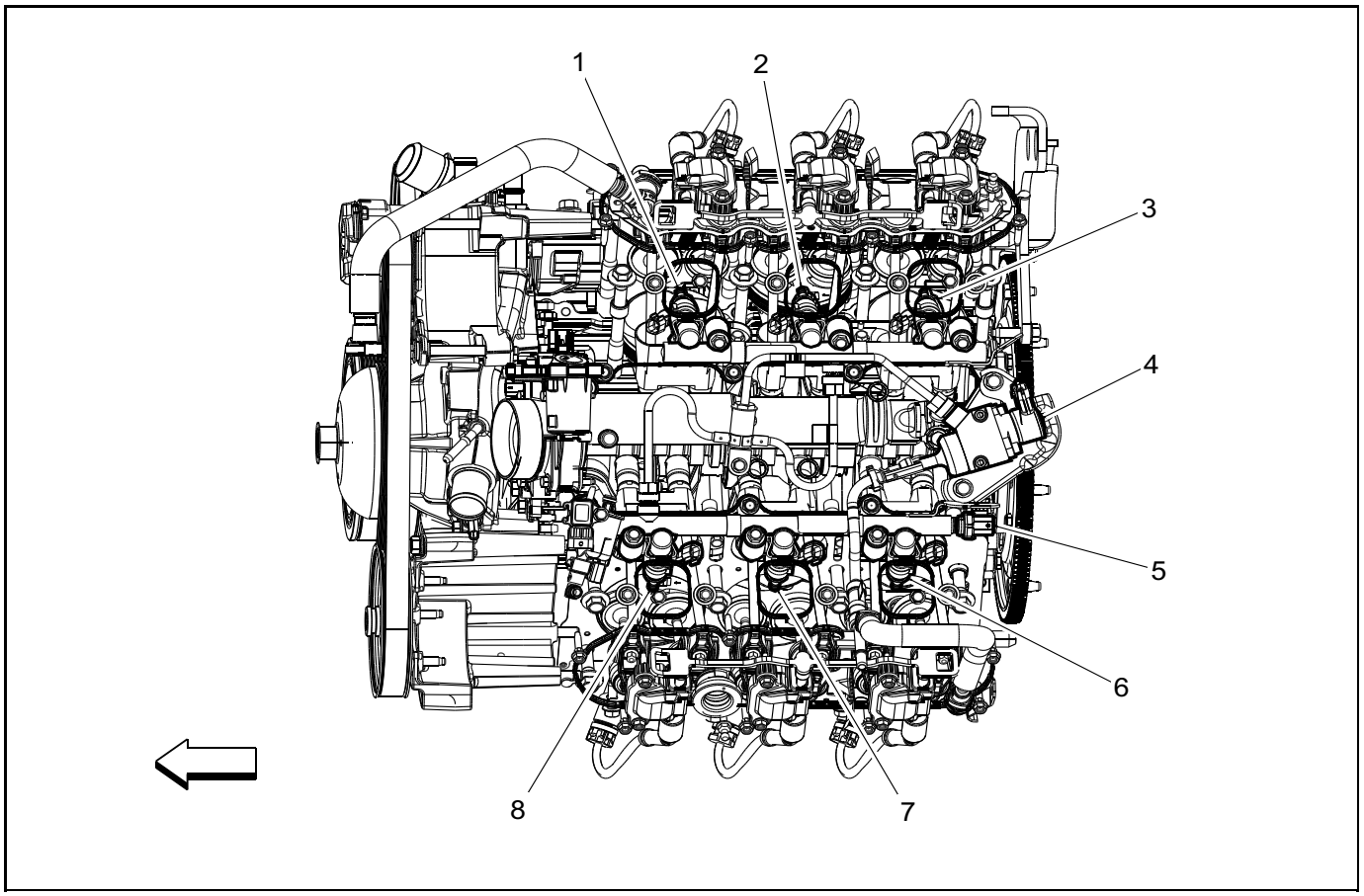
(4) B68B Knock Sensor 2 (LV1, L96, or LC8)

(5) B34 Engine Coolant Temperature Sensor

(6) B23 Camshaft Position Sensor

(7) G13 Generator

Top of the Engine Components (LV1)

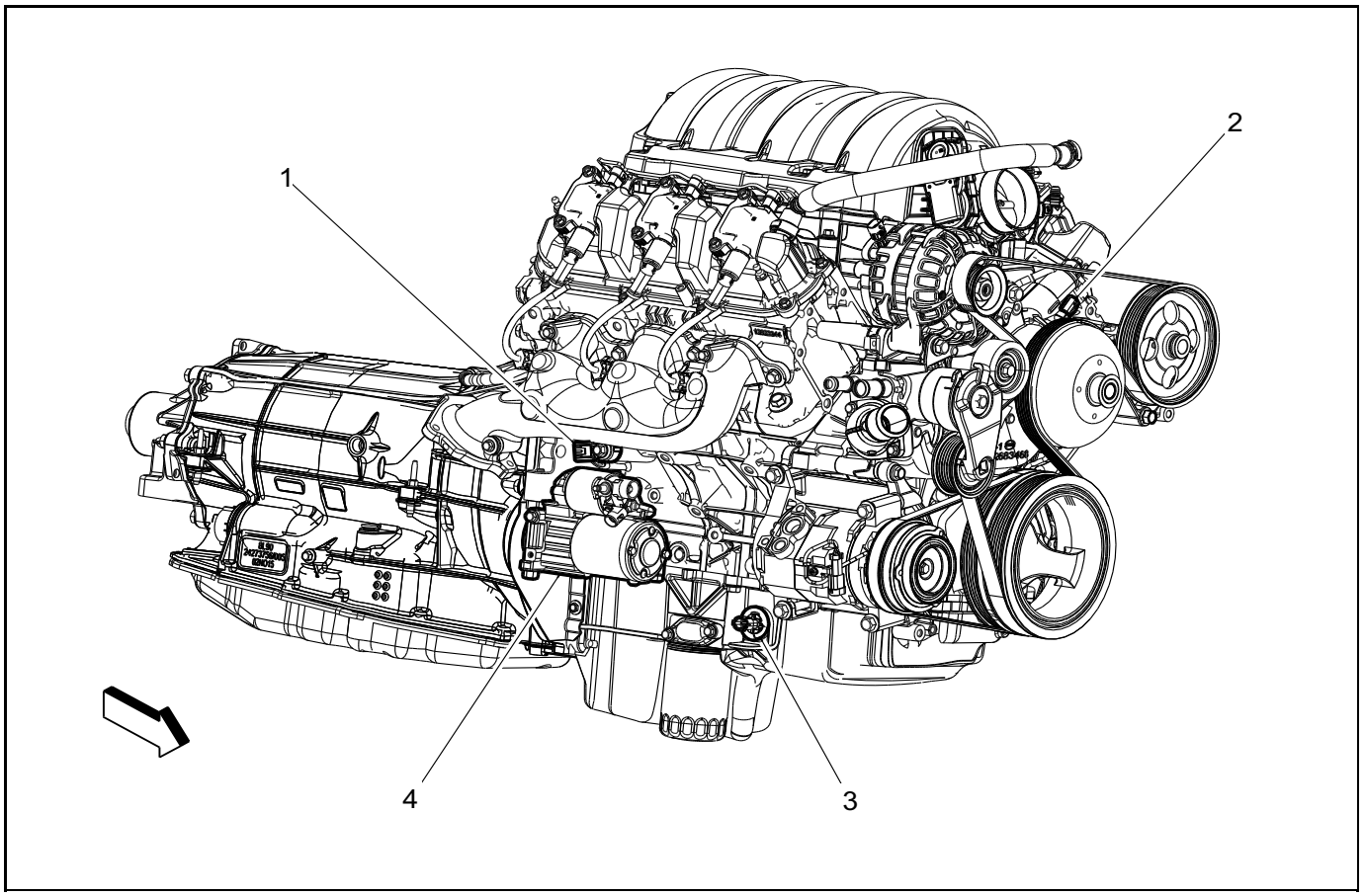


4861761

Items

(1) Q17B Fuel Injector 2
(2) Q17D Fuel Injector 4
(3) Q17F Fuel Injector 6 (LV1, L96, or LC8)
(4) G18 High Pressure Fuel Pump
(5) B47B Fuel Rail Pressure Sensor (LV1, or LWN)
(6) Q17E Fuel Injector 5 (LV1, L96, or LC8)
(7) Q17C Fuel Injector 3
(8) Q17A Fuel Injector 1

Right Front Side of the Engine Components (LV1)

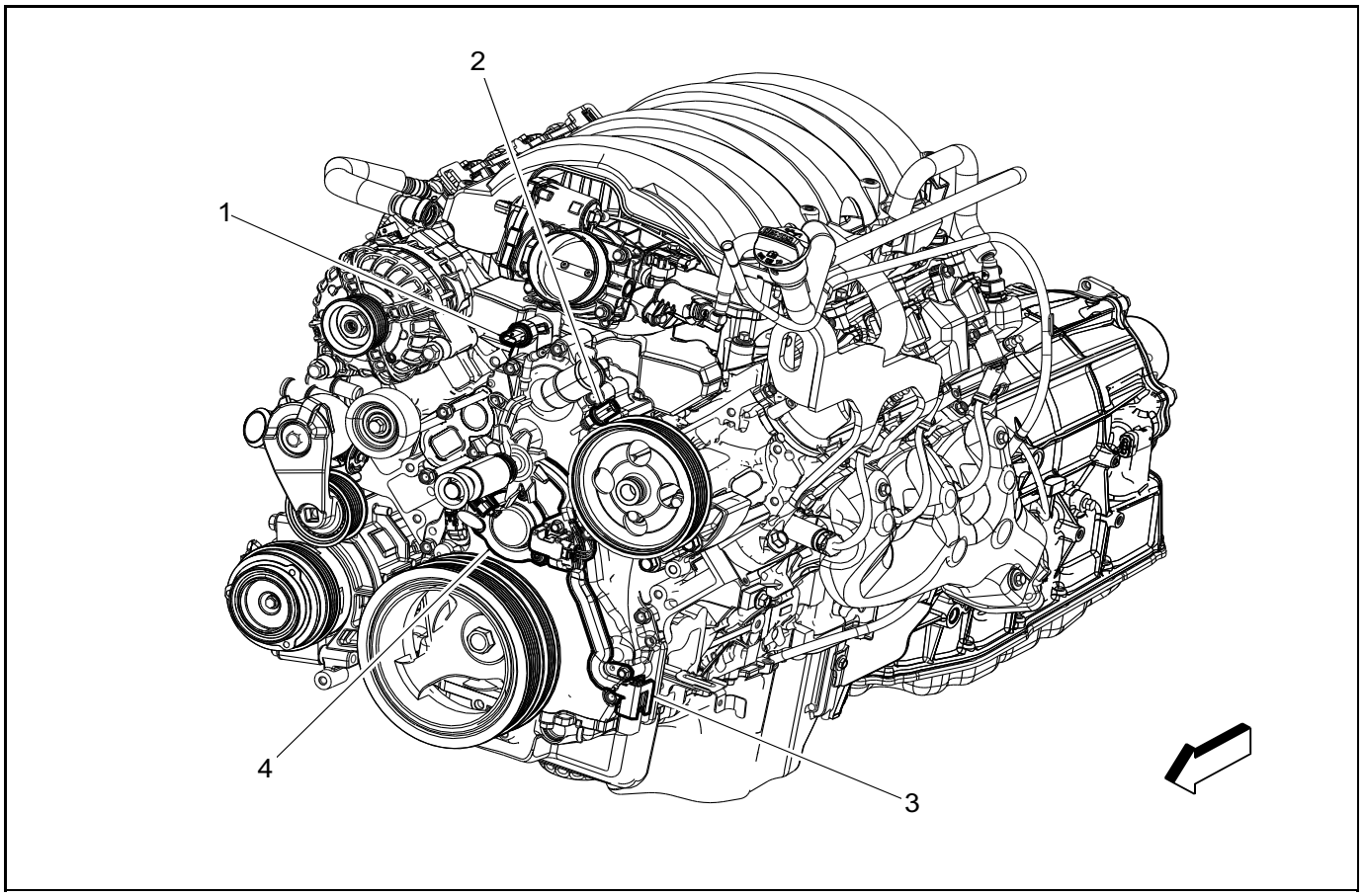


4861762

Items

(1) B68B Knock Sensor 2 (LV1, L96, or LC8)
(2) B34 Engine Coolant Temperature Sensor
(3) B35 Engine Oil Level Switch (LV1, or LWN)
(4) M64 Starter Motor

Left Front Side of the Engine Components (LV1)

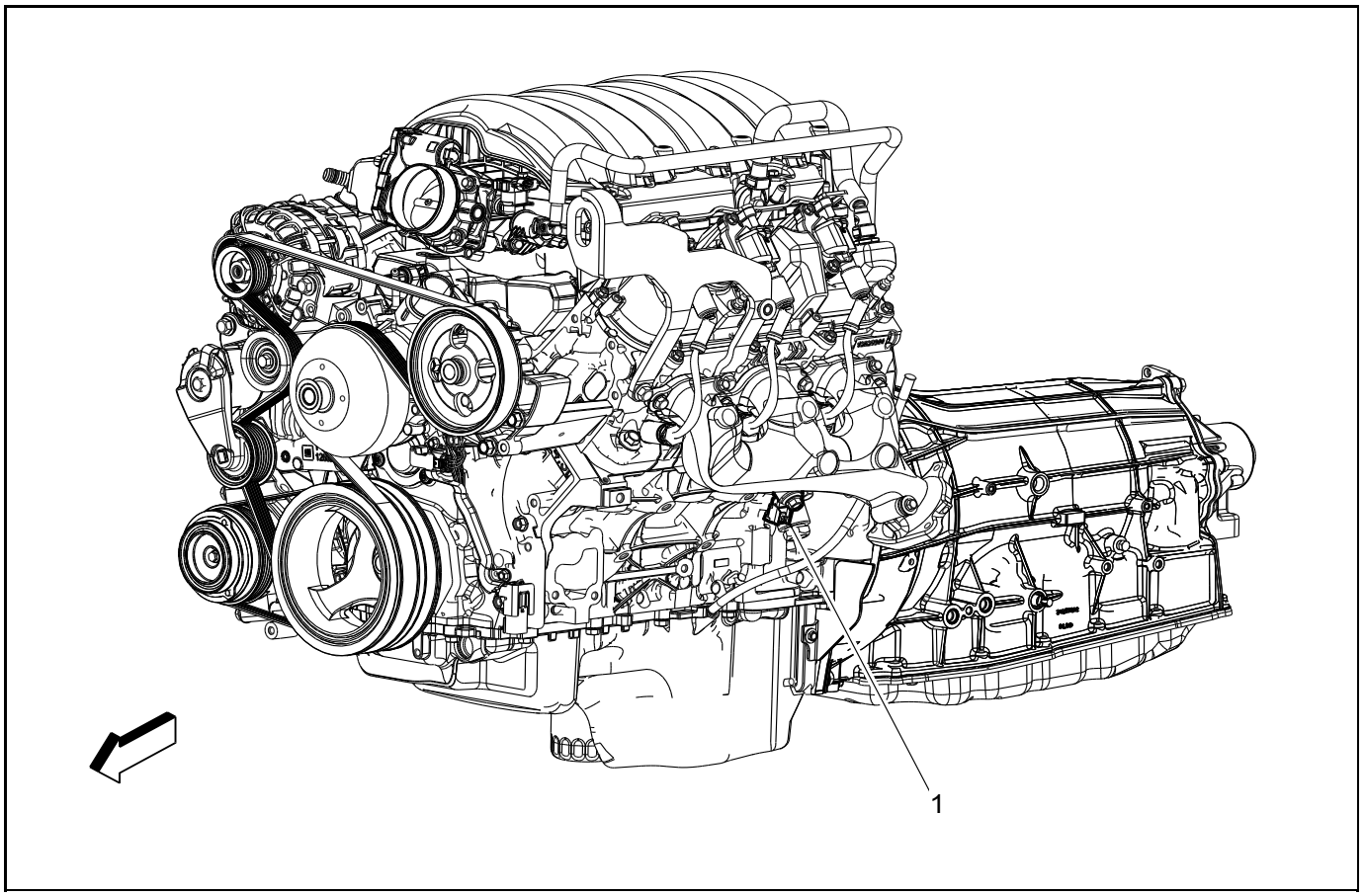


4861764

Items

(1) B37B Engine Oil Pressure Sensor
(2) B34 Engine Coolant Temperature Sensor
(3) B23 Camshaft Position Sensor
(4) Q6 Camshaft Position Actuator Solenoid Valve (LV1, L96, or LC8)

Left Side of the Engine Components (LV1)

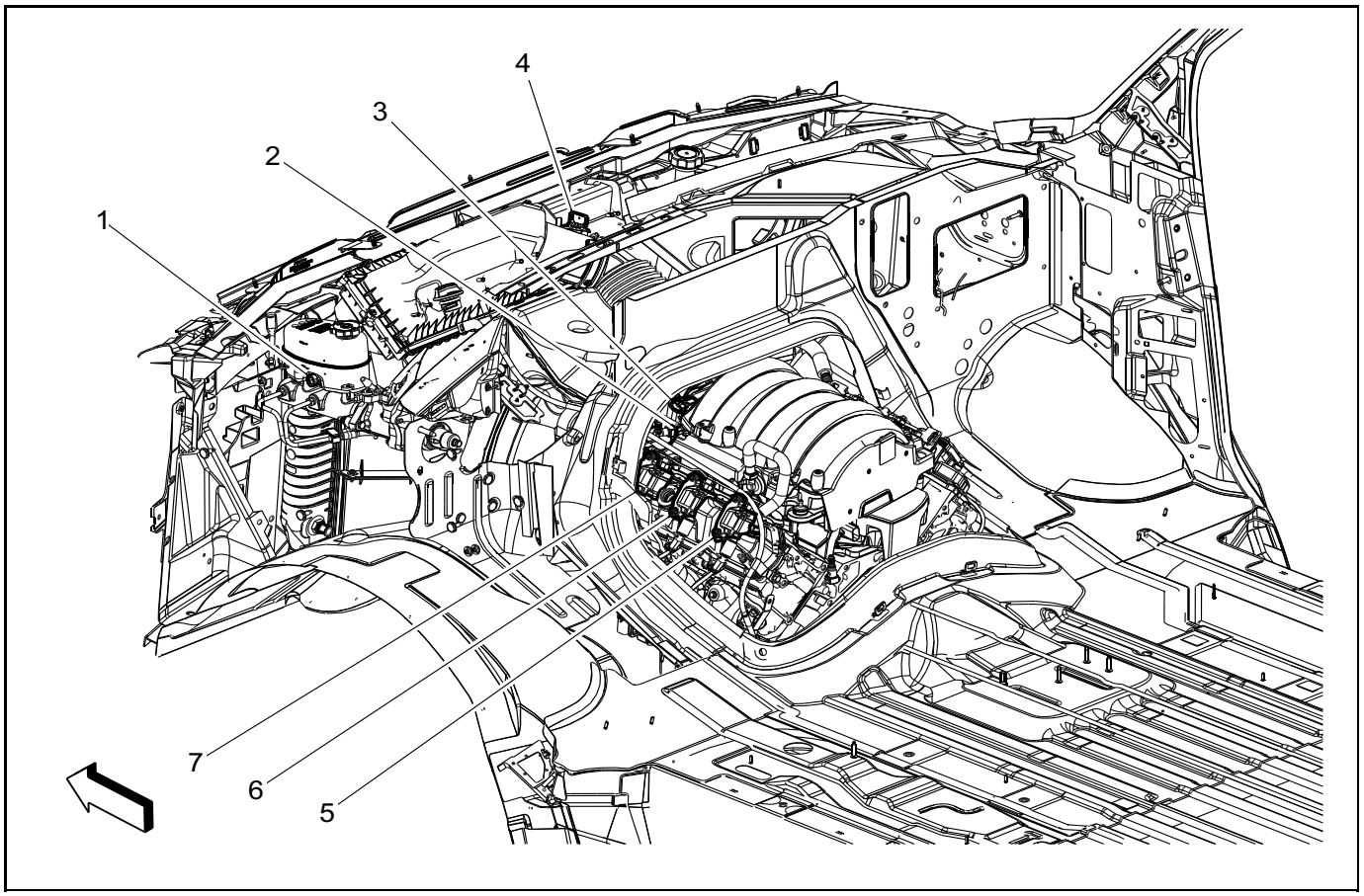


4861765

Items

(1) B68A Knock Sensor 1 (LV1, L96, or LC8)

Upper Left Side of the Engine Components (LV1)



4861767

Items

(1) B20 Brake Fluid Level Switch

(2) Q12 Evaporative Emission Purge Solenoid Valve (LV1, L96, or LC8)

(3) B74 Manifold Absolute Pressure Sensor (LV1, L96, or LC8)

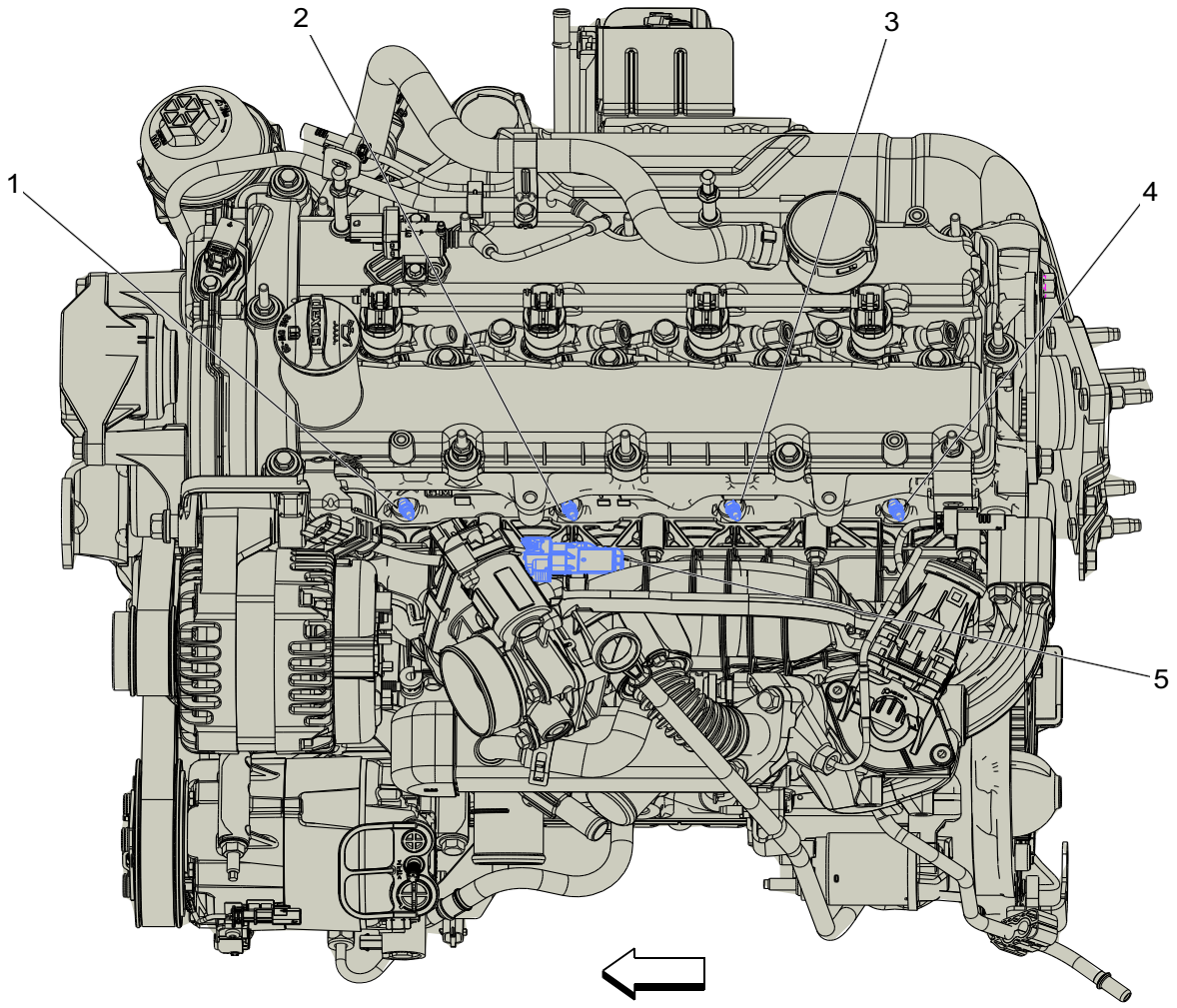
(4) B75C Multifunction Intake Air Sensor

(5) T8E Ignition Coil 5 (LV1, L96, or LC8)

(6) T8C Ignition Coil 3 (LV1, L96, or LC8)

(7) T8A Ignition Coil 1 (LV1, L96, or LC8)

Top of Engine Components (LWN)

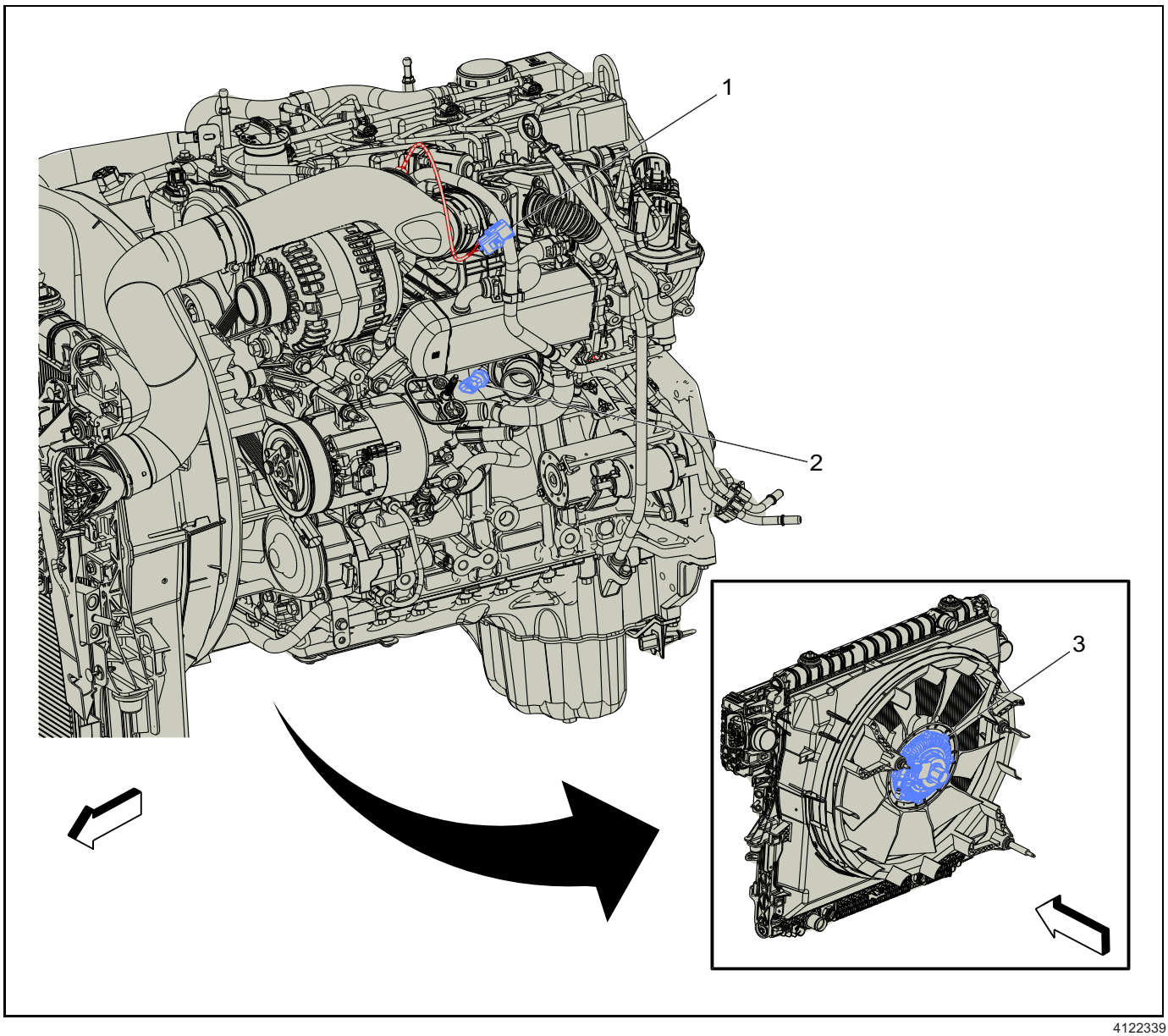


4122337

Items

(1) E12A Glow Plug 1 (LWN)
(2) E12B Glow Plug 2 (LWN)
(3) E12C Glow Plug 3 (LWN)
(4) E12D Glow Plug 4 (LWN)
(5) B65 Intake Manifold Pressure and Air Temperature Sensor (LWN)

Left Side of Engine Components (LWN)



4122339

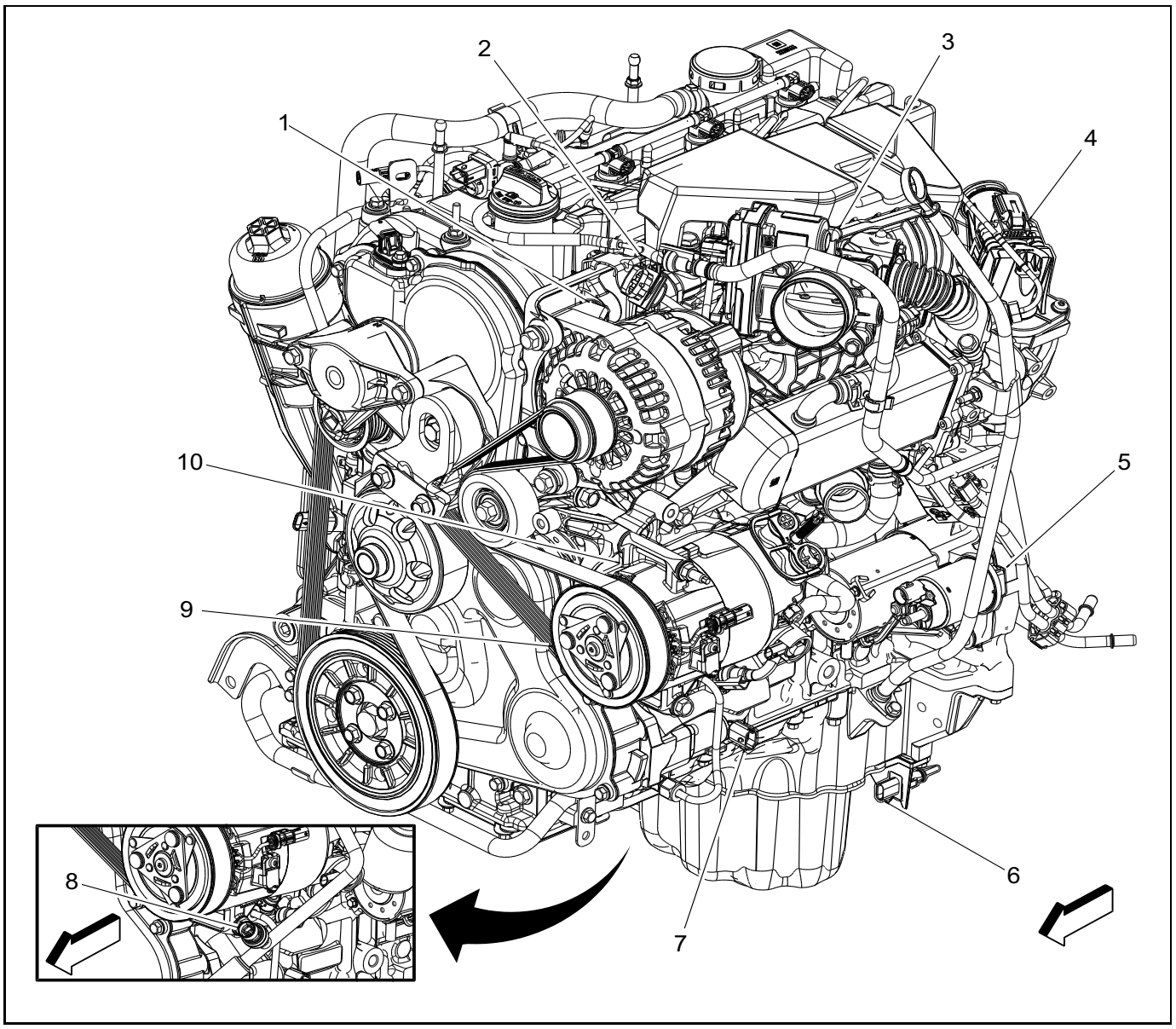
Items

(1) B193B Charge Air Cooler Outlet Temperature Sensor (LWN)

(2) B34 Engine Coolant Temperature Sensor

(3) Q85 Cooling Fan Clutch (LWN)

Left Front of the Engine Components (LWN)

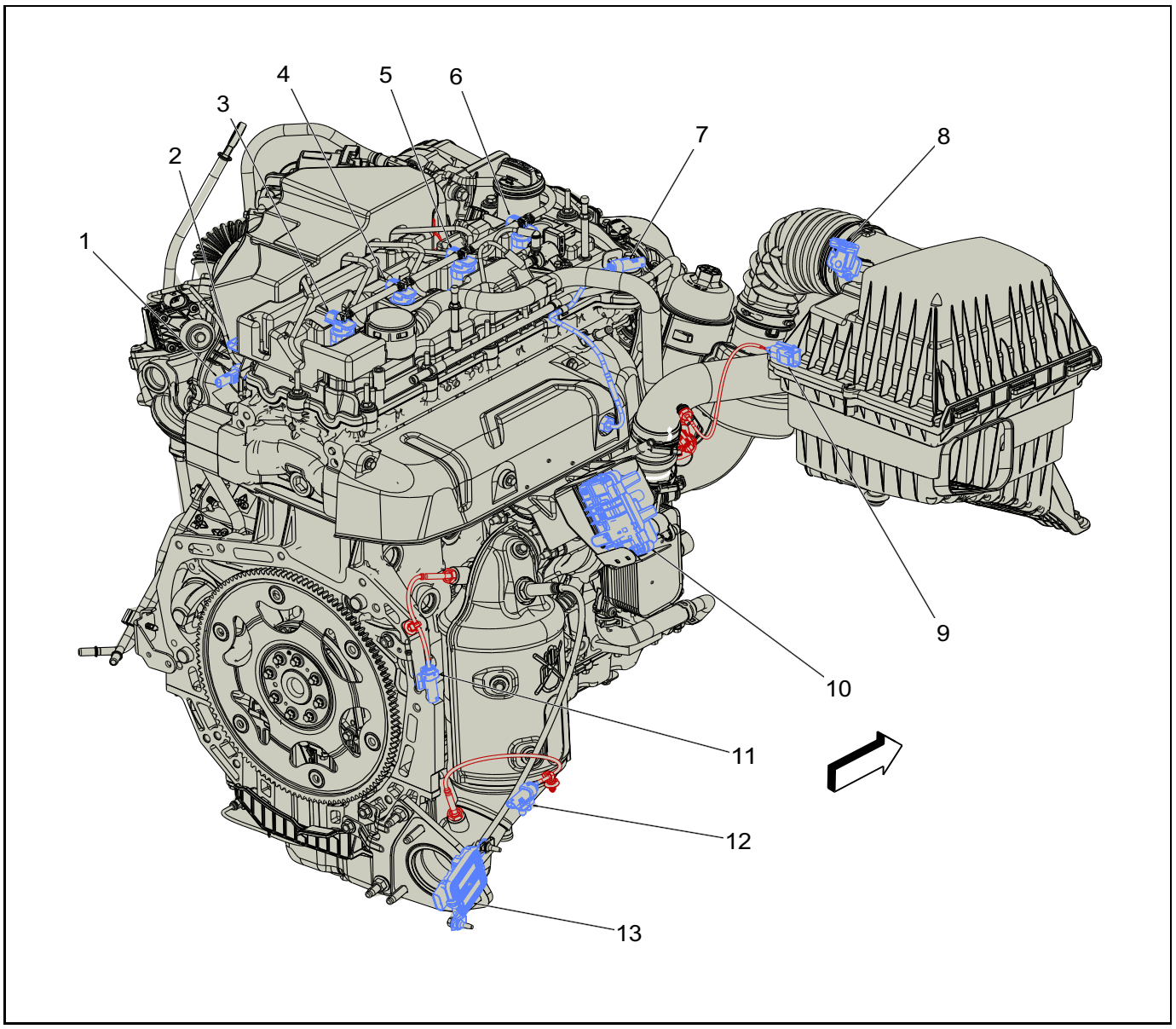


4650734

Items

(1) G13 Generator
(2) Q18B Fuel Pressure Regulator 2 (LWN)
(3) Q38 Throttle Body
(4) Q14 Exhaust Gas Recirculation Valve (LWN)
(5) M64 Starter Motor
(6) B26 Crankshaft Position Sensor
(7) Q18A Fuel Pressure Regulator 1 (LWN)
(8) B1 A/C Refrigerant Pressure Sensor (C60)
(9) Q2 A/C Compressor Clutch (C60)
(10) G1 A/C Compressor

Right Rear of Engine Components (LWN)



4122346

Items

(1) B130B Exhaust Gas Recirculation Temperature Sensor 2 (LWN)

(2) B47B Fuel Rail Pressure Sensor (LV1, or LWN)

(3) Q17D Fuel Injector 4

(4) Q17C Fuel Injector 3

(5) Q17B Fuel Injector 2

(6) Q17A Fuel Injector 1

(7) B130A Exhaust Gas Recirculation Temperature Sensor 1 (LWN)

(8) B75C Multifunction Intake Air Sensor

(9) B193A Charge Air Cooler Inlet Temperature Sensor (LWN)

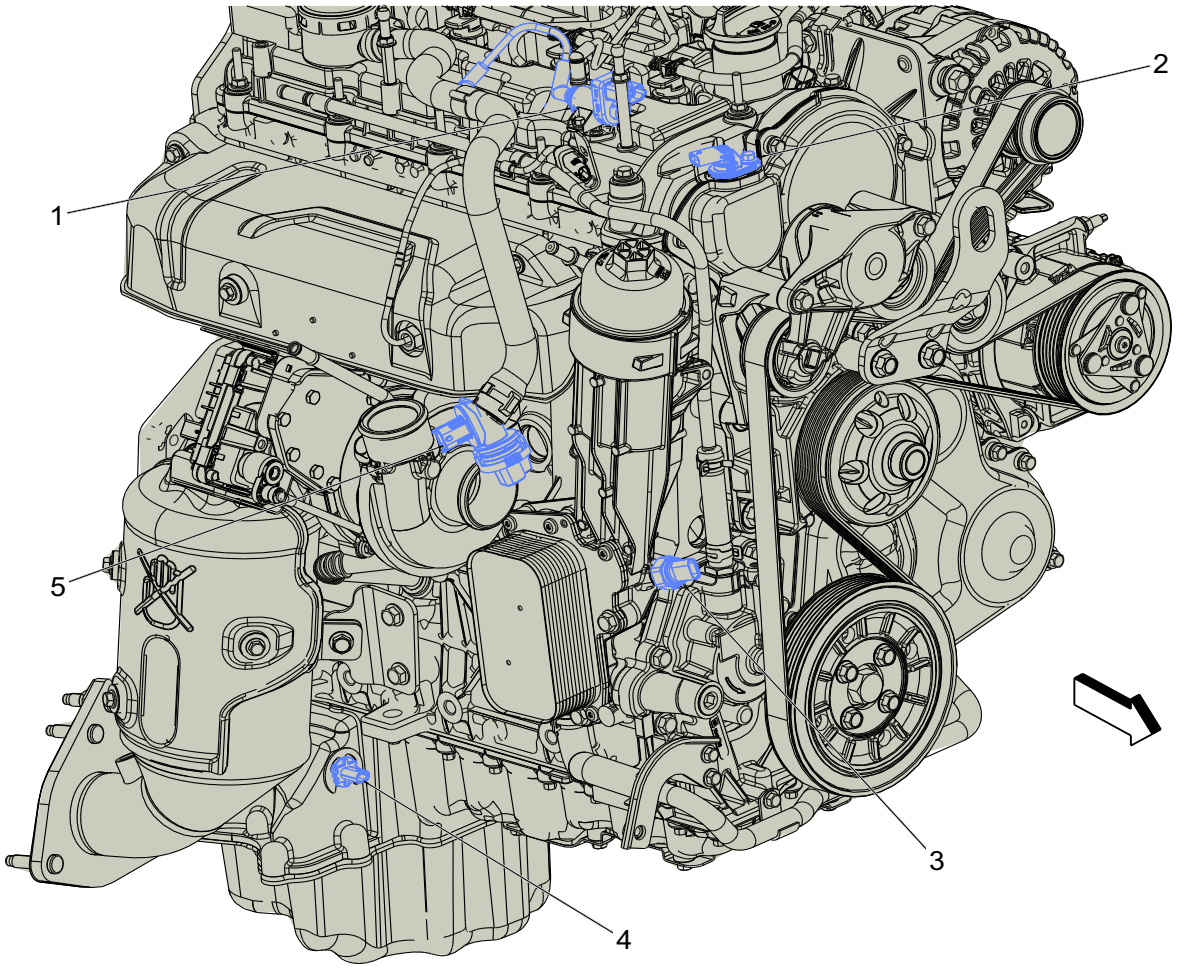
(10) M103 Turbocharger Vane Position Actuator (LWN)

(11) B131A Exhaust Temperature Sensor 1 (LWN)

(12) B131B Exhaust Temperature Sensor 2 (LWN)

(13) B195A Nitrogen Oxides Sensor 1 (LWN)

Right Front of Engine Components (LWN)



4122347

Items

(1) Q47 Exhaust Gas Recirculation Cooler Bypass Solenoid Valve (LWN)

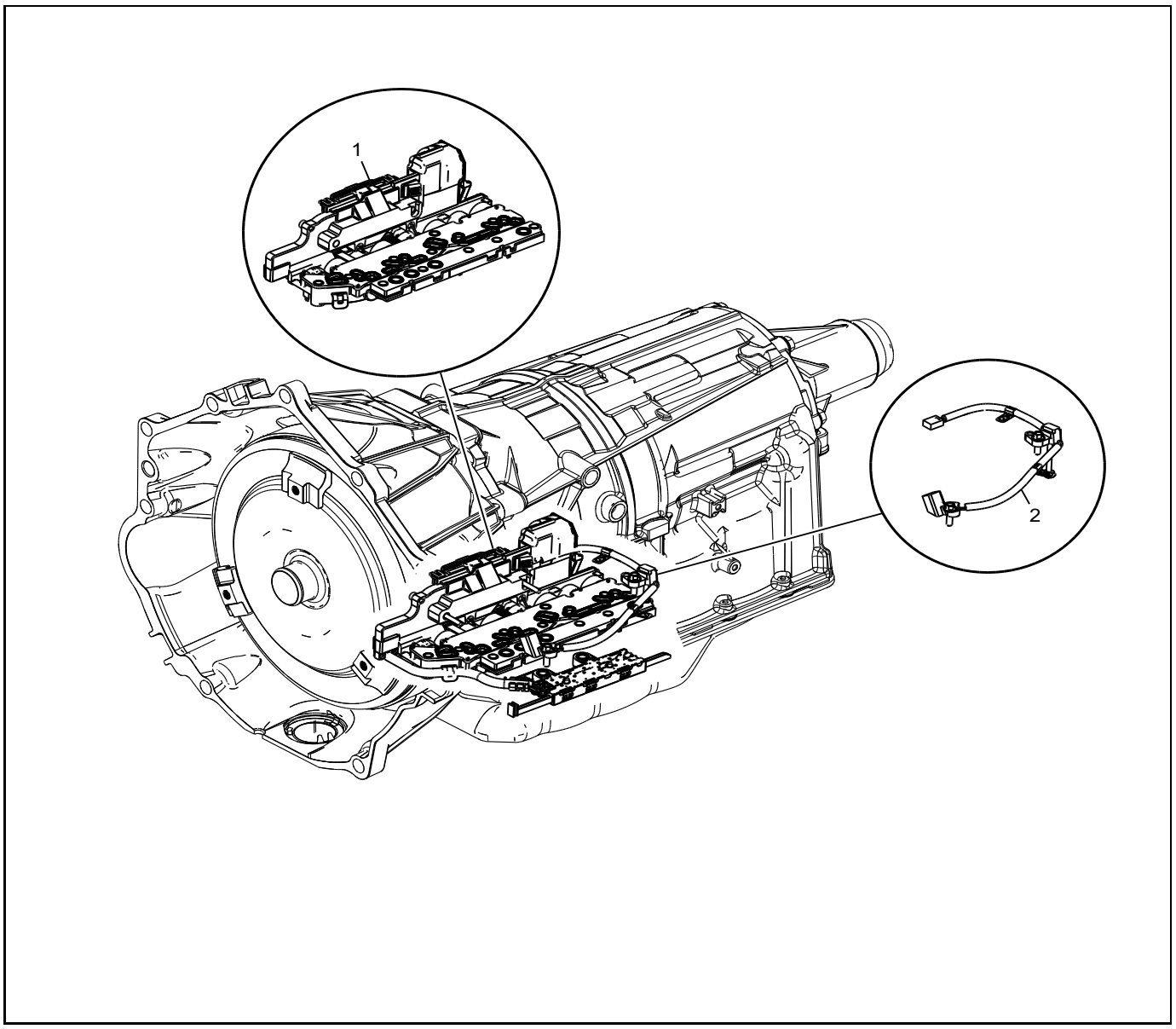
(2) B23 Camshaft Position Sensor

(3) B37B Engine Oil Pressure Sensor

(4) B35 Engine Oil Level Switch (LV1, or LWN)

(5) E45 Positive Crankcase Ventilation Heater

Automatic Transmission Internal Electrical Components



1696407

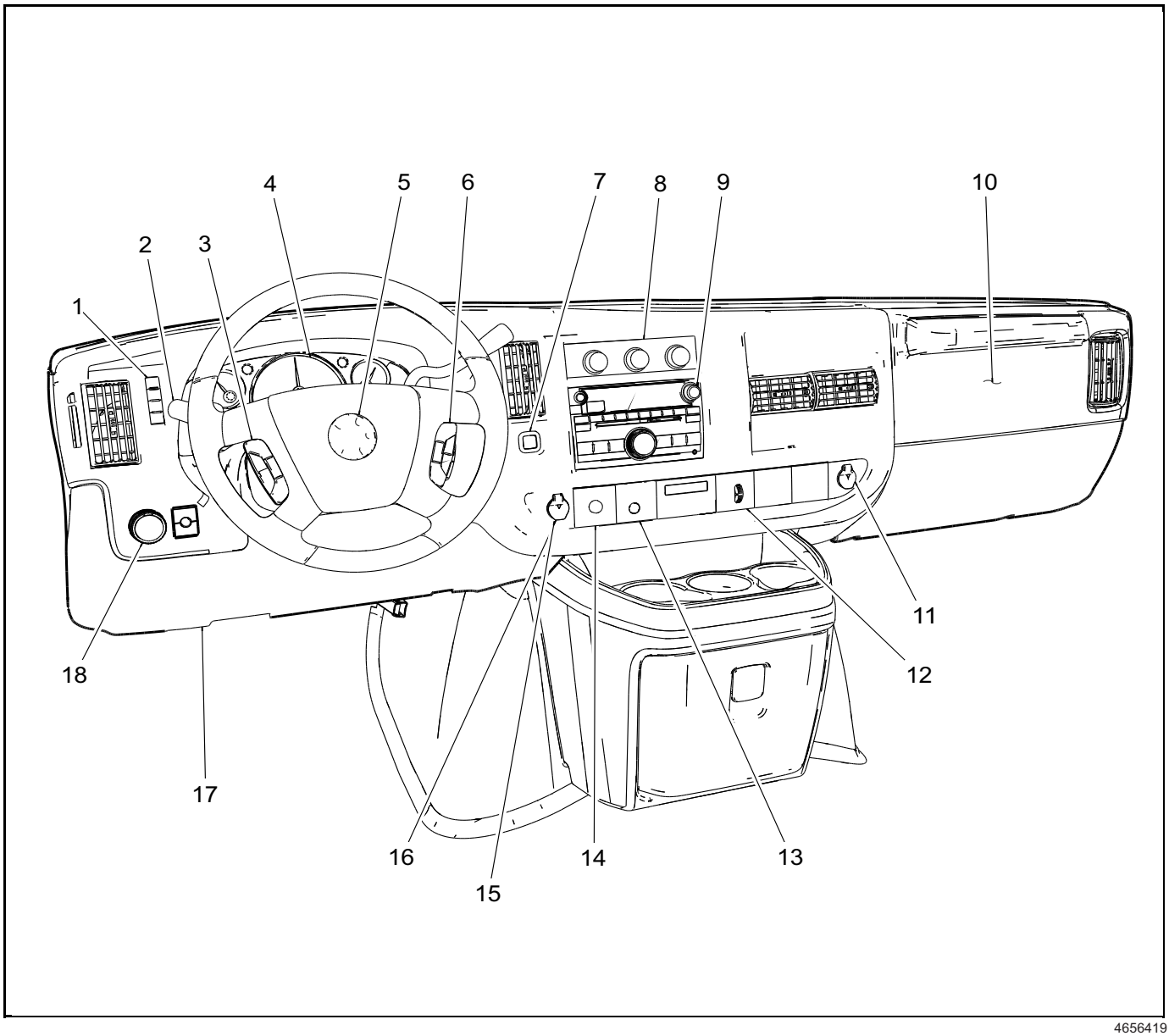
Items

(1) Q8 Control Solenoid Valve Assembly

(2) B14A Transmission Output Shaft Speed Sensor

Instrument Panel/Center Console Component Views

Instrument Panel Components (1 of 2)

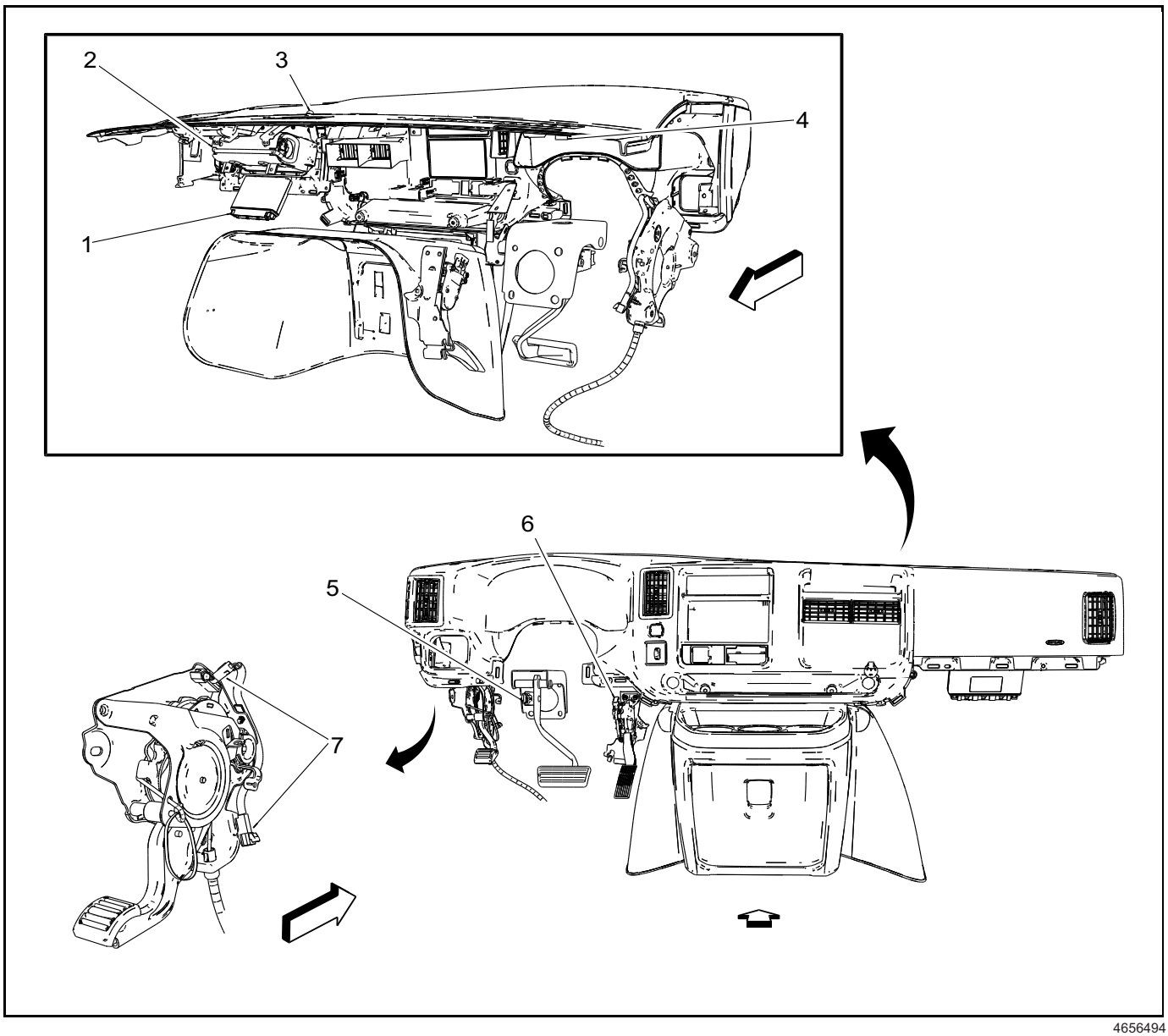


4656419

Items

(1) S16 Driver Information Center Switch
(2) S78 Turn Signal/Multifunction Switch
(3) S70L Steering Wheel Controls Switch - Left (K34)
(4) P16 Instrument Cluster
(5) F107 Steering Wheel Air Bag
(6) S70R Steering Wheel Controls Switch - Right (W1Y)
(7) S74 Tow/Haul Mode Switch
(8) S34 HVAC Controls Switch Assembly
(9) A11 Radio
(10) F101 Passenger Instrument Panel Air Bag
(11) X80B Accessory Power Receptacle - Center Console 2
(12) S85 Auxiliary Blower Motor Switch (C36 or C69)
(13) S40 Passenger Air Bag Disable Switch (C99)
(14) S75 Traction Control Switch
(15) X80A Accessory Power Receptacle - Center Console 1 (Without DT4)
(16) E32 Cigarette Lighter Receptacle (DT4)
(17) X84 Data Link Connector
(18) S30 Headlamp Switch

Instrument Panel Components (2 of 2)

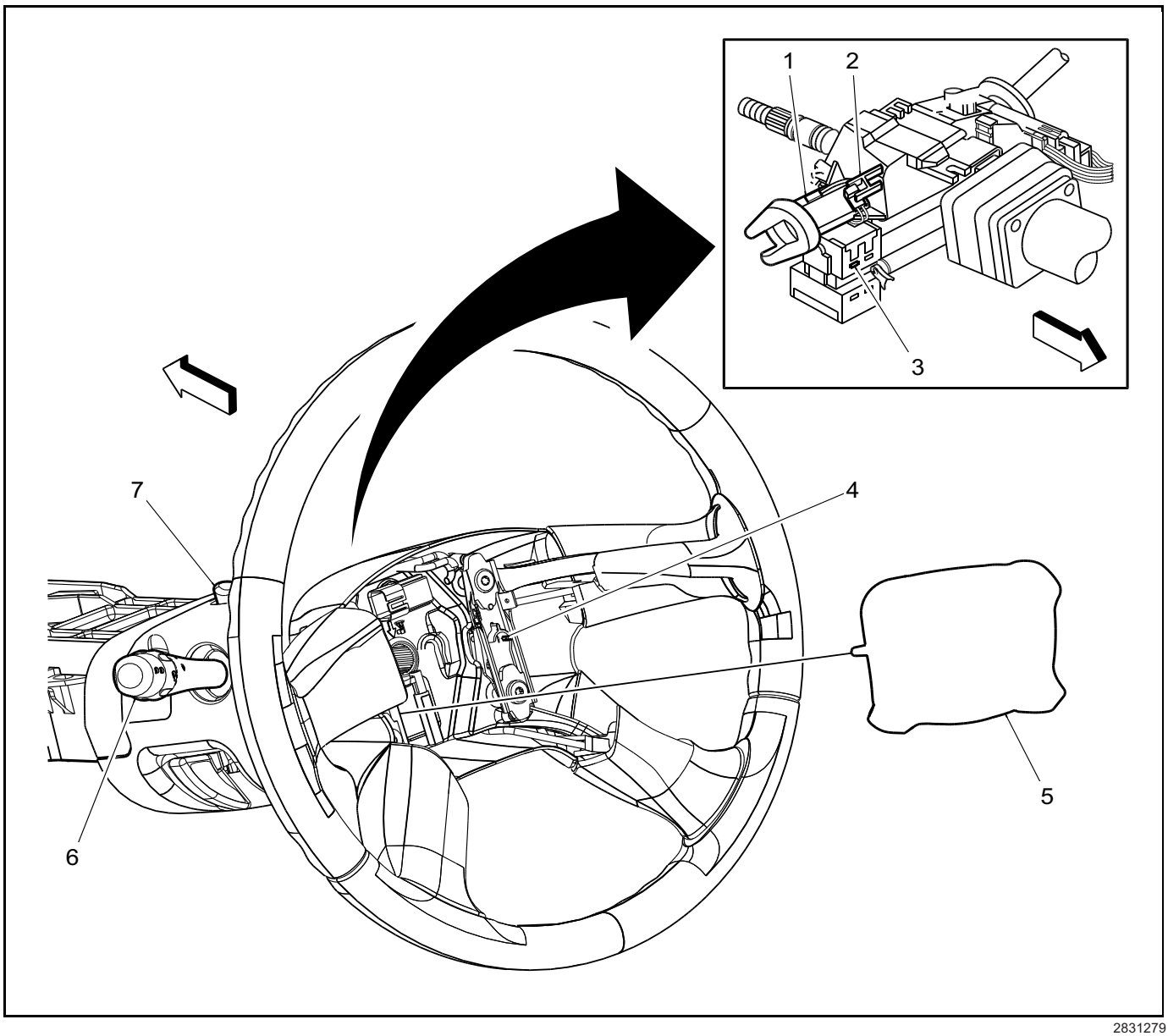


4656494

Items

(1) K9 Body Control Module
(2) F101 Passenger Instrument Panel Air Bag
(3) B10 Ambient Light Sensor
(4) K77 Remote Control Door Lock Receiver (ATG or UJM)
(5) B22 Brake Pedal Position Sensor
(6) B107 Accelerator Pedal Position Sensor
(7) B80 Park Brake Switch

Steering Column Components (1 of 2)

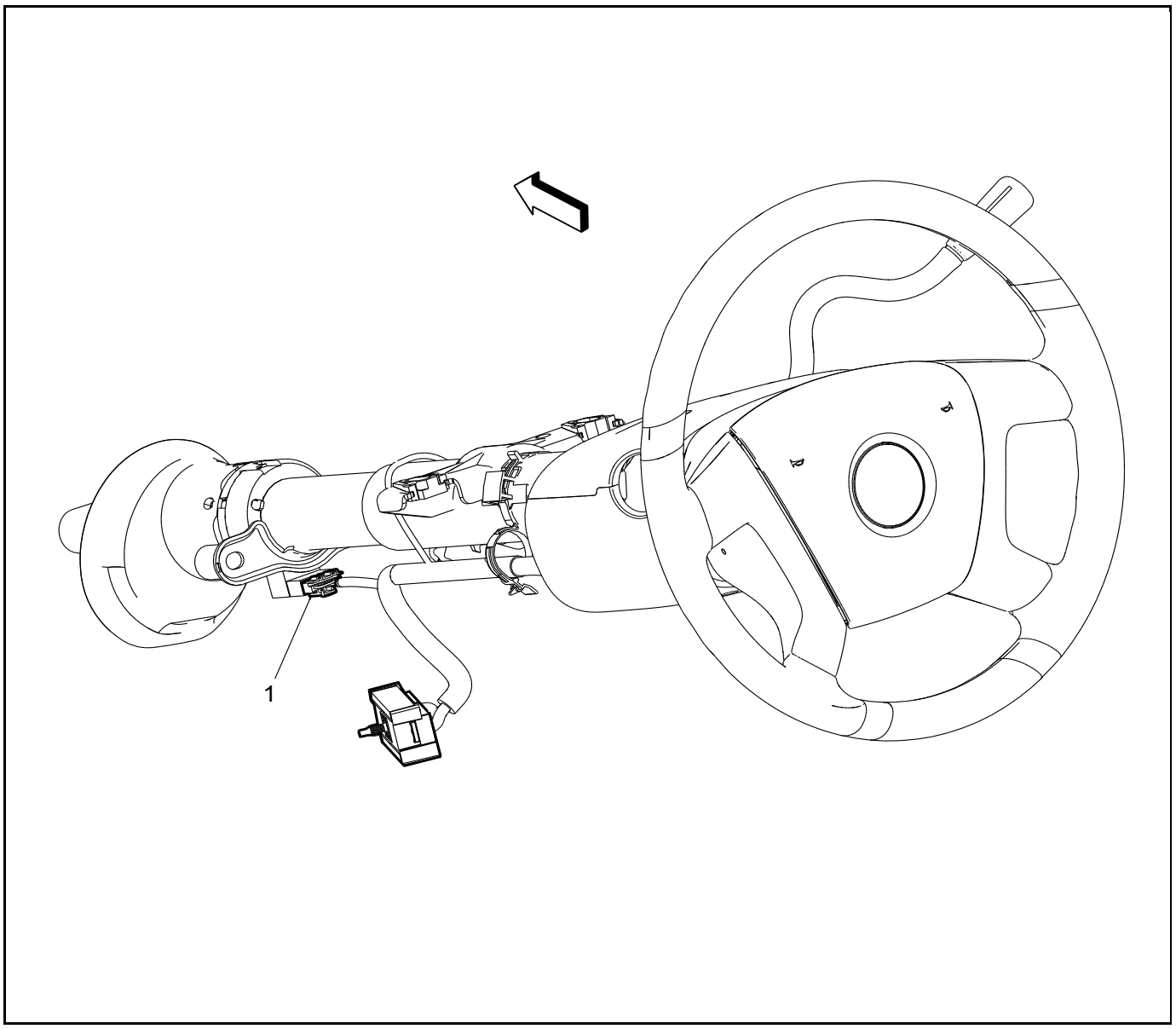


2831279

Items

(1) K64 Content Theft Deterrent Control Module
(2) M7 Transmission Shift Lock Control Solenoid Actuator
(3) S39 Ignition Switch
(4) S33 Horn Switch
(5) F107 Steering Wheel Air Bag
(6) S78 Turn Signal/Multifunction Switch
(7) S26 Hazard Warning Switch

Steering Column Components (2 of 2)

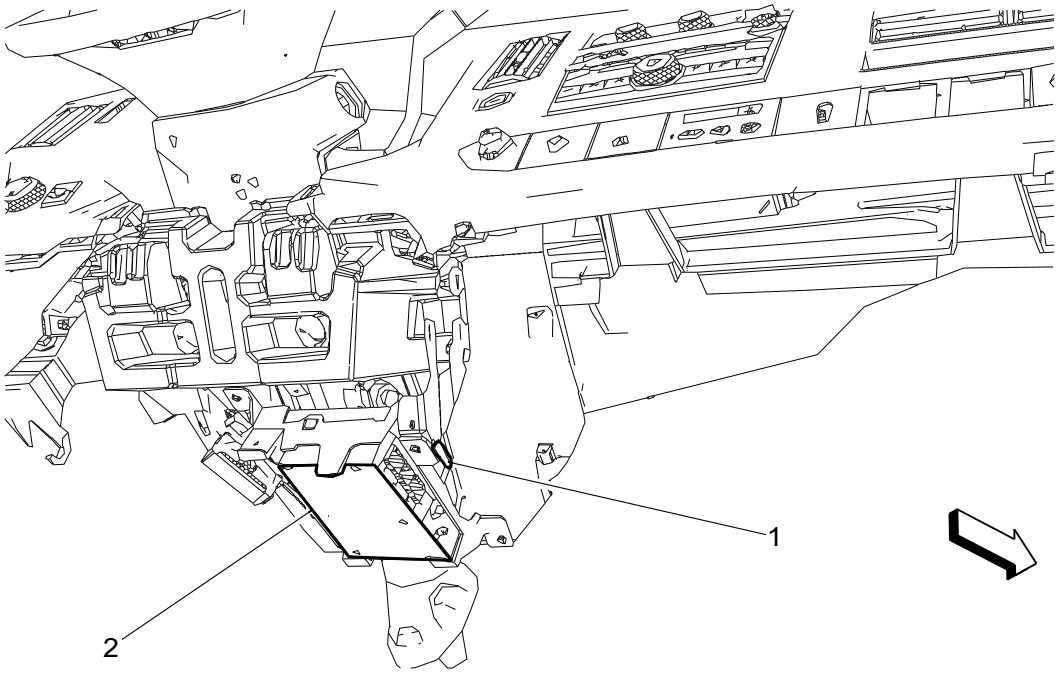


4004007

Items

(1) B99 Steering Wheel Angle Sensor

Underside of Instrument Panel Components



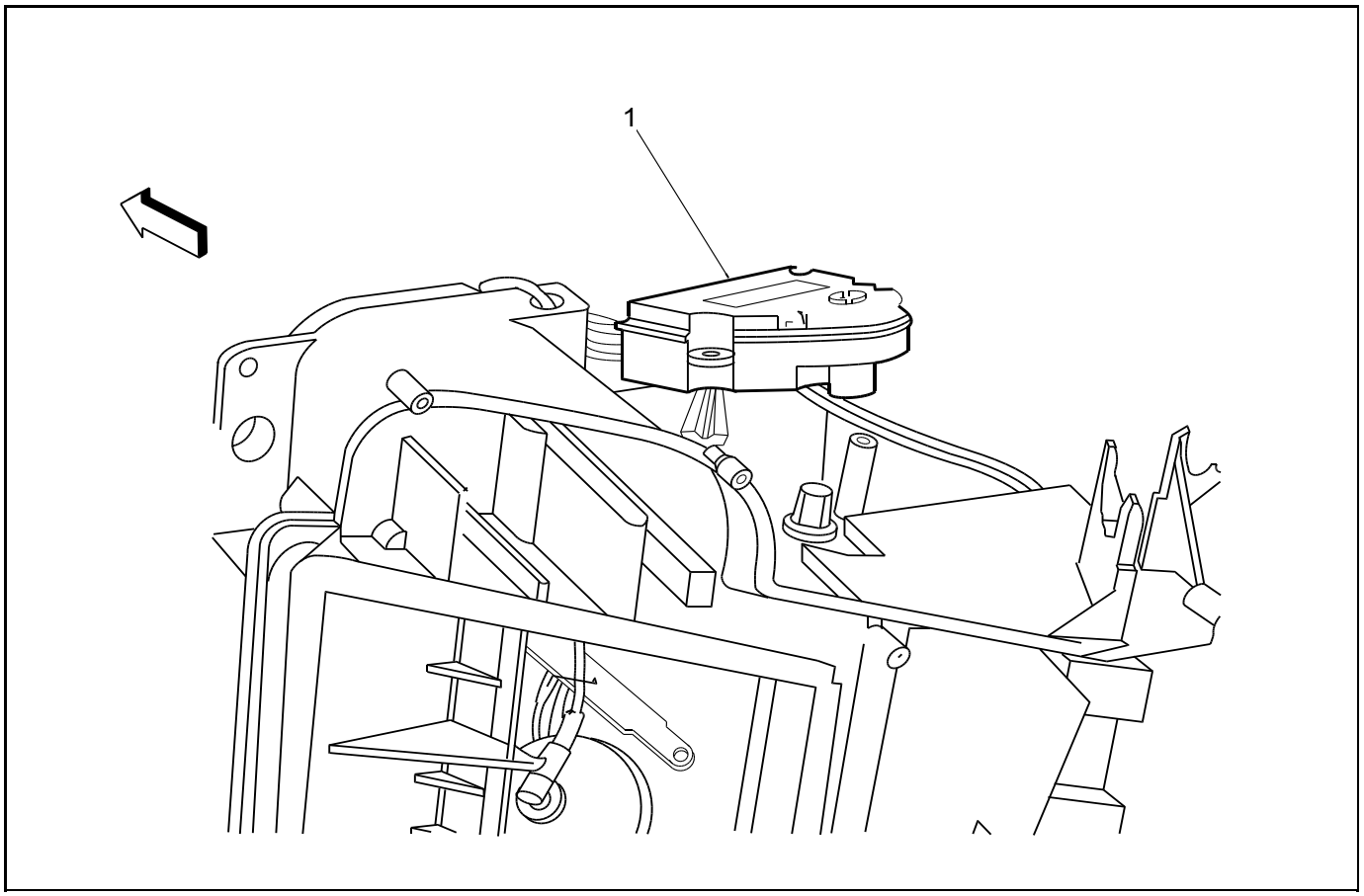
2831283

Items

(1) A12 Digital Radio Receiver Control Module (U2K or UBS)

(2) K73 Telematics Communication Interface Control Module (UE1)

HVAC Case Components



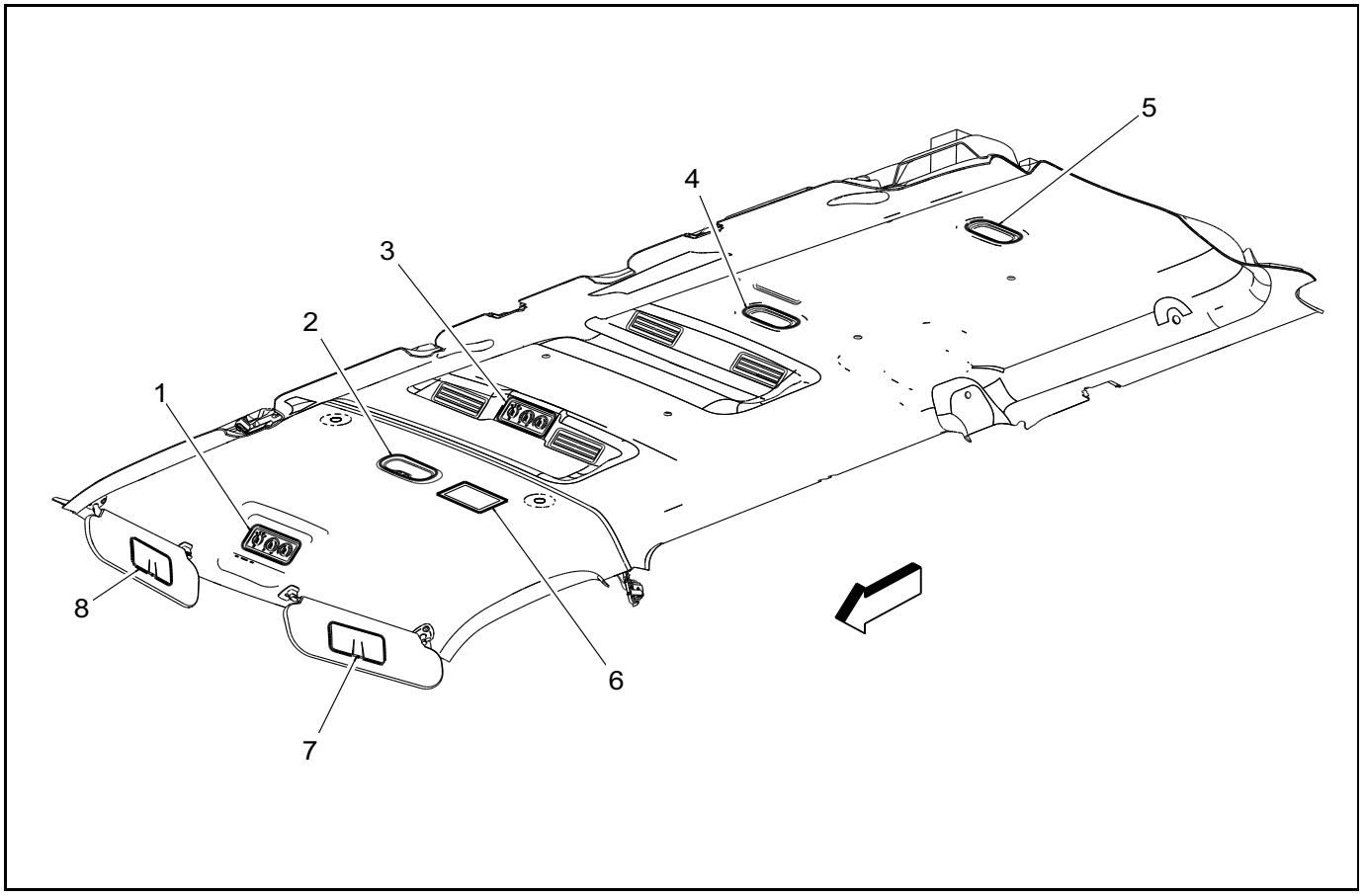
4059788

Items

(1) M6 Air Temperature Door Actuator

Passenger Compartment/Roof Component Views

Headliner Components



4004093

Items

(1) S34F HVAC Controls Switch Assembly - Auxiliary Front (C36 or C69)

(2) E37F Dome/Reading Lamps - Front (Without YF7)

(3) S34R HVAC Controls Switch Assembly - Auxiliary Rear (C36 or C69 with Rear HVAC Controls)

(4) E37M Dome/Reading Lamps - Middle (Passenger)

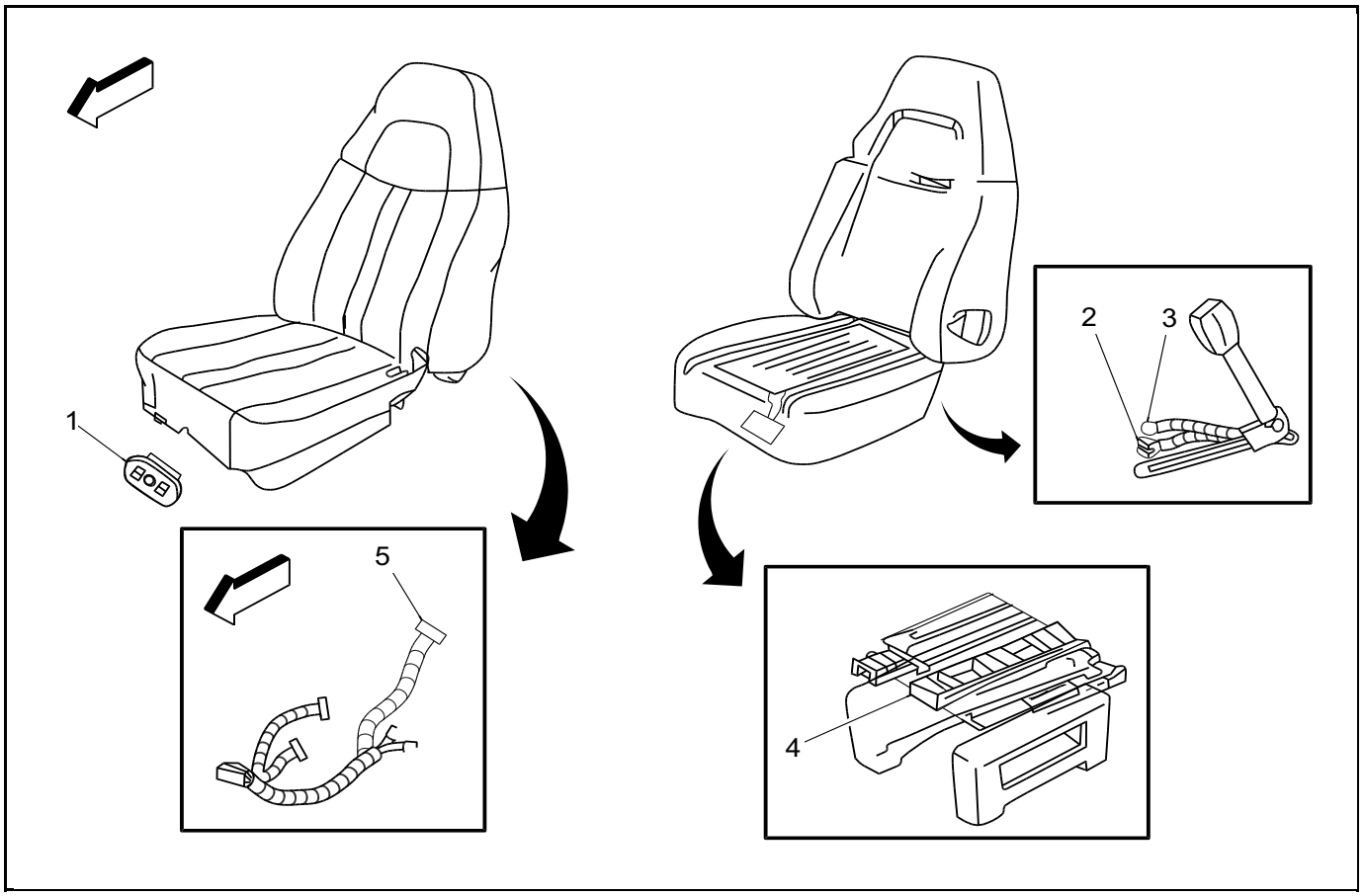
(5) E37R Dome/Reading Lamps - Rear (Passenger)

(6) K18 Compass Module (U80)

(7) E31R Sunshade Mirror Lamp - Right (C69 or DH6)

(8) E31L Sunshade Mirror Lamp - Left (C69 or DH6)

Passenger Seat Components



4656488

Items

(1) S64P Seat Adjuster Switch - Passenger (AG2)

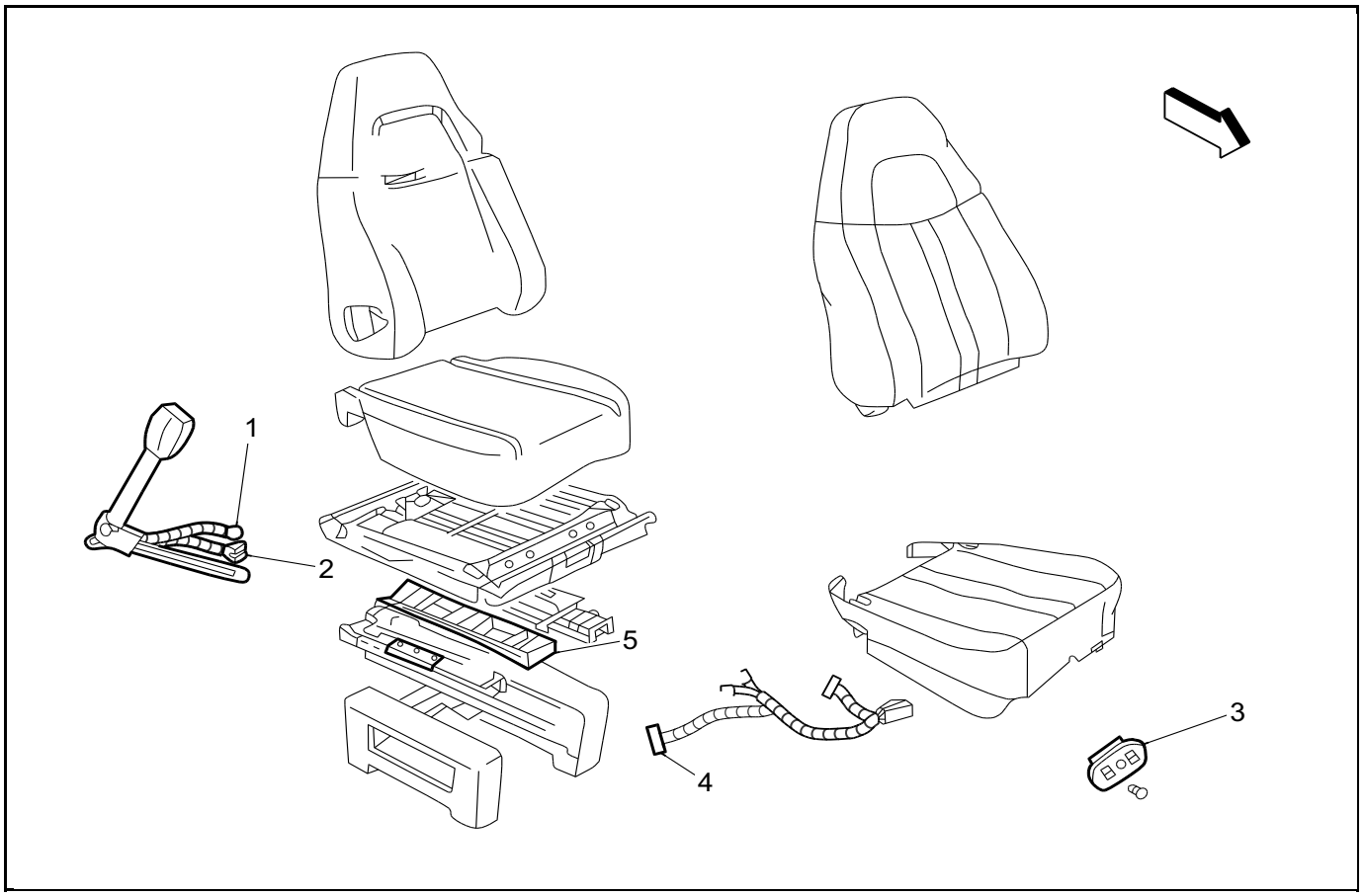
(2) F109P Seat Belt Buckle Pretensioner - Passenger (AK5)

(3) B153P Seat Belt Buckle - Passenger (AK5)

(4) M49P Seat Motor Assembly - Passenger (AG2)

(5) X306 Body Harness to Passenger Seat Harness

Driver Seat Components



4004063

Items

(1) B153D Seat Belt Buckle - Driver

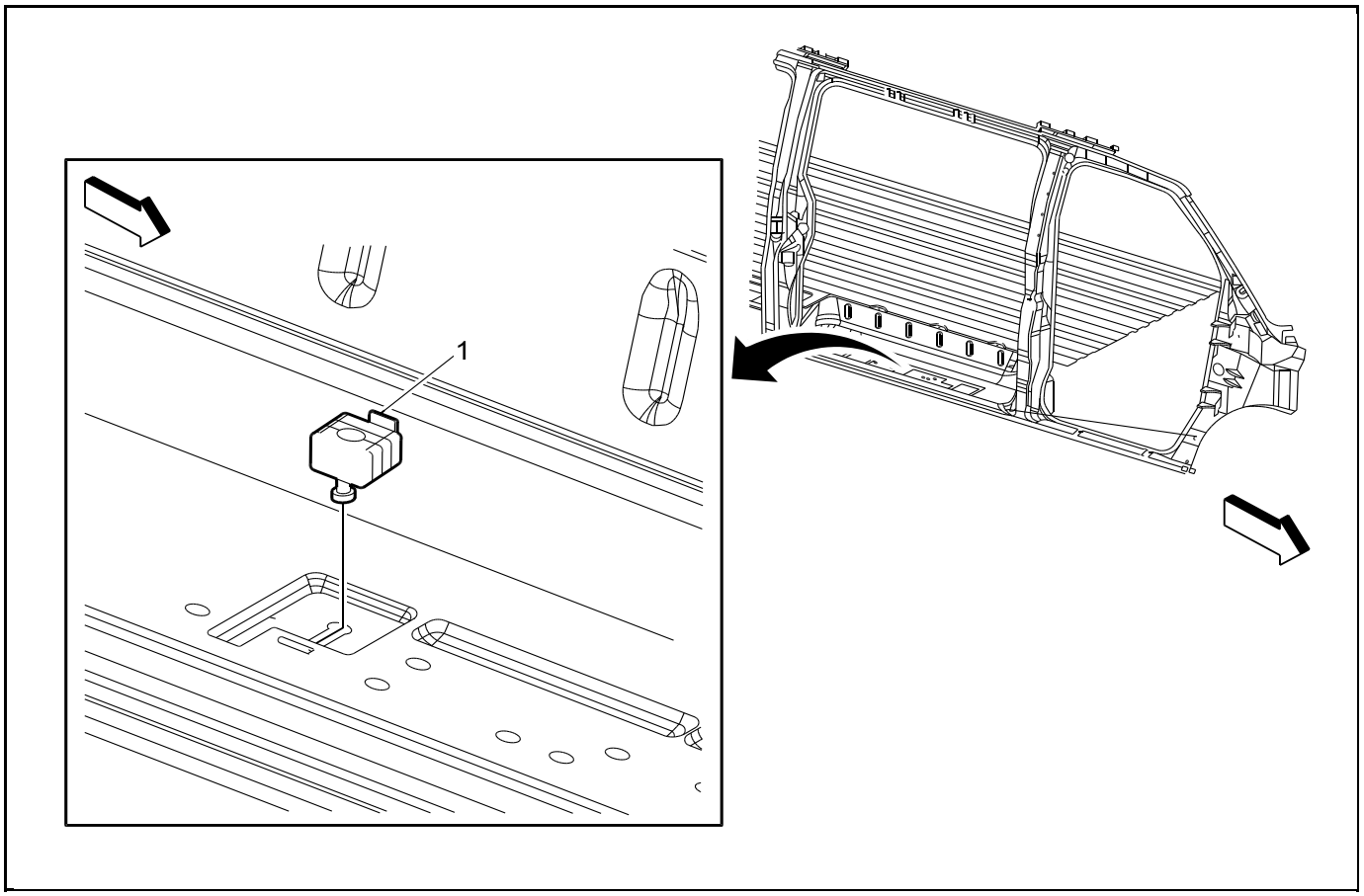
(2) F109D Seat Belt Buckle Pretensioner - Driver

(3) S64D Seat Adjuster Switch - Driver (AG1)

(4) X307 Body Harness to Driver Seat Harness

(5) M49D Seat Motor Assembly - Driver (AG1)

Right Rear Frame Rail Components (Passenger with E24)

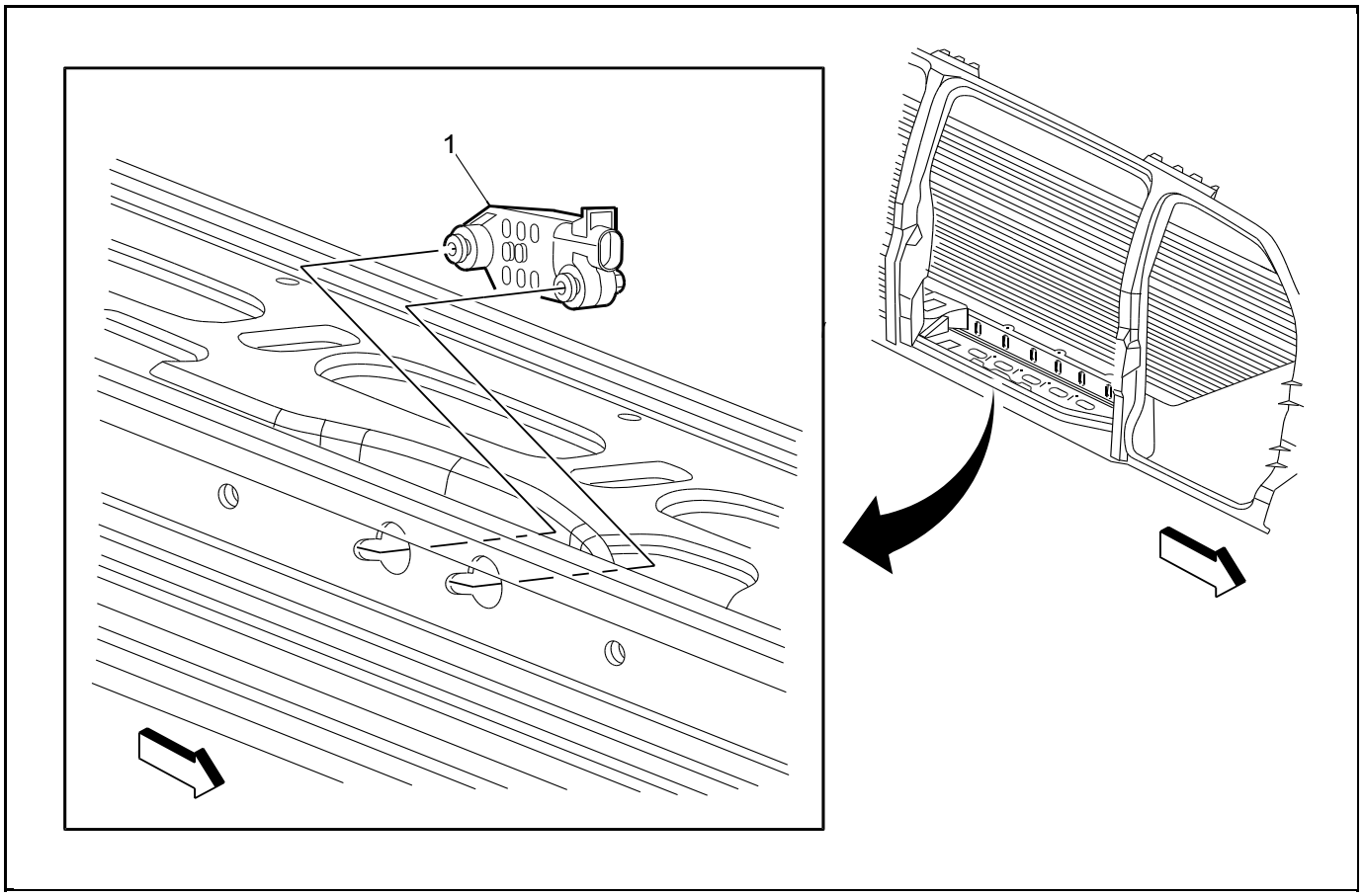


2831290

Items

(1) B63RR Side Impact Sensor - Right Rear (ASF)

Right Rear Frame Rail Components (Passenger with YA2)

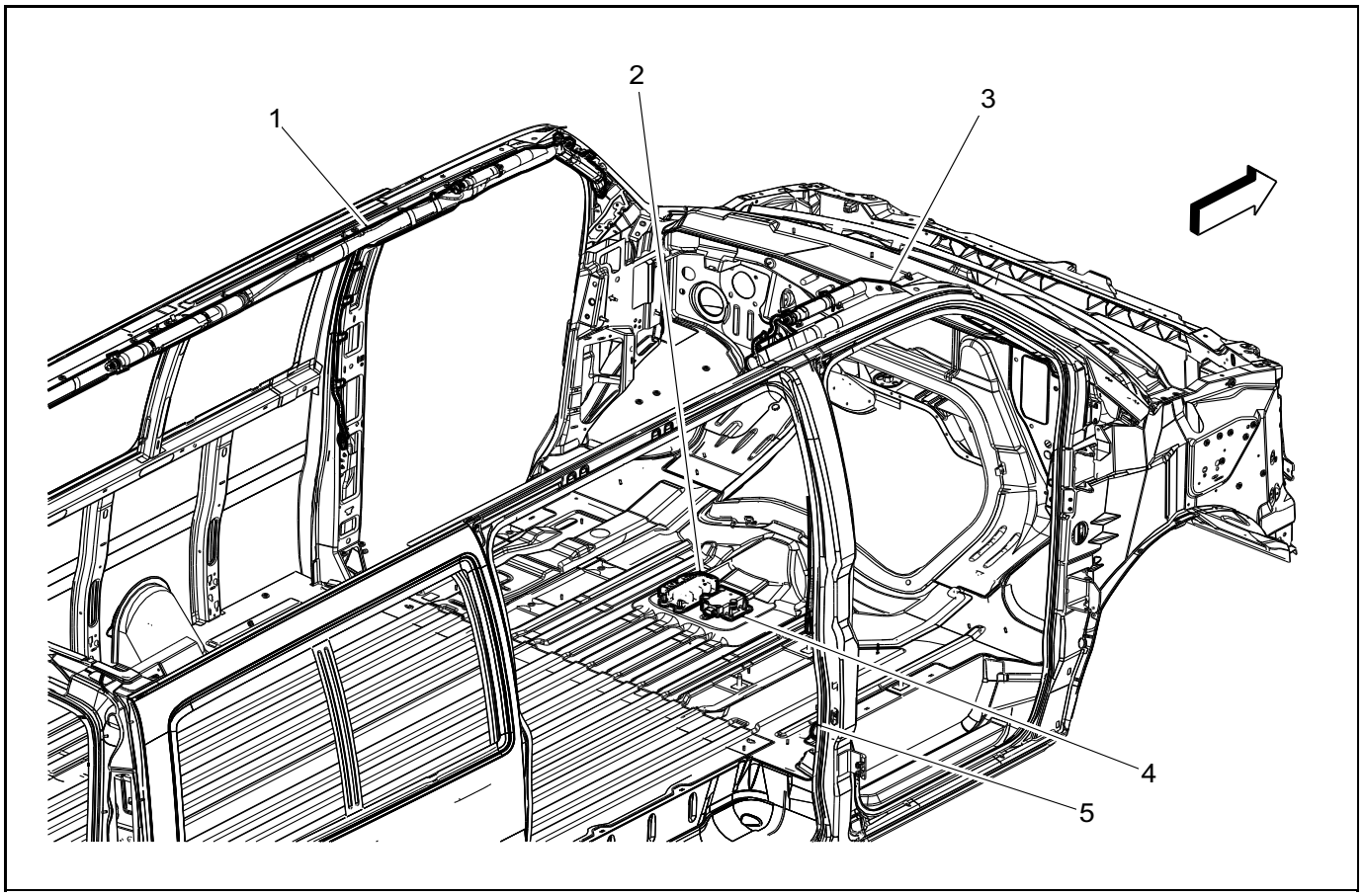


2831291

Items

(1) B63RR Side Impact Sensor - Right Rear (ASF)

Front of the Passenger Compartment Components



4861782

Items

(1) F105LF Roof Rail Air Bag - Left Front (ASF)

(2) K36 Inflatable Restraint Sensing and Diagnostic Module

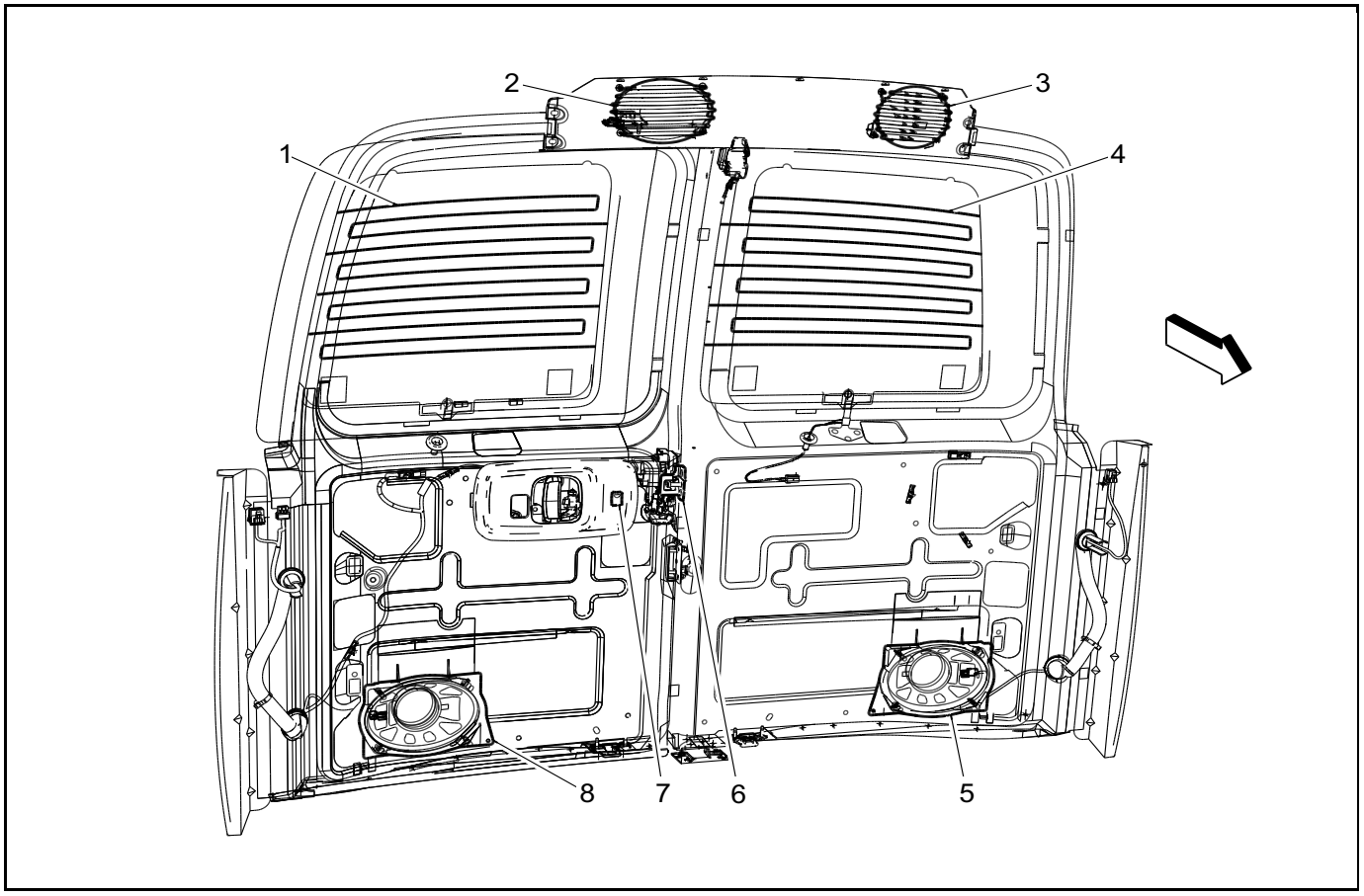
(3) F105RF Roof Rail Air Bag - Right Front (ASF)

(4) B176 Multi-axis Acceleration Sensor Module

(5) B28F Door Ajar Switch - Right Sliding

Door Component Views

Rear Door Components (Passenger or Cargo)



4009344

Items

(1) E18R Rear Defogger Grid - Right (C49)

(2) P19RR Speaker - Right Rear Roof (Cargo or Passenger)

(3) P19LR Speaker - Left Rear Roof (Cargo or Passenger)

(4) E18L Rear Defogger Grid - Left (C49)

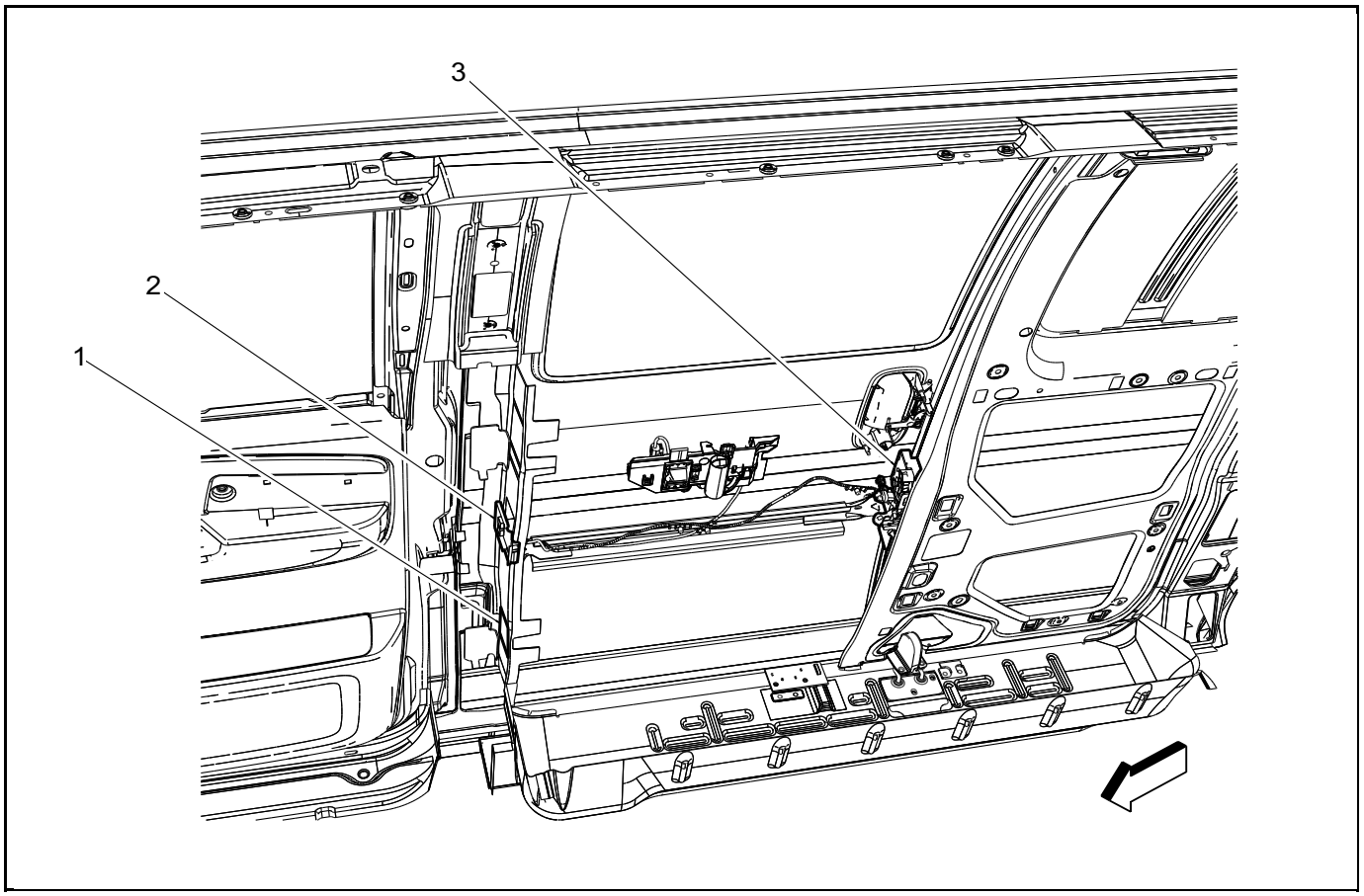
(5) P19F Speaker - Left Rear Cargo Door (US8)

(6) M13 Door Latch Assembly - Rear Cargo (Passenger or Cargo)

(7) S13A Door Lock Switch - Rear Cargo (Passenger or Cargo with AU3)

(8) P19T Speaker - Right Rear Cargo Door (US8)

Right Side Hinged Door Components (E24)



4004104

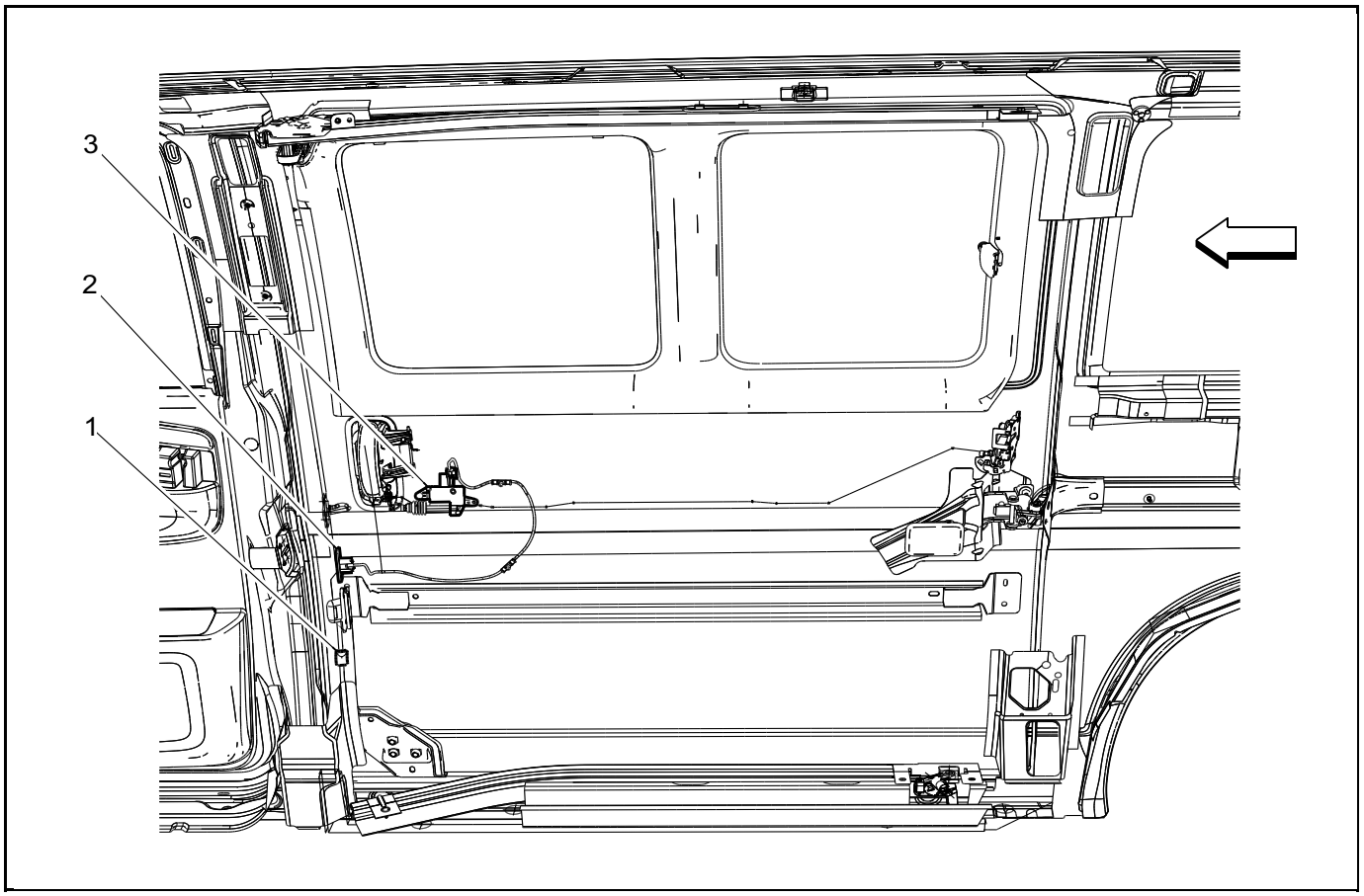
Items

(1) B28F Door Ajar Switch - Right Sliding

(2) X87RB Sliding Door Jamb Contact Plate - Right Body (AU3 and E24 or YA2)

(3) M14RR Door Lock Actuator - Right Rear (AU3)

Right Sliding Door Components (YA2)



2831297

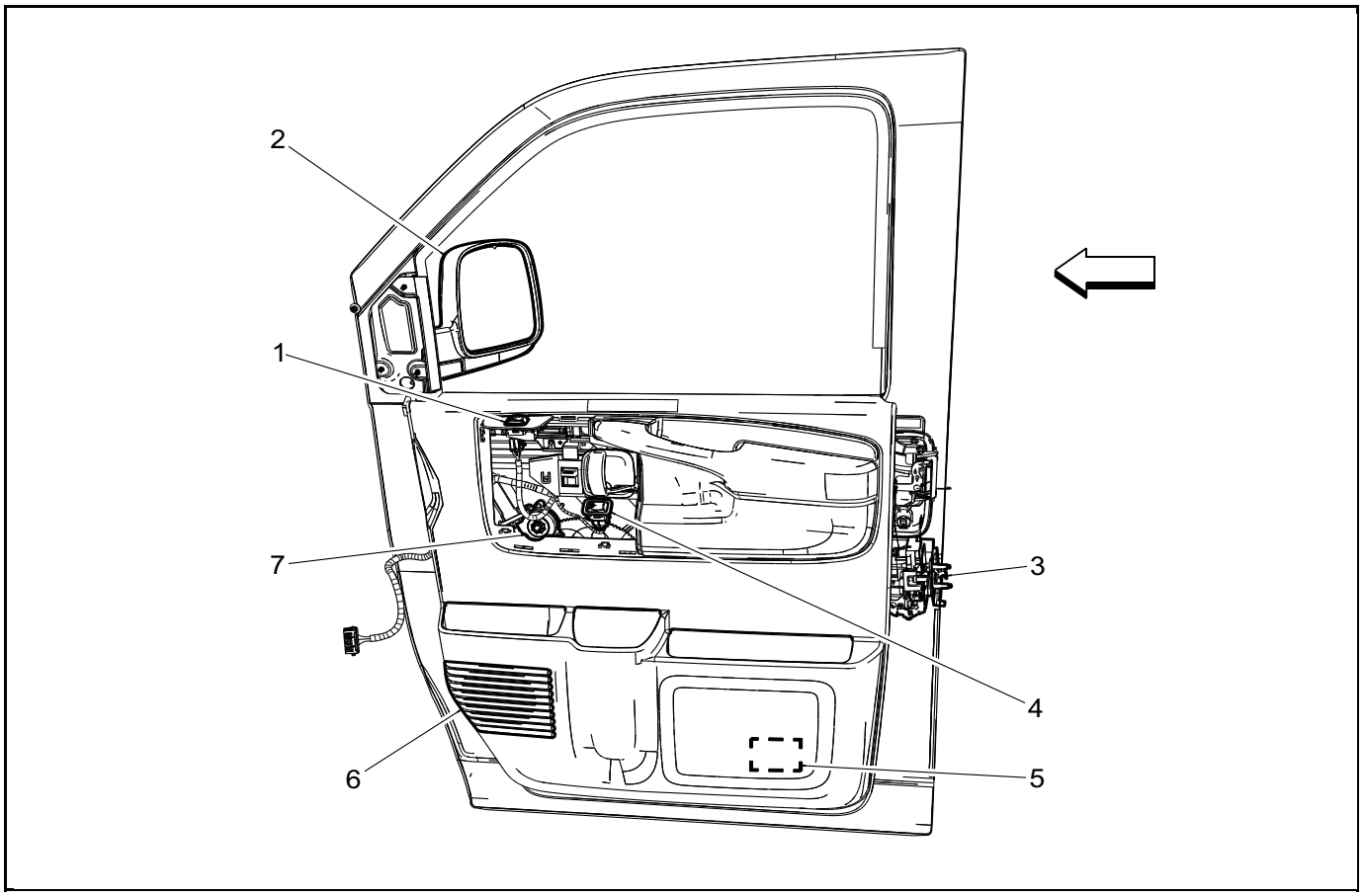
Items

(1) B28F Door Ajar Switch - Right Sliding

(2) X87RB Sliding Door Jamb Contact Plate - Right Body (AU3 and E24 or YA2)

(3) M14RR Door Lock Actuator - Right Rear (AU3)

Front Passenger Door Components



2831293

Items

(1) S79P Window Switch - Passenger (A31)

(2) A9B Outside Rearview Mirror - Passenger (DEB or DE5)

(3) A23P Door Latch Assembly - Passenger

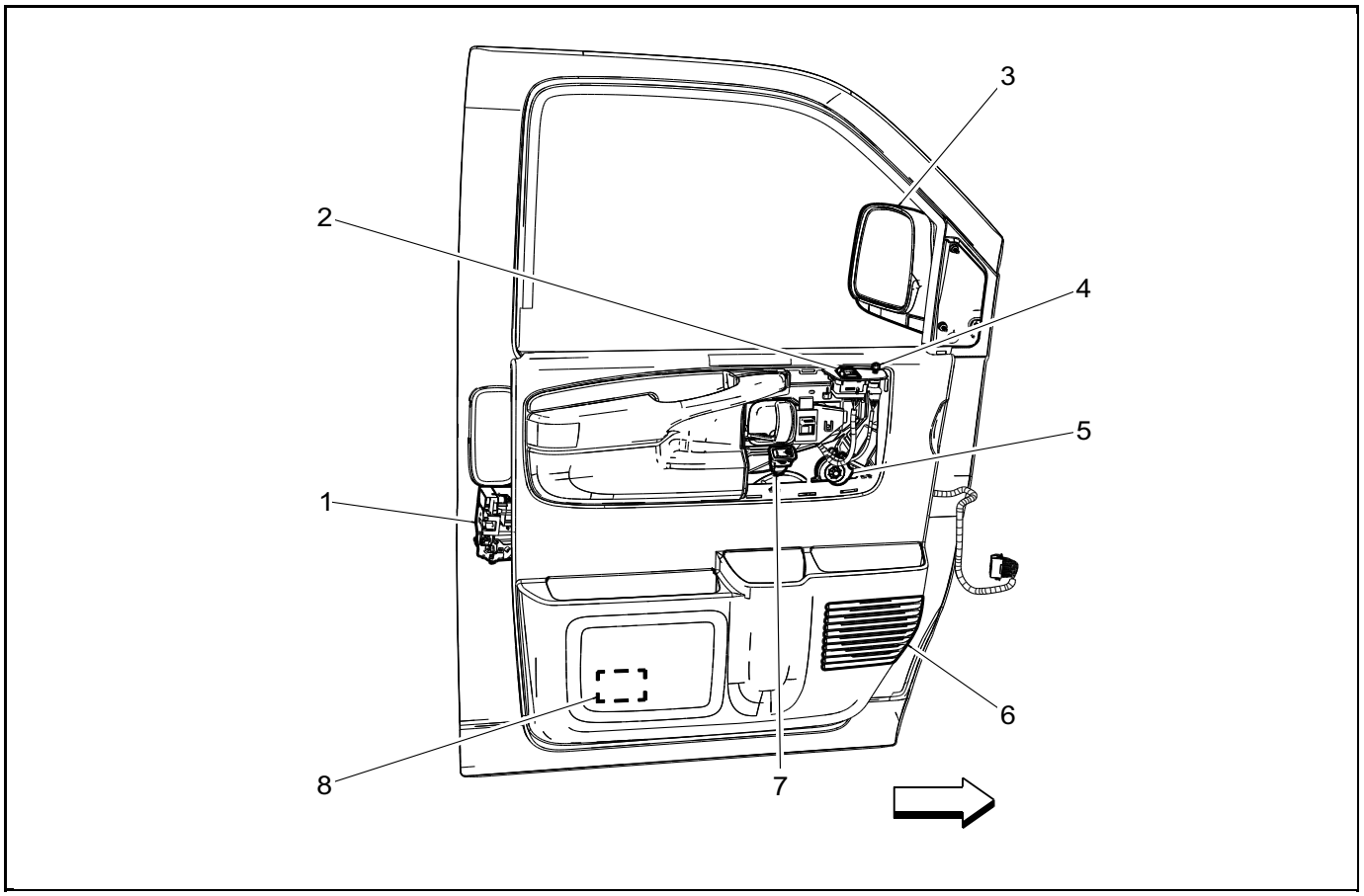
(4) S13P Door Lock Switch - Passenger (AU3)

(5) B63RF Side Impact Sensor - Right Front (ASF)

(6) P19AH Speaker - Right Front Door

(7) M74P Window Motor - Passenger (A31)

Driver Door Components



2831292

Items

(1) A23D Door Latch Assembly - Driver

(2) S79D Window Switch - Driver (A31)

(3) A9A Outside Rearview Mirror - Driver (DEB or DE5)

(4) S52 Outside Rearview Mirror Switch (DEB or DE5)

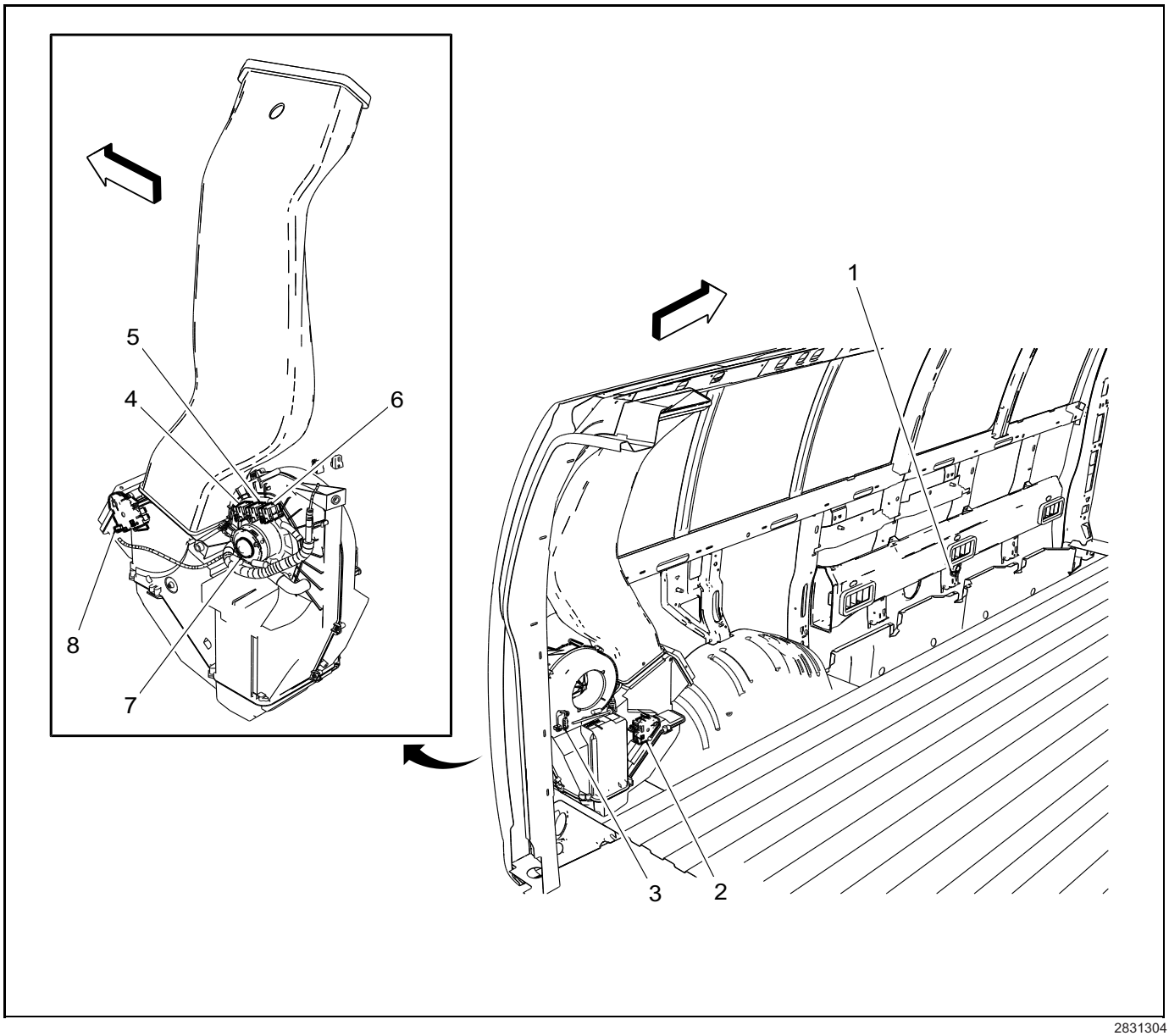
(5) M74D Window Motor - Driver (A31)

(6) P19AG Speaker - Left Front Door

(7) S13D Door Lock Switch - Driver (AU3)

(8) B63LF Side Impact Sensor - Left Front (ASF)

Luggage Compartment/Rear of Vehicle Component Views
Left Rear Cargo Area Components (Passenger or Cargo)



2831304

Items

(1) B63LR Side Impact Sensor - Left Rear (ASF)

(2) M6B Air Temperature Door Actuator - Auxiliary (C69)

(3) R3B Blower Motor Resistor - Auxiliary (C69)

(4) KR32B Blower Motor High Speed Relay - Auxiliary

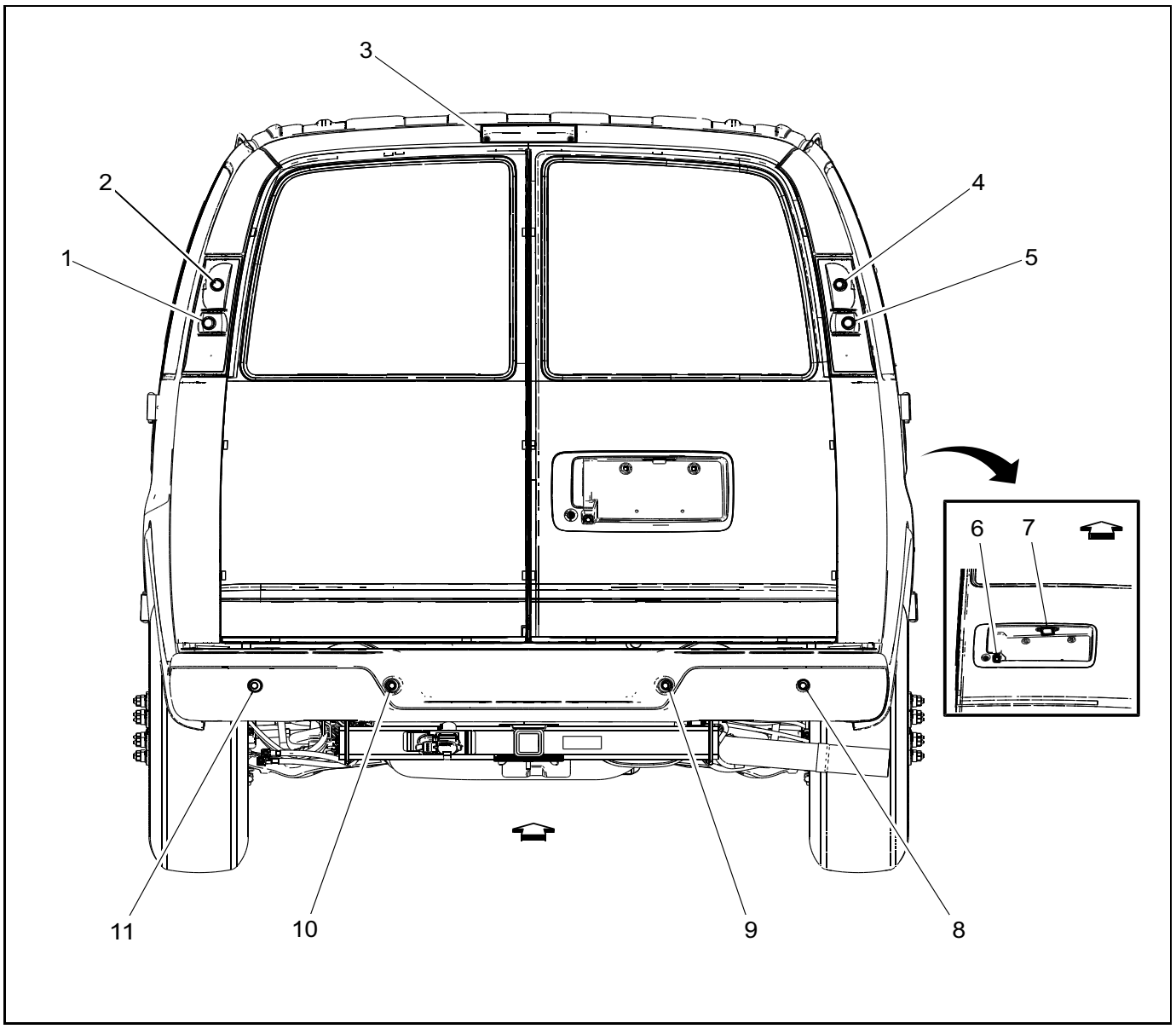
(5) KR32D Blower Motor Medium Speed Relay - Auxiliary

(6) KR32C Blower Motor Low Speed Relay - Auxiliary

(7) M8B Blower Motor - Auxiliary (C36 or C69)

(8) M37B Mode Door Actuator - Auxiliary (C69)

Rear Exterior Lights (Passenger or Cargo)



4650730

Items

(1) E5A Backup Lamp - Left

(2) E5S Tail/Stop and Turn Signal Lamp - Left (Passenger or Cargo)

(3) E6 Center High Mounted Stop Lamp (Passenger or Cargo)

(4) E5T Tail/Stop and Turn Signal Lamp - Right (Passenger or Cargo)

(5) E5B Backup Lamp - Right

(6) B87 Rearview Camera (UVC)

(7) E7 License Plate Lamp (Passenger or Cargo)

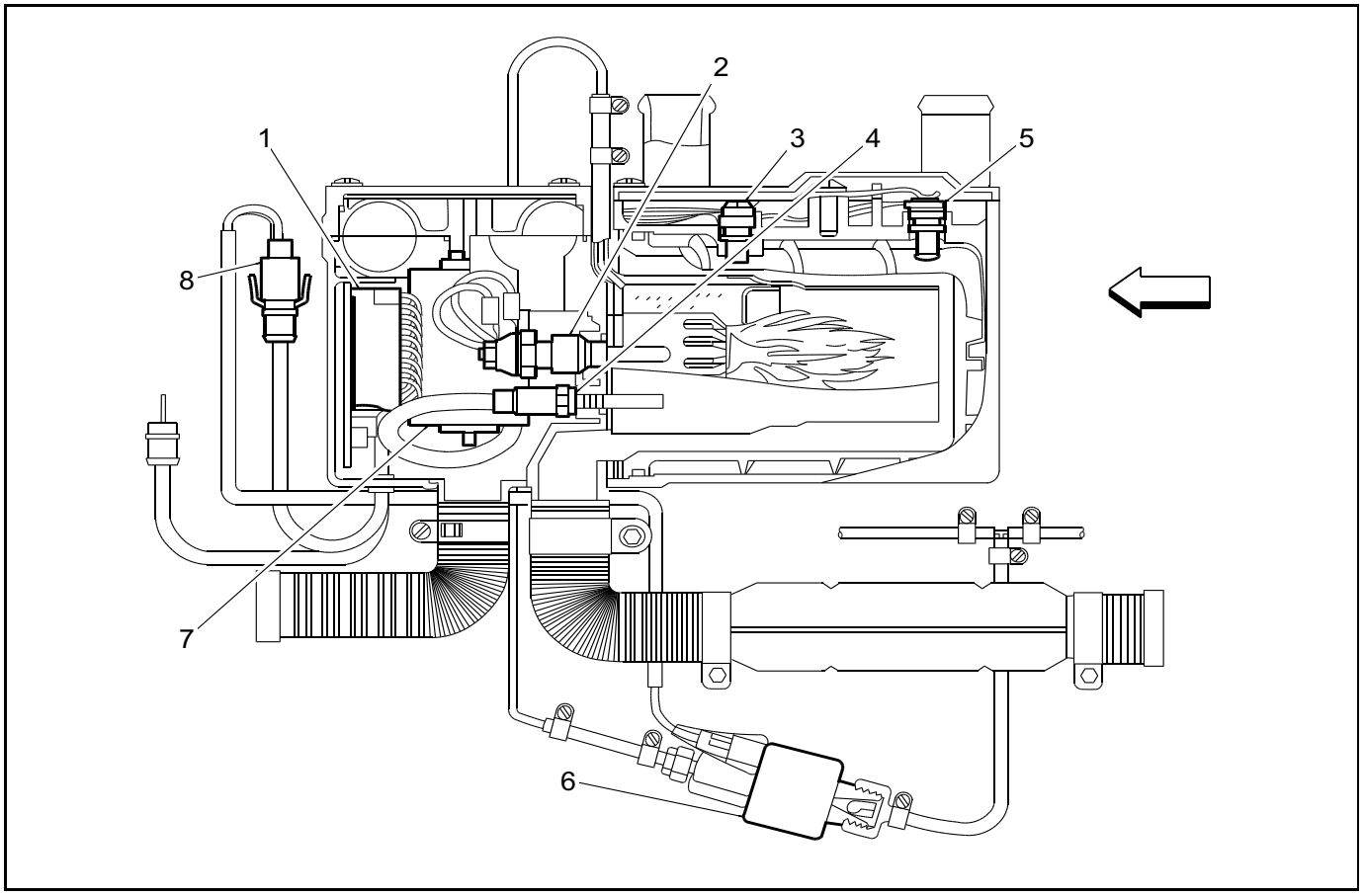
(8) B306H Parking Assist Sensor - Rear Right Outer

(9) B306G Parking Assist Sensor - Rear Right Middle

(10) B306F Parking Assist Sensor - Rear Left Middle

(11) B306E Parking Assist Sensor - Rear Left Outer

Wheels/Vehicle Underbody Component Views
Coolant Heater Components (K08)



2831328

Items

(1) K10 Coolant Heater Control Module (K08)

(2) E20 Coolant Heater Glow Plug (K08)

(3) B134A Coolant Heater Air Temperature Sensor (K08)

(4) B134B Coolant Heater Combustion Sensor (K08)

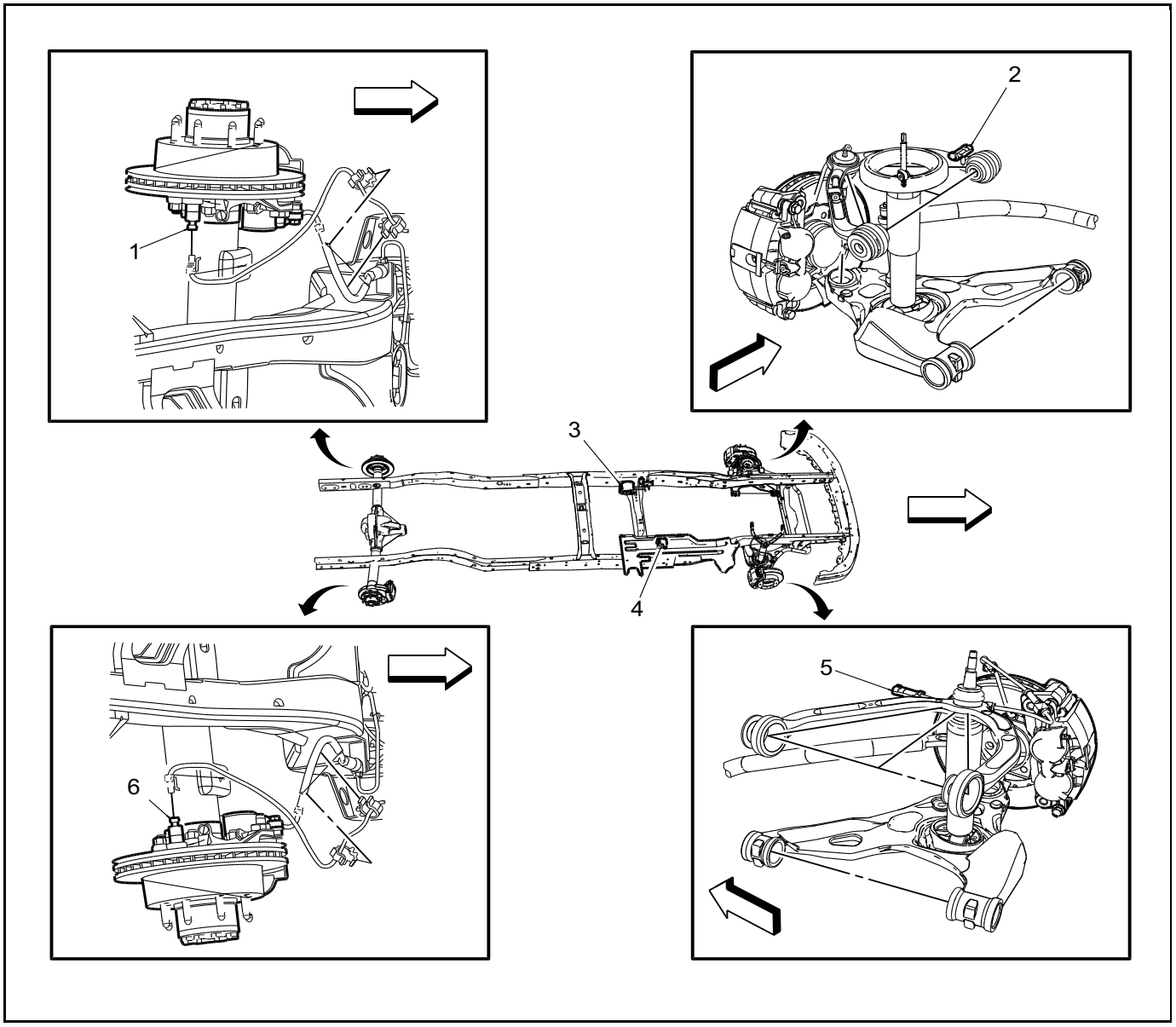
(5) B134C Coolant Heater Overheat Sensor (K08)

(6) G7 Coolant Heater Fuel Pump (K08)

(7) M11 Coolant Heater Blower Motor (K08)

(8) E19 Coolant Heater (K08)

Frame and Underbody Components (1 of 2)

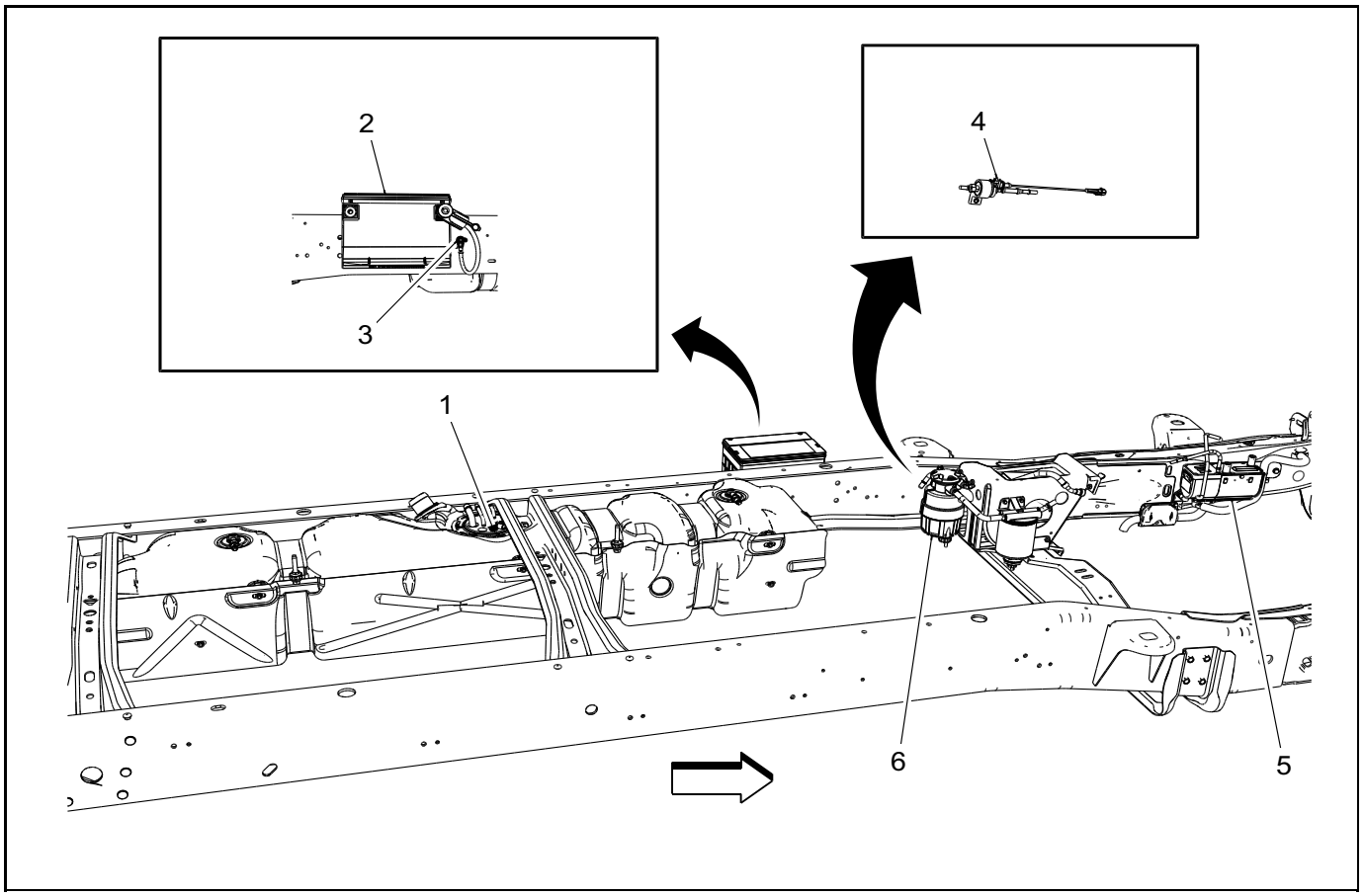


4866082

Items

(1) B5LR Wheel Speed Sensor - Left Rear
(2) B5LF Wheel Speed Sensor - Left Front
(3) K17 Electronic Brake Control Module
(4) B119 Multi-axis Acceleration Sensor
(5) B5RF Wheel Speed Sensor - Right Front
(6) B5RR Wheel Speed Sensor - Right Rear

Frame and Underbody Components (2 of 2)



2831330

Items

(1) B46 Fuel Level Sensor (LV1, L96, or LC8)

(2) C1B Battery - Auxiliary (LWN or TP2)

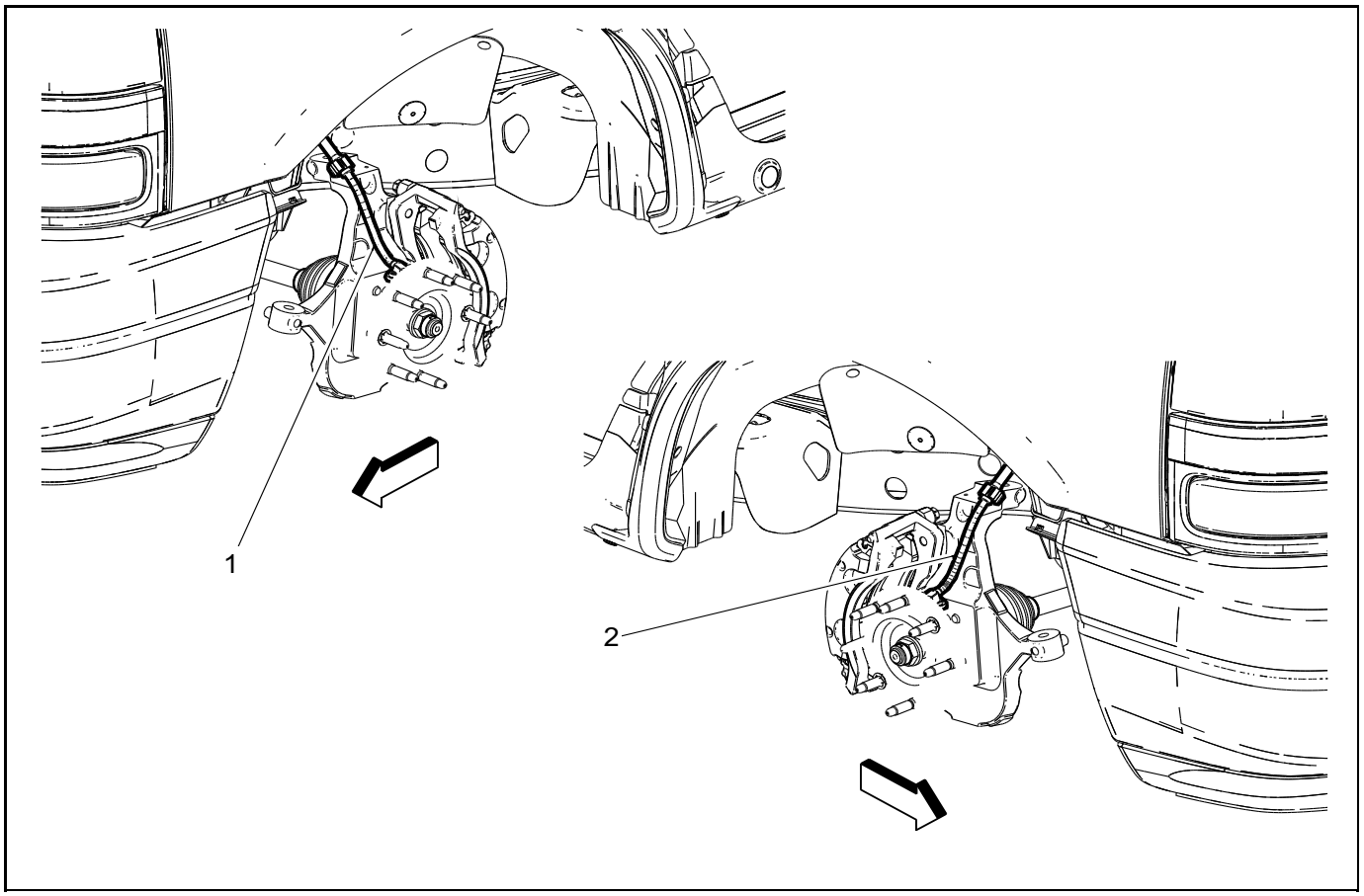
(3) G305 Auxiliary Battery Negative Cable (TP2 or LWN)

(4) G7 Coolant Heater Fuel Pump (K08)

(5) E19 Coolant Heater (K08)

(6) G12 Fuel Pump (LV1, L96, or LC8)

Front Wheel Speed Sensor Components



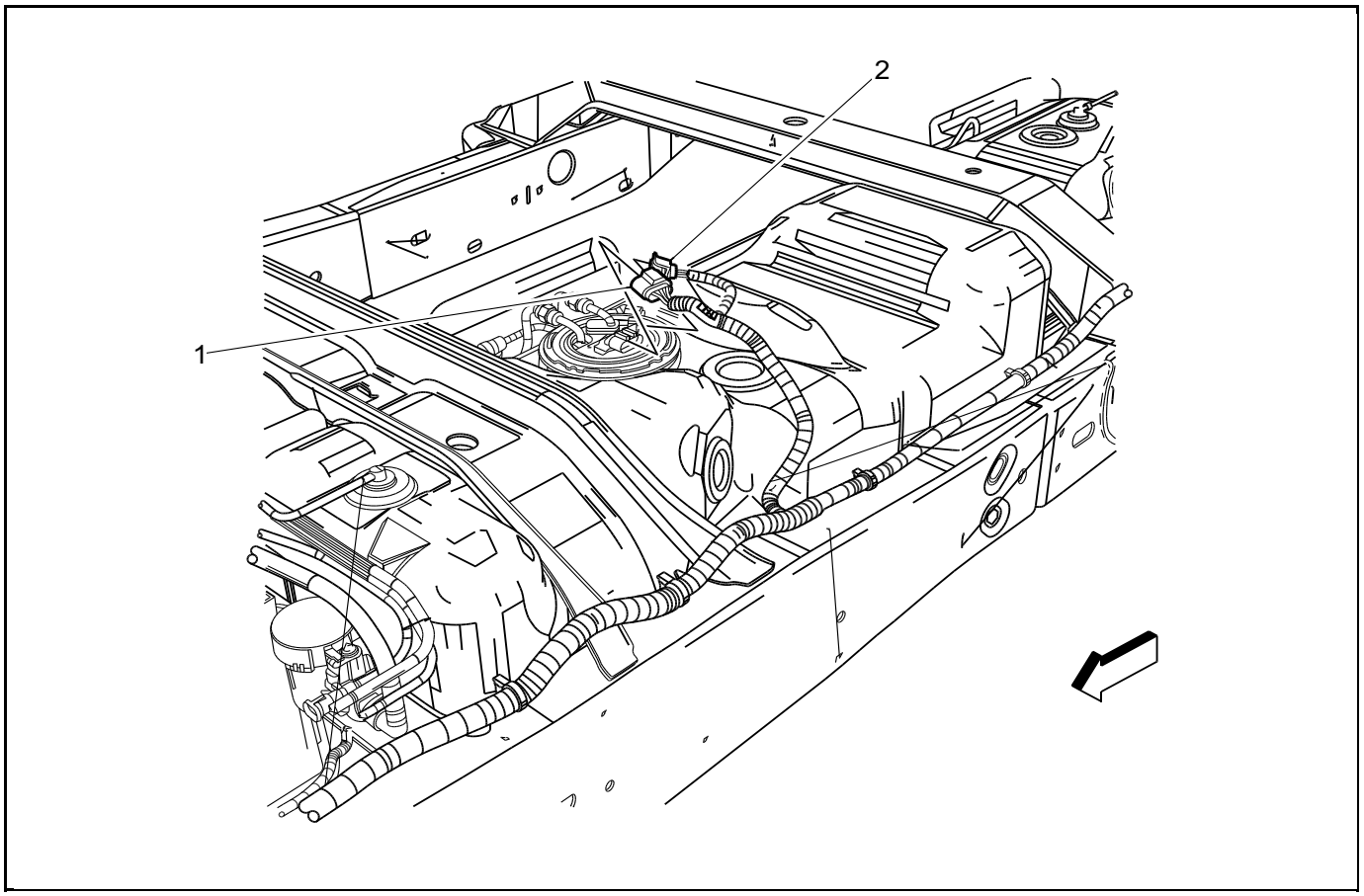
2831313

Items

(1) B5LF Wheel Speed Sensor - Left Front

(2) B5RF Wheel Speed Sensor - Right Front

Fuel Tank Components (Without NE7)



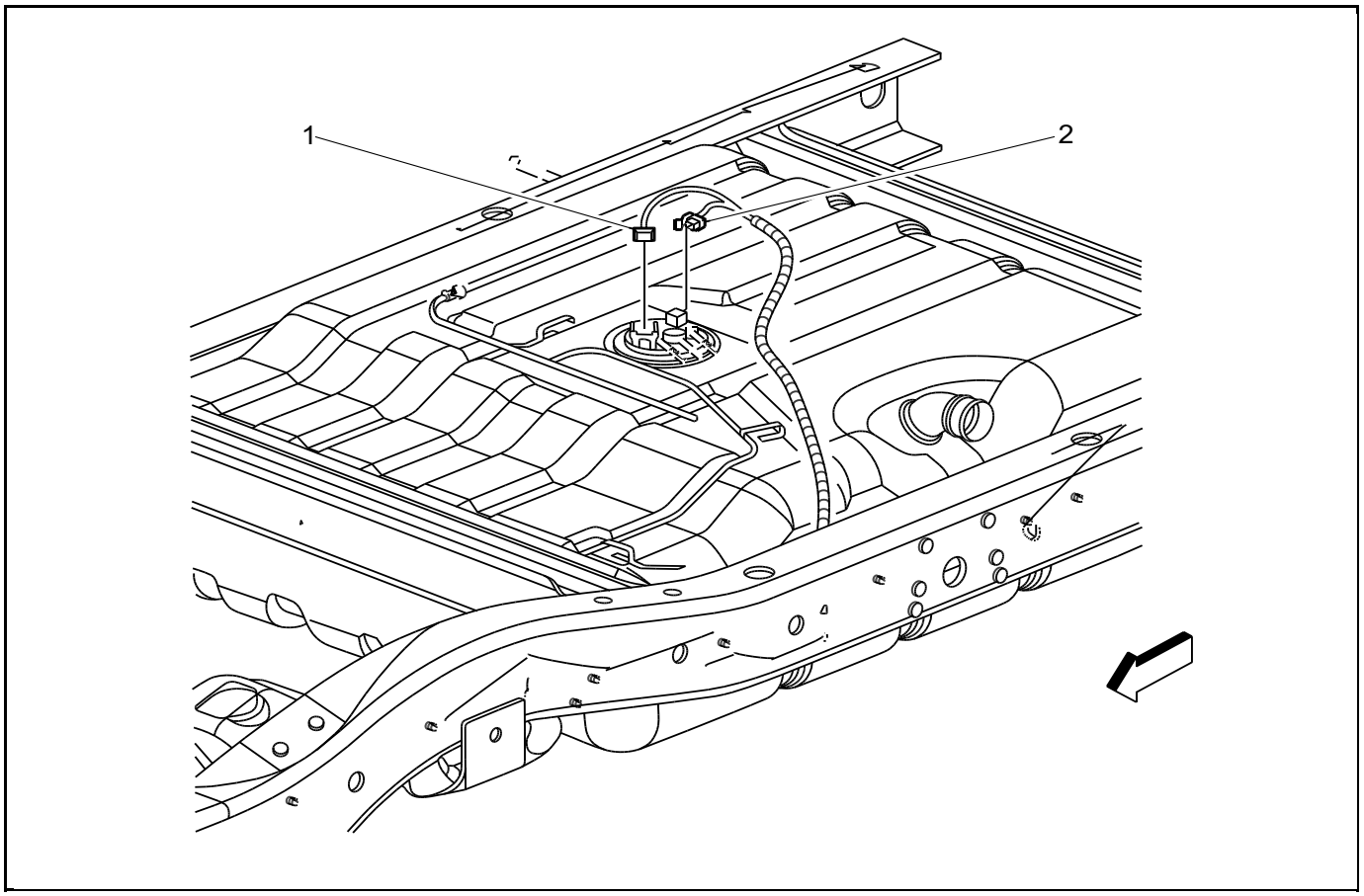
2831324

Items

(1) A7 Fuel Pump and Level Sensor Assembly

(2) B150 Fuel Tank Pressure Sensor (L96)

Fuel Tank Components (NE7)



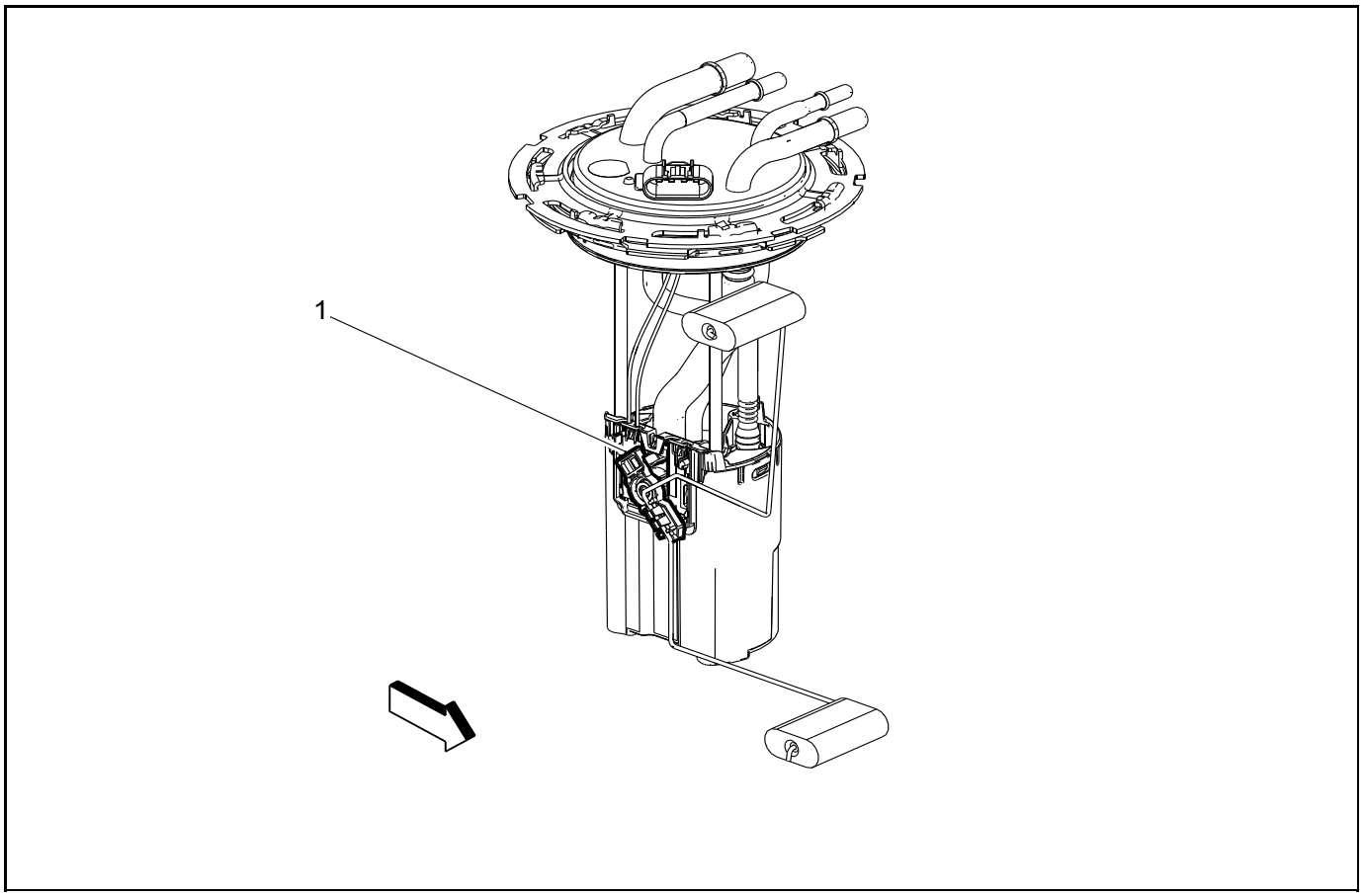
2831321

Items

(1) B150 Fuel Tank Pressure Sensor (L96)

(2) A7 Fuel Pump and Level Sensor Assembly

Inside of Fuel Tank Components

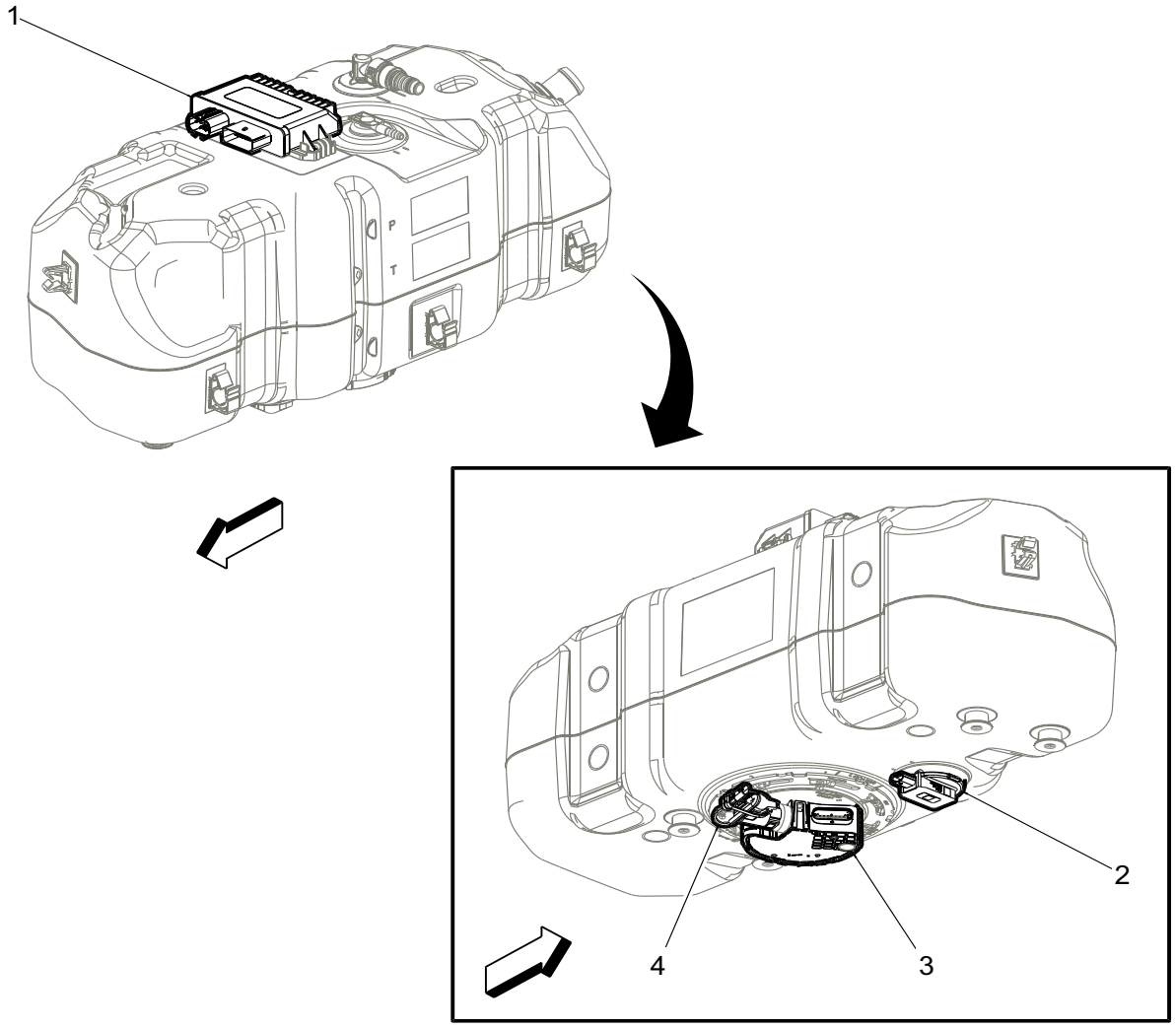


2831317

Items

(1) B46 Fuel Level Sensor (LV1, L96, or LC8)

Reductant Tank Components

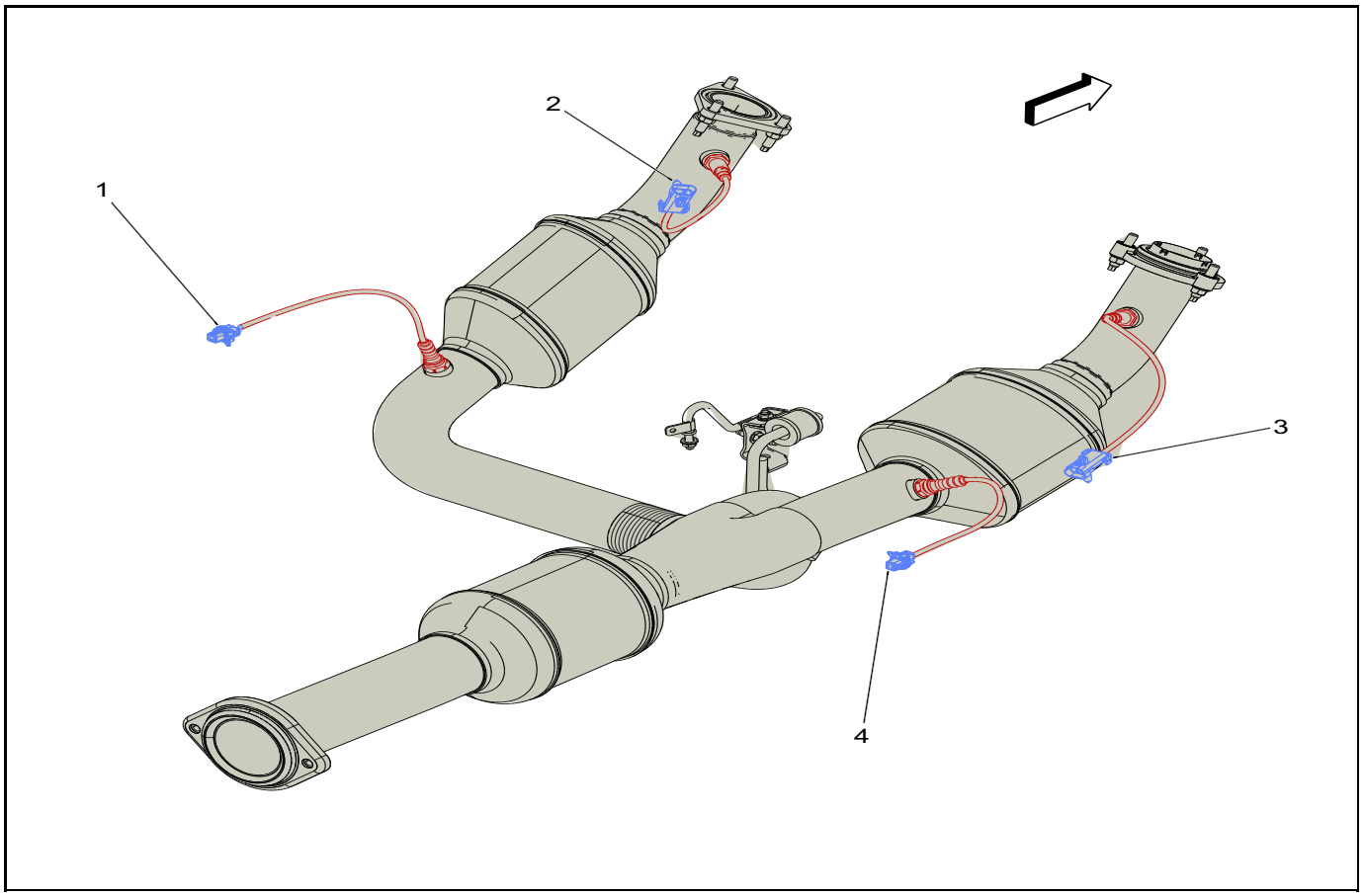


4702574

Items

(1) K115 Reductant Control Module (LWN)
(2) B295 Reductant Quality Sensor
(3) A39 Reductant Fluid Reservoir Assembly
(4) E52 Reductant Line Heater (LWN)

Exhaust Components (L96 or LC8)



3634131

Items

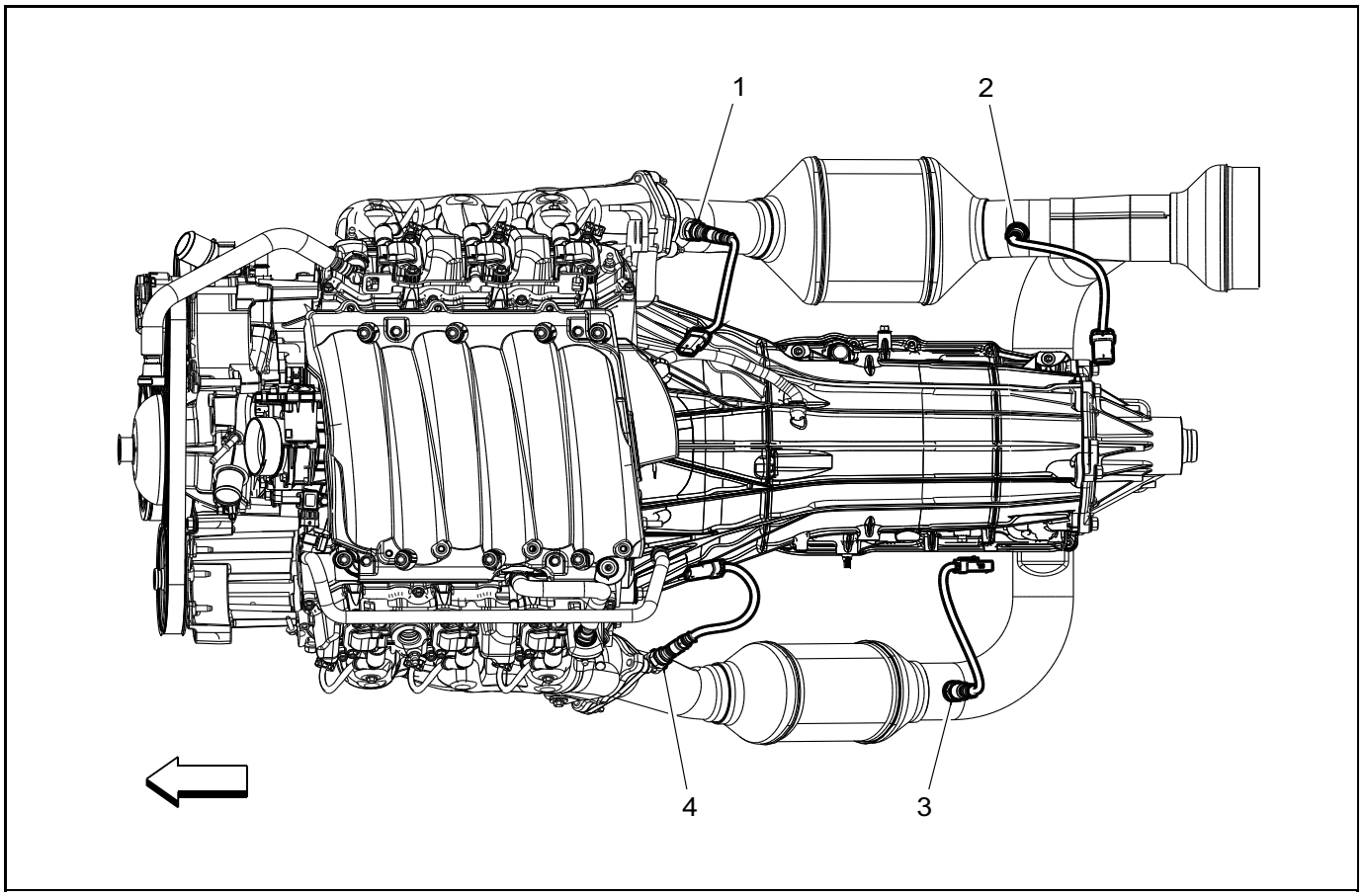
(1) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV1, L96, or LC8)

(2) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV1, L96, or LC8)

(3) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV1, L96, or LC8)

(4) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV1, L96, or LC8)

Exhaust Components (LV1)



4861783

Items

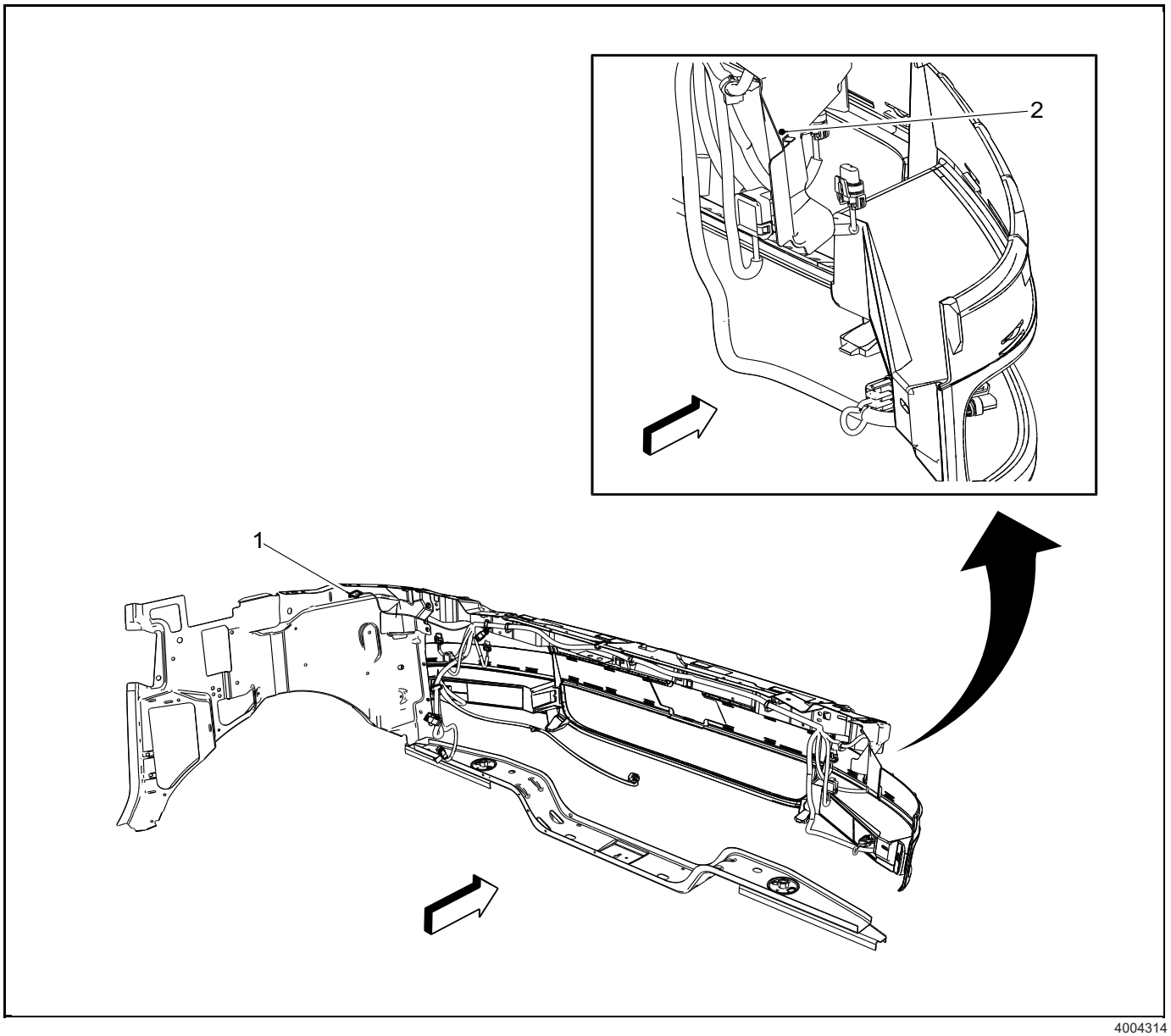
(1) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV1, L96, or LC8)

(2) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV1, L96, or LC8)

(3) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV1, L96, or LC8)

(4) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV1, L96, or LC8)

Ground Views
G100 and G101



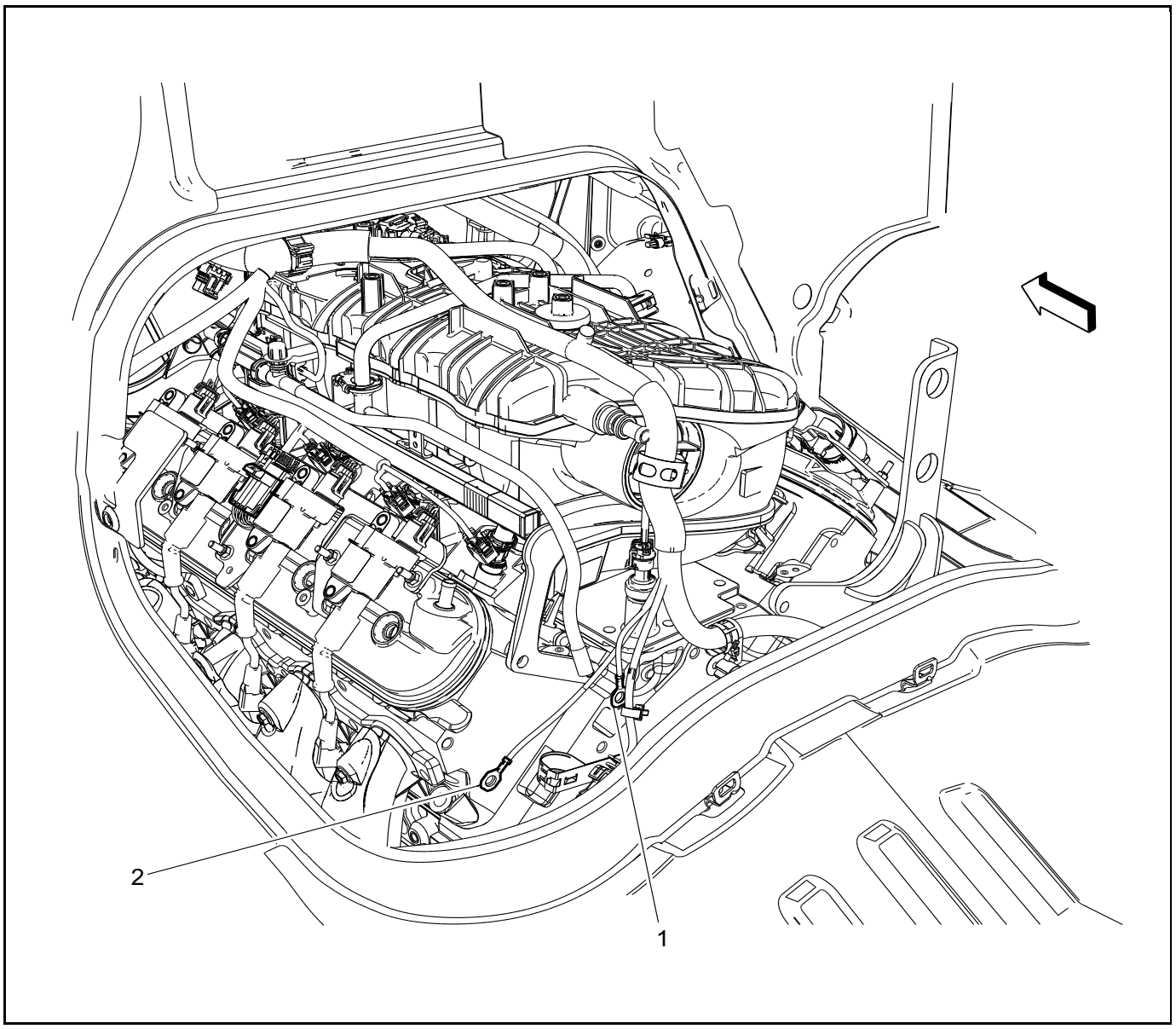
4004314

Items

(1) G100 Forward Lamp Harness

(2) G101 Forward Lamp Harness

G102 and G103 (L96 or LC8)



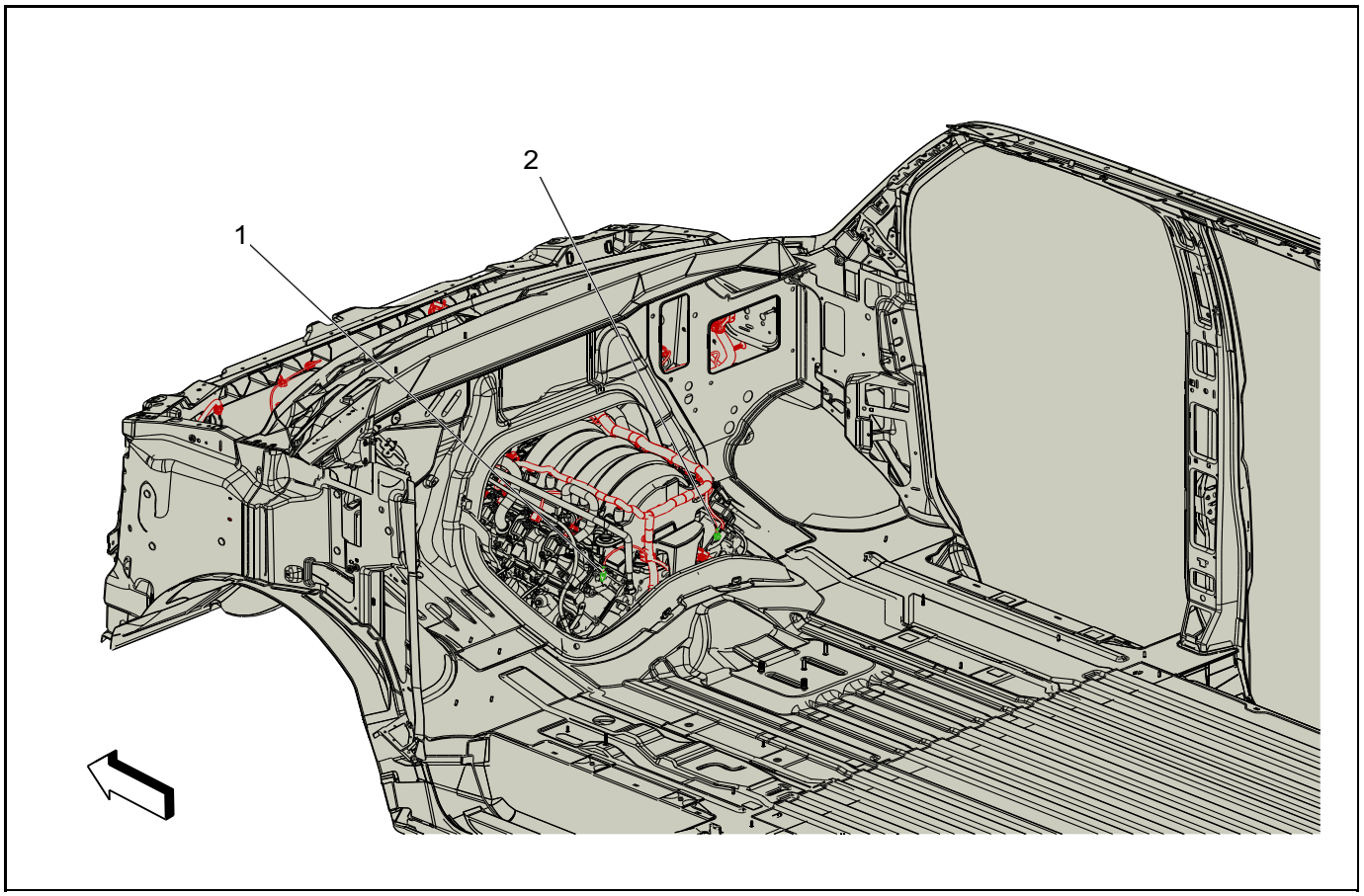
4004324

Items

(1) G103 Engine Harness

(2) G102 Engine Harness

G107 and G108 (LV1)

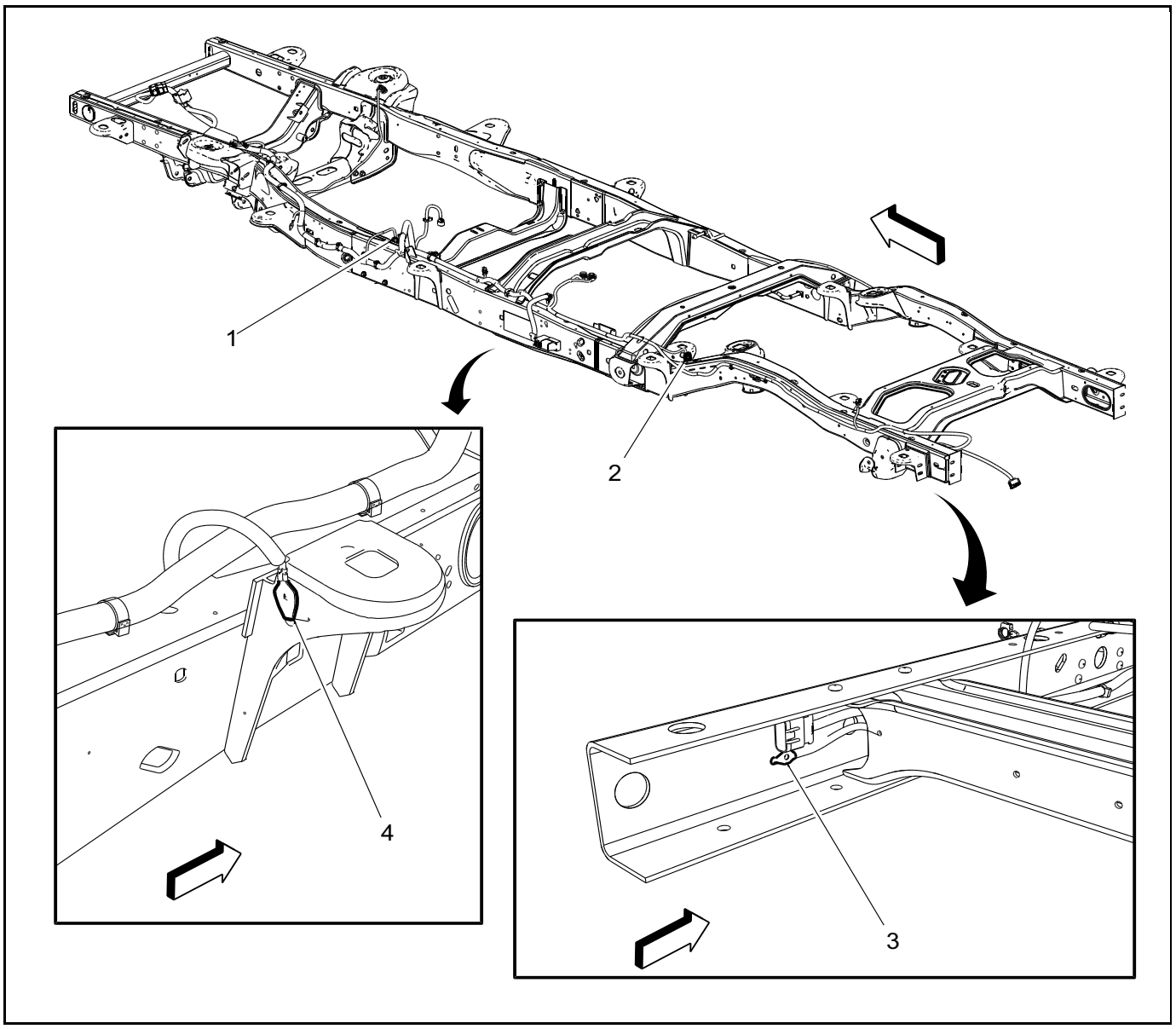


4861786

Items

(1) G107 Engine Harness (LV1)
(2) G108 Engine Harness (LV1)
(3) G109 Engine Harness (LV1)

G300, G400, G404 and G405

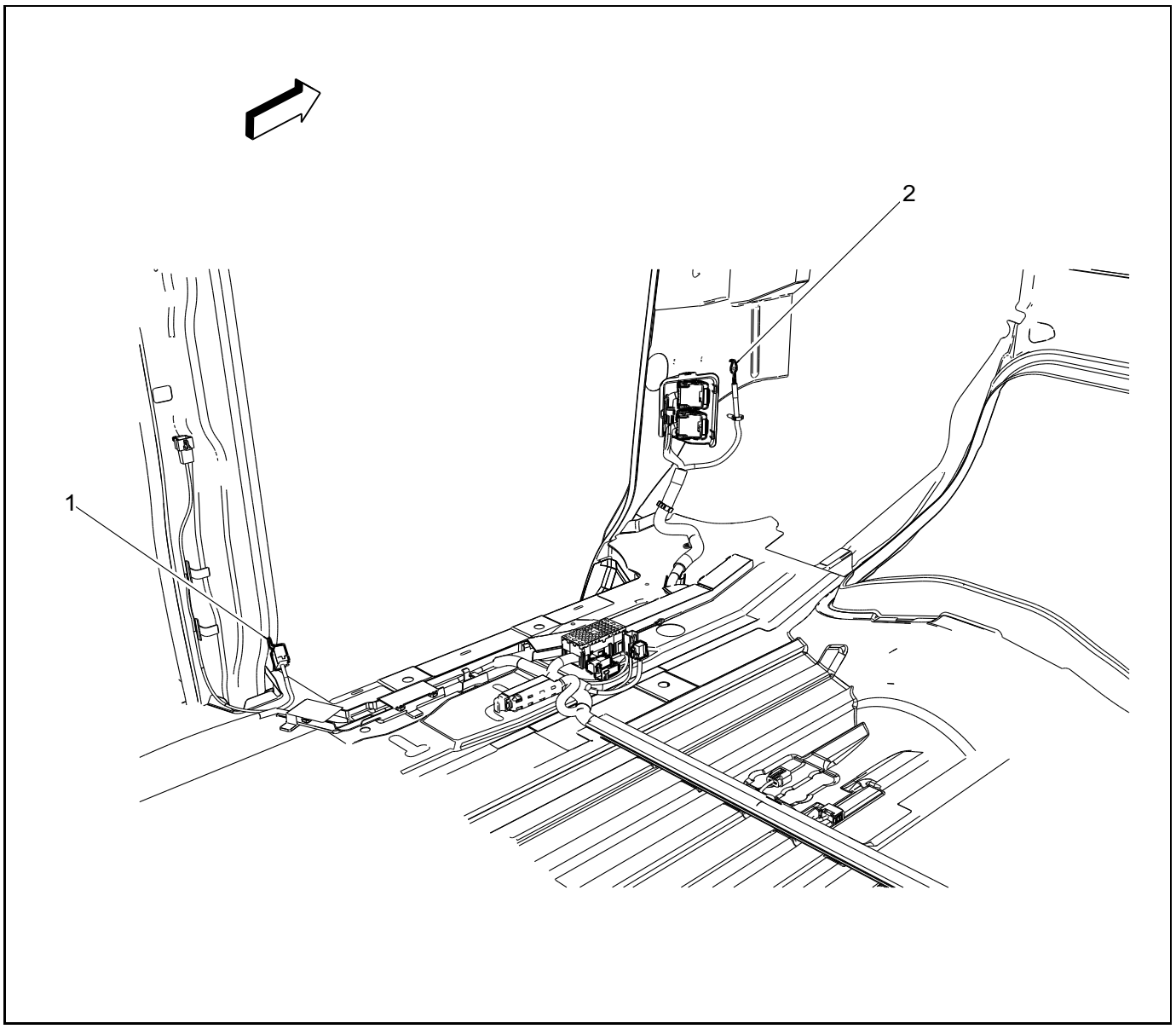


4584379

Items

(1) G405 Chassis Harness (LWN)
(2) G400 Chassis Harness
(3) G300 Chassis Harness
(4) G404 Chassis Harness

G302 and G347



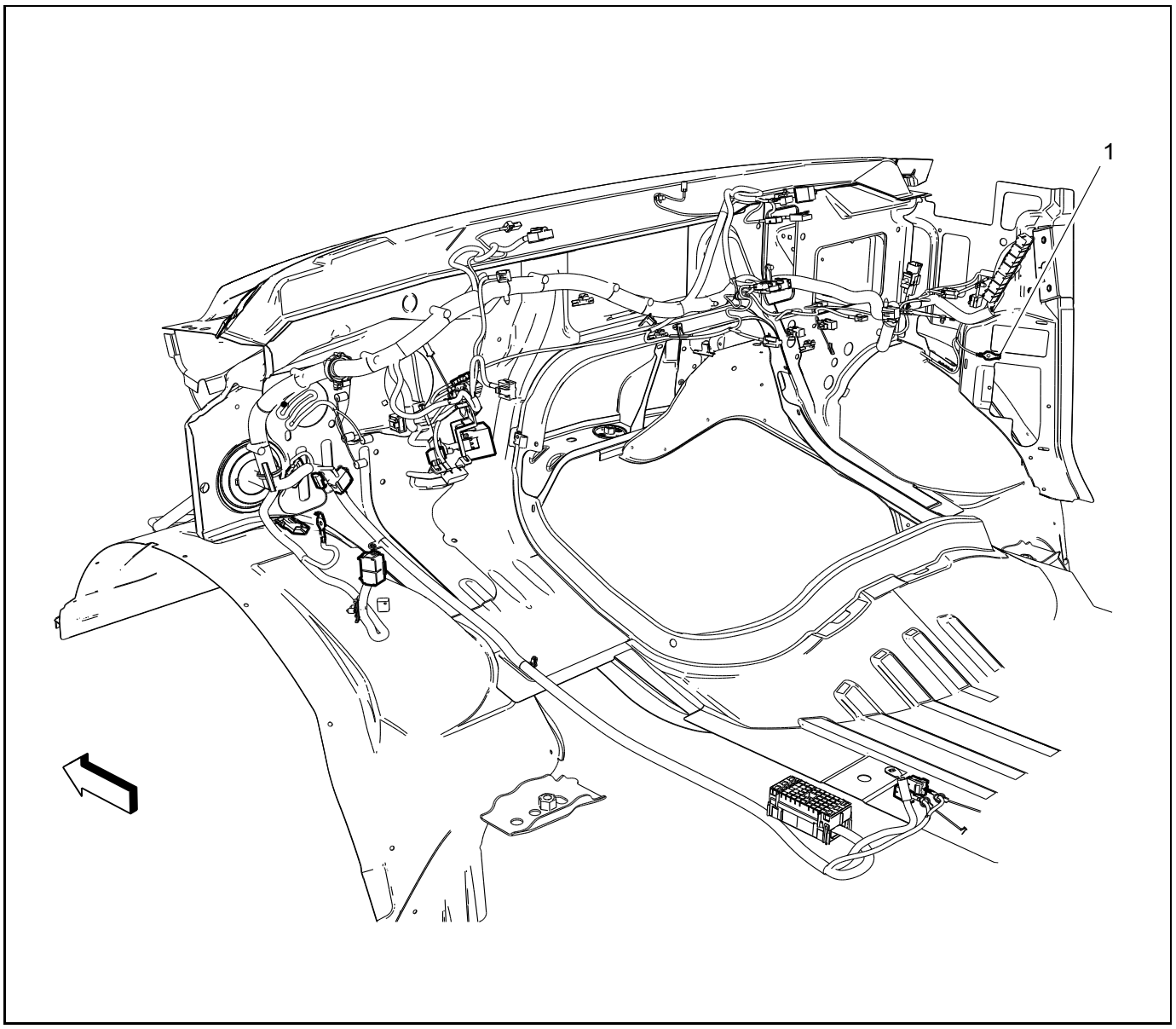
4004327

Items

(1) G347 Body Harness

(2) G302 Instrument Panel

G304

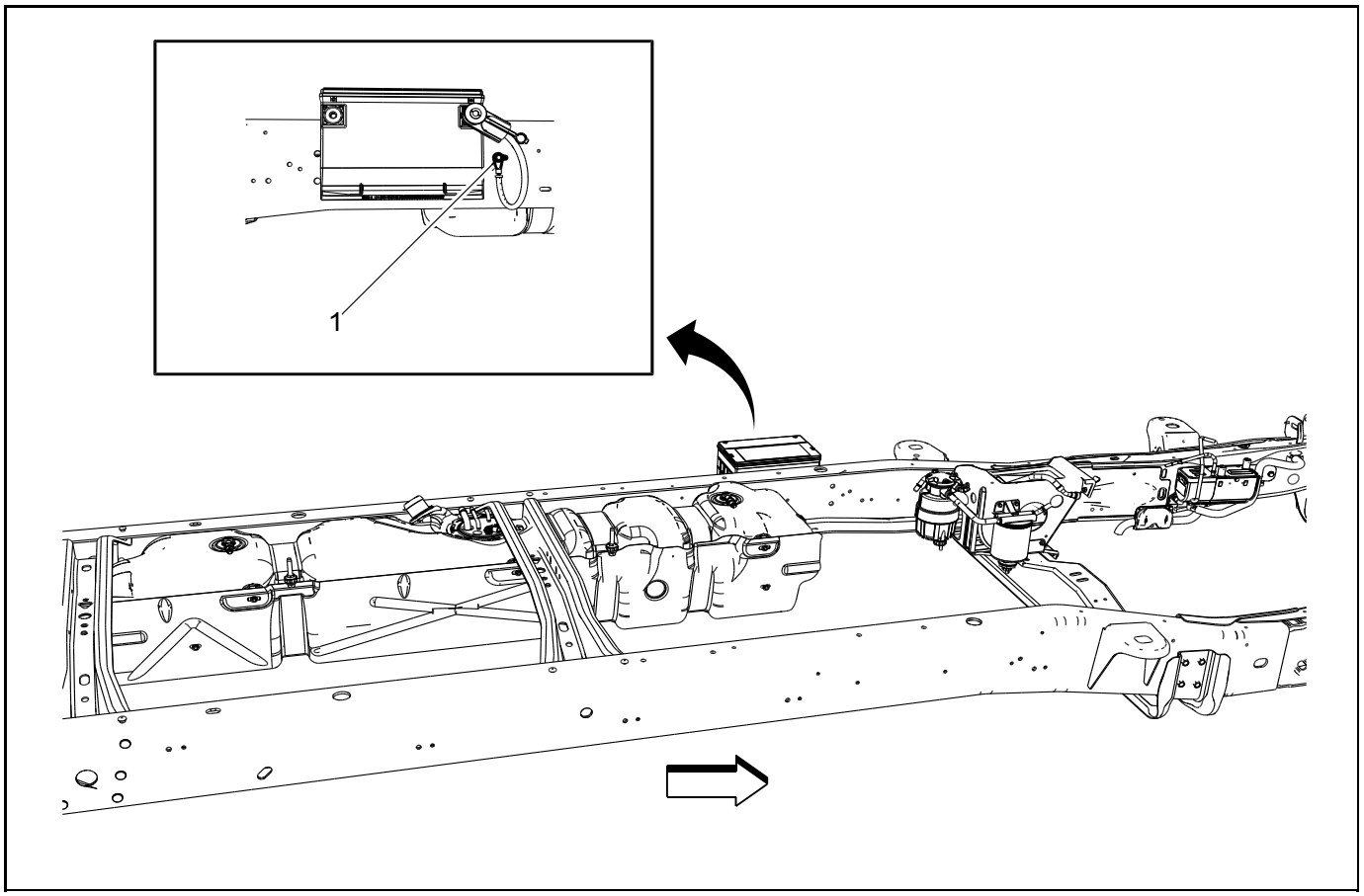


4010006

Items

(1) G304 Instrument Panel

G305

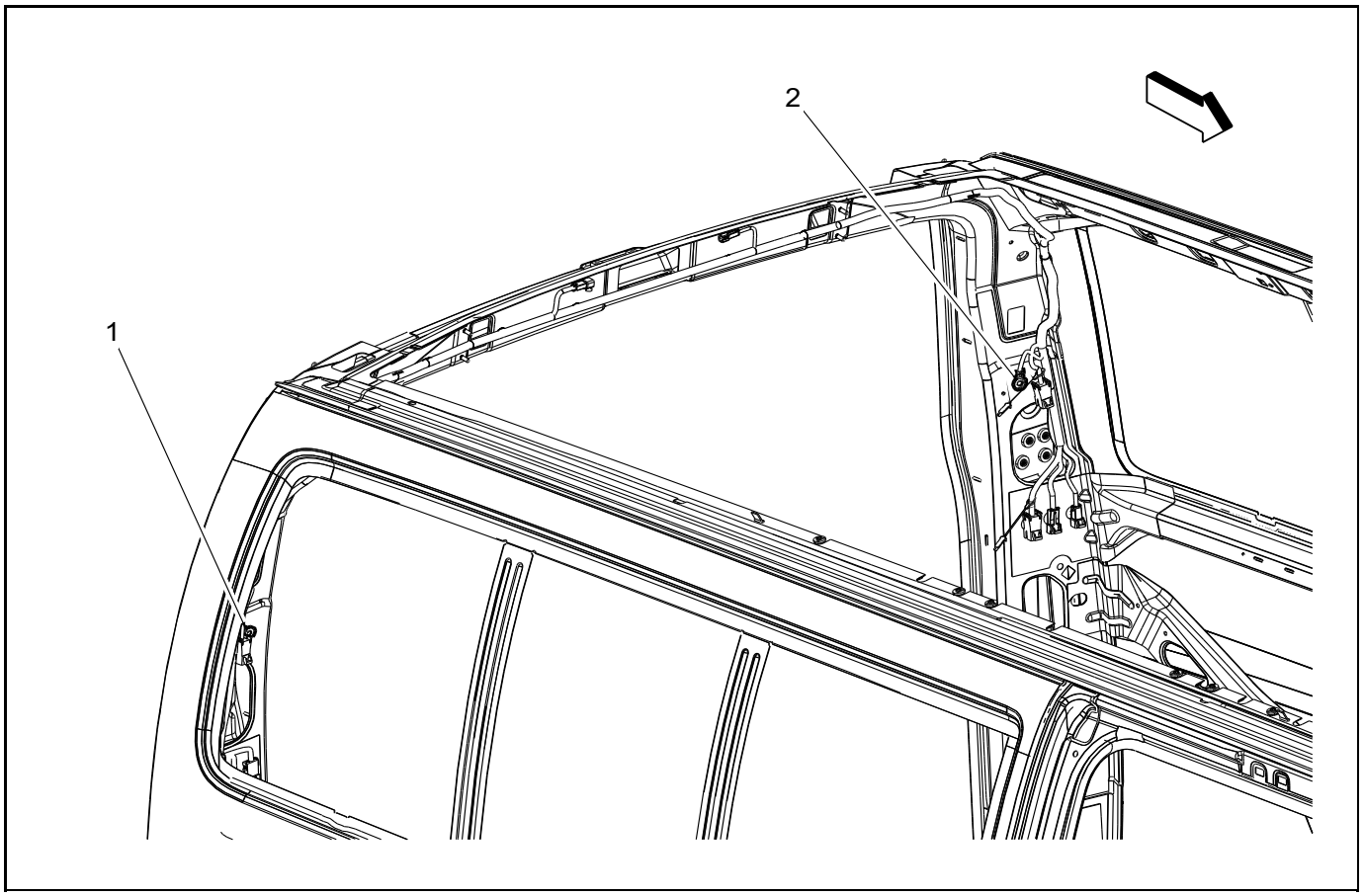


4005659

Items

(1) G305 Auxiliary Battery Negative Cable (TP2 or LWN)

G401 and G402 (Passenger or Cargo)



4861788

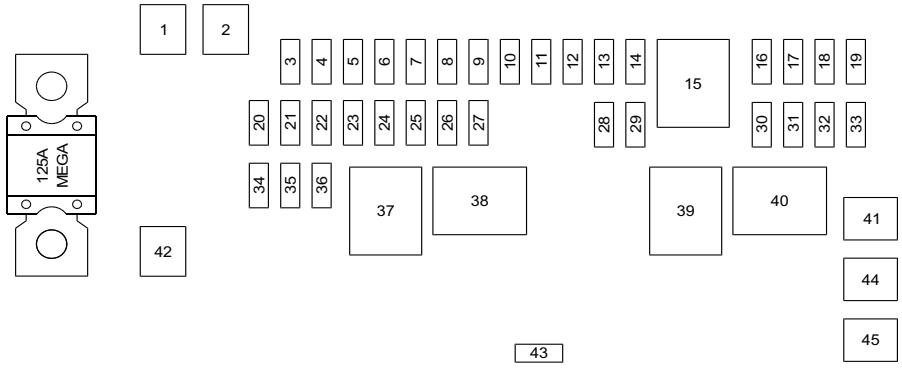
Items

(1) G401 Body Harness (Passenger or Cargo)

(2) G402 Body Harness (Passenger or Cargo)

Electrical Center Identification Views

X50A Fuse Block - Underhood Label



MINI FUSES

3 15A RT STOP/TRN TRLR
4 10A SPARE
5 10A SPARE
6 10A FSCM IGN
7 10A BCM-5
8 10A BCM-7
9 10A BCM-4
10 10A IPC
11 30A TRLR WRG
12 10A SPARE
13 10A DISPLY MIR/REAR B/U CAMERA
14 15A WASH
16 20A HORN
17 15A TRANS
18 15A A/C CMPRSR
19 10A ECM BATT
20 10A CUTAWAY LH STP/TRN LAMP
21 15A LT STOP/TRN TRLR
22 10A CUTAWAY RH STP/TRN LAMP
23 15A SPARE
24 30A GAS FUEL PUMP
24 20A DIESEL FUEL PUMP
25 20A AUX PWR OUTLET
26 10A BCM-3
27 10A SEO
28 10A AIRBAG
29 10A STR/WHL/SNSR
30 15A ECM IGN/GLOW PLUG MDL IGN
31 15A TCM IGN
32 10A TCM BATT
33 10A OBSDET
34 15A SPARE
35 15A FOH MDL
36 25A FSCM BATT
43 10A EV FAN CLUTCH
51 10A LT HI BEAM
52 10A RT HI BEAM
53 10A LT LO BEAM
54 10A RT LO BEAM
55 25A WPR
56 10A CNSTR VENT SOL
58 10A BCM-2
59 10A BCM-1
61 15A SPARE
62 10A O2 SNSR 2 (POST)/EV FAN
63 10A SPARE
64 15A MAF/CNSTR VENT/HUMIDITY SENSOR
65 20A ODD IGN/INJ
66 10A DRL2 (LOLVL-V22)
67 15A DRL1 (UPLVL+V22)
68 15A AUX STOP LAMP (S)
69 10A PWR EXT TRAILER
70 10A UPFTR STOP LAMP (S)
71 15A FUEL HTR/FLEX FUEL SNSR
72 10A BCM-6
73 20A LTR/DLC
75 15A V6 FUEL INJ
76 10A SOOT SNSR
77 10A O2 SNSR 1 (PRE)/CLS
78 10A ECM PWR/TRN
79 20A EVEN IGN/INJ

J-CASE FUSE

1 50A ABS MTR
2 40A ABS MDL
41 20A SPARE
42 30A TRLR WRG
44 40A STRTR SOL
45 30A ECM PWR/TRN
46 25A AC/DC INV
47 40A FAN LO
74 40A FRT BLWR

RELAYS

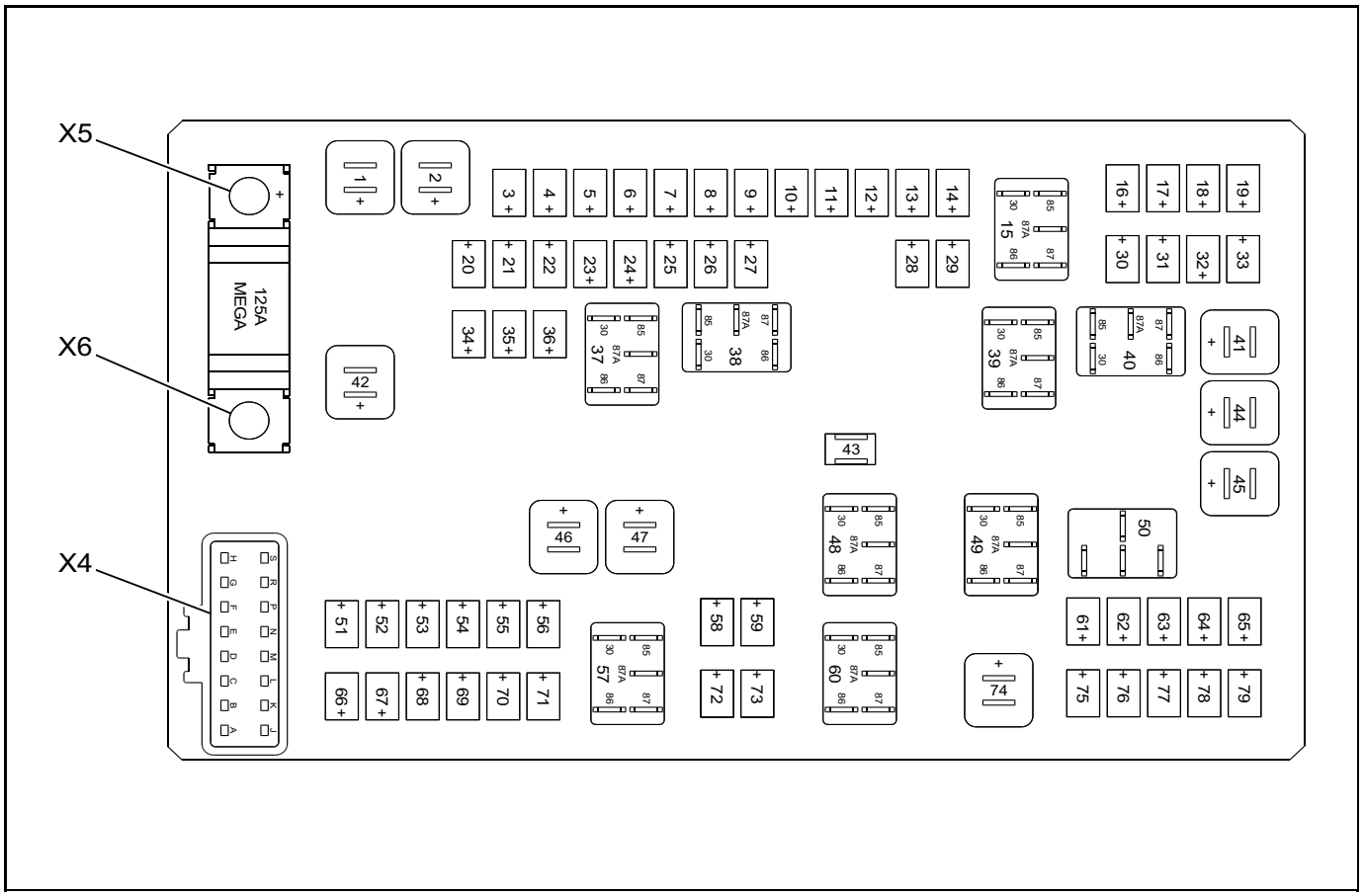
15	MICRO G8V	RUN/CRNK
37	MICRO G8V	SPARE
38	MICRO G8V	FUEL PUMP
39	MICRO G8V	CRNK
40	MICRO G8V	A/C CMPRSR
48	SOLID STATE	EV FAN CLUTCH
49	MICRO G8V	PWR/TRN
50	SOLID STATE	SPARE
57	MICRO G8V	FAN LO
60	MICRO G8V	FAN CNTRL

CIRCUIT BOARD RELAY (NOT SHOWN)

K3 WPR HI
K5 HORN/WASH
K6 LO BEAM
K7 HI BEAM
K9 TRLR LT STOP/TRN
K11 STOP LAMP(S)
K13 WPR
K18 TRLR RT STOP/TRN
K19 DRL

4845391

X50A Fuse Block - Underhood Top View



4846863

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Mini Fuses				
MEGA	—	MEGA	125A	• X52A Fuse Block - Passenger Compartment
3	RT STOP/TRN TRLR	F3UA	15A	• X88 Trailer Connector
4	SPARE	F4UA	10A	• Not Used
5	SPARE	F5UA	10A	• Not Used
6	FSCM IGN	F6UA	10A	• E11A Fuel Heater/Water in Fuel Sensor (LWN) • K38 Chassis Control Module (LV1/L96/LC8)
7	BCM-5	F7UA	10A	• K9 Body Control Module
8	BCM-7	F8UA	10A	• K9 Body Control Module
9	BCM-4	F9UA	10A	• K9 Body Control Module
10	IPC	F10UA	10A	• P16 Instrument Cluster
11	TRLR WRG	F11UA	30A	• W8 Blunt Cut - Trailer Provision (UY7)
12	SPARE	F12UA	10A	• Not Used
13	DISPLY MIR/ REAR B/U CAMERA	F13UA	10A	• A10 Inside Rearview Mirror (UVC) • B87 Rearview Camera (UVC)
14	WASH	F14UA	15A	• G24 Windshield Washer Pump

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
16	HORN	F16UA	20A	• P13 Horn Assembly
17	TRANS	F17UA	15A	• Not Used
18	A/C CMPRSR	F18UA	15A	• Q2 A/C Compressor Clutch (C60)
19	ECM BATT	F19UA	10A	• K20 Engine Control Module
20	CUTAWAY LH STP/TRN LAMP	F20UA	10A	• X405
21	LT STOP/TRN TRLR	F21UA	15A	• X88 Trailer Connector
22	CUTAWAY RH STP/TRN LAMP	F22UA	10A	• X405
23	NOX SENSOR	F23UA	15A	• B136 Exhaust Particulate Matter Sensor (LWN) • B195A Nitrogen Oxides Sensor 1 (LWN) • B195B Nitrogen Oxides Sensor 2 (LWN)
24	DIESEL FUEL PUMP	F24UA	20A	• A7 Fuel Pump and Level Sensor Assembly (LWN)
25	AUX PWR OUTLET	F25UA	20A	• X80B Accessory Power Receptacle - Center Console 2
26	BCM-3	F26UA	10A	• K9 Body Control Module
27	SEO	F27UA	10A	• P16 Instrument Cluster
28	AIRBAG	F28UA	10A	• K36 Inflatable Restraint Sensing and Diagnostic Module • S40 Passenger Air Bag Disable Switch (C99)
29	STR/WHL/SNSR	F29UA	10A	• Not Used
30	ECM IGN/GLOW PLUG MDL IGN	F30UA	15A	• K20 Engine Control Module
31	TCM IGN	F31UA	15A	• K71 Transmission Control Module (M5U) • T12 Automatic Transmission Assembly (MYD)
32	TCM BATT	F32UA	10A	• T12 Automatic Transmission Assembly (MYD)
33	OBSDET	F33UA	10A	• B218L Side Object Sensor Module - Left (UFT) • B218R Side Object Sensor Module - Right (UFT) • K182 Parking Assist Control Module (UD7)
34	NOX SENSOR	F34UA	15A	• K115 Reductant Control Module (LWN) • KR121B Reductant Control Module Relay 2 (LWN)
35	FOH MDL	F35UA	15A	• E19 Coolant Heater (K08)
36	FSCM BATT	F36UA	20A	• K38 Chassis Control Module (LV1/L96/LC8)
43	EV FAN CLUTCH	F43UA	10A	• KR20F Cooling Fan Relay (LWN) • Q85 Cooling Fan Clutch (LWN)
51	LT HI BEAM	F51UA	10A	• E4E Headlamp - Left High Beam (V22) • E13L Headlamp - Left (Without V22)
52	RT HI BEAM	F52UA	10A	• E4F Headlamp - Right High Beam (V22) • E13R Headlamp - Right (Without V22)
53	LT LO BEAM	F53UA	10A	• E4G Headlamp - Left Low Beam (V22) • E13L Headlamp - Left (Without V22)
54	RT LO BEAM	F54UA	10A	• E4H Headlamp - Right Low Beam (V22) • E13R Headlamp - Right (Without V22)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
55	WPR	F55UA	25A	• KR12B Windshield Wiper Relay
56	CNSTR VENT SOL	F56UA	10A	• Q13 Evaporative Emission Vent Solenoid Valve (LV1/ L96/LC8)
58	BCM-2	F58UA	10A	• K9 Body Control Module
59	BCM-1	F59UA	10A	• K9 Body Control Module
61	CCV HTR/ENG OIL SOL	F61UA	15A	• E45 Positive Crankcase Ventilation Heater (LWN) • Q44 Engine Oil Pressure Control Solenoid Valve (LV1)
62	O2 SNSR 2 (POST)/EV FAN	F62UA	10A	• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV1/ L96/LC8) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV1/ L96/LC8)
63	SPARE	F63UA	10A	• Not Used
64	MAF/CNSTR VENT/HUMIDITY SENSOR	F64UA	15A	• B75C Multifunction Intake Air Sensor • Q12 Evaporative Emission Purge Solenoid Valve (LV1/L96/LC8)
65	ODD IGN/INJ	F65UA	20A	• K20 Engine Control Module (LV1) • Q17A Fuel Injector 1 (L96/LC8) • Q17C Fuel Injector 3 (L96/LC8) • Q17E Fuel Injector 5 (L96/LC8) • Q17G Fuel Injector 7 (L96/LC8) • T8A Ignition Coil 1 (LV1/L96/LC8) • T8C Ignition Coil 3 (LV1/L96/LC8) • T8E Ignition Coil 5 (LV1/L96/LC8) • T8G Ignition Coil 7 (L96/LC8)
66	DRL2 (LOLVL-V22)	F66UA	10A	• E13L Headlamp - Left (Without V22)
67	DRL1 (UPLVL +V22)	F67UA	15A	• E4G Headlamp - Left Low Beam (V22)
68	AUX STOP LAMP(S)	F68UA	15A	• X405 (Cutaway)
69	PWR EXT TRAILER	F69UA	10A	• W8 Blunt Cut - Trailer Provision (UY7)
70	UPFTR STOP LAMP(S)	F70UA	10A	• W25 Blunt Cut - Configurable Provision
71	FUEL HTR/FLEX FUEL SNSR	F71UA	15A	• B198 Fuel Composition Sensor (L96)
72	BCM-6	F72UA	10A	• K9 Body Control Module
73	LTR/DLC	F73UA	20A	• E32 Cigarette Lighter Receptacle (DT4) • X80A Accessory Power Receptacle - Center Console 1 (Without DT4) • X84 Data Link Connector
75	ECM	F75UA	15A	• K20 Engine Control Module (LWN)
76	SOOT SNSR	F76UA	10A	• Not Used
77	O2 SNSR 1 (PRE)/ CLS	F77UA	10A	• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV1/ L96/LC8) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV1/ L96/LC8) • K20 Engine Control Module (LWN)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
78	ECM PWR/TRN	F78UA	10A	• K20 Engine Control Module (L96/LC8)
79	EVEN IGN/INJ	F79UA	20A	• Q17B Fuel Injector 2 (L96/LC8) • Q17D Fuel Injector 4 (L96/LC8) • Q17F Fuel Injector 6 (L96/LC8) • Q17H Fuel Injector 8 (L96/LC8) • T8B Ignition Coil 2 (LV1/L96/LC8) • T8D Ignition Coil 4 (LV1/L96/LC8) • T8F Ignition Coil 6 (LV1/L96/LC8) • T8H Ignition Coil 8 (L96/LC8)
J-Case Fuses				
1	ABS MTR	F1UA	50A	• K17 Electronic Brake Control Module
2	ABS MDL	F2UA	40A	• K17 Electronic Brake Control Module
41	TCM BATT	F41UA	20A	• K71 Transmission Control Module (M5U)
42	TRLR WRG	F42UA	30A	• X88 Trailer Connector (UY7)
44	STRTR SOL	F44UA	40A	• M64 Starter Motor
45	ECM PWR/TRN	F45UA	30A	• K20 Engine Control Module (LV1/LWN)
46	SPARE	F46UA	30A	• Not Used (Without KI4)
46	AC/DC INV	F46UA	25A	• T1 Accessory DC/AC Power Iverter Module (KI4)
47	FAN LO	F47UA	40A	• Not Used
74	FRT BLWR	F74UA	40A	• R3 Blower Motor Resistor
Relays				
15	RUN/CRNK	KR93 Ignition Run/ Crank Relay	—	• A10 Inside Rearview Mirror (UVC) • B87 Rearview Camera (UVC) • E11A Fuel Heater/Water in Fuel Sensor (LWN) • K20 Engine Control Module • K36 Inflatable Restraint Sensing and Diagnostic Module • K38 Chassis Control Module (LV1/L96/LC8) • K71 Transmission Control Module (M5U) • P16 Instrument Cluster • S40 Passenger Air Bag Disable Switch (C99) • T12 Automatic Transmission Assembly (MYD)
37	NOX SENSOR	KR121B Reductant Control Module Relay 2	—	• B136 Exhaust Particulate Matter Sensor (LWN) • B195A Nitrogen Oxides Sensor 1 (LWN) • B195B Nitrogen Oxides Sensor 2 (LWN)
38	FUEL PUMP	KR23A Fuel Pump Relay	—	• A7 Fuel Pump and Level Sensor Assembly (LWN)
39	CRNK	KR27 Starter Relay	—	• M64 Starter Motor
40	A/C CMPRSR	KR29 A/C Compressor Clutch Relay	—	• Q2 A/C Compressor Clutch
48	EV FAN CLUTCH	KR20F Cooling Fan Relay	—	• Q85 Cooling Fan Clutch (LWN)

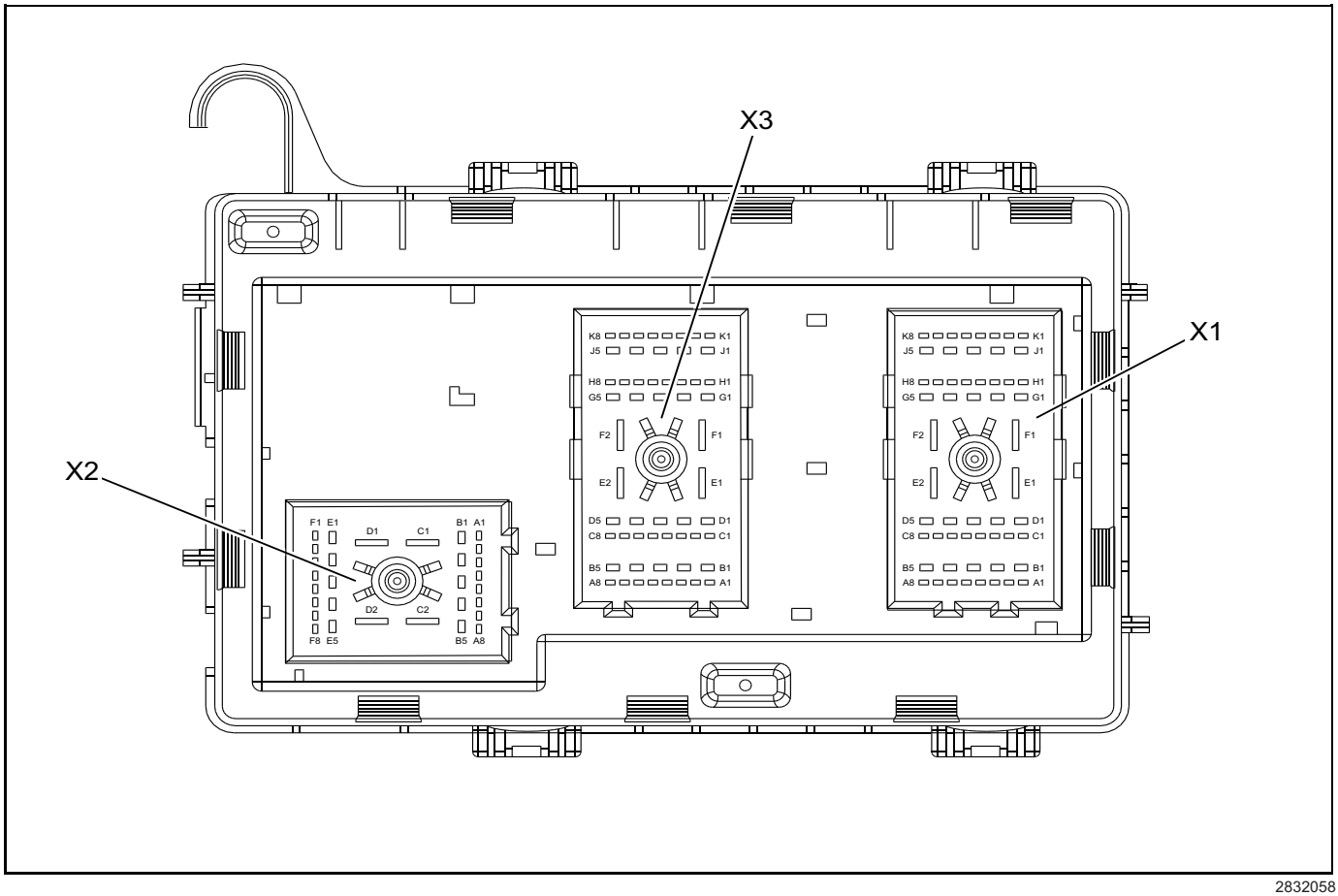
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
49	PWR/TRN	KR75 Engine Controls Ignition Relay	—	• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV1/L96/LC8) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV1/L96/LC8) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV1/L96/LC8) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV1/L96/LC8) • B75C Multifunction Intake Air Sensor • B198 Fuel Composition Sensor (L96) • E45 Positive Crankcase Ventilation Heater (LWN) • K20 Engine Control Module • Q12 Evaporative Emission Purge Solenoid Valve (LV1/L96/LC8) • Q17A Fuel Injector 1 (L96/LC8) • Q17B Fuel Injector 2 (L96/LC8) • Q17C Fuel Injector 3 (L96/LC8) • Q17D Fuel Injector 4 (L96/LC8) • Q17E Fuel Injector 5 (L96/LC8) • Q17F Fuel Injector 6 (L96/LC8) • Q17G Fuel Injector 7 (L96/LC8) • Q17H Fuel Injector 8 (L96/LC8) • Q44 Engine Oil Pressure Control Solenoid Valve (LV1) • T8A Ignition Coil 1 (LV1/L96/LC8) • T8B Ignition Coil 2 (LV1/L96/LC8) • T8C Ignition Coil 3 (LV1/L96/LC8) • T8D Ignition Coil 4 (LV1/L96/LC8) • T8E Ignition Coil 5 (LV1/L96/LC8) • T8F Ignition Coil 6 (LV1/L96/LC8) • T8G Ignition Coil 7 (L96/LC8) • T8H Ignition Coil 8 (L96/LC8)
50	SPARE	KR150 Relay - Spare	—	• Not Used
57	FAN LO	KR20C Cooling Fan Low Speed Relay	—	• Not Used
60	FAN CNTRL	KR20E Cooling Fan Speed Control Relay	—	• Not Used
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K3	WPR HI	KR12C Windshield Wiper Speed Control Relay	—	• M75 Windshield Wiper Motor
K5	HORN/WASH	KR3 Horn Relay, KR11 Windshield Washer Pump Relay	—	• P13 Horn Assembly • G24 Windshield Washer Pump
K6	LO BEAM	KR49 Headlamp Low Beam Relay	—	• E4G Headlamp - Left Low Beam (V22) • E4H Headlamp - Right Low Beam (V22) • E13L Headlamp - Left (Without V22) • E13R Headlamp - Right (Without V22)
K7	HI BEAM	KR48 Headlamp High Beam Relay	—	• E4E Headlamp - Left High Beam (V22) • E4F Headlamp - Right High Beam (V22) • E13L Headlamp - Left (Without V22) • E13R Headlamp - Right (Without V22)

Usage Table (cont'd)

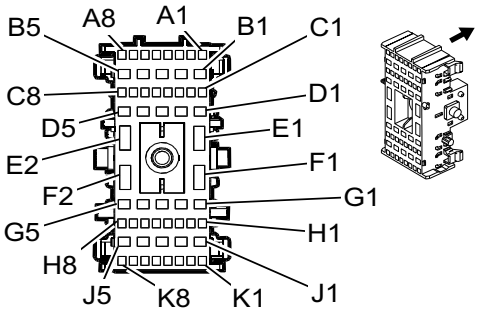
No.	Device Label Name	Device Assigned Name	Rating	Description
K9	TRLR LT STOP/ TRN	KR63L Trailer Stop/Turn Signal Lamp Relay - Left	—	• X88 Trailer Connector • X405 (Cutaway)
K11	STOP LAMP(S)	KR59 Stop Lamp Relay	—	• W8 Blunt Cut - Trailer Provision • W25 Blunt Cut - Configurable Provision • X405 (Cutaway)
K13	WPR	KR12B Windshield Wiper Relay	—	• KR12C Windshield Wiper Speed Control Relay • M75 Windshield Wiper Motor
K18	TRLR RT STOP/ TRN	KR63R Trailer Stop/Turn Signal Lamp Relay - Right	—	• X88 Trailer Connector • X405 (Cutaway)
K19	DRL	KR42 Daytime Running Lamps Relay	—	• F66UA (Without V22) • F67UA (V22)

X50A Fuse Block - Underhood Bottom View



2832058

X50A Fuse Block - Underhood X1



2083844

Connector Part Information

Harness Type: Engine
OEM Connector: 15477823
Service Connector: 13574911
Description: 56-Way F 150, 280 GT Metri-Pack Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575718	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
III	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C
IV	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
V	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
VI	19367554	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G

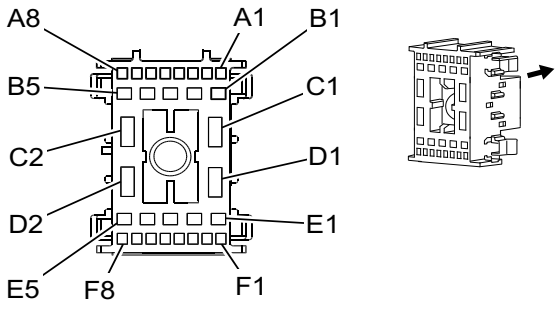
X50A Fuse Block - Underhood X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	RD/BN	440	Battery Positive Voltage	III	—
A2	0.35	RD/WH	1840	Battery Positive Voltage	III	—
A3 - A8	—	—	—	Not Occupied	—	—
B1	0.5	RD/WH	840	Battery Positive Voltage	V	—
B2	0.5 0.5	BN/L-GN D-GN	59 59	A/C Compressor Clutch Control A/C Compressor Clutch Control	V V	LWN -LWN
B3	—	—	—	Not Occupied	—	—
B4	0.8	D-GN	29	Horn Control	IV	—
B5	0.5	VT/L-GN	439	Run/Crank Ignition 1 Voltage	V	—
C1	—	—	—	Not Occupied	—	—
C2	0.5 0.5	D-GN/WH WH/GY	459 459	A/C Compressor Clutch Relay Control A/C Compressor Clutch Relay Control	III III	L96/LC8/LWN LV1
C3 - C5	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C6	0.5	YE/BK	625	Starter Enable Relay Control	III	—
C7	1	BK	1250	Ground	II	—
C8	0.5	L-GN/GY	465	Fuel Pump Primary Relay Control	III	—
D1	0.75 0.75	RD/WH RD/L-GN	1840 1840	Battery Positive Voltage Battery Positive Voltage	IV IV	LV1 LWN
D2	—	—	—	Not Occupied	—	—
D3	0.5 0.5	VT/BK PK	2139 2139	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	V V	M5U MYD
D4	0.75	BK	550	Ground	IV	—
D5	—	—	—	Not Occupied	—	—
E1	4 5	YE PU	6 6	Starter Solenoid Crank Ignition Voltage Starter Solenoid Crank Ignition Voltage	VI VI	LV1 LWN
E2	—	—	—	Not Occupied	—	—
F1	2.5 2.5	VT/GY VT	1439 1439	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	I I	LV1 LWN
F2	5	RD/BK	542	Battery Positive Voltage	VI	—
G1	1 0.75 1	PK VT/GY VT/GY	1039 1039 1039	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV	L96/LC8 LV1 LV1
G2	0.8	PK	1039	Run/Crank Ignition 1 Voltage	IV	—
G3	0.8	PK	1039	Run/Crank Ignition 1 Voltage	IV	—
G4	0.75	VT/WH	1939	Run/Crank Ignition 1 Voltage	IV	—
G5	0.5 0.5	PK VT/WH	1939 1939	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	V V	L96/LC8 LV1
H1	—	—	—	Not Occupied	—	—
H2	0.8	PK	1339	Run/Crank Ignition 1 Voltage	II	—
H3 - H4	—	—	—	Not Occupied	—	—
H5	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	III	—
H6	0.5	WH	2368	Cooling Fan Control Signal	III	—
H7 - H8	—	—	—	Not Occupied	—	—
J1	1 0.75 1	PK VT/BK VT/BK	1239 1239 1239	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV	L96/LC8 LV1 LV1
J2	0.8	PK	1239	Run/Crank Ignition 1 Voltage	IV	—
J3	0.8	PK	1239	Run/Crank Ignition 1 Voltage	IV	—
J4	0.5	VT/D-BU	5292	Powertrain Main Relay Fused Supply 3	V	—
J5	0.5	VT/D-BU	5293	Powertrain Main Relay Fused Supply 4	V	—
K1	1 0.5 0.5	PK VT/GY VT/D-BU	539 539 5291	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage Powertrain Main Relay Fused Supply 2	II III III	L96/LC8 LV1 LWN
K2 - K3	—	—	—	Not Occupied	—	—
K4	1 0.5	PK VT/WH	1539 1539	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	II III	L96/LC8 LV1
K5 - K7	—	—	—	Not Occupied	—	—
K8	0.5	YE	5991	Powertrain Relay Coil Control	III	—

X50A Fuse Block - Underhood X2



1665657

Connector Part Information

Harness Type: Chassis
OEM Connector: 13567518
Service Connector: 19180280
Description: 30-Way F 150, 280 GT Metri-Pack 800 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575718	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G
II	13575790	J-35616-2A (GY)	J-38125-553	15496302	Delphi 5	2	A
III	13575790	J-35616-2A (GY)	J-38125-553	15496302	Delphi 5	E	A
IV	19303704	J-35616-35 (VT)	J-38125-553	13525970	Delphi 4	2	A
V	19303704	J-35616-4A (PU)	J-38125-553	13525970	Delphi 4	2	A
VI	19303708	J-35616-35 (VT)	J-38125-553	13525969	Delphi 4	4	4
VII	19303708	J-35616-35 (VT)	J-38125-553	13525969	Delphi 4	F	D
VIII	19367554	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G

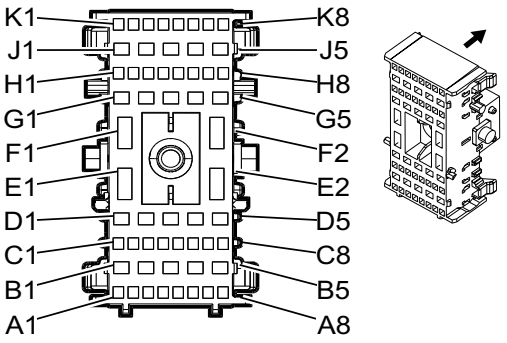
X50A Fuse Block - Underhood X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	—	—	—	Not Occupied	—	—
A2	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
A3	0.8	D-BU/WH	149	Courtesy Lamp Control	II	—
A4	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
A5	—	—	—	Not Occupied	—	—
A6	0.5	RD/WH	4042	Battery Positive Voltage	III	—
A7	1	BN	2109	Trailer Park Lamp Control	II	—
A8	0.75 0.5	VT/GY VT/GY	2739 2739	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	II III	LWN -LWN

X50A Fuse Block - Underhood X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
B1	2.5	GY	120	Fuel Pump Control	VII	—
B2	0.75	VT/D-BU	5294	Powertrain Main Relay Fused Supply 5	IV	—
B3	1	GY	3672	NOx Sensor 2 Control	IV	—
B4	2	RD/WH	1740	Battery Positive Voltage	VI	—
B5	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	IV	—
	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	V	—
C1	—	—	—	Not Occupied	—	—
C2	2.5	RD/VT	1640	Battery Positive Voltage	I	—
D1	3	RD/BK	742	Battery Positive Voltage	I	—
D2	5	RD/YE	442	Battery Positive Voltage	VIII	—
E1	—	—	—	Not Occupied	—	—
E2	0.8	L-BU	1320	CHMSL Control	V	—
E3	3	D-BU	47	Trailer Auxiliary Control	VII	—
E4	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	V	—
E5	3	RD/WH	1940	Battery Positive Voltage	VII	—
F1	1	L-GN	1624	Trailer Backup Lamp Control	II	—
F2	0.5	RD/L-GN	40	Battery Positive Voltage	III	—
F3	1	BN	2109	Trailer Park Lamp Control	II	—
F4	0.5	L-GN/D-BU	3889	DEF Power Module Relay Control	III	—
F5	0.5	RD/L-GN	2440	Battery Positive Voltage	III	—
F6	0.5	RD/WH	4042	Battery Positive Voltage	III	—
F7	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
F8	1	YE	618	Left Rear Turn Signal Lamp Control	II	—

X50A Fuse Block - Underhood X3



1581655

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15477822
Service Connector: 19115189
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575718	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
III	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C
IV	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
V	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
VI	13575754	J-35616-4A (PU)	J-38125-553	15304713	Delphi 19	4	4
VII	13575754	J-35616-4A (PU)	J-38125-553	15304713	Delphi 19	F	D

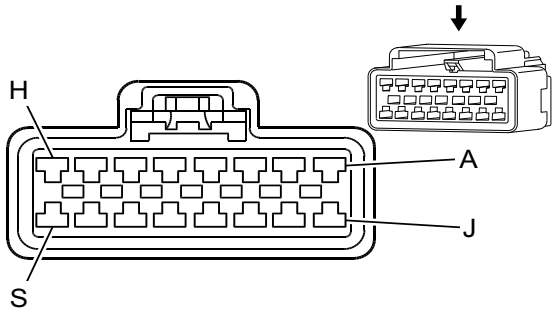
X50A Fuse Block - Underhood X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	PK	1639	Run/Crank Ignition 1 Voltage	III	—
A2	0.35	RD/WH	2840	Battery Positive Voltage	III	—
A3	0.8	RD/WH	2240	Battery Positive Voltage	II	—
A4	0.8	RD/WH	3040	Battery Positive Voltage	II	—
A5	0.5	RD/WH	2540	Battery Positive Voltage	III	—
A6	—	—	—	Not Occupied	—	—
A7	0.8	RD/WH	2740	Battery Positive Voltage	II	—
A8	—	—	—	Not Occupied	—	—
B1	3	RD/WH	3940	Battery Positive Voltage	VII	—
B2	0.35	PK	1139	Run/Crank Ignition 1 Voltage	V	—
B3	0.35	PK	1139	Run/Crank Ignition 1 Voltage	V	—

X50A Fuse Block - Underhood X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
B4	1	RD/WH	1040	Battery Positive Voltage	IV	—
B5	1	BN	2109	Trailer Park Lamp Control	IV	—
C1	0.5	PK	239	Run/Crank Ignition 1 Voltage	III	—
C2 - C3	—	—	—	Not Occupied	—	—
C4	0.35	OG	5186	Left Trailer Turn Signal Lamp Control	III	—
C5	1	BN	2109	Trailer Park Lamp Control	II	—
C6	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
C7	0.8	D-BU/WH	149	Courtesy Lamp Control	II	—
C8	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
D1	0.5	OG	228	Windshield Washer Pump Control	V	—
D2	0.35	YE	5199	Run/Crank Relay Coil Control	V	—
D3	1	L-GN	1624	Trailer Backup Lamp Control	IV	—
D4	3	D-BU	47	Trailer Auxiliary Control	VII	—
D5 - E1	—	—	—	Not Occupied	—	—
E2	3	RD/WH	4140	Battery Positive Voltage	I	—
F1 - F2	—	—	—	Not Occupied	—	—
G1	0.8	RD/WH	640	Battery Positive Voltage	IV	—
G2	0.35	OG	2268	Windshield Washer Relay Control	V	—
G3	0.35	YE	5187	Right Trailer Turn Signal Lamp Control	V	—
G4	2	PU	92	Windshield Wiper Motor High Speed Control	VI	—
G5	2	D-GN	95	Windshield Wiper Motor Low Speed Control	VI	—
H1	—	—	—	Not Occupied	—	—
H2	1	RD/WH	3840	Battery Positive Voltage	II	—
H3	0.35	TN	28	Horn Relay Control	III	—
H4	0.35	PK/WH	1970	Headlamp Low Beam Relay Control	III	—
H5	0.35	PU	544	DRL Relay Control	III	—
H6	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	III	—
H7	0.5	WH	5065	Stop Lamp Relay Coil Control	III	—
H8	0.35	TN	860	Front Windshield Wiper Switch High Signal	III	—
J1	1	RD/WH	640	Battery Positive Voltage	IV	—
J2	0.8	RD/WH	2940	Battery Positive Voltage	IV	—
J3	0.8	BN	2309	Front Park Lamp Control	IV	—
J4	0.8	D-BU/WH	1315	Right Front Turn Signal Lamp Control	IV	—
J5 - K2	—	—	—	Not Occupied	—	—
K3	0.8	RD/WH	2140	Battery Positive Voltage	II	—
K4	0.5	L-BU	20	Stop Lamp Control	III	—
K5	0.5	L-BU/WH	6311	Cruise/ETC/TCC Brake Signal	III	—
K6	—	—	—	Not Occupied	—	—
K7	0.8	L-BU/WH	1314	Left Front Turn Signal Lamp Control	II	—
K8	0.35	TN/WH	1969	Headlamp High Beam Relay Control	III	—

X50A Fuse Block - Underhood X4



823321

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 15326952
Service Connector: 15306426
Description: 16-Way F 280 GT Series (BK)

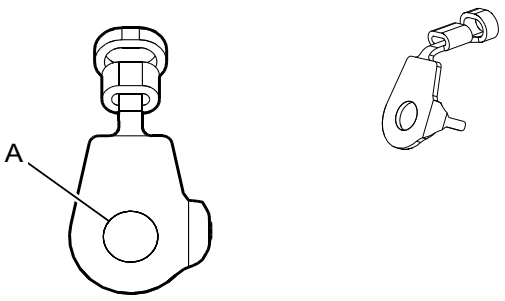
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
II	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A

X50A Fuse Block - Underhood X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.5	GY/BN	2309	Front Park Lamp Control	II	—
C	0.5	GY/BN	2309	Front Park Lamp Control	II	—
D	0.75	L-GN/VT	1315	Right Front Turn Signal Lamp Control	I	—
E	0.8	L-BU/WH	1314	Left Front Turn Signal Lamp Control	I	—
F	0.8	YE	712	Left Headlamp Low Beam Control	I	—
	0.5	YE	712	Left Headlamp Low Beam Control	II	V22
	0.35	YE	712	Left Headlamp Low Beam Control	II	-V22
G - J	—	—	—	Not Occupied	—	—
K	0.5	YE	712	Left Headlamp Low Beam Control	II	—
L	0.35	YE	712	Left Headlamp Low Beam Control	II	—
M	0.75	WH	311	Right Headlamp High Beam Control	I	—
N	0.75	WH	711	Left Headlamp High Beam Control	I	—
P	0.75	YE	312	Right Headlamp Low Beam Control	I	—
R - S	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X5



4831180

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12160208
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

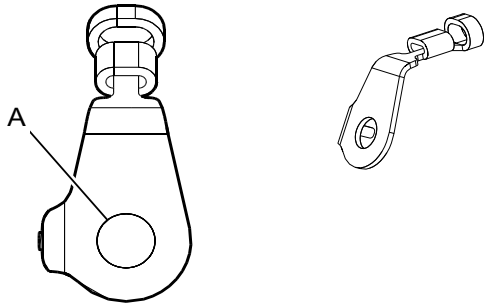
Terminal Part Information

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

X50A Fuse Block - Underhood X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	1	Unfused Battery Positive Voltage	I	—

X50A Fuse Block - Underhood X6



4831192

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13595106
Service Connector: —
Description: 1-Way Ring Terminal

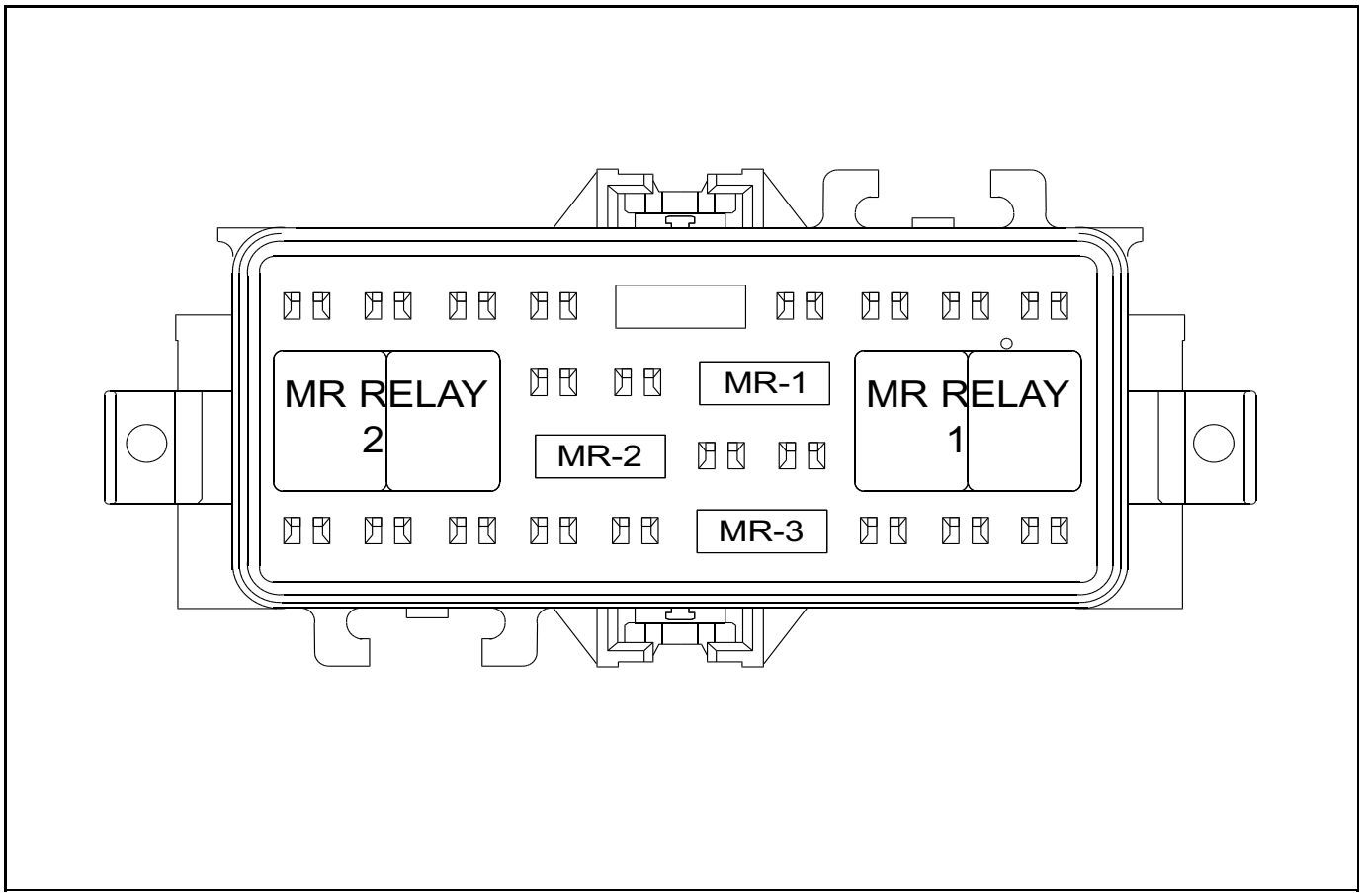
Terminal Part Information

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

X50A Fuse Block - Underhood X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	842	Battery Positive Voltage	I	—

X50B Fuse Block - Underhood Auxiliary Top View

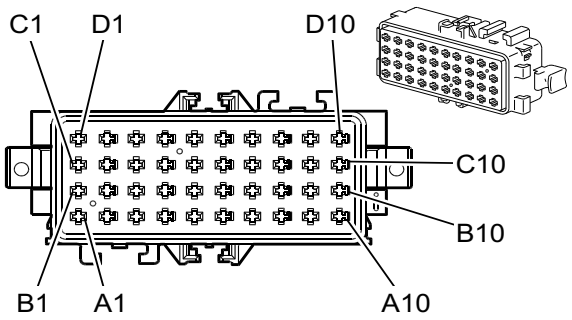


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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	MR-2	F1UB	30A	• KR161B Configurable Provision Relay 2 (9L7)
F2	MR-1	F2UB	30A	• KR161A Configurable Provision Relay 1 (9L7)
F3	MR-3	F3UB	10A	• W25 Blunt Cut - Configurable Provision (9L7)
Relays				
R1	MR RELAY 1	KR90 Door Unlock Relay (WRF), KR161B Configurable Provision Relay 2 (9L7)	—	• S13D Door Lock Switch - Driver (WRF) • W25 Blunt Cut - Configurable Provision
R2	MR RELAY 2	KR97 Door Lock Relay (WRF), KR161A Configurable Provision Relay 1 (9L7)	—	• S13D Door Lock Switch - Driver (WRF) • W25 Blunt Cut - Configurable Provision

X50B Fuse Block - Underhood Auxiliary (-LV1)



2002692

Connector Part Information

Harness Type: Body
OEM Connector: 13607200
Service Connector: Service by Component - See Part Catalog
Description: 40-Way F 2.8 MCP Series, Sealed (BK)

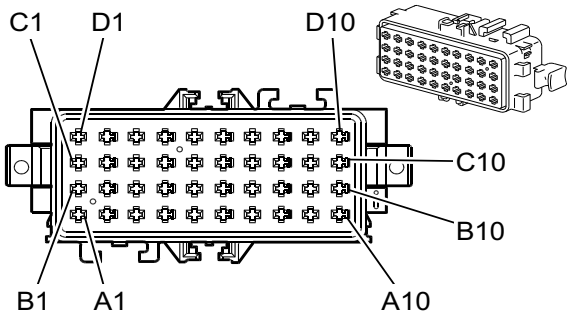
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300440	J-35616-35 (VT)	J-38125-557	Not Required	Not Required	Not Required	Not Required

X50B Fuse Block - Underhood Auxiliary (-LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A10	—	—	—	Not Occupied	—	—
B1	0.5	BK	450	Ground	I	—
B2	—	—	—	Not Occupied	—	—
B3	0.5	BU/YE	6843	Auxiliary Device Relay 2 Control	I	—
B4 - B7	—	—	—	Not Occupied	—	—
B8	0.5	BK	450	Ground	I	—
B9	—	—	—	Not Occupied	—	—
B10	0.5	BN	6842	Auxiliary Device Relay 1 Control	I	—
C1	0.5	RD/VT	102	Battery Positive Voltage	I	—
C2	—	—	—	Not Occupied	—	—
C3	0.5	BN/YE	780	Driver Door Lock Switch Lock Signal	I	—
C4 - C7	—	—	—	Not Occupied	—	—
C8	0.5	RD/VT	102	Battery Positive Voltage	I	—
C9	—	—	—	Not Occupied	—	—
C10	0.5	BN/WH	781	Driver Door Lock Switch Unlock Signal	I	—
D1 - D10	—	—	—	Not Occupied	—	—

X50B Fuse Block - Underhood Auxiliary (LV1+9L7)



2002692

Connector Part Information

Harness Type: Accessory
OEM Connector: 13607200
Service Connector: Service by Harness - See Part Catalog
Description: 40-Way F 2.8 MCP Series, Sealed (BK)

Terminal Part Information

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

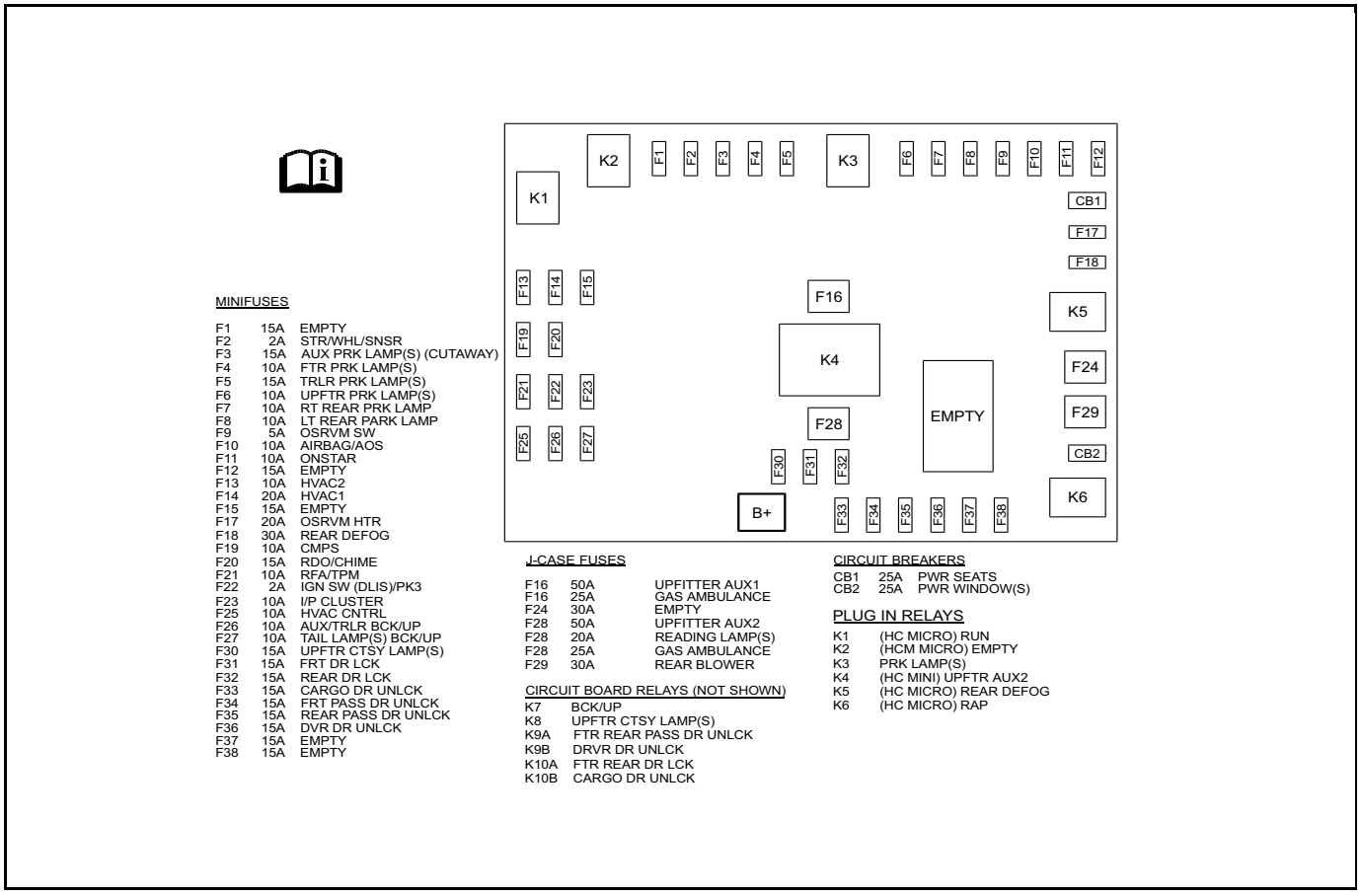
X50B Fuse Block - Underhood Auxiliary (LV1+9L7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A5	—	—	—	Not Occupied	—	—
A6	1	RD/BK	102	Battery Positive Voltage	I	—
A7	1	RD/WH	5440	Battery Positive Voltage	I	—
A8 - A10	—	—	—	Not Occupied	—	—
B1	2.5	RD/WH	5440	Battery Positive Voltage	I	—
B2	—	—	—	Not Occupied	—	—
B3	0.5	D-BU	6843	Auxiliary Device Relay 2 Control	I	—
B4	2.5	RD/BK	102	Battery Positive Voltage	I	—
B5	2.5	RD/WH	5440	Battery Positive Voltage	I	—
B6 - B7	—	—	—	Not Occupied	—	—
B8	2.5	RD/WH	5440	Battery Positive Voltage	I	—
B9	—	—	—	Not Occupied	—	—
B10	0.5	L-BU	6842	Auxiliary Device Relay 1 Control	I	—
C1	0.5	BK	1850	Ground	I	—
C2	—	—	—	Not Occupied	—	—
C3	2.5	D-GN	6840	Auxiliary Device 2 Switched Voltage	I	—
C4 - C5	—	—	—	Not Occupied	—	—
C6	2.5	RD/BK	102	Battery Positive Voltage	I	—
C7	2.5	RD/WH	5440	Battery Positive Voltage	I	—
C8	0.5	BK	1551	Signal Ground	I	—
C9	—	—	—	Not Occupied	—	—

X50B Fuse Block - Underhood Auxiliary (LV1+9L7) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C10	2.5	L-GN	6839	Auxiliary Device 1 Switched Voltage	I	—
D1 - D10	—	—	—	Not Occupied	—	—

X52A Fuse Block - Passenger Compartment Label



MINIFUSES

F1	15A	EMPTY
F2	2A	STR/WHL/SNSR
F3	15A	AUX PRK LAMP(S) (CUTAWAY)
F4	10A	FTR PRK LAMP(S)
F5	15A	TRLR PRK LAMP(S)
F6	10A	UPFTR PRK LAMP(S)
F7	10A	RT REAR PRK LAMP
F8	10A	LT REAR PARK LAMP
F9	5A	OSRVM SW
F10	10A	AIRBAG/AOS
F11	10A	ONSTAR
F12	15A	EMPTY
F13	10A	HVAC2
F14	20A	HVAC1
F15	15A	EMPTY
F17	20A	OSRVM HTR
F18	30A	REAR DEFOG
F19	10A	CMPS
F20	15A	RDO/CHIME
F21	10A	RFA/TPM
F22	2A	IGN SW (DLIS)/PK3
F23	10A	I/P CLUSTER
F25	10A	HVAC CNTRL
F26	10A	AUX/TRLR BCK/UP
F27	10A	TAIL LAMP(S) BCK/UP
F30	15A	UPFTR CTSY LAMP(S)
F31	15A	FRT DR LCK
F32	15A	REAR DR LCK
F33	15A	CARGO DR UNLCK
F34	15A	FRT PASS DR UNLCK
F35	15A	REAR PASS DR UNLCK
F36	15A	DVR DR UNLCK
F37	15A	EMPTY
F38	15A	EMPTY

J-CASE FUSES

F16	50A	UPFITTER AUX1
F16	25A	GAS AMBULANCE
F24	30A	EMPTY
F28	50A	UPFITTER AUX2
F28	20A	READING LAMP(S)
F28	25A	GAS AMBULANCE
F29	30A	REAR BLOWER

CIRCUIT BOARD RELAYS (NOT SHOWN)

K7	BCK/UP
K8	UPFTR CTSY LAMP(S)
K9A	FTR REAR PASS DR UNLCK
K9B	DRVR DR UNLCK
K10A	FTR REAR DR LCK
K10B	CARGO DR UNLCK

CIRCUIT BREAKERS

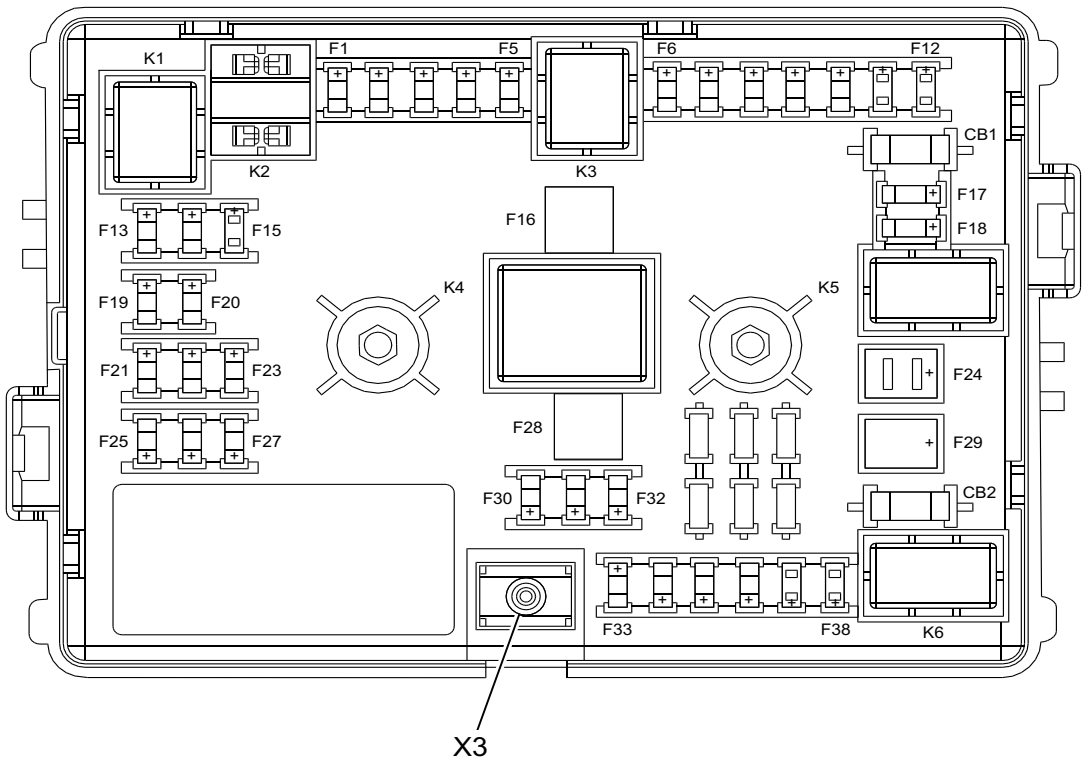
CB1	25A	PWR SEATS
CB2	25A	PWR WINDOW(S)

PLUG IN RELAYS

K1	(HC MICRO) RUN
K2	(HCM MICRO) EMPTY
K3	PRK LAMP(S)
K4	(HC MINI) UPFTR AUX2
K5	(HC MICRO) REAR DEFOG
K6	(HC MICRO) RAP

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X52A Fuse Block - Passenger Compartment Top View



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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Mini Fuses				
F1	EMPTY	F1PA	15A	• Not Used
F2	STR/WHL/SNSR	F2PA	2A	• X85 Steering Wheel Air Bag Coil (K34 or W1Y)
F3	AUX PRK LAMP(S) (CUTAWAY)	F3PA	15A	• X405 (Cutaway)
F4	FRT PRK LAMP(S)	F4PA	10A	• E2LF Side Marker Lamp - Left Front • E2RF Side Marker Lamp - Right Front • E4N Park/Turn Signal Lamp - Left • E4P Park/Turn Signal Lamp - Right
F5	TRLR PRK LAMP(S)	F5PA	15A	• X88 Trailer Connector (UY7)
F6	UPFTR PRK LAMP(S)	F6PA	10A	• X320 (YF2 or YF7)
F7	RT REAR PRK LAMP	F7PA	10A	• E5T Tail/Stop and Turn Signal Lamp - Right (Cargo or Passenger)
F8	LT REAR PARK LAMP	F8PA	10A	• E5S Tail/Stop and Turn Signal Lamp - Left (Cargo or Passenger) • E7 License Plate Lamp (Cargo or Passenger)
F9	OSRVM SW	F9PA	5A	• S52 Outside Rearview Mirror Switch (DEB or DE5)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F10	AIRBAG/AOS	F10PA	10A	• K36 Inflatable Restraint Sensing and Diagnostic Module
F11	ONSTAR	F11PA	10A	• K73 Telematics Communication Interface Control Module (UE1)
F12	EMPTY	F12PA	15A	• KR90 Door Unlock Relay • KR97 Door Lock Relay
F13	HVAC2	F13PA	10A	• K33A HVAC Control Module - Auxiliary • KR32B Blower Motor High Speed Relay - Auxiliary (C69/C36/ENC) • KR32C Blower Motor Low Speed Relay - Auxiliary (C69/C36/ENC) • KR32D Blower Motor Medium Speed Relay - Auxiliary (C69/C36/ENC) • KR81 Auxiliary Battery Relay 1 • M6 Air Temperature Door Actuator • M6B Air Temperature Door Actuator - Auxiliary (C69/C36/ENC) • M37B Mode Door Actuator - Auxiliary (C69/C36/ENC) • S34 HVAC Controls Switch Assembly (C49/DE5/C60) • S34F HVAC Controls Switch Assembly - Auxiliary Front • S34R HVAC Controls Switch Assembly - Auxiliary Rear (Rear HVAC Controls)
F14	HVAC1	F14PA	20A	• S34 HVAC Controls Switch Assembly • X81 Accessory Power Receptacle - 110V AC (KI4)
F15	EMPTY	F15PA	15A	• Not Used
F17	OSRVM HTR	F17PA	20A	• A9A Outside Rearview Mirror - Driver (DEB or DE5) • A9B Outside Rearview Mirror - Passenger (DEB or DE5)
F18	REAR DEFOG	F18PA	30A	• E18L Rear Defogger Grid - Left (C49) • E18R Rear Defogger Grid - Right (C49)
F19	CMPS	F19PA	10A	• B176 Multi-axis Acceleration Sensor Module • K18 Compass Module (U80)
F20	RDO/CHIME	F20PA	15A	• A11 Radio (Without UL5) • A12 Digital Radio Receiver Control Module (U2K or UBS)
F21	RFA/TPM	F21PA	10A	• K77 Remote Control Door Lock Receiver (ATG or UJM)
F22	IGN SW (DLIS)/ PK3	F22PA	2A	• K64 Content Theft Deterrent Control Module • S39 Ignition Switch
F23	I/P CLUSTER	F23PA	10A	• P16 Instrument Cluster (Without 8S8)
F25	HVAC CNTRL	F25PA	10A	• S34 HVAC Controls Switch Assembly (C49 or DE5)
F26	AUX/TRLR BCK/ UP	F26PA	10A	• P3 Backup Alarm (8S3) • X88 Trailer Connector • X405 (Cutaway)
F27	TAIL LAMP(S) BCK/UP	F27PA	10A	• E5A Backup Lamp - Left (Cargo or Passenger) • E5B Backup Lamp - Right (Cargo or Passenger)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F30	UPFTR CTSY LAMP(S)	F30PA	15A	• E36AC Dome Lamp - Left Roof Rail (Cargo Without YF7) • E36AD Dome Lamp - Right Roof Rail (Cargo Without YF7) • E36AH Dome Lamp (Cargo without YF7) • E37F Dome/Reading Lamps - Front • E37M Dome/Reading Lamps - Middle (Passenger) • E37R Dome/Reading Lamps - Rear (Passenger without YF7) • K9 Body Control Module • X320 (YF7) • X405
F31	FRT DR LCK	F31PA	15A	• A23D Door Latch Assembly - Driver (AU3) • A23P Door Latch Assembly - Passenger (AU3)
F32	REAR DR LCK	F32PA	15A	• M13 Door Latch Assembly - Rear Cargo (Passenger or Cargo with AU3) • M14RR Door Lock Actuator - Right Rear (E24 or YA2) • X87RB Sliding Door Jamb Contact Plate - Right Body (E24 or YA2)
F33	CARGO DR UNLCK	F33PA	15A	• M13 Door Latch Assembly - Rear Cargo (Cargo or Passenger with AU3)
F34	FRT PASS DR UNLCK	F34PA	15A	• A23P Door Latch Assembly - Passenger (AU3) • M14RR Door Lock Actuator - Right Rear (AU3) • KR90A Cargo Door Unlock Relay (AU3) • X87RB Sliding Door Jamb Contact Plate - Right Body
F35	REAR PASS DR UNLCK	F35PA	15A	• M14RR Door Lock Actuator - Right Rear (AU3) • X87RB Sliding Door Jamb Contact Plate - Right Body (AU3)
F36	DVR DR UNLCK	F36PA	15A	• A23D Door Latch Assembly - Driver (AU3)
F37	EMPTY	F37PA	15A	• Not Used
F38	EMPTY	F38PA	15A	• Not Used
J-Case Fuses				
F16	UPFITTER AUX1	F16PA	50A	• W12 Blunt Cut - Emergency Vehicle Provision (YF1) • X222 (YF7) • X289 (PRP) • X321 (YF7)
F24	EMPTY	F24PA	30A	• Not Used
F28	UPFITTER AUX2	F28PA	50A	• W12 Blunt Cut - Emergency Vehicle Provision (YF1) • X222 (YF7) • X321 (YF7)
F29	REAR BLOWER	F29PA	30A	• KR32B Blower Motor High Speed Relay - Auxiliary (C36/C69/ENC) • KR32C Blower Motor Low Speed Relay - Auxiliary (C36/C69/ENC) • KR32D Blower Motor Medium Speed Relay - Auxiliary (C36/C69/ENC)
Circuit Breakers				
CB1	PWR SEATS	CB1PA	25A	• S64D Seat Adjuster Switch - Driver (AG1) • S64P Seat Adjuster Switch - Passenger (AG2)
CB2	PWR WINDOW(S)	CB2PA	25A	• S79D Window Switch - Driver (A31) • S79P Window Switch - Passenger (A31)

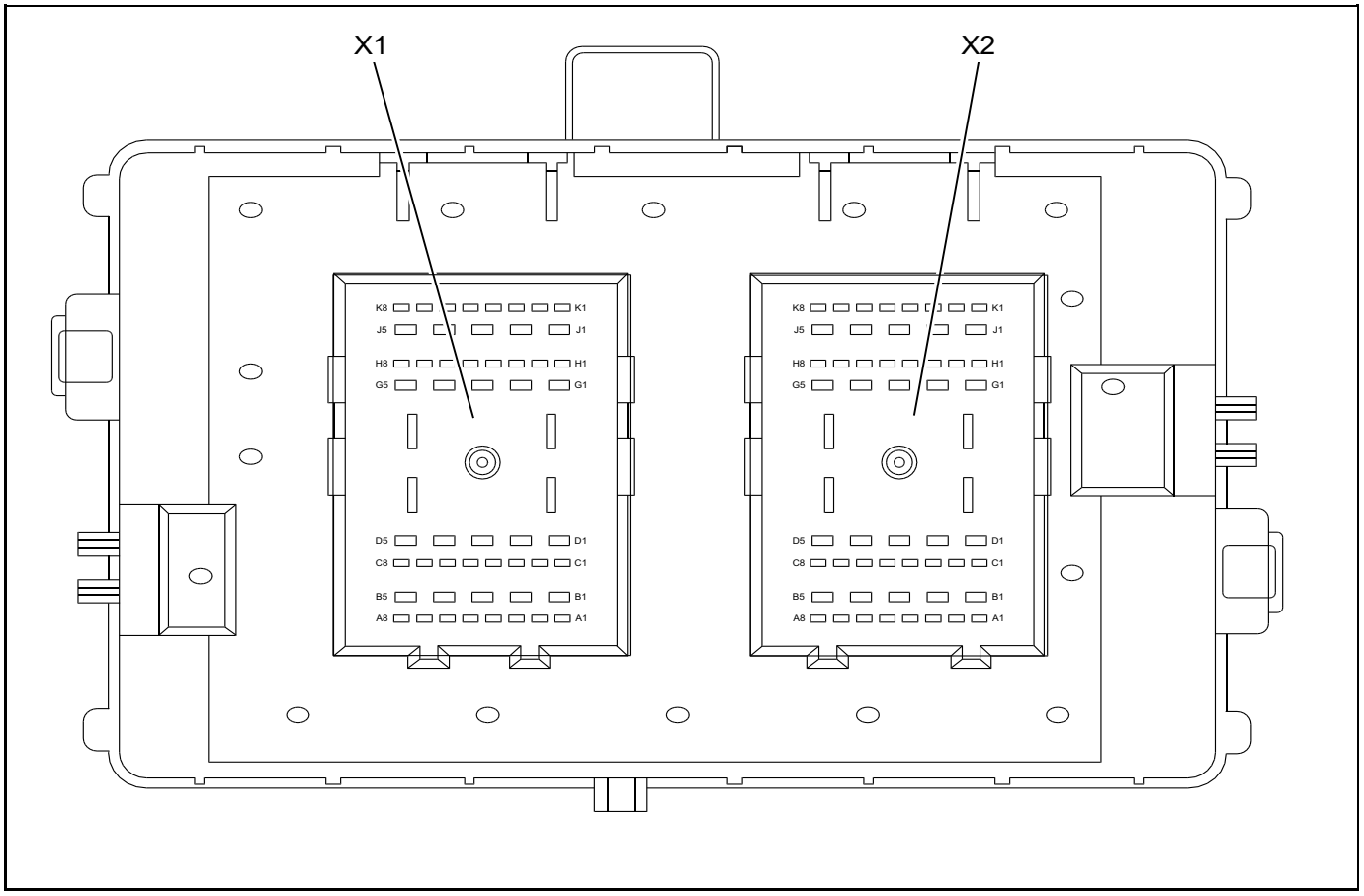
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
Relays				
K1	RUN	KR74 Ignition Run Relay	—	• F13PA • F14PA • F19PA • KR77 Ignition Power Provision Relay
K2	EMPTY	KR150 Relay - Spare	—	• Not Used
K3	PRK LAMP(S)	KR53 Park Lamps Relay	—	• F3PA • F4PA • F5PA • F6PA • F7PA • F8PA
K4	UPFTR AUX2	KR77 Ignition Power Provision Relay	—	• W12 Blunt Cut - Emergency Vehicle Provision (YF1) • X222 (YF7) • X321 (YF7)
K5	REAR DEFOG	KR5 Rear Defogger Relay	—	• A9A Outside Rearview Mirror - Driver (DEB/DE5) • A9B Outside Rearview Mirror - Passenger (DEB/DE5) • E18L Rear Defogger Grid - Left (C49) • E18R Rear Defogger Grid - Right (C49)
K6	RAP	KR76 Retained Accessory Power Relay	—	• S79D Window Switch - Driver (A31) • S79P Window Switch - Passenger (A31)
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K7	BCK/UP	KR40 Backup Lamp Relay	—	• E5A Backup Lamp - Left • E5B Backup Lamp - Right • P3 Backup Alarm (8S3) • X88 Trailer Connector • X405 (Cutaway)
K8	UPFTR CTSY LAMP(S)	KR78 Courtesy Lamps Provision Relay	—	• E36AC Dome Lamp - Left Roof Rail (Cargo Without YF7) • E36AD Dome Lamp - Right Roof Rail (Cargo Without YF7) • E36AH Dome Lamp (Cargo without YF7) • E37F Dome/Reading Lamps - Front • E37M Dome/Reading Lamps - Middle (Passenger) • E37R Dome/Reading Lamps - Rear (Passenger without YF7) • K9 Body Control Module • X320 (YF7) • X405
K9A	FTR REAR PASS DR UNLCK	KR90P Passenger/ Cargo Door Unlock Relay	—	• A23P Door Latch Assembly - Passenger (AU3) • M14RR Door Lock Actuator - Right Rear (AU3) • KR90A Cargo Door Unlock Relay (AU3) • X87RB Sliding Door Jamb Contact Plate - Right Body
K9B	DRVR DR UNLCK	KR92D Driver Door Unlatch Relay	—	• A23D Door Latch Assembly - Driver (AU3)

Usage Table (cont'd)

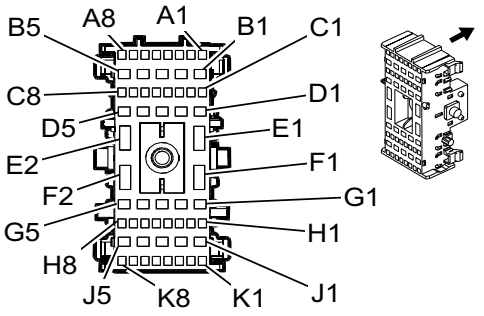
No.	Device Label Name	Device Assigned Name	Rating	Description
K10A	FTR REAR DR LCK	KR97 Door Lock Relay	—	• A23D Door Latch Assembly - Driver (AU3) • A23P Door Latch Assembly - Passenger (AU3) • M13 Door Latch Assembly - Rear Cargo (Passenger or Cargo) • M14RR Door Lock Actuator - Right Rear (E24 or YA2) • X87RB Sliding Door Jamb Contact Plate - Right Body (E24 or YA2)
K10B	CARGO DR UNLCK	KR90A Cargo Door Unlock Relay	—	• M13 Door Latch Assembly - Rear Cargo (AU3)

X52A Fuse Block - Passenger Compartment Bottom View



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X52A Fuse Block - Passenger Compartment X1



2083844

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15477823
Service Connector: 13574911
Description: 56-Way F 150, 280 GT Metri-Pack Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C
III	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
IV	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
V	13579922	J-35616-44 (YE)	J-38125-558	12065915	Delphi 5	C	A
VI	19367554	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G

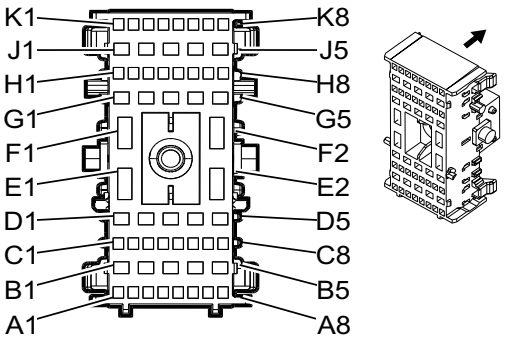
X52A Fuse Block - Passenger Compartment X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A3	—	—	—	Not Occupied	—	—
A4	0.5	YE	6817	LED Backlight Dimming Control	II	—
A5	0.35	D-BU	45	Park Lamp Relay Control	II	—
A6	0.35	BN	6136	Control	II	—
A7 - A8	—	—	—	Not Occupied	—	—
B1	0.8	RD/WH	3240	Battery Positive Voltage	III	—
B2	1	BN	2109	Trailer Park Lamp Control	III	—
B3	0.35	BN	341	Run Ignition 3 Voltage	IV	—
B4	0.8	BN	2309	Front Park Lamp Control	III	—
B5	1	BN	2109	Trailer Park Lamp Control	III	—
C1	1	YE	618	Left Rear Turn Signal Lamp Control	I	—
C2	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	II	—

X52A Fuse Block - Passenger Compartment X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C3	1	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
C4	0.35	WH	193	Rear Defog Relay Control	II	—
C5	0.35	BN	341	Run Ignition 3 Voltage	II	—
C6	—	—	—	Not Occupied	—	—
C7	0.35	OG	300	Run Ignition 3 Voltage	II	—
C8 - D4	—	—	—	Not Occupied	—	—
D5	1 0.5	BN D-BU	141 6807	Run Ignition 3 Voltage DC To AC Inverter Control	III IV	— KI4
E1	5	RD/BK	1042	Battery Positive Voltage	VI	—
E2	0.8	BK	350	Ground	V	—
F1	5	BN	541	Run Ignition 3 Voltage	VI	—
F2 - G2	—	—	—	Not Occupied	—	—
G3	0.8 0.5	D-BU/WH GY	1315 5861	Right Front Turn Signal Lamp Control Passenger Side Object Detection LED Signal 1	III IV	DEE UFT
G4	1	RD/WH	340	Battery Positive Voltage	III	—
G5	—	—	—	Not Occupied	—	—
H1	0.8 0.5	L-BU/WH GY/YE	1314 5853	Left Front Turn Signal Lamp Control Driver Side Object Detection LED Signal 1	I II	DEE UFT
H2	0.8 1	D-BU/WH D-BU/WH	149 149	Courtesy Lamp Control Courtesy Lamp Control	I I	CARGO/ PASSENGER CUTAWAY
H3	0.35	BK/WH	351	Signal Ground	II	—
H4	0.35	YE	43	Accessory Ignition Voltage	II	—
H5	0.8	RD/WH	4440	Battery Positive Voltage	I	—
H6	0.35	RD/WH	2840	Battery Positive Voltage	II	—
H7	0.35	RD/WH	540	Battery Positive Voltage	II	—
H8	0.5	RD/WH	5340	Battery Positive Voltage	II	—
J1 - J4	—	—	—	Not Occupied	—	—
J5	1	L-GN	1624	Trailer Backup Lamp Control	III	—
K1	—	—	—	Not Occupied	—	—
K2	0.5	YE	356	Driver Door Lock Relay Unlock Control	II	—
K3	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	II	—
K4	0.35 0.5	L-BU L-BU	244 244	Passenger Door Lock Switch Lock Control Passenger Door Lock Switch Lock Control	II II	PRP -PRP
K5	0.5 0.35	YE L-BU	356 244	Driver Door Lock Relay Unlock Control Passenger Door Lock Switch Lock Control	II II	AU3 AU3+PRP
K6	—	—	—	Not Occupied	—	—
K7	0.5	GY/BK	690	Courtesy Lamp Relay Control	II	—
K8	0.35	D-BU	38	Backup Lamp Relay Control	II	—

X52A Fuse Block - Passenger Compartment X2



1581655

Connector Part Information

Harness Type: Body
OEM Connector: 15477822
Service Connector: 19115189
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575718	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
III	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C
IV	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
V	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
VI	13575754	J-35616-4A (PU)	J-38125-553	15304713	Delphi 19	F	D
VII	13575754	J-35616-4A (PU)	J-38125-553	Not Available	Not Available	Not Available	Not Available
VIII	13575756	J-35616-4A (PU)	J-38125-553	15304713	Delphi 19	F	D
IX	19367554	J-35616-44 (YE)	J-38125-558	12110127	Delphi 19	F	G

X52A Fuse Block - Passenger Compartment X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.5	RD/WH	3440	Battery Positive Voltage	III	—
A4	0.5	BN	2509	Left Rear Park Lamp Control	III	—
A5	0.5	BN	2609	Right Rear Park Lamp Control	III	—
A6	0.5	RD/WH	4340	Battery Positive Voltage	III	—
A7 - A8	—	—	—	Not Occupied	—	—
B1	3	RD/WH	3540	Battery Positive Voltage	VI	—

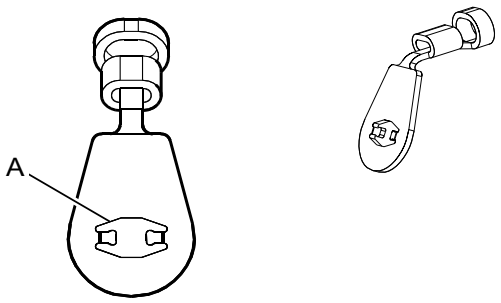
X52A Fuse Block - Passenger Compartment X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
B2	3	RD/WH	3540	Battery Positive Voltage	VI	—
B3	1	RD/WH	3240	Battery Positive Voltage	IV	—
B4	0.5	BN	2209	Rear Park Lamp Control	V	—
B5 - C1	—	—	—	Not Occupied	—	—
C2	1	RD/WH	3240	Battery Positive Voltage	II	—
C3	0.35	BN	341	Run Ignition 3 Voltage	III	—
C4	0.35	BN	341	Run Ignition 3 Voltage	III	—
C5	0.35	BN	341	Run Ignition 3 Voltage	III	—
C6	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
C7	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
C8	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	III	—
D1	5	PU	293	Rear Defog Element Control	VIII	—
D2	5	PU	293	Rear Defog Element Control	VIII	—
D3	0.8	OG	2267	Mirror Heating Element Control	IV	—
D4	0.8	OG	2267	Mirror Heating Element Control	IV	—
D5	0.5	RD/VT	102	Battery Positive Voltage	V	—
E1	—	—	—	Not Occupied	—	—
E2	5	RD/BK	1042	Battery Positive Voltage	IX	—
F1	5	RD/WH	1740	Battery Positive Voltage	IX	—
F2	3	BN	541	Run Ignition 3 Voltage	I	—
	5	BN	541	Run Ignition 3 Voltage	IX	—
G1	3	D-GN	1001	Retained Accessory Power Ignition	VI	—
G2	3	D-GN	1001	Retained Accessory Power Ignition	VI	—
G3	—	—	—	Not Occupied	—	—
G4	1	GY	295	Door Lock Actuator Lock Control	IV	—
G5	0.8	GY	295	Door Lock Actuator Lock Control	IV	—
	1	GY	295	Door Lock Actuator Lock Control	IV	—
H1	—	—	—	Not Occupied	—	—
H2	0.5	BK/BN	6045	Steering Angle Sensor Low Reference	III	—
H3	0.35	BK/WH	351	Signal Ground	III	—
H4	—	—	—	Not Occupied	—	—
H5	0.5	D-BU/WH	1315	Right Front Turn Signal Lamp Control	III	DEE
	0.5	GY	5861	Passenger Side Object Detection LED Signal 1	VI	UFT
H6	0.5	L-BU/WH	1314	Left Front Turn Signal Lamp Control	III	DEE
	—	GY/YE	5853	Driver Side Object Detection LED Signal 1	VI	UFT
H7	0.5	D-BU/WH	149	Courtesy Lamp Control	III	—
H8	0.5	D-BU/WH	149	Courtesy Lamp Control	III	CARGO+YF7
	0.8	D-BU/WH	149	Courtesy Lamp Control	II	CARGO-YF7
	1	D-BU/WH	149	Courtesy Lamp Control	II	PASSENGER
J1	0.8	TN	694	Driver Door Lock Actuator Unlock Control	IV	—
J2	1	TN	294	Door Lock Actuator Unlock Control	IV	—
J3	0.8	TN	294	Door Lock Actuator Unlock Control	IV	—
J4	0.8	TN	294	Door Lock Actuator Unlock Control	IV	—
J5	0.8	GY	295	Door Lock Actuator Lock Control	VII	—
K1 - K2	—	—	—	Not Occupied	—	—
K3	1	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	II	—

X52A Fuse Block - Passenger Compartment X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
K4 - K6	—	—	—	Not Occupied	—	—
K7	1	TN	294	Door Lock Actuator Unlock Control	II	—
K8	1	L-GN	24	Backup Lamp Control	II	—

X52A Fuse Block - Passenger Compartment X3



4831037

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12160241
Service Connector: —
Description: 1-Way Ring Terminal

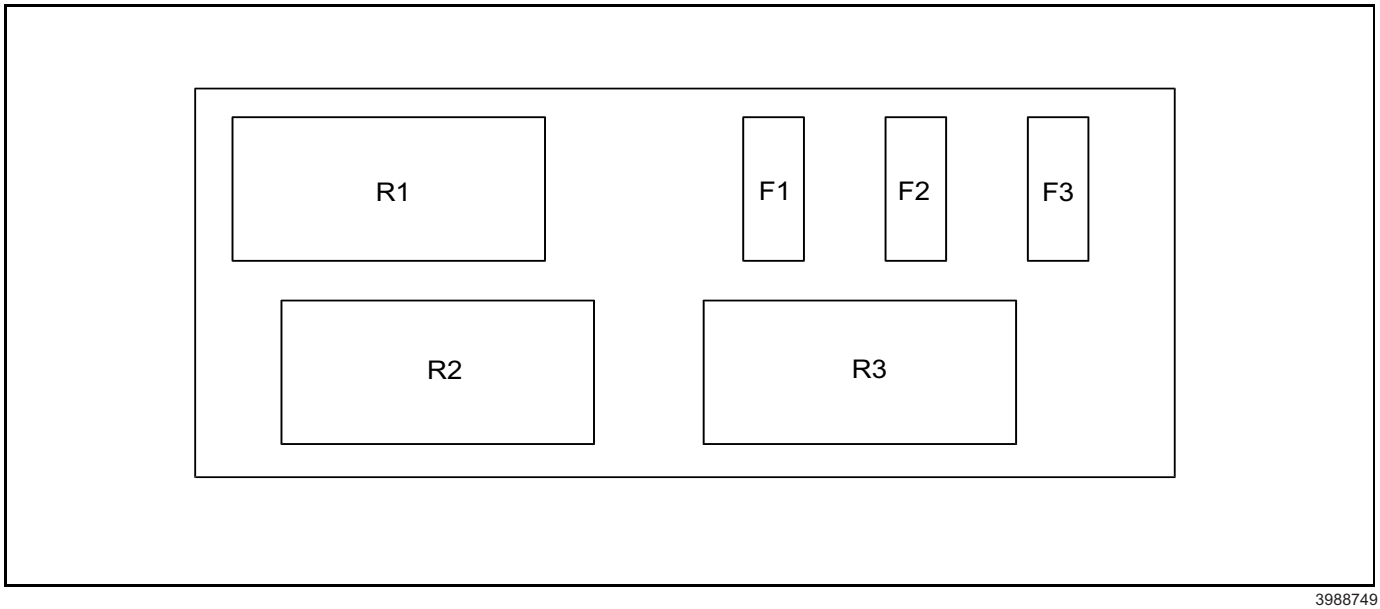
Terminal Part Information

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

X52A Fuse Block - Passenger Compartment X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	842	Battery Positive Voltage	I	—

X53A Fuse Block - Rear Body Top View (PRP)

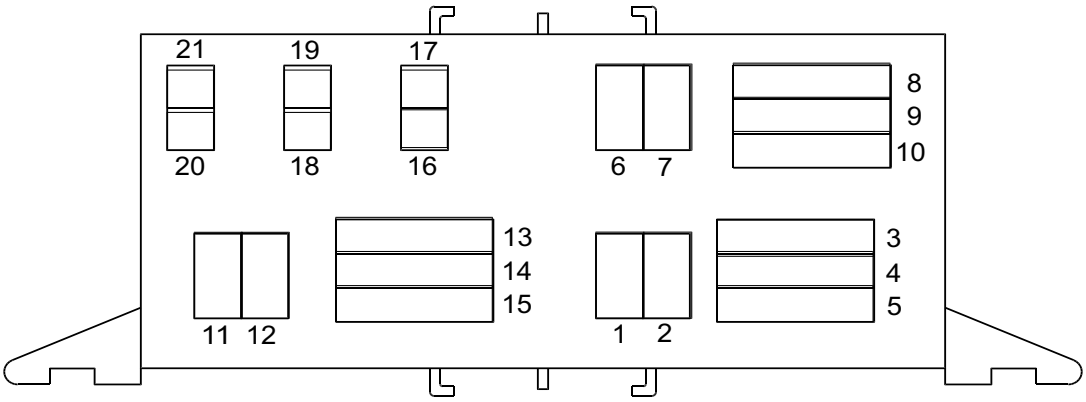


3988749

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	DOME FLUORES-CENT WORK LAMPS	F1RA	10A	• E21A Fluorescent Work Lamp - Right Access Panel • E21F Fluorescent Work Lamp - Front Cargo • E21LF Fluorescent Work Lamp - Left Front Access Panel • E21R Fluorescent Work Lamp - Rear Cargo • E21LR Fluorescent Work Lamp - Left Rear Access Panel
F2	PANEL ACTUATOR	F2RA	15A	• KR89LF Left Front Access Panel Relay • KR89LR Left Rear Access Panel Relay • KR89RR Right Rear Access Panel Relay
F3	SPARE	F3RA	—	• Not Used
Relays				
R1	LEFT REAR ACCESS PANEL RELAY	KR89LR Left Rear Access Panel Relay	—	• M2C Access Panel Unlatch Actuator - Left Rear Side Front • M2D Access Panel Unlatch Actuator - Left Rear Side Rear
R2	LEFT FRONT ACCESS PANEL RELAY	KR89LF Left Front Access Panel Relay	—	• M2A Access Panel Unlatch Actuator - Left Front Side Front • M2B Access Panel Unlatch Actuator - Left Front Side Rear
R3	RIGHT REAR ACCESS PANEL RELAY	KR89RR Right Rear Access Panel Relay	—	• M2E Access Panel Unlatch Actuator - Right Side Front • M2F Access Panel Unlatch Actuator - Right Side Rear

X53A Fuse Block - Rear Body Bottom View (PRP)



2832080

Connector Part Information

Harness Type: Side Access Panel Harness
OEM Connector: Not Available
Service Connector: Not Available
Description: 21-Way F Fuse Block (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

X53A Fuse Block - Rear Body Bottom View (PRP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	OG	740	Battery Positive Voltage	I	—
2	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
3	0.5	L-BU/WH	244	Passenger Door Lock Switch Lock Control	I	—
4	—	—	—	Not Used	—	—
5	0.5	OG	5810	Park Enable Signal	I	—
6	0.8	OG	740	Battery Positive Voltage	I	—
7	0.8	PK	1092	Left Rear Door Lock Actuator Unlock Control	I	—
8	0.5	L-GN	1391	Left Front Door Lock Relay Control	I	—
9	—	—	—	Not Used	—	—
10	0.5	OG	5810	Park Enable Signal	I	—
11	0.8	OG	740	Battery Positive Voltage	I	—
12	0.8	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
13	0.5	L-BU	1344	Trunk Release Relay Control	I	—
14	—	—	—	Not Used	—	—
15	0.5	OG	5810	Park Enable Signal	I	—
16	0.8	RD	1732	Electronic Control Unit 12 Volt Reference (3)	I	UF2
17	0.8	D-BU/WH	149	Courtesy Lamp Supply Voltage	I	UF2
18	5.0	RD	1042	Battery Positive Voltage	I	—
19	1.0	OG	740	Battery Positive Voltage	I	—
20	—	—	—	Not Used	—	—
21	—	—	—	Not Used	—	—

X53A Fuse Block - Rear Body

—

Connector Part Information

Harness Type: Rear Body
OEM Connector: 63995
Service Connector: Service by Harness - See Part Catalog
Description: Wire Entry Fuse Block

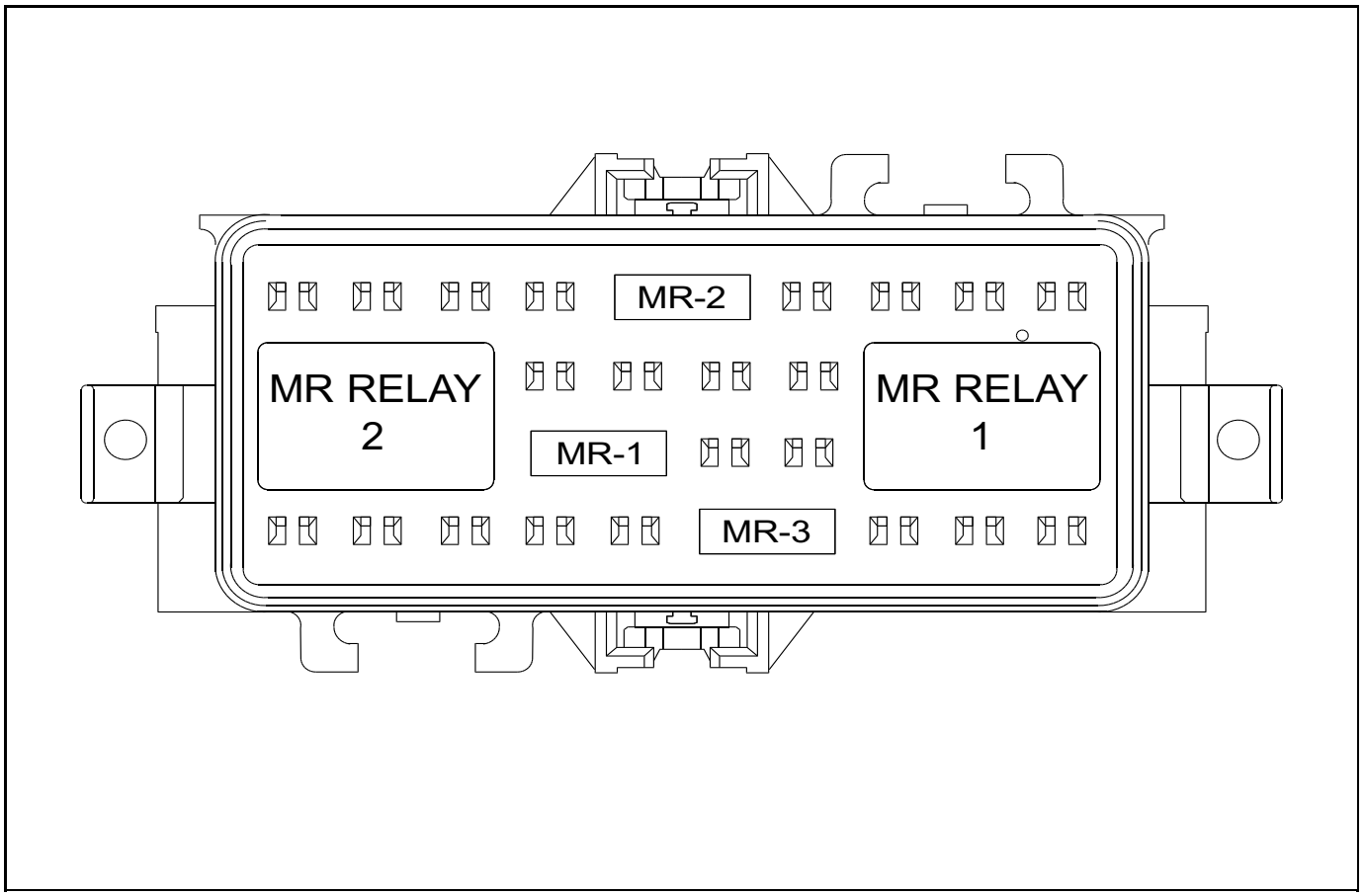
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X53A Fuse Block - Rear Body

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	OG	740	Battery Positive Voltage	III	—
2	0.8	TN	294	Door Lock Actuator Unlock Control	III	—
3	0.5	L-BU/WH	244	Passenger Door Lock Switch Lock Control	III	—
5	0.5	OG	5810	Park Enable Signal	III	—
6	0.8	OG	740	Battery Positive Voltage	III	—
7	0.8	PK	1092	Left Rear Door Lock Actuator Unlock Control	III	—
8	20	L-GN	1391	Left Front Door Lock Relay Control	III	—
10	0.5	OG	5810	Park Enable Signal	III	—
11	0.8	OG	740	Battery Positive Voltage	III	—
12	0.8	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	III	—
13	0.5	L-BU	1344	Rear Compartment Lid Release Relay Control	III	—
15	0.5	OG	5810	Park Enable Signal	III	—
16	0.8	RD	1732	Electronic Control Unit 12V Reference 3	II	—
17	0.8	D-BU/WH	149	Courtesy Lamp Control	II	—
18	5	RD	1042	Battery Positive Voltage	I	—
19	1	OG	740	Battery Positive Voltage	II	—

X54D Fuse Block - Fuel Heater Top View

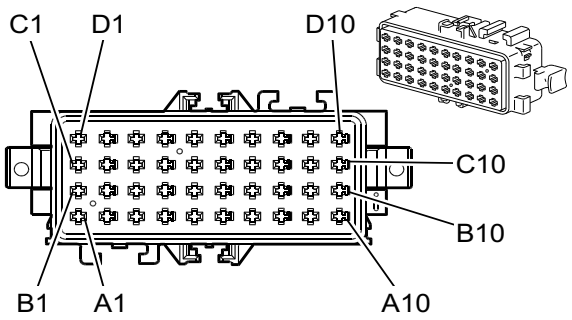


4845613

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	MR-1	F1BA	30A	• E11A Fuel Heater/Water in Fuel Sensor
F2	MR-2	F2BA	30A	• K115 Reductant Control Module
F3	MR-3	F3BA	10A	• K115 Reductant Control Module
Relays				
R1	MR RELAY 1	KR22 Fuel Heater Relay	—	• F1BA
R2	MR RELAY 2	KR121A Reductant Control Module Relay 1	—	• F2BA • F3BA

X54D Fuse Block - Fuel Heater



2002692

Connector Part Information

Harness Type: Engine
OEM Connector: 13607200
Service Connector: Service by Component - See Part Catalog
Description: 40-Way F 2.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300440	J-35616-35 (VT)	J-38125-557	Not Required	Not Required	Not Required	Not Required

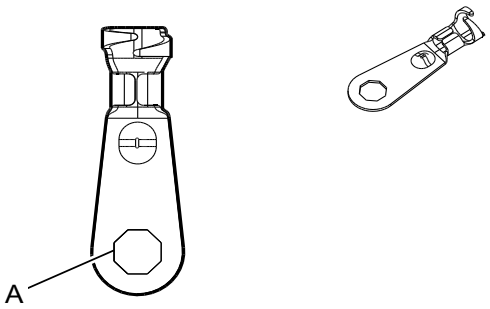
X54D Fuse Block - Fuel Heater

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A5	—	—	—	Not Occupied	—	—
A6	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
A7	2	RD/WH	5440	Battery Positive Voltage	I	—
A8 - A10	—	—	—	Not Occupied	—	—
B1	2.5	RD/YE	2	Battery Positive Voltage	I	—
B2	—	—	—	Not Occupied	—	—
B3	0.5	BU	3017	Fuel Heater Relay Control 1	I	—
B4	2.5	VT/L-GN	355	Fuel Filter Heater Voltage	I	—
B5	2.5	RD/WH	6440	Battery Positive Voltage	I	—
B6 - B7	—	—	—	Not Occupied	—	—
B8	2.5	RD/YE	2	Battery Positive Voltage	I	—
B9	—	—	—	Not Occupied	—	—
B10	0.5	L-GN/D-BU	3889	DEF Power Module Relay Control	I	—
C1	2.5	RD/YE	2	Battery Positive Voltage	I	—
C2	—	—	—	Not Occupied	—	—
C3	2.5	RD/WH	6440	Battery Positive Voltage	I	—
C4 - C7	—	—	—	Not Occupied	—	—
C8	2.5	RD/YE	2	Battery Positive Voltage	I	—
C9	—	—	—	Not Occupied	—	—
C10	2.5	RD/WH	5440	Battery Positive Voltage	I	—

X54D Fuse Block - Fuel Heater (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D1 - D4	—	—	—	Not Occupied	—	—
D5	2.5	BU	3921	DEF Heater Supply 1	I	—
D6	2.5	RD/WH	5440	Battery Positive Voltage	I	—
D7 - D10	—	—	—	Not Occupied	—	—

X60A Junction Block - Underhood



3214043

Connector Part Information

Harness Type: Auxiliary Battery Cable
OEM Connector: 12146361
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

Terminal Part Information

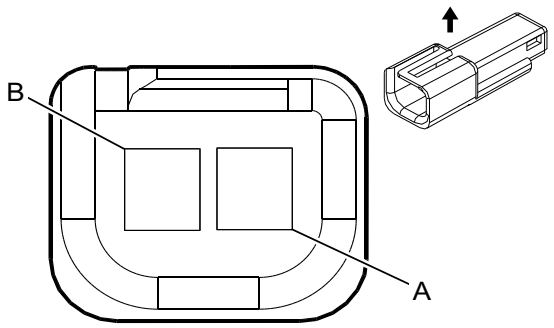
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

X60A Junction Block - Underhood

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	32	RD/YE	2	Battery Positive Voltage	I	—

Component Connector End Views

A3L Sunshade - Left



35441

Connector Part Information

Harness Type: Front Headliner
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (BK)

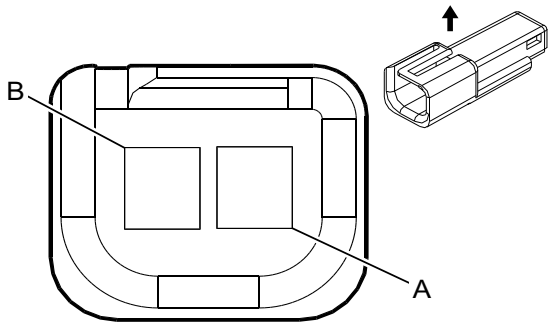
Terminal Part Information

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

A3L Sunshade - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	OG	1732	Electronic Control Unit 12V Reference 3	I	—
B	—	BK	1850	Ground	I	—

A3R Sunshade - Right



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

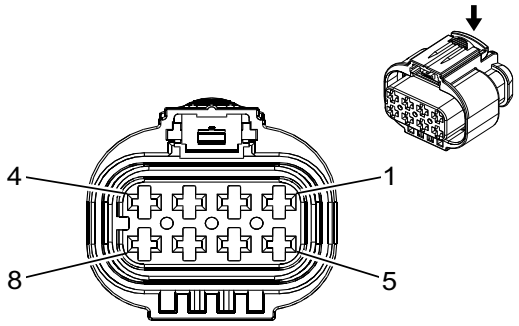
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A3R Sunshade - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	OG	1732	Electronic Control Unit 12V Reference 3	I	YF7
	0.5	OG	1732	Electronic Control Unit 12V Reference 3	I	-YF7
B	0.5	BK	1850	Ground	I	—

A7 Fuel Pump and Level Sensor Assembly



3749581

Connector Part Information

Harness Type: Chassis
OEM Connector: 33180017
Service Connector: 19355165
Description: 8-Way F 2.8 Series, Sealed (BK)

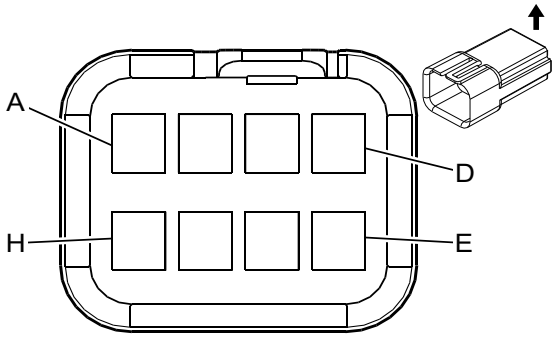
Terminal Part Information

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

A7 Fuel Pump and Level Sensor Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	2.5	GY	120	Fuel Pump Control	I	—
4	2 2.5	BK BK/L-GN	150 1580	Ground Fuel Pump Low Reference	I I	LWN -LWN
5	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	—
6	0.5 0.5	BK/L-GN BK/BN	6281 2759	Fuel Level Sensor Low Reference Fuel Tank Pressure Sensor Low Reference	I I	LWN -LWN
7 - 8	—	—	—	Not Occupied	—	—

A9A Outside Rearview Mirror - Driver



62434

Connector Part Information

Harness Type: Driver Door
OEM Connector: 12065396
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series (NA)

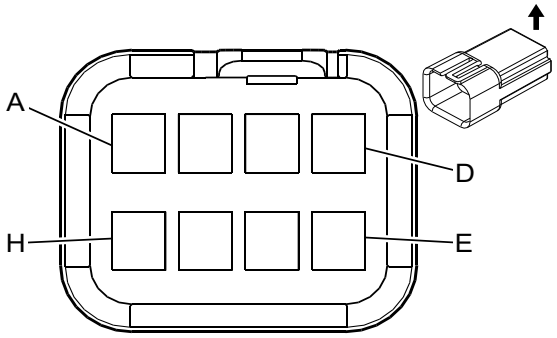
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

A9A Outside Rearview Mirror - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	450	Ground	I	—
B	0.5 0.5	GY/YE L-BU/WH	5853 1314	Driver Side Object Detection LED Signal 1 Left Front Turn Signal Lamp Control	II I	UFT -UFT
C	0.8	OG	2267	Mirror Heating Element Control	I	—
D	0.5	BK	450	Ground	I	—
E	0.35	YE	88	Left Mirror Motor Up Control	I	—
F	0.35	L-GN	89	Left Mirror Motor Down Control	I	—
G	0.35	WH	81	Left Mirror Motor Right Control	I	—
H	0.35	YE	88	Left Mirror Motor Up Control	I	—

A9B Outside Rearview Mirror - Passenger



62434

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 12162427
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series (NA)

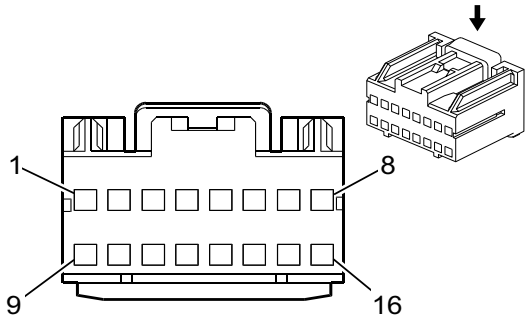
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

A9B Outside Rearview Mirror - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	1850	Ground	I	—
B	0.5 0.5	GY D-BU/WH	5861 1315	Passenger Side Object Detection LED Signal 1 Right Front Turn Signal Lamp Control	I I	UFT -UFT
C	0.8	OG	2267	Mirror Heating Element Control	I	—
D	0.5	BK	1850	Ground	I	—
E	0.35	BN/WH	1498	Right Mirror Motor Up Control	I	—
F	0.35	PU/WH	889	Right Mirror Motor Down Control	I	—
G	0.35	OG/WH	881	Right Mirror Motor Right Control	I	—
H	0.35	BN/WH	1498	Right Mirror Motor Up Control	I	—

A10 Inside Rearview Mirror



1711009

Connector Part Information

Harness Type: Headliner
OEM Connector: 15441350
Service Connector: 15306351
Description: 16-Way F 100A Micro-Pack Series (BK)

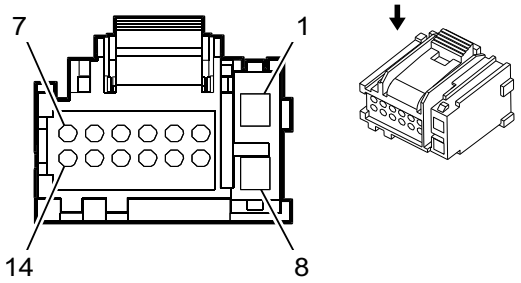
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575548	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	J	J

A10 Inside Rearview Mirror

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH	7641	Camera Rear Vision Signal +	I	—
7	0.5	D-BU	7642	Camera Rear Vision Signal (-)	I	—
8	0.5	BK/WH	351	Signal Ground	I	—
9	0.5	L-GN	24	Backup Lamp Control	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—
14 - 16	—	—	—	Not Occupied	—	—

A11 Radio X1



2684742

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13545675
Service Connector: 13580448
Description: 14-Way F 0.64 Micro-Pack, 150 GT Series (BK)

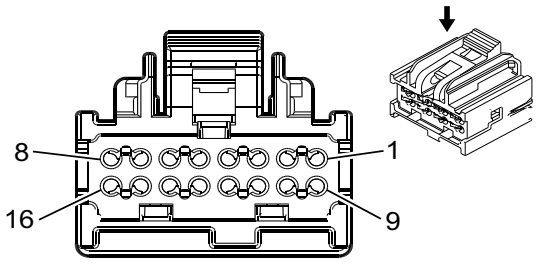
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575535	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
III	13579976	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M

A11 Radio X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	RD/WH	340	Battery Positive Voltage	II	—
2	0.8	D-BU	1857	Left Front Midrange Speaker Control (+)	III	—
3	0.8	OG	1853	Right Front Midrange Speaker Control (+)	III	—
4	0.35 0.8	PK GY	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	I III	UE1 -UE1
5	0.35 0.8	PK/BK D-GN	5152 654	Voice Recognition Audio Low Reference Cellular Telephone Microphone Low Reference	I III	UE1 -UE1
6	—	—	—	Not Occupied	—	—
7	0.35	YE	6817	LED Backlight Dimming Control	I	—
8	1	BK/WH	351	Signal Ground	II	—
9	0.8	L-BU	1957	Left Front Midrange Speaker (-) Low Reference	III	—
10	0.8	D-GN	1953	Right Front Midrange Speaker (-) Low Reference	III	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
14	—	—	—	Not Occupied	—	—

A11 Radio X2



2127936

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13567860
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series, Sealed (PU)

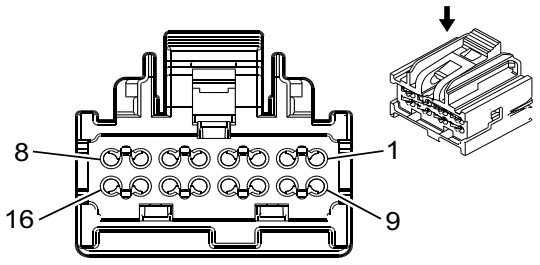
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575535	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M
II	13579976	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M

A11 Radio X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	367	Remote Radio Left Audio Signal	I	—
2	0.35	D-GN/WH	368	Remote Radio Right Audio Signal 1	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.8	TN	1859	Left Rear Midrange Speaker Control (+)	II	—
6	0.8	TN	1855	Right Rear Midrange Speaker Control (+)	II	—
7	0.35 0.8	D-BU D-BU	658 658	Cellular Telephone Voice Signal Cellular Telephone Voice Signal	I II	UI8 -UI8
8	—	—	—	Not Occupied	—	—
9	0.35	TN/WH	372	Remote Radio Audio (-) Low Reference	I	—
10	0.35	GY	388	Remote Radio Right Audio Signal 2	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.8	WH	1959	Left Rear Midrange Speaker (-) Low Reference	II	—
14	0.8	OG	1955	Right Rear Midrange Speaker (-) Low Reference	II	—
15	0.35 0.8	L-BU/BK L-BU/BK	659 659	Cellular Telephone Voice Low Reference Cellular Telephone Voice Low Reference	I II	UI8 -UI8
16	—	—	—	Not Occupied	—	—

A12 Digital Radio Receiver Control Module X1



2127936

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13568238
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series, Sealed (BK)

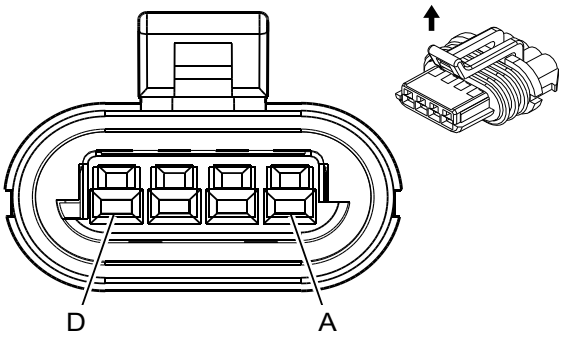
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575535	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M
II	13579976	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M

A12 Digital Radio Receiver Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	TN/WH	372	Remote Radio Audio (-) Low Reference	I	—
2	0.35	BN/WH	367	Remote Radio Left Audio Signal	I	—
3	0.35	D-GN/WH	368	Remote Radio Right Audio Signal 1	I	—
4	0.35	GY	388	Remote Radio Right Audio Signal 2	I	—
5	0.5	D-GN	5060	Low Speed GMLAN Serial Data	II	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.8	BK/WH	351	Signal Ground	II	—
10	—	—	—	Not Occupied	—	—
11	0.35	Bare	1573	Front Audio Low Reference	I	—
12 - 15	—	—	—	Not Occupied	—	—
16	0.8	RD/WH	340	Battery Positive Voltage	II	—

A23D Door Latch Assembly - Driver X1



684948

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15354716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

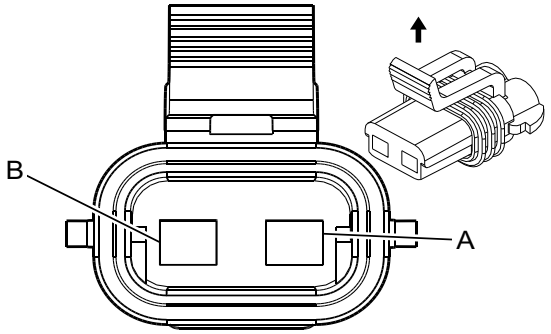
Terminal Part Information

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

A23D Door Latch Assembly - Driver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	TN	126	Left Front Door Open Switch Signal	I	—
B	0.35	GY/BK	745	Left Front Door Ajar Switch Signal	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	BK	450	Ground	I	—

A23D Door Latch Assembly - Driver X2



68721

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

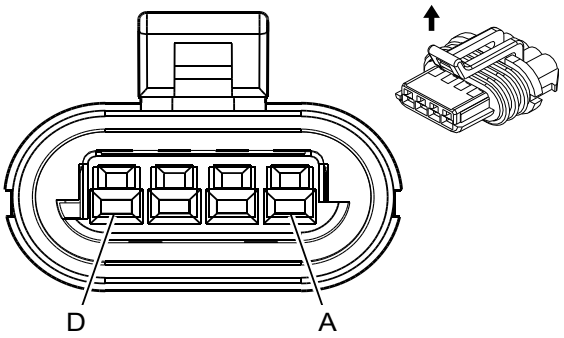
Terminal Part Information

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

A23D Door Latch Assembly - Driver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	694	Driver Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

A23P Door Latch Assembly - Passenger X1



684948

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15354716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

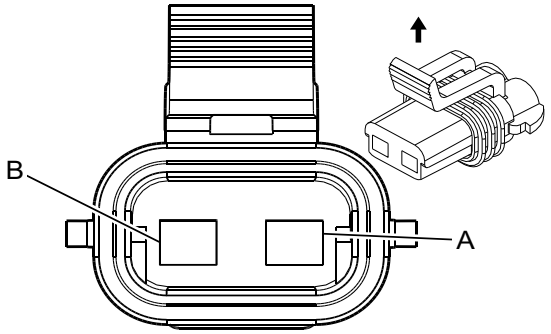
Terminal Part Information

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

A23P Door Latch Assembly - Passenger X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	—	—	—	Not Occupied	—	—
C	0.35	TN/WH	746	Right Front Door Ajar Switch Signal	I	—
D	0.35	L-GN	1177	Right Front Door Open Switch Signal	I	—

A23P Door Latch Assembly - Passenger X2



68721

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

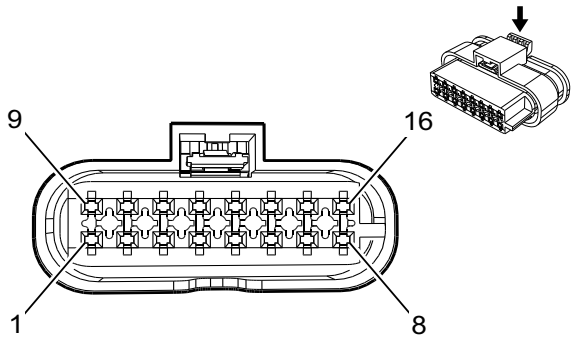
Terminal Part Information

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

A23P Door Latch Assembly - Passenger X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

A39 Reductant Fluid Reservoir Assembly



4259227

Connector Part Information

Harness Type: Emission Reductant Fluid Tank Reservoir
OEM Connector: 805-587-541
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 1.2 Multilock Series (BK)

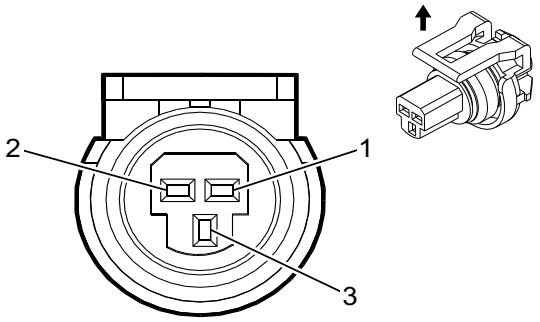
Terminal Part Information

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

A39 Reductant Fluid Reservoir Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG	3244	DEF Tank Temperature Sensor Signal	I	—
2	—	GN	3245	DEF Tank Temperature Sensor Low Reference	I	—
3	—	YE	3107	DEF Pressure Sensor Low Reference	I	—
4	—	GY	3108	DEF Pressure Sensor Signal	I	—
5	—	BU	3106	DEF Pressure Sensor 5V Reference	I	—
6	—	VT	3029	DEF Tank Level Sensor Low Reference	I	—
7	—	BU	3876	DEF Smart Pump Control Phase 3	I	—
8	—	GN	3875	DEF Smart Pump Control Phase 2	I	—
9	—	YE	3921	DEF Heater Supply 1	I	—
10	—	—	—	Not Occupied	—	—
11	—	VT	4318	DEF Tank Heater Low Control	I	—
12	—	—	—	Not Occupied	—	—
13	—	VT	6136	Control	I	—
14	—	BU	3028	DEF Tank Level Sensor Signal	I	—
15	—	BK	3104	DEF Smart Pump Low Reference	I	—
16	—	OG	3103	DEF Smart Pump Control	I	—

B1 A/C Refrigerant Pressure Sensor



2909191

Connector Part Information

Harness Type: Engine
OEM Connector: 13846842
Service Connector: 19368669
Description: 3-Way F 150 GT Series, Sealed (BK)

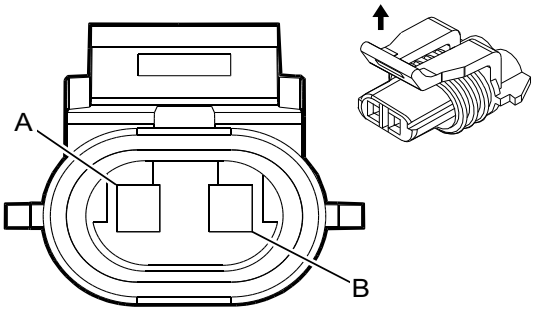
Terminal Part Information

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

B1 A/C Refrigerant Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	TN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	L96/LC8/LWN
	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	LV1
2	0.8	GY	2700	A/C Pressure Sensor 5V Reference	I	L96/LC8/LWN
	0.5	BN/RD	2700	A/C Pressure Sensor 5V Reference	I	LV1
3	0.8	OG/BK	380	A/C Refrigerant Pressure Sensor Signal	I	L96/LC8/LWN
	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	I	LV1

B1B A/C Low Side Pressure Switch



537107

Connector Part Information

Harness Type: Engine
OEM Connector: 12052644
Service Connector: 15306302
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

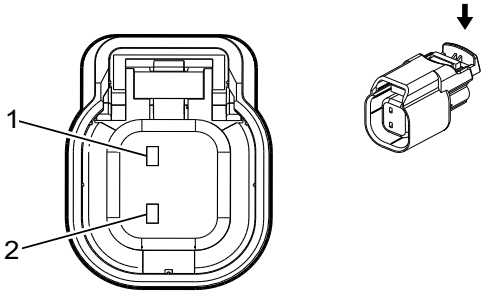
Terminal Part Information

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

B1B A/C Low Side Pressure Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	L-GN	66	A/C Request Signal	I	—
B	0.5	L-GN/WH	66	A/C Request Signal	I	—

B5LF Wheel Speed Sensor - Left Front



2792100

Connector Part Information

Harness Type: Chassis
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

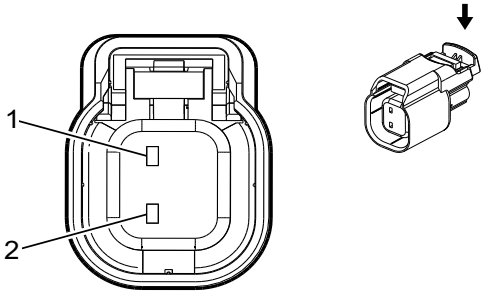
Terminal Part Information

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

B5LF Wheel Speed Sensor - Left Front

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

B5LR Wheel Speed Sensor - Left Rear



2792100

Connector Part Information

Harness Type: Chassis
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

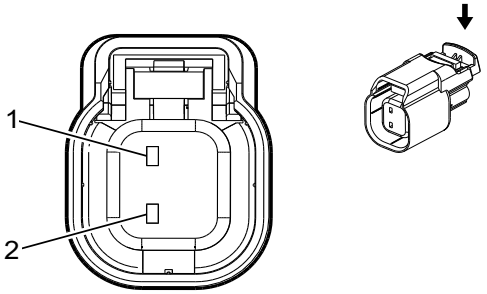
Terminal Part Information

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

B5LR Wheel Speed Sensor - Left Rear

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

B5RF Wheel Speed Sensor - Right Front (LV1/LC8)



2792100

Connector Part Information

Harness Type: Chassis
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

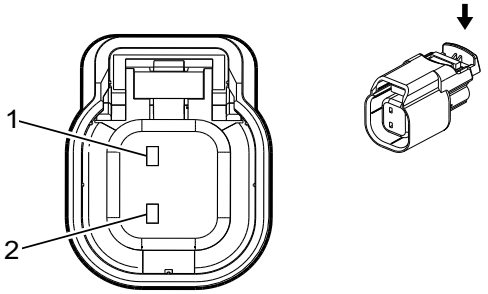
Terminal Part Information

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

B5RF Wheel Speed Sensor - Right Front (LV1/LC8)

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

B5RF Wheel Speed Sensor - Right Front (LWN)



2792100

Connector Part Information

Harness Type: Engine
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

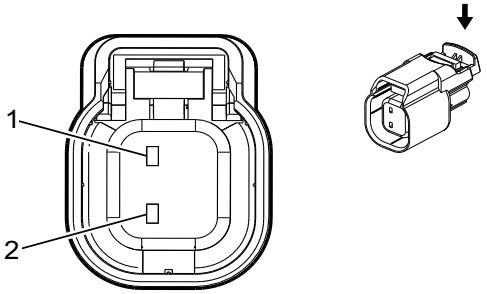
Terminal Part Information

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

B5RF Wheel Speed Sensor - Right Front (LWN)

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

B5RR Wheel Speed Sensor - Right Rear



2792100

Connector Part Information

Harness Type: Chassis
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

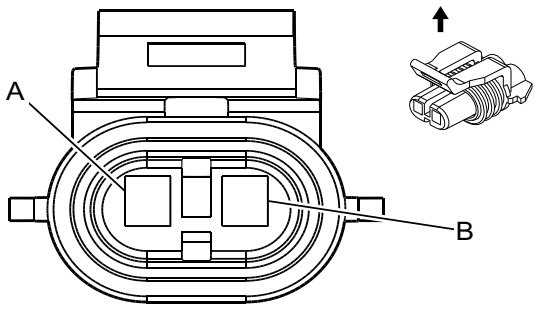
Terminal Part Information

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

B5RR Wheel Speed Sensor - Right Rear

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

B9 Ambient Air Temperature Sensor (UFA)



684793

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12052642
Service Connector: 12101856
Description: 2-Way F 150 Metri-Pack Series, Sealed (L-GN)

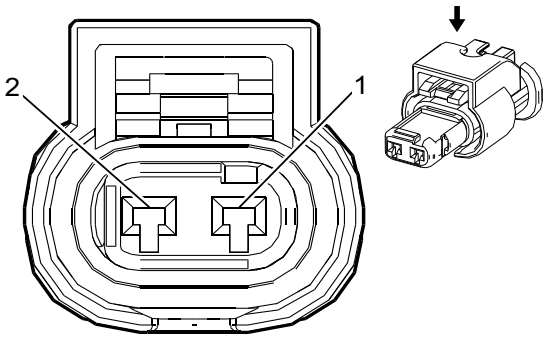
Terminal Part Information

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

B9 Ambient Air Temperature Sensor (UFA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-GN/WH	636	Outside Ambient Air Temperature Sensor Signal	I	LWN
	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-LWN
B	0.5	YE	61	Outside Ambient Temperature Sensor Low Reference	I	LWN
	0.5	BK/D-BU	61	Outside Ambient Temperature Sensor Low Reference	I	-LWN

B9 Ambient Air Temperature Sensor (V22)



2474752

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 13927761
Service Connector: 19300402
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

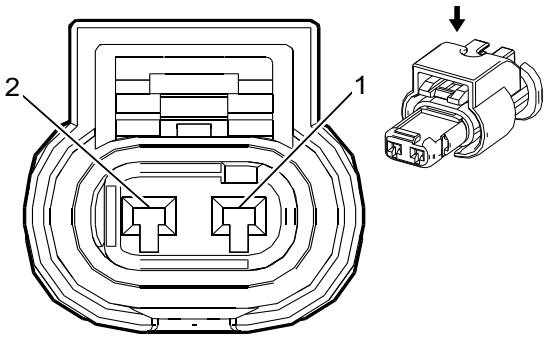
Terminal Part Information

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

B9 Ambient Air Temperature Sensor (V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN/BK	735	Outside Ambient Air Temperature Sensor Signal	I	—
2	0.5	BK/YE	407	Sensor Low Reference	I	—

B9 Ambient Air Temperature Sensor (-V22)



2474752

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 13927761
Service Connector: 19300402
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

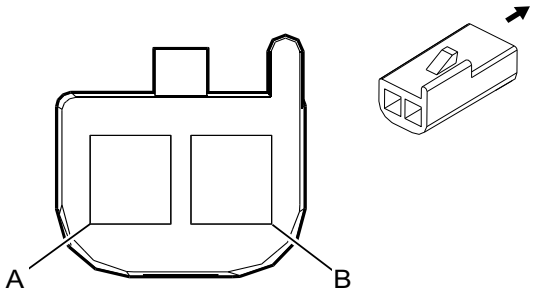
Terminal Part Information

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

B9 Ambient Air Temperature Sensor (-V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN/BK	735	Outside Ambient Air Temperature Sensor Signal	I	—
2	0.5	BK/YE	407	Sensor Low Reference	I	—

B10 Ambient Light Sensor



82383

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series (BK)

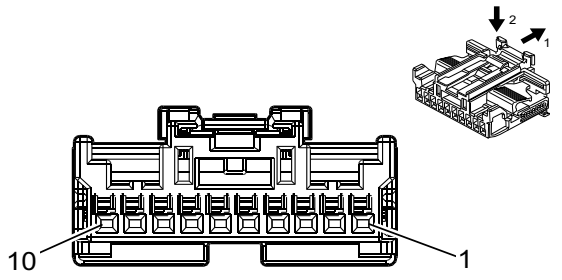
Terminal Part Information

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

B10 Ambient Light Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	WH	278	Ambient Light Sensor Signal	I	—
B	0.35	BK/WH	351	Signal Ground	I	—

B15 Transmission Internal Mode Switch (M5U)



4051038

Connector Part Information

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

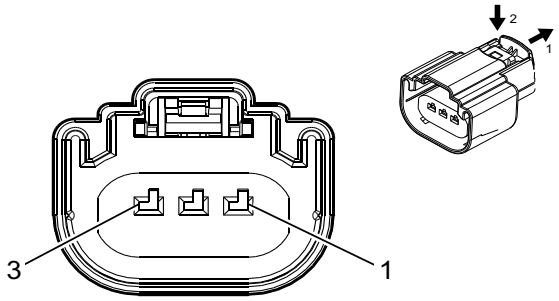
Terminal Part Information

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

B15 Transmission Internal Mode Switch (M5U)

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

B18 Battery Current Sensor



4569745

Connector Part Information

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

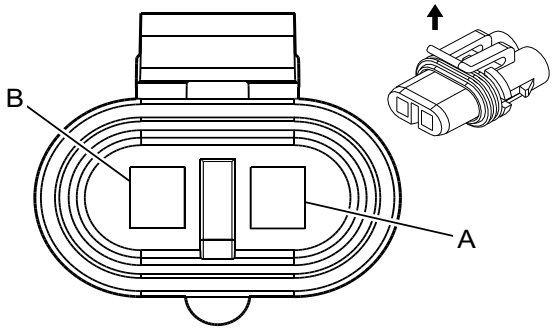
Terminal Part Information

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

B18 Battery Current Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PK	5076	Current Sensor Control	I	—
2	0.5	BN	5077	Current Sensor Low Reference	I	—
3	0.5	WH	5075	Current Sensor Signal	I	—

B19A Brake Booster Fluid Pressure Alarm Switch



646148

Connector Part Information

Harness Type: Brake Fluid Level Switch
OEM Connector: 12020599
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

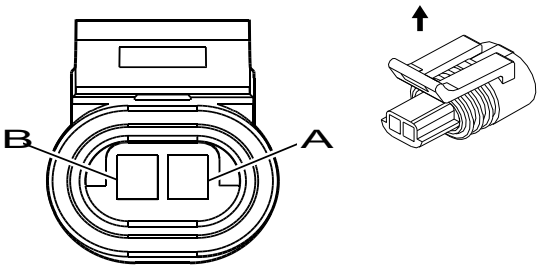
Terminal Part Information

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

B19A Brake Booster Fluid Pressure Alarm Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	TN/WH	33	Brake Warning Indicator Control	I	—
B	0.5	L-BU/BK	1928	Brake Booster Fluid Flow Switch Signal	I	—

B20 Brake Fluid Level Switch (LC8/L96)



655692

Connector Part Information

Harness Type: Engine
OEM Connector: 12162195
Service Connector: 88987993
Description: 2-Way F 150.2 Metri-Pack Series, Sealed (BK)

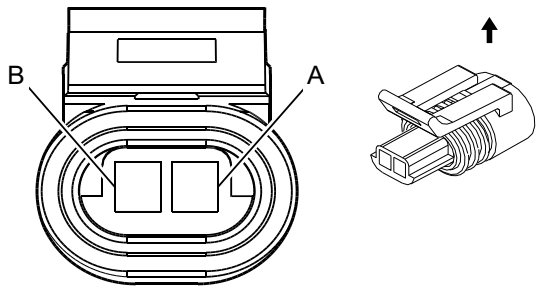
Terminal Part Information

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

B20 Brake Fluid Level Switch (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/WH	1551	Signal Ground	I	—
B	0.5	PU	333	Brake Fluid Level Sensor Signal	I	—

B20 Brake Fluid Level Switch (LWN/LV1)



237066

Connector Part Information

Harness Type: Engine
OEM Connector: 12162194
Service Connector: 88987993
Description: 2-Way F 150.2 Metri-Pack Series, Sealed (BK)

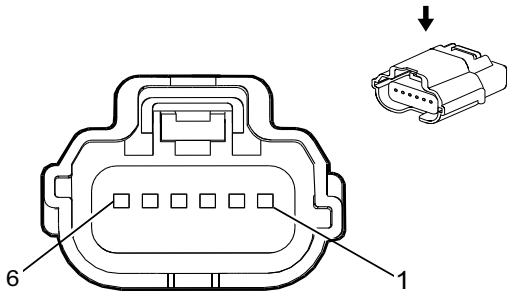
Terminal Part Information

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

B20 Brake Fluid Level Switch (LWN/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BK/WH	1551	Signal Ground	I	LWN
	0.8	BK/WH	1551	Signal Ground	I	-LWN
B	0.75	PU	333	Brake Fluid Level Sensor Signal	I	LWN
	0.8	PU	333	Brake Fluid Level Sensor Signal	I	-LWN

B22 Brake Pedal Position Sensor



3270302

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13893502
Service Connector: 19356496
Description: 6-Way F 64 Series, Sealed (NA)

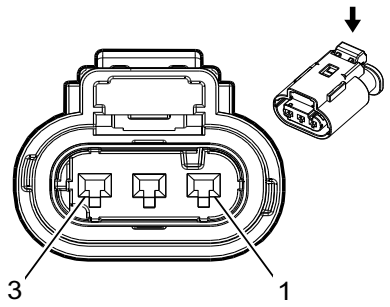
Terminal Part Information

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

B22 Brake Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	5382	Brake Position Sensor Low Reference	I	—
2	0.5	GY	5381	Brake Position Sensor 5V Reference	I	—
3	0.5	TN	5380	Brake Position Sensor Signal	I	—
4	0.5	YE	5361	Brake Apply Sensor Signal	I	—
5	0.5	BN	5360	Brake Apply Sensor Low Reference	I	—
6	0.5	WH	5359	Brake Apply Sensor Control	I	—

B23 Camshaft Position Sensor (LV1)



2717069

Connector Part Information

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

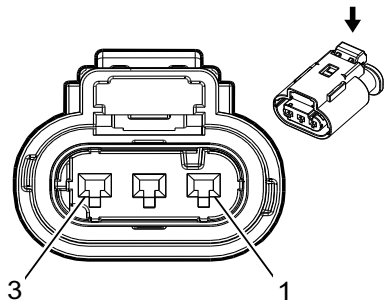
Terminal Part Information

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

B23 Camshaft Position Sensor (LV1)

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

B23 Camshaft Position Sensor (LWN)



2717069

Connector Part Information

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

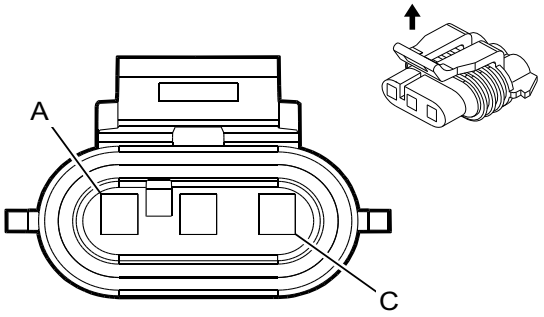
Terminal Part Information

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

B23 Camshaft Position Sensor (LWN)

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

B23 Camshaft Position Sensor (L96/LC8)



516611

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 12059595
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 150 Metri-Pack Series, Sealed (BK)

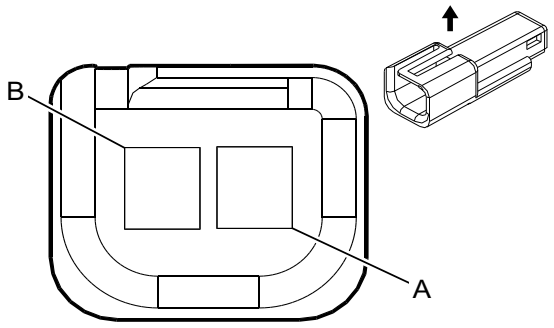
Terminal Part Information

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

B23 Camshaft Position Sensor (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU	6259	Camshaft CAM W Control	I	—
B	0.8	BN	6266	Camshaft CAM W Ground	I	—
C	0.8	D-BU/WH	6265	Camshaft CAM W Signal	I	—

B24 Mobile Telephone Microphone



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

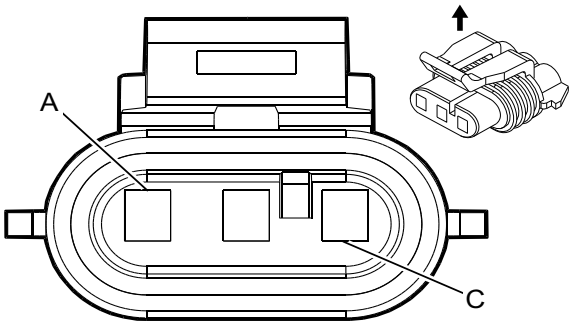
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B24 Mobile Telephone Microphone

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-GN	654	Cellular Telephone Microphone Low Reference	I	—
B	0.8	GY	655	Cellular Telephone Microphone Signal	I	—

B26 Crankshaft Position Sensor (LC8/L96)



684840

Connector Part Information

Harness Type: Engine
OEM Connector: 12129946
Service Connector: 88987997
Description: 3-Way F 150 Metri-Pack Series, Sealed (GY)

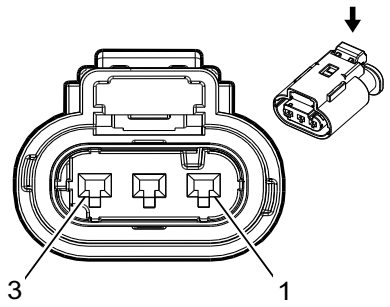
Terminal Part Information

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

B26 Crankshaft Position Sensor (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	WH/BK	6271	Crankshaft 60X Sensor Signal	I	—
B	0.8	GY/BK	6272	Crankshaft 60X Sensor Low Reference	I	—
C	0.8	PU/WH	6270	Crankshaft 60X Sensor 5V Reference	I	—

B26 Crankshaft Position Sensor (LWN/LV1)



2717069

Connector Part Information

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

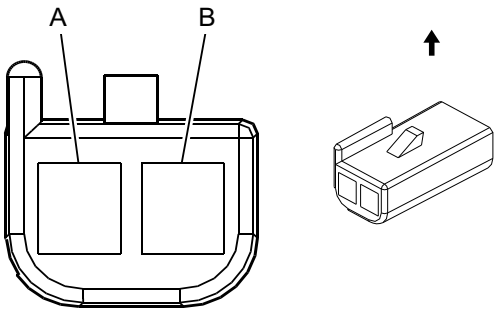
Terminal Part Information

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

B26 Crankshaft Position Sensor (LWN/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	6271	Crankshaft 60X Sensor Signal	I	LV1
	0.5	VT/D-BU	6270	Crankshaft 60X Sensor 5V Reference	I	LWN
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
3	0.5	VT/D-BU	6270	Crankshaft 60X Sensor 5V Reference	I	LV1
	0.5	L-GN	6271	Crankshaft 60X Sensor Signal	I	LWN

B28F Door Ajar Switch - Right Sliding



35451

Connector Part Information

Harness Type: Body
OEM Connector: 12059251
Service Connector: 12101848
Description: 2-Way F 150 Metri-Pack Series (RD)

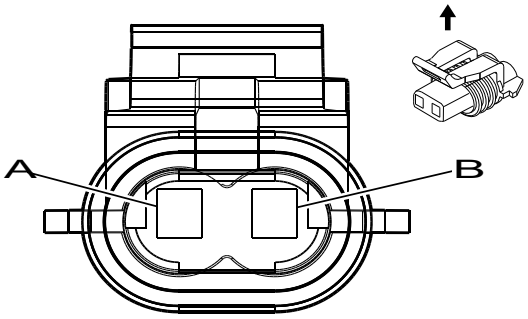
Terminal Part Information

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

B28F Door Ajar Switch - Right Sliding

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	0.35	YE/BK	1181	Right Rear Door Open Switch Signal	I	—

B33 Engine Coolant Level Switch



655783

Connector Part Information

Harness Type: Engine
OEM Connector: 15324243
Service Connector: 15306302
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

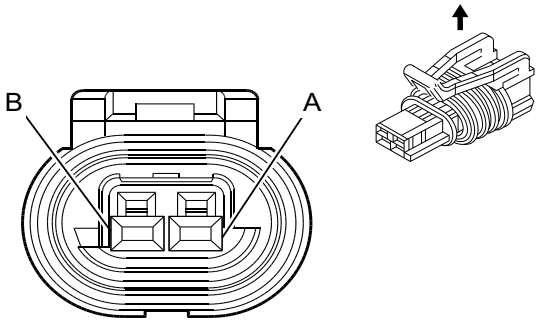
Terminal Part Information

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

B33 Engine Coolant Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	L-GN	1478	Coolant Level Switch Signal	I	—
B	0.5	BK/WH	351	Signal Ground	I	—

B34 Engine Coolant Temperature Sensor (LC8/L96)



1538760

Connector Part Information

Harness Type: Engine
OEM Connector: 15449028
Service Connector: 88987993
Description: 2-Way F 150 GT Series, Sealed (BK)

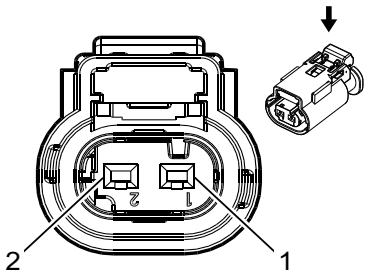
Terminal Part Information

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

B34 Engine Coolant Temperature Sensor (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	2761	Coolant Temperature Sensor Low Reference	I	—
B	0.8	YE	410	Engine Coolant Temperature Sensor Signal	I	—

B34 Engine Coolant Temperature Sensor (LV1)



2717066

Connector Part Information

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

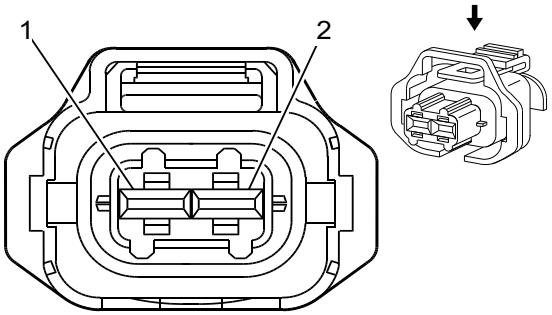
Terminal Part Information

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

B34 Engine Coolant Temperature Sensor (LV1)

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

B203 Radiator Coolant Temperature Sensor (LWN)



1403270

Connector Part Information

Harness Type: Engine
OEM Connector: 15363766
Service Connector: 88953309
Description: 2-Way F 2.8 Junior Power Timer Series, Sealed (BK)

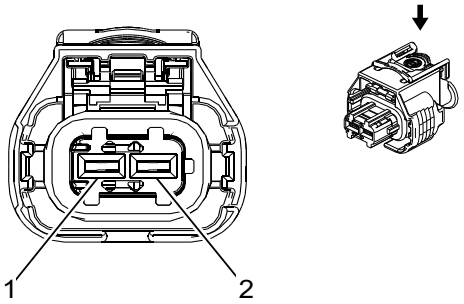
Terminal Part Information

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

B203 Radiator Coolant Temperature Sensor (LWN)

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

B35 Engine Oil Level Switch (LV1)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

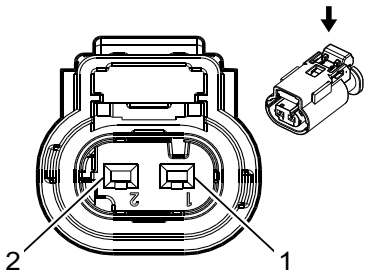
Terminal Part Information

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

B35 Engine Oil Level Switch (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK/WH	1551	Signal Ground	I	—
2	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	—

B35 Engine Oil Level Switch (LWN)



2717066

Connector Part Information

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

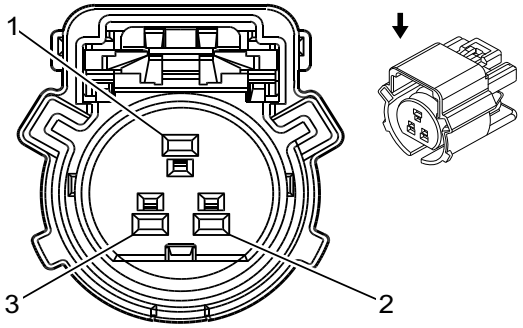
Terminal Part Information

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

B35 Engine Oil Level Switch (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	—
2	0.75	BK/WH	1551	Signal Ground	I	—

B37B Engine Oil Pressure Sensor (LC8/L96)



2159957

Connector Part Information

Harness Type: Engine
OEM Connector: 13589761
Service Connector: 13501882
Description: 3-Way F 150 GT Series, Sealed (BK)

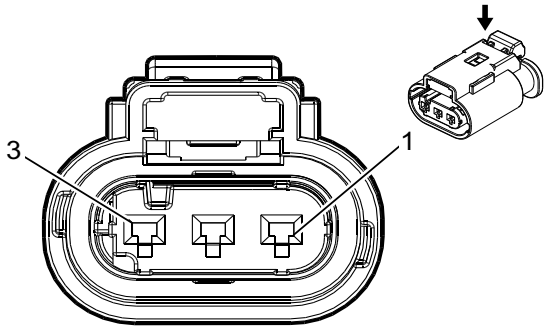
Terminal Part Information

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

B37B Engine Oil Pressure Sensor (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	TN/WH	331	Oil Pressure Sensor Signal	I	—
2	0.8	GY	2705	Oil Pressure Sensor 5V Reference	I	—
3	0.8	BK	2755	Oil Pressure Sensor Low Reference	I	—

B37B Engine Oil Pressure Sensor (LWN/LV1)



3240107

Connector Part Information

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

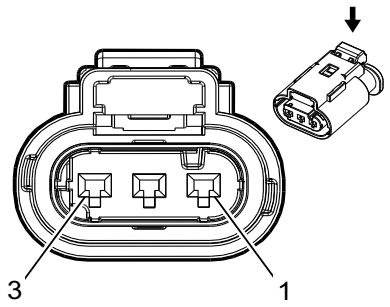
Terminal Part Information

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

B37B Engine Oil Pressure Sensor (LWN/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	—
3	0.5	WH/RD	2705	Oil Pressure Sensor 5V Reference	I	—

B47 Fuel Pressure Sensor (CUTAWAY)



2717069

Connector Part Information

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

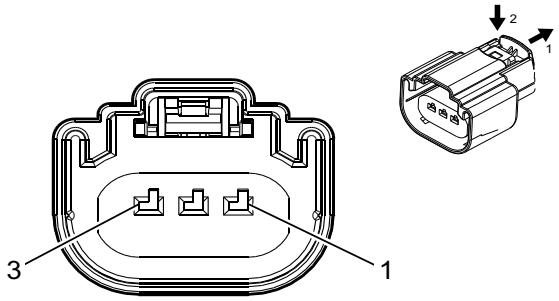
Terminal Part Information

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

B47 Fuel Pressure Sensor (CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
2	0.5	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	I	—
3	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	—

B47 Fuel Pressure Sensor (-CUTAWAY)



4569745

Connector Part Information

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

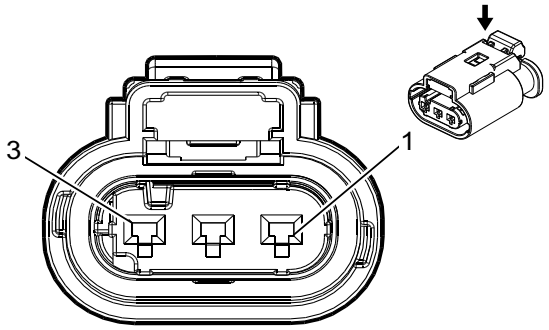
Terminal Part Information

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

B47 Fuel Pressure Sensor (-CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	—
2	0.5	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	I	—
3	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—

B47B Fuel Rail Pressure Sensor (LV1)



3240107

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 10010344
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

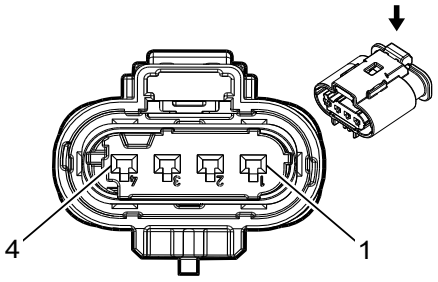
Terminal Part Information

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

B47B Fuel Rail Pressure Sensor (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/L-GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
2	0.5	D-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	—
3	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—

B47B Fuel Rail Pressure Sensor (LWN)



2717079

Connector Part Information

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

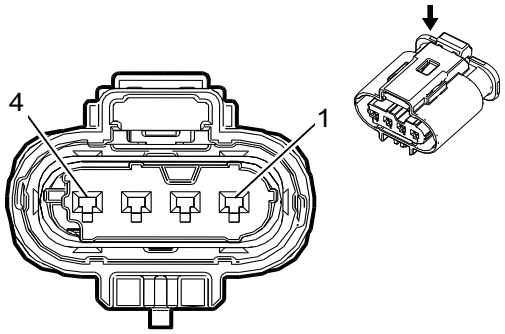
Terminal Part Information

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

B47B Fuel Rail Pressure Sensor (LWN)

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/L-GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
4	0.5	D-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1



3240113

Connector Part Information

Harness Type: Engine
OEM Connector: 13869004
Service Connector: 19301716
Description: 4-Way F 1.2 Multilock Series, Sealed (D-GY)

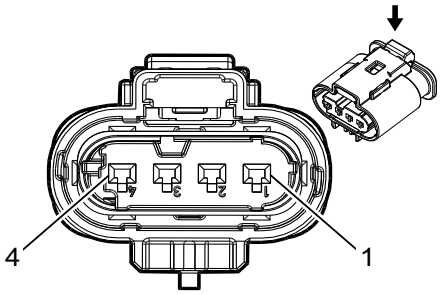
Terminal Part Information

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

B52C Heated Oxygen Sensor - Bank 1 Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	LC8/L96
	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	LV1
2	0.8	PK	539	Run/Crank Ignition 1 Voltage	I	LC8/L96
	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	I	LV1
3	0.8	TN	1664	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	LC8/L96
	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	LV1
4	0.8	PU/WH	1665	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	LC8/L96
	0.5	VT/WH	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	LV1

B52D Heated Oxygen Sensor - Bank 1 Sensor 2



2717096

Connector Part Information

Harness Type: Engine
OEM Connector: 13815348
Service Connector: 13587298
Description: 4-Way F 1.2 Multilock Series, Sealed (L-GY)

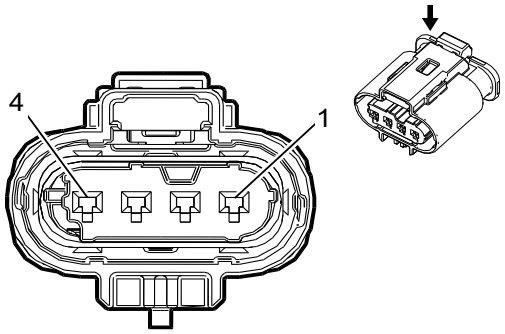
Terminal Part Information

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

B52D Heated Oxygen Sensor - Bank 1 Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	LC8/L96
	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	LV1
2	0.8	PK	1539	Run/Crank Ignition 1 Voltage	I	LC8/L96
	0.5	VT/WH	1539	Run/Crank Ignition 1 Voltage	I	LV1
3	0.8	TN/WH	1669	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	LC8/L96
	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	LV1
4	0.8	PU/WH	1668	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	LC8/L96
	0.5	VT/D-BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	LV1

B52E Heated Oxygen Sensor - Bank 2 Sensor 1



3240113

Connector Part Information

Harness Type: Engine
OEM Connector: 13869004
Service Connector: 19301716
Description: 4-Way F 1.2 Multilock Series, Sealed (D-GY)

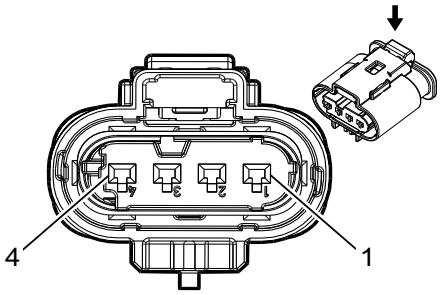
Terminal Part Information

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

B52E Heated Oxygen Sensor - Bank 2 Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	L-GN	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	LC8/L96
	0.5	L-GN	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	LV1
2	0.8	PK	539	Run/Crank Ignition 1 Voltage	I	LC8/L96
	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	I	LV1
3	0.8	TN	1667	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	LC8/L96
	0.5	YE/VT	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	LV1
4	0.8	PU	1666	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	LC8/L96
	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	LV1

B52F Heated Oxygen Sensor - Bank 2 Sensor 2



2717096

Connector Part Information

Harness Type: Engine
OEM Connector: 13815348
Service Connector: 13587298
Description: 4-Way F 1.2 Multilock Series, Sealed (L-GY)

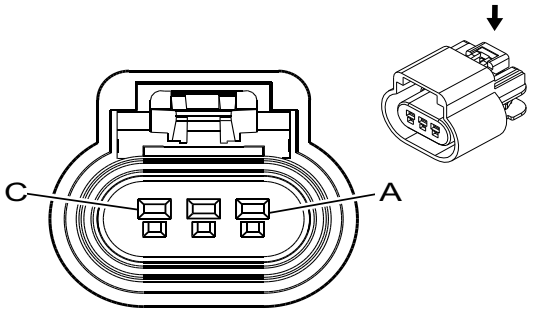
Terminal Part Information

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

B52F Heated Oxygen Sensor - Bank 2 Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	OG/WH	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	LC8/L96
	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	LV1
2	0.8	PK	1539	Run/Crank Ignition 1 Voltage	I	LC8/L96
	0.5	VT/WH	1539	Run/Crank Ignition 1 Voltage	I	LV1
3	0.8	TN	1671	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	LC8/L96
	0.5	YE/D-BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	LV1
4	0.8	PU	1670	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	LC8/L96
	0.5	VT/L-GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	LV1

B55 Engine Hood Switch



646415

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 13519047
Service Connector: 13580871
Description: 3-Way F 150 GT Series, Sealed (BK)

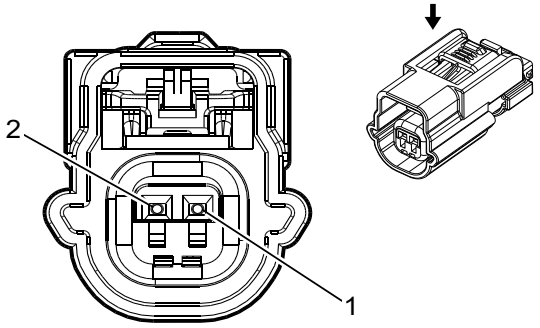
Terminal Part Information

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

B55 Engine Hood Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	PK/BK	109	Hood Ajar Switch Signal	I	LWN
	0.5	BN/L-GN	109	Hood Ajar Switch Signal	I	-LWN
B	0.5	PU	5531	Hood Closed Switch Signal	I	LWN
	0.5	BK/BN	5531	Hood Closed Switch Signal	I	-LWN
C	0.5	BK	250	Ground	I	—

B59 Front Impact Sensor



3556418

Connector Part Information

Harness Type: EFS Jumper
OEM Connector: 89047492
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed (L-GY)

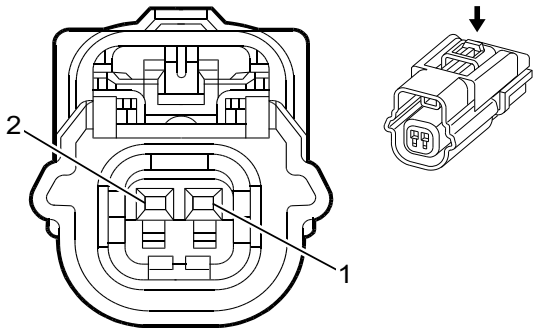
Terminal Part Information

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

B59 Front Impact Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN/WH	6618	Middle Front Discriminating Sensor Signal	I	—
2	—	D-BU/WH	6619	Middle Front Discriminating Sensor Low Reference	I	—

B63LF Side Impact Sensor - Left Front (ASF)



1664592

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

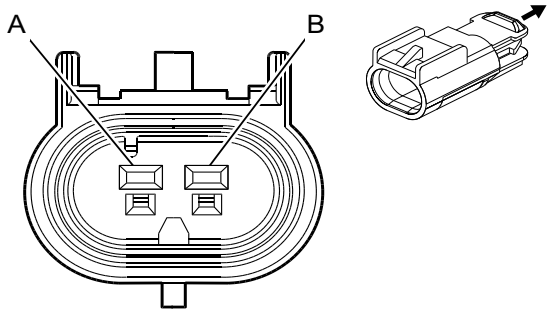
Terminal Part Information

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

B63LF Side Impact Sensor - Left Front (ASF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	2132	Left Front Side Impact Sensing Module Signal	I	—
2	0.5	PU/WH	6628	Left Front Side Impact Sensing Module Low Reference	I	—

B63LF Side Impact Sensor - Left Front (-ASF)



681875

Connector Part Information

Harness Type: Driver Door
OEM Connector: 13510099
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 GT Series, Sealed (BK)

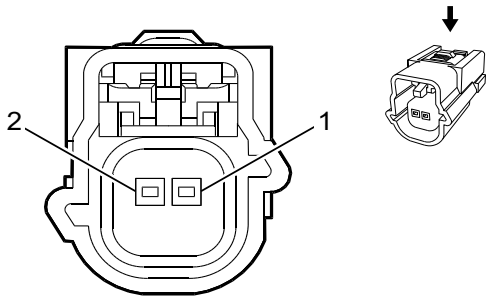
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B63LF Side Impact Sensor - Left Front (-ASF)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/WH	6628	Left Front Side Impact Sensing Module Low Reference	I	—
B	0.5	WH	2132	Left Front Side Impact Sensing Module Signal	I	—

B63LR Side Impact Sensor - Left Rear



2179777

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed (D-GY)

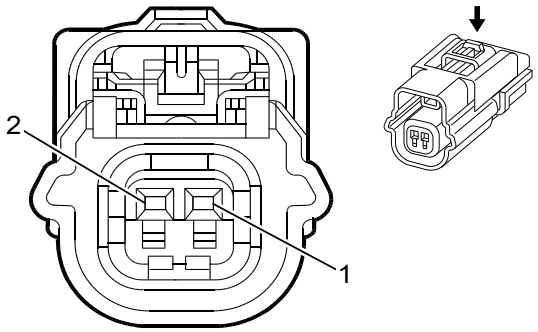
Terminal Part Information

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

B63LR Side Impact Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-GN/WH	6620	Left Middle Side Impact Sensing Module Signal	I	—
2	0.5	GY/BK	6621	Left Middle Side Impact Sensing Module Low Reference	I	—

B63RF Side Impact Sensor - Right Front



1664592

Connector Part Information

Harness Type: Passenger Side Impact Sensor
OEM Connector: 89047381
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

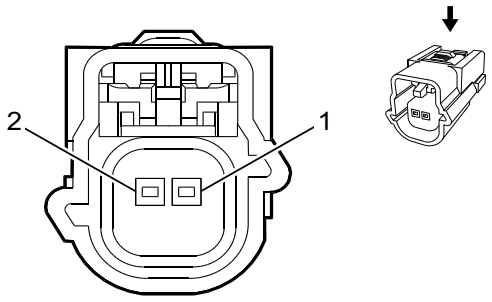
Terminal Part Information

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

B63RF Side Impact Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	2134	Right Front Side Impact Sensing Module Signal	I	—
2	—	VT/WH	6629	Right Front Side Impact Sensing Module Low Reference	I	—

B63RR Side Impact Sensor - Right Rear



2179777

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13593078
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed (L-GY)

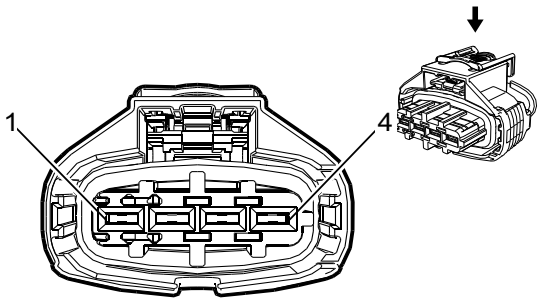
Terminal Part Information

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

B63RR Side Impact Sensor - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-BU/BK	6624	Right Middle Side Impact Sensing Module Signal	I	—
2	0.5	L-GN/WH	6625	Right Middle Side Impact Sensing Module Low Reference	I	—

B65 Intake Manifold Pressure and Air Temperature Sensor



2487930

Connector Part Information

Harness Type: Intake Manifold Pressure and Air Temperature Sensor Jumper
OEM Connector: 13343438
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 2.8 Series, Sealed (BK)

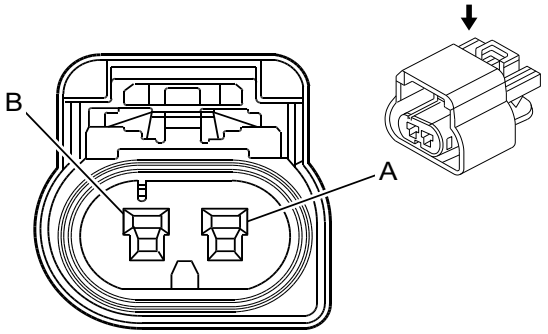
Terminal Part Information

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

B65 Intake Manifold Pressure and Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK/L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
2	—	BN	7348	Induction Air Temperature Sensor 2 Signal	I	—
3	—	GY/RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
4	—	L-GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B68A Knock Sensor 1 (LC8/L96)



1232999

Connector Part Information

Harness Type: Engine
OEM Connector: 15374222
Service Connector: 13580877
Description: 2-Way F 150 GT Series, Sealed (NA)

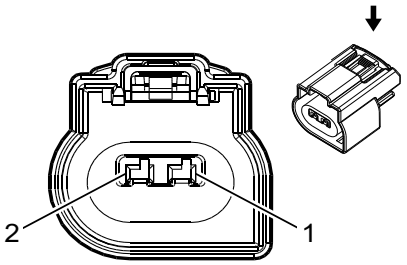
Terminal Part Information

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

B68A Knock Sensor 1 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU	496	Knock Sensor Signal 1	I	—
B	0.8	GY	1716	Knock Sensor Low Reference 1	I	—

B68A Knock Sensor 1 (LV1)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

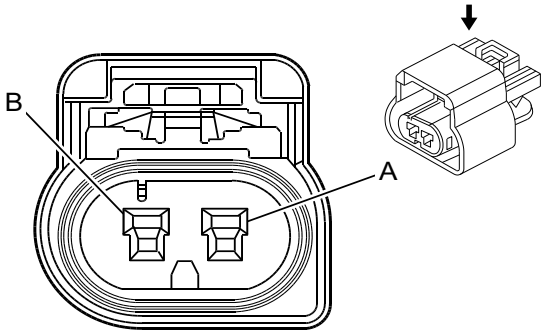
Terminal Part Information

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

B68A Knock Sensor 1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/GY	496	Knock Sensor Signal 1	I	—
2	0.75	GY	1716	Knock Sensor Low Reference 1	I	—

B68B Knock Sensor 2 (LC8/L96)



1232999

Connector Part Information

Harness Type: Engine
OEM Connector: 15374222
Service Connector: 13580877
Description: 2-Way F 150 GT Series, Sealed (NA)

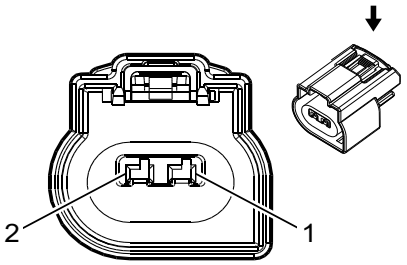
Terminal Part Information

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

B68B Knock Sensor 2 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	L-BU	1876	Knock Sensor Signal 2	I	—
B	0.8	GY	2303	Knock Sensor Low Reference 2	I	—

B68B Knock Sensor 2 (LV1)



2717073

Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

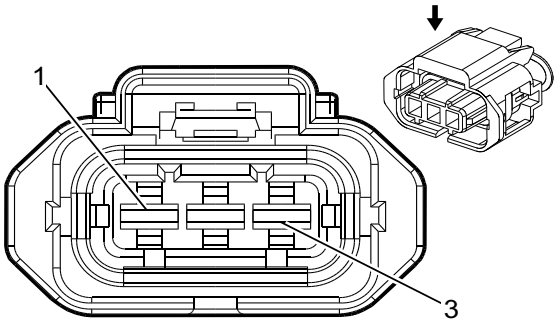
Terminal Part Information

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

B68B Knock Sensor 2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	D-BU	1876	Knock Sensor Signal 2	I	—
2	0.75	BK/GY	2303	Knock Sensor Low Reference 2	I	—

B74 Manifold Absolute Pressure Sensor (L96/LC8)



1914850

Connector Part Information

Harness Type: Engine
OEM Connector: 13639747
Service Connector: 19181248
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

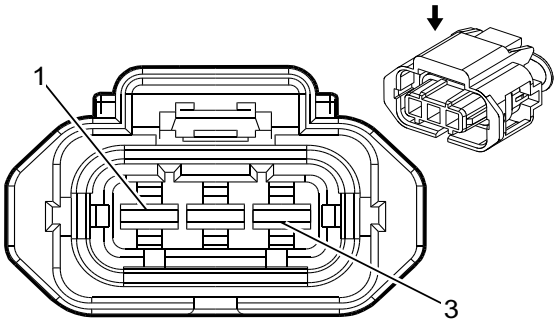
Terminal Part Information

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

B74 Manifold Absolute Pressure Sensor (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	GY	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
2	0.8	OG/BK	469	Manifold Absolute Pressure Sensor Low Reference	I	—
3	0.8	L-GN	432	Manifold Absolute Pressure Sensor Signal	I	—

B74 Manifold Absolute Pressure Sensor (LV1)



1914850

Connector Part Information

Harness Type: Engine
OEM Connector: 15397338
Service Connector: 13585845
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

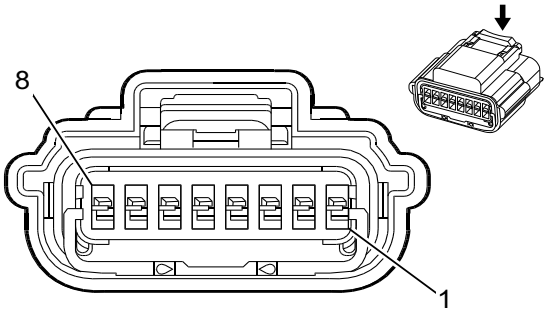
Terminal Part Information

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

B74 Manifold Absolute Pressure Sensor (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
2	0.5	OG/BK	469	Manifold Absolute Pressure Sensor Low Reference	I	—
3	0.5	L-GN	432	Manifold Absolute Pressure Sensor Signal	I	—

B75C Multifunction Intake Air Sensor



2581486

Connector Part Information

Harness Type: Engine
OEM Connector: 13774439
Service Connector: 13583440
Description: 8-Way F 0.64 Series, Sealed (BK)

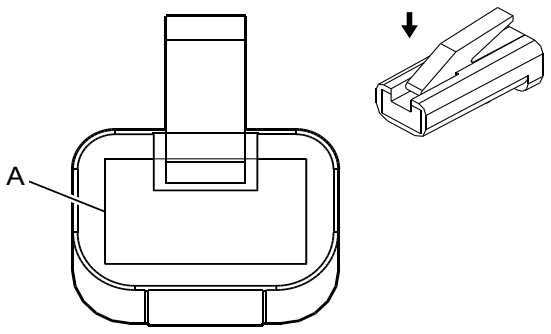
Terminal Part Information

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

B75C Multifunction Intake Air Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/VT	472	Intake Air Temperature Sensor Signal	I	LC8/L96
	0.5	D-BU	6289	Induction Air Temperature Sensor Signal	I	LV1
	0.5	WH/D-BU	6289	Induction Air Temperature Sensor Signal	I	LWN
2	0.75	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	LC8/L96
	0.5	GY/WH	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	LV1
	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	LWN
3	0.75	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	LC8/L96
	0.5	WH/YE	3202	Throttle Inlet Absolute Pressure Sensor Low Reference	I	LV1
	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	LWN
4	0.75	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	LC8/L96
	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	LV1
	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	LWN
5	0.75	VT/WH	1939	Run/Crank Ignition 1 Voltage	I	—
6	0.75	L-GN/WH	492	Mass Air Flow Sensor Signal	I	LC8/L96
	0.5	YE	492	Mass Air Flow Sensor Signal	I	LV1
	0.5	L-GN/WH	492	Mass Air Flow Sensor Signal	I	LWN
7	0.75	BK/WH	1551	Signal Ground	I	—
8	0.75	GY/D-BU	7564	Humidity Sensor Signal	I	LC8/L96
	0.5	D-BU	7564	Humidity Sensor Signal	I	LV1
	0.5	BN/GY	4008	Humidity Sensor Signal	I	LWN

B80 Park Brake Switch



35348

Connector Part Information

Harness Type: Park Brake Switch Jumper
OEM Connector: 12004267
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 5.6 Series (BK)

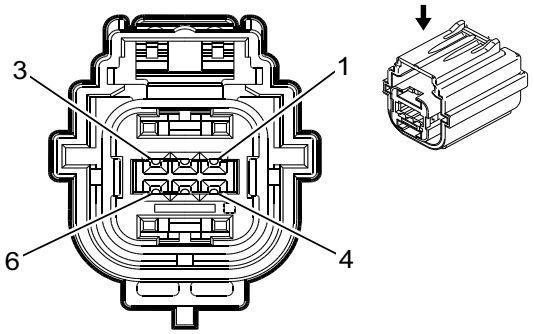
Terminal Part Information

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

B80 Park Brake Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	1134	Park Brake Switch Signal	I	—

B87 Rearview Camera (CUTAWAY)



2133378

Connector Part Information

Harness Type: Rearview Camera
OEM Connector: 13629704
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed (GY)

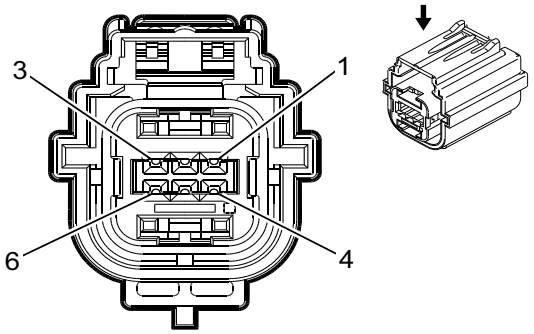
Terminal Part Information

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

B87 Rearview Camera (CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	7641	Camera Rear Vision Signal +	I	—
2	0.5	Bare	6799	Camera Shield Ground	I	—
3	0.5	L-GN	24	Backup Lamp Control	I	—
4	0.5	L-BU	7642	Camera Rear Vision Signal (-)	I	—
5	0.5	BK/WH	351	Signal Ground	I	—
6	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—

B87 Rearview Camera (-CUTAWAY)



2133378

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 13629704
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed (GY)

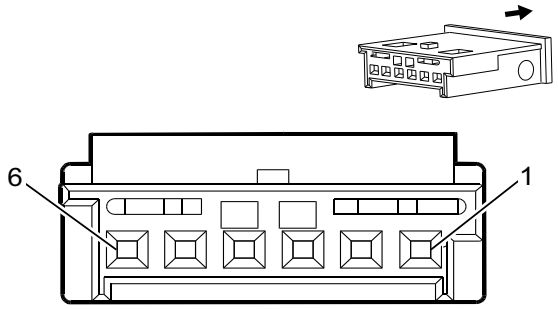
Terminal Part Information

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

B87 Rearview Camera (-CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	7641	Camera Rear Vision Signal +	I	—
2	0.5	Bare	6799	Camera Shield Ground	I	—
3	0.5	L-GN	24	Backup Lamp Control	I	—
4	0.5	L-BU	7642	Camera Rear Vision Signal (-)	I	—
5	0.5	BK	351	Signal Ground	I	—
6	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—

B99 Steering Wheel Angle Sensor



1862024

Connector Part Information

Harness Type: Steering Column
OEM Connector: 19151551
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Micro-Quadlock Series (BK)

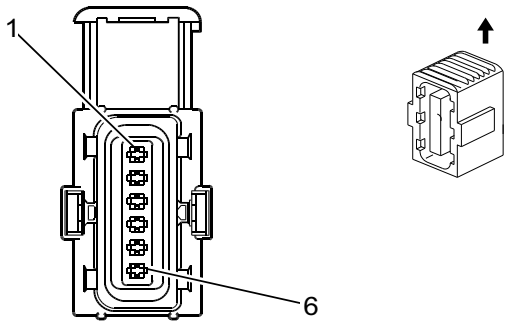
Terminal Part Information

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

B99 Steering Wheel Angle Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
2	—	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
3	—	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
4	—	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
5	—	L-GN/BN	2087	Combined Vehicle Inertial Sensor Supply Voltage	I	—
6	—	BK/WH	351	Signal Ground	I	—

B107 Accelerator Pedal Position Sensor



1334452

Connector Part Information

Harness Type: Accelerator Pedal Position Sensor
OEM Connector: 15383136
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Micro-Timer Series, Sealed (BK)

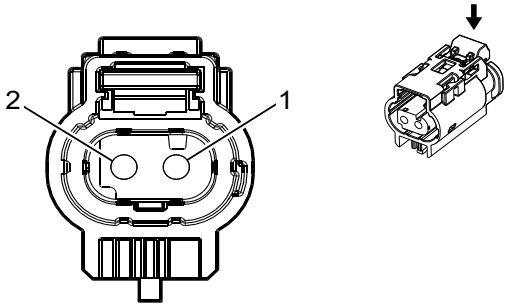
Terminal Part Information

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

B107 Accelerator Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	TN	1274	Accelerator Pedal Position 5V Reference 2	I	L96/LC8/LWN
	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	I	LV1
2	0.35	WH/BK	1164	Accelerator Pedal Position 5V Reference 1	I	L96/LC8/LWN
	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	I	LV1
3	0.35	D-BU	1161	Accelerator Pedal Position Signal 1	I	L96/LC8/LWN
	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	I	LV1
4	0.35	BN	1271	Accelerator Pedal Position Low Reference 1	I	L96/LC8/LWN
	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference 1	I	LV1
5	0.35	PU	1272	Accelerator Pedal Position Low Reference 2	I	L96/LC8/LWN
	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	I	LV1
6	0.35	L-BU	1162	Accelerator Pedal Position Signal 2	I	L96/LC8/LWN
	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal 2	I	LV1

B130A Exhaust Gas Recirculation Temperature Sensor 1



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

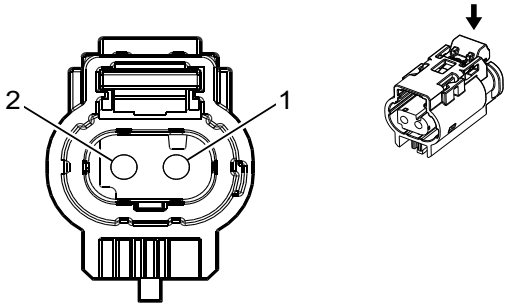
Terminal Part Information

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

B130A Exhaust Gas Recirculation Temperature Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/D-BU	6274	Exhaust Gas Recirculation Temperature Sensor Low Reference	I	—
2	0.5	WH/BN	3237	Exhaust Gas Recirculation Temperature Sensor Signal	I	—

B130B Exhaust Gas Recirculation Temperature Sensor 2



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 33180624
Service Connector: 19332628
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

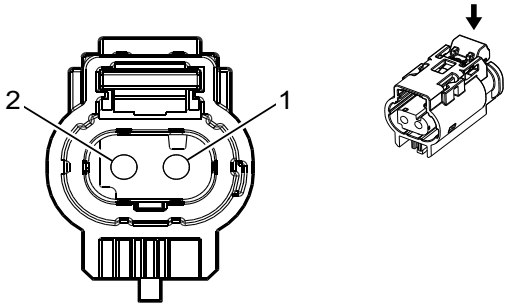
Terminal Part Information

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

B130B Exhaust Gas Recirculation Temperature Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	I	—
2	0.5	YE/L-GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	I	—

B131A Exhaust Temperature Sensor 1



3747581

Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

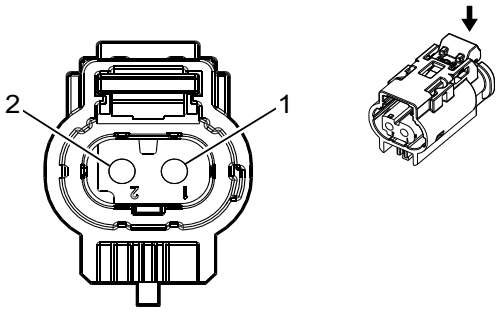
Terminal Part Information

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

B131A Exhaust Temperature Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—
2	0.5	D-BU/WH	5277	Exhaust Gas Temperature Sensor 1	I	—

B131B Exhaust Temperature Sensor 2



3747580

Connector Part Information

Harness Type: Engine
OEM Connector: 33159713
Service Connector: 19332627
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

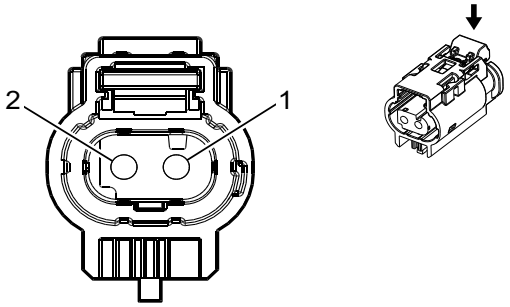
Terminal Part Information

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

B131B Exhaust Temperature Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/D-BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—
2	0.5	D-BU/L-GN	5377	Exhaust Gas Temperature Sensor 2	I	—

B131C Exhaust Temperature Sensor 3



3747581

Connector Part Information

Harness Type: Chassis
OEM Connector: 33180624
Service Connector: 19332628
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

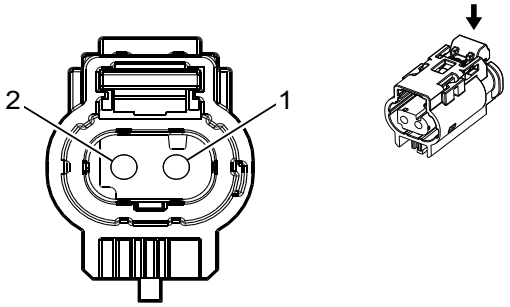
Terminal Part Information

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

B131C Exhaust Temperature Sensor 3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/L-GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—
2	0.5	GY/L-GN	5378	Exhaust Gas Temperature Sensor 3	I	—

B131D Exhaust Temperature Sensor 4



3747581

Connector Part Information

Harness Type: Chassis
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

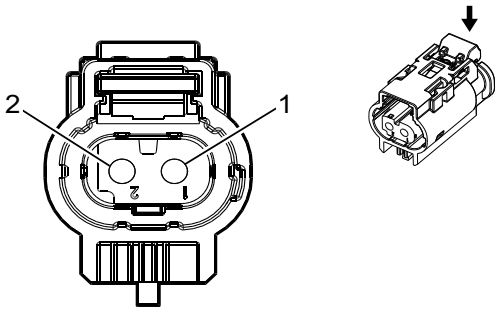
Terminal Part Information

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

B131D Exhaust Temperature Sensor 4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GY	3659	Exhaust Gas Temperature Sensor 4 Low Reference	I	—
2	0.5	VT/BN	3658	Exhaust Gas Temperature Sensor 4 Signal	I	—

B131E Exhaust Temperature Sensor 5



3747580

Connector Part Information

Harness Type: Chassis
OEM Connector: 33159713
Service Connector: 19332627
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

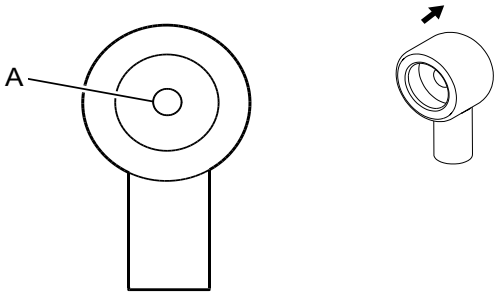
Terminal Part Information

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

B131E Exhaust Temperature Sensor 5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/VT	3661	Exhaust Gas Temperature Sensor 5 Low Reference	I	—
2	0.5	D-BU/GY	3660	Exhaust Gas Temperature Sensor 5 Signal	I	—

B133 Brake Booster Fluid Flow Alarm Switch X1



2004808

Connector Part Information

Harness Type: Brake Fluid Level Switch
OEM Connector: 6288440
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F Grip Series (BK)

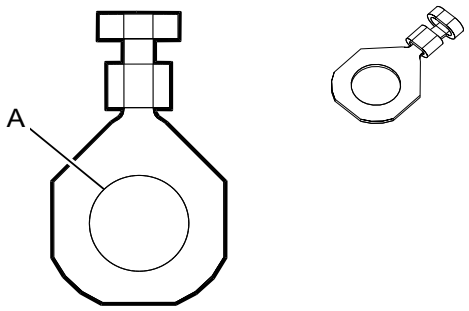
Terminal Part Information

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

B133 Brake Booster Fluid Flow Alarm Switch X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	L-BU/BK	1928	Brake Booster Fluid Flow Switch Signal	I	—

B133 Brake Booster Fluid Flow Alarm Switch X2



3240148

Connector Part Information

Harness Type: Brake Fluid Level Switch
OEM Connector: 12103516
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

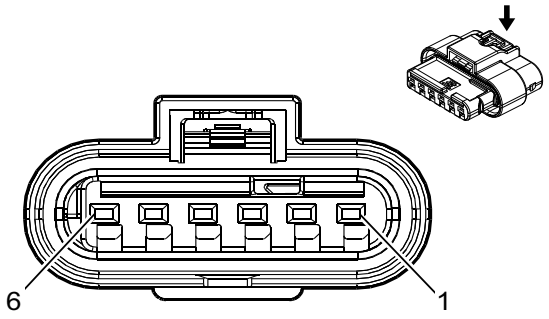
Terminal Part Information

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

B133 Brake Booster Fluid Flow Alarm Switch X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/WH	351	Signal Ground	I	—

B136 Exhaust Particulate Matter Sensor



3747582

Connector Part Information

Harness Type: Chassis
OEM Connector: 33226734
Service Connector: 19354530
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BN)

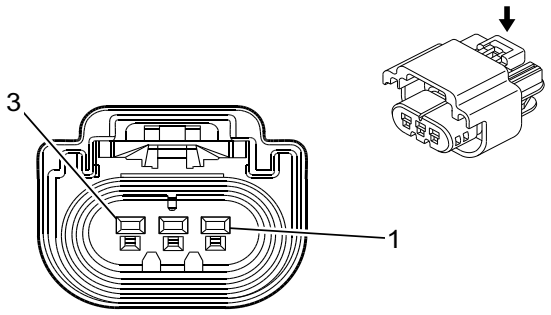
Terminal Part Information

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

B136 Exhaust Particulate Matter Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	150	Ground	I	—
2	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
3	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
4	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
5	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
6	1	GY	3672	NOx Sensor 2 Control	I	—

B150 Fuel Tank Pressure Sensor



2004806

Connector Part Information

Harness Type: Chassis
OEM Connector: 13522407
Service Connector: 19179274
Description: 3-Way F 150 GT Series, Sealed (BK)

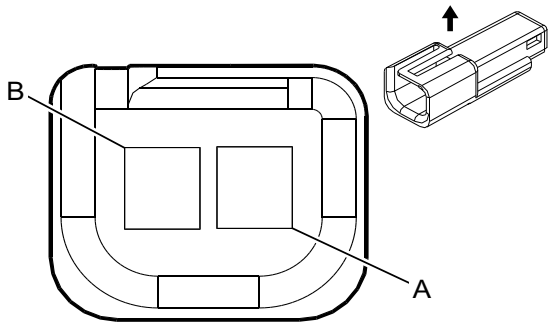
Terminal Part Information

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

B150 Fuel Tank Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	I	—
2	0.5	BK/BN	2759	Fuel Tank Pressure Sensor Low Reference	I	—
3	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—

B153D Seat Belt Buckle - Driver



35441

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (BK)

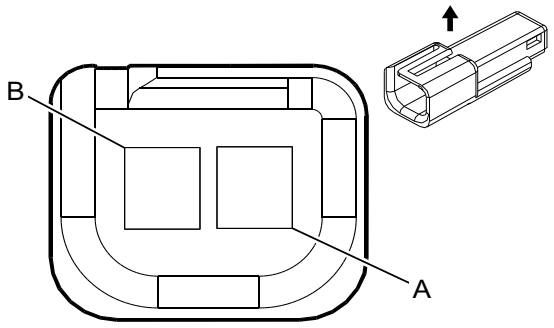
Terminal Part Information

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

B153D Seat Belt Buckle - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	PK	5057	Seat Position Switch Low Reference	I	—
B	—	TN/WH	238	Driver Seat Belt Switch Signal	I	—

B153P Seat Belt Buckle - Passenger



35441

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (BK)

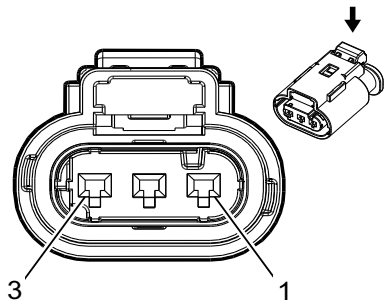
Terminal Part Information

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

B153P Seat Belt Buckle - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	PK	1361	Passenger Seat Belt Switch Low Reference	I	—
B	—	OG	1362	Passenger Seat Belt Switch Signal	I	—

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor



2717069

Connector Part Information

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

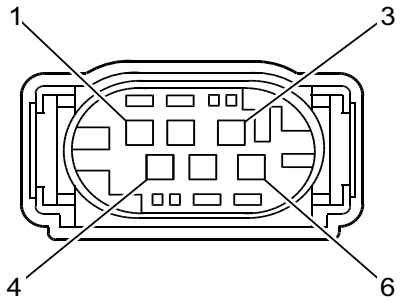
Terminal Part Information

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

B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	6053	Exhaust Pressure Sensor Signal 1	I	—
2	0.5	BK/YE	6055	Exhaust Pressure Sensor Low Reference 1	I	—
3	0.5	WH/RD	6054	Exhaust Pressure Sensor 5V Reference 1	I	—

B176 Multi-axis Acceleration Sensor Module



831393

Connector Part Information

Harness Type: Body
OEM Connector: 15355474
Service Connector: 15306420
Description: 6-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

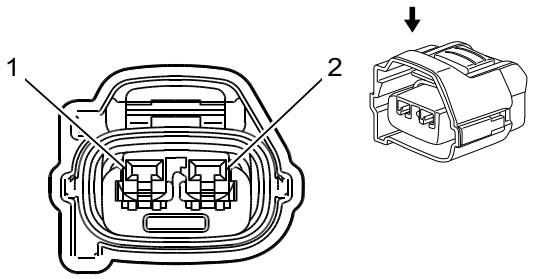
Terminal Part Information

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

B176 Multi-axis Acceleration Sensor Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6045	Steering Angle Sensor Low Reference	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
5	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
6	0.5	BK/WH	2751	Signal Ground	I	—

B193A Charge Air Cooler Inlet Temperature Sensor



2388842

Connector Part Information

Harness Type: Engine
OEM Connector: 15401053
Service Connector: 13576415
Description: 2-Way F 090 Series, Sealed (D-GY)

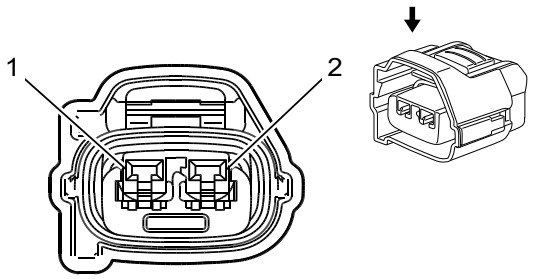
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B193A Charge Air Cooler Inlet Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—
2	0.5	YE/BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—

B193B Charge Air Cooler Outlet Temperature Sensor



2388842

Connector Part Information

Harness Type: Engine
OEM Connector: 15401053
Service Connector: 13576415
Description: 2-Way F 090 Series, Sealed (D-GY)

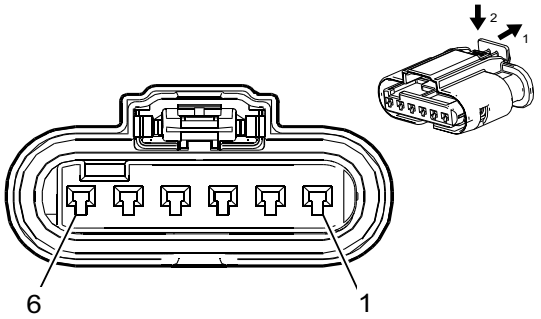
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B193B Charge Air Cooler Outlet Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—
2	0.5	YE/D-BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—

B195A Nitrogen Oxides Sensor 1



3960142

Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19368560
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

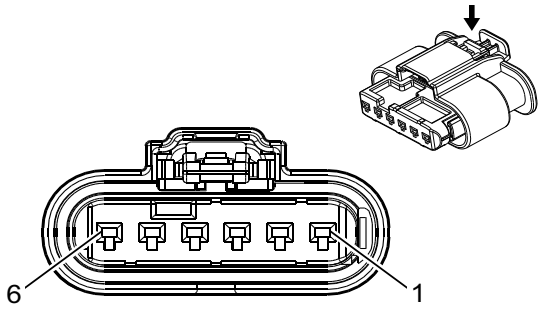
Terminal Part Information

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

B195A Nitrogen Oxides Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GY	3672	NOx Sensor 2 Control	I	—
2	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
3	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
4	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
6	1	BK	150	Ground	I	—

B195B Nitrogen Oxides Sensor 2



4455148

Connector Part Information

Harness Type: Chassis
OEM Connector: 33226735
Service Connector: 19368561
Description: 6-Way F 1.2 MCON-LL Series, Sealed (GY)

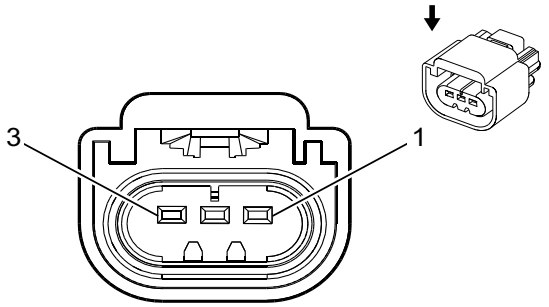
Terminal Part Information

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

B195B Nitrogen Oxides Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GY	3672	NOx Sensor 2 Control	I	—
2	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
3	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
4	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
6	1	BK	150	Ground	I	—

B198 Fuel Composition Sensor



2422393

Connector Part Information

Harness Type: Chassis
OEM Connector: 13511132
Service Connector: 19368712
Description: 3-Way F 150 GT Series, Sealed (BN)

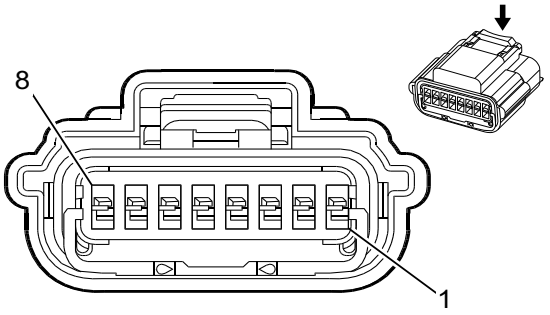
Terminal Part Information

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

B198 Fuel Composition Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/D-BU	5294	Powertrain Main Relay Fused Supply 5	I	—
2	1	BK/WH	1551	Signal Ground	I	—
3	0.75	WH	1579	Fuel Temperature/Composition Signal	I	—

B218L Side Object Sensor Module - Left



2581486

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15543347
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 0.64 Series, Sealed (BK)

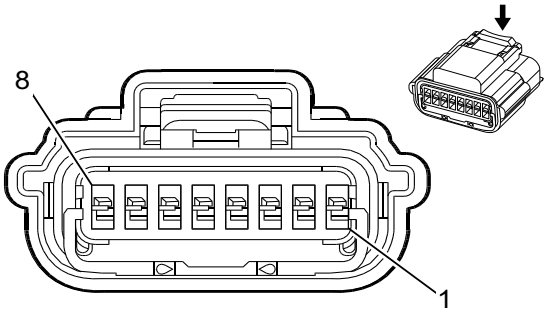
Terminal Part Information

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

B218L Side Object Sensor Module - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GY/YE	5853	Driver Side Object Detection LED Signal 1	I	—
5	0.5	RD/L-GN	3140	Battery Positive Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
8	0.5	BK	2150	Ground	I	—

B218R Side Object Sensor Module - Right



2581486

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15543346
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

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

B218R Side Object Sensor Module - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK	2150	Ground	I	—
4	0.5	GY	5861	Passenger Side Object Detection LED Signal 1	I	—
5	0.5	RD/L-GN	3140	Battery Positive Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
8	0.5	BK	2150	Ground	I	—

B295 Reductant Quality Sensor

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Connector Part Information

Harness Type: Emission Reductant Fluid Tank Reservoir
OEM Connector: 13893234
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

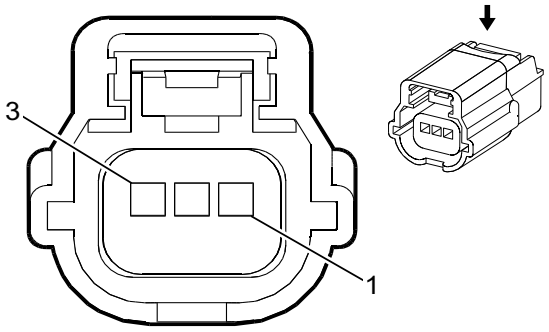
Terminal Part Information

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

B295 Reductant Quality Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE	53	Diesel Exhaust Fluid Quality Signal	I	—
2	—	GN	7487	Sensor Signal	I	—
3	—	OG	7285	Diesel Exhaust Fluid Liquid Quality Temperature Sensor Low Reference	I	—

B306E Parking Assist Sensor - Rear Left Outer



1664596

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed (BK)

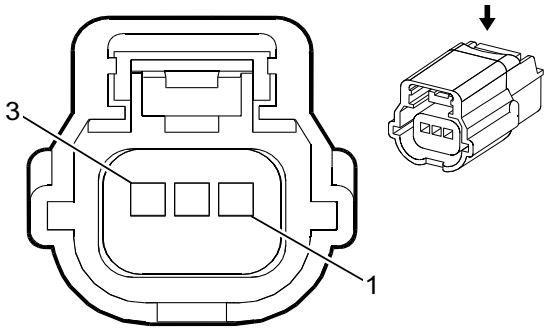
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306E Parking Assist Sensor - Rear Left Outer

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	II	UFT
	0.5	BU	2374	Object Sensor Control	I	-UFT
2	0.5	BK/GY	2379	Object Sensor Low Reference	II	UFT
	0.5	GY	2379	Object Sensor Low Reference	I	-UFT
3	0.5	YE	2375	Left Rear Corner Object Sensor Signal	II	UFT
	0.5	YE	2375	Left Rear Corner Object Sensor Signal	I	-UFT

B306F Parking Assist Sensor - Rear Left Middle



1664596

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed (BK)

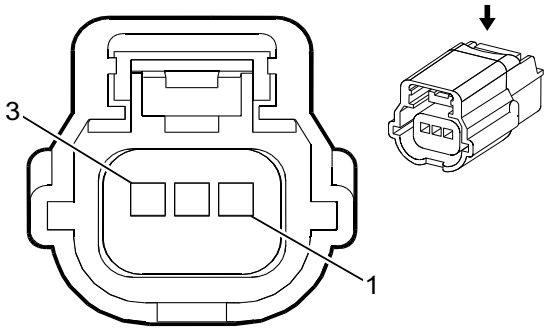
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306F Parking Assist Sensor - Rear Left Middle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	II	UFT
	0.5	BU	2374	Object Sensor Control	I	-UFT
2	0.5	BK/GY	2379	Object Sensor Low Reference	II	UFT
	0.5	GY	2379	Object Sensor Low Reference	I	-UFT
3	0.5	YE/D-BU	2376	Left Rear Middle Object Sensor Signal	II	UFT
	0.5	OG	2376	Left Rear Middle Object Sensor Signal	I	-UFT

B306G Parking Assist Sensor - Rear Right Middle



1664596

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed (BK)

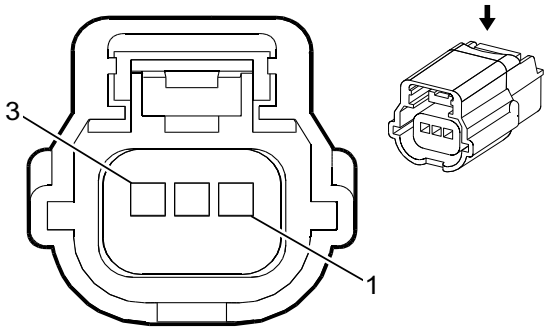
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306G Parking Assist Sensor - Rear Right Middle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	II	UFT
	0.5	BU	2374	Object Sensor Control	I	-UFT
2	0.5	BK/GY	2379	Object Sensor Low Reference	II	UFT
	0.5	GY	2379	Object Sensor Low Reference	I	-UFT
3	0.5	YE/WH	2377	Right Rear Middle Object Sensor Signal	II	UFT
	0.5	D-GN	2377	Right Rear Middle Object Sensor Signal	I	-UFT

B306H Parking Assist Sensor - Rear Right Outer



1664596

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed (BK)

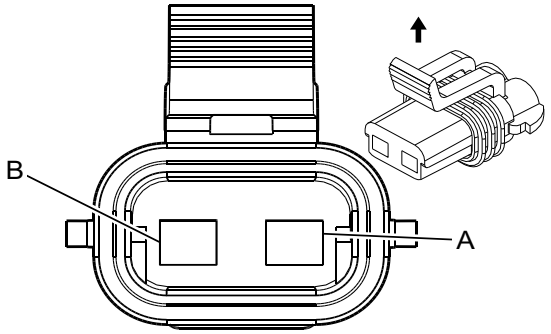
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

B306H Parking Assist Sensor - Rear Right Outer

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	2374	Object Sensor Control	II	UFT
	0.5	BU	2374	Object Sensor Control	I	-UFT
2	0.5	BK/GY	2379	Object Sensor Low Reference	II	UFT
	0.5	GY	2379	Object Sensor Low Reference	I	-UFT
3	0.5	YE/VT	2378	Right Rear Corner Object Sensor Signal	II	UFT
	0.5	VT	2378	Right Rear Corner Object Sensor Signal	I	-UFT

E2LF Side Marker Lamp - Left Front



68721

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 15300027
Service Connector: 12101855
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

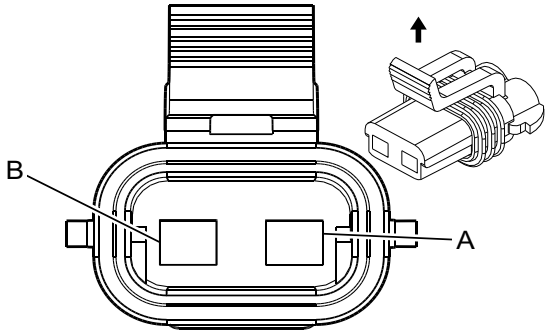
Terminal Part Information

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

E2LF Side Marker Lamp - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY/BN	2309	Front Park Lamp Control	I	—
B	0.5	BK	250	Ground	I	—

E2RF Side Marker Lamp - Right Front



68721

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 15300027
Service Connector: 12101855
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

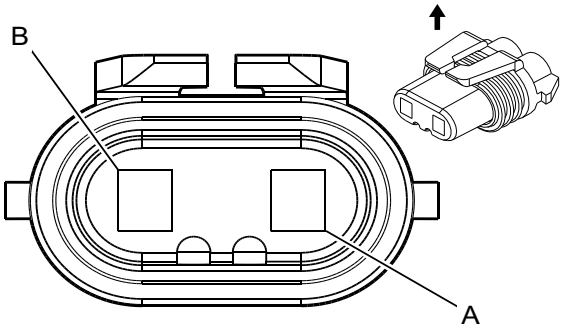
Terminal Part Information

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

E2RF Side Marker Lamp - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY/BN	2309	Front Park Lamp Control	I	—
B	0.5	BK	650	Ground	I	—

E4E Headlamp - Left High Beam (V22)



684797

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12059183
Service Connector: 12101898
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

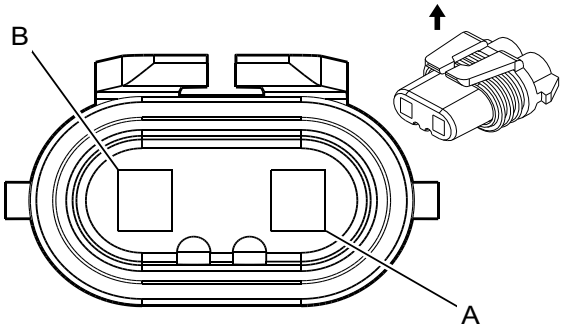
Terminal Part Information

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

E4E Headlamp - Left High Beam (V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	WH	711	Left Headlamp High Beam Control	I	—
B	0.75	BK	250	Ground	I	—

E4F Headlamp - Right High Beam (V22)



684797

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12059183
Service Connector: 12101898
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

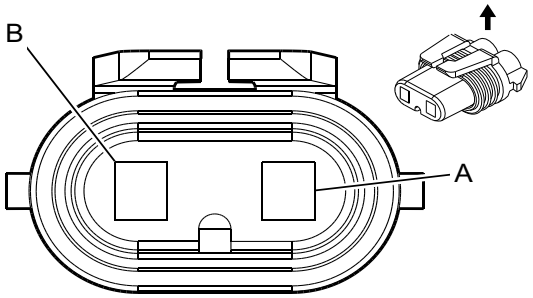
Terminal Part Information

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

E4F Headlamp - Right High Beam (V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	WH	311	Right Headlamp High Beam Control	I	—
B	0.75	BK	650	Ground	I	—

E4G Headlamp - Left Low Beam (V22)



684796

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12059181
Service Connector: 19301866
Description: 2-Way F 280 Metri-Pack Series, Sealed (GY)

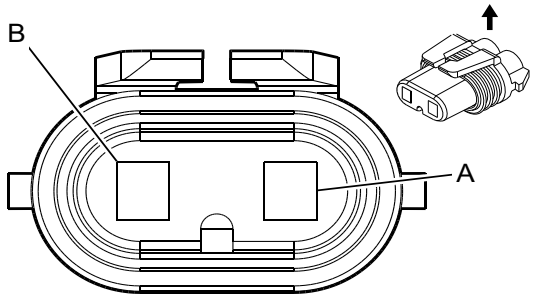
Terminal Part Information

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

E4G Headlamp - Left Low Beam (V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	YE	712	Left Headlamp Low Beam Control	I	—
B	0.75	BK	250	Ground	I	—

E4H Headlamp - Right Low Beam (V22)



684796

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12059181
Service Connector: 19301866
Description: 2-Way F 280 Metri-Pack Series, Sealed (GY)

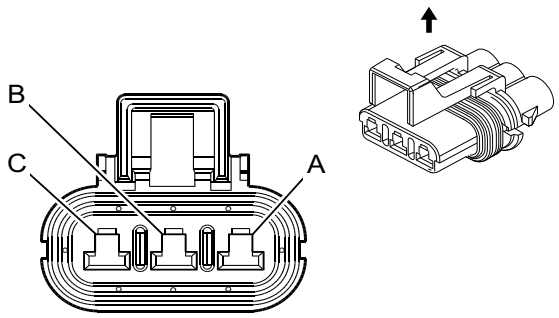
Terminal Part Information

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

E4H Headlamp - Right Low Beam (V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	YE	312	Right Headlamp Low Beam Control	I	—
B	0.75	BK	650	Ground	I	—

E4N Park/Turn Signal Lamp - Left



847206

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12040977
Service Connector: 12085492
Description: 3-Way F 280 Metri-Pack Series, Sealed (BK)

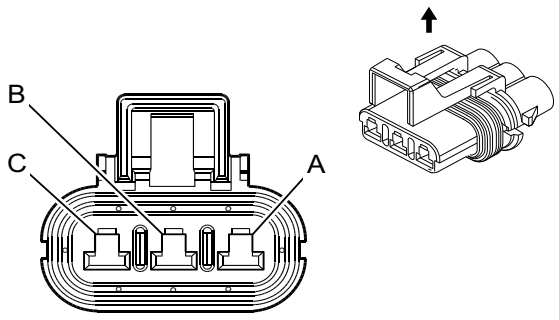
Terminal Part Information

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

E4N Park/Turn Signal Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	D-BU/WH	1314	Left Front Turn Signal Lamp Control	I	—
B	0.5	GY/BN	2309	Front Park Lamp Control	I	—
C	0.5	BK	250	Ground	I	—

E4P Park/Turn Signal Lamp - Right



847206

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12040977
Service Connector: 12085492
Description: 3-Way F 280 Metri-Pack Series, Sealed (BK)

Terminal Part Information

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

E4P Park/Turn Signal Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	L-GN/VT	1315	Right Front Turn Signal Lamp Control	I	—
B	0.5	GY/BN	2309	Front Park Lamp Control	I	—
C	0.5	BK	650	Ground	I	—

E5A Backup Lamp - Left

—

Connector Part Information

Harness Type: Backup Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

Terminal Part Information

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

E5A Backup Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-GN	24	Backup Lamp Control	I	—
G	—	BK	850	Ground	I	—

E5B Backup Lamp - Right

—

Connector Part Information

Harness Type: Backup Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

Terminal Part Information

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

E5B Backup Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-GN	24	Backup Lamp Control	I	—
G	—	BK	1050	Ground	I	—

E5S Tail/Stop and Turn Signal Lamp - Left

—

Connector Part Information

Harness Type: Tail/Stop and Turn Signal Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

Terminal Part Information

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

E5S Tail/Stop and Turn Signal Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	YE	618	Left Rear Turn Signal Lamp Control	I	—
B	—	BN	2509	Left Rear Park Lamp Control	I	—
G	—	BK	850	Ground	I	—

E5T Tail/Stop and Turn Signal Lamp - Right

—

Connector Part Information

Harness Type: Tail/Stop and Turn Signal Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

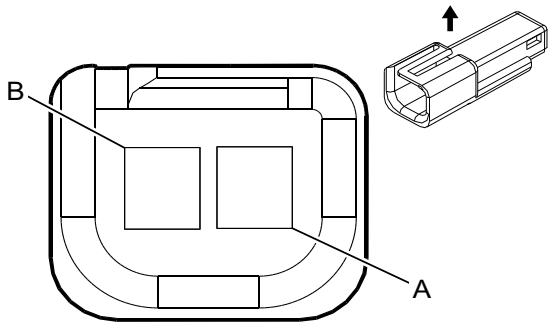
Terminal Part Information

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

E5T Tail/Stop and Turn Signal Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
B	—	BN	2609	Right Rear Park Lamp Control	I	—
G	—	BK	1050	Ground	I	—

E6 Center High Mounted Stop Lamp



35441

Connector Part Information

Harness Type: CHMSL
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (BK)

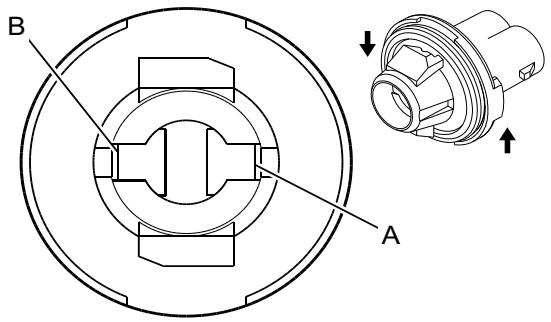
Terminal Part Information

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

E6 Center High Mounted Stop Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	1320	CHMSL Control	I	—
B	—	BK	850	Ground	I	—

E7 License Plate Lamp



744036

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

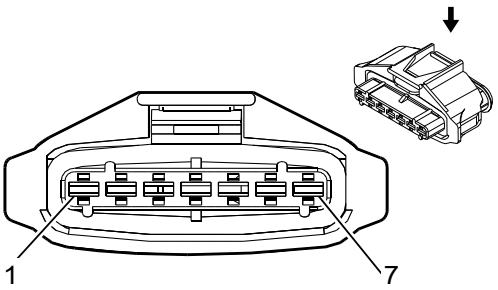
Terminal Part Information

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

E7 License Plate Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BN	2509	Left Rear Park Lamp Control	I	—
B	0.5	BK	1050	Ground	I	—

E11A Fuel Heater/Water in Fuel Sensor



2537256

Connector Part Information

Harness Type: Chassis
OEM Connector: 10774827
Service Connector: 19354080
Description: 7-Way F 2.8 Junior Power Timer Series, Sealed (BK)

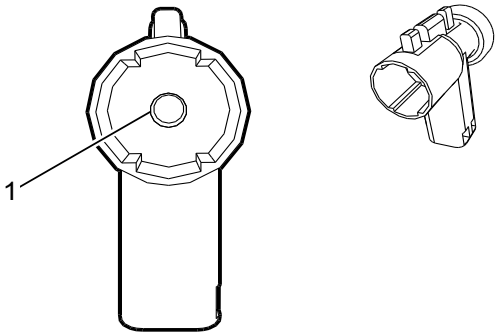
Terminal Part Information

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

E11A Fuel Heater/Water in Fuel Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	7073	Sensor Fuel Temperature 1 Low Reference	I	—
2	0.5	BN/GY	7072	Sensor Fuel Temperature 1 Signal	I	—
3	0.5	BU/YE	6861	Water In Fuel Sensor Signal	I	—
4	0.75	BK	2150	Ground	I	—
5	0.75	VT/GY	2739	Run/Crank Ignition 1 Voltage	I	—
6	2.5	VT/L-GN	355	Fuel Filter Heater Voltage	I	—
7	2.5	BK	2150	Ground	I	—

E12A Glow Plug 1



2323611

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 1928404878
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F (BK)

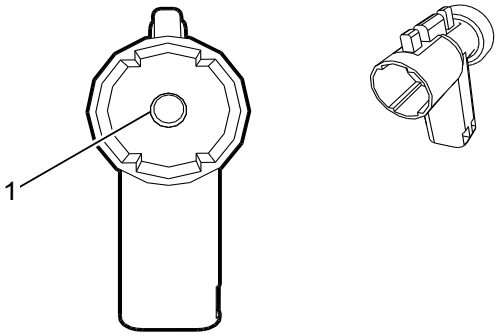
Terminal Part Information

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

E12A Glow Plug 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/D-BU	1581	Glow Plug Control 1	I	—

E12B Glow Plug 2



2323611

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 1928404878
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F (BK)

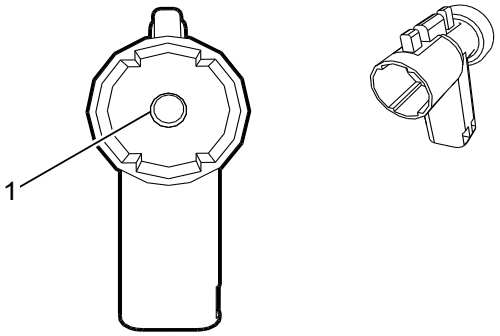
Terminal Part Information

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

E12B Glow Plug 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/BN	1582	Glow Plug Control 2	I	—

E12C Glow Plug 3



2323611

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 1928404878
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F (BK)

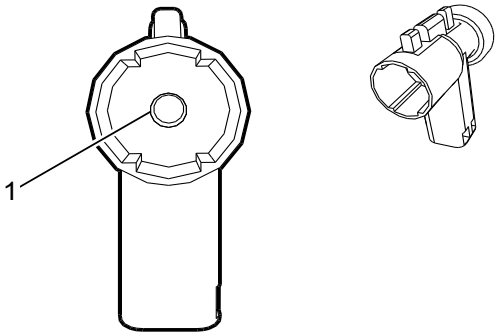
Terminal Part Information

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

E12C Glow Plug 3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/L-GN	1583	Glow Plug Control 3	I	—

E12D Glow Plug 4



2323611

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 1928404878
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F (BK)

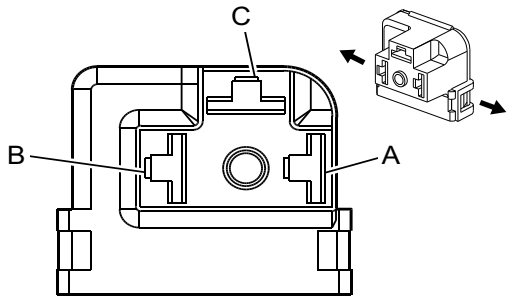
Terminal Part Information

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

E12D Glow Plug 4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY/YE	1584	Glow Plug Control 4	I	—

E13L Headlamp - Left (-V22)



306269

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12034372
Service Connector: 12117369
Description: 3-Way F 800 Metri-Pack Series (BK)

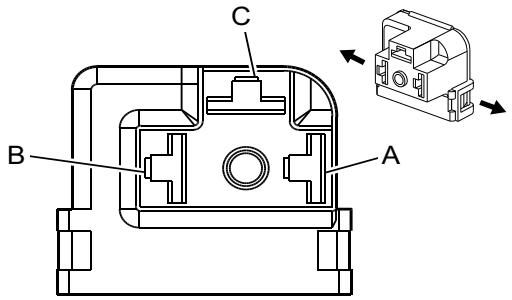
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-44 (YE)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E13L Headlamp - Left (-V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	250	Ground	I	—
B	0.75	WH	711	Left Headlamp High Beam Control	I	—
C	0.5	YE	712	Left Headlamp Low Beam Control	I	—

E13R Headlamp - Right (-V22)



306269

Connector Part Information

Harness Type: Forward Lamp
OEM Connector: 12034372
Service Connector: 12117369
Description: 3-Way F 800 Metri-Pack Series (BK)

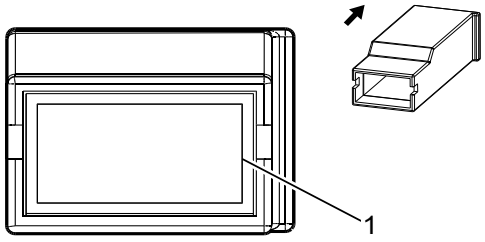
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-44 (YE)	No Tool Required	Not Required	Not Required	Not Required	Not Required

E13R Headlamp - Right (-V22)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BK	650	Ground	I	—
B	0.75	WH	311	Right Headlamp High Beam Control	I	—
C	0.75	YE	312	Right Headlamp Low Beam Control	I	—

E18L Rear Defogger Grid - Left X1



2500421

Connector Part Information

Harness Type: Rear Window Defogger
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series (BK)

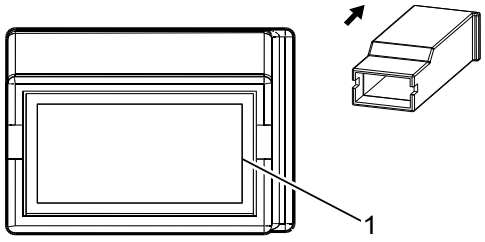
Terminal Part Information

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

E18L Rear Defogger Grid - Left X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	PU	293	Rear Defog Element Control	I	—

E18L Rear Defogger Grid - Left X2



2500421

Connector Part Information

Harness Type: Rear Window Defogger
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series (BK)

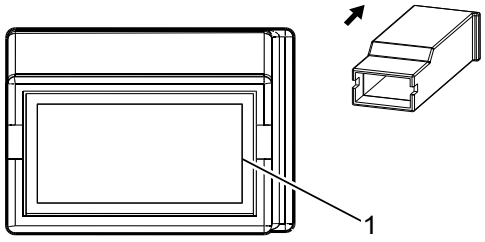
Terminal Part Information

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

E18L Rear Defogger Grid - Left X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	850	Ground	I	—

E18R Rear Defogger Grid - Right X1



2500421

Connector Part Information

Harness Type: Rear Window Defogger
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series (BK)

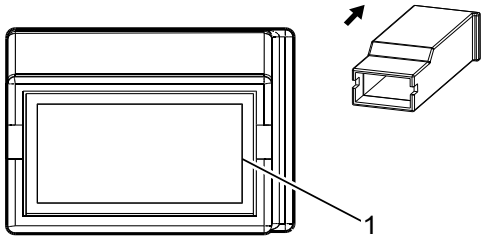
Terminal Part Information

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

E18R Rear Defogger Grid - Right X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	PU	293	Rear Defog Element Control	I	—

E18R Rear Defogger Grid - Right X2



2500421

Connector Part Information

Harness Type: Rear Window Defogger
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series (BK)

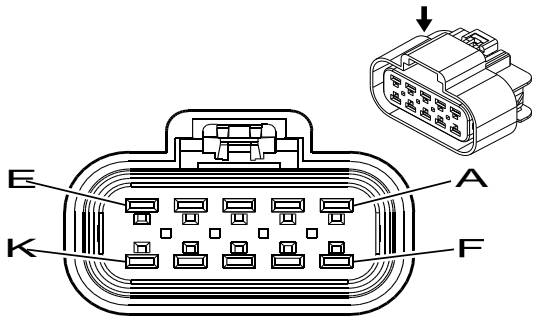
Terminal Part Information

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

E18R Rear Defogger Grid - Right X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	850	Ground	I	—

E19 Coolant Heater (K08)



655815

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326660
Service Connector: 88986262
Description: 10-Way F 280 GT Series, Sealed (BK)

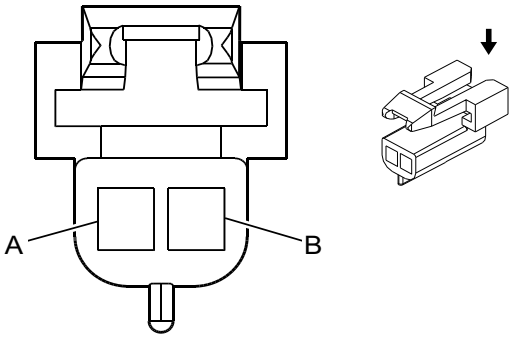
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578906	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	2	5
II	13578906	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	E	5
III	13578906	J-35616-4A (PU)	J-38125-553	15304720	Delphi 19	4	5

E19 Coolant Heater (K08)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2	RD/WH	1740	Battery Positive Voltage	III	—
B	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
C	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
D	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
E	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
F	0.8	D-BU/L-GN	7077	Fuel Operated Heater Dosing Pump Control	I	—
G	—	—	—	Not Occupied	—	—
H	2	BK	150	Ground	III	—
J	0.5	WH/D-BU	5986	Serial Data Communication Enable	II	—
K	—	—	—	Not Occupied	—	—

E21A Fluorescent Work Lamp - Right Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

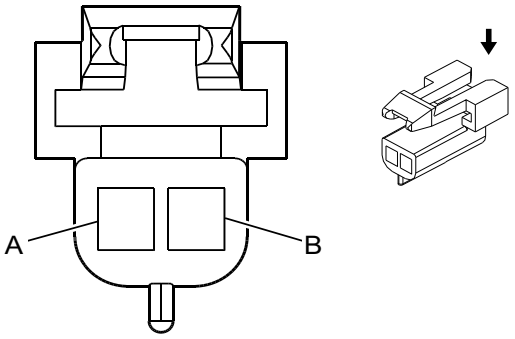
Terminal Part Information

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

E21A Fluorescent Work Lamp - Right Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	20	BK	150	Ground	I	—

E21F Fluorescent Work Lamp - Front Cargo



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

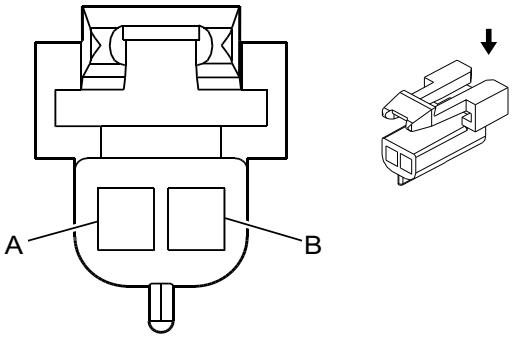
Terminal Part Information

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

E21F Fluorescent Work Lamp - Front Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	20	BK	150	Ground	I	—

E21LF Fluorescent Work Lamp - Left Front Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

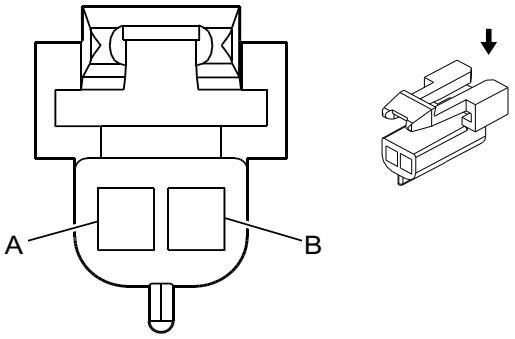
Terminal Part Information

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

E21LF Fluorescent Work Lamp - Left Front Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	20	BK	150	Ground	I	—

E21LR Fluorescent Work Lamp - Left Rear Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

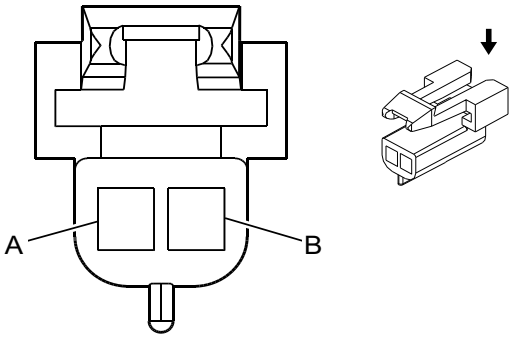
Terminal Part Information

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

E21LR Fluorescent Work Lamp - Left Rear Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	20	BK	150	Ground	I	—

E21R Fluorescent Work Lamp - Rear Cargo



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

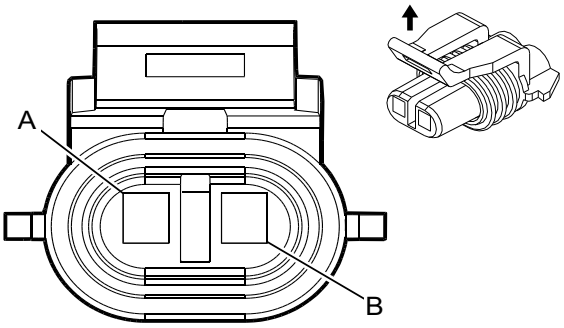
Terminal Part Information

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

E21R Fluorescent Work Lamp - Rear Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	20	BK	150	Ground	I	—

E22 Underhood Lamp (L96/LC8)



635009

Connector Part Information

Harness Type: Engine
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series (BK)

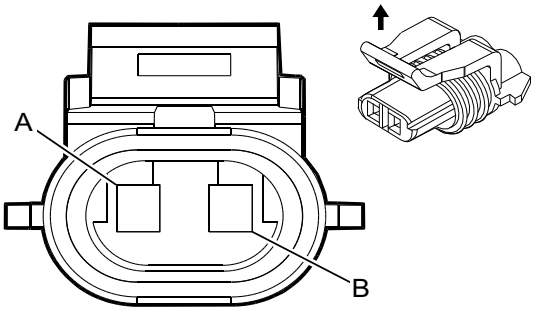
Terminal Part Information

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

E22 Underhood Lamp (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	1732	Electronic Control Unit 12V Reference 3	I	—
B	0.8	BK	1250	Ground	I	—

E22 Underhood Lamp (TR9)



537107

Connector Part Information

Harness Type: Underhood Lamp
OEM Connector: 12052644
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

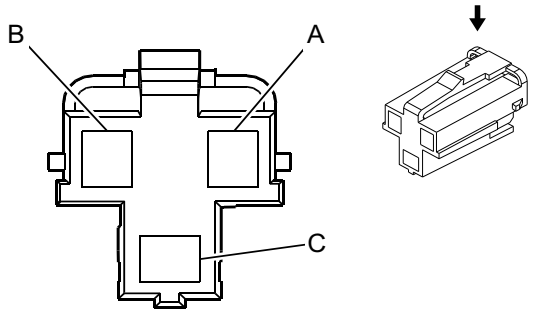
Terminal Part Information

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

E22 Underhood Lamp (TR9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	1732	Electronic Control Unit 12V Reference 3	I	—
B	0.5	BK	1250	Ground	I	—

E32 Cigarette Lighter Receptacle (DT4)



362748

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12176836
Service Connector: 19257374
Description: 3-Way F 280 Metri-Pack Series (GY)

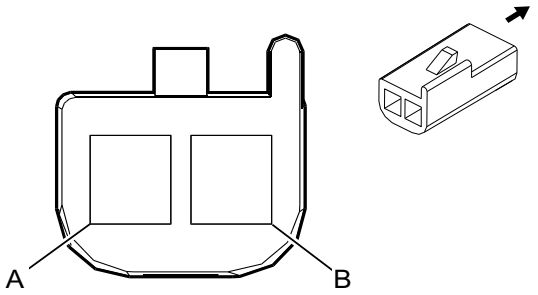
Terminal Part Information

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

E32 Cigarette Lighter Receptacle (DT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD/WH	640	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

E36AC Dome Lamp - Left Roof Rail



82383

Connector Part Information

Harness Type: Body
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series (BK)

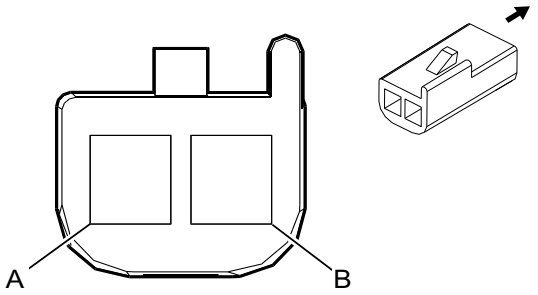
Terminal Part Information

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

E36AC Dome Lamp - Left Roof Rail

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E36AD Dome Lamp - Right Roof Rail



82383

Connector Part Information

Harness Type: Body
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series (BK)

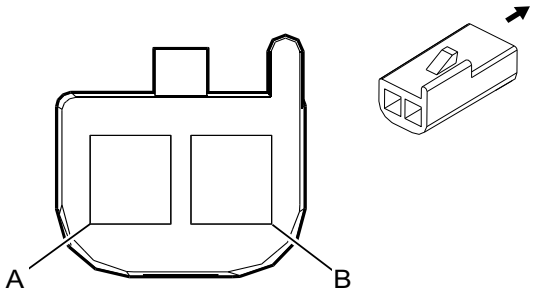
Terminal Part Information

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

E36AD Dome Lamp - Right Roof Rail

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E36AH Dome Lamp



82383

Connector Part Information

Harness Type: Body
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series (BK)

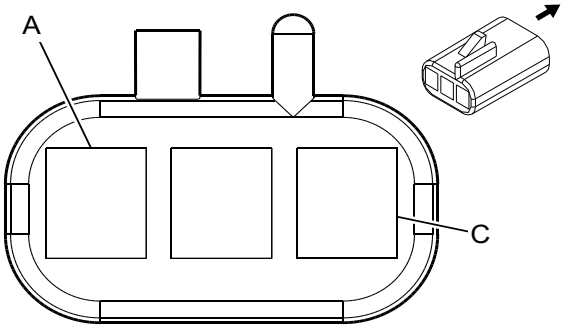
Terminal Part Information

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

E36AH Dome Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E37F Dome/Reading Lamps - Front



333035

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series (BK)

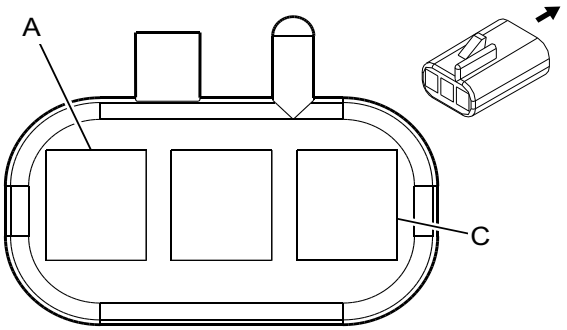
Terminal Part Information

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

E37F Dome/Reading Lamps - Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU/WH	149	Courtesy Lamp Control	I	—
B	1	BK	1850	Ground	I	C69
	0.8	BK	1850	Ground	I	-C69
C	0.8	OG	1732	Electronic Control Unit 12V Reference 3	I	—

E37M Dome/Reading Lamps - Middle



333035

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series (BK)

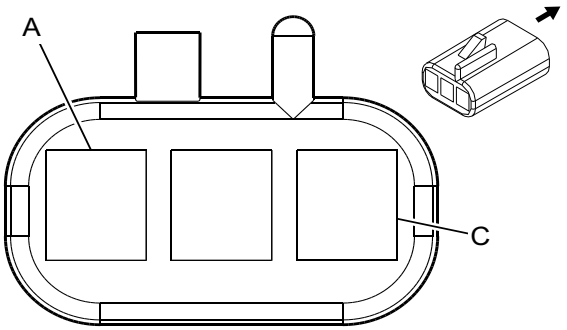
Terminal Part Information

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

E37M Dome/Reading Lamps - Middle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/WH	149	Courtesy Lamp Control	I	—
B	0.5	BK	1050	Ground	I	—
C	0.8	OG	1732	Electronic Control Unit 12V Reference 3	I	—

E37R Dome/Reading Lamps - Rear



333035

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series (BK)

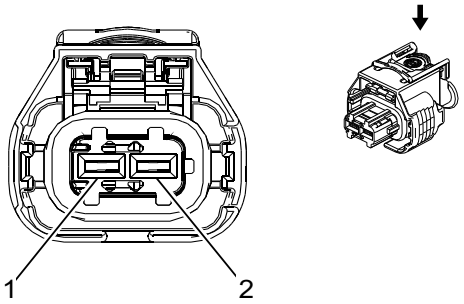
Terminal Part Information

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

E37R Dome/Reading Lamps - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/WH	149	Courtesy Lamp Control	I	—
B	0.5	BK	1050	Ground	I	—
C	0.8	OG	1732	Electronic Control Unit 12V Reference 3	I	—

E45 Positive Crankcase Ventilation Heater



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

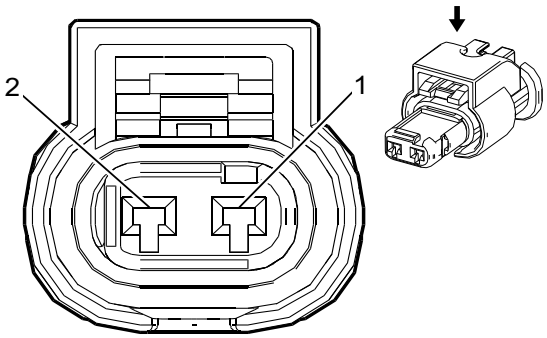
Terminal Part Information

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

E45 Positive Crankcase Ventilation Heater

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/D-BU	1497	Crankcase Ventilation (Blowby) Heater Control Signal	I	—
2	0.5	VT/D-BU	5293	Powertrain Main Relay Fused Supply 4	I	—

E52 Reductant Line Heater



2474752

Connector Part Information

Harness Type: Emission Reductant Fluid Tank Reservoir
OEM Connector: 1-1823608-5
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

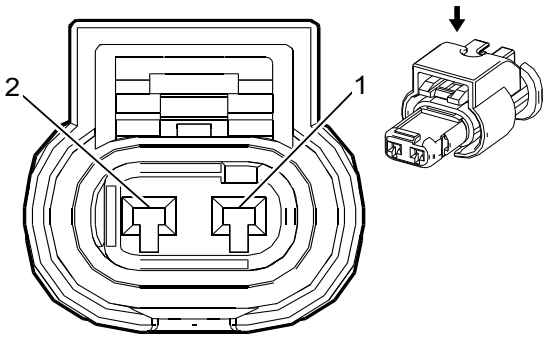
Terminal Part Information

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

E52 Reductant Line Heater

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT	4319	DEF Line Heater Low Control	I	—
2	—	YE	3922	DEF Heater Supply 2	I	—

F101 Passenger Instrument Panel Air Bag



2474752

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13863037
Service Connector: 13587886
Description: 2-Way F 1.2 MCP Series, Sealed (YE)

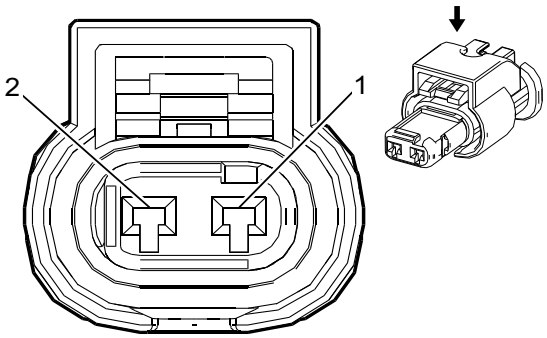
Terminal Part Information

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

F101 Passenger Instrument Panel Air Bag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	3025	Passenger IP Module Stage 1 High Control	I	—
2	0.5	OG	3024	Passenger IP Module Stage 1 Low Control	I	—

F105LF Roof Rail Air Bag - Left Front



2474752

Connector Part Information

Harness Type: Body
OEM Connector: 13863037
Service Connector: 13587886
Description: 2-Way F 1.2 MCP Series, Sealed (YE)

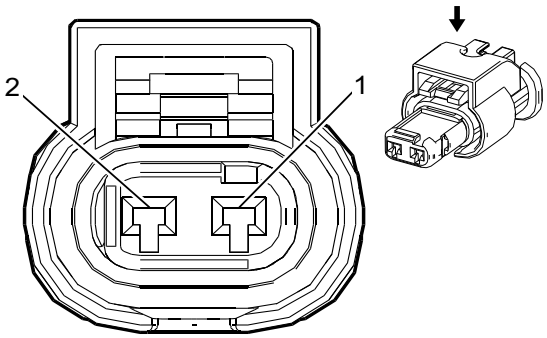
Terminal Part Information

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

F105LF Roof Rail Air Bag - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PK	5020	Left Front Head Curtain Module Low Control	I	—
2	0.5	PU/WH	5019	Left Front Head Curtain Module High Control	I	—

F105RF Roof Rail Air Bag - Right Front



2474752

Connector Part Information

Harness Type: Body
OEM Connector: 13863037
Service Connector: 13587886
Description: 2-Way F 1.2 MCP Series, Sealed (YE)

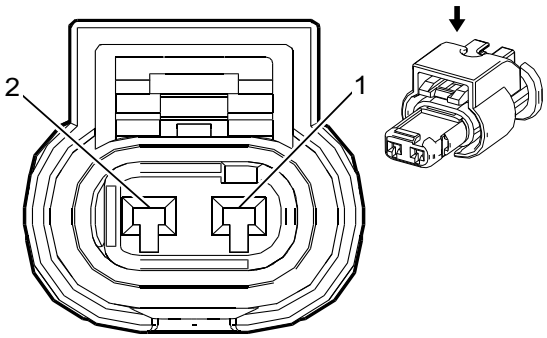
Terminal Part Information

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

F105RF Roof Rail Air Bag - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BK	5022	Right Front Head Curtain Module Low Control	I	—
2	0.5	YE/BK	5021	Right Front Head Curtain Module High Control	I	—

F105RR Roof Rail Air Bag - Right Rear



2474752

Connector Part Information

Harness Type: Body
OEM Connector: 13863037
Service Connector: 13587886
Description: 2-Way F 1.2 MCP Series, Sealed (YE)

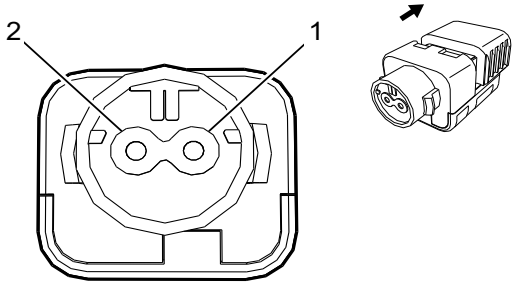
Terminal Part Information

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

F105RR Roof Rail Air Bag - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	TN/BK	7016	Right Rear Head Curtain Module Low Control	I	—
2	0.5	L-BU	7015	Right Rear Head Curtain Module High Control	I	—

F106D Seat Side Air Bag - Driver



2282927

Connector Part Information

Harness Type: Seat Side Air Bag
OEM Connector: 19153419
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

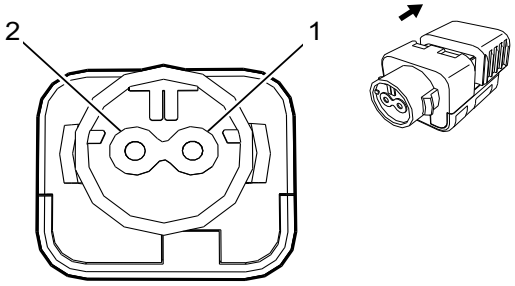
Terminal Part Information

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

F106D Seat Side Air Bag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/RD	2137	Left Front Side Impact Module High Control	I	—
2	—	GN/RD	2138	Left Front Side Impact Module Low Control	I	—

F106P Seat Side Air Bag - Passenger



2282927

Connector Part Information

Harness Type: Seat Side Air Bag
OEM Connector: 19153419
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

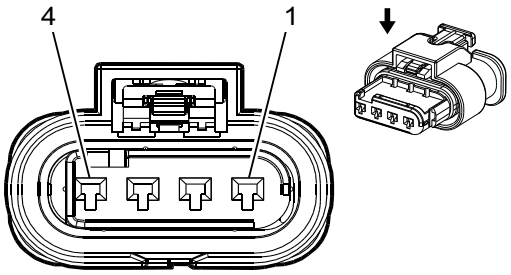
Terminal Part Information

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

F106P Seat Side Air Bag - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH/RD	2135	Right Front Side Impact Module High Control	I	—
2	—	GN/RD	2136	Right Front Side Impact Module Low Control	I	—

F107 Steering Wheel Air Bag



2684560

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13854531
Service Connector: 13586137
Description: 4-Way F 1.2 Series, Sealed (YE)

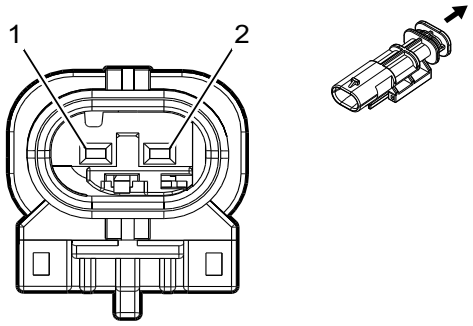
Terminal Part Information

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

F107 Steering Wheel Air Bag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	TN	3021	Steering Wheel Module Stage 1 High Control	I	—
2	0.5	BN	3020	Steering Wheel Module Stage 1 Low Control	I	—
3 - 4	—	—	—	Not Occupied	—	—

F109D Seat Belt Buckle Pretensioner - Driver



4569729

Connector Part Information

Harness Type: Seat Belt Buckle Pretensioner
OEM Connector: 13581182
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (YE)

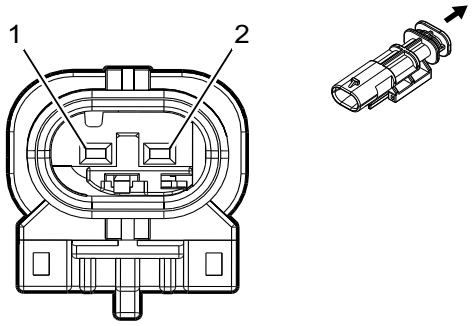
Terminal Part Information

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

F109D Seat Belt Buckle Pretensioner - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	PU	2118	Driver Seat Belt Pretensioner High Control	I	—
2	—	L-GN	2119	Driver Seat Belt Pretensioner Low Control	I	—

F109P Seat Belt Buckle Pretensioner - Passenger



4569729

Connector Part Information

Harness Type: Seat Belt Buckle Pretensioner
OEM Connector: 13581182
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (YE)

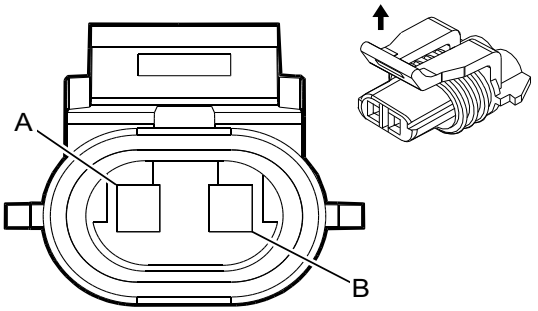
Terminal Part Information

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

F109P Seat Belt Buckle Pretensioner - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	PU	2116	Passenger Seat Belt Pretensioner High Control	I	—
2	—	L-GN	2117	Passenger Seat Belt Pretensioner Low Control	I	—

G7 Coolant Heater Fuel Pump



537107

Connector Part Information

Harness Type: Chassis
OEM Connector: 12052644
Service Connector: 15306302
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

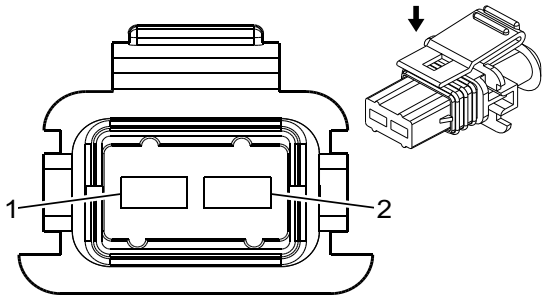
Terminal Part Information

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

G7 Coolant Heater Fuel Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU/L-GN	7077	Fuel Operated Heater Dosing Pump Control	I	—
B	0.8	BK	150	Ground	I	—

G13 Generator X1 (L96/LC8)



1522871

Connector Part Information

Harness Type: Engine
OEM Connector: 12186308
Service Connector: 13585849
Description: 2-Way F Junior Power Timer Series, Sealed (BK)

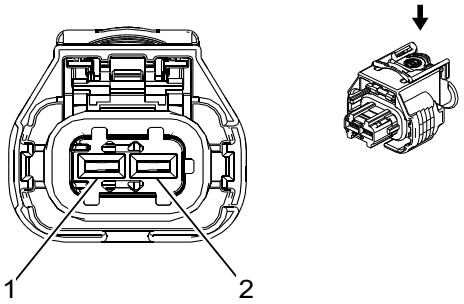
Terminal Part Information

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

G13 Generator X1 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG	225	Generator Turn On Signal	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X1 (LWN/LV1)



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

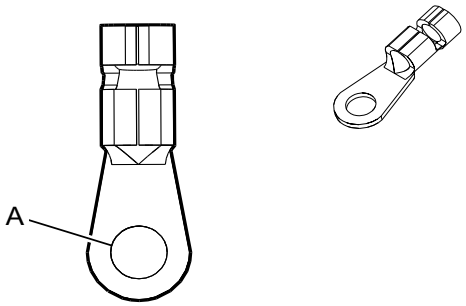
Terminal Part Information

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

G13 Generator X1 (LWN/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU/WH	225	Generator Turn On Signal	I	LV1
	0.75	D-BU/WH	225	Generator Turn On Signal	I	LWN
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	LV1
	0.75	GY	23	Generator Field Duty Cycle Signal	I	LWN

G13 Generator X2 (K68+TP2)



2268698

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12129598
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

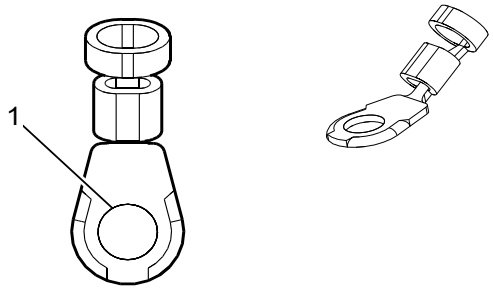
Terminal Part Information

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

G13 Generator X2 (K68+TP2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (K68-TP2)



4833641

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12191853
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

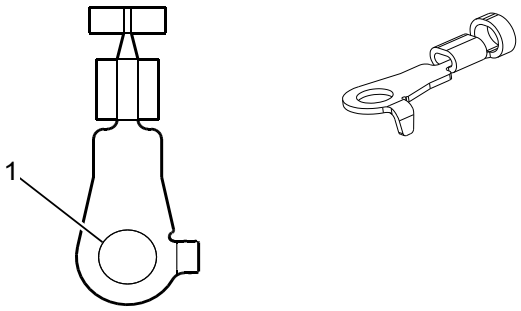
Terminal Part Information

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

G13 Generator X2 (K68-TP2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	19	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (KW5/KG4)



4833656

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 15544794
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

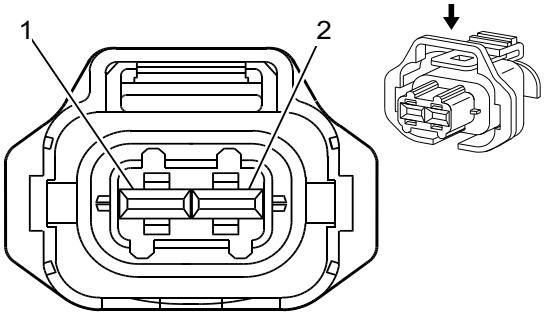
Terminal Part Information

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

G13 Generator X2 (KW5/KG4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD	1	Unfused Battery Positive Voltage	I	—

G18 High Pressure Fuel Pump (LV1)



784092

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 1928403874
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Kompakt Series, Sealed (BK)

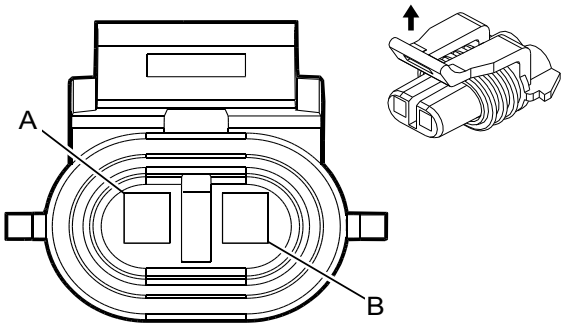
Terminal Part Information

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

G18 High Pressure Fuel Pump (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	—
2	—	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	—

G24 Windshield Washer Pump



635009

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series (BK)

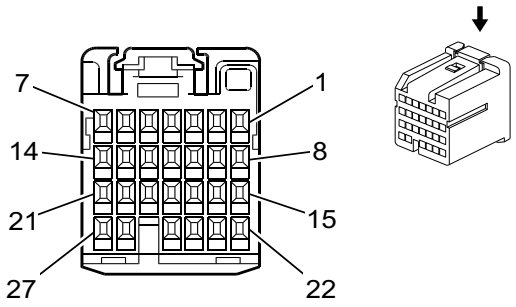
Terminal Part Information

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

G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	228	Windshield Washer Pump Control	I	—
B	0.5	BK	350	Ground	I	—

K9 Body Control Module X1



1664495

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15482789
Service Connector: 88988838
Description: 27-Way F HIT Series (L-GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J

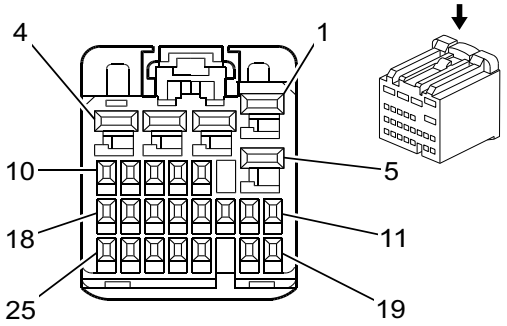
K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	PK	1020	Off/Run/Crank Ignition Voltage	I	—
3	0.35	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	0.35	WH	530	Off/Run/Crank Ignition Voltage	I	—
5	0.35	L-GN	1715	Windshield Wiper Switch High Signal	I	—
6	0.35	L-GN	6818	Steering Wheel Resistor Ladder Signal 1	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	TN/BK	6009	Windshield Wiper Switch Low Reference	I	—
9	0.35	L-BU	1714	Windshield Wiper Switch Low Signal	I	—
10 - 13	—	—	—	Not Occupied	—	—
14	0.35	PK	3	Run/Crank Ignition 1 Voltage	I	—
15	0.35	D-GN	663	Hazard Switch Left Turn Signal	I	—
16	0.35	TN	664	Hazard Switch Right Turn Signal	I	—
17	0.35	PK	1444	12V Reference	I	—
18	0.35	YE	525	Headlamp Dimmer Switch Low Beam Signal	I	—
19	0.35	WH	111	Hazard Switch Signal	I	—
20	0.35	PU	5526	Tap Up/Tap Down Switch Signal	I	—
21	0.35	BN	4	Accessory Ignition Voltage	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	L-BU	1788	Traction Control Switch Signal 1	I	—

K9 Body Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.35	PK	94	Windshield Washer Switch Signal	I	—
25	0.35	YE	307	Headlamp Switch Flash To Pass Signal	I	—
26	0.5	TN/WH	816	Brake Transmission Shift Interlock Solenoid Control	I	—
27	—	—	—	Not Occupied	—	—

K9 Body Control Module X2



1664496

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15482790
Service Connector: 88988839
Description: 25-Way F HIT Series (NA)

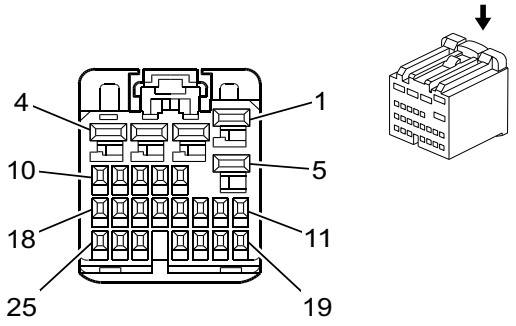
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	OG	1732	Electronic Control Unit 12V Reference 3	II	—
2	0.5	RD/WH	2540	Battery Positive Voltage	II	—
3	0.5	BN/WH	230	Instrument Panel Lamp Dimming Control	II	—
4	—	—	—	Not Occupied	—	—
5	0.5 0.8	GY/BK D-BU/WH	690 149	Courtesy Lamp Relay Control Courtesy Lamp Control	II II	5BV -5BV
6 - 7	—	—	—	Not Occupied	—	—
8	0.35	L-BU	13	Headlamp Switch Park Lamp Signal	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH	278	Ambient Light Sensor Signal	I	—
12	0.35	WH	103	Headlamp Switch On Signal	I	—
13 - 16	—	—	—	Not Occupied	—	—
17	0.35	D-GN	306	Headlamp Switch Headlamps Off Signal Control	I	—
18	0.35	D-BU/WH	149	Courtesy Lamp Control	I	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	D-BU	6727	Vehicle Stability Control Off Switch Signal	I	—
22	0.35	D-BU	38	Backup Lamp Relay Control	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.35	PU	328	Interior Lamp Defeat Switch Signal	I	—

K9 Body Control Module X3



1664498

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15482791
Service Connector: 88988840
Description: 25-Way F HIT Series (L-BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

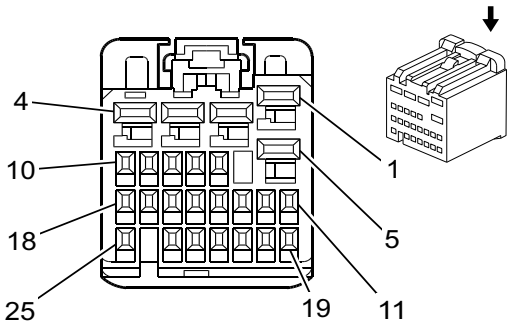
K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK/WH	351	Signal Ground	II	—
2	0.8	RD/WH	2140	Battery Positive Voltage	II	—
3	0.5	RD/WH	3840	Battery Positive Voltage	II	—
4	—	—	—	Not Occupied	—	—
5	0.8	BK/WH	351	Signal Ground	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
9	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
10	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
11	0.35	D-GN	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
12	0.35	OG/WH	812	12V Reference	I	—
13	0.5	TN	5380	Brake Position Sensor Signal	I	—
14	0.5	BN/WH	5382	Brake Position Sensor Low Reference	I	—
15	0.5	GY	5381	Brake Position Sensor 5V Reference	I	—
16	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
17	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
18	0.5	YE	6817	LED Backlight Dimming Control	I	—
19	0.5	WH/D-BU	5986	Serial Data Communication Enable	I	—
20 - 21	—	—	—	Not Occupied	—	—

K9 Body Control Module X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.35	D-GN/WH	7158	Cruise Control Indicator Dimming Signal	I	—
23 - 25	—	—	—	Not Occupied	—	—

K9 Body Control Module X4



1664499

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15482792
Service Connector: 88988841
Description: 25-Way F HIT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

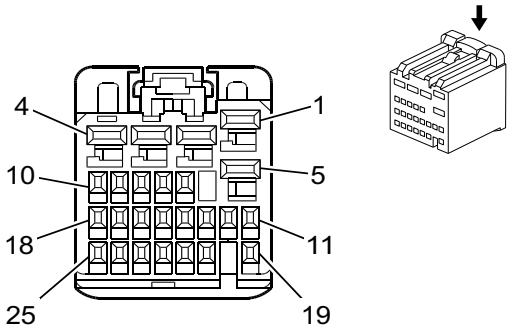
K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	RD/WH	2740	Battery Positive Voltage	II	—
2	0.8	RD/WH	3040	Battery Positive Voltage	II	—
3	0.8	RD/WH	2940	Battery Positive Voltage	II	—
4	0.8	RD/WH	2240	Battery Positive Voltage	II	—
5	0.8	D-BU/WH	1315	Right Front Turn Signal Lamp Control	II	—
6	0.35	D-GN	6134	Local Interconnect Network Serial Data Bus 3	I	—
7	0.35	YE	196	Windshield Wiper Motor Park Switch Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	BK/WH	451	Signal Ground	I	—
10	0.5	RD/WH	2840	Battery Positive Voltage	I	—
11	0.5	L-GN	1391	Left Front Door Lock Relay Control	I	—
12	0.35	YE	5187	Right Trailer Turn Signal Lamp Control	I	—
13	0.35	OG	5186	Left Trailer Turn Signal Lamp Control	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	OG	2268	Windshield Washer Relay Control	I	—
16	0.35	TN/WH	1969	Headlamp High Beam Relay Control	I	—
17	0.5	PK/BK	109	Hood Ajar Switch Signal	I	—
18	—	—	—	Not Occupied	—	—
19	0.5	D-BU	5985	Accessory Wakeup Serial Data	I	—

K9 Body Control Module X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	L-BU	1344	Rear Compartment Lid Release Relay Control	I	—
21	0.35	YE	5199	Run/Crank Relay Coil Control	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	PU	544	DRL Relay Control	I	—
24	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
25	—	—	—	Not Occupied	—	—

K9 Body Control Module X5



1664500

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15480179
Service Connector: 88988837
Description: 25-Way F HIT Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	C	A
III	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

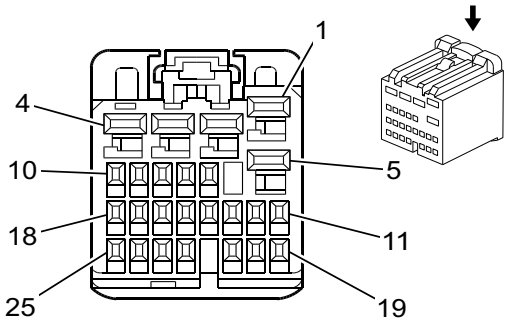
K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
2	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
3	—	—	—	Not Occupied	—	—
4	0.8	L-BU/WH	1314	Left Front Turn Signal Lamp Control	III	—
5	0.5	WH	5065	Stop Lamp Relay Coil Control	III	—
6	0.35	WH/D-BU	6311	Cruise/ETC/TCC Brake Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	PK	5076	Current Sensor Control	I	—
9	0.5	WH	5075	Current Sensor Signal	I	—
10	0.5	BN	5077	Current Sensor Low Reference	I	—
11	0.35	YE	43	Accessory Ignition Voltage	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	OG	300	Run Ignition 3 Voltage	I	—
14	0.5	L-GN	24	Backup Lamp Control	I	—
15	0.5	PU	5531	Hood Closed Switch Signal	I	—
16	0.35	L-BU	1134	Park Brake Switch Signal	I	—
17	—	—	—	Not Occupied	—	—

K9 Body Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	TN	28	Horn Relay Control	I	—
19	0.5	YE	5810	Park Enable Signal	I	—
20	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
21	0.35	TN	860	Front Windshield Wiper Switch High Signal	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	PK/WH	1970	Headlamp Low Beam Relay Control	I	—
24	0.35	D-BU	45	Park Lamp Relay Control	I	—
25	—	—	—	Not Occupied	—	—

K9 Body Control Module X6



1664502

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15482793
Service Connector: 88988842
Description: 25-Way F HIT Series (PK)

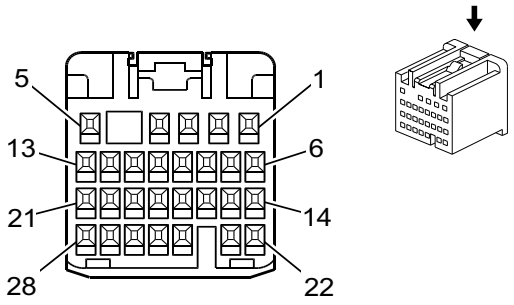
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.8	L-BU	1320	CHMSL Control	II	—
3 - 7	—	—	—	Not Occupied	—	—
8	0.35	TN/WH	746	Right Front Door Ajar Switch Signal	I	—
9	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
10	0.35	GY/BK	745	Left Front Door Ajar Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.35	PK/BK	1303	Lift Gate Ajar Switch Signal 1	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	YE/BK	1181	Right Rear Door Open Switch Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	L-GN	1177	Right Front Door Open Switch Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
19 - 21	—	—	—	Not Occupied	—	—
22	0.35	L-GN	5926	Rear Access Open Switch Signal	I	—
23 - 25	—	—	—	Not Occupied	—	—

K9 Body Control Module X7



1664505

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15466053
Service Connector: 88988806
Description: 28-Way F HIT Series (GY)

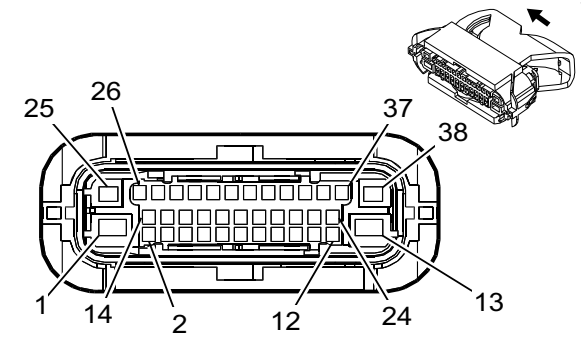
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J

K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	YE	356	Driver Door Lock Relay Unlock Control	I	—
3 - 5	—	—	—	Not Occupied	—	—
6	0.5	YE	356	Driver Door Lock Relay Unlock Control	I	—
7	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.5	OG/BK	781	Driver Door Lock Switch Unlock Signal	I	—
12	0.5	PK/BK	780	Driver Door Lock Switch Lock Signal	I	—
13 - 22	—	—	—	Not Occupied	—	—
23	0.5	TN	126	Left Front Door Open Switch Signal	I	—
24	0.5	L-GN	66	A/C Request Signal	I	—
25 - 28	—	—	—	Not Occupied	—	—

K17 Electronic Brake Control Module



3638282

Connector Part Information

Harness Type: Chassis
OEM Connector: 13655518
Service Connector: 19303771
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19329757	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
II	19367600	J-35616-40 (BU)	J-38125-556	Not Available	Not Available	Not Available	Not Available
III	19368624	J-35616-35 (VT)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

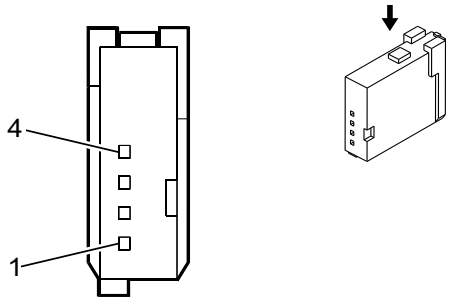
K17 Electronic Brake Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD/YE	442	Battery Positive Voltage	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	I	—
4	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	I	—
5	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	—
6	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
9	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
10	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	I	—
11	0.5	YE	872	Wheel Speed Sensor Signal Right Front	I	—
12	—	—	—	Not Occupied	—	—
13	5	BK	2150	Ground	II	—
14 - 16	—	—	—	Not Occupied	—	—
17	0.5	L-GN/BN	2087	Combined Vehicle Inertial Sensor Supply Voltage	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—

K17 Electronic Brake Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
22 - 24	—	—	—	Not Occupied	—	—
25	2.5	RD/VT	1640	Battery Positive Voltage	III	—
26 - 27	—	—	—	Not Occupied	—	—
28	0.5	WH/D-BU	5986	Serial Data Communication Enable	I	—
29	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	I	—
30	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	I	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	D-GN/WH	817	Vehicle Speed Signal	I	—
34	—	—	—	Not Occupied	—	—
35	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	I	—
36	0.5	GY	830	Wheel Speed Sensor Signal Left Front	I	—
37	—	—	—	Not Occupied	—	—
38	2.5	BK	2150	Ground	III	—

K18 Compass Module



2831061

Connector Part Information

Harness Type: Headliner
OEM Connector: 13820711
Service Connector: 19300398
Description: 4-Way F 0.64 Series (BK)

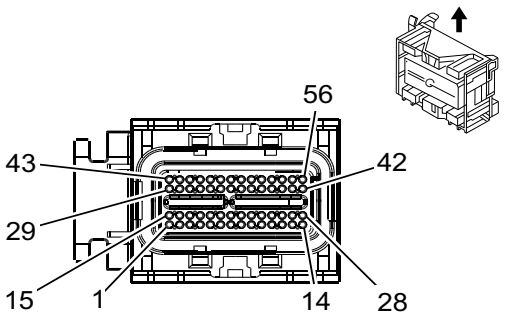
Terminal Part Information

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

K18 Compass Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	441	Run Ignition 3 Voltage	I	—
2	0.35	BK/WH	351	Signal Ground	I	—
3	0.35	D-GN	6134	Local Interconnect Network Serial Data Bus 3	I	—
4	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L96/LC8)



784851

Connector Part Information

Harness Type: Engine
OEM Connector: 13510837
Service Connector: 88988373
Description: 56-Way F 0.64 Series, Sealed (BU with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available

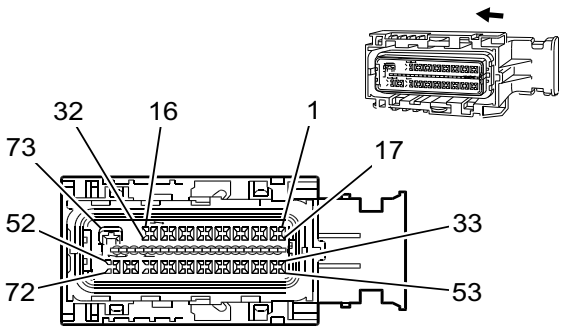
K20 Engine Control Module X1 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	L-BU	1162	Accelerator Pedal Position Signal 2	I	—
3	0.75	L-GN/WH	492	Mass Air Flow Sensor Signal	I	—
4 - 7	—	—	—	Not Occupied	—	—
8	0.75	GY/D-BU	7564	Humidity Sensor Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	D-BU	1161	Accelerator Pedal Position Signal 1	I	—
11	0.75	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	—
12	0.8	OG/BK	380	A/C Refrigerant Pressure Sensor Signal	I	—
13	0.8	TN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.5	TN	1274	Accelerator Pedal Position 5V Reference 2	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	D-BU	5985	Accessory Wakeup Serial Data	I	—
19	0.5	VT/L-GN	439	Run/Crank Ignition 1 Voltage	I	—
20	0.5	RD/WH	440	Battery Positive Voltage	I	—
21 - 23	—	—	—	Not Occupied	—	—
24	0.5	WH/BK	1164	Accelerator Pedal Position 5V Reference 1	I	—
25	0.75	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	—

K20 Engine Control Module X1 (L96/LC8) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26	0.8	GY	2700	A/C Pressure Sensor 5V Reference	I	—
27	0.5	YE/BK	625	Starter Enable Relay Control	I	—
28	0.5	D-GN/WH	465	Fuel Pump Primary Relay Control	I	—
29	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
30	0.5	PU	1272	Accelerator Pedal Position Low Reference 2	I	—
31	0.75	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	—
32	0.8	L-BU/BK	6813	Coolant Temperature Sensor 2 Low Reference	I	—
33	0.5	L-BU/WH	6311	Cruise/ETC/TCC Brake Signal	I	—
34	0.5	OG/BK	1786	Transmission Park/Neutral Signal 1	I	—
35 - 37	—	—	—	Not Occupied	—	—
38	0.5	BN	1271	Accelerator Pedal Position Low Reference 1	I	—
39	—	—	—	Not Occupied	—	—
40	0.5	YE	5991	Powertrain Relay Coil Control	I	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
44	—	—	—	Not Occupied	—	—
45	0.75	BN/VT	472	Intake Air Temperature Sensor Signal	I	—
46	0.8	L-GN	2032	Coolant Temperature Sensor Signal	I	—
47	0.5	OG	225	Generator Turn On Signal	I	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.5	D-GN/WH	817	Vehicle Speed Signal	I	—
51	—	—	—	Not Occupied	—	—
52	0.5	BN/WH	419	Check Engine Indicator Control	I	—
53	0.5	D-GN/WH	459	A/C Compressor Clutch Relay Control	I	—
54 - 55	—	—	—	Not Occupied	—	—
56	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	—

K20 Engine Control Module X1 (LV1)



2470482

Connector Part Information

Harness Type: Engine
OEM Connector: 13611938
Service Connector: 13574782
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available
II	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

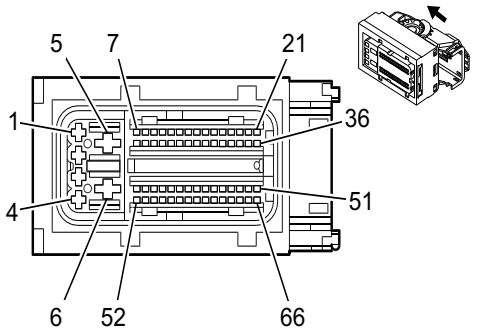
K20 Engine Control Module X1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	—	—	—	Not Occupied	—	—
4	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	—
5	0.5	GY/WH	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	—
6	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	I	—
10	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.5	L-GN/BK	735	Outside Ambient Air Temperature Sensor Signal	I	—
14	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
15	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	I	—
16 - 20	—	—	—	Not Occupied	—	—
21	0.5	BN/RD	2700	A/C Pressure Sensor 5V Reference	I	—
22	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	—
26	0.5	BK/BN	2759	Fuel Tank Pressure Sensor Low Reference	I	—
27 - 29	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.5	BK/D-BU	1271	Accelerator Pedal Position Low Reference 1	I	—
31	—	—	—	Not Occupied	—	—
32	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	—
33	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	I	—
34	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal 2	I	—
35 - 38	—	—	—	Not Occupied	—	—
39	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
41	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	L-GN/GY	465	Fuel Pump Primary Relay Control	I	—
45	—	—	—	Not Occupied	—	—
46	0.5	BN/WH	419	Check Engine Indicator Control	I	—
47	0.5	WH	5359	Brake Apply Sensor Control	I	—
48	0.5	D-BU/YE	5361	Brake Apply Sensor Signal	I	—
49 - 50	—	—	—	Not Occupied	—	—
51	0.5	VT/L-GN	439	Run/Crank Ignition 1 Voltage	I	—
52	0.75	RD/WH	440	Battery Positive Voltage	I	—
53	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	I	—
54 - 56	—	—	—	Not Occupied	—	—
57	0.5	WH/D-BU	6311	Cruise/ETC/TCC Brake Signal	I	—
58 - 61	—	—	—	Not Occupied	—	—
62	0.75	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	—
63	0.5	YE/BK	625	Starter Enable Relay Control	I	—
64 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	—
67	0.75	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	—
68	0.5	BK/BN	5360	Brake Apply Sensor Low Reference	I	—
69	—	—	—	Not Occupied	—	—
70	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
71	—	—	—	Not Occupied	—	—
72	0.5	YE	5991	Powertrain Relay Coil Control	I	—
73	2.5	VT	1439	Run/Crank Ignition 1 Voltage	II	—

K20 Engine Control Module X1 (LWN)



2498868

Connector Part Information

Harness Type: Engine
OEM Connector: 33261333
Service Connector: 19181736
Description: 66-Way F 0.64, 2.8, 6.3 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575360	J-35616-4A (PU)	J-38125-36	4-964286-1	Lear 16	E	1
II	13579752	J-35616-4A (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
III	13584448	J-35616-64B (LT BU)	J-38125-12A	1719532-5	Lear 7	J	J
IV	13584529	J-35616-42 (RD)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
V	13584530	J-35616-4A (PU)	J-38125-36	4-964273-1	Yazaki 15	C	5

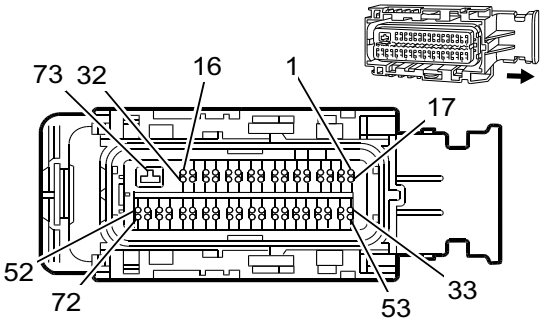
K20 Engine Control Module X1 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	VT/GY	1439	Run/Crank Ignition 1 Voltage	V	—
2	0.5	VT/D-BU	5291	Powertrain Main Relay Fused Supply 2	II	—
3	0.5	VT/D-BU	5292	Powertrain Main Relay Fused Supply 3	II	—
4	0.5	RD/BN	440	Battery Positive Voltage	I	—
5	6	RD/YE	2	Battery Positive Voltage	IV	—
6	6	BK/WH	451	Signal Ground	IV	—
7	0.5	VT/YE	5985	Accessory Wakeup Serial Data	III	—
8 - 10	—	—	—	Not Occupied	—	—
11	0.5	BU/YE	6861	Water In Fuel Sensor Signal	III	—
12	—	—	—	Not Occupied	—	—
13	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	III	—
14	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	III	—
15	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal 2	III	—
16	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	III	—

K20 Engine Control Module X1 (LWN) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
17	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	III	—
18	0.5	BN/WH	419	Check Engine Indicator Control	III	—
19	0.5	L-GN/BN	507	Wait To Start Indicator Control	III	—
20	—	—	—	Not Occupied	—	—
21	0.5	YE	2928	Fuel Metering Valve High Control	III	—
22	0.5	VT/L-GN	439	Run/Crank Ignition 1 Voltage	III	—
23	0.5	WH/D-BU	6311	Cruise/ETC/TCC Brake Signal	III	—
24	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	III	—
25	0.5	L-GN/WH	492	Mass Air Flow Sensor Signal	III	—
26	0.5	BU/VT	2364	Cooling Fan Speed Signal	III	—
27	0.5	BK/D-BU	1271	Accelerator Pedal Position Low Reference 1	III	—
28	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	III	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	III	—
34 - 35	—	—	—	Not Occupied	—	—
36	0.5	BN/BK	2929	Fuel Metering Valve Low Control	III	—
37 - 38	—	—	—	Not Occupied	—	—
39	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	III	—
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	III	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK/BN	5360	Brake Apply Sensor Low Reference	III	—
44	0.5	WH	5359	Brake Apply Sensor Control	III	—
45	0.5	WH/D-BU	6289	Induction Air Temperature Sensor Signal	III	—
46	0.5	BN/RD	2700	A/C Pressure Sensor 5V Reference	III	—
47	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	III	—
48	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	III	—
49	—	—	—	Not Occupied	—	—
50	0.5	L-GN/GY	465	Fuel Pump Primary Relay Control	III	—
51	0.5	YE	5991	Powertrain Relay Coil Control	III	—
52 - 53	—	—	—	Not Occupied	—	—
54	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	III	—
55	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	III	—
56 - 58	—	—	—	Not Occupied	—	—
59	0.5	D-BU/YE	5361	Brake Apply Sensor Signal	III	—
60	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	III	—
61 - 63	—	—	—	Not Occupied	—	—
64	0.75	VT/BN	2927	Hydrocarbon Injector Low Control	III	—
65	—	—	—	Not Occupied	—	—
66	0.5	YE/BK	625	Starter Enable Relay Control	III	—

K20 Engine Control Module X2 (L96/LC8)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available
II	19368324	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

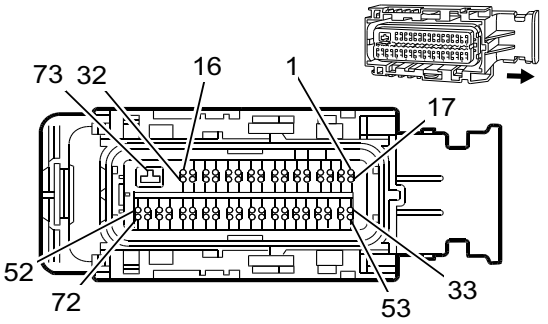
K20 Engine Control Module X2 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	PU	2121	Ignition Control 1	I	—
2	0.5	TN	1744	Fuel Injector Control 1	I	—
3	0.5	D-BU/WH	878	Fuel Injector Control 8	I	—
4	0.5	OG/BK	877	Fuel Injector Control 7	I	—
5	0.5	L-GN/BK	1745	Fuel Injector Control 2	I	—
6	0.5	YE/BK	846	Fuel Injector Control 6	I	—
7	0.5	TN/WH	845	Fuel Injector Control 5	I	—
8	0.5	L-BU/BK	844	Fuel Injector Control 4	I	—
9	0.5	PK/BK	1746	Fuel Injector Control 3	I	—
10	—	—	—	Not Occupied	—	—
11	0.8	PU	5284	Camshaft Phaser Intake Solenoid 1	I	—
12 - 14	—	—	—	Not Occupied	—	—
15	0.5	YE	581	Throttle Actuator Control Open	I	—
16	0.5	BN	582	Throttle Actuator Control Close	I	—
17	0.8	PU/WH	2128	Ignition Control 8	I	—
18	0.8	D-GN/WH	2124	Ignition Control 4	I	—
19	0.8	BN/WH	2130	Ignition Control Low Reference Bank 2	I	—
20	0.8	GY/BK	6272	Crankshaft 60X Sensor Low Reference	I	—
21 - 23	—	—	—	Not Occupied	—	—

K20 Engine Control Module X2 (L96/LC8) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.8	BN	6266	Camshaft CAM W Ground	I	—
25	0.8	BK	2755	Oil Pressure Sensor Low Reference	I	—
26 - 27	—	—	—	Not Occupied	—	—
28	0.8	PK	1339	Run/Crank Ignition 1 Voltage	I	—
29	0.8	TN	2199	Camshaft Phaser Solenoid Low Reference	I	—
30 - 32	—	—	—	Not Occupied	—	—
33	0.8	OG	2127	Ignition Control 7	I	—
34	0.8	D-GN	2125	Ignition Control 5	I	—
35	0.8	BN	2129	Ignition Control Low Reference Bank 1	I	—
36	0.8	PU/WH	6270	Crankshaft 60X Sensor 5V Reference	I	—
37 - 39	—	—	—	Not Occupied	—	—
40	0.8	D-BU	6259	Camshaft CAM W Control	I	—
41	0.8	GY	2705	Oil Pressure Sensor 5V Reference	I	—
42	—	—	—	Not Occupied	—	—
43	0.5	GY	2701	Throttle Position Sensor 5V Reference	I	—
44	0.5	TN	2752	Throttle Position Sensor Low Reference	I	—
45	0.5	D-GN	485	Throttle Position Sensor Signal 1	I	—
46	—	—	—	Not Occupied	—	—
47	0.8	TN	1664	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	—
48	0.8	TN	1667	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	—
49	0.8	GY	1716	Knock Sensor Low Reference 1	I	—
50	0.8	GY	2303	Knock Sensor Low Reference 2	I	—
51	—	—	—	Not Occupied	—	—
52	0.8	L-GN	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	—
53	0.8	OG/WH	2122	Ignition Control 2	I	—
54	0.8	L-BU/WH	2126	Ignition Control 6	I	—
55	0.8	L-BU	2123	Ignition Control 3	I	—
56	0.8	WH/BK	6271	Crankshaft 60X Sensor Signal	I	—
57 - 59	—	—	—	Not Occupied	—	—
60	0.8	D-BU/WH	6265	Camshaft CAM W Signal	I	—
61	0.8	TN/WH	331	Oil Pressure Sensor Signal	I	—
62 - 66	—	—	—	Not Occupied	—	—
67	0.8	PU/WH	1665	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	—
68	0.8	PU	1666	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	—
69	0.8	D-BU	496	Knock Sensor Signal 1	I	—
70	0.8	L-BU	1876	Knock Sensor Signal 2	I	—
71	—	—	—	Not Occupied	—	—
72	0.8	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	—
73	3	BK/WH	1551	Signal Ground	II	—

K20 Engine Control Module X2 (LV1)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available
II	19368324	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

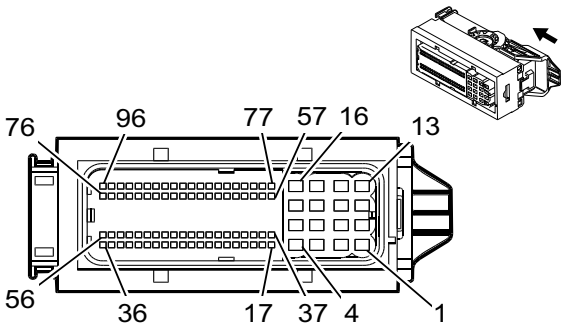
K20 Engine Control Module X2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK/L-GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—
4 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT/WH	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	I	—
11	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	I	—
12	0.5	VT/D-BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	—
13	0.5	VT/L-GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	D-BU	7564	Humidity Sensor Signal	I	—
16	0.5	BN/WH	582	Throttle Actuator Control Close	I	—
17	—	—	—	Not Occupied	—	—
18	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—
19 - 25	—	—	—	Not Occupied	—	—
26	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	I	—
27	0.5	YE/VT	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	I	—

K20 Engine Control Module X2 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
28	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	—
29	0.5	YE/D-BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	—
30 - 31	—	—	—	Not Occupied	—	—
32	0.5	YE	581	Throttle Actuator Control Open	I	—
33	—	—	—	Not Occupied	—	—
34	0.5	GY	2701	Throttle Position Sensor 5V Reference	I	—
35	—	—	—	Not Occupied	—	—
36	0.75	VT/GY	496	Knock Sensor Signal 1	I	—
37	0.75	D-BU	1876	Knock Sensor Signal 2	I	—
38 - 40	—	—	—	Not Occupied	—	—
41	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	I	—
42	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	—
43	0.5	L-GN	432	Manifold Absolute Pressure Sensor Signal	I	—
44	0.5	GY	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
45 - 48	—	—	—	Not Occupied	—	—
49	0.5	D-BU	6289	Induction Air Temperature Sensor Signal	I	—
50	—	—	—	Not Occupied	—	—
51	0.5	L-GN/D-BU	428	EVAP Canister Purge Solenoid Control	I	—
52	0.5	YE	492	Mass Air Flow Sensor Signal	I	—
53	0.5	BU/WH	225	Generator Turn On Signal	I	—
54	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	—
55	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
56	0.75	GY	1716	Knock Sensor Low Reference 1	I	—
57	0.75	BK/GY	2303	Knock Sensor Low Reference 2	I	—
58	0.5	WH/GY	1786	Transmission Park/Neutral Signal 1	I	—
59	0.5	BU	179	Oil Pump Command Signal	I	—
60	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	—
61	0.5	L-GN	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	I	—
62	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	—
63	0.5	OG/BK	469	Manifold Absolute Pressure Sensor Low Reference	I	—
64	—	—	—	Not Occupied	—	—
65	0.5	BK/YE	407	Sensor Low Reference	I	—
66 - 68	—	—	—	Not Occupied	—	—
69	0.5	WH/YE	3202	Throttle Inlet Absolute Pressure Sensor Low Reference	I	—
70	0.5	D-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	—
71 - 72	—	—	—	Not Occupied	—	—
73	3	BK/WH	1551	Signal Ground	II	—

K20 Engine Control Module X2 (LWN)



4115094

Connector Part Information

Harness Type: Engine
OEM Connector: 33254326
Service Connector: 19354404
Description: 96-Way F 0.64 MTS-B, 2.8 ATS Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13584448	J-35616-64B (LT BU)	J-38125-12A	1719532-5	Lear 7	J	J
II	13584530	J-35616-4A (PU)	J-38125-36	4-964273-1	Yazaki 15	C	5
III	13584530	J-35616-4A (PU)	J-38125-36	4-964273-1	Yazaki 15	E	1

K20 Engine Control Module X2 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	D-BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	III	—
2	1.5	L-GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	III	—
3	1.5	D-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	III	—
4	1.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	III	—
5	1.5	D-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	III	—
6	1.5	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	III	—
7	1.5	GY/D-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	III	—
8	1.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	III	—
9 - 12	—	—	—	Not Occupied	—	—
13	2	GY/BN	1582	Glow Plug Control 2	II	—
14	2	GY/YE	1584	Glow Plug Control 4	II	—
15	2	GY/L-GN	1583	Glow Plug Control 3	II	—

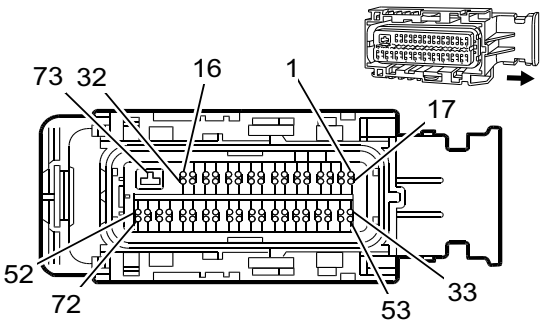
K20 Engine Control Module X2 (LWN) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
16	2	GY/D-BU	1581	Glow Plug Control 1	II	—
17	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	—
18	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
19	0.5	WH/RD	2705	Oil Pressure Sensor 5V Reference	I	—
20 - 25	—	—	—	Not Occupied	—	—
26	0.5	BN	7348	Induction Air Temperature Sensor 2 Signal	I	—
27	0.5	BN/GY	7072	Sensor Fuel Temperature 1 Signal	I	—
28 - 29	—	—	—	Not Occupied	—	—
30	0.5	D-BU	410	Engine Coolant Temperature Sensor Signal	I	—
31	0.5	BN	3681	Charge Air Cooler Outlet Temperature Sensor Signal	I	—
32	0.5	L-GN	3683	Charge Air Cooler Inlet Temperature Sensor Signal	I	—
33	—	—	—	Not Occupied	—	—
34	0.75	D-BU/WH	225	Generator Turn On Signal	I	—
35 - 37	—	—	—	Not Occupied	—	—
38	0.5	BN/YE	2161	Fuel Rail Pressure Sensor 2 Signal	I	—
39	—	—	—	Not Occupied	—	—
40	0.5	GY/D-BU	5300	Camshaft Position Intake Sensor Control 1	I	—
41	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	I	—
42	0.5	BK/L-GN	5301	Camshaft Position Intake Sensor Low Reference 1	I	—
43	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	I	—
44	0.5	D-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	—
45	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	—
46	—	—	—	Not Occupied	—	—
47	0.5	BN/WH	7073	Sensor Fuel Temperature 1 Low Reference	I	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	—
51	0.5	YE/D-BU	3680	Charge Air Cooler Outlet Temperature Sensor Low Reference	I	—
52	0.5	YE/BK	3682	Charge Air Cooler Inlet Temperature Sensor Low Reference	I	—
53 - 55	—	—	—	Not Occupied	—	—
56	0.75	BN/D-BU	2926	Hydrocarbon Injector High Control	I	—
57	0.5	BK/BN	2753	Exhaust Gas Recirculation Sensor Low Reference	I	—
58	0.5	BN/WH	5763	Exhaust Gas Recirculation Valve Sensor Signal	I	—
59	0.5	D-BU/RD	5047	Exhaust Gas Recirculation 5V Reference 1	I	—
60	0.5	BK/BN	6141	Cooling Fan Speed Low Reference	I	—
61	—	—	—	Not Occupied	—	—
62	0.5	GY/RD	2365	Cooling Fan Speed 5V Reference	I	—
63 - 66	—	—	—	Not Occupied	—	—
67	0.75	GY	23	Generator Field Duty Cycle Signal	I	—
68	—	—	—	Not Occupied	—	—
69	0.5	BK/L-GN	2919	Fuel Rail Pressure Sensor Low Reference	I	—

K20 Engine Control Module X2 (LWN) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
70	0.5	VT/BK	5746	Exhaust Gas Recirculation Valve Motor Low Signal	I	—
71	0.5	WH/VT	5764	Exhaust Gas Recirculation Valve Motor High Signal	I	—
72	0.5	GY/D-BU	5930	Variable Nozzle Turbo Solenoid High Signal	I	—
73	0.5	WH/BK	5931	Variable Nozzle Turbo Solenoid Low Signal	I	—
74 - 75	—	—	—	Not Occupied	—	—
76	0.5	BK/YE	2834	Fuel Rail Pressure Solenoid Low Reference	I	—
77 - 79	—	—	—	Not Occupied	—	—
80	0.5	BK/L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
81	0.5	L-GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	—
82	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
83	0.5	VT/D-BU	6270	Crankshaft 60X Sensor 5V Reference	I	—
84	0.5	L-GN	6271	Crankshaft 60X Sensor Signal	I	—
85	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
86	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	—
87	—	—	—	Not Occupied	—	—
88	0.5	D-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	—
89	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	I	—
90	0.5	BN/WH	582	Throttle Actuator Control Close	I	—
91	0.5	YE	581	Throttle Actuator Control Open	I	—
92 - 93	—	—	—	Not Occupied	—	—
94	0.5	YE/D-BU	3231	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	—
95	0.5	GY/D-BU	3230	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	—
96	0.5	D-BU/WH	2530	Fuel Rail Pressure Solenoid Control	I	—

K20 Engine Control Module X3 (L96/LC8)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available

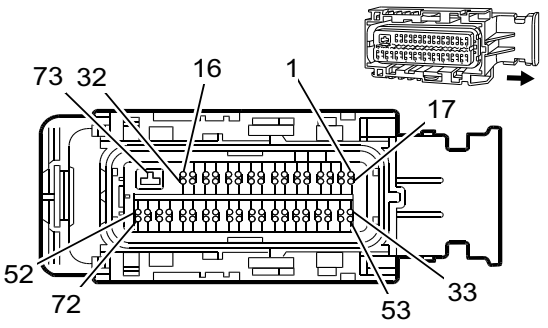
K20 Engine Control Module X3 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 9	—	—	—	Not Occupied	—	—
10	0.5	D-GN/WH	428	EVAP Canister Purge Solenoid Control	I	—
11 - 15	—	—	—	Not Occupied	—	—
16	0.8	OG/WH	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	I	—
17	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
18 - 21	—	—	—	Not Occupied	—	—
22	0.5	BN	5360	Brake Apply Sensor Low Reference	I	—
23 - 26	—	—	—	Not Occupied	—	—
27	0.5	TN	2759	Fuel Tank Pressure Sensor Low Reference	I	—
28	0.8	GY	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
29	0.8	OG/BK	469	Manifold Absolute Pressure Sensor Low Reference	I	—
30	0.8	TN	2761	Coolant Temperature Sensor Low Reference	I	—
31	—	—	—	Not Occupied	—	—
32	0.8	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	I	—
33	—	—	—	Not Occupied	—	—
34	0.8	WH/BK	1579	Fuel Temperature/Composition Signal	I	—
35 - 37	—	—	—	Not Occupied	—	—
38	0.5	WH	5359	Brake Apply Sensor Control	I	—

K20 Engine Control Module X3 (L96/LC8) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
39 - 42	—	—	—	Not Occupied	—	—
43	0.5	GY	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
44	—	—	—	Not Occupied	—	—
45	0.8	L-GN	432	Manifold Absolute Pressure Sensor Signal	I	—
46	0.8	YE	410	Engine Coolant Temperature Sensor Signal	I	—
47 - 54	—	—	—	Not Occupied	—	—
55	0.5	OG/BK	6399	Replicated TOS Signal	I	—
56 - 57	—	—	—	Not Occupied	—	—
58	0.5	YE	5361	Brake Apply Sensor Signal	I	—
59 - 62	—	—	—	Not Occupied	—	—
63	0.5	D-GN	890	Fuel Tank Pressure Sensor Signal	I	—
64	0.5	VT	1589	Primary Fuel Level Sensor Signal	I	—
65	0.8	PU	1670	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	I	—
66	0.8	TN	1671	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	I	—
67	0.8	PU/WH	1668	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	I	—
68	0.8	TN/WH	1669	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	I	—
69 - 73	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (LV1)



1590596

Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available
II	19368324	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

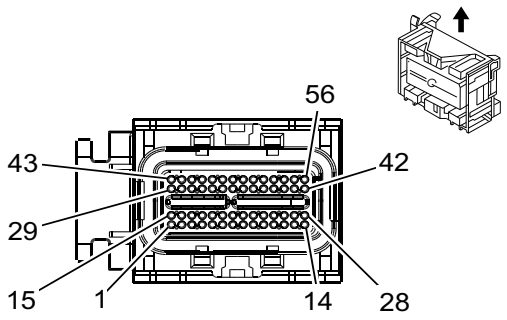
K20 Engine Control Module X3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	WH/RD	2705	Oil Pressure Sensor 5V Reference	I	—
3 - 7	—	—	—	Not Occupied	—	—
8	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT/D-BU	6270	Crankshaft 60X Sensor 5V Reference	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.5	BU/WH	2122	Ignition Control 2	I	—
14	0.5	L-GN/D-BU	2123	Ignition Control 3	I	—
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
16	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	—
17	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	—
18 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	—
25	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
26	0.5	L-GN	6271	Crankshaft 60X Sensor Signal	I	—
27	0.5	YE/D-BU	2124	Ignition Control 4	I	—
28	0.5	BU/GY	2125	Ignition Control 5	I	—

K20 Engine Control Module X3 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.5	BN/D-BU	2126	Ignition Control 6	I	—
30	0.5	BU/VT	2121	Ignition Control 1	I	—
31	0.5	BK/D-BU	2129	Ignition Control Low Reference Bank 1	I	—
32	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	—
33	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	I	—
34	0.5	GY/D-BU	5300	Camshaft Position Intake Sensor Control 1	I	—
35 - 38	—	—	—	Not Occupied	—	—
39	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	I	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.75	D-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—
47	0.75	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—
48	0.75	VT/L-GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—
49	—	—	—	Not Occupied	—	—
50	0.75	WH/L-GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—
51	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—
52	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—
53	0.5	BK/L-GN	5301	Camshaft Position Intake Sensor Low Reference 1	I	—
54 - 58	—	—	—	Not Occupied	—	—
59	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
67	0.75	L-GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
68	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—
69	—	—	—	Not Occupied	—	—
70	0.75	L-GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—
71	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
72	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—
73	3	BK/WH	1551	Signal Ground	II	—

K20 Engine Control Module X3 (LWN)



784851

Connector Part Information

Harness Type: Engine
OEM Connector: 13510837
Service Connector: 88988373
Description: 56-Way F 0.64 Series, Sealed (BU with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available

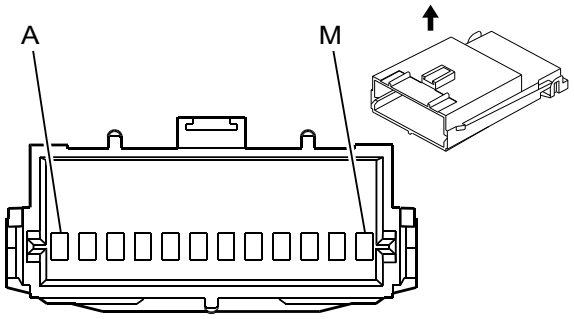
K20 Engine Control Module X3 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	3100	DEF Dosing Valve Low Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK/L-GN	6281	Fuel Level Sensor Low Reference	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	—
7	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	—
8	0.5	BK/YE	407	Sensor Low Reference	I	—
9	0.5	BK/VT	3661	Exhaust Gas Temperature Sensor 5 Low Reference	I	—
10	0.5	BK/D-BU	6274	Exhaust Gas Recirculation Temperature Sensor Low Reference	I	—
11	0.5	BK/GY	3659	Exhaust Gas Temperature Sensor 4 Low Reference	I	—
12	0.5	BK/L-GN	3657	Exhaust Gas Temperature Sensor 3 Low Reference	I	—
13	0.5	BK/D-BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	—
14	0.5	D-BU/WH	5277	Exhaust Gas Temperature Sensor 1	I	—
15	0.5	BN	3099	DEF Dosing Valve High Control	I	—
16 - 17	—	—	—	Not Occupied	—	—
18	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	—

K20 Engine Control Module X3 (LWN) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
19	0.5	BK/YE	6275	Exhaust Gas Recirculation Temperature Sensor 2 Low Reference	I	—
20	0.5	YE/L-GN	3236	Exhaust Gas Recirculation Temperature Sensor 2 Signal	I	—
21	0.5	GY/RD	5928	Variable Nozzle Turbo Position Sensor 5V Reference	I	—
22	0.5	L-GN/BK	735	Outside Ambient Air Temperature Sensor Signal	I	—
23	0.5	D-BU/GY	3660	Exhaust Gas Temperature Sensor 5 Signal	I	—
24	0.5	WH/BN	3237	Exhaust Gas Recirculation Temperature Sensor Signal	I	—
25	0.5	VT/BN	3658	Exhaust Gas Temperature Sensor 4 Signal	I	—
26	0.5	GY/L-GN	5378	Exhaust Gas Temperature Sensor 3	I	—
27	0.5	BK/BN	6782	Exhaust Gas Temperature Sensor 1 Low Reference	I	—
28	0.5	D-BU/L-GN	5377	Exhaust Gas Temperature Sensor 2	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	YE/D-BU	1497	Crankcase Ventilation (Blowby) Heater Control Signal	I	—
31	—	—	—	Not Occupied	—	—
32	0.5	BN/GY	4008	Humidity Sensor Signal	I	—
33	0.5	BK/BN	5929	Variable Nozzle Turbo Position Sensor Low Reference	I	—
34 - 42	—	—	—	Not Occupied	—	—
43	0.5	L-GN/D-BU	3889	DEF Power Module Relay Control	I	—
44	—	—	—	Not Occupied	—	—
45	0.5	BU	3017	Fuel Heater Relay Control 1	I	—
46	0.5	VT/YE	5947	Variable Nozzle Turbo Position Sensor Signal	I	—
47 - 49	—	—	—	Not Occupied	—	—
50	0.5	WH/RD	6054	Exhaust Pressure Sensor 5V Reference 1	I	—
51	0.5	D-BU	6053	Exhaust Pressure Sensor Signal 1	I	—
52	0.5	BK/YE	6055	Exhaust Pressure Sensor Low Reference 1	I	—
53 - 56	—	—	—	Not Occupied	—	—

K33A HVAC Control Module - Auxiliary



328486

Connector Part Information

Harness Type: Headliner
OEM Connector: 12040747
Service Connector: 12101938
Description: 12-Way P/C Edgeboard Standard Series (BK)

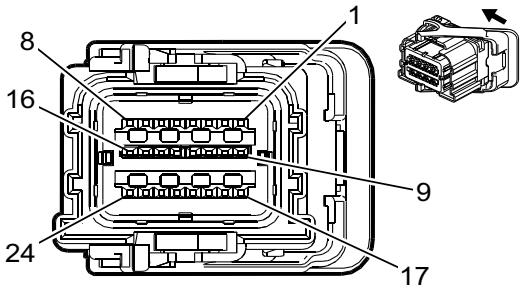
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19330178	J-35616-4A (PU)	J-38125-12A	12040511	Delphi 3	E	A

K33A HVAC Control Module - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	PU	5260	Dual Logic Module Front Temperature Signal	I	—
B	0.35	OG	2775	Rear Air Temperature Motor Control	I	—
C	0.35	BN	5263	Dual Logic Module Rear Temperature Signal	I	—
D	0.35	PU/WH	5264	Dual Logic Module Rear Mode Signal	I	—
E	0.35	TN	5261	Dual Logic Module Front Mode Signal	I	—
F	0.35	GY	2599	Rear Mode Motor Signal	I	—
G	—	—	—	Not Occupied	—	—
H	0.35	BK	1850	Ground	I	—
J	0.35	BN	341	Run Ignition 3 Voltage	I	—
K	—	—	—	Not Occupied	—	—
L	0.35	PK/BK	5265	Dual Logic Module Rear Control Signal	I	—
M	0.35	YE	5262	Dual Logic Module Rear Control Enable Signal	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1



3240106

Connector Part Information

Harness Type: Body
OEM Connector: 13859806
Service Connector: 13579314
Description: 24-Way F 0.64 Series, Sealed (YE)

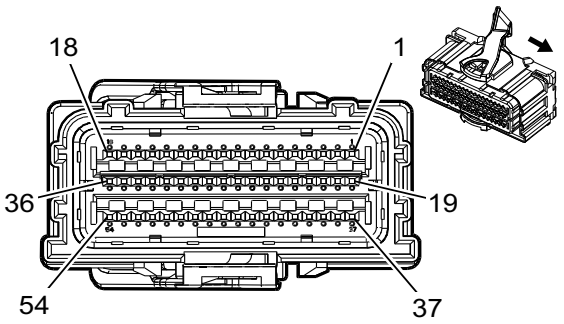
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19328872	J-35616-64B (LT BU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

K36 Inflatable Restraint Sensing and Diagnostic Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BN	3020	Steering Wheel Module Stage 1 Low Control	I	—
4	0.5	TN	3021	Steering Wheel Module Stage 1 High Control	I	—
5	0.5	YE	3025	Passenger IP Module Stage 1 High Control	I	—
6	0.5	OG	3024	Passenger IP Module Stage 1 Low Control	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.5	RD/WH	3440	Battery Positive Voltage	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.5	PK	353	Passenger IP Module Suppression Indicator Control	I	—
14	0.5	TN/BK	371	Passenger IP Module Disable Switch Signal	I	—
15	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
16	—	—	—	Not Occupied	—	—
17	0.35	PK	1139	Run/Crank Ignition 1 Voltage	I	—
18	—	—	—	Not Occupied	—	—
19	0.5	BK/WH	1751	Signal Ground	I	—
20 - 24	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2



2817420

Connector Part Information

Harness Type: Body
OEM Connector: 13914358
Service Connector: 19301526
Description: 54-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19328872	J-35616-64B (LT BU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

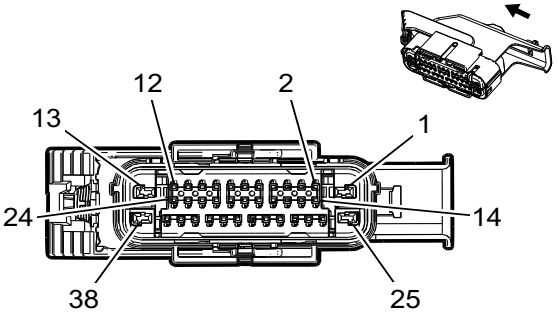
K36 Inflatable Restraint Sensing and Diagnostic Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 10	—	—	—	Not Occupied	—	—
11	0.5	TN/BK	7016	Right Rear Head Curtain Module Low Control	I	—
12	0.5	L-BU	7015	Right Rear Head Curtain Module High Control	I	—
13	0.5	BN	2137	Left Front Side Impact Module High Control	I	—
14	0.5	YE/BK	2138	Left Front Side Impact Module Low Control	I	—
15	0.5	L-GN	2136	Right Front Side Impact Module Low Control	I	—
16	0.5	TN/WH	2135	Right Front Side Impact Module High Control	I	—
17	0.5	PU/WH	5019	Left Front Head Curtain Module High Control	I	—
18	0.5	PK	5020	Left Front Head Curtain Module Low Control	I	—
19	0.5	WH	2132	Left Front Side Impact Sensing Module Signal	I	—
20	0.5	PU/WH	6628	Left Front Side Impact Sensing Module Low Reference	I	—
21	0.5	WH/BK	6629	Right Front Side Impact Sensing Module Low Reference	I	—
22	0.5	D-GN	2134	Right Front Side Impact Sensing Module Signal	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	D-BU/WH	6619	Middle Front Discriminating Sensor Low Reference	I	—
26	0.5	BN/WH	6618	Middle Front Discriminating Sensor Signal	I	—
27	0.5	D-GN/WH	6620	Left Middle Side Impact Sensing Module Signal	I	—
28	0.5	GY/BK	6621	Left Middle Side Impact Sensing Module Low Reference	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.5	L-GN/WH	6625	Right Middle Side Impact Sensing Module Low Reference	I	—
30	0.5	L-BU/BK	6624	Right Middle Side Impact Sensing Module Signal	I	—
31 - 36	—	—	—	Not Occupied	—	—
37	0.5	TN/WH	2118	Driver Seat Belt Pretensioner High Control	I	—
38	0.5	OG/BK	2119	Driver Seat Belt Pretensioner Low Control	I	—
39	0.5	OG	2117	Passenger Seat Belt Pretensioner Low Control	I	—
40	0.5	L-GN	2116	Passenger Seat Belt Pretensioner High Control	I	—
41	0.5	TN/WH	238	Driver Seat Belt Switch Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.5	PK	5057	Seat Position Switch Low Reference	I	—
44	0.5	L-BU	1361	Passenger Seat Belt Switch Low Reference	I	—
45	0.5	OG	1362	Passenger Seat Belt Switch Signal	I	—
46 - 52	—	—	—	Not Occupied	—	—
53	0.5	YE/BK	5021	Right Front Head Curtain Module High Control	I	—
54	0.5	WH/BK	5022	Right Front Head Curtain Module Low Control	I	—

K38 Chassis Control Module



2546969

Connector Part Information

Harness Type: Chassis
OEM Connector: 13638773
Service Connector: 13574909
Description: 38-Way F 0.64, 2.8, 6.3 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575408	J-35616-4A (PU)	J-38125-553	Not Available	Not Available	Not Available	Not Available
II	13579774	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	Yazaki 14	9	9

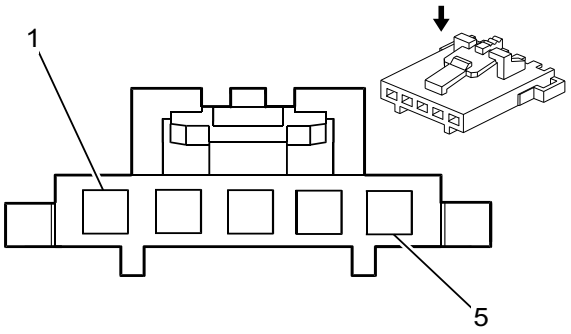
K38 Chassis Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD/WH	1940	Battery Positive Voltage	I	—
2 - 4	—	—	—	Not Occupied	—	—
5	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
6	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	—
11 - 12	—	—	—	Not Occupied	—	—
13	2.5	GY	120	Fuel Pump Control	I	—
14 - 16	—	—	—	Not Occupied	—	—
17	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
18	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	—
19	—	—	—	Not Occupied	—	—
20	0.5	L-GN/GY	465	Fuel Pump Primary Relay Control	II	—
21	0.5	VT/GY	2739	Run/Crank Ignition 1 Voltage	II	—
22	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	II	—
23	0.5	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	II	—
24	0.5	BK	1350	Ground	II	—

K38 Chassis Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	2	BK	2150	Ground	I	—
26 - 37	—	—	—	Not Occupied	—	—
38	2.5	BK/L-GN	1580	Fuel Pump Low Reference	I	—

K64 Content Theft Deterrent Control Module



1593355

Connector Part Information

Harness Type: Content Theft Deterrent Control Module
OEM Connector: 15383337
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way F SL Series (BK)

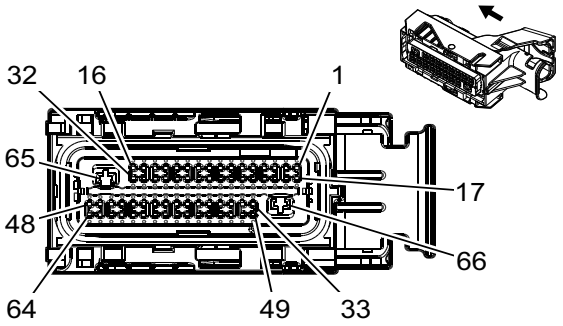
Terminal Part Information

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

K64 Content Theft Deterrent Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD/WH	540	Battery Positive Voltage	I	—
2	—	BN	4	Accessory Ignition Voltage	I	—
3	—	BK/WH	351	Signal Ground	I	—
4	—	D-GN	5060	Low Speed GMLAN Serial Data	I	—
5	—	—	—	Not Occupied	—	—

K71 Transmission Control Module



3621452

Connector Part Information

Harness Type: Engine
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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available
II	13579769	J-35616-4A (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

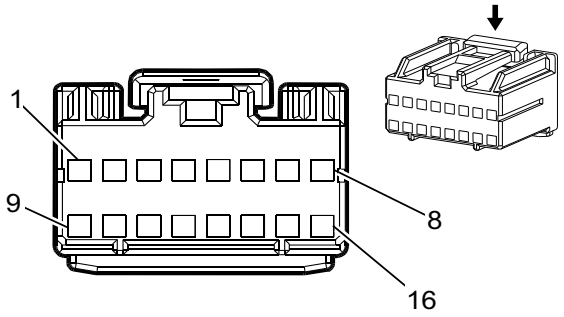
K71 Transmission Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	D-BU WH/D-BU	4507 4507	Transmission Clutch H Control Transmission Clutch H Control	I I	LV1 LWN
2	0.5	D-BU	6401	Clutch B Control	I	—
3	0.5	GY/L-GN	6403	Clutch D Control	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5 0.5	VT/WH YE/L-GN	4170 4170	Transmission Position Sensor B 9V Reference Transmission Position Sensor B 9V Reference	I I	LV1 LWN
8	0.5 0.5	VT YE/D-BU	4171 4171	Transmission Position Sensor A 9V Reference Transmission Position Sensor A 9V Reference	I I	LV1 LWN
9 - 12	—	—	—	Not Occupied	—	—
13	0.5	L-GN/VT	4510	Transmission Intermediate Speed Signal	I	—
14	0.5	GY/D-BU	6358	Output Speed Signal	I	—
15	0.5 0.5	L-GN L-GN/YE	6353 6353	Input Speed Signal Input Speed Signal	I I	LV1 LWN
16	—	—	—	Not Occupied	—	—
17	0.5	WH	4508	Transmission Clutch G Control	I	—
18	0.5	BN	6400	Clutch A Control	I	—
19	0.5	GY	6402	Clutch C Control	I	—
20	0.5	YE/BN	6404	Clutch E Control	I	—
21	0.5	L-GN/WH	6380	TCC On/Off Solenoid A Control	I	—

K71 Transmission Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	WH/BK	3927	IMS Mode Switch Low Reference	I	LV1
	0.5	BK/GY	3927	IMS Mode Switch Low Reference	I	LWN
26 - 27	—	—	—	Not Occupied	—	—
28	0.5	OG/BK	586	Transmission Oil Temperature Sensor Low Reference	I	LV1
	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	I	LWN
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	L-GN/WH	6387	Transmission High Side Driver 1 Signal Driver	I	LV1
	0.5	L-GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	LWN
34	—	—	—	Not Occupied	—	—
35	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	I	—
36	—	—	—	Not Occupied	—	—
37	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
38	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
39 - 46	—	—	—	Not Occupied	—	—
47	0.5	GY/YE	4169	PRNDL S Signal	I	—
48	—	—	—	Not Occupied	—	—
49	0.75	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
52	—	—	—	Not Occupied	—	—
53	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
54	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
55 - 58	—	—	—	Not Occupied	—	—
59	0.5	GY	4168	PRNDL P Signal	I	LV1
	0.5	GY/WH	4168	PRNDL P Signal	I	LWN
60	0.5	OG/BK	5983	PRNDL C Signal	I	LV1
	0.5	WH/BK	5983	PRNDL C Signal	I	LWN
61	0.5	GY/BN	5982	PRNDL B Signal	I	—
62	0.5	VT/WH	5981	PRNDL A Signal	I	—
63	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	I	—
64	—	—	—	Not Occupied	—	—
65	0.75	BK/WH	1551	Signal Ground	II	—
66	0.75	RD/WH	1840	Battery Positive Voltage	II	LV1
	0.75	RD/L-GN	1840	Battery Positive Voltage	II	LWN

K73 Telematics Communication Interface Control Module X1



1471689

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15431362
Service Connector: 15306351
Description: 16-Way F 100A Micro-Pack Series (NA)

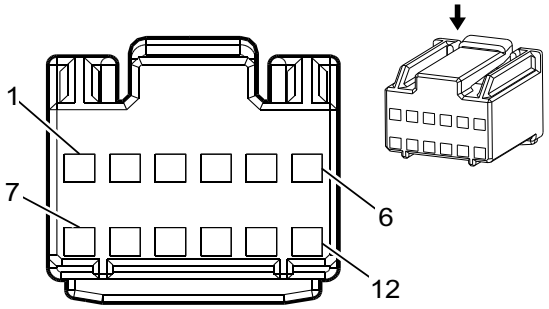
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575548	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	J	J
II	13575548	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	K	K

K73 Telematics Communication Interface Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2	0.8	BN/WH	2517	Keypad Red LED Control	II	—
3	0.8	YE/BK	2516	Keypad Green LED Control	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.8	L-GN/BK	2515	Keypad Control	II	—
7	0.8	BK/WH	351	Signal Ground	II	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
11	0.8	D-GN/WH	2514	Keypad Signal	II	—
12	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.8	RD/WH	3240	Battery Positive Voltage	II	—
16	—	—	—	Not Occupied	—	—

K73 Telematics Communication Interface Control Module X2



1471691

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15431365
Service Connector: 88952886
Description: 12-Way F 100A Micro-Pack Series (NA)

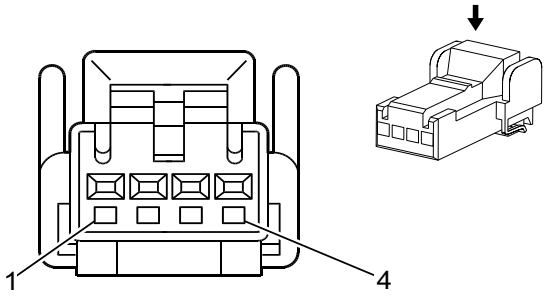
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575548	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	J	J
II	13575548	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	K	K

K73 Telematics Communication Interface Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-BU	658	Cellular Telephone Voice Signal	I	UI8
	0.8	D-BU	658	Cellular Telephone Voice Signal	II	-UI8
2	0.35	L-BU/BK	659	Cellular Telephone Voice Low Reference	I	UI8
	0.8	L-BU/BK	659	Cellular Telephone Voice Low Reference	II	-UI8
3	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
4	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
5	0.35	Bare	1792	Low Reference	I	—
6	0.35	PK	5149	Voice Recognition Audio Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	Bare	1782	Low Reference	I	UI8
	0.8	Bare	1792	Low Reference	II	-UI8
9	0.8	GY	655	Cellular Telephone Microphone Signal	II	—
10	0.8	D-GN	654	Cellular Telephone Microphone Low Reference	II	—
11	—	—	—	Not Occupied	—	—
12	0.35	PK/BK	5152	Voice Recognition Audio Low Reference	I	—

K77 Remote Control Door Lock Receiver



1673483

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15462684
Service Connector: 13585474
Description: 4-Way F IL-AG5 Series (GN)

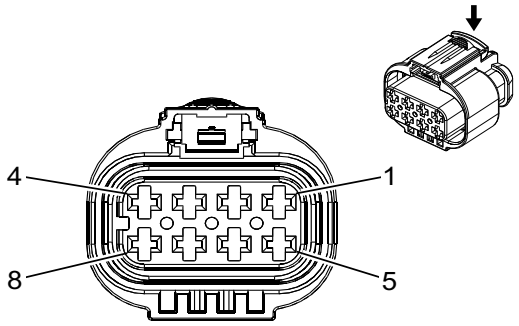
Terminal Part Information

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

K77 Remote Control Door Lock Receiver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	5340	Battery Positive Voltage	I	—
2	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK/WH	351	Signal Ground	I	—

K115 Reductant Control Module X1



3749581

Connector Part Information

Harness Type: Chassis
OEM Connector: 15530717
Service Connector: 19368670
Description: 8-Way F 2.8 Series, Sealed (BK)

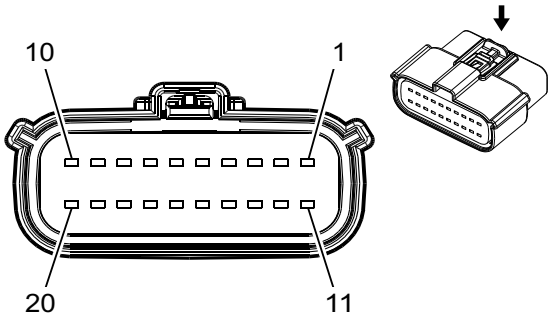
Terminal Part Information

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

K115 Reductant Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/L-GN	2440	Battery Positive Voltage	I	—
2	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
3	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
4	1.5	BK	150	Ground	I	—
5	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	—
6	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	I	—
7	0.5	D-BU/BK	7493	High Speed GMLAN Serial Data (+)3	I	—
8	2.5	D-BU	3921	DEF Heater Supply 1	I	—

K115 Reductant Control Module X2



2871898

Connector Part Information

Harness Type: Emission Reductant Fluid Tank Reservoir
OEM Connector: 33472-2006
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 150 MX Series, Sealed (BK)

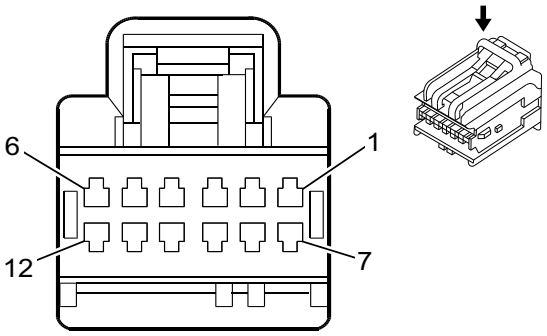
Terminal Part Information

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

K115 Reductant Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	OG	3103	DEF Smart Pump Control	I	—
2	—	GN	3875	DEF Smart Pump Control Phase 2	I	—
3	—	BU	3876	DEF Smart Pump Control Phase 3	I	—
4	—	VT	4318	DEF Tank Heater Low Control	I	—
5	—	BK	3104	DEF Smart Pump Low Reference	I	—
6	—	OG	7285	Diesel Exhaust Fluid Liquid Quality Temperature Sensor Low Reference	I	—
7	—	YE	3922	DEF Heater Supply 2	I	—
8	—	—	—	Not Occupied	—	—
9	—	OG	3244	DEF Tank Temperature Sensor Signal	I	—
10	—	GN	3245	DEF Tank Temperature Sensor Low Reference	I	—
11	—	YE	3921	DEF Heater Supply 1	I	—
12	—	BU	3106	DEF Pressure Sensor 5V Reference	I	—
13	—	GY	3108	DEF Pressure Sensor Signal	I	—
14	—	YE	3107	DEF Pressure Sensor Low Reference	I	—
15	—	VT	6136	Control	I	—
16	—	BU	3028	DEF Tank Level Sensor Signal	I	—
17	—	VT	3029	DEF Tank Level Sensor Low Reference	I	—
18	—	GN	7487	Sensor Signal	I	—
19	—	YE	53	Diesel Exhaust Fluid Quality Signal	I	—
20	—	VT	4319	DEF Line Heater Low Control	I	—

K182 Parking Assist Control Module X1



1664569

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13784026
Service Connector: 13578574
Description: 12-Way F 0.64 Series (BK)

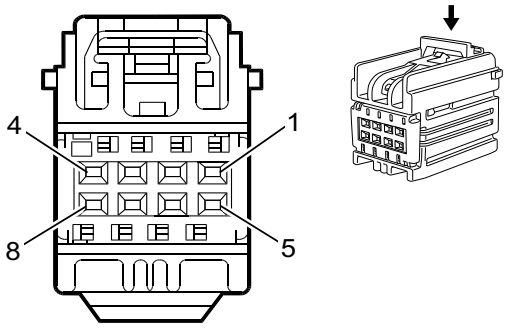
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575549	J-35616-16 (LT GN)	J-38125-559	15445905	Delphi 23	J	J

K182 Parking Assist Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	840	Battery Positive Voltage	I	—
2 - 5	—	—	—	Not Occupied	—	—
6	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.5	BK/WH	351	Signal Ground	I	—
8 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X2



1664573

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13551679
Service Connector: 19115653
Description: 8-Way F YESC Kaizen Series (L-GY)

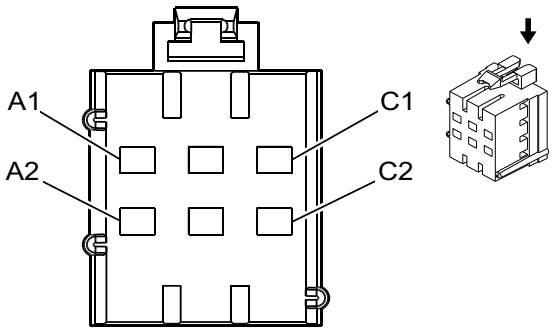
Terminal Part Information

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

K182 Parking Assist Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	—
2	0.5	YE/WH	2377	Right Rear Middle Object Sensor Signal	I	—
3	0.5	YE/D-BU	2376	Left Rear Middle Object Sensor Signal	I	—
4	0.5	BN/WH	2374	Object Sensor Control	I	—
5	0.5	YE	2375	Left Rear Corner Object Sensor Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK/GY	2379	Object Sensor Low Reference	I	—

KR32B Blower Motor High Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series (GY)

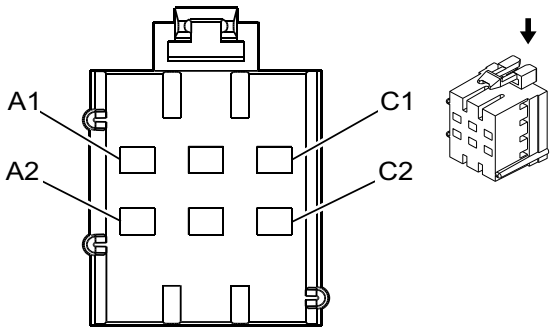
Terminal Part Information

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

KR32B Blower Motor High Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
A2	5	YE	1172	Auxiliary Blower Motor Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD/WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR32C Blower Motor Low Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series (GY)

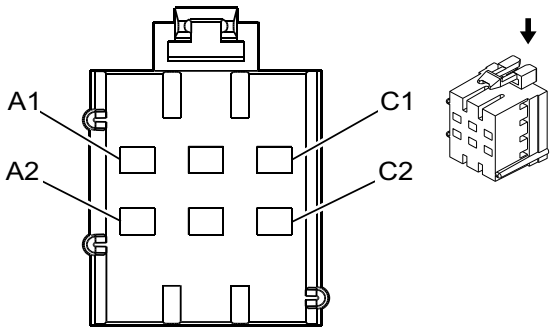
Terminal Part Information

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

KR32C Blower Motor Low Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	D-BU	1926	Auxiliary Blower Motor Low Speed Control	I	—
A2	3	YE	1176	Auxiliary Blower Motor Low Speed Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD/WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR32D Blower Motor Medium Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series (GY)

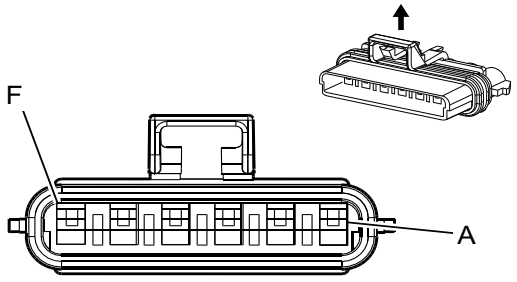
Terminal Part Information

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

KR32D Blower Motor Medium Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	OG	1925	Auxiliary Blower Motor Medium Speed Control	I	—
A2	3	L-BU	1072	Auxiliary Blower Motor Medium Speed Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD/WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR32E Blower Motor Relay



535914

Connector Part Information

Harness Type: Engine
OEM Connector: 12160746
Service Connector: 15306007
Description: 6-Way F 280 Metri-Pack Flexlock Series, Sealed (L-GY)

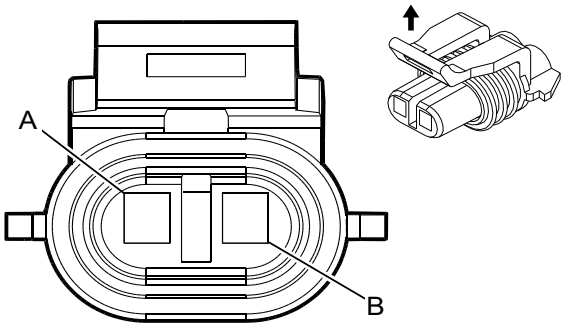
Terminal Part Information

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

KR32E Blower Motor Relay

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD/BK	542	Battery Positive Voltage	I	—
B	0.8	OG	52	High Blower Motor Control	I	—
C	5	BK	1250	Ground	I	—
D	0.8	TN	63	Medium Blower Motor Control 1	I	—
E	0.8	YE	60	Low Blower Motor Control	I	—
F	2	L-BU	72	Medium 2 Blower Motor Control	I	—

KR81 Auxiliary Battery Relay 1 X1



635009

Connector Part Information

Harness Type: Engine
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series (BK)

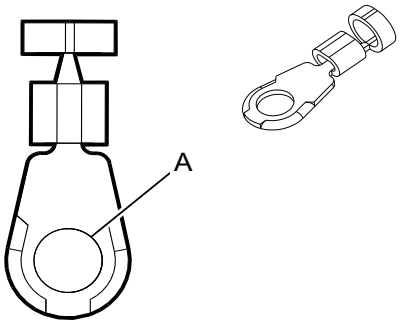
Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	RD/WH	4892	Auxiliary Battery Relay Control	I	—
B	0.5	BK/WH	1551	Signal Ground	I	—

KR81 Auxiliary Battery Relay 1 X2 (L96/LC8)



3385519

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

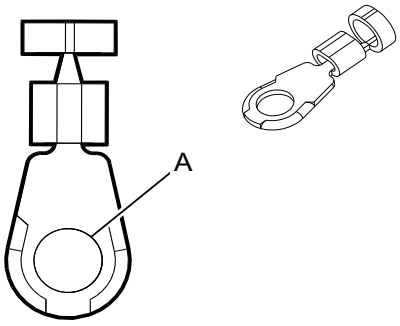
Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X2 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X2 (LV1)



3385519

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (9L7)

—

Connector Part Information

Harness Type: Accessory
OEM Connector: 12103504
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

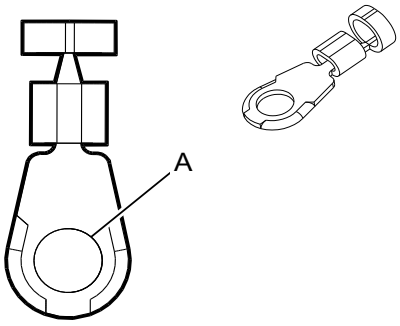
Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X3 (9L7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD/BK	102	Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (LV1)



3385519

Connector Part Information

Harness Type: Auxiliary Battery Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

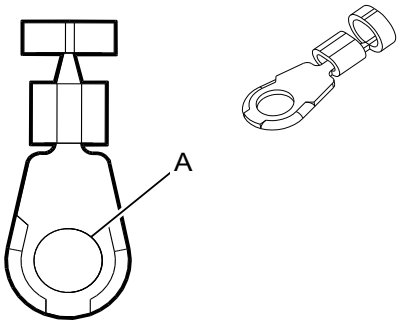
Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (TP2)



3385519

Connector Part Information

Harness Type: Auxiliary Battery Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

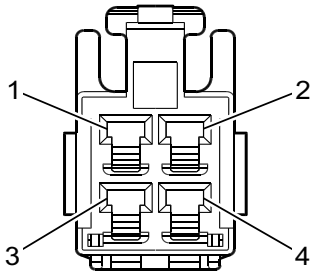
Terminal Part Information

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

KR81 Auxiliary Battery Relay 1 X3 (TP2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

M2A Access Panel Unlatch Actuator - Left Front Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

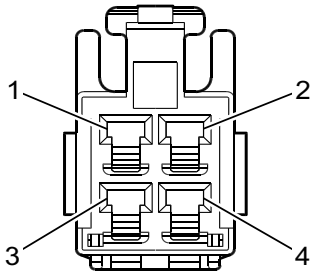
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2A Access Panel Unlatch Actuator - Left Front Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	TN	294	Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M2B Access Panel Unlatch Actuator - Left Front Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

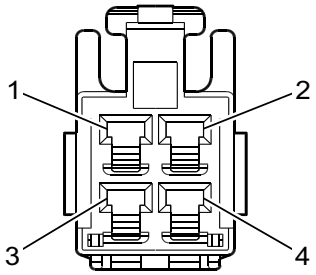
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2B Access Panel Unlatch Actuator - Left Front Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	TN	294	Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M2C Access Panel Unlatch Actuator - Left Rear Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

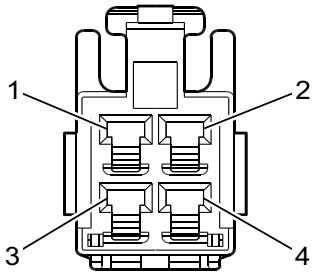
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2C Access Panel Unlatch Actuator - Left Rear Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	PK	1092	Left Rear Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M2D Access Panel Unlatch Actuator - Left Rear Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

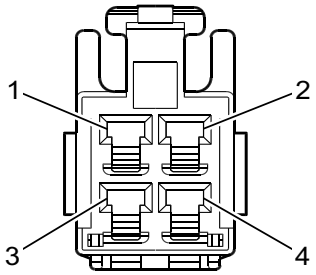
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2D Access Panel Unlatch Actuator - Left Rear Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	PK	1092	Left Rear Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M2E Access Panel Unlatch Actuator - Right Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

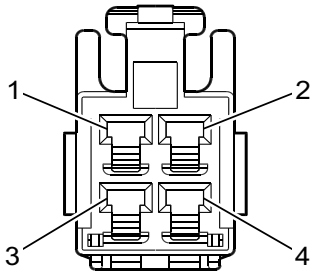
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2E Access Panel Unlatch Actuator - Right Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M2F Access Panel Unlatch Actuator - Right Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series (BU)

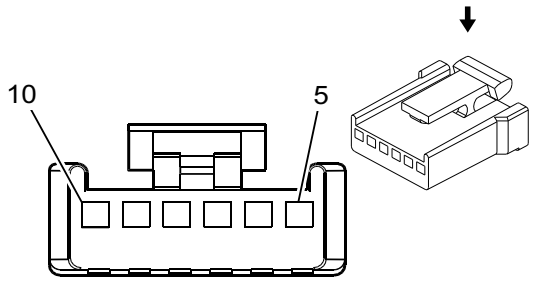
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M2F Access Panel Unlatch Actuator - Right Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
4	20	BK	750	Ground	I	—

M6 Air Temperature Door Actuator



281207

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12040953
Service Connector: 12102632
Description: 6-Way F 100 Micro-Pack Series (BK)

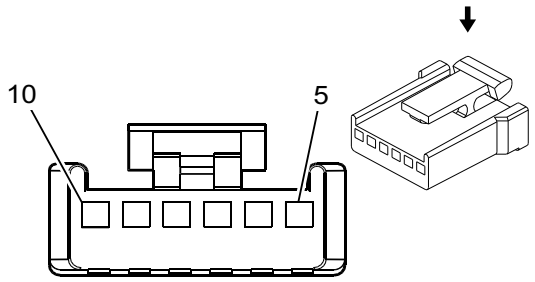
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-6 (BN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M6 Air Temperature Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	1	BK	550	Ground	I	—
8	0.8	L-BU	733	Air Temperature Door Position Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M6B Air Temperature Door Actuator - Auxiliary



281207

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12040953
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 100 Micro-Pack Series (BK)

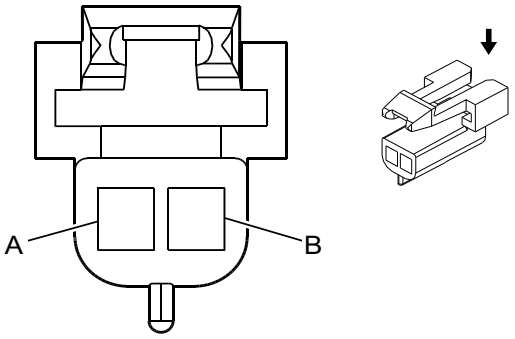
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-6 (BN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M6B Air Temperature Door Actuator - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BK	850	Ground	I	—
8	0.35	OG	2775	Rear Air Temperature Motor Control	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M7 Transmission Shift Lock Control Solenoid Actuator (MYD)



280768

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

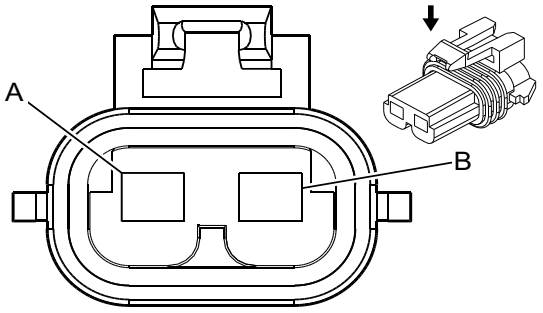
Terminal Part Information

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

M7 Transmission Shift Lock Control Solenoid Actuator (MYD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	TN/WH	816	Brake Transmission Shift Interlock Solenoid Control	I	—
B	—	BK	350	Ground	I	—

M8 Blower Motor



684799

Connector Part Information

Harness Type: HVAC
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

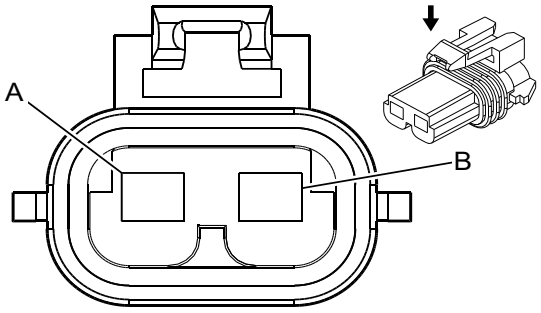
Terminal Part Information

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

M8 Blower Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	1250	Ground	I	—
B	—	RD	65	Blower Motor Control	I	—

M8B Blower Motor - Auxiliary



684799

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12077900
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

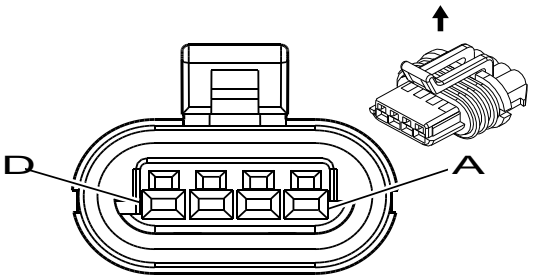
Terminal Part Information

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

M8B Blower Motor - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	BK	850	Ground	I	—
B	5	YE	1172	Auxiliary Blower Motor Control	I	—

M13 Door Latch Assembly - Rear Cargo X1



655858

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 15336846
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BU)

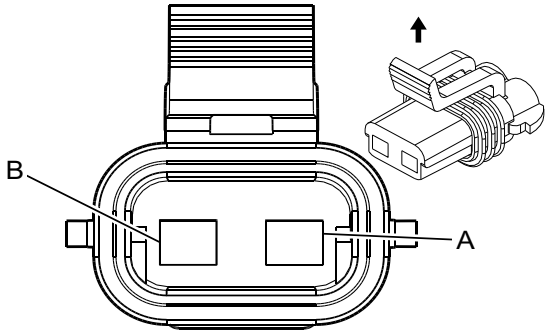
Terminal Part Information

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

M13 Door Latch Assembly - Rear Cargo X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK/WH	1051	Signal Ground	I	—
B	—	—	—	Not Occupied	—	—
C	0.35	PK/BK	1303	Lift Gate Ajar Switch Signal 1	I	—
D	0.35	L-GN	5926	Rear Access Open Switch Signal	I	—

M13 Door Latch Assembly - Rear Cargo X2



68721

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

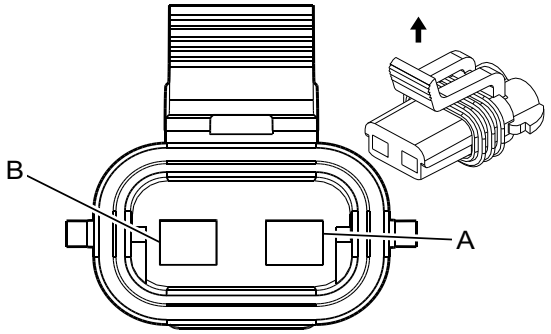
Terminal Part Information

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

M13 Door Latch Assembly - Rear Cargo X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	TN/BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
B	1	GY	295	Door Lock Actuator Lock Control	I	—

M14RR Door Lock Actuator - Right Rear (E24)



68721

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

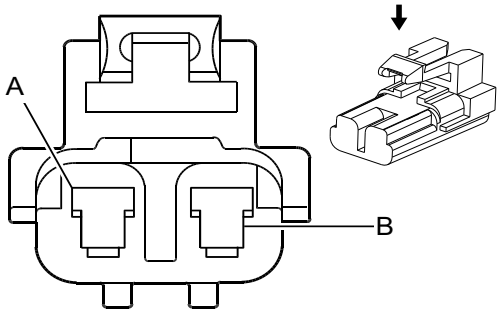
Terminal Part Information

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

M14RR Door Lock Actuator - Right Rear (E24)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

M14RR Door Lock Actuator - Right Rear (YA2)



62488

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 12084957
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series (BK)

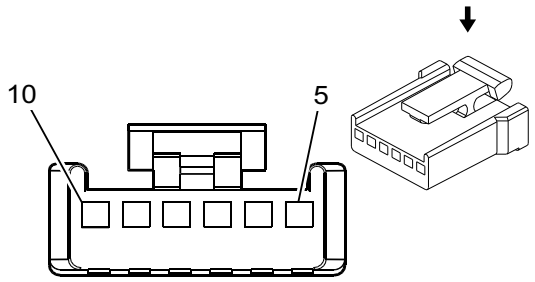
Terminal Part Information

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

M14RR Door Lock Actuator - Right Rear (YA2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	GY	295	Door Lock Actuator Lock Control	I	—
B	0.8	TN	294	Door Lock Actuator Unlock Control	I	—

M37B Mode Door Actuator - Auxiliary



281207

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12040953
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 100 Micro-Pack Series (BK)

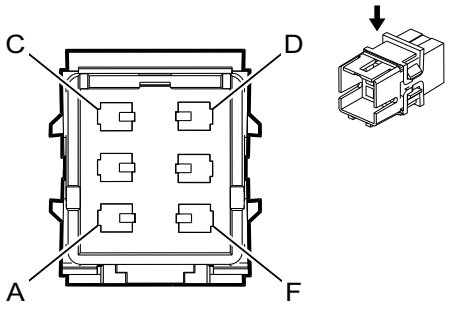
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-6 (BN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M37B Mode Door Actuator - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BK	850	Ground	I	—
8	0.35	GY	2599	Rear Mode Motor Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M49D Seat Motor Assembly - Driver (AG1)



2684011

Connector Part Information

Harness Type: Seat Motor Assembly
OEM Connector: 12015345
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M Weather Pack Series (BK)

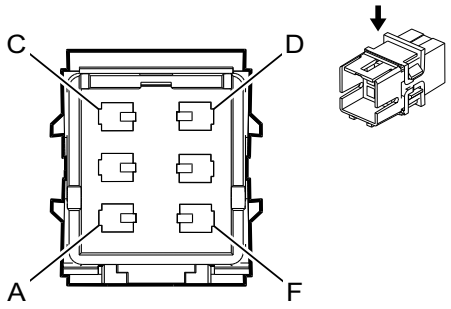
Terminal Part Information

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

M49D Seat Motor Assembly - Driver (AG1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
B	—	L-BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
C	—	TN	285	Driver Power Seat Horizontal Motor Forward Control	I	—
D	—	L-GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—
E	—	D-GN	286	Driver Power Seat Front Vertical Motor Up Control	I	—
F	—	D-BU	287	Driver Power Seat Front Vertical Motor Down Control	I	—

M49P Seat Motor Assembly - Passenger (AG2)



2684011

Connector Part Information

Harness Type: Seat Motor Assembly
OEM Connector: 12015345
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M Weather Pack Series (BK)

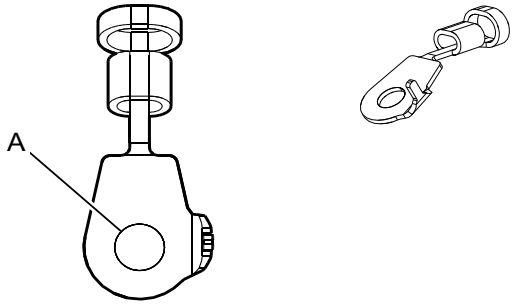
Terminal Part Information

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

M49P Seat Motor Assembly - Passenger (AG2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	YE	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
B	—	L-BU	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—
C	—	TN	296	Passenger Power Seat Horizontal Motor Forward Control	I	—
D	—	L-GN	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
E	—	D-GN	297	Passenger Power Seat Front Vertical Motor Up Control	I	—
F	—	D-BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—

M64 Starter Motor X1 (-TP2)



4833247

Connector Part Information

Harness Type: Positive Battery Cable
OEM Connector: 12176602
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way Ring Terminal

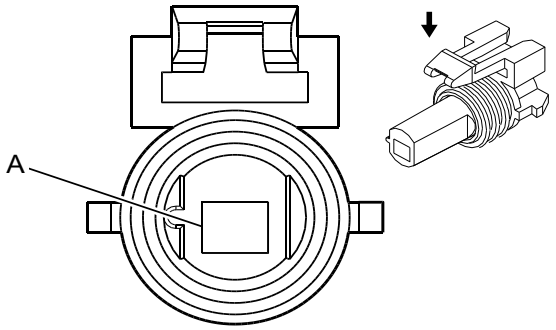
Terminal Part Information

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

M64 Starter Motor X1 (-TP2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	32	RD	1	Unfused Battery Positive Voltage	I	—

M64 Starter Motor X2 (L96/LC8)



696940

Connector Part Information

Harness Type: Engine
OEM Connector: 15481001
Service Connector: 13584479
Description: 1-Way F 280 Metri-Pack Series, Sealed (BK)

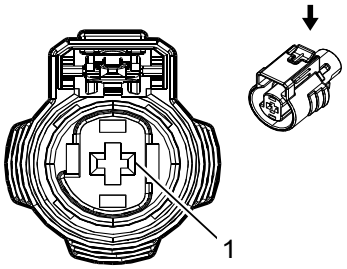
Terminal Part Information

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

M64 Starter Motor X2 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	PU	6	Starter Solenoid Crank Ignition Voltage	I	—

M64 Starter Motor X2 (LWN/LV1)



2717134

Connector Part Information

Harness Type: Engine
OEM Connector: 15526411
Service Connector: 19300471
Description: 1-Way F 2.8 MCP Series, Sealed (BK)

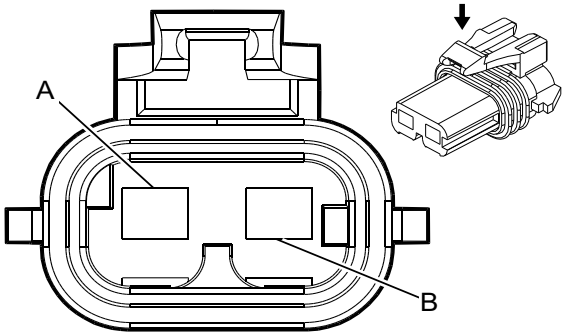
Terminal Part Information

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

M64 Starter Motor X2 (LWN/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	YE	6	Starter Solenoid Crank Ignition Voltage	I	LV1
	5	PU	6	Starter Solenoid Crank Ignition Voltage	I	LWN

M74D Window Motor - Driver



684837

Connector Part Information

Harness Type: Driver Door
OEM Connector: 12129487
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Flexlock Series, Sealed (GY)

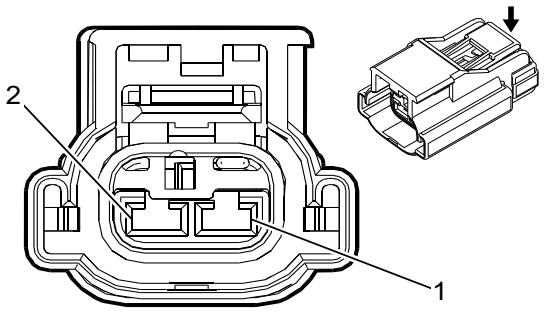
Terminal Part Information

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

M74D Window Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	BN	165	Power Window Motor Left Front Down Control	I	—
B	3	D-BU	164	Power Window Motor Left Front Up Control	I	—

M74P Window Motor - Passenger (AU3)



3372003

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 13896059
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed (BK)

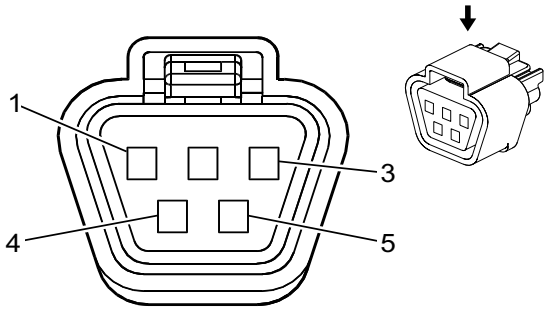
Terminal Part Information

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

M74P Window Motor - Passenger (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	D-BU	666	Power Window Motor Right Front Up Control	I	—
2	3	BN	667	Power Window Motor Right Front Down Control	I	—

M75 Windshield Wiper Motor



1715213

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15316488
Service Connector: 13587179
Description: 5-Way F 090 Series, Sealed (BK)

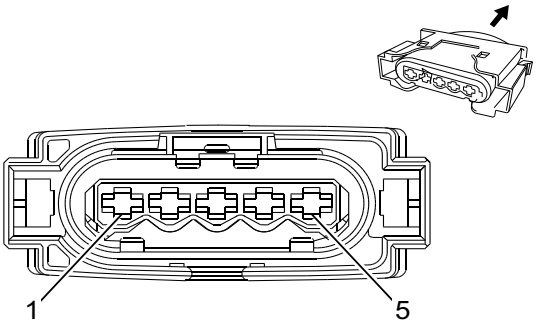
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-18 (BK)	No Tool Required	Not Required	Not Required	Not Required	Not Required

M75 Windshield Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	D-GN	95	Windshield Wiper Motor Low Speed Control	II	—
2	0.35	BK/WH	351	Signal Ground	I	—
3	0.35	YE	196	Windshield Wiper Motor Park Switch Signal	I	—
4	2	PU	92	Windshield Wiper Motor High Speed Control	II	—
5	2	BK	1250	Ground	II	—

M103 Turbocharger Vane Position Actuator



3794114

Connector Part Information

Harness Type: Engine
OEM Connector: 10890285
Service Connector: 19329390
Description: 5-Way F 2.8 SLK Series (BK)

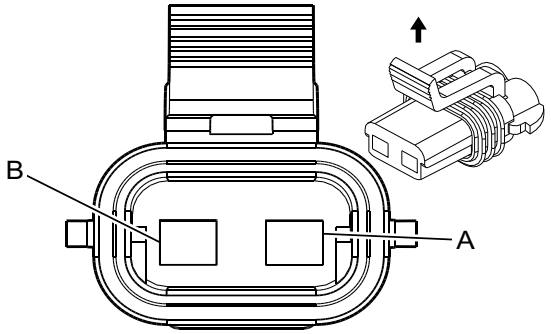
Terminal Part Information

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

M103 Turbocharger Vane Position Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/D-BU	5930	Variable Nozzle Turbo Solenoid High Signal	I	—
2	0.5	WH/BK	5931	Variable Nozzle Turbo Solenoid Low Signal	I	—
3	0.5	BK/BN	5929	Variable Nozzle Turbo Position Sensor Low Reference	I	—
4	0.5	VT/YE	5947	Variable Nozzle Turbo Position Sensor Signal	I	—
5	0.5	GY/RD	5928	Variable Nozzle Turbo Position Sensor 5V Reference	I	—

P3 Backup Alarm (CUTAWAY)



68721

Connector Part Information

Harness Type: Chassis Rear Extension
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

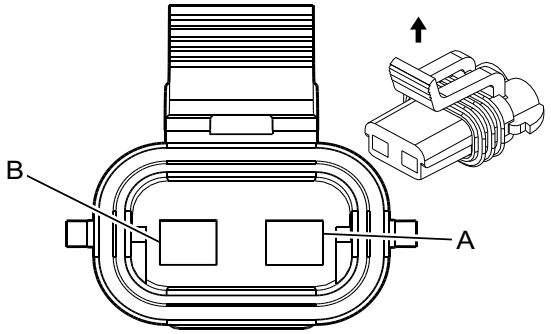
Terminal Part Information

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

P3 Backup Alarm (CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	I	—
B	1	BK	150	Ground	I	—

P3 Backup Alarm (-CUTAWAY)



68721

Connector Part Information

Harness Type: Chassis
OEM Connector: 15300027
Service Connector: 12101855
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

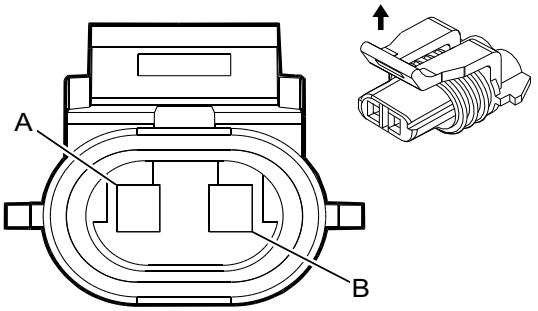
Terminal Part Information

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

P3 Backup Alarm (-CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	I	—
B	1	BK	150	Ground	I	—

P13 Horn Assembly



537107

Connector Part Information

Harness Type: Engine
OEM Connector: 12052644
Service Connector: 15306302
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

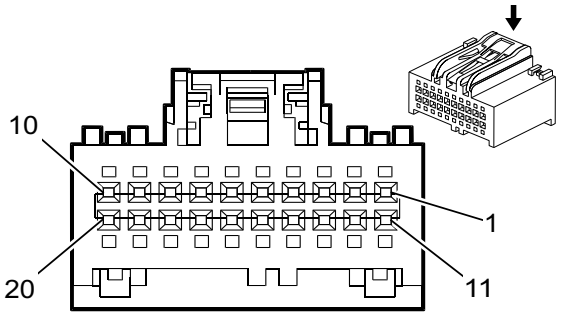
Terminal Part Information

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

P13 Horn Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	1250	Ground	I	—
B	0.8	D-GN	29	Horn Control	I	—

P16 Instrument Cluster



1715223

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15489824
Service Connector: 15126711
Description: 20-Way F 0.64 Series (BK)

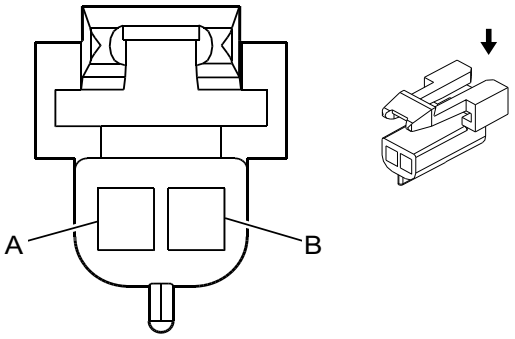
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575742	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

P16 Instrument Cluster

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	L-GN	1478	Coolant Level Switch Signal	I	—
4	0.5	BN/WH	419	Check Engine Indicator Control	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BK/WH	351	Signal Ground	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	L-GN/BN	507	Wait To Start Indicator Control	I	—
10	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	—
11	0.5	BK/D-BU	61	Outside Ambient Temperature Sensor Low Reference	I	—
12	0.35	D-BU	2307	Passenger Air Bag On Indicator Control	I	—
13	0.35	D-GN	2308	Passenger Air Bag Off Indicator Control	I	—
14	0.5	TN/WH	33	Brake Warning Indicator Control	I	—
15	0.5	PU	333	Brake Fluid Level Sensor Signal	I	—
16	0.35	PK	893	Driver Information Center Select Menu Switch Signal	I	—
17	0.35	D-GN/WH	1358	Driver Information Center Switch Signal	I	—
18	0.35	BN	897	Driver Information Center Switch Low Reference	I	—
19	0.35	PK	1639	Run/Crank Ignition 1 Voltage	I	—
20	0.35	RD/WH	2840	Battery Positive Voltage	I	—

P19AG Speaker - Left Front Door



280768

Connector Part Information

Harness Type: Driver Door
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

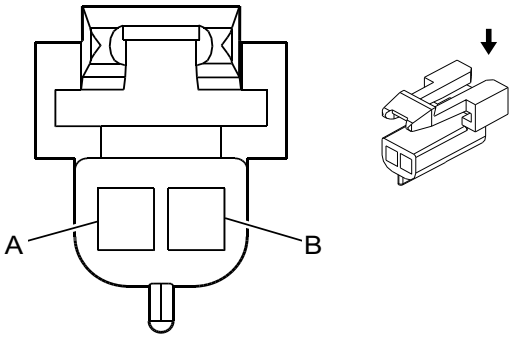
Terminal Part Information

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

P19AG Speaker - Left Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	L-BU	1957	Left Front Midrange Speaker (-) Low Reference	I	—
B	0.8	D-BU	1857	Left Front Midrange Speaker Control (+)	I	—

P19AH Speaker - Right Front Door



280768

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

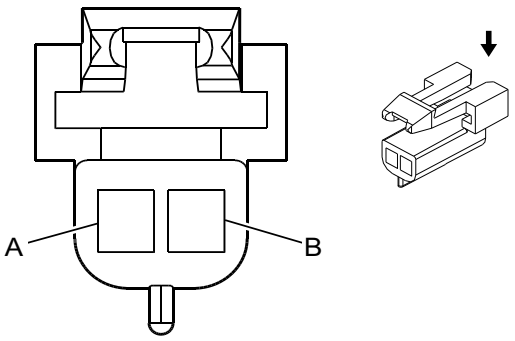
Terminal Part Information

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

P19AH Speaker - Right Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-GN	1953	Right Front Midrange Speaker (-) Low Reference	I	—
B	0.8	OG	1853	Right Front Midrange Speaker Control (+)	I	—

P19F Speaker - Left Rear Cargo Door



280768

Connector Part Information

Harness Type: Left Rear Cargo Door
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

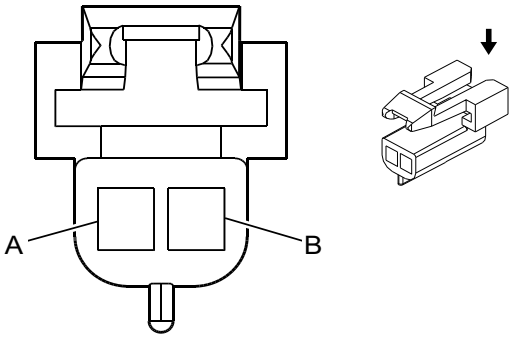
Terminal Part Information

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

P19F Speaker - Left Rear Cargo Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	1959	Left Rear Midrange Speaker (-) Low Reference	I	—
B	1	TN	1859	Left Rear Midrange Speaker Control (+)	I	—

P19LR Speaker - Left Rear Roof



280768

Connector Part Information

Harness Type: Rear Speaker
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

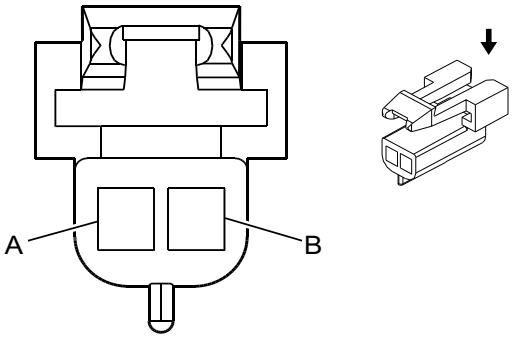
Terminal Part Information

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

P19LR Speaker - Left Rear Roof

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	1959	Left Rear Midrange Speaker (-) Low Reference	I	—
B	1	TN	1859	Left Rear Midrange Speaker Control (+)	I	—

P19RR Speaker - Right Rear Roof



280768

Connector Part Information

Harness Type: Rear Speaker
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

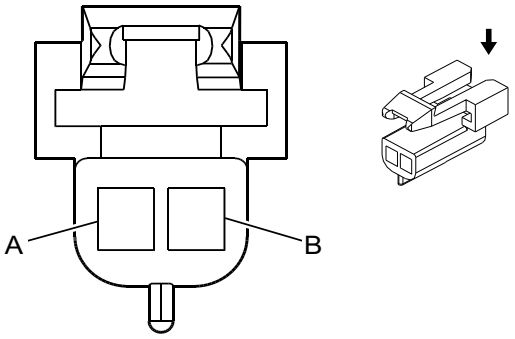
Terminal Part Information

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

P19RR Speaker - Right Rear Roof

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	OG	1955	Right Rear Midrange Speaker (-) Low Reference	I	—
B	1	TN	1855	Right Rear Midrange Speaker Control (+)	I	—

P19T Speaker - Right Rear Cargo Door



280768

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

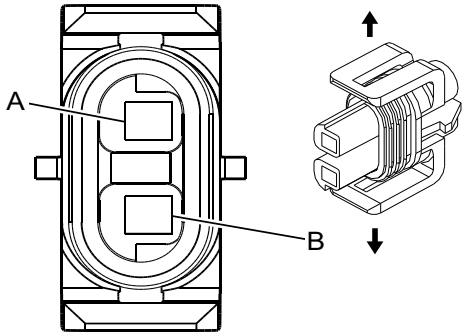
Terminal Part Information

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

P19T Speaker - Right Rear Cargo Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	OG	1955	Right Rear Midrange Speaker (-) Low Reference	I	—
B	1	TN	1855	Right Rear Midrange Speaker Control (+)	I	—

Q2 A/C Compressor Clutch (L96/LC8/LV1)



684852

Connector Part Information

Harness Type: Engine
OEM Connector: 12162017
Service Connector: 12101937
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

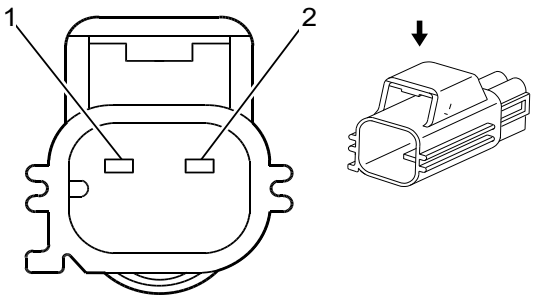
Terminal Part Information

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

Q2 A/C Compressor Clutch (L96/LC8/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	1250	Ground	I	—
B	0.5	D-GN	59	A/C Compressor Clutch Control	I	—

Q2 A/C Compressor Clutch (LWN)



897985

Connector Part Information

Harness Type: Engine
OEM Connector: 15342400
Service Connector: 88953303
Description: 2-Way M YESC Weather Pack Series (BK)

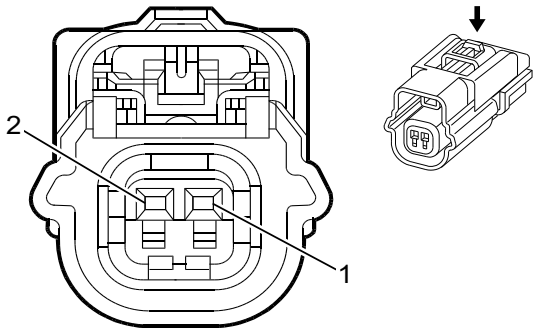
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Q2 A/C Compressor Clutch (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/L-GN	59	A/C Compressor Clutch Control	I	—
2	0.8	BK	1250	Ground	I	—

Q6 Camshaft Position Actuator Solenoid Valve (LV1)



1664592

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

Terminal Part Information

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

Q6 Camshaft Position Actuator Solenoid Valve (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	—
2	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	I	—

Q6 Camshaft Position Actuator Solenoid Valve (L96/LC8)

—

Connector Part Information

Harness Type: CAM Phaser Solenoid
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: M

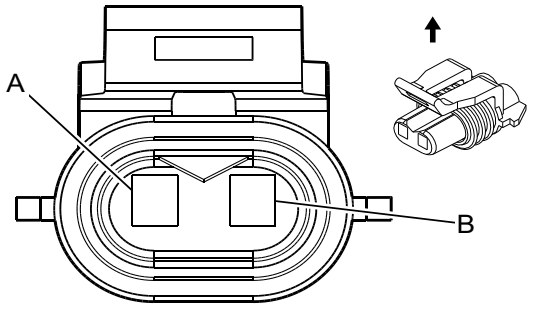
Terminal Part Information

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

Q6 Camshaft Position Actuator Solenoid Valve (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	TN	2199	Camshaft Phaser Solenoid Low Reference	II	—
2	0.8	PU	5284	Camshaft Phaser Intake Solenoid 1	I	—

Q12 Evaporative Emission Purge Solenoid Valve (L96/LC8)



684829

Connector Part Information

Harness Type: Engine
OEM Connector: 12124037
Service Connector: 13585860
Description: 2-Way F 150 Metri-Pack Series, Sealed (BK)

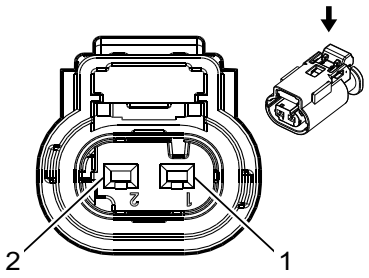
Terminal Part Information

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

Q12 Evaporative Emission Purge Solenoid Valve (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	PK	1939	Run/Crank Ignition 1 Voltage	I	—
B	0.5	D-GN/WH	428	EVAP Canister Purge Solenoid Control	I	—

Q12 Evaporative Emission Purge Solenoid Valve (LV1)



2717066

Connector Part Information

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

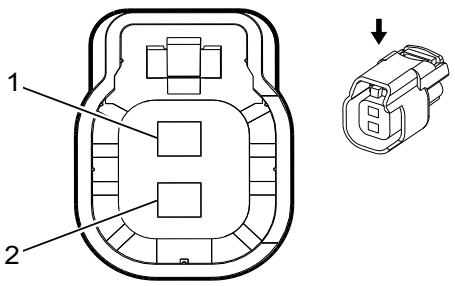
Terminal Part Information

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

Q12 Evaporative Emission Purge Solenoid Valve (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	1939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	L-GN/D-BU	428	EVAP Canister Purge Solenoid Control	I	—

Q13 Evaporative Emission Vent Solenoid Valve



2422378

Connector Part Information

Harness Type: Chassis
OEM Connector: 13771883
Service Connector: 13579002
Description: 2-Way F 1.5 Series, Sealed (BK)

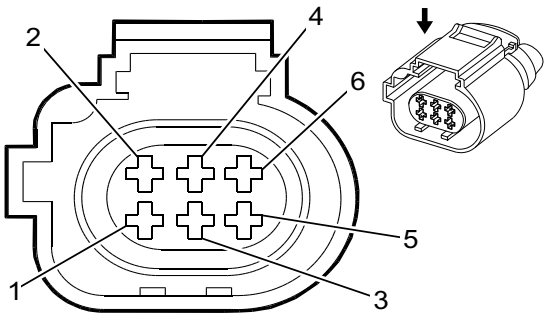
Terminal Part Information

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

Q13 Evaporative Emission Vent Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	—
2	0.5	RD/L-GN	40	Battery Positive Voltage	I	—

Q14 Exhaust Gas Recirculation Valve



2216905

Connector Part Information

Harness Type: Engine
OEM Connector: 10888948
Service Connector: 13586128
Description: 6-Way F 1.6 Micro-Timer Series, Sealed (BN)

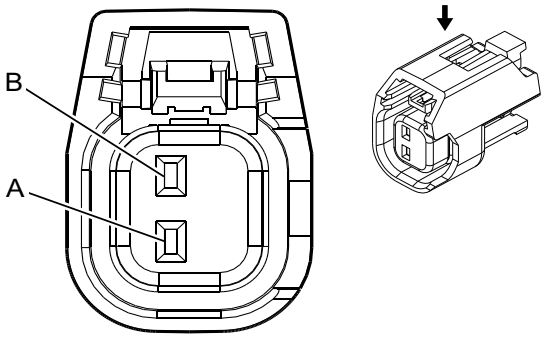
Terminal Part Information

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

Q14 Exhaust Gas Recirculation Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/VT	5764	Exhaust Gas Recirculation Valve Motor High Signal	I	—
2	0.5	BN/WH	5763	Exhaust Gas Recirculation Valve Sensor Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	BK/BN	2753	Exhaust Gas Recirculation Sensor Low Reference	I	—
5	0.5	VT/BK	5746	Exhaust Gas Recirculation Valve Motor Low Signal	I	—
6	0.5	D-BU/RD	5047	Exhaust Gas Recirculation 5V Reference 1	I	—

Q17A Fuel Injector 1 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

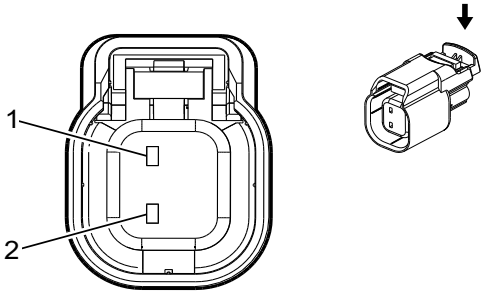
Terminal Part Information

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

Q17A Fuel Injector 1 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1039	Run/Crank Ignition 1 Voltage	I	—
B	0.5	TN	1744	Fuel Injector Control 1	I	—

Q17A Fuel Injector 1 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

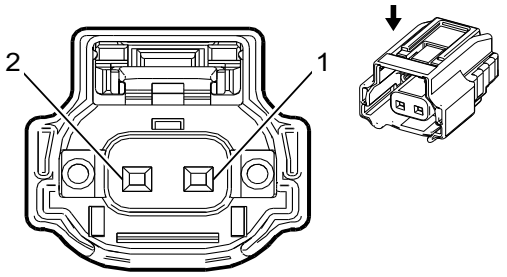
Terminal Part Information

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

Q17A Fuel Injector 1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—
2	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—

Q17A Fuel Injector 1 (LWN)



2498869

Connector Part Information

Harness Type: Engine
OEM Connector: 13988576
Service Connector: 13407097
Description: 2-Way F 090 DL Series, Sealed (BK)

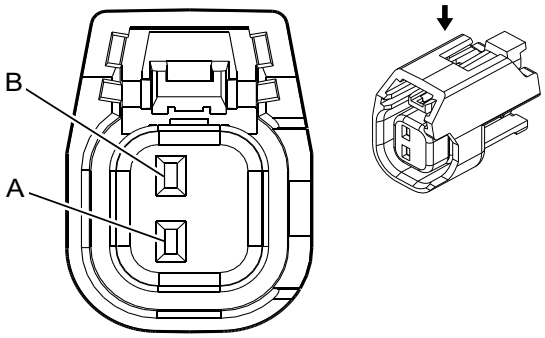
Terminal Part Information

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

Q17A Fuel Injector 1 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—
2	1.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—

Q17B Fuel Injector 2 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

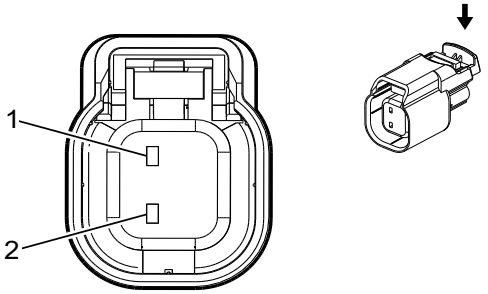
Terminal Part Information

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

Q17B Fuel Injector 2 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1239	Run/Crank Ignition 1 Voltage	I	—
B	0.5	L-GN/BK	1745	Fuel Injector Control 2	I	—

Q17B Fuel Injector 2 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

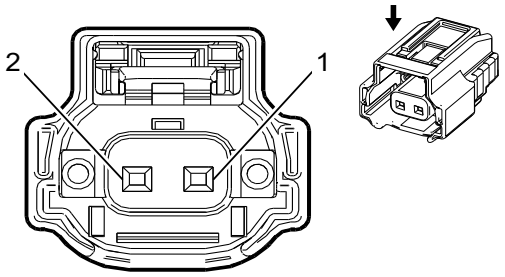
Terminal Part Information

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

Q17B Fuel Injector 2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	D-BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
2	0.75	D-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—

Q17B Fuel Injector 2 (LWN)



2498869

Connector Part Information

Harness Type: Engine
OEM Connector: 13988576
Service Connector: 13407097
Description: 2-Way F 090 DL Series, Sealed (BK)

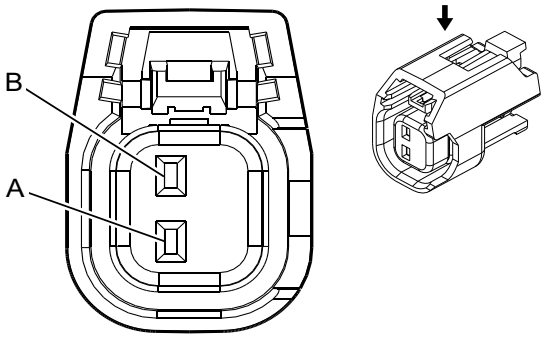
Terminal Part Information

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

Q17B Fuel Injector 2 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	D-BU/WH	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—
2	1.5	D-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—

Q17C Fuel Injector 3 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

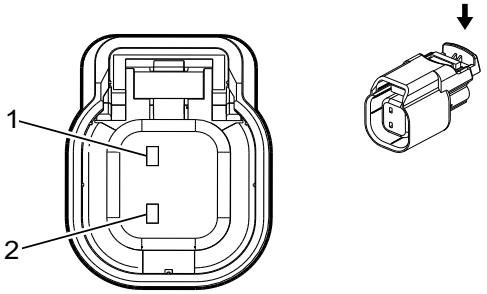
Terminal Part Information

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

Q17C Fuel Injector 3 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1039	Run/Crank Ignition 1 Voltage	I	—
B	0.5	PK/BK	1746	Fuel Injector Control 3	I	—

Q17C Fuel Injector 3 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

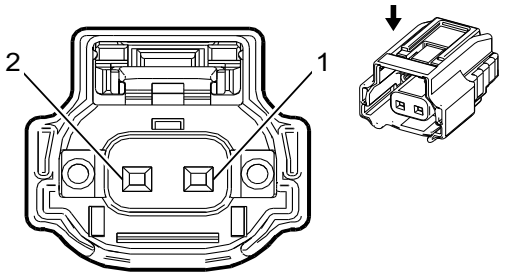
Terminal Part Information

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

Q17C Fuel Injector 3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	L-GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
2	0.75	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—

Q17C Fuel Injector 3 (LWN)



2498869

Connector Part Information

Harness Type: Engine
OEM Connector: 13988576
Service Connector: 13407097
Description: 2-Way F 090 DL Series, Sealed (BK)

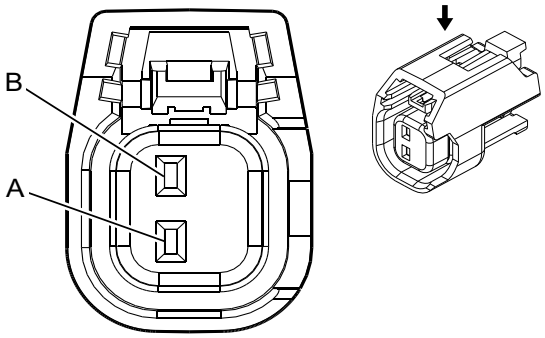
Terminal Part Information

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

Q17C Fuel Injector 3 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	L-GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—
2	1.5	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—

Q17D Fuel Injector 4 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

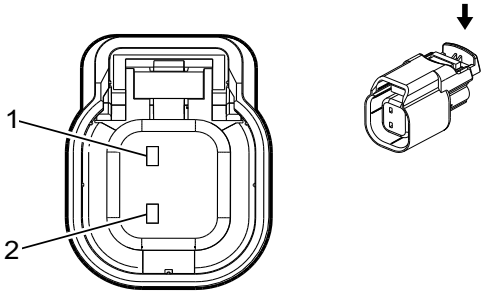
Terminal Part Information

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

Q17D Fuel Injector 4 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1239	Run/Crank Ignition 1 Voltage	I	—
B	0.5	L-BU/BK	844	Fuel Injector Control 4	I	—

Q17D Fuel Injector 4 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

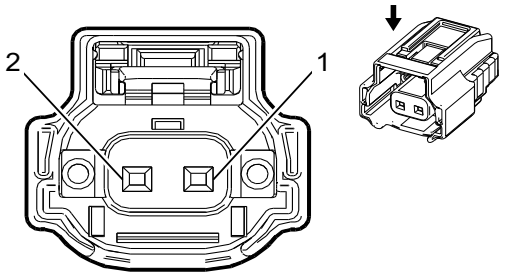
Terminal Part Information

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

Q17D Fuel Injector 4 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	D-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
2	0.75	D-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—

Q17D Fuel Injector 4 (LWN)



2498869

Connector Part Information

Harness Type: Engine
OEM Connector: 13988576
Service Connector: 13407097
Description: 2-Way F 090 DL Series, Sealed (BK)

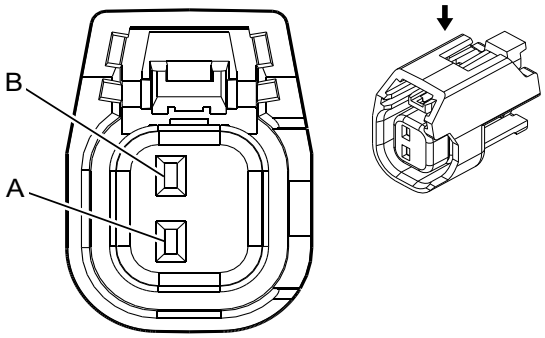
Terminal Part Information

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

Q17D Fuel Injector 4 (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	D-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—
2	1.5	GY/D-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—

Q17E Fuel Injector 5 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

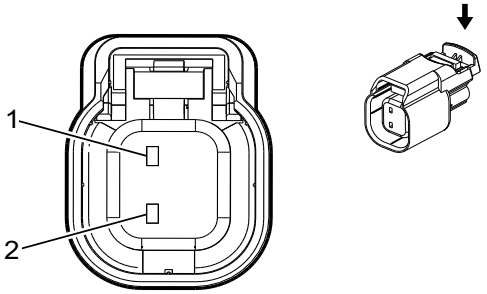
Terminal Part Information

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

Q17E Fuel Injector 5 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1039	Run/Crank Ignition 1 Voltage	I	—
B	0.5	TN/WH	845	Fuel Injector Control 5	I	—

Q17E Fuel Injector 5 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

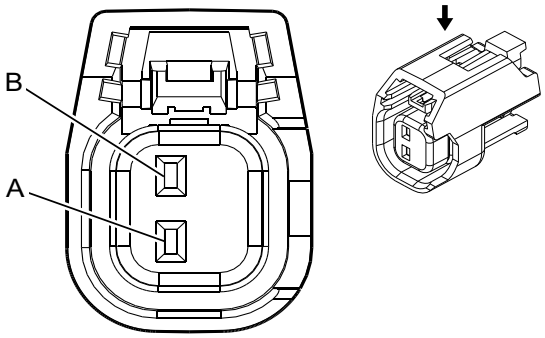
Terminal Part Information

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

Q17E Fuel Injector 5 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	L-GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—
2	0.75	WH/L-GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—

Q17F Fuel Injector 6 (LC8/L96)



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

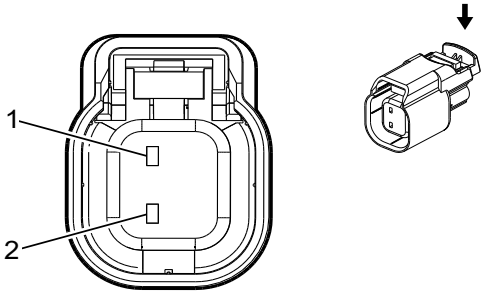
Terminal Part Information

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

Q17F Fuel Injector 6 (LC8/L96)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1239	Run/Crank Ignition 1 Voltage	I	—
B	0.5	YE/BK	846	Fuel Injector Control 6	I	—

Q17F Fuel Injector 6 (LV1)



2792100

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

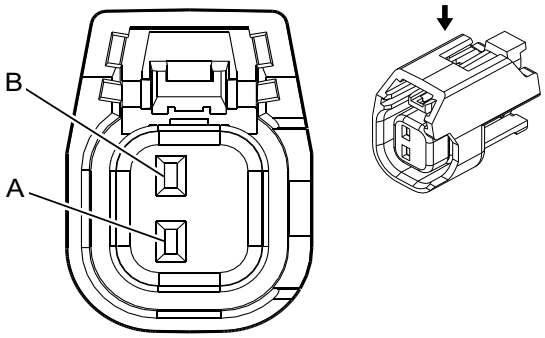
Terminal Part Information

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

Q17F Fuel Injector 6 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—
2	0.75	VT/L-GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—

Q17G Fuel Injector 7



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

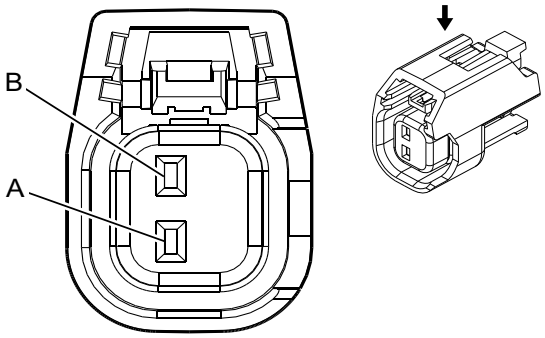
Terminal Part Information

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

Q17G Fuel Injector 7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1039	Run/Crank Ignition 1 Voltage	I	—
B	0.5	OG/BK	877	Fuel Injector Control 7	I	—

Q17H Fuel Injector 8



1527729

Connector Part Information

Harness Type: Engine
OEM Connector: 15419715
Service Connector: 13580876
Description: 2-Way F 150 GT Series, Sealed (GY)

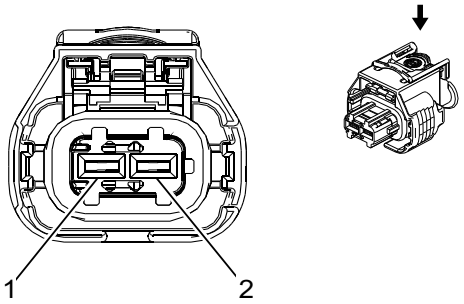
Terminal Part Information

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

Q17H Fuel Injector 8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK	1239	Run/Crank Ignition 1 Voltage	I	—
B	0.5	D-BU/WH	878	Fuel Injector Control 8	I	—

Q18A Fuel Pressure Regulator 1



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

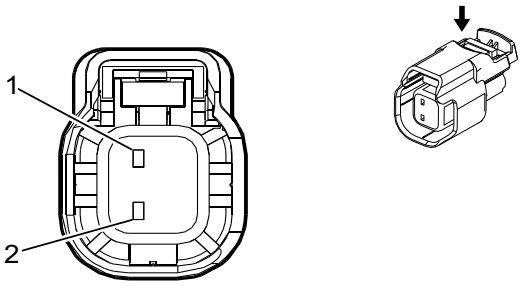
Terminal Part Information

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

Q18A Fuel Pressure Regulator 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	2928	Fuel Metering Valve High Control	I	—
2	0.5	BN/BK	2929	Fuel Metering Valve Low Control	I	—

Q18B Fuel Pressure Regulator 2



3028817

Connector Part Information

Harness Type: Engine
OEM Connector: 13946568
Service Connector: 19352404
Description: 2-Way F 1.5 Series, Sealed (BK)

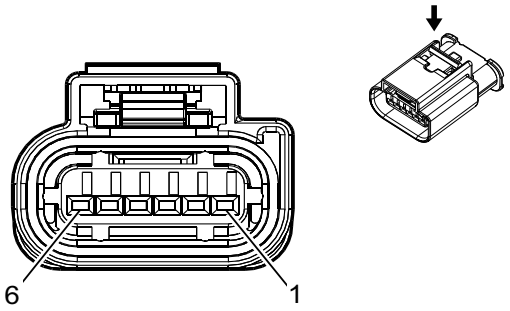
Terminal Part Information

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

Q18B Fuel Pressure Regulator 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU/WH	2530	Fuel Rail Pressure Solenoid Control	I	—
2	0.5	BK/YE	2834	Fuel Rail Pressure Solenoid Low Reference	I	—

Q38 Throttle Body (L96/LC8/LV1)



3747579

Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

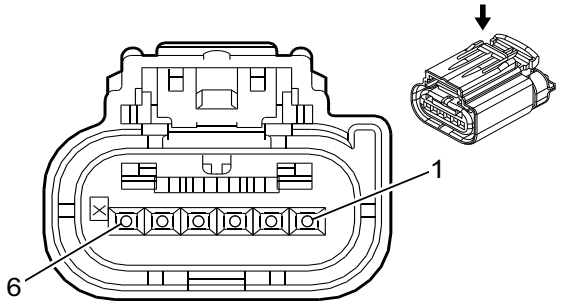
Terminal Part Information

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

Q38 Throttle Body (L96/LC8/LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Control Open	I	—
2	0.5	BN	582	Throttle Actuator Control Close	I	—
3	0.5	D-GN	485	Throttle Position Sensor Signal 1	I	L20/L96
	0.5	D-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	LV1
4	0.5	TN	2752	Throttle Position Sensor Low Reference	I	—
5	0.5	GY	2701	Throttle Position Sensor 5V Reference	I	—
6	—	—	—	Not Occupied	—	—

Q38 Throttle Body (LWN)



2482433

Connector Part Information

Harness Type: Engine
OEM Connector: 13699991
Service Connector: 13581267
Description: 6-Way F 0.64 GET Series, Sealed (BK)

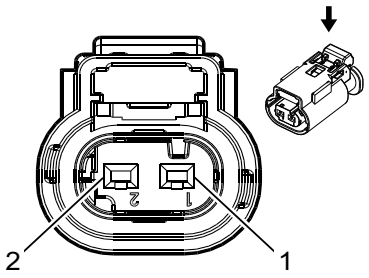
Terminal Part Information

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

Q38 Throttle Body (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Control Open	I	—
2	0.5	BN/WH	582	Throttle Actuator Control Close	I	—
3	0.5	D-BU/WH	3630	Throttle Position Sensor (SENT1) 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 (LV1)



2717066

Connector Part Information

Harness Type: Oil Pressure Control Solenoid Valve
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

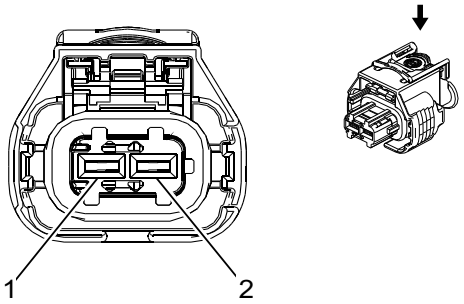
Terminal Part Information

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

Q44 Engine Oil Pressure Control Solenoid Valve (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT/D-BU	5293	Powertrain Main Relay Fused Supply 4	I	—
2	—	BU	179	Oil Pump Command Signal	I	—

Q47 Exhaust Gas Recirculation Cooler Bypass Solenoid Valve



2577394

Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

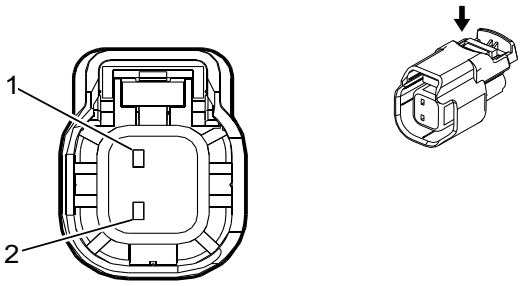
Terminal Part Information

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

Q47 Exhaust Gas Recirculation Cooler Bypass Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/D-BU	3231	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	—
2	0.5	GY/D-BU	3230	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	—

Q61 Reductant Injector



3028817

Connector Part Information

Harness Type: Engine
OEM Connector: 13946568
Service Connector: 19352404
Description: 2-Way F 1.5 Series, Sealed (BK)

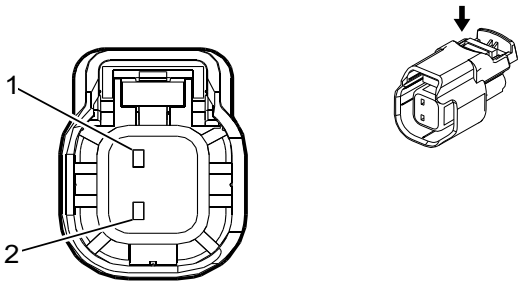
Terminal Part Information

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

Q61 Reductant Injector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	3100	DEF Dosing Valve Low Control	I	—
2	0.5	BN	3099	DEF Dosing Valve High Control	I	—

Q67 Exhaust Aftertreatment Fuel Injector



3028817

Connector Part Information

Harness Type: Chassis
OEM Connector: 13820418
Service Connector: 13580230
Description: 2-Way F 1.5 Series, Sealed (BK)

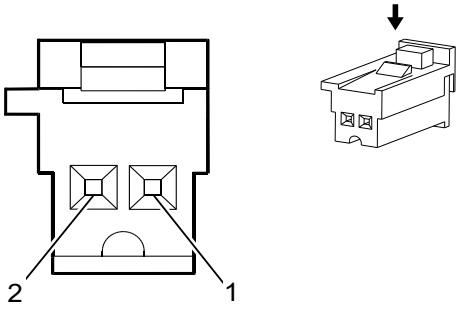
Terminal Part Information

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

Q67 Exhaust Aftertreatment Fuel Injector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/BN	2927	Hydrocarbon Injector Low Control	I	—
2	0.75	BN/D-BU	2926	Hydrocarbon Injector High Control	I	—

Q77A Transmission Control Solenoid Valve 1 (M5U)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

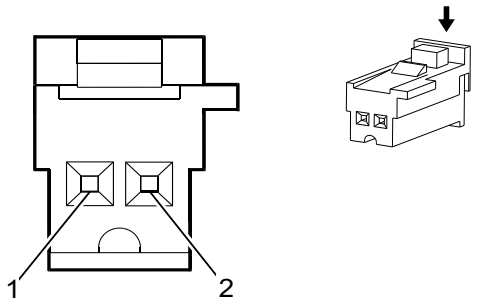
Terminal Part Information

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

Q77A Transmission Control Solenoid Valve 1 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6400	Clutch A Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77B Transmission Control Solenoid Valve 2 (M5U)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

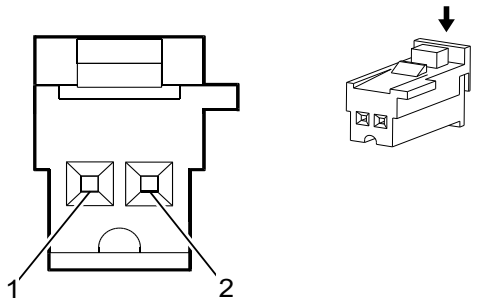
Terminal Part Information

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

Q77B Transmission Control Solenoid Valve 2 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	6401	Clutch B Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77C Transmission Control Solenoid Valve 3 (M5U)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

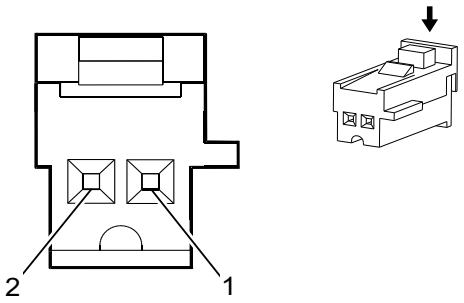
Terminal Part Information

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

Q77C Transmission Control Solenoid Valve 3 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	6402	Clutch C Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77D Transmission Control Solenoid Valve 4 (M5U)



4008636

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (NA)

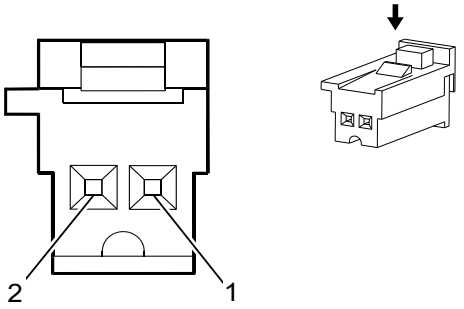
Terminal Part Information

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

Q77D Transmission Control Solenoid Valve 4 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	4508	Transmission Clutch G Control	I	—
2	0.5	L-GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	—

Q77E Transmission Control Solenoid Valve 5 (M5U)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

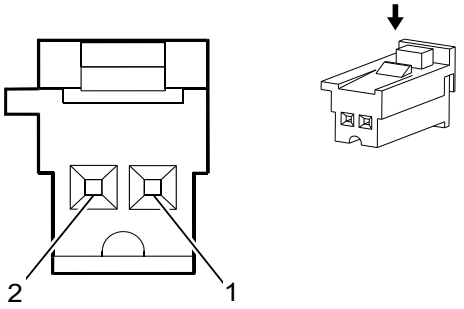
Terminal Part Information

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

Q77E Transmission Control Solenoid Valve 5 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/D-BU	4507	Transmission Clutch H Control	I	—
2	0.5	L-GN/WH	6387	Transmission High Side Driver 1 Signal Driver	I	—

Q77F Transmission Control Solenoid Valve 6 (M5U)



4051391

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

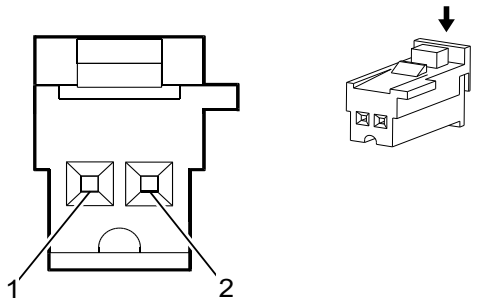
Terminal Part Information

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

Q77F Transmission Control Solenoid Valve 6 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/L-GN	6403	Clutch D Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77G Transmission Control Solenoid Valve 7 (M5U)



4008644

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

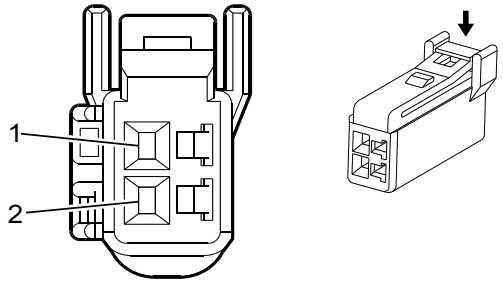
Terminal Part Information

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

Q77G Transmission Control Solenoid Valve 7 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	6404	Clutch E Control	I	—
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—

Q77H Transmission Control Solenoid Valve 8 (M5U)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

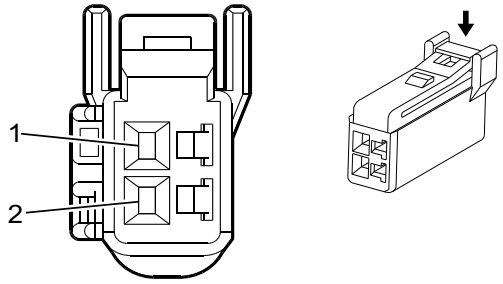
Terminal Part Information

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

Q77H Transmission Control Solenoid Valve 8 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	—
2	0.5	L-GN/WH	6380	TCC On/Off Solenoid A Control	I	—

Q77J Transmission Control Solenoid Valve 9 (M5U)



4051682

Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

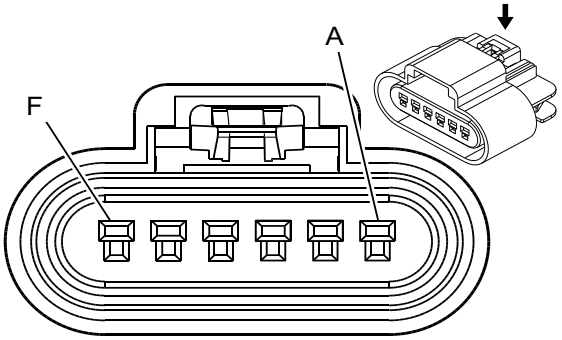
Terminal Part Information

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

Q77J Transmission Control Solenoid Valve 9 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	—
2	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	I	—

Q85 Cooling Fan Clutch (LWN)



632357

Connector Part Information

Harness Type: Electro Viscous Fan Clutch
OEM Connector: 19177552
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 150 GT Series, Sealed (BK)

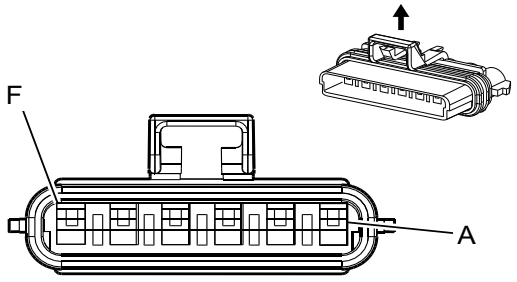
Terminal Part Information

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

Q85 Cooling Fan Clutch (LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	550	Ground	I	—
B	—	WH	2368	Cooling Fan Control Signal	I	—
C	—	BK/BN	6141	Cooling Fan Speed Low Reference	I	—
D	—	BU/VT	2364	Cooling Fan Speed Signal	I	—
E	—	GY/RD	2365	Cooling Fan Speed 5V Reference	I	—
F	—	—	—	Not Occupied	—	—

R3 Blower Motor Resistor



535914

Connector Part Information

Harness Type: Engine
OEM Connector: 12160746
Service Connector: 15306007
Description: 6-Way F 280 Metri-Pack Flexlock Series, Sealed (L-GY)

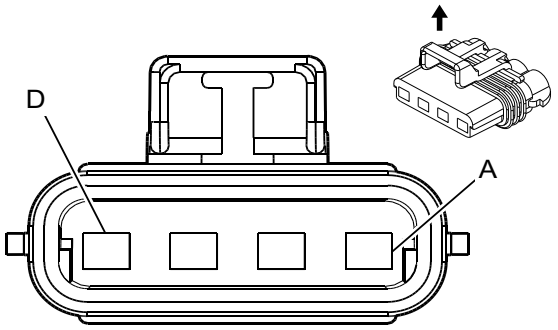
Terminal Part Information

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

R3 Blower Motor Resistor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD/BK	542	Battery Positive Voltage	I	—
B	0.8	OG	52	High Blower Motor Control	I	—
C	5	BK	1250	Ground	I	—
D	0.8	TN	63	Medium Blower Motor Control 1	I	—
E	0.8	YE	60	Low Blower Motor Control	I	—
F	2	L-BU	72	Medium 2 Blower Motor Control	I	—

R3B Blower Motor Resistor - Auxiliary



697053

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12129566
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 280 Metri-Pack Series, Sealed (GY)

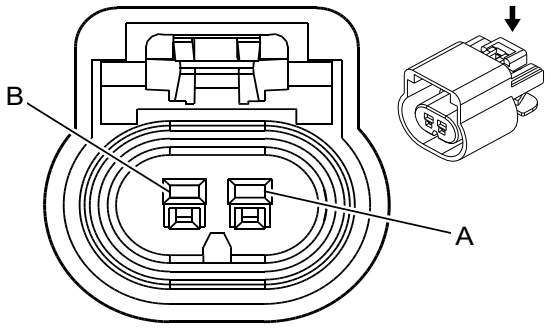
Terminal Part Information

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

R3B Blower Motor Resistor - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	YE	1176	Auxiliary Blower Motor Low Speed Control	I	—
B	—	—	—	Not Occupied	—	—
C	3	L-BU	1072	Auxiliary Blower Motor Medium Speed Control	I	—
D	3	YE	1172	Auxiliary Blower Motor Control	I	—

R6A Terminating Resistor - High Speed Bus



523630

Connector Part Information

Harness Type: Engine
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

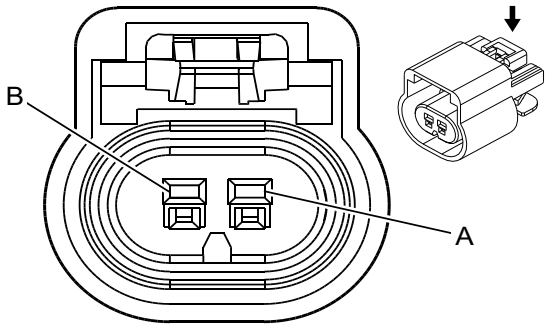
Terminal Part Information

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

R6A Terminating Resistor - High Speed Bus

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
B	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—

R10 Cooling Fan Resistor



523630

Connector Part Information

Harness Type: Engine
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

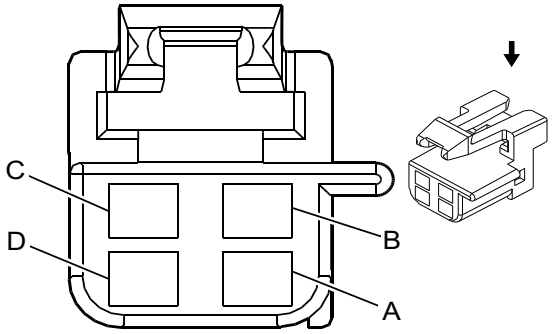
Terminal Part Information

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

R10 Cooling Fan Resistor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY/RD	2365	Cooling Fan Speed 5V Reference	I	—
B	0.5	BU/VT	2364	Cooling Fan Speed Signal	I	—

S2 Transmission Manual Shift Switch (MYD)



130637

Connector Part Information

Harness Type: Transmission Manual Shift Switch
OEM Connector: 12064760
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 Metri-Pack Series (BK)

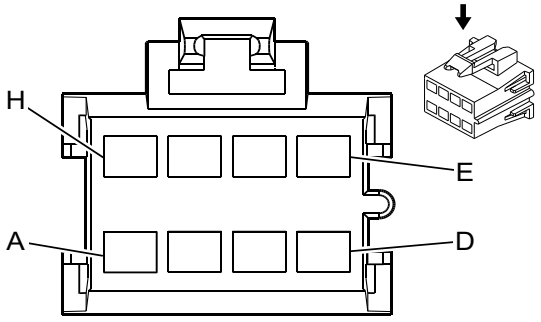
Terminal Part Information

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

S2 Transmission Manual Shift Switch (MYD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	PU	5526	Tap Up/Tap Down Switch Signal	I	—
D	—	PK	1444	12V Reference	I	—

S13A Door Lock Switch - Rear Cargo



62469

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 12064998
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 Metri-Pack Series (BK)

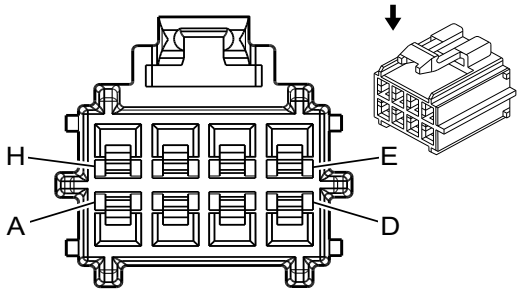
Terminal Part Information

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

S13A Door Lock Switch - Rear Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
B - C	—	—	—	Not Occupied	—	—
D	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
E	0.35	BK/WH	1051	Signal Ground	I	—
F - H	—	—	—	Not Occupied	—	—

S13D Door Lock Switch - Driver



851474

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15418533
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series (L-GN)

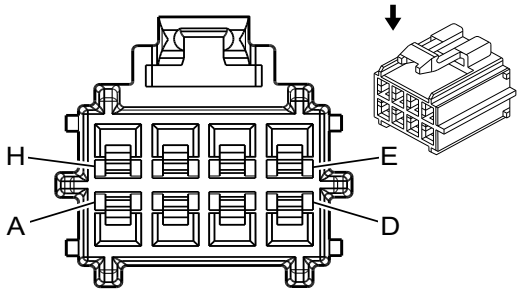
Terminal Part Information

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

S13D Door Lock Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	450	Ground	I	—
B	0.35	BK	450	Ground	I	—
C	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
D - E	—	—	—	Not Occupied	—	—
F	0.35	OG/BK	781	Driver Door Lock Switch Unlock Signal	I	—
G	0.35	PK/BK	780	Driver Door Lock Switch Lock Signal	I	—
H	—	—	—	Not Occupied	—	—

S13P Door Lock Switch - Passenger



851474

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15418533
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series (L-GN)

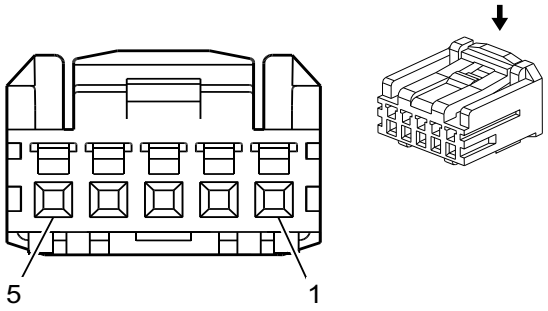
Terminal Part Information

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

S13P Door Lock Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	0.35	BK	1850	Ground	I	—
C	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
D - E	—	—	—	Not Occupied	—	—
F	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
G	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
H	—	—	—	Not Occupied	—	—

S16 Driver Information Center Switch



1673494

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15491277
Service Connector: 88988747
Description: 5-Way F HCM Series (BK)

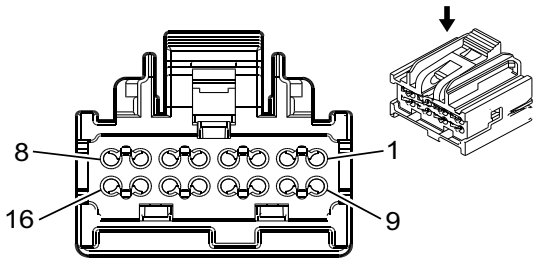
Terminal Part Information

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

S16 Driver Information Center Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN/WH	1358	Driver Information Center Switch Signal	I	—
2	0.35	BN	897	Driver Information Center Switch Low Reference	I	—
3	0.35	PK	893	Driver Information Center Select Menu Switch Signal	I	—
4	0.5	YE	6817	LED Backlight Dimming Control	I	—
5	0.5	BK/WH	351	Signal Ground	I	—

S30 Headlamp Switch



2127936

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13568238
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series, Sealed (BK)

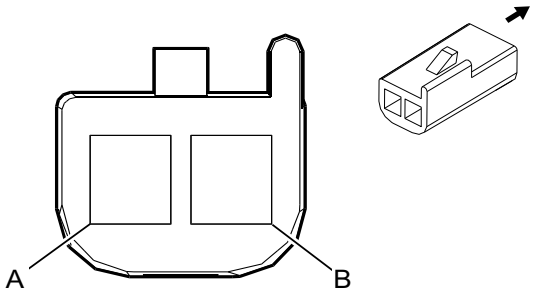
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575535	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M
II	13579976	J-35616-64B (LT BU)	J-38125-21	15359541	Delphi 4	M	M

S30 Headlamp Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH	103	Headlamp Switch On Signal	I	—
2	0.35	L-BU	13	Headlamp Switch Park Lamp Signal	I	—
3	0.35	D-GN	306	Headlamp Switch Headlamps Off Signal Control	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
8	0.5	BK/WH	351	Signal Ground	II	—
9	0.35	PU	328	Interior Lamp Defeat Switch Signal	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.35	D-BU/WH	149	Courtesy Lamp Control	I	—
13	0.35	D-GN	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	OG/WH	812	12V Reference	I	—
16	—	—	—	Not Occupied	—	—

S33 Horn Switch



82383

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 12047662
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series (BK)

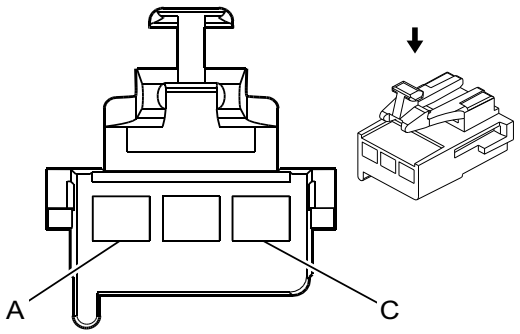
Terminal Part Information

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

S33 Horn Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	TN	28	Horn Relay Control	I	—
B	—	BK	350	Ground	I	—

S34 HVAC Controls Switch Assembly X1



68737

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12129489
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 280 Metri-Pack Flexlock Series (BK)

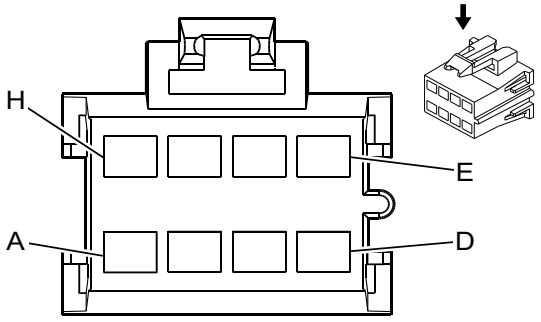
Terminal Part Information

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

S34 HVAC Controls Switch Assembly X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	119	Mode Door Control	I	—
B	1	BK	550	Ground	I	—
C	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—

S34 HVAC Controls Switch Assembly X2



62469

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12064998
Service Connector: 15306189
Description: 8-Way F 280 Metri-Pack Series (BK)

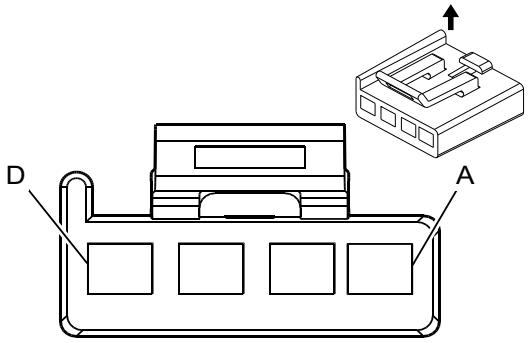
Terminal Part Information

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

S34 HVAC Controls Switch Assembly X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	YE	60	Low Blower Motor Control	I	—
B	0.8	TN	63	Medium Blower Motor Control 1	I	—
C	0.8	L-BU	72	Medium 2 Blower Motor Control	I	—
D	0.8	OG	52	High Blower Motor Control	I	—
E	1	BN	141	Run Ignition 3 Voltage	I	—
F	0.8	L-BU	733	Air Temperature Door Position Signal	I	—
G	1	WH	119	Mode Door Control	I	—
H	0.5	D-GN/WH	762	A/C Request Signal	I	—

S34 HVAC Controls Switch Assembly X3



62450

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12052856
Service Connector: 12125636
Description: 4-Way F 280 Metri-Pack Series (BK)

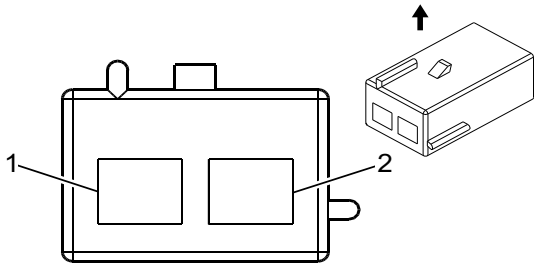
Terminal Part Information

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

S34 HVAC Controls Switch Assembly X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	RD/WH	4440	Battery Positive Voltage	I	—
B	0.35	BN	341	Run Ignition 3 Voltage	I	—
C	1	BK	550	Ground	I	—
D	0.35	WH	193	Rear Defog Relay Control	I	—

S34 HVAC Controls Switch Assembly X4



1283895

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15318080
Service Connector: 21019410
Description: 2-Way F 280 Metri-Pack Series (BK)

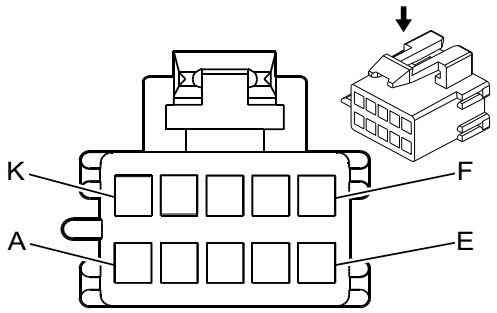
Terminal Part Information

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

S34 HVAC Controls Switch Assembly X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	66	A/C Request Signal	I	—
2	0.5	D-GN/WH	762	A/C Request Signal	I	—

S34F HVAC Controls Switch Assembly - Auxiliary Front (REAR HVAC CONTROLS)



62464

Connector Part Information

Harness Type: Headliner
OEM Connector: 12064769
Service Connector: 12101762
Description: 10-Way F 150 Metri-Pack Series (NA)

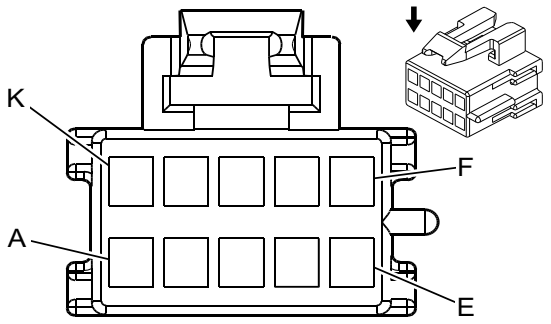
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575464	J-35616-14 (GN)	J-38125-12A	15326030	Delphi 2	E	C

S34F HVAC Controls Switch Assembly - Auxiliary Front (REAR HVAC CONTROLS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	1850	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control	I	—
F	0.35	YE	5262	Dual Logic Module Rear Control Enable Signal	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.35	PU	5260	Dual Logic Module Front Temperature Signal	I	—
J	0.35	TN	5261	Dual Logic Module Front Mode Signal	I	—
K	—	—	—	Not Occupied	—	—

S34F HVAC Controls Switch Assembly - Auxiliary Front (-REAR HVAC CONTROLS)



803688

Connector Part Information

Harness Type: Headliner
OEM Connector: 12064871
Service Connector: 12101832
Description: 10-Way F 150 Metri-Pack Series (BU)

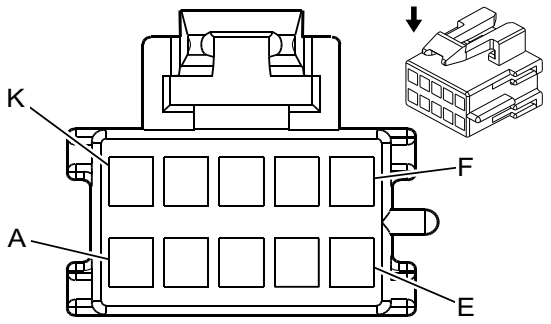
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575464	J-35616-14 (GN)	J-38125-12A	15326030	Delphi 2	E	C

S34F HVAC Controls Switch Assembly - Auxiliary Front (-REAR HVAC CONTROLS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	1850	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control	I	—
F	0.35	BK	1850	Ground	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.35	OG	2775	Rear Air Temperature Motor Control	I	—
J	0.35	GY	2599	Rear Mode Motor Signal	I	—
K	—	—	—	Not Occupied	—	—

S34R HVAC Controls Switch Assembly - Auxiliary Rear



803688

Connector Part Information

Harness Type: Headliner
OEM Connector: 12064871
Service Connector: 12101832
Description: 10-Way F 150 Metri-Pack Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575464	J-35616-14 (GN)	J-38125-12A	15326030	Delphi 2	E	C
II	19300422	J-35616-14 (GN)	J-38125-12A	15326030	Delphi 2	E	C

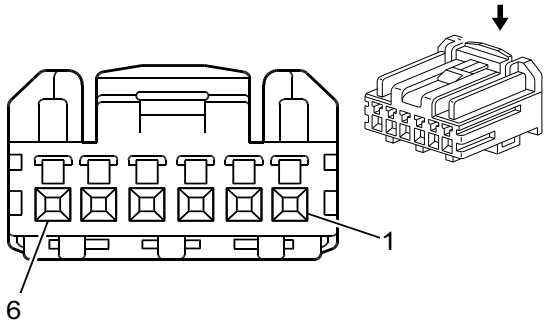
S34R HVAC Controls Switch Assembly - Auxiliary Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	II	—
B	0.5	BK	1050	Ground	II	—
	0.5	BK	1050	Ground	I	—
	0.5	BK	1850	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control	II	—
	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	II	—
	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control	I	—
	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control	II	—
F	0.35	PK/BK	5265	Dual Logic Module Rear Control Signal	I	—
	0.5	PK/BK	5265	Dual Logic Module Rear Control Signal	II	—
	0.5	PK/BK	5265	Dual Logic Module Rear Control Signal	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	II	—
	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.35	BN	5263	Dual Logic Module Rear Temperature Signal	I	—
	0.5	BN	5263	Dual Logic Module Rear Temperature Signal	II	—
	0.5	BN	5263	Dual Logic Module Rear Temperature Signal	I	—
J	0.35	PU/WH	5264	Dual Logic Module Rear Mode Signal	I	—
	0.5	PU/WH	5264	Dual Logic Module Rear Mode Signal	I	—

S34R HVAC Controls Switch Assembly - Auxiliary Rear (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	0.5	PU/WH	5264	Dual Logic Module Rear Mode Signal	II	—
K	—	—	—	Not Occupied	—	—

S39 Ignition Switch



3681331

Connector Part Information

Harness Type: Steering Column
OEM Connector: HCMPB-C06-K
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series (BK)

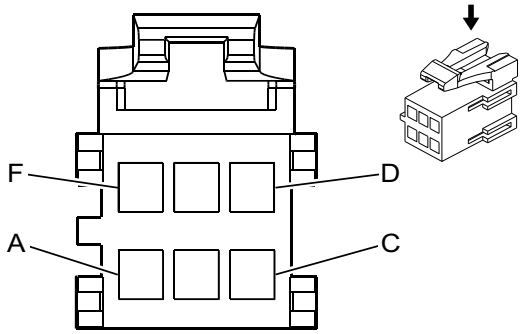
Terminal Part Information

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

S39 Ignition Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	PK	3	Run/Crank Ignition 1 Voltage	I	—
3	—	BN	4	Accessory Ignition Voltage	I	—
4	—	RD/WH	540	Battery Positive Voltage	I	—
5	—	PK	1020	Off/Run/Crank Ignition Voltage	I	—
6	—	WH	530	Off/Run/Crank Ignition Voltage	I	—

S40 Passenger Air Bag Disable Switch



362753

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15305286
Service Connector: 15306014
Description: 6-Way F 150 Metri-Pack Series (YE)

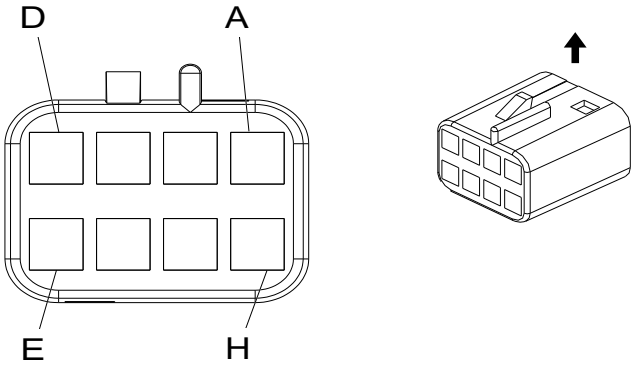
Terminal Part Information

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

S40 Passenger Air Bag Disable Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	TN/BK	371	Passenger IP Module Disable Switch Signal	I	—
B	0.35	PK	1139	Run/Crank Ignition 1 Voltage	I	—
C	0.35	D-BU	2307	Passenger Air Bag On Indicator Control	I	—
D	0.5	PK	353	Passenger IP Module Suppression Indicator Control	I	—
E	0.5	BK/WH	1751	Signal Ground	I	—
F	0.35	D-GN	2308	Passenger Air Bag Off Indicator Control	I	—

S51 Telematics Button Assembly



62439

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12047886
Service Connector: 13584485
Description: 8-Way F 150 Metri-Pack Series (BK)

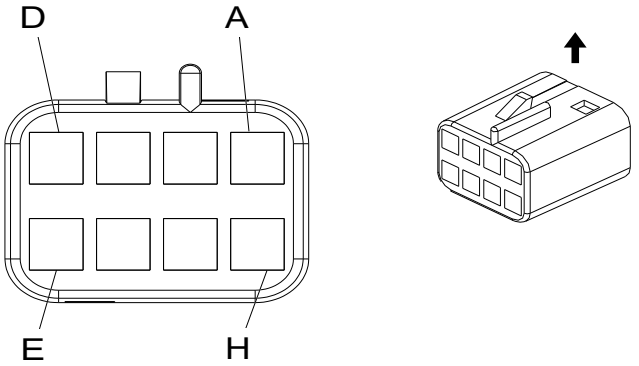
Terminal Part Information

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

S51 Telematics Button Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	L-GN/BK	2515	Keypad Control	I	—
B	0.8	D-GN/WH	2514	Keypad Signal	I	—
C - D	—	—	—	Not Occupied	—	—
E	1	BK/WH	351	Signal Ground	I	—
F	0.8	YE/BK	2516	Keypad Green LED Control	I	—
G	0.8	BN/WH	2517	Keypad Red LED Control	I	—
H	—	—	—	Not Occupied	—	—

S52 Outside Rearview Mirror Switch



62439

Connector Part Information

Harness Type: Driver Door
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series (BK)

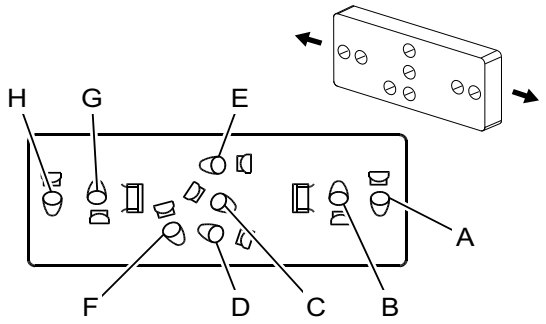
Terminal Part Information

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

S52 Outside Rearview Mirror Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	OG/WH	881	Right Mirror Motor Right Control	I	—
B	0.35	PU/WH	889	Right Mirror Motor Down Control	I	—
C	0.35	BN/WH	1498	Right Mirror Motor Up Control	I	—
D	0.5	BK	450	Ground	I	—
E	0.5	RD/WH	4340	Battery Positive Voltage	I	—
F	0.35	L-GN	89	Left Mirror Motor Down Control	I	—
G	0.35	WH	81	Left Mirror Motor Right Control	I	—
H	0.35	YE	88	Left Mirror Motor Up Control	I	—

S64D Seat Adjuster Switch - Driver (AG1)



387555

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12066386
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F Pin Grip Connector (GY)

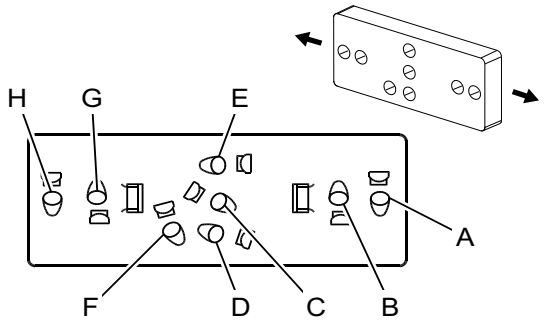
Terminal Part Information

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

S64D Seat Adjuster Switch - Driver (AG1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
B	—	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
C	—	BK	450	Ground	I	—
D	—	TN	285	Driver Power Seat Horizontal Motor Forward Control	I	—
E	—	L-GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—
F	—	RD/WH	3540	Battery Positive Voltage	I	—
G	—	D-BU	287	Driver Power Seat Front Vertical Motor Down Control	I	—
H	—	D-GN	286	Driver Power Seat Front Vertical Motor Up Control	I	—

S64P Seat Adjuster Switch - Passenger (AG2)



387555

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12066386
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F Pin Grip Connector (GY)

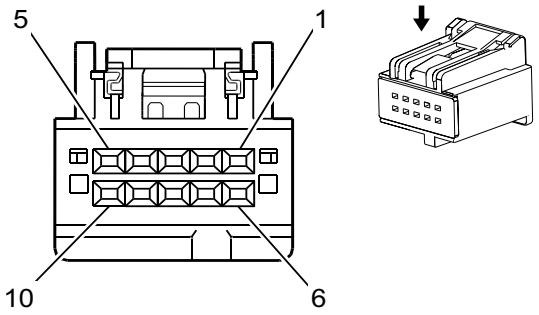
Terminal Part Information

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

S64P Seat Adjuster Switch - Passenger (AG2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—
B	—	YE	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
C	—	BK	1850	Ground	I	—
D	—	TN	296	Passenger Power Seat Horizontal Motor Forward Control	I	—
E	—	L-GN	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
F	—	RD/WH	3540	Battery Positive Voltage	I	—
G	—	D-BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—
H	—	D-GN	297	Passenger Power Seat Front Vertical Motor Up Control	I	—

S70L Steering Wheel Controls Switch - Left (K34)



1399235

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 307001100
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 H-DAC Series (GY)

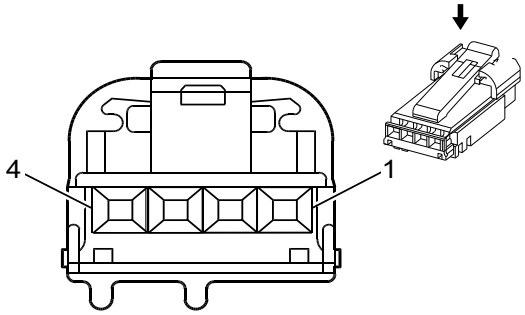
Terminal Part Information

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

S70L Steering Wheel Controls Switch - Left (K34)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	PK	1444	12V Reference	I	—
2	—	—	—	Not Occupied	—	—
3	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	—	BN	6136	Control	I	—
7	—	—	—	Not Occupied	—	—
8	—	BK	350	Ground	I	—
9	—	GN/WH	7158	Cruise Control Indicator Dimming Signal	I	—
10	—	—	—	Not Occupied	—	—

S70R Steering Wheel Controls Switch - Right (W1Y)



1709750

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 31068-1010
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 H-DAC Series (BK)

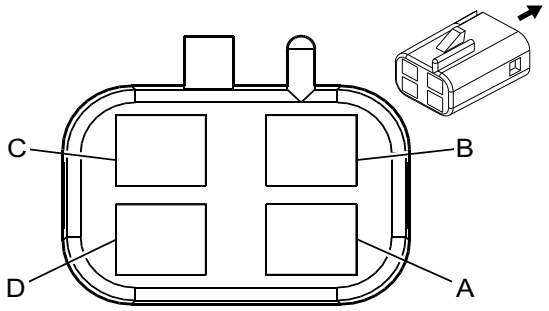
Terminal Part Information

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

S70R Steering Wheel Controls Switch - Right (W1Y)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	350	Ground	I	—
2	—	BN	6136	Control	I	—
3	—	PK	1444	12V Reference	I	—
4	—	L-GN	6818	Steering Wheel Resistor Ladder Signal 1	I	—

S74 Tow/Haul Mode Switch



39660

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12047785
Service Connector: 12102900
Description: 4-Way F 150 Metri-Pack Series (BK)

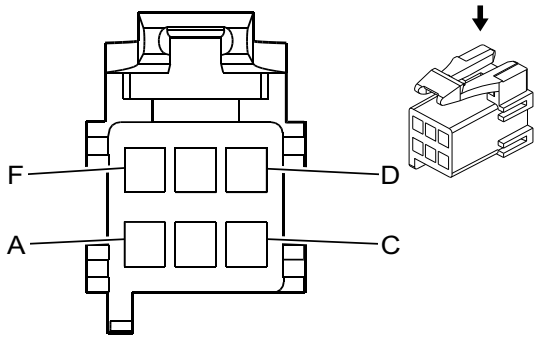
Terminal Part Information

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

S74 Tow/Haul Mode Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/WH	351	Signal Ground	I	—
B	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	L-BU	1788	Traction Control Switch Signal 1	I	—

S75 Traction Control Switch



304345

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12177195
Service Connector: 15305931
Description: 6-Way F 150 Metri-Pack Series (BK)

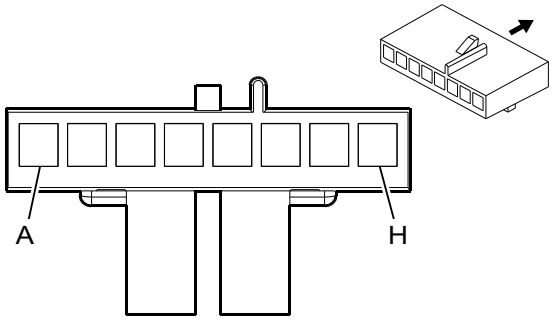
Terminal Part Information

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

S75 Traction Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	0.35	BK/WH	351	Signal Ground	I	—
D	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
E	—	—	—	Not Occupied	—	—
F	0.5	D-BU	6727	Vehicle Stability Control Off Switch Signal	I	—

S78 Turn Signal/Multifunction Switch X1



39746

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12064862
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series (BK)

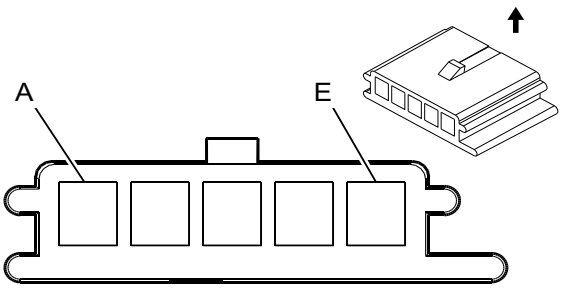
Terminal Part Information

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

S78 Turn Signal/Multifunction Switch X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	BK/WH	351	Signal Ground	I	—
D	—	TN	664	Hazard Switch Right Turn Signal	I	—
E	—	D-GN	663	Hazard Switch Left Turn Signal	I	—
F	—	BK/WH	351	Signal Ground	I	—
G	—	WH	111	Hazard Switch Signal	I	—
H	—	—	—	Not Occupied	—	—

S78 Turn Signal/Multifunction Switch X2



130718

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12059800
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way F 150 Metri-Pack Series (BK)

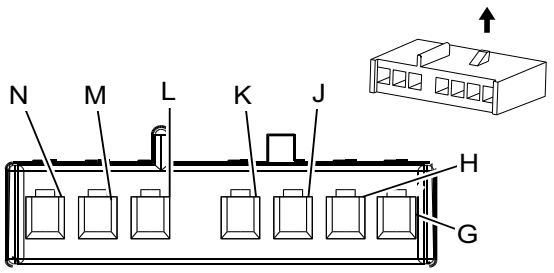
Terminal Part Information

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

S78 Turn Signal/Multifunction Switch X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	YE	525	Headlamp Dimmer Switch Low Beam Signal	I	—
D	—	BK/WH	351	Signal Ground	I	—
E	—	YE	307	Headlamp Switch Flash To Pass Signal	I	—

S78 Turn Signal/Multifunction Switch X3



811190

Connector Part Information

Harness Type: Steering Column
OEM Connector: 15339058
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 150 Metri-Pack Series (GY)

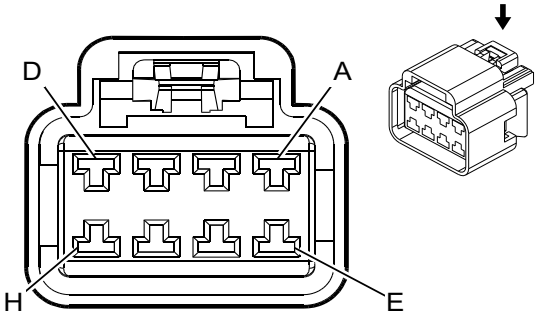
Terminal Part Information

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

S78 Turn Signal/Multifunction Switch X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G - J	—	—	—	Not Occupied	—	—
K	—	L-GN	1715	Windshield Wiper Switch High Signal	I	—
L	—	PK	94	Windshield Washer Switch Signal	I	—
M	—	TN/BK	6009	Windshield Wiper Switch Low Reference	I	—
N	—	L-BU	1714	Windshield Wiper Switch Low Signal	I	—

S79D Window Switch - Driver



556473

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15459914
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series (BK)

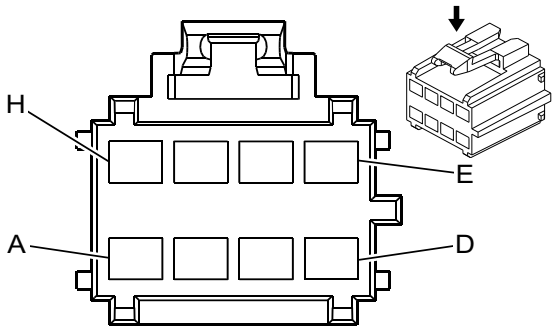
Terminal Part Information

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

S79D Window Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	L-BU	166	Power Window Master Switch Right Front Up Signal	I	—
B	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
C	3	D-GN	1001	Retained Accessory Power Ignition	I	—
D	3	TN	167	Power Window Master Switch Right Front Down Signal	I	—
E	—	—	—	Not Occupied	—	—
F	3	BK	450	Ground	I	—
G	3	D-BU	164	Power Window Motor Left Front Up Control	I	—
H	3	BN	165	Power Window Motor Left Front Down Control	I	—

S79P Window Switch - Passenger



333036

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 12191825
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 Metri-Pack Series (BN)

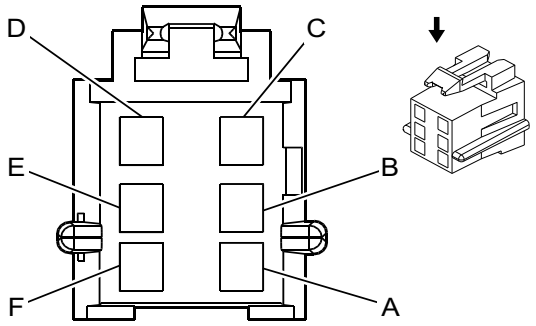
Terminal Part Information

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

S79P Window Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	D-GN	1001	Retained Accessory Power Ignition	I	—
B	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
C	0.35	BK	1850	Ground	I	—
D	3	TN	167	Power Window Master Switch Right Front Down Signal	I	—
E	—	—	—	Not Occupied	—	—
F	3	BN	667	Power Window Motor Right Front Down Control	I	—
G	3	D-BU	666	Power Window Motor Right Front Up Control	I	—
H	3	L-BU	166	Power Window Master Switch Right Front Up Signal	I	—

S85 Auxiliary Blower Motor Switch



62456

Connector Part Information

Harness Type: Auxiliary Heater Front
OEM Connector: 12064752
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Series (BK)

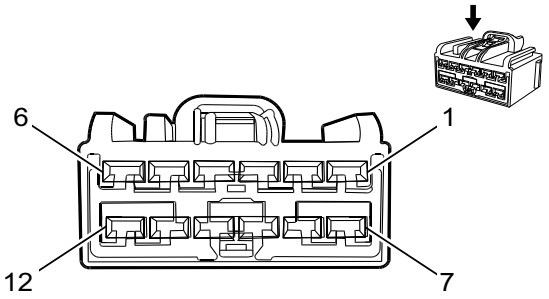
Terminal Part Information

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

S85 Auxiliary Blower Motor Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN/WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	450	Ground	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.35	D-BU	1926	Auxiliary Blower Motor Low Speed Control	I	—
F	0.35	OG	1925	Auxiliary Blower Motor Medium Speed Control	I	—

T1 Accessory DC/AC Power Inverter Module



2231648

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846814
Service Connector: 13580444
Description: 12-Way F 2.8 Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19301752	J-35616-35 (VT)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	19301761	J-35616-35 (VT)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

T1 Accessory DC/AC Power Inverter Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	1	BK	5683	120 V AC Phase A	II	—
3 - 5	—	—	—	Not Occupied	—	—
6	3	RD/WH	4140	Battery Positive Voltage	I	—
7	1	WH	5685	120 V AC Neutral	II	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	BK/WH	1351	Signal Ground	II	—
11	3	BK	550	Ground	I	—
12	0.35	D-GN	2266	DC To AC Inverter Control 2	II	—

T4M Radio Antenna

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Connector Part Information

Harness Type: Radio Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way

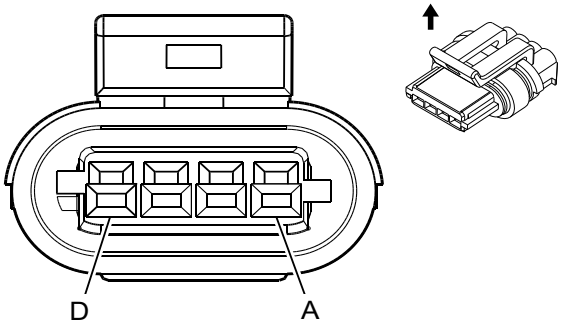
Terminal Part Information

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

T4M Radio Antenna

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

T8A Ignition Coil 1 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

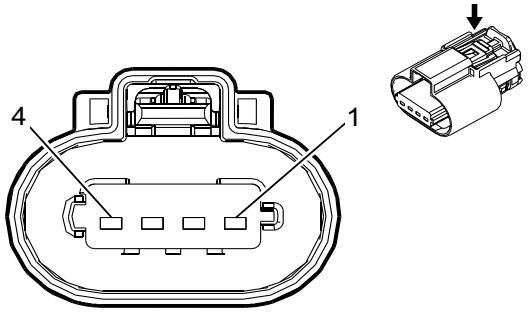
Terminal Part Information

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

T8A Ignition Coil 1 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	PU	2121	Ignition Control 1	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8A Ignition Coil 1 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

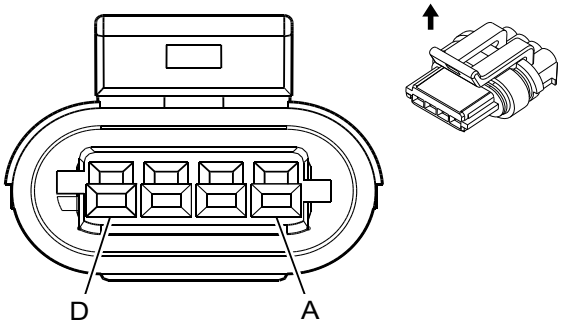
Terminal Part Information

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

T8A Ignition Coil 1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/VT	2121	Ignition Control 1	I	—
4	0.75	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	—

T8B Ignition Coil 2 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

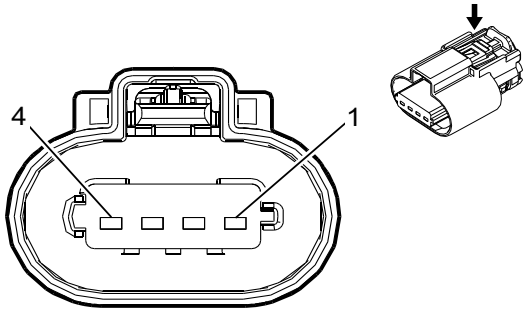
Terminal Part Information

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

T8B Ignition Coil 2 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN/WH	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	OG/WH	2122	Ignition Control 2	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8B Ignition Coil 2 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

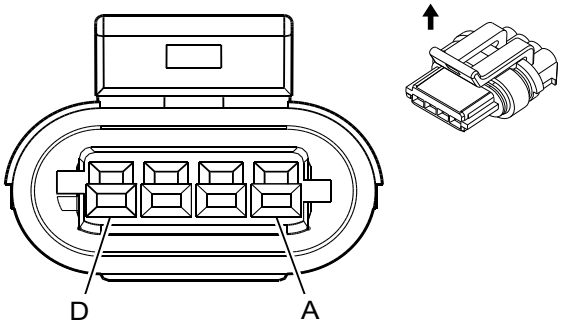
Terminal Part Information

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

T8B Ignition Coil 2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BU/WH	2122	Ignition Control 2	I	—
4	0.75	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	—

T8C Ignition Coil 3 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

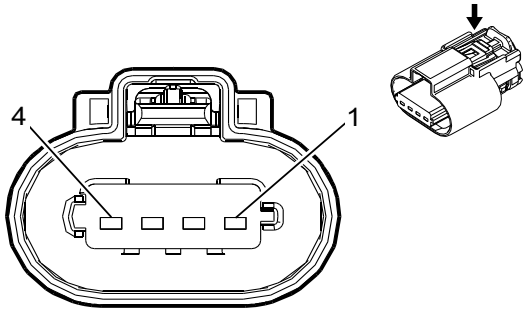
Terminal Part Information

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

T8C Ignition Coil 3 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	L-BU	2123	Ignition Control 3	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8C Ignition Coil 3 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

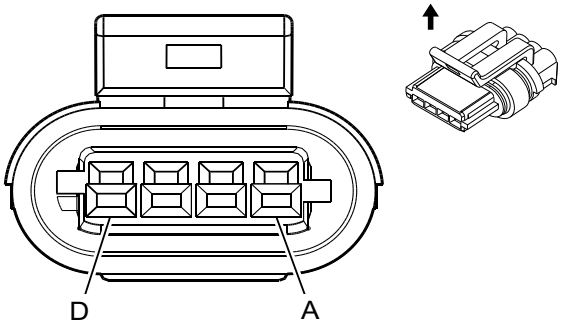
Terminal Part Information

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

T8C Ignition Coil 3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	L-GN/D-BU	2123	Ignition Control 3	I	—
4	0.75	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	—

T8D Ignition Coil 4 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

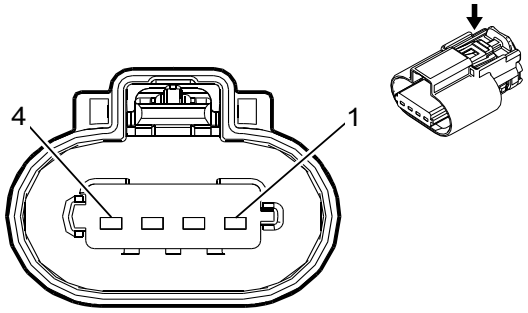
Terminal Part Information

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

T8D Ignition Coil 4 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN/WH	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	D-GN/WH	2124	Ignition Control 4	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8D Ignition Coil 4 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

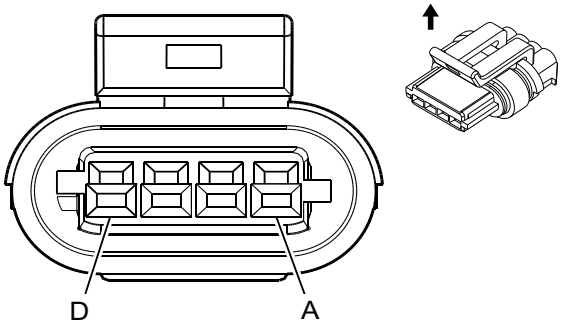
Terminal Part Information

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

T8D Ignition Coil 4 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	YE/D-BU	2124	Ignition Control 4	I	—
4	0.75	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	—

T8E Ignition Coil 5 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

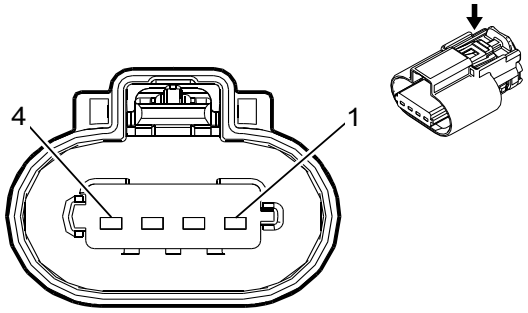
Terminal Part Information

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

T8E Ignition Coil 5 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	D-GN	2125	Ignition Control 5	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8E Ignition Coil 5 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

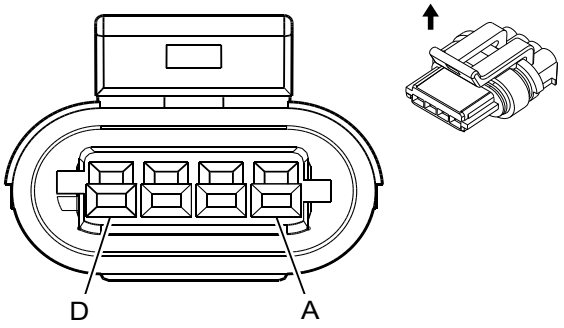
Terminal Part Information

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

T8E Ignition Coil 5 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/GY	2125	Ignition Control 5	I	—
4	0.75	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	—

T8F Ignition Coil 6 (L96/LC8)



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

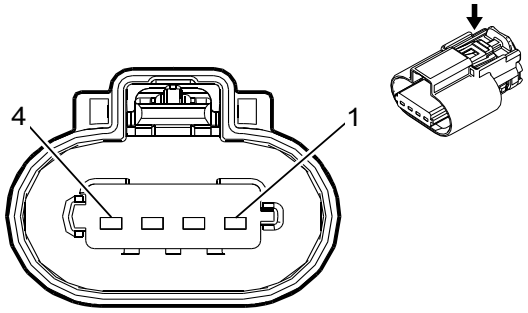
Terminal Part Information

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

T8F Ignition Coil 6 (L96/LC8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN/WH	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	L-BU/WH	2126	Ignition Control 6	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8F Ignition Coil 6 (LV1)



3240115

Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

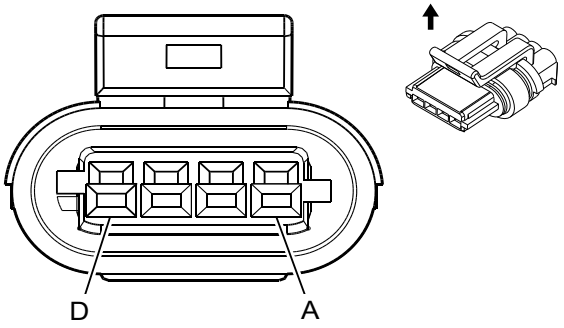
Terminal Part Information

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

T8F Ignition Coil 6 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BN/D-BU	2126	Ignition Control 6	I	—
4	0.75	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	—

T8G Ignition Coil 7



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

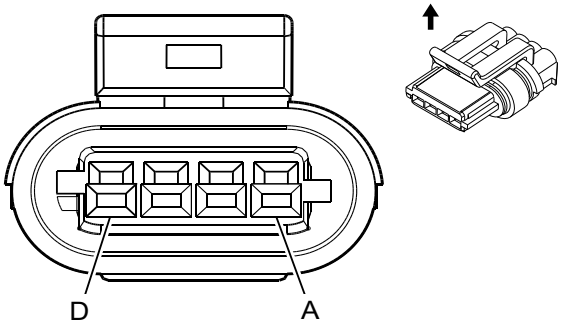
Terminal Part Information

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

T8G Ignition Coil 7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	RD	2127	Ignition Control 7	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T8H Ignition Coil 8



1581641

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15439568
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed (BK)

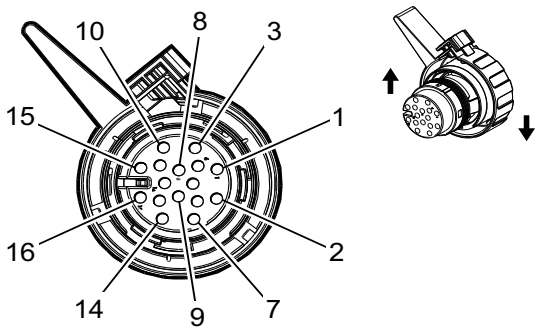
Terminal Part Information

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

T8H Ignition Coil 8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	151	Signal Ground	I	—
B	0.5	BN/WH	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	PU/WH	2128	Ignition Control 8	I	—
D	0.8	PK	39	Run/Crank Ignition 1 Voltage	I	—

T12 Automatic Transmission Assembly



3277917

Connector Part Information

Harness Type: Engine
OEM Connector: 13878751
Service Connector: 19303772
Description: 16-Way F 1.5 Series, Sealed (BK)

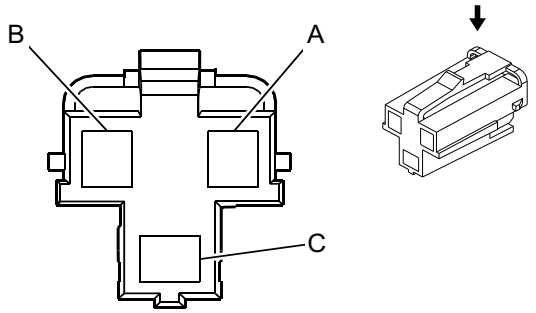
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575434	J-35616-66 (YE)	J-38125-28	2 21 24 47220 0	Yazaki 12	E	1
II	13578934	J-35616-66 (YE)	J-38125-28	2 21 24 47220 0	Yazaki 12	E	1

T12 Automatic Transmission Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	OG/BK	1786	Transmission Park/Neutral Signal 1	I	—
4	0.35	RD/WH	1840	Battery Positive Voltage	I	—
5	0.8	BK/WH	1551	Signal Ground	II	—
6	0.5	L-BU/WH	6311	Cruise/ETC/TCC Brake Signal	II	—
7	—	—	—	Not Occupied	—	—
8	0.5	TN	2501	High Speed GMLAN Serial Data (-) 1	II	—
9	0.5	D-BU	5985	Accessory Wakeup Serial Data	II	—
10	0.5	TN/BK	2500	High Speed GMLAN Serial Data (+) 1	II	—
11	0.5	TN	2501	High Speed GMLAN Serial Data (-) 1	II	—
12	0.5	PK	2139	Run/Crank Ignition 1 Voltage	II	—
13	0.5	TN	2501	High Speed GMLAN Serial Data (-) 1	II	—
14	0.5	TN/BK	2500	High Speed GMLAN Serial Data (+) 1	II	—
15	0.5	TN/BK	2500	High Speed GMLAN Serial Data (+) 1	II	—
16	0.5	OG/BK	6399	Replicated TOS Signal	II	—

X80A Accessory Power Receptacle - Center Console 1 (-DT4)



362748

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12176836
Service Connector: —
Description: 3-Way F 280 Metri-Pack Series (GY)

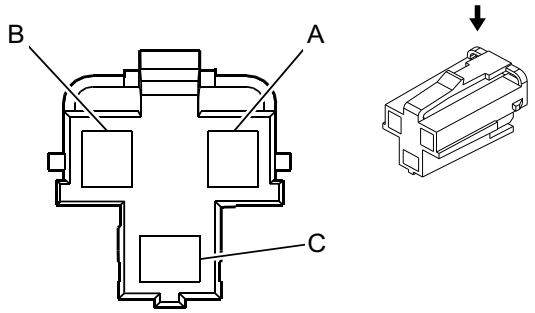
Terminal Part Information

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

X80A Accessory Power Receptacle - Center Console 1 (-DT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD/WH	640	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

X80B Accessory Power Receptacle - Center Console 2



362748

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12176836
Service Connector: 19257374
Description: 3-Way F 280 Metri-Pack Series (GY)

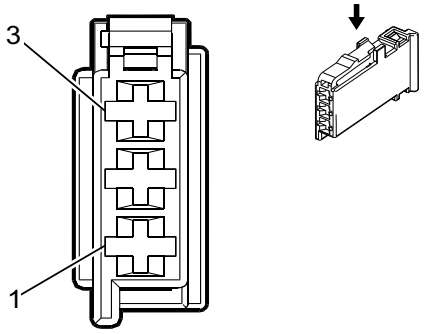
Terminal Part Information

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

X80B Accessory Power Receptacle - Center Console 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD/WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

X81 Accessory Power Receptacle - 110V AC X1



2039656

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3-Way F 1.6 Micro-Timer Series (BK)

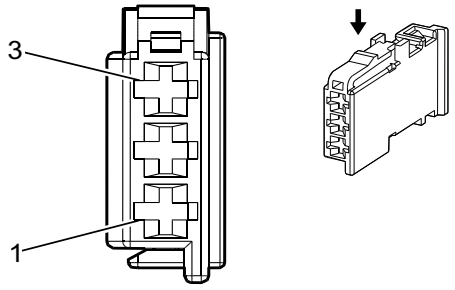
Terminal Part Information

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

X81 Accessory Power Receptacle - 110V AC X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	6807	DC To AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	1	BK	5683	120 V AC Phase A	I	—

X81 Accessory Power Receptacle - 110V AC X2



2236412

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 13583924
Description: 3-Way F 1.6 Timer Series, Sealed (GY)

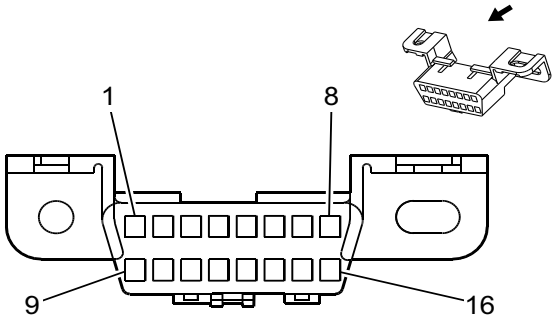
Terminal Part Information

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

X81 Accessory Power Receptacle - 110V AC X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	2266	DC To AC Inverter Control 2	I	—
2	—	—	—	Not Occupied	—	—
3	1	WH	5685	120 V AC Neutral	I	—

X84 Data Link Connector



68793

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series (BK)

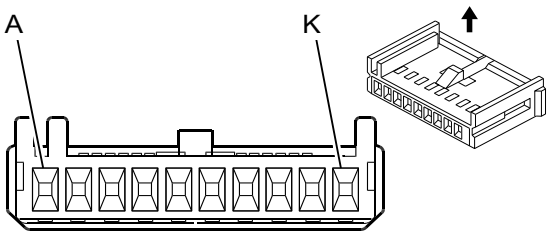
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575724	J-35616-14 (GN)	J-38125-12A	12129484	Delphi 19	E	C
II	13580059	J-35616-14 (GN)	J-38125-12A	12129484	Delphi 19	E	A

X84 Data Link Connector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK/WH	351	Signal Ground	I	—
5	0.5	BK/WH	351	Signal Ground	I	—
6	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
7 - 13	—	—	—	Not Occupied	—	—
14	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
15	—	—	—	Not Occupied	—	—
16	0.8	RD/WH	640	Battery Positive Voltage	II	—

X85 Steering Wheel Air Bag Coil X1



1593397

Connector Part Information

Harness Type: Steering Column
OEM Connector: 15393433
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Micro-Pack Series (BK)

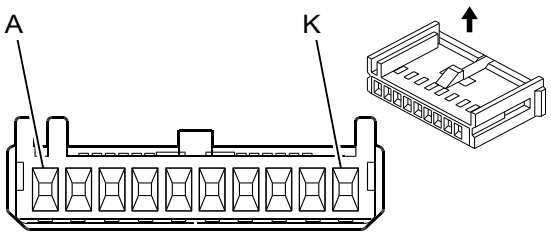
Terminal Part Information

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

X85 Steering Wheel Air Bag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	350	Ground	I	—
B	—	TN	28	Horn Relay Control	I	—
C	—	D-GN/WH	7158	Cruise Control Indicator Dimming Signal	I	—
D - E	—	—	—	Not Occupied	—	—
F	—	PK	1444	12V Reference	I	—
G	—	BN	6136	Control	I	—
H	—	L-GN	6818	Steering Wheel Resistor Ladder Signal 1	I	—
J	—	—	—	Not Occupied	—	—
K	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—

X85 Steering Wheel Air Bag Coil X2



1593397

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 15393433
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Micro-Pack Series (BK)

Terminal Part Information

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

X85 Steering Wheel Air Bag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
B	—	—	—	Not Occupied	—	—
C	—	L-GN	6818	Steering Wheel Resistor Ladder Signal 1	I	—
D	—	BN	6136	Control	I	—
E	—	PK	1444	12V Reference	I	—
F - G	—	—	—	Not Occupied	—	—
H	—	GN/WH	7158	Cruise Control Indicator Dimming Signal	I	—
J	—	TN	28	Horn Relay Control	I	—
K	—	BK	350	Ground	I	—

X87RB Sliding Door Jamb Contact Plate - Right Body (AU3)

—

Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33148350
Service Connector: Service by Harness - See Part Catalog
Description: —

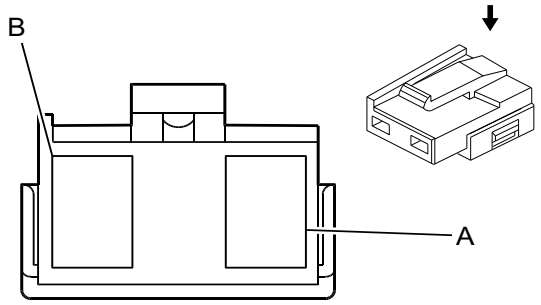
Terminal Part Information

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

X87RB Sliding Door Jamb Contact Plate - Right Body (AU3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

X87RB Sliding Door Jamb Contact Plate - Right Body (CARGO)



38274

Connector Part Information

Harness Type: Body
OEM Connector: 12034343
Service Connector: 12101821
Description: 2-Way F 280 Metri-Pack Series (BK)

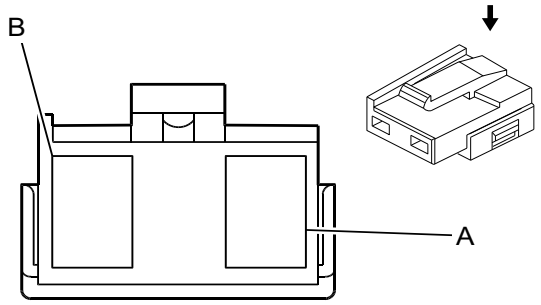
Terminal Part Information

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

X87RB Sliding Door Jamb Contact Plate - Right Body (CARGO)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—
	1	GY	295	Door Lock Actuator Lock Control	I	—

X87RB Sliding Door Jamb Contact Plate - Right Body (CUTAWAY)



38274

Connector Part Information

Harness Type: Body
OEM Connector: 12034343
Service Connector: 12101821
Description: 2-Way F 280 Metri-Pack Series (BK)

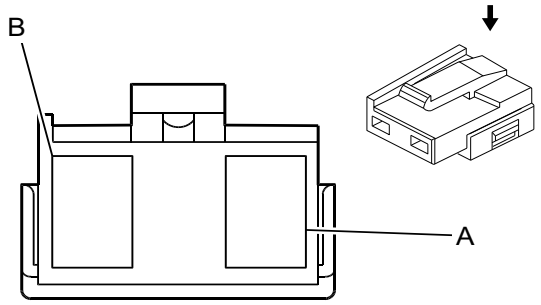
Terminal Part Information

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

X87RB Sliding Door Jamb Contact Plate - Right Body (CUTAWAY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	1	GY	295	Door Lock Actuator Lock Control	I	—

X87RB Sliding Door Jamb Contact Plate - Right Body (PASSENGER)



38274

Connector Part Information

Harness Type: Body
OEM Connector: 12034343
Service Connector: 12101821
Description: 2-Way F 280 Metri-Pack Series (BK)

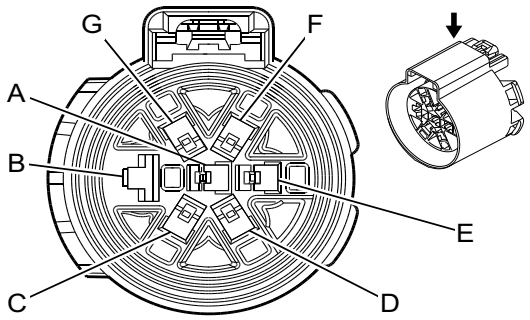
Terminal Part Information

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

X87RB Sliding Door Jamb Contact Plate - Right Body (PASSENGER)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	1	GY	295	Door Lock Actuator Lock Control	I	—

X88 Trailer Connector (-LWN)



2056936

Connector Part Information

Harness Type: Chassis
OEM Connector: 13857223
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed (BK)

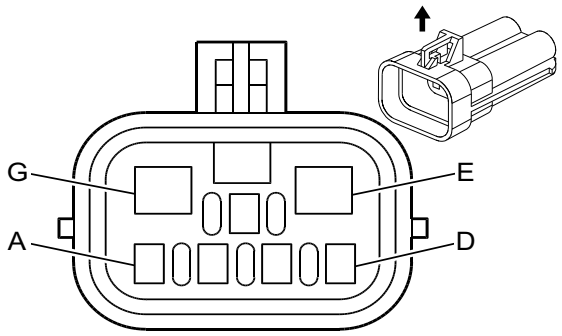
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X88 Trailer Connector (-LWN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	II	—
B	8	WH	22	Trailer Ground	I	—
C	3	D-BU	47	Trailer Auxiliary Control	II	—
D	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	3	RD/BK	742	Battery Positive Voltage	II	—
F	1	BN	2109	Trailer Park Lamp Control	II	—
G	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	II	—

X88 Trailer Connector (NE7)



1372292

Connector Part Information

Harness Type: Chassis
OEM Connector: 12052200
Service Connector: 12117321
Description: 7-Way M 150, 480 Metri-Pack Series, Sealed (BK)

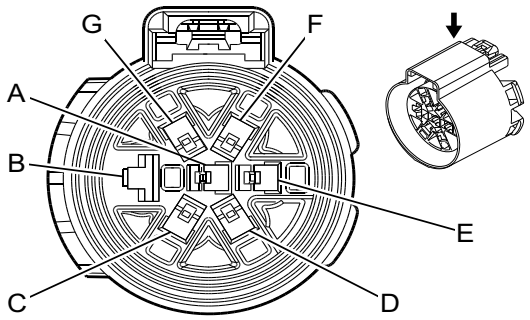
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-41 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X88 Trailer Connector (NE7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	I	—
B	1	BN	2109	Trailer Park Lamp Control	I	—
C	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	I	—
D	—	—	—	Not Occupied	—	—
E	3	D-BU	47	Trailer Auxiliary Control	II	—
F	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	I	—
G	3	RD/BK	742	Battery Positive Voltage	II	—

X88 Trailer Connector (-NE7)



2056936

Connector Part Information

Harness Type: Chassis
OEM Connector: 13857223
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed (BK)

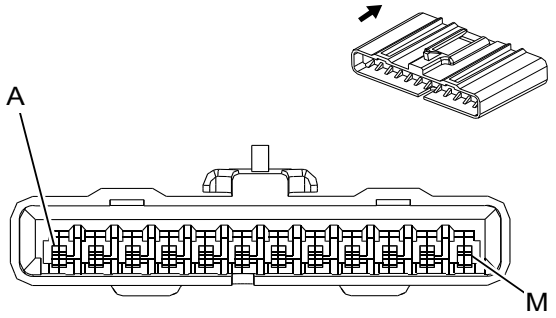
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X88 Trailer Connector (-NE7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	II	—
B	8	WH	22	Trailer Ground	I	—
C	3	D-BU	47	Trailer Auxiliary Control	II	—
D	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	3	RD/BK	742	Battery Positive Voltage	II	—
F	1	BN	2109	Trailer Park Lamp Control	II	—
G	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	II	—

Splice Pack Connector End Views
JX200 Splice Pack



966355

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12176461
Service Connector: 15305914
Description: 12-Way F 150 GT Series (BK)

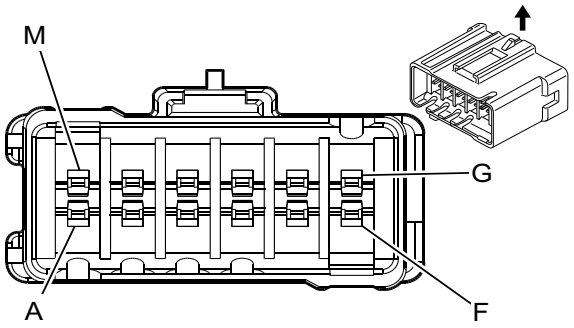
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C

JX200 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
B	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
C	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
D	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
E	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
F	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
G	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
H	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
J	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
K	—	—	—	Not Occupied	—	—
L	0.5	D-GN	5060	Low Speed GMLAN Serial Data	I	—
M	0.5	D-GN	5060	Low Speed GMLAN Serial Data	I	—

JX250 Splice Pack



803605

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15305288
Service Connector: 12167610
Description: 12-Way F 280 Metri-Pack Series (BK)

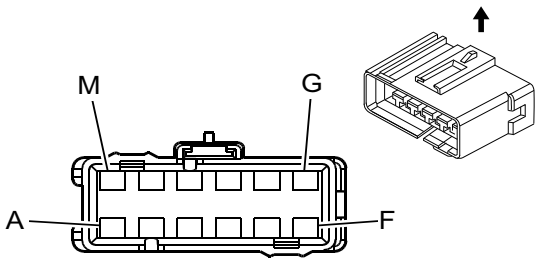
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	E	A

JX250 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
B	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
C	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	I	—
D - J	—	—	—	Not Occupied	—	—
K	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
L	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—
M	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	I	—

JX347 Splice Pack



365987

Connector Part Information

Harness Type: Body
OEM Connector: 12191928
Service Connector: 88986418
Description: 12-Way F 280 Metri-Pack Series (BK)

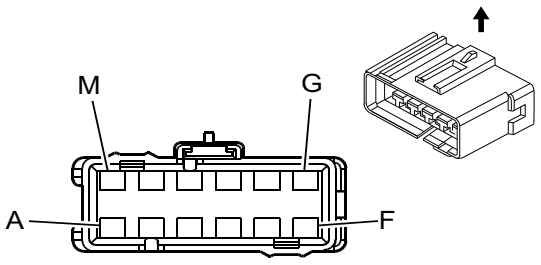
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	E	4
II	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	E	A
III	13579958	J-35616-4A (PU)	J-38125-11A	15324340	Delphi 19	F	G
IV	19330177	J-35616-4A (PU)	J-38125-11A	15324340	Delphi 19	F	G

JX347 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	450	Ground	I	—
B - C	—	—	—	Not Occupied	—	—
D	5	BK	450	Ground	III	—
E	3	BK	450	Ground	IV	—
F	3	BK	450	Ground	IV	—
G	0.5	BK	450	Ground	II	—
H	5	BK	450	Ground	III	—
J	0.5	BK	450	Ground	II	—
K	0.5	BK	450	Ground	II	—
L	—	—	—	Not Occupied	—	—
M	0.35	BK	450	Ground	I	—

JX348 Splice Pack



365987

Connector Part Information

Harness Type: Body
OEM Connector: 12191928
Service Connector: 88986418
Description: 12-Way F 280 Metri-Pack Series (BK)

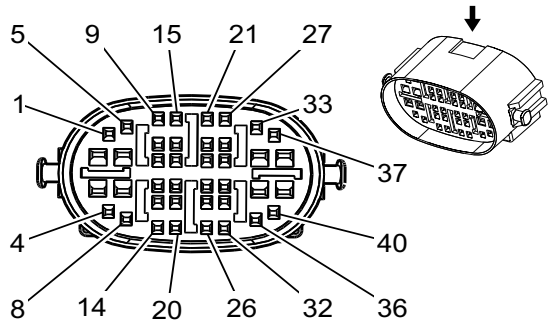
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	C	A
II	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	E	4
III	13575721	J-35616-4A (PU)	J-38125-553	12110844	Delphi 4	E	A
IV	19330177	J-35616-4A (PU)	J-38125-11A	15324340	Delphi 19	F	G

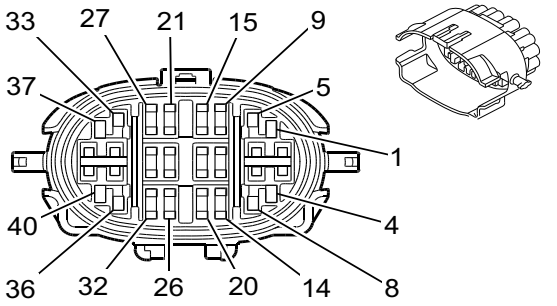
JX348 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	II	—
B	0.8	BK	1850	Ground	I	—
C	3	BK	1850	Ground	IV	—
D	0.35	BK	1850	Ground	II	—
E - F	—	—	—	Not Occupied	—	—
G	0.5	BK/WH	2751	Signal Ground	III	—
H	—	—	—	Not Occupied	—	—
J	1	BK	1850	Ground	I	—
K - M	—	—	—	Not Occupied	—	—

Inline Harness Connector End Views
X100 Instrument Panel Harness to Engine Harness



1713502



1713503

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13601803
Service Connector: 19166997
Description: 40-Way F 150, 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Engine
OEM Connector: 13605375
Service Connector: 19169297
Description: 40-Way M 150, 280 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575396	J-35616-14 (GN)	J-38125-553	15326427	Delphi 5	E	A
II	13575412	J-35616-14 (GN)	J-38125-553	12191819	Delphi 8	2	1
III	13576356	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	2	5
IV	13576356	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	E	5
V	13576360	J-35616-14 (GN)	J-38125-553	12191819	Delphi 8	E	1
VI	13579782	J-35616-4A (PU)	J-38125-553	15304720	Delphi 19	4	5
VII	13575443	J-35616-5 (PU)	J-38125-553	15304732	Delphi 8	A	5
VIII	13576364	J-35616-3 (GY)	J-38125-553	15326269	Delphi 19	E	1
IX	13576364	J-35616-3 (GY)	J-38125-553	15326269	Delphi 19	E	4
X	13580826	J-35616-5 (PU)	J-38125-553	15304731	Delphi 19	C	5
XI	13580826	J-35616-5 (PU)	J-38125-553	15304731	Delphi 19	E	5
XII	19368625	J-35616-3 (GY)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

X100 Instrument Panel Harness to Engine Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH/ D-BU	6311	V	—	Cruise/ETC/ TCC Brake Signal Cruise/ETC/ TCC Brake Signal	1	0.5 0.5	WH/ D-BU L-BU/ WH	6311 6311	IX IX	LV1/LWN L96/LC8
2	0.8	OG	52	III	—	High Blower Motor Control	2	0.8	OG	52	X	—
3	0.8	L-BU	72	III	—	Medium 2 Blower Motor Control	3	2	L-BU	72	VII	—
4	0.8 0.5	OG OG	1732 1732	II V	PRP -PRP	Electronic Control Unit 12V Reference 3 Electronic Control Unit 12V Reference 3	4	0.5	OG	1732	IX	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.8	TN	63	III	—	Medium Blower Motor Control 1	6	0.8	TN	63	X	—
7	2	BK	1250	VI	—	Ground	7	2	BK	1250	VII	—
8	0.8	YE	60	II	—	Low Blower Motor Control	8	0.8	YE	60	VIII	—
9	0.5	L-GN/ BN	507	V	—	Wait To Start Indicator Control	9	0.5	L-GN/ BN	507	IX	—
10 - 11	—	—	—	—	—	Not Occupied	10 - 11	—	—	—	—	—
12	0.5	L-GN	1478	V	—	Coolant Level Switch Signal	12	0.5	L-GN	1478	IX	—
13	0.5	BK/ WH	351	V	—	Signal Ground	13	0.5	BK/ WH	351	IX	—
14	0.5	L-GN	66	V	—	A/C Request Signal	14	0.5	L-GN	66	IX	—
15	0.5	WH/ D-BU	5986	V	—	Serial Data Communication Enable Serial Data Communication Enable	15	0.5 0.5	L-BU WH/ D-BU	5986 5986	IX IX	LWN L96/LC8/ LV1
16	0.5	L-GN	66	V	—	A/C Request Signal	16	0.5	L-GN/ WH	66	IX	—
17	0.5	PU	333	V	—	Brake Fluid Level Sensor Signal Brake Fluid Level Sensor Signal	17	0.75 0.8 0.5	PU PU PU	333 333 333	VIII VIII IX	LWN LV1 L96/LC8
18	0.5	BN/ WH	419	V	—	Check Engine Indicator Control	18	0.5	BN/ WH	419	IX	—

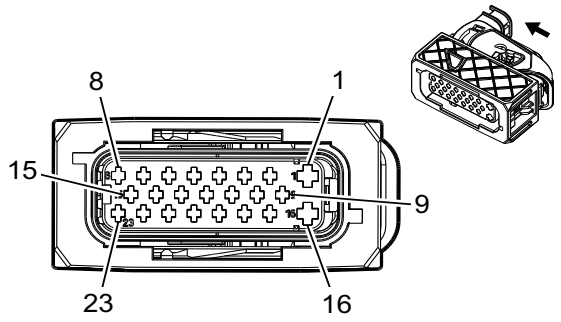
X100 Instrument Panel Harness to Engine Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
19	0.5	D-BU	5985	V	—	Accessory Wakeup Serial Data Accessory Wakeup Serial Data	19	0.5 0.5	VT/YE D-BU	5985 5985	IX IX	LV1 L96/LC8/LWN
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.35	BK/D-BU	1271	I	—	Accelerator Pedal Position Low Reference 1 Accelerator Pedal Position Low Reference 1	21	0.5 0.5	BN BK/D-BU	1271 1271	XII XII	LWN LV1
22	0.35	WH/RD	1164	I	—	Accelerator Pedal Position 5V Reference 1 Accelerator Pedal Position 5V Reference 1	22	0.5 0.5	WH/BK WH/RD	1164 1164	XII XII	LWN LV1
23	0.35	BN/RD	1274	I	—	Accelerator Pedal Position 5V Reference 2 Accelerator Pedal Position 5V Reference 2	23	0.5 0.5	TN BN/RD	1274 1274	XII XII	LWN LV1
24	0.5	BK/WH	451	V	—	Signal Ground Signal Ground	24	0.8 0.75	BK/WH BK/WH	451 451	VIII VIII	LWN LV1
25	0.5	WH	5075	V	—	Current Sensor Signal	25	0.5	WH	5075	IX	—
26	0.5	BN	5077	V	—	Current Sensor Low Reference	26	0.5	BN	5077	IX	—
27	0.35	YE/WH	1161	I	—	Accelerator Pedal Position Signal 1 Accelerator Pedal Position Signal 1	27	0.5 0.5	D-BU YE/WH	1161 1161	XII XII	L96/LC8 LV1/LWN
28	0.35	BK/VT	1272	I	—	Accelerator Pedal Position Low Reference 2 Accelerator Pedal Position Low Reference 2	28	0.5 0.5	PU BK/VT	1272 1272	XII XII	LWN LV1

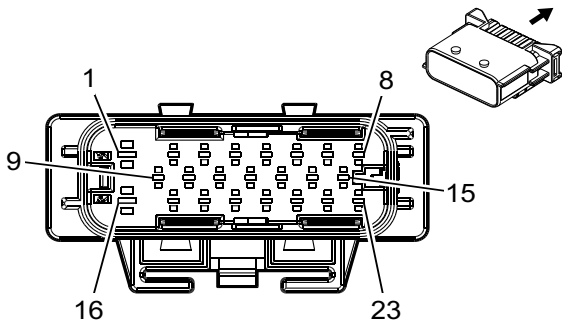
X100 Instrument Panel Harness to Engine Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
29	0.35	L-GN/ WH	1162	I	—	Accelerator Pedal Position Signal 2 Accelerator Pedal Position Signal 2	29	0.5 0.5	L-BU L-GN/ WH	1162 1162	XII XII	LWN LV1
30	0.5	PK	5076	V	—	Current Sensor Control	30	0.5	PK	5076	IX	—
31 - 32	—	—	—	—	—	Not Occupied	31 - 32	—	—	—	—	—
33	0.5	BU	2500	V	—	High Speed GMLAN Serial Data (+) 1	33	0.5	BU	2500	IX	—
34	0.5	BK/ YE	407	IV	—	Sensor Low Reference	34	0.5 0.8	BK/ YE L-GN	407 2032	XI X	LWN/LV1 L96/LC8
35	0.5	L-GN/ BK	735	IV	—	Outside Ambient Air Temperature Sensor Signal	35	0.5 0.8	L-GN/ BK L-BU/ BK	735 6813	XI X	LWN/LV1 L96/LC8
36	0.5	BU	2500	V	—	High Speed GMLAN Serial Data (+) 1	36	0.5	BU	2500	IX	—
37	0.5	WH	2501	V	—	High Speed GMLAN Serial Data (-) 1	37	0.5	WH	2501	IX	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—
40	0.5	WH	2501	V	—	High Speed GMLAN Serial Data (-) 1	40	0.5	WH	2501	IX	—

X101 Engine Harness to Chassis Harness



2906942



2906943

Connector Part Information

Harness Type: Engine
OEM Connector: 13674800
Service Connector: 19300480
Description: 23-Way F 1.5 DSQ, 2.8 ATS Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 13674783
Service Connector: 19303858
Description: 23-Way M 1.5 DSQ, 2.8 ATS Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575429	J-35616-14 (GN)	J-38125-560	Not Available	Not Available	Not Available	Not Available
II	13576369	J-35616-14 (GN)	J-38125-560	Not Available	Not Available	Not Available	Not Available
III	13580830	J-35616-35 (VT)	J-38125-36	Not Available	Not Available	Not Available	Not Available
IV	13575361	J-35616-34 (YE)	J-38125-560	964265-2	Lear 28	C	A
V	13575380	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
VI	13580827	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available

X101 Engine Harness to Chassis 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 0.5	TN/BK BU	2500 2500	II II	L96/LC8 LV1/LWN	High Speed GMLAN Serial Data (+) 1 High Speed GMLAN Serial Data (+) 1	2	0.5	BU	2500	V	—

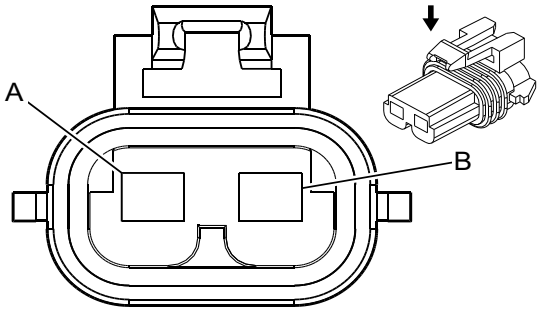
X101 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
3	0.5 0.5	TN WH	2501 2501	II II	L96LC8 LV1/LWN	High Speed GMLAN Serial Data (-) 1 High Speed GMLAN Serial Data (-) 1	3	0.5	WH	2501	V	—
4	0.5	YE	2375	II	—	Left Rear Corner Object Sensor Signal	4	0.5	YE	2375	V	—
5	0.5	YE/D-BU	2376	II	—	Left Rear Middle Object Sensor Signal	5	0.5	YE/D-BU	2376	V	—
6	0.5	D-GN/WH	817	II	—	Vehicle Speed Signal	6	0.5	D-GN/WH	817	V	—
7	0.5	BK/GY	2379	II	—	Object Sensor Low Reference	7	0.5	BK/GY	2379	V	—
8	0.5 0.5	D-GN/WH L-GN/GY	465 465	II II	L96/LC8 LV1/LWN	Fuel Pump Primary Relay Control Fuel Pump Primary Relay Control	8	0.5	L-GN/GY	465	V	—
9	0.5 0.5	PU BU/VT	1589 1589	II II	L96/LC8 LV1	Primary Fuel Level Sensor Signal Primary Fuel Level Sensor Signal	9	0.5	BU/VT	1589	V	—
10	0.5	YE/WH	2377	II	—	Right Rear Middle Object Sensor Signal	10	0.5	YE/WH	2377	V	—
11	0.8	WH/BK	1579	I	—	Fuel Temperature/ Composition Signal	11	0.75	WH	1579	V	—
12	0.5	WH	1310	II	—	EVAP Canister Vent Solenoid Control	12	0.5	WH	1310	V	—
13	0.8	BK/WH	1551	I	—	Signal Ground	13	1	BK/WH	1551	IV	—
14	0.5	BN/WH	2374	II	—	Object Sensor Control	14	0.5	BN/WH	2374	V	—
15	0.5	YE/VT	2378	II	—	Right Rear Corner Object Sensor Signal	15	0.5	YE/VT	2378	V	—

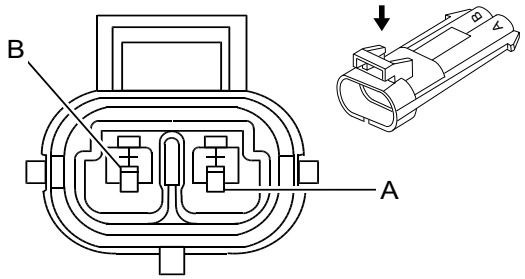
X101 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.5 0.5	D-BU VT/ YE	5985 5985	III III	L96/LC8/ LWN LV1	Accessory Wakeup Serial Data Accessory Wakeup Serial Data	16	0.5	VT/ YE	5985	VI	—
17	0.5 0.5	TN BK/ BN	2759 2759	II II	L96/LC8 LV1	Fuel Tank Pressure Sensor Low Reference Fuel Tank Pressure Sensor Low Reference	17	0.5	BK/ BN	2759	V	—
18	0.5 0.5	GY YE/ RD	2709 2709	II II	L96/LC8 LV1	Fuel Tank Pressure Sensor 5V Reference Fuel Tank Pressure Sensor 5V Reference	18	0.5	YE/ RD	2709	V	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	WH/ D-BU	5986	II	—	Serial Data Communica-tion Enable	20	0.5	WH/ D-BU	5986	V	—
21	0.5 0.5	D-GN BU/ WH	890 890	II II	L96/LC8 LV1	Fuel Tank Pressure Sensor Signal Fuel Tank Pressure Sensor Signal	21	0.5	BU/ WH	890	V	—
22	0.5	BU	2500	II	—	High Speed GMLAN Serial Data (+) 1	22	0.5	BU	2500	V	—
23	0.5	WH	2501	II	—	High Speed GMLAN Serial Data (-) 1	23	0.5	WH	2501	V	—

X104 Instrument Panel Harness to Front Impact Sensor Jumper Harness



684799



879383

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12077900
Service Connector: 12116247
Description: 2-Way F 280 Metri-Pack Series, Sealed (BK)

Connector Part Information

Harness Type: Front Impact Sensor
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X104 Instrument Panel Harness to Front Impact Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	D-BU/WH	6619	I	—	Middle Front Discriminating Sensor Low Reference	A	0.5	D-BU/WH	6619	II	—
B	0.5	BN/WH	6618	I	—	Middle Front Discriminating Sensor Signal	B	0.5	BN/WH	6618	II	—

X108 Battery Cable Harness to Engine Harness

—

Connector Part Information

Harness Type: Battery Cable
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

—

Connector Part Information

Harness Type: Engine
OEM Connector: 33379229
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

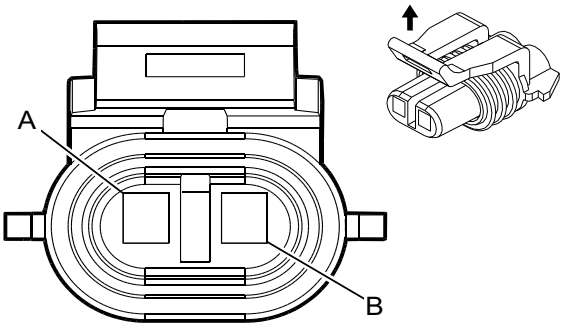
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-21 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

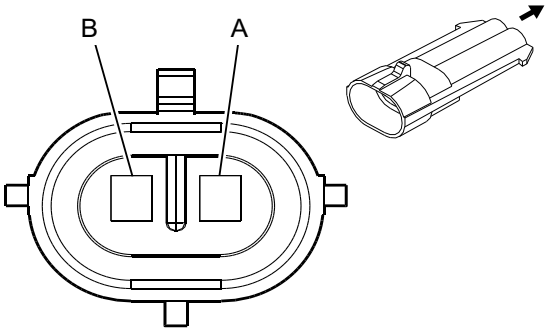
X108 Battery Cable Harness to Engine Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	6	RD/ YE	2	I	—	Battery Positive Voltage	1	6	RD/ YE	2	II	—
2	10	RD/ BK	2	I	—	Battery Positive Voltage	2	10	RD/ BK	2	II	—

X109 Engine Harness to Underhood Lamp Harness



635009



333041

Connector Part Information

Harness Type: Engine
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Underhood Lamp
OEM Connector: 12162000
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (BK)

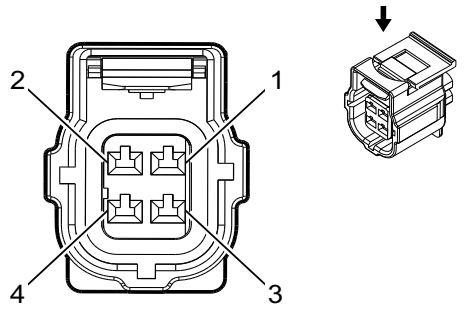
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

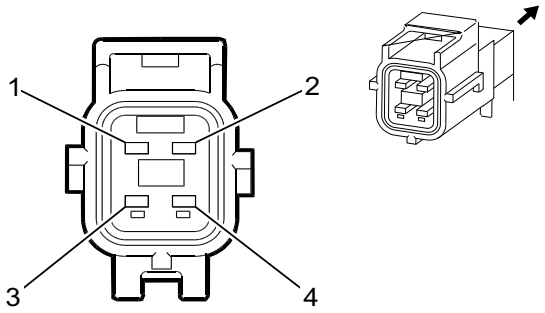
X109 Engine Harness to Underhood Lamp Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	OG	1732	I	—	Electronic Control Unit 12V Reference 3	A	0.5	OG	1732	II	—
B	0.8	BK	1250	I	—	Ground	B	0.5	BK	1250	II	—

X111 Engine Harness to Glow Plug Jumper Harness



2716365



1243485

Connector Part Information

Harness Type: Engine
OEM Connector: 33225173
Service Connector: 13587793
Description: 4-Way F SSC Series (BK)

Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

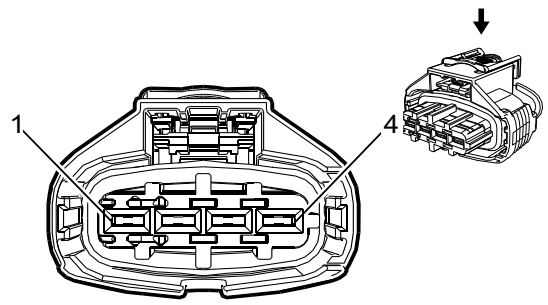
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

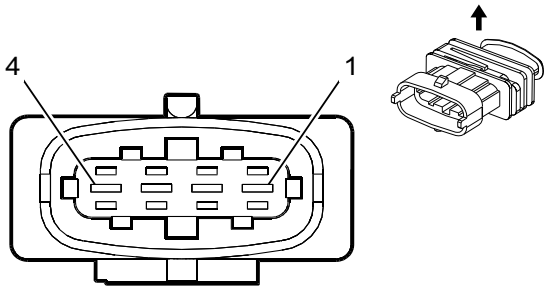
X111 Engine Harness to Glow Plug Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2	GY/ D-BU	1581	I	—	Glow Plug Control 1	1	2	GY/ D-BU	1581	II	—
2	2	GY/ BN	1582	I	—	Glow Plug Control 2	2	2	GY/ BN	1582	II	—
3	2	GY/L-GN	1583	I	—	Glow Plug Control 3	3	2	GY/L-GN	1583	II	—
4	2	GY/ YE	1584	I	—	Glow Plug Control 4	4	2	GY/ YE	1584	II	—

X112 Engine Harness to Fuel Rail Jumper Harness (LWN)



2487930



816173

Connector Part Information

Harness Type: Engine
OEM Connector: 13931683
Service Connector: 13584423
Description: 4-Way F 2.8 Series, Sealed (BK)

Connector Part Information

Harness Type: Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

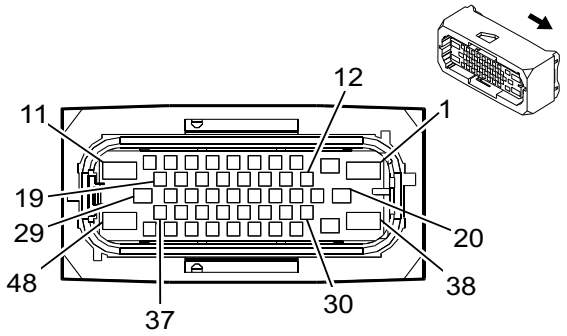
Terminal Part Information

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

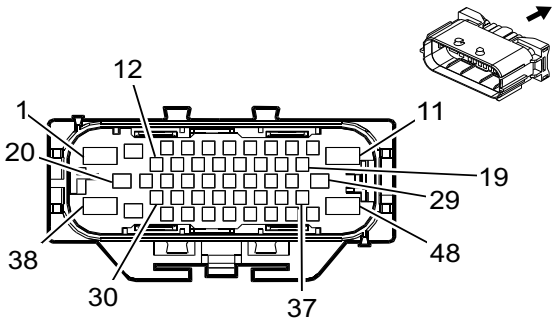
X112 Engine Harness to Fuel Rail Jumper Harness (LWN)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK/L-GN	469	I	—	Manifold Absolute Pressure Sensor Low Reference	1	0.5	BK/L-GN	469	II	—
2	0.5	BN	7348	I	—	Induction Air Temperature Sensor 2 Signal	2	0.5	BN	7348	II	—
3	0.5	GY/RD	2704	I	—	Manifold Absolute Pressure Sensor 5V Reference	3	0.5	GY/RD	2704	II	—
4	0.5	L-GN/WH	432	I	—	Manifold Absolute Pressure Sensor Signal	4	0.5	L-GN/WH	432	II	—

X116 Engine Harness to Chassis Harness



3931602



3924401

Connector Part Information

Harness Type: Engine

OEM Connector: 15509585

Service Connector: 19329744

Description: 48-Way F 1.5 MCP, 2.8 JPT, 6.3 MCP Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis

OEM Connector: 15513438

Service Connector: 19356277

Description: 48-Way M 1.6, 2.8, 5.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13580829	J-35616-4A (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
II	13580830	J-35616-35 (VT)	J-38125-36	Not Available	Not Available	Not Available	Not Available
III	13580830	J-35616-4A (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
IV	19301757	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	A	B
V	19301775	J-35616-40 (BU)	J-38125-556	1241408-1	Lear 28	C	A
VI	19301776	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19329757	J-35616-14 (GN)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VIII	13575380	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
IX	13578827	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
X	13580827	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
XI	19301750	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available
XII	19329756	J-35616-32 (OR)	J-38125-36	Not Available	Not Available	Not Available	Not Available

X116 Engine Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—

X116 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
2	2.5	BU	3921	I	—	DEF Heater Supply 1	2	2.5	D-BU	3921	IX	—
3	0.5	L-GN/ D-BU	3889	VI	—	DEF Power Module Relay Control	3	0.5	L-GN/ D-BU	3889	VIII	—
4	0.5	D-GN	2377	VI	—	Right Rear Middle Object Sensor Signal	4	0.5	YE/ WH	2377	VIII	—
5	0.5	BU	2500	VI	—	High Speed GMLAN Serial Data (+) 1	5	0.5	BU	2500	VIII	—
6	0.5	WH	2501	VI	—	High Speed GMLAN Serial Data (-) 1	6	0.5	WH	2501	VIII	—
7	0.5	WH/ RD	6054	VI	—	Exhaust Pressure Sensor 5V Reference 1	7	0.5	WH/ RD	6054	VIII	—
8	0.5	BK/ YE	6055	VI	—	Exhaust Pressure Sensor Low Reference 1	8	0.5	BK/ YE	6055	VIII	—
9	0.5	BK/L-GN	6281	VII	—	Fuel Level Sensor Low Reference	9	0.5	BK/L-GN	6281	VIII	—
10	0.5	BU/ VT	1589	VII	—	Primary Fuel Level Sensor Signal	10	0.5	BU/ VT	1589	VIII	—
11	1	GY	3672	V	—	NOx Sensor 2 Control	11	1	GY	3672	XI	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	0.5	BN/ WH	7073	VII	—	Sensor Fuel Temperature 1 Low Reference	13	0.5	BN/ WH	7073	VIII	—
14	0.5	BN/ GY	7072	VII	—	Sensor Fuel Temperature 1 Signal	14	0.5	BN/ GY	7072	VIII	—
15	0.5	BN/ WH	2374	VI	—	Object Sensor Control	15	0.5	BN/ WH	2374	VIII	—
16	0.5	YE	2375	VI	—	Left Rear Corner Object Sensor Signal	16	0.5	YE	2375	VIII	—
17	0.5	YE/D-BU	2376	VI	—	Left Rear Middle Object Sensor Signal	17	0.5	YE/D-BU	2376	VIII	—
18 - 19	—	—	—	—	—	Not Occupied	18 - 19	—	—	—	—	—

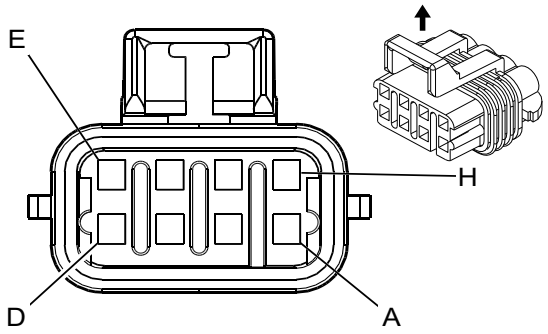
X116 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
20	0.5	D-BU	6053	II	—	Exhaust Pressure Sensor Signal 1	20	0.5	D-BU	6053	X	—
21	0.5	BU/ YE	6861	VII	—	Water In Fuel Sensor Signal	21	0.5	BU/ YE	6861	VIII	—
22 - 23	—	—	—	—	—	Not Occupied	22 - 23	—	—	—	—	—
24	0.5	GY/ BN	7065	VI	—	Wheel Speed Sensor Control Right Front	24	0.5	GY/ BN	7065	VIII	—
25	0.5	YE	872	VI	—	Wheel Speed Sensor Signal Right Front	25	0.5	YE	872	VIII	—
26	0.5	YE/ VT	2378	VI	—	Right Rear Corner Object Sensor Signal	26	0.5	YE/ VT	2378	VIII	—
27	—	—	—	—	—	Not Occupied	27	—	—	—	—	—
28	0.5	VT/ YE	5985	VI	—	Accessory Wakeup Serial Data	28	0.5	VT/ YE	5985	VIII	—
29	1	BK	150	III	—	Ground	29	1	BK	150	X	—
30	0.5	D-BU/ GY	3660	VI	—	Exhaust Gas Temperature Sensor 5 Signal	30	0.5	D-BU/ GY	3660	VIII	—
31	0.5	BK/ VT	3661	VI	—	Exhaust Gas Temperature Sensor 5 Low Refer-ence	31	0.5	BK/ VT	3661	VIII	—
32	0.5	D-BU/ BK	7493	VI	—	High Speed GMLAN Serial Data (+)3	32	0.5	D-BU/ BK	7493	VIII	—
33	0.5	WH	7494	VI	—	High Speed GMLAN Serial Data (-)3	33	0.5	WH	7494	VIII	—
34 - 35	—	—	—	—	—	Not Occupied	34 - 35	—	—	—	—	—
36	0.5	WH/ D-BU	5986	VI	—	Serial Data Communica-tion Enable	36	0.5	WH/ D-BU	5986	VIII	—
37	0.5	BK/ GY	2379	VI	—	Object Sensor Low Reference	37	0.5	BK/ GY	2379	VIII	—
38	—	—	—	—	—	Not Occupied	38	—	—	—	—	—

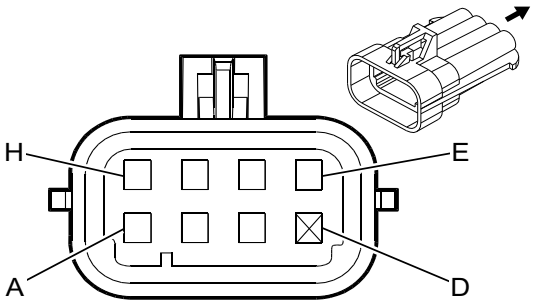
X116 Engine Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
39	0.5	BU	2500	II	—	High Speed GMLAN Serial Data (+) 1	39	0.5	BU	2500	X	—
40	0.5	WH	2501	VI	—	High Speed GMLAN Serial Data (-) 1	40	0.5	WH	2501	VIII	—
41	0.5	BK/L-GN	3657	VI	—	Exhaust Gas Temperature Sensor 3 Low Reference	41	0.5	BK/L-GN	3657	VIII	—
42	0.5	GY/L-GN	5378	VI	—	Exhaust Gas Temperature Sensor 3	42	0.5	GY/L-GN	5378	VIII	—
43	0.5	VT/BN	3658	VI	—	Exhaust Gas Temperature Sensor 4 Signal	43	0.5	VT/BN	3658	VIII	—
44	0.5	BK/GY	3659	VI	—	Exhaust Gas Temperature Sensor 4 Low Reference	44	0.5	BK/GY	3659	VIII	—
45	—	—	—	—	—	Not Occupied	45	—	—	—	—	—
46	0.75	BN/D-BU	2926	VI	—	Hydrocarbon Injector High Control	46	0.75	BN/D-BU	2926	VIII	—
47	0.75	VT/BN	2927	VI	—	Hydrocarbon Injector Low Control	47	0.75	VT/BN	2927	VIII	—
48	2.5	VT/L-GN	355	IV	—	Fuel Filter Heater Voltage	48	2.5	VT/L-GN	355	XII	—

X126 Engine Harness to Ignition Coil Harness



684790



2582274

Connector Part Information

Harness Type: Engine
OEM Connector: 12047938
Service Connector: 13580883
Description: 8-Way F 150 Metri-Pack Series, Sealed (L-GY)

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15496016
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series (GY)

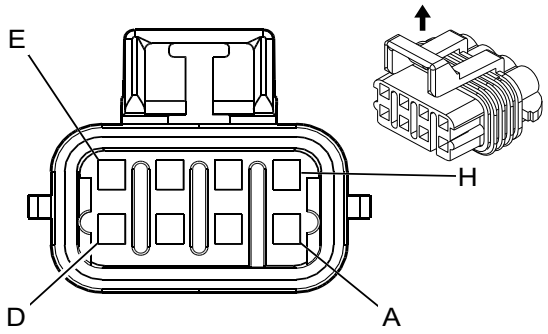
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

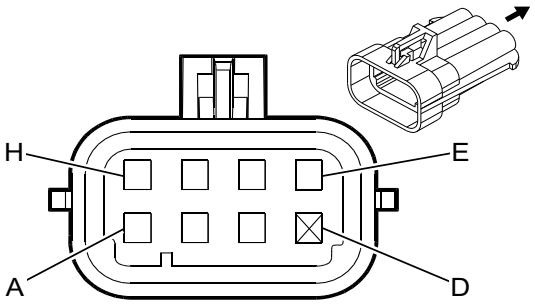
X126 Engine Harness to Ignition Coil Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	BK	1250	I	—	Ground	A	0.8	BK	151	II	—
B	0.8	OG	2127	I	—	Ignition Control 7	B	0.5	RD	2127	II	—
C	0.8	D-GN	2125	I	—	Ignition Control 5	C	0.5	D-GN	2125	II	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—
E	0.8	BN	2129	I	—	Ignition Control Low Reference Bank 1	E	0.5	BN	2129	II	—
F	0.8	L-BU	2123	I	—	Ignition Control 3	F	0.5	L-BU	2123	II	—
G	0.8	PU	2121	I	—	Ignition Control 1	G	0.5	PU	2121	II	—
H	1	PK	1039	I	—	Run/Crank Ignition 1 Voltage	H	0.8	PK	39	II	—

X127 Engine Harness to Ignition Coil Harness



684790



2582274

Connector Part Information

Harness Type: Engine
OEM Connector: 12047938
Service Connector: 13580883
Description: 8-Way F 150 Metri-Pack Series, Sealed (L-GY)

Connector Part Information

Harness Type: Ignition Coil
OEM Connector: 15496016
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series (GY)

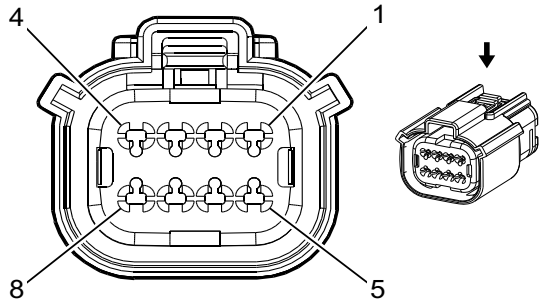
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

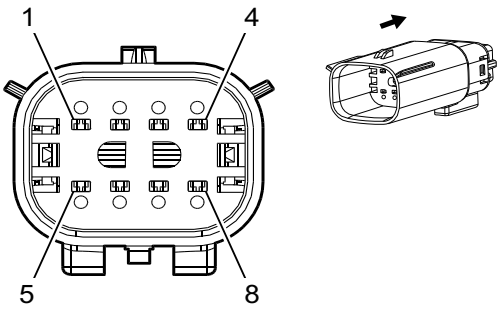
X127 Engine Harness to Ignition Coil Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	BK	1250	I	—	Ground	A	0.8	BK	151	II	—
B	0.8	OG/WH	2122	I	—	Ignition Control 2	B	0.5	OG/WH	2122	II	—
C	0.8	D-GN/WH	2124	I	—	Ignition Control 4	C	0.5	D-GN/WH	2124	II	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—
E	0.8	BN/WH	2130	I	—	Ignition Control Low Reference Bank 2	E	0.5	BN/WH	2130	II	—
F	0.8	L-BU/WH	2126	I	—	Ignition Control 6	F	0.5	L-BU/WH	2126	II	—
G	0.8	PU/WH	2128	I	—	Ignition Control 8	G	0.5	PU/WH	2128	II	—
H	1	PK	1239	I	—	Run/Crank Ignition 1 Voltage	H	0.8	PK	39	II	—

X130 Engine Harness to Camshaft Position Sensor Jumper Harness



2268728



2667653

Connector Part Information

Harness Type: Engine
OEM Connector: 13884361
Service Connector: 19366859
Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13790317
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

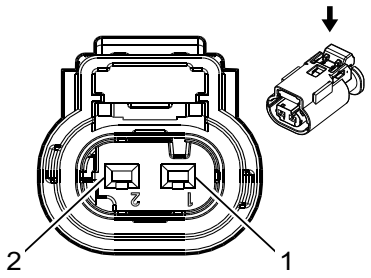
X130 Engine Harness to Camshaft Position Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/ D-BU	5300	I	—	Camshaft Position Intake Sensor Control 1	1	0.5	GY/ D-BU	5300	II	—
2	0.5	BK/L-GN	5301	I	—	Camshaft Position Intake Sensor Low Reference 1	2	0.5	BK/L-GN	5301	II	—
3	0.5	YE/ VT	5275	I	—	Camshaft Position Intake Sensor 1	3	0.5	YE/ VT	5275	II	—
4	0.5	BU	179	I	—	Oil Pump Command Signal	4	0.5	BU	179	II	—
5	0.5	VT/ BN	5284	I	—	Camshaft Phaser Intake Solenoid 1	5	0.5	VT/ BN	5284	II	—
6	0.5	BK/ BN	6753	I	—	Cam Phaser W Low Reference	6	0.5	BK/ BN	6753	II	—

X130 Engine Harness to Camshaft Position Sensor Jumper Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	VT/D-BU	5293	I	—	Powertrain Main Relay Fused Supply 4	7	0.5	VT/D-BU	5293	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X135 Camshaft Position Sensor Jumper Harness to Oil Control Valve Harness



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2717066

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13735326
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

Connector Part Information

Harness Type: Oil Control Valve
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

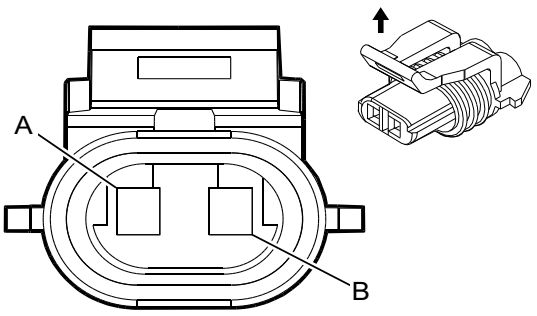
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-17 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

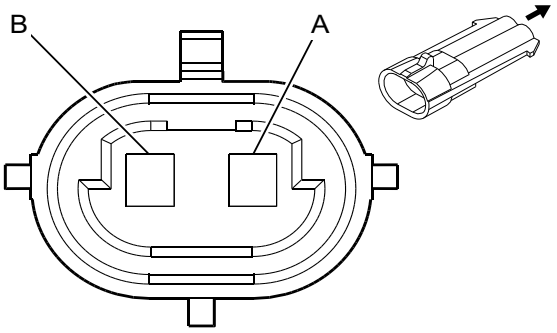
X135 Camshaft Position Sensor Jumper Harness to Oil Control Valve Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/D-BU	5293	I	—	Powertrain Main Relay Fused Supply 4	1	0.5	VT/D-BU	5293	II	—
2	0.5	BU	179	I	—	Oil Pump Command Signal	2	0.5	BU	179	II	—

X141 Instrument Panel Harness to Brake Fluid Level Jumper Harness



537107



605500

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12052644
Service Connector: 15306302
Description: 2-Way F 150 Metri-Pack Series, Sealed (GY)

Connector Part Information

Harness Type: Brake Fluid Level Switch
OEM Connector: 12162343
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series (GY)

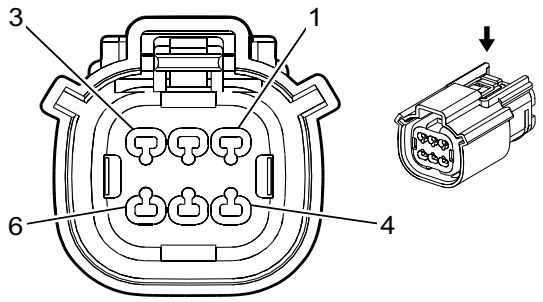
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

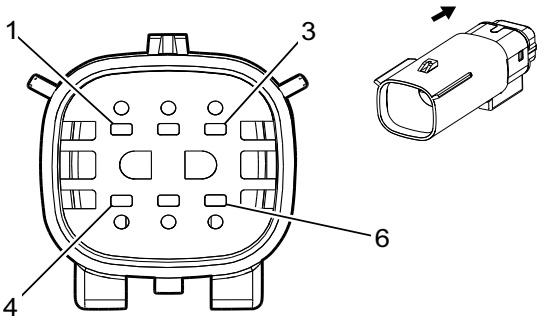
X141 Instrument Panel Harness to Brake Fluid Level Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	TN/WH	33	I	—	Brake Warning Indicator Control	A	0.5	TN/WH	33	II	—
B	0.5	BK/WH	351	I	—	Signal Ground	B	0.5	BK/WH	351	II	—

X142 Engine Harness to Cooling Fan Jumper Harness



1986157



1986159

Connector Part Information

Harness Type: Engine
OEM Connector: 13609714
Service Connector: 13585853
Description: 6-Way F 150 MX Series, Sealed (BK)

Connector Part Information

Harness Type: Cooling Fan Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M

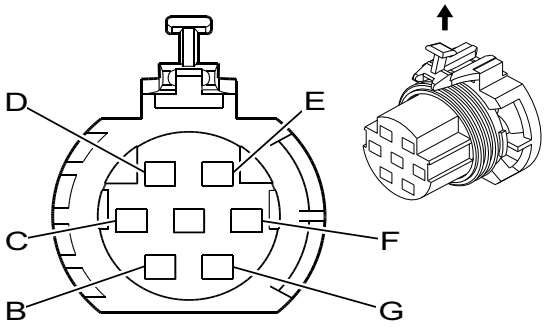
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

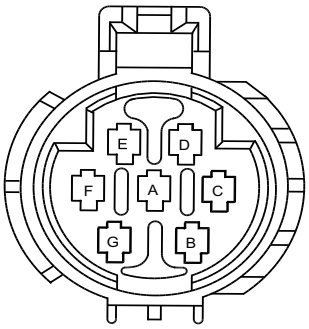
X142 Engine Harness to Cooling Fan Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	WH	2368	I	—	Cooling Fan Control Signal	2	0.5	WH	2368	II	—
3	0.5	GY/RD	2365	I	—	Cooling Fan Speed 5V Reference	3	0.5	GY/RD	2365	II	—
4	0.5	BU/VT	2364	I	—	Cooling Fan Speed Signal	4	0.5	BU/VT	2364	II	—
5	0.5	BK/BN	6141	I	—	Cooling Fan Speed Low Reference	5	0.5	BK/BN	6141	II	—
6	0.75	BK	550	I	—	Ground	6	0.75	BK	550	II	—

X150 Instrument Panel Harness to Forward Lamp Harness



655687



258231

Connector Part Information

Harness Type: Instrument Panel

OEM Connector: 12110751

Service Connector: 12110751

Description: 7-Way F 280 Metri-Pack Flexlock Series, Sealed (BK)

Connector Part Information

Harness Type: Forward Lamp

OEM Connector: 12110753

Service Connector: 12110753

Description: 7-Way M 280 Metri-Pack Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

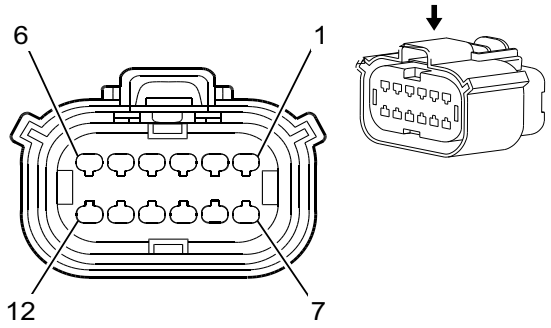
X150 Instrument Panel Harness to Forward Lamp Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	PK/BK	109	I	—	Hood Ajar Switch Signal Hood Ajar Switch Signal	A	0.5 0.5	PK/BK BN/L-GN	109 109	II II	LWN -LWN
B	0.5	PU	5531	I	—	Hood Closed Switch Signal Hood Closed Switch Signal	B	0.5 0.5	VT BK/BN	5531 5531	II II	LWN -LWN
C	0.5	BU/GY	636	I	—	Outside Ambient Air Temperature Sensor Signal Outside Ambient Air Temperature Sensor Signal	C	0.5 0.5	BU/GY D-GN/WH	636 636	II II	-LWN LWN

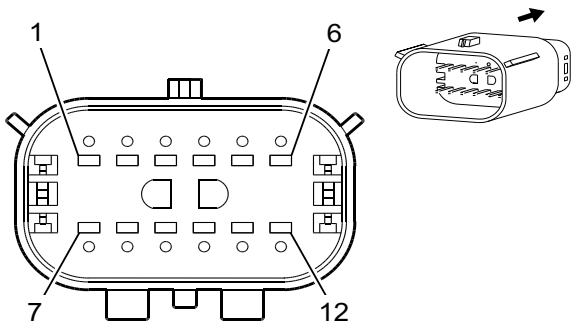
X150 Instrument Panel Harness to Forward Lamp Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
D	0.5	BK/D-BU	61	I	—	Outside Ambient Temperature Sensor Low Reference Outside Ambient Temperature Sensor Low Reference	D	0.5 0.5	YE BK/D-BU	61 61	II II	LWN -LWN
E	0.5	BK/YE	407	I	—	Sensor Low Reference	E	0.5	BK/YE	407	II	—
F	0.5	L-GN/BK	735	I	—	Outside Ambient Air Temperature Sensor Signal	F	0.5	L-GN/BK	735	II	—
G	—	—	—	—	—	Not Occupied	G	—	—	—	—	—

X160 Engine Harness to Fuel Injector Rail Jumper Harness



1825165



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 13609715
Service Connector: 19178148
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13503543
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

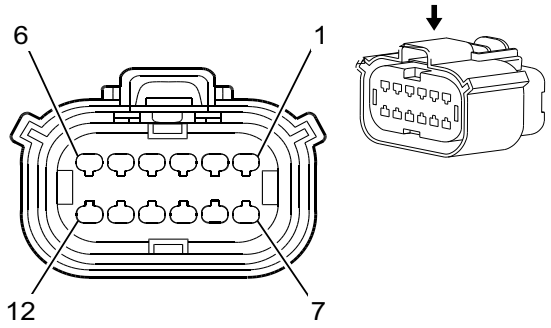
X160 Engine Harness to Fuel Injector Rail Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BN/WH	4901	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	2	0.75	BN/WH	4901	II	—
3	0.75	L-GN/GY	4903	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	3	0.75	L-GN/GY	4903	II	—
4	0.75	L-GN/WH	4905	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	4	0.75	L-GN/WH	4905	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

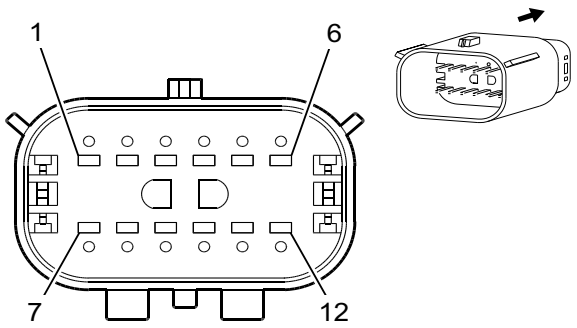
X160 Engine Harness to Fuel Injector Rail Jumper Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	L-GN	4803	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	8	0.75	L-GN	4803	II	—
9	0.75	WH/ L-GN	4805	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	9	0.75	WH/ L-GN	4805	II	—
10	0.5	BN/ RD	2917	I	—	Fuel Rail Pressure Sensor 5V Reference	10	0.5	BN/ RD	2917	II	—
11	0.5	BU/ WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	D-BU/ WH	2918	II	—
12	0.5	BK/L-GN	2919	I	—	Fuel Rail Pressure Sensor Low Reference	12	0.5	BK/L-GN	2919	II	—

X161 Engine Harness to Fuel Injector Rail Jumper Harness



1825165



1825167

Connector Part Information

Harness Type: Engine
OEM Connector: 13863397
Service Connector: 19329931
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Fuel Injector
OEM Connector: 13577093
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

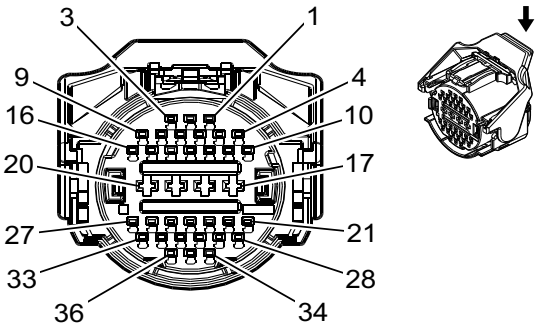
X161 Engine Harness to Fuel Injector Rail Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BU/GY	4902	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	2	0.75	D-BU/GY	4902	II	—
3	0.75	BU/WH	4904	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	3	0.75	D-BU/WH	4904	II	—
4	0.75	VT/GY	4906	I	—	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	4	0.75	VT/GY	4906	II	—
5	0.75	BU	4802	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	5	0.75	D-BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

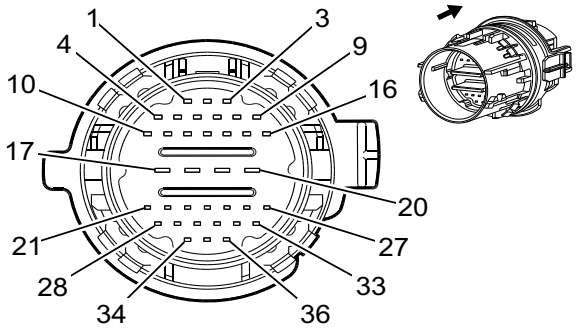
X161 Engine Harness to Fuel Injector Rail Jumper Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	D-BU	4804	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	8	0.75	D-BU	4804	II	—
9	0.75	VT/L-GN	4806	I	—	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	9	0.75	VT/L-GN	4806	II	—
10	0.75	VT/BK	7300	I	—	High Pressure Fuel Pump Actuator Low - Control	10	0.75	VT/BK	7300	II	—
11	0.75	YE	7301	I	—	High Pressure Fuel Pump Actuator High - Control	11	0.75	YE	7301	II	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—

X175 Engine Harness to Transmission Jumper Harness (M5U)



3621473



3977661

Connector Part Information

Harness Type: Engine

OEM Connector: 15532799

Service Connector: 19332681

Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed (BK)

Connector Part Information

Harness Type: Transmission Case

OEM Connector: 2138338-5

Service Connector: Service by Harness - See Part Catalog

Description: 36-Way M 1.2 MCON, 2.8 MQP Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19119772	J-35616-35 (VT)	J-38125-557	1241388-1	Lear 17	E	C
II	19300445	J-35616-16 (LT GN)	J-38125-12A	Not Available	Not Avail-able	Not Avail-able	Not Avail-able
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

X175 Engine Harness to Transmission Jumper Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-GN/ WH	6380	II	—	TCC On/Off Solenoid A Control	1	0.5	L-GN/ WH	6380	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	YE/ BN	6404	II	—	Clutch E Control	3	0.5	YE/ BN	6404	III	—
4	0.5	GY/L-GN	6403	II	—	Clutch D Control	4	0.5	GY/L-GN	6403	III	—
5	0.5	BN	6400	II	—	Clutch A Control	5	0.5	BN	6400	III	—
6	0.5	D-BU	6401	II	—	Clutch B Control	6	0.5	BU	6401	III	—
7	0.5	YE/ BN	6210	II	—	TCC On/Off Solenoid B Control	7	0.5	YE/ BN	6210	III	—
8 - 9	—	—	—	—	—	Not Occupied	8 - 9	—	—	—	—	—
10	0.5	GY	6402	II	—	Clutch C Control	10	0.5	GY	6402	III	—

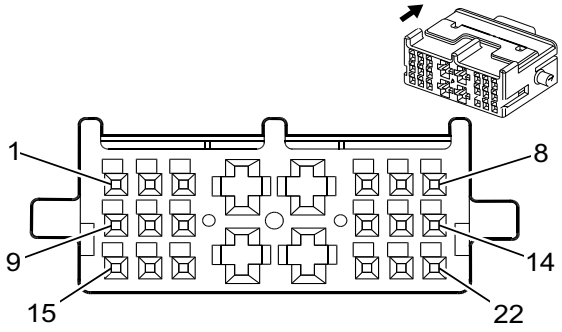
X175 Engine Harness to Transmission Jumper Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5 0.5	OG/BK BK/BN	586 586	II II	LV1 LWN	Transmission Oil Temperature Sensor Low Reference Transmission Oil Temperature Sensor Low Reference	11	0.5	OG/BK	586	III	—
12	0.5	BN/WH	585	II	—	Transmission Oil Temperature Sensor Signal	12	0.5	BN/WH	585	III	—
13	0.5	WH	4508	II	—	Transmission Clutch G Control	13	0.5	WH	4508	III	—
14	0.5 0.5	D-BU WH/D-BU	4507 4507	II II	LV1 LWN	Transmission Clutch H Control Transmission Clutch H Control	14	0.5	WH/BU	4507	III	—
15 - 17	—	—	—	—	—	Not Occupied	15 - 17	—	—	—	—	—
18	0.5 0.5	L-GN/WH L-GN/GY	6387 6387	I I	LV1 LWN	Transmission High Side Driver 1 Signal Driver Transmission High Side Driver 1 Signal Driver	18	2.5	D-GN/WH	6387	III	—
19	0.75	GY/BN	6388	I	—	Transmission High Side Driver 2 Signal	19	2.5	GY/BN	6388	III	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.5 0.5	OG/BK WH/BK	5983 5983	II II	LV1 LWN	PRNDL C Signal PRNDL C Signal	21	0.5	OG/BK	5983	III	—
22	0.5	VT/WH	5981	II	—	PRNDL A Signal	22	0.5	VT/WH	5981	III	—
23	0.5 0.5	GY GY/WH	4168 4168	II II	LV1 LWN	PRNDL P Signal PRNDL P Signal	23	0.5	GY/WH	4168	III	—
24	0.5	GY/D-BU	6358	II	—	Output Speed Signal	24	0.5	GY/BU	6358	III	—
25	0.5 0.5	VT/WH YE/L-GN	4170 4170	II II	LV1 LWN	Transmission Position Sensor B 9V Reference Transmission Position Sensor B 9V Reference	25	0.5	YE/WH	4170	III	—

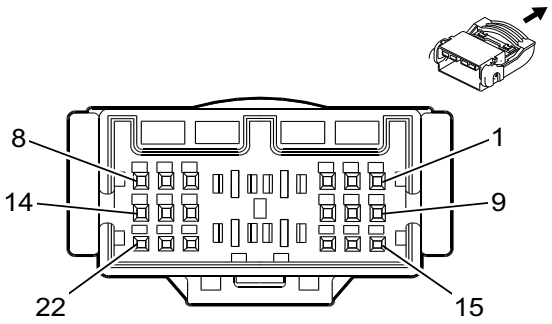
X175 Engine Harness to Transmission Jumper Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
26	0.5 0.5	L-GN L-GN/YE	6353 6353	II II	LV1 LWN	Input Speed Signal Input Speed Signal	26	0.5	D-GN/YE	6353	III	—
27	0.5 0.5	VT YE/D-BU	4171 4171	II II	LV1 LWN	Transmission Position Sensor A 9V Reference Transmission Position Sensor A 9V Reference	27	0.5	YE/BU	4171	III	—
28	0.5	GY/BN	5982	II	—	PRNDL B Signal	28	0.5	GY/BN	5982	III	—
29	0.5 0.5	VT YE/D-BU	4171 4171	II II	LV1 LWN	Transmission Position Sensor A 9V Reference Transmission Position Sensor A 9V Reference	29	0.5	YE/BU	4171	III	—
30	0.5 0.5	WH/BK BK/GY	3927 3927	II II	LV1 LWN	IMS Mode Switch Low Reference IMS Mode Switch Low Reference	30	0.5	WH/BK	3927	III	—
31	0.5 0.5	VT/WH YE/L-GN	4170 4170	II II	LV1 LWN	Transmission Position Sensor B 9V Reference Transmission Position Sensor B 9V Reference	31	0.5	PU/WH	4170	III	—
32	0.5	L-GN/VT	4510	II	—	Transmission Intermediate Speed Signal	32	0.5	L-GN/VT	4510	III	—
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	0.5	GY/YE	4169	II	—	PRNDL S Signal	34	0.5	GY/YE	4169	III	—
35	0.5	WH/GY	1786	II	—	Transmission Park/Neutral Signal 1	35	0.5	OG/BK	1786	III	—
36	—	—	—	—	—	Not Occupied	36	—	—	—	—	—

X176 Transmission Case Harness to Transmission Control Harness (M5U)



3977748



3977770

Connector Part Information

Harness Type: Transmission Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

Connector Part Information

Harness Type: Transmission Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

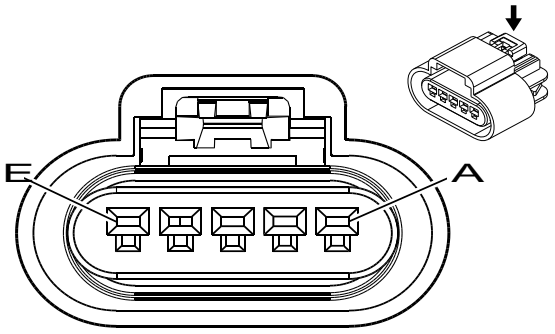
X176 Transmission Case Harness to Transmission Control Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-GN/ WH	6380	II	—	TCC On/Off Solenoid A Control	1	0.5	L-GN/ WH	6380	IV	—
2	0.5	VT/ WH	5981	II	—	PRNDL A Signal	2	0.5	VT/ WH	5981	IV	—
3	0.5	GY/ BN	5982	II	—	PRNDL B Signal	3	0.5	GY/ BN	5982	IV	—
4	2.5	L-GN/ GY	6387	I	—	Transmission High Side Driver 1 Signal Driver	4	2.5	L-GN/ GY	6387	III	—
5	0.5	YE/ BU	4171	I	—	Transmission Position Sensor A 9V Reference	5	0.5	YE/ BU	4171	III	—
6	0.5	GY/ YE	4169	II	—	PRNDL S Signal	6	0.5	GY/ YE	4169	IV	—
7	0.5	WH/ BU	4507	II	—	Transmission Clutch H Control	7	0.5	WH/ BU	4507	IV	—

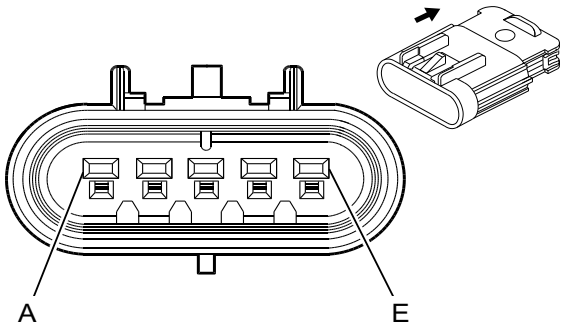
X176 Transmission Case Harness to Transmission Control Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	GY/L-GN	6403	II	—	Clutch D Control	8	0.5	GY/L-GN	6403	IV	—
9	0.5	WH	4508	II	—	Transmission Clutch G Control	9	0.5	WH	4508	IV	—
10	0.5	YE/BN	6210	II	—	TCC On/Off Solenoid B Control	10	0.5	YE/BN	6210	IV	—
11	0.5	OG/BK	5983	II	—	PRNDL C Signal	11	0.5	OG/BK	5983	IV	—
12	0.5	OG/BK	1786	II	—	Transmission Park/Neutral Signal 1	12	0.5	OG/BK	1786	IV	—
13	0.5	GY	6402	II	—	Clutch C Control	13	0.5	GY	6402	IV	—
14	0.5	YE/BN	6404	II	—	Clutch E Control	14	0.5	YE/BN	6404	IV	—
15	0.5	BN/WH	585	II	—	Transmission Oil Temperature Sensor Signal	15	0.5	BN/WH	585	IV	—
16	0.5	OG/BK	586	II	—	Transmission Oil Temperature Sensor Low Reference	16	0.5	OG/BK	586	IV	—
17	0.5	GY/WH	4168	II	—	PRNDL P Signal	17	0.5	GY/WH	4168	IV	—
18	2.5	GY/BN	6388	I	—	Transmission High Side Driver 2 Signal	18	2.5	GY/BN	6388	III	—
19	0.5	PU/WH	4170	I	—	Transmission Position Sensor B 9V Reference	19	0.5	VT/WH	4170	III	—
20	0.5	WH/BK	3927	II	—	IMS Mode Switch Low Reference	20	0.5	WH/BK	3927	IV	—
21	0.5	BN	6400	II	—	Clutch A Control	21	0.5	BN	6400	IV	—
22	0.5	BU	6401	II	—	Clutch B Control	22	0.5	BU	6401	IV	—

X177 Engine Harness to Camshaft Position Sensor Jumper Harness



647974



1334521

Connector Part Information

Harness Type: Engine
OEM Connector: 13519051
Service Connector: 13585858
Description: 5-Way F 150 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 15326827
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 150 GT Series, Sealed (BK)

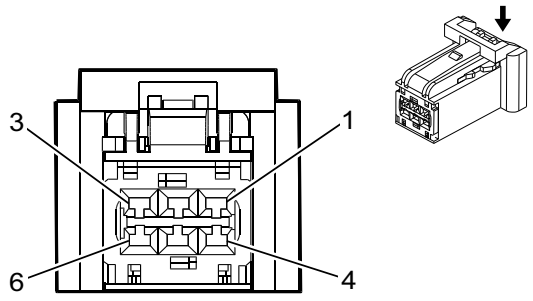
Terminal Part Information

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

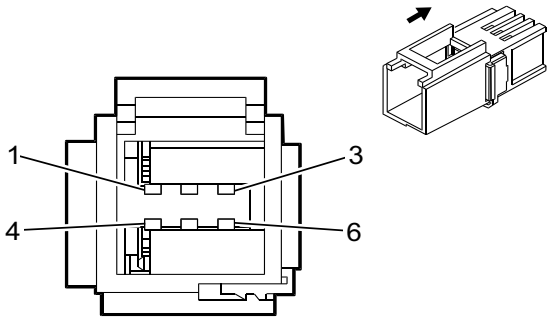
X177 Engine Harness to Camshaft Position Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.8	D-BU	6259	I	—	Camshaft CAM W Control	A	0.8	D-BU	6259	II	—
B	0.8	BN	6266	I	—	Camshaft CAM W Ground	B	0.8	BN	6266	II	—
C	0.8	D-BU/ WH	6265	I	—	Camshaft CAM W Signal	C	0.8	D-BU/ WH	6265	II	—
D	0.8	PU	5284	I	—	Camshaft Phaser Intake Solenoid 1	D	0.8	PU	5284	II	—
E	0.8	TN	2199	I	—	Camshaft Phaser Solenoid Low Refer-ence	E	0.8	TN	2199	II	—

X178 Transmission Case Harness to Speed Sensor Assembly Harness (M5U)



3977938



3977959

Connector Part Information

Harness Type: Transmission Case
OEM Connector: 13960975
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 OCS Series (NA)

Connector Part Information

Harness Type: Speed Sensor Assembly
OEM Connector: 13955963
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 0.64 II Series (GY)

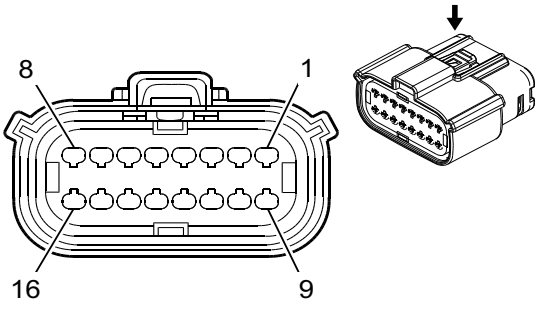
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

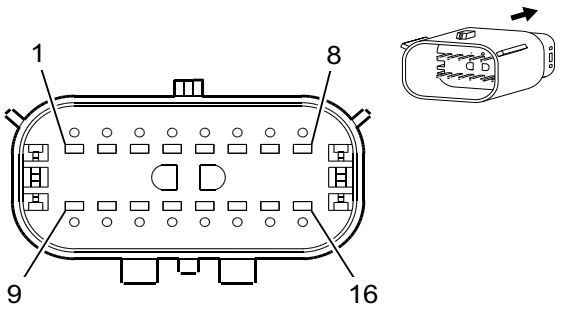
X178 Transmission Case Harness to Speed Sensor Assembly Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/BU	6358	I	—	Output Speed Signal	1	0.5	YE	6358	II	—
2	0.5	YE/WH	4170	I	—	Transmission Position Sensor B 9V Reference	2	0.5	VT/WH	4170	II	—
3	0.5	YE/WH	4170	I	—	Transmission Position Sensor B 9V Reference	3	0.5	WH/WH	4170	II	—
4	0.5	YE/BU	4171	I	—	Transmission Position Sensor A 9V Reference	4	0.5	WH	4171	II	—
5	0.5	L-GN/YE	6353	I	—	Input Speed Signal	5	0.5	D-GN	6353	II	—
6	0.5	L-GN/VT	4510	I	—	Transmission Intermediate Speed Signal	6	0.5	L-GN/VT	4510	II	—

X185 Instrument Panel Harness to Chassis Harness



2548389



2548390

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13778557
Service Connector: 13584788
Description: 16-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 13551665
Service Connector: 19300393
Description: 16-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300635	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
II	19119842	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

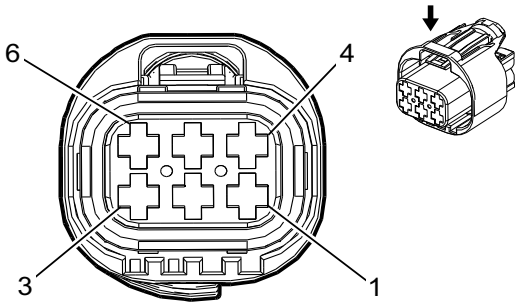
X185 Instrument Panel Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD/L-GN	3140	I	—	Battery Positive Voltage	1	0.5	RD/L-GN	3140	II	—
2	0.5	L-GN	5060	I	—	Low Speed GMLAN Serial Data	2	0.5	L-GN	5060	II	—
3 - 7	—	—	—	—	—	Not Occupied	3 - 7	—	—	—	—	—
8	0.5	BU/YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	8	0.5	BU/YE	6105	II	—
9	0.5	GY/YE	5853	I	—	Driver Side Object Detection LED Signal 1 Driver Side Object Detection LED Signal 1	9	0.5 0.5	GY GY/YE	5853 5853	II II	LWN -LWN

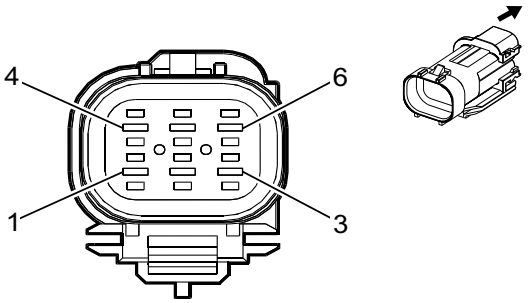
X185 Instrument Panel Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	GY	5861	I	—	Passenger Side Object Detection LED Signal 1 Passenger Side Object Detection LED Signal 1	10	0.5 0.5	GY GY/ YE	5861 5861	II II	-LWN LWN
11 - 14	—	—	—	—	—	Not Occupied	11 - 14	—	—	—	—	—
15	0.5	L-GN/ BN	2087	I	—	Combined Vehicle Inertial Sensor Supply Voltage	15	0.5	L-GN/ BN	2087	II	—
16	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	16	0.5	WH	6106	II	—

X190 Accessory Harness to Accessory Power Fuse Block Rear Extension Harness



2042938



2042939

Connector Part Information

Harness Type: Accessory
OEM Connector: 10865192
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Extension
OEM Connector: 10865189
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 2.8 Series, Sealed (BK)

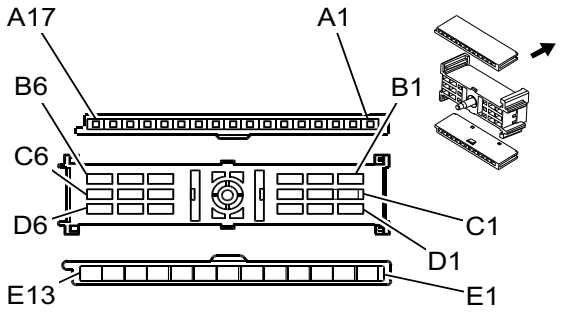
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

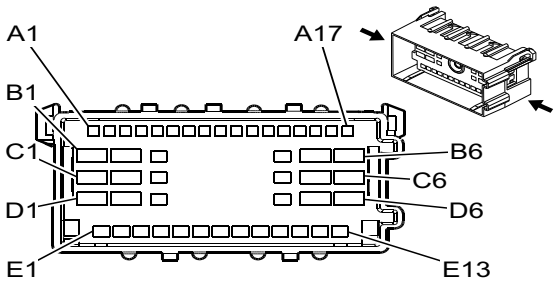
X190 Accessory Harness to Accessory Power Fuse Block Rear Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-BU	6842	I	—	Auxiliary Device Relay 1 Control	1	0.5	L-BU	6842	II	—
2	2.5	L-GN	6839	I	—	Auxiliary Device 1 Switched Voltage	2	2.5	L-GN	6839	II	—
3	0.5	D-BU	6843	I	—	Auxiliary Device Relay 2 Control	3	0.5	D-BU	6843	II	—
4	2.5	D-GN	6840	I	—	Auxiliary Device 2 Switched Voltage	4	2.5	D-GN	6840	II	—
5	1	RD/WH	5440	I	—	Battery Positive Voltage	5	1	RD/WH	5440	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X200 Steering Column Harness to Instrument Panel Harness



794237



510556

Connector Part Information

Harness Type: Steering Column
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 48-Way F

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15492579
Service Connector: 88988982
Description: 48-Way M 150, 280, 630 Metri-Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575462	J-35616-3 (GY)	J-38125-12A	12047581	Delphi 2	E	C
III	13575715	J-35616-5 (PU)	J-38125-11A	12034047	Delphi 2	E	A
IV	19330180	J-35616-43 (RD)	J-38125-11A	12020126	Delphi 2	E	A

X200 Steering Column Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.35	TN	28	I	—	Horn Relay Control	A1	0.35	TN	28	II	—
A2	—	—	—	—	—	Not Occupied	A2	—	—	—	—	—
A3	0.35	PK	1444	I	—	12V Reference	A3	0.35	PK	1444	II	—
A4	0.35	PU	5526	I	—	Tap Up/Tap Down Switch Signal	A4	0.35	PU	5526	II	—
A5	—	—	—	—	—	Not Occupied	A5	—	—	—	—	—
A6	0.5	L-GN/BN	2087	I	—	Combined Vehicle Inertial Sensor Supply Voltage	A6	0.5	L-GN/BN	2087	II	—
A7 - A8	—	—	—	—	—	Not Occupied	A7 - A8	—	—	—	—	—

X200 Steering Column Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A9	0.35	PK	3	I	—	Run/Crank Ignition 1 Voltage	A9	0.35	PK	3	II	—
A1-0	—	—	—	—	—	Not Occupied	A1-0	—	—	—	—	—
A1-1	0.35	L-GN	6818	I	—	Steering Wheel Resistor Ladder Signal 1	A11	0.35	L-GN	6818	II	—
A1-2	—	—	—	—	—	Not Occupied	A1-2	—	—	—	—	—
A1-3	0.35	D-GN/WH	7158	I	—	Cruise Control Indicator Dimming Signal	A1-3	0.35	D-GN/WH	7158	II	—
A1-4	—	—	—	—	—	Not Occupied	A1-4	—	—	—	—	—
A1-5	0.35	BN	6136	I	—	Control	A1-5	0.35	BN	6136	II	—
A1-6	—	—	—	—	—	Not Occupied	A1-6	—	—	—	—	—
A1-7	0.35	GY	1884	I	—	Cruise Control Set/ Coast/ Resume/ Accelerate Switch Signal	A1-7	0.35	GY	1884	II	—
B1	0.35	RD/WH	540	I	—	Battery Positive Voltage	B1	0.35	RD/WH	540	IV	—
B2	—	—	—	—	—	Not Occupied	B2	—	—	—	—	—
B3	0.35	WH	111	I	—	Hazard Switch Signal	B3	0.35	WH	111	III	—
B4-B5	—	—	—	—	—	Not Occupied	B4-B5	—	—	—	—	—
B6	0.35	PK	1020	I	—	Off/Run/ Crank Ignition Voltage	B6	0.35	PK	1020	IV	—
C1	0.35	WH	530	I	—	Off/Run/ Crank Ignition Voltage	C1	0.35	WH	530	IV	—
C2	—	—	—	—	—	Not Occupied	C2	—	—	—	—	—
C3	0.35	YE	307	I	—	Headlamp Switch Flash To Pass Signal	C3	0.35	YE	307	III	—
C4-C5	—	—	—	—	—	Not Occupied	C4-C5	—	—	—	—	—

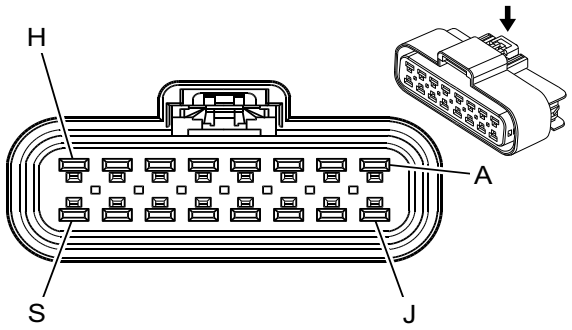
X200 Steering Column Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C6	0.35	BN	4	I	—	Accessory Ignition Voltage	C6	0.35	BN	4	IV	—
D1	0.35	TN/ BK	6009	I	—	Windshield Wiper Switch Low Refer-ence	D1	0.35	TN/ BK	6009	IV	—
D2	—	—	—	—	—	Not Occupied	D2	—	—	—	—	—
D3	0.35	YE	525	I	—	Headlamp Dimmer Switch Low Beam Signal	D3	0.35	YE	525	III	—
D4	0.5	TN/ WH	816	I	—	Brake Trans-mission Shift Interlock Solenoid Control	D4	0.5	TN/ WH	816	III	—
D5	—	—	—	—	—	Not Occupied	D5	—	—	—	—	—
D6	0.35	PK	94	I	—	Windshield Washer Switch Signal	D6	0.35	PK	94	IV	—
E1	0.5	BK	350	I	—	Ground	E1	0.5	BK	350	III	—
E2	—	—	—	—	—	Not Occupied	E2	—	—	—	—	—
E3	0.5	BK/ WH	351	I	—	Signal Ground	E3	0.5	BK/ WH	351	III	—
E4	0.5	BU/ YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	E4	0.5	BU/ YE	6105	III	—
E5	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	E5	0.5	WH	6106	III	—
E6	0.5	BU/ YE	6105	I	—	High Speed GMLAN Serial Data (+) 2	E6	0.5	BU/ YE	6105	III	—
E7	0.5	WH	6106	I	—	High Speed GMLAN Serial Data (-) 2	E7	0.5	WH	6106	III	—
E8	0.35	D-GN	663	I	—	Hazard Switch Left Turn Signal	E8	0.35	D-GN	663	III	—
E9	0.35	TN	664	I	—	Hazard Switch Right Turn Signal	E9	0.35	TN	664	III	—
E1-0	—	—	—	—	—	Not Occupied	E1-0	—	—	—	—	—
E1-1	0.35	L-BU	1714	I	—	Windshield Wiper Switch Low Signal	E11	0.35	L-BU	1714	III	—
E1-2	0.35	L-GN	1715	I	—	Windshield Wiper Switch High Signal	E1-2	0.35	L-GN	1715	III	—

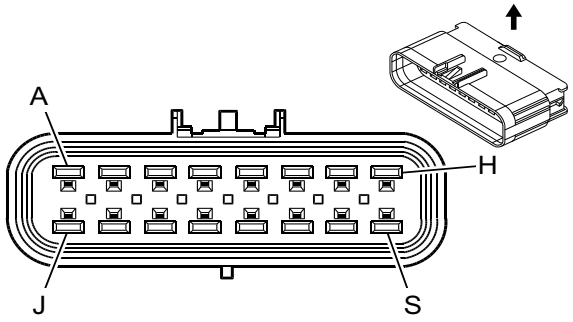
X200 Steering Column Harness to Instrument Panel Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
E1-3	0.35	D-GN	5060	I	—	Low Speed GMLAN Serial Data	E1-3	0.35	D-GN	5060	III	—

X202 Instrument Panel Harness to Engine Harness



847252



847270

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15326666
Service Connector: 15326666
Description: 16-Way F 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Engine
OEM Connector: 15326667
Service Connector: 88986347
Description: 16-Way M 280 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576356	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	E	5
II	13580826	J-35616-5 (PU)	J-38125-553	15304731	Delphi 19	E	5

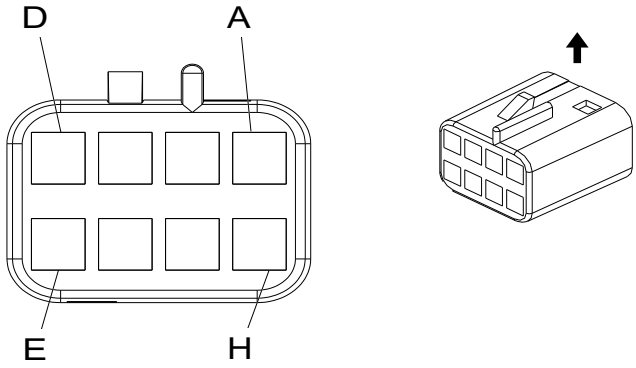
X202 Instrument Panel Harness to Engine Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	YE/VT	2378	I	—	Right Rear Corner Object Sensor Signal Right Rear Corner Object Sensor Signal	A	0.5 0.5	VT YE/VT	2378 2378	II II	LWN -LWN
B	0.5	YE/WH	2377	I	—	Right Rear Middle Object Sensor Signal Right Rear Middle Object Sensor Signal	B	0.5 0.5	D-GN YE/WH	2377 2377	II II	LWN -LWN
C	0.5	RD/WH	840	I	—	Battery Positive Voltage	C	0.5	RD/WH	840	II	—
D - E	—	—	—	—	—	Not Occupied	D - E	—	—	—	—	—

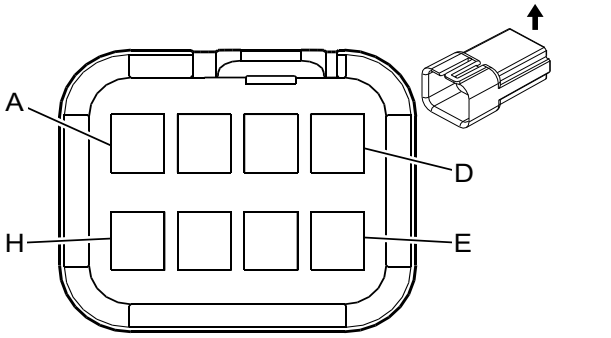
X202 Instrument Panel Harness to Engine Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
F	0.5	BN	5360	I	—	Brake Apply Sensor Low Reference Brake Apply Sensor Low Reference	F	0.5 0.5	BN BK/BN	5360 5360	II II	L96/LC8 LV1/LWN
G	0.5	BN/WH	2374	I	—	Object Sensor Control Object Sensor Control	G	0.5 0.5	BU BN/WH	2374 2374	II II	LWN -LWN
H	0.5	YE	2375	I	—	Left Rear Corner Object Sensor Signal	H	0.5	YE	2375	II	—
J	0.5	BK/GY	2379	I	—	Object Sensor Low Reference Object Sensor Low Reference	J	0.5 0.5	BK/GY GY	2379 2379	II II	-LWN LWN
K - L	—	—	—	—	—	Not Occupied	K - L	—	—	—	—	—
M	0.5	RD/WH	4892	I	—	Auxiliary Battery Relay Control	M	0.5	RD/WH	4892	II	—
N	—	—	—	—	—	Not Occupied	N	—	—	—	—	—
P	0.5	YE	5361	I	—	Brake Apply Sensor Signal Brake Apply Sensor Signal	P	0.5 0.5	YE D-BU/YE	5361 5361	II II	L96/LC8 LV1/LWN
R	0.5	WH	5359	I	—	Brake Apply Sensor Control	R	0.5	WH	5359	II	—
S	0.5	YE/D-BU	2376	I	—	Left Rear Middle Object Sensor Signal Left Rear Middle Object Sensor Signal	S	0.5 0.5	YE/D-BU OG	2376 2376	II II	-LWN LWN

X204 Body Harness to Headliner Harness



62439



62434

Connector Part Information

Harness Type: Body
OEM Connector: 12047886
Service Connector: 13584485
Description: 8-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Headliner
OEM Connector: 12045688
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

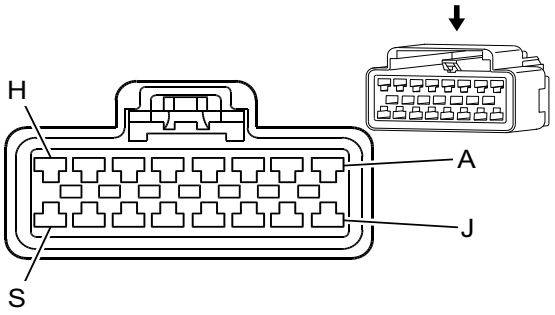
X204 Body Harness to Headliner Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	WH	7641	I	—	Camera Rear Vision Signal +	A	0.5	WH	7641	II	—
						Camera Rear Vision Signal +						
B	0.35	L-BU	7642	I	—	Camera Rear Vision Signal (-)	B	0.5	D-BU	7642	II	—
						Camera Rear Vision Signal (-)						
C	0.35	Bare	6799	I	—	Camera Shield Ground	C	0.5	Bare	6799	II	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
						Run/Crank Ignition 1 Voltage						

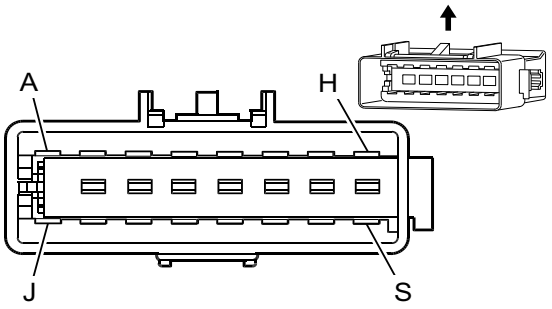
X204 Body Harness to Headliner Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
F	0.5	L-GN	24	I	—	Backup Lamp Control Backup Lamp Control	F	0.5	L-GN	24	II	—
G	0.8	D-GN	654	I	—	Cellular Telephone Microphone Low Reference	G	0.8	D-GN	654	II	—
H	0.8	GY	655	I	—	Cellular Telephone Microphone Signal	H	0.8	GY	655	II	—

X205 Front Headliner Harness to Body Harness



823321



823318

Connector Part Information

Harness Type: Headliner
OEM Connector: 15326952
Service Connector: 15306426
Description: 16-Way F 280 GT Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 13573920
Service Connector: 15326956
Description: 16-Way M 280 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
II	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
III	13575505	J-35616-5 (PU)	J-38125-553	15304722	Delphi 8	E	C
IV	13575507	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	2	A

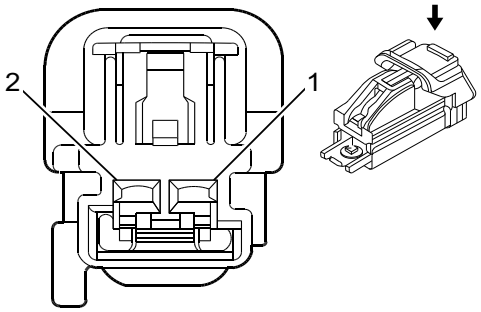
X205 Front Headliner Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	BN	441	II	—	Run Ignition 3 Voltage	A	0.35	BN	441	III	—
B	0.5	PU/WH	5264	II	—	Dual Logic Module Rear Mode Signal	B	0.5	PU/WH	5264	III	—
C	0.5	PK/BK	5265	II	—	Dual Logic Module Rear Control Signal	C	0.5	PK/BK	5265	III	—
D	0.35	GY	2599	II	—	Rear Mode Motor Signal	D	0.35	GY	2599	III	—
E	0.5	WH	1924	II	—	Auxiliary Blower Motor High Speed Control	E	0.35	WH	1924	III	—
F	0.35	BN	341	II	—	Run Ignition 3 Voltage	F	0.35	BN	341	III	—
G	1 0.8	BK BK	1850 1850	I I	C69 -C69	Ground Ground	G	1	BK	1850	IV	—

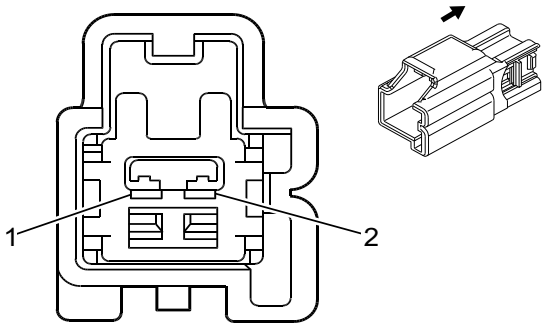
X205 Front Headliner Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
H	0.5	D-BU/WH	149	II	—	Courtesy Lamp Control	H	0.5	D-BU/WH	149	III	—
J	0.35 0.5	BK/WH BK/WH	351 351	II II	U80 UVC	Signal Ground Signal Ground	J	0.35	BK/WH	351	III	—
K	0.5	BN	5263	II	—	Dual Logic Module Rear Temperature Signal	K	0.5	BN	5263	III	—
L	0.35	D-GN	6134	II	—	Local Interconnect Network Serial Data Bus 3	L	0.35	D-GN	6134	III	—
M	0.35	OG	2775	II	—	Rear Air Temperature Motor Control	M	0.35	OG	2775	III	—
N	0.5	OG	1925	II	—	Auxiliary Blower Motor Medium Speed Control	N	0.35	OG	1925	III	—
P	0.5	D-BU	1926	II	—	Auxiliary Blower Motor Low Speed Control	P	0.35	D-BU	1926	III	—
R	0.35	BN/WH	230	II	—	Instrument Panel Lamp Dimming Control	R	0.35	BN/WH	230	III	—
S	0.8 0.5	OG OG	1732 1732	I II	TR9 -TR9	Electronic Control Unit 12V Reference 3 Electronic Control Unit 12V Reference 3	S	0.8	OG	1732	IV	—

X206 Instrument Panel Harness to Instrument Panel Harness



1856792



1853532

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846794
Service Connector: 19367525
Description: 2-Way F 1.5 YESC Series (L-GY)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846798
Service Connector: 19367526
Description: 2-Way M 1.5 Series (L-GY)

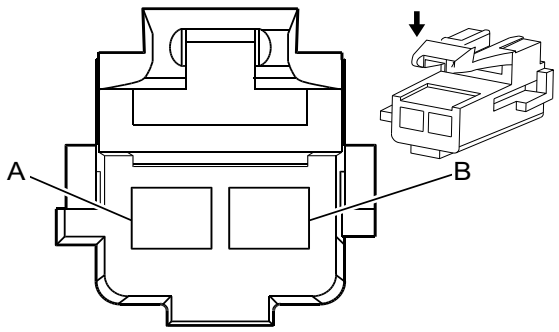
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

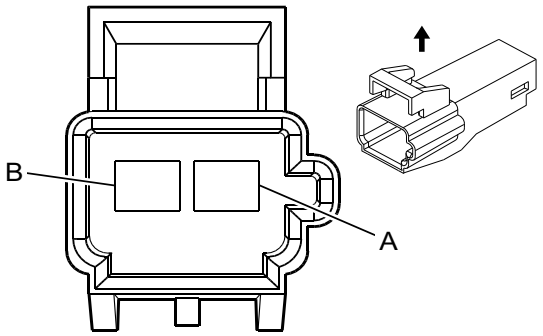
X206 Instrument Panel Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-BU	20	I	—	Stop Lamp Control	1	0.5	L-BU	20	II	—
2	0.5	BK	350	I	—	Ground	2	0.5	BK	350	II	—

X220 Instrument Panel Harness to Park Brake Jumper Harness



1542255



788072

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12129082
Service Connector: 15305896
Description: 2-Way F 280 Metri-Pack Flexlock Series (GY)

Connector Part Information

Harness Type: Park Brake Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

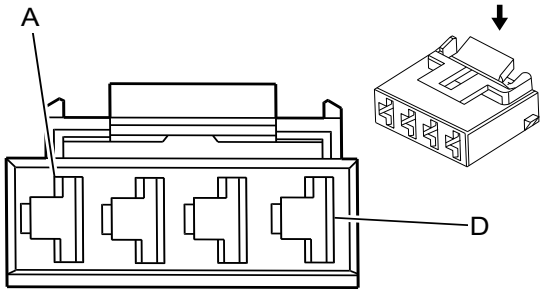
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

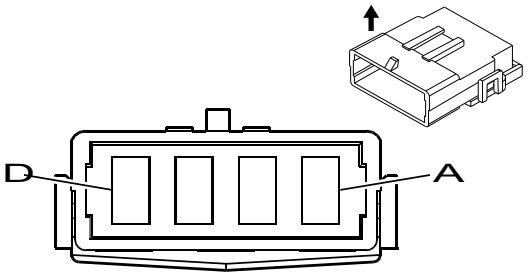
X220 Instrument Panel Harness to Park Brake Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	L-BU	1134	I	—	Park Brake Switch Signal	A	0.35	L-BU	1134	II	—
B	—	—	—	—	—	Not Occupied	B	—	—	—	—	—

X222 Upfitter Provision Harness to Instrument Panel Harness



365938



655680

Connector Part Information

Harness Type: Upfitter Provision
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12052623
Service Connector: 15306008
Description: 4-Way M 630 Metri-Pack Series (BK)

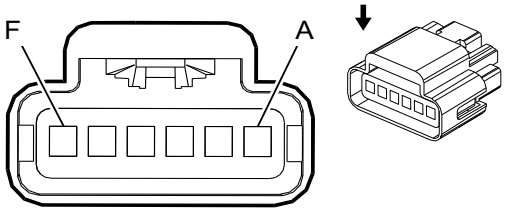
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-43 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

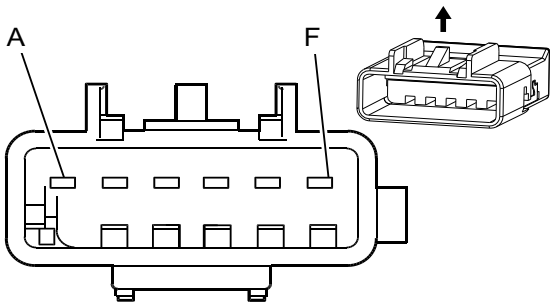
X222 Upfitter Provision Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	RD/BK	1042	I	—	Battery Positive Voltage	A	5	RD/BK	1042	II	—
B	5	BN	541	I	—	Run Ignition 3 Voltage	B	5	BN	541	II	—
C	5	BK	350	I	—	Ground	C	5	BK	350	II	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—

X225 Accelerator Pedal Position (APP) Sensor Jumper Harness to Instrument Panel Harness



2526641



1464340

Connector Part Information

Harness Type: Accelerator Pedal Position Sensor
OEM Connector: 13667186
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 150 GT FBT Series (BK)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15332142
Service Connector: 89046638
Description: 6-Way M 150 GT Series (BK)

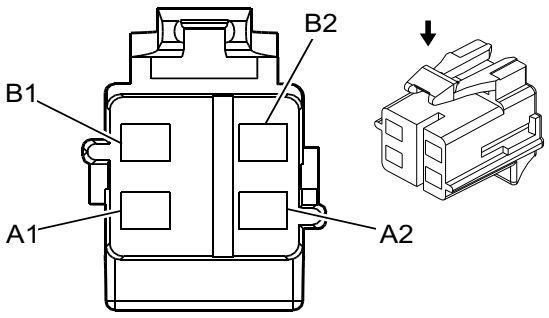
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

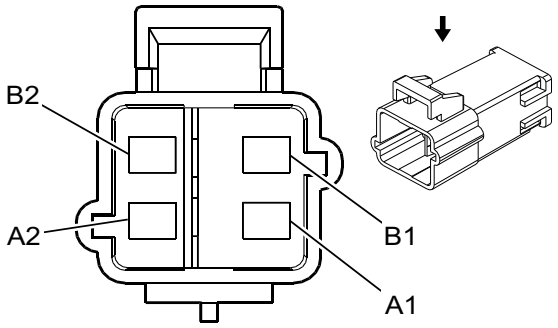
X225 Accelerator Pedal Position (APP) Sensor Jumper Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	TN	1274	I	—	Accelerator Pedal Position 5V Reference 2	A	0.35	BN/ RD	1274	II	—
B	0.35	WH/ BK	1164	I	—	Accelerator Pedal Position 5V Reference 1	B	0.35	WH/ RD	1164	II	—
C	0.35	D-BU	1161	I	—	Accelerator Pedal Position Signal 1	C	0.35	YE/ WH	1161	II	—
D	0.35	BN/ BU	1271	I	—	Accelerator Pedal Position Low Reference 1	D	0.35	BK/D-BU	1271	II	—
E	0.35	PU	1272	I	—	Accelerator Pedal Position Low Reference 2	E	0.35	BK/ VT	1272	II	—
F	0.35	L-BU	1162	I	—	Accelerator Pedal Position Signal 2	F	0.35	L-GN/ WH	1162	II	—

X276 Steering Wheel Harness to Instrument Panel Harness



684936



684931

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15336476
Service Connector: 88987998
Description: 4-Way M 280 Metri-Pack Series (YE)

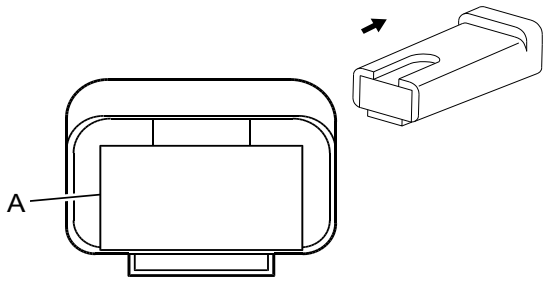
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

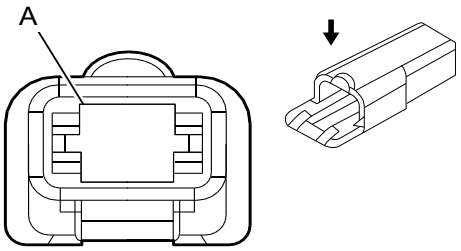
X276 Steering Wheel Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.5	TN	3021	I	—	Steering Wheel Module Stage 1 High Control	A1	0.5	TN	3021	II	—
A2	0.5	BN	3020	I	—	Steering Wheel Module Stage 1 Low Control	A2	0.5	BN	3020	II	—
B1 - B2	—	—	—	—	—	Not Occupied	B1 - B2	—	—	—	—	—

X289 Side Access Panel Harness to Instrument Panel Harness



1542249



2698491

Connector Part Information

Harness Type: Rear Body
OEM Connector: 6288704
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 56 Series (CR)

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 2984528
Service Connector: 19332517
Description: 1-Way M 56 Series (BK)

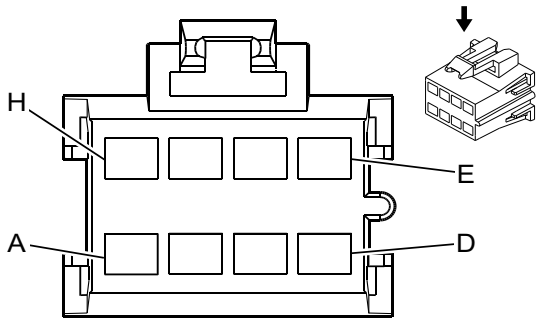
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-43 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

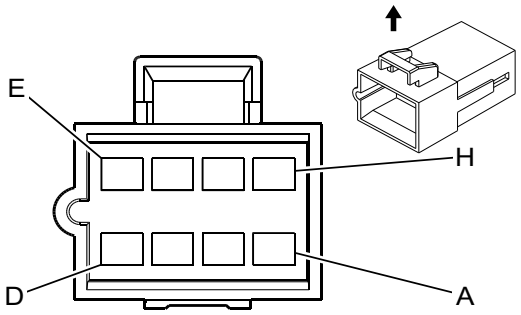
X289 Side Access Panel Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	RD	1042	I	—	Battery Positive Voltage	A	5	RD/ BK	1042	II	—

X290 Instrument Panel Harness to Side Access Panel Harness



62469



655684

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12064998
Service Connector: 15306189
Description: 8-Way F 280 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12066195
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 280 Metri-Pack Series (BK)

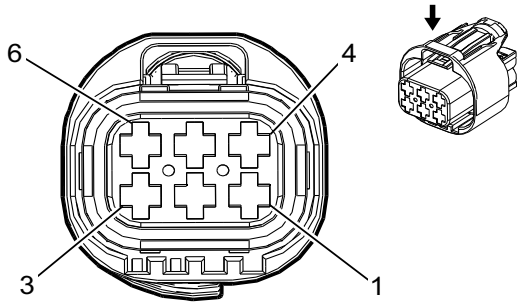
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

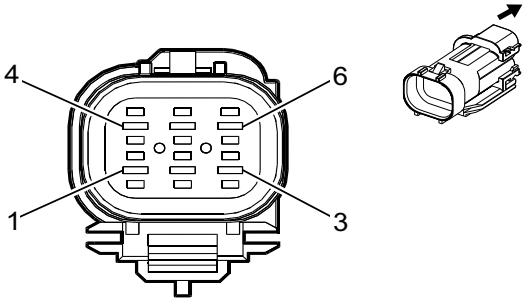
X290 Instrument Panel Harness to Side Access Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	A	0.5	L-BU/ WH	244	II	—
B	0.5	L-BU	1344	I	—	Rear Compart-ment Lid Release Relay Control	B	0.5	L-BU	1344	II	—
C	0.5	L-GN	1391	I	—	Left Front Door Lock Relay Control	C	20	L-GN	1391	II	—
D - F	—	—	—	—	—	Not Occupied	D - F	—	—	—	—	—
G	0.8	OG	1732	I	—	Electronic Control Unit 12V Refer-ence 3	G	0.8	RD	1732	II	—
H	0.5	YE	5810	I	—	Park Enable Signal	H	0.5	OG	5810	II	—

X291 Accessory Power Fuse Block Rear Extension Harness to Accessory Power Fuse Block Rear Extension Harness



2042938



2042939

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Extension
OEM Connector: 10865192
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Extension
OEM Connector: 10865189
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 2.8 Series, Sealed (BK)

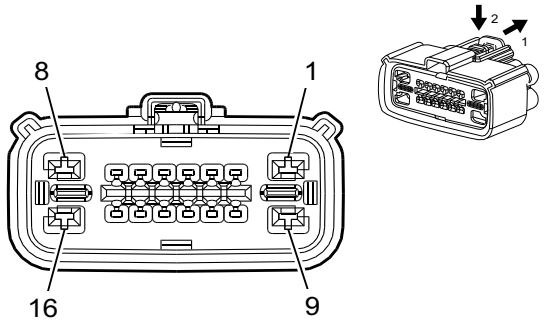
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

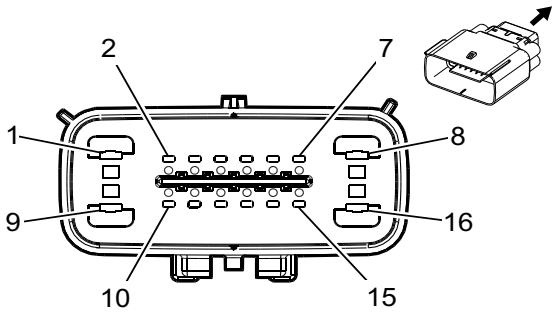
X291 Accessory Power Fuse Block Rear Extension Harness to Accessory Power Fuse Block Rear Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	D-GN	6840	I	—	Auxiliary Device 2 Switched Voltage	1	2.5	D-GN	6840	II	—
2	2.5	L-GN	6839	I	—	Auxiliary Device 1 Switched Voltage	2	2.5	L-GN	6839	II	—
3	0.5	D-BU	6843	I	—	Auxiliary Device Relay 2 Control	3	0.5	D-BU	6843	II	—
4	0.5	L-BU	6842	I	—	Auxiliary Device Relay 1 Control	4	0.5	L-BU	6842	II	—
5	1	RD/WH	5440	I	—	Battery Positive Voltage	5	1	RD/WH	5440	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X306 Body Harness to Passenger Seat Harness



4283035



4111132

Connector Part Information

Harness Type: Body
OEM Connector: 33320906
Service Connector: 19368738
Description: 16-Way F (YE)

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

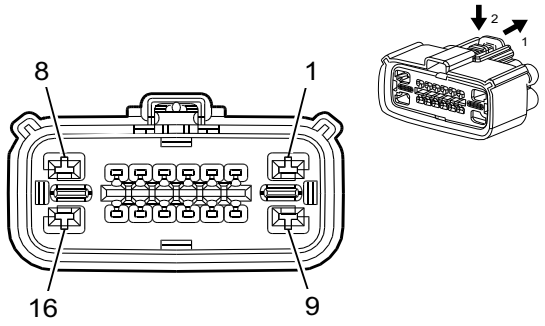
X306 Body Harness to Passenger Seat Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	BK	1850	I	—	Ground	1	3	BK	1850	III	—
2 - 4	—	—	—	—	—	Not Occupied	2 - 4	—	—	—	—	—
5	0.5	L-GN	2116	II	—	Passenger Seat Belt Pretensioner High Control	5	0.5	L-GN	2116	III	—
6	0.5	OG	2117	II	—	Passenger Seat Belt Pretensioner Low Control	6	0.5	OG	2117	III	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	3	RD/WH	3540	I	—	Battery Positive Voltage	9	3	RD/WH	3540	III	—
10	0.5	L-GN	2136	II	—	Right Front Side Impact Module Low Control	10	0.5	L-GN	2136	III	—

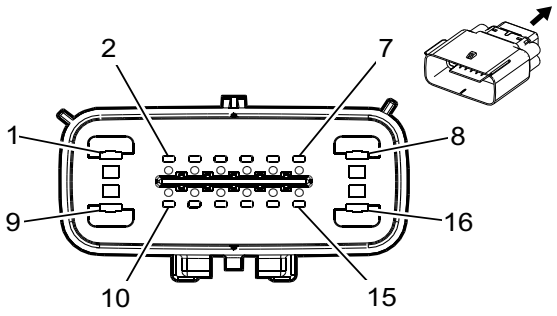
X306 Body Harness to Passenger Seat Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	TN/WH	2135	II	—	Right Front Side Impact Module High Control	11	0.5	TN/WH	2135	III	—
12 - 16	—	—	—	—	—	Not Occupied	12 - 16	—	—	—	—	—

X307 Body Harness to Driver Seat Harness



4283035



4111132

Connector Part Information

Harness Type: Body
OEM Connector: 33320906
Service Connector: 19368738
Description: 16-Way F (YE)

Connector Part Information

Harness Type: Driver Seat
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576377	J-35616-35 (VT)	J-38125-12A	1326030-8	Lear 17	4	D
II	13578813	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	19300635	J-35616-2A (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
IV	Not Required	Not Available	No Tool Required	Not Required	Not Required	Not Required	Not Required

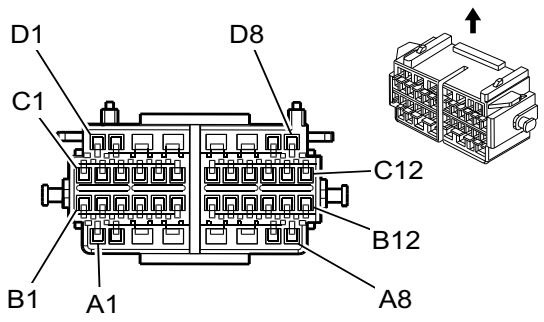
X307 Body Harness to Driver Seat Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD/WH	3540	I	—	Battery Positive Voltage	1	3	RD/WH	3540	IV	—
2	0.5	PK	5057	III	—	Seat Position Switch Low Reference	2	0.5	PK	5057	IV	—
3	0.5	TN/WH	238	III	—	Driver Seat Belt Switch Signal	3	0.5	TN/WH	238	IV	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	TN/WH	2118	II	—	Driver Seat Belt Pretensioner High Control	5	0.5	TN/WH	2118	IV	—
6	0.5	OG/BK	2119	II	—	Driver Seat Belt Pretensioner Low Control	6	0.5	OG/BK	2119	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

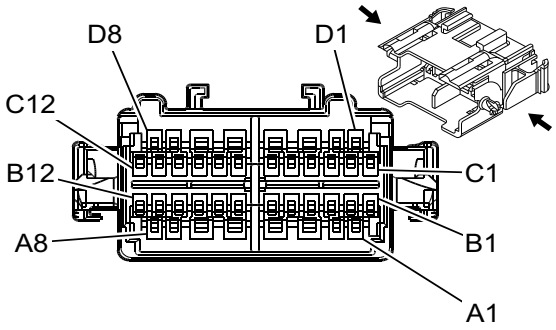
X307 Body Harness to Driver Seat Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	3	BK	450	I	—	Ground	9	3	BK	450	IV	—
10	0.5	YE/ BK	2138	II	—	Left Front Side Impact Module Low Control	10	0.5	YE/ BK	2138	IV	—
11	0.5	BN	2137	II	—	Left Front Side Impact Module High Control	11	0.5	BN	2137	IV	—
12 - 16	—	—	—	—	—	Not Occupied	12 - 16	—	—	—	—	—

X318 Instrument Panel Harness to Body Harness



1538795



851471

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15448130
Service Connector: 89046970
Description: 40-Way F 150, 280 GT Series (L-GY)

Connector Part Information

Harness Type: Body
OEM Connector: 15416977
Service Connector: 19331377
Description: 40-Way M 150, 280 GT Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	C	A
II	13575735	J-35616-14 (GN)	J-38125-553	12191812	Delphi 19	E	C
III	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	2	A
IV	13575753	J-35616-4A (PU)	J-38125-553	15304711	Delphi 8	E	A
V	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	4
VI	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	C
VII	13575505	J-35616-5 (PU)	J-38125-553	15304722	Delphi 8	E	C
VIII	13575507	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	2	A
IX	19177683	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	2	4

X318 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.8	OG	1853	I	—	Right Front Midrange Speaker Control (+)	A1	0.8	OG	1853	IX	—
A2	0.8	D-GN	1953	I	—	Right Front Midrange Speaker (-) Low Reference	A2	0.8	D-GN	1953	IX	—

X318 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A3	0.5	BK/WH	1751	IV	—	Signal Ground	A3	0.5	BK/WH	1751	VII	—
A4	0.5	TN/BK	371	IV	—	Passenger IP Module Disable Switch Signal	A4	0.5	TN/BK	371	VII	—
A5	0.5	BU/YE	6105	IV	—	High Speed GMLAN Serial Data (+) 2	A5	0.5	BU/YE	6105	VII	—
A6	0.5	WH	6106	IV	—	High Speed GMLAN Serial Data (-) 2	A6	0.5	WH	6106	VII	—
A7	—	—	—	—	—	Not Occupied	A7	—	—	—	—	—
A8	0.35	YE/BK	1181	II	—	Right Rear Door Open Switch Signal	A8	0.35	YE/BK	1181	VI	—
B1	0.8	L-BU	1320	I	—	CHMSL Control	B1	0.8	L-BU	1320	IX	—
B2	—	—	—	—	—	Not Occupied	B2	—	—	—	—	—
B3	0.8	TN	1855	I	—	Right Rear Midrange Speaker Control (+)	B3	1	TN	1855	IX	—
B4	0.8	OG	1955	I	—	Right Rear Midrange Speaker (-) Low Reference	B4	1	OG	1955	IX	—
B5-B6	—	—	—	—	—	Not Occupied	B5-B6	—	—	—	—	—
B7	0.5	D-BU/WH	6619	II	—	Middle Front Discriminating Sensor Low Reference	B7	0.5	D-BU/WH	6619	V	—
B8	0.5	BN/WH	6618	II	—	Middle Front Discriminating Sensor Signal	B8	0.5	BN/WH	6618	V	—
B9	—	—	—	—	—	Not Occupied	B9	—	—	—	—	—
B1-0	0.35	D-GN	5060	II	—	Low Speed GMLAN Serial Data	B1-0	0.35	D-GN	5060	VI	—
B1-1	0.35	D-GN	6134	II	—	Local Interconnect Network Serial Data Bus 3	B11	0.35	D-GN	6134	VI	—
B1-2	—	—	—	—	—	Not Occupied	B1-2	—	—	—	—	—

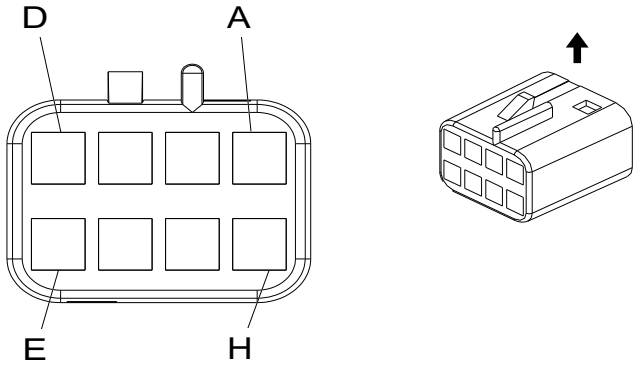
X318 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1	0.8	D-GN	654	I	—	Cellular Telephone Microphone Low Reference	C1	0.8	D-GN	654	IX	—
C2	0.35	PK	1139	II	—	Run/Crank Ignition 1 Voltage	C2	0.35	PK	1139	VI	—
C3	0.8	TN	1859	I	—	Left Rear Midrange Speaker Control (+)	C3	1	TN	1859	IX	—
C4	0.8	WH	1959	I	—	Left Rear Midrange Speaker (-) Low Reference	C4	1	WH	1959	IX	—
C5	0.8	GY	655	I	—	Cellular Telephone Microphone Signal	C5	0.8	GY	655	IX	—
C6	—	—	—	—	—	Not Occupied	C6	—	—	—	—	—
C7	0.35	L-GN	5926	II	—	Rear Access Open Switch Signal	C7	0.35	L-GN	5926	VI	—
C8	0.35	PK/BK	1303	II	—	Lift Gate Ajar Switch Signal 1	C8	0.35	PK/BK	1303	VI	—
C9	0.35	TN/WH	746	II	—	Right Front Door Ajar Switch Signal	C9	0.35	TN/WH	746	VI	—
C1-0	0.35	L-GN	1177	II	—	Right Front Door Open Switch Signal	C1-0	0.35	L-GN	1177	VI	—
C1-1	0.5	TN	126	II	—	Left Front Door Open Switch Signal	C1-1	0.35	TN	126	VI	—
C1-2	0.35	GY/BK	745	II	—	Left Front Door Ajar Switch Signal	C1-2	0.35	GY/BK	745	VI	—
D1	0.8	D-BU	1857	I	—	Left Front Midrange Speaker Control (+)	D1	0.8	D-BU	1857	IX	—
D2	0.8	L-BU	1957	I	—	Left Front Midrange Speaker (-) Low Reference	D2	0.8	L-BU	1957	IX	—
D3	0.8 0.5	OG OG	1732 1732	III IV	PRP -PRP	Electronic Control Unit 12V Reference 3 Electronic Control Unit 12V Reference 3	D3	0.8	OG	1732	VIII	—

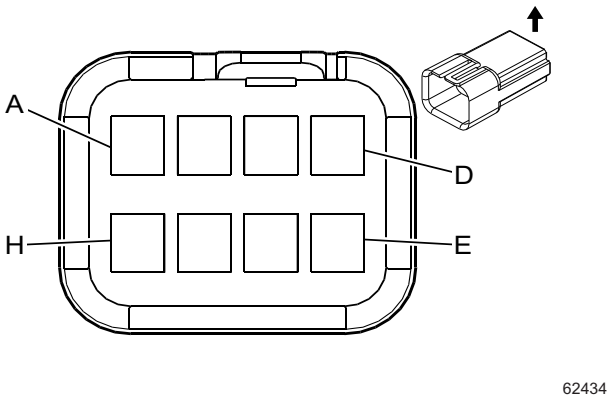
X318 Instrument Panel Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
D4	0.5	PK	353	IV	—	Passenger IP Module Suppression Indicator Control	D4	0.5	PK	353	VII	—
D5	0.5	PK/ BK	780	IV	—	Driver Door Lock Switch Lock Signal	D5	0.35	PK/ BK	780	VII	—
D6	0.5 0.35	OG/ BK OG/ BK	781 781	IV IV	AU3 AU3+PRP	Driver Door Lock Switch Unlock Signal Driver Door Lock Switch Unlock Signal	D6	0.35	OG/ BK	781	VII	—
D7	0.35	L-BU	244	II	—	Passenger Door Lock Switch Lock Control	D7	0.35	L-BU	244	VI	—
D8	0.35 0.35	OG/ BK D-BU	781 245	II II	PRP -PRP	Driver Door Lock Switch Unlock Signal Passenger Door Lock Switch Unlock Control	D8	0.35	D-BU	245	VI	—

X319 Rear Heater Switch Harness to Body Harness



62439



62434

Connector Part Information

Harness Type: Auxiliary Heater Front
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12045688
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

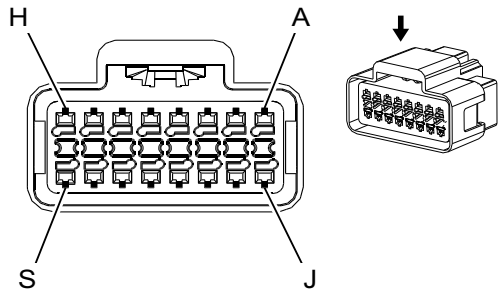
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

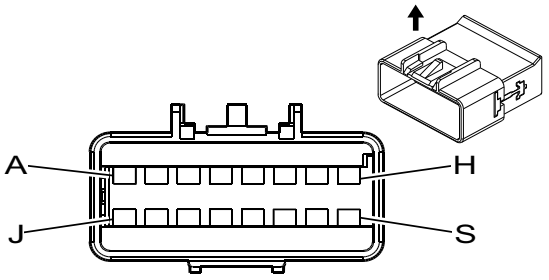
X319 Rear Heater Switch Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	A	0.35	WH	1924	II	—
B	0.35	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control	B	0.35	OG	1925	II	—
C	0.35	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control	C	0.35	D-BU	1926	II	—
D	0.35	BN/WH	230	I	—	Instrument Panel Lamp Dimming Control	D	0.35	BN/WH	230	II	—
E	0.35	BK	450	I	—	Ground	E	0.35	BK	450	II	—
F - H	—	—	—	—	—	Not Occupied	F - H	—	—	—	—	—

X320 Upfitter Provision Harness to Body Harness



2394112



646377

Connector Part Information

Harness Type: Upfitter Provision
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 13516907
Service Connector: 19153746
Description: 16-Way M 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	4
III	19177683	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	2	4

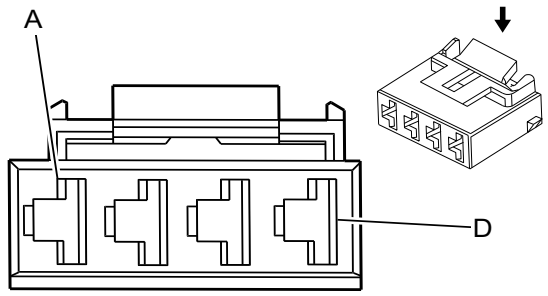
X320 Upfitter Provision Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	WH	1959	I	—	Left Rear Midrange Speaker (-) Low Reference	A	1	WH	1959	III	—
B	1	TN	1859	I	—	Left Rear Midrange Speaker Control (+)	B	1	TN	1859	III	—
C	1	OG	1955	I	—	Right Rear Midrange Speaker (-) Low Reference	C	1	OG	1955	III	—
D	1	TN	1855	I	—	Right Rear Midrange Speaker Control (+)	D	1	TN	1855	III	—
E - N	—	—	—	—	—	Not Occupied	E - N	—	—	—	—	—
P	0.5	BK	450	I	—	Ground	P	0.5	BK	450	II	—

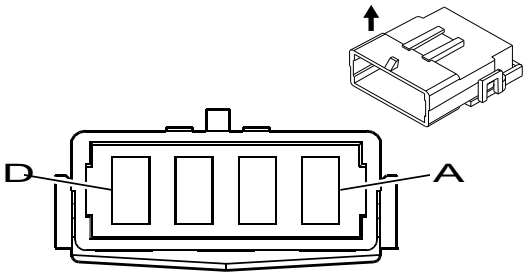
X320 Upfitter Provision Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
R	0.5	D-BU/WH	149	I	—	Courtesy Lamp Control	R	0.5	D-BU/WH	149	II	—
S	0.5	BN	2209	I	—	Rear Park Lamp Control	S	0.5	BN	2209	II	—

X321 Upfitter Provision Harness to Body Harness



365938



655680

Connector Part Information

Harness Type: Upfitter Provision
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12052623
Service Connector: 15306008
Description: 4-Way M 630 Metri-Pack Series (BK)

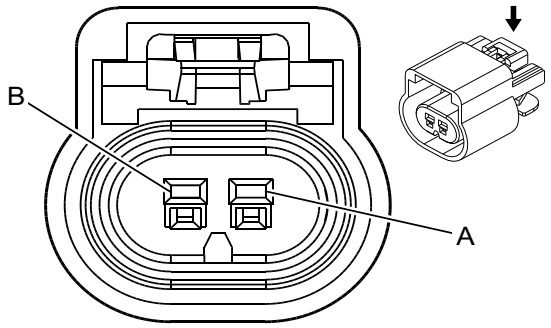
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-43 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

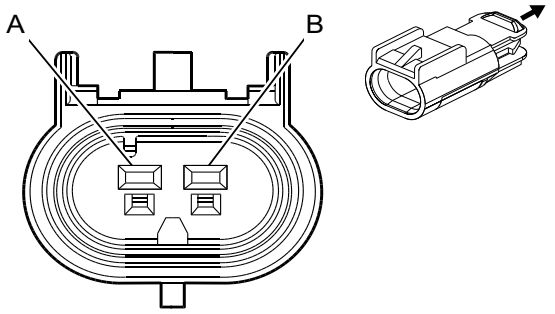
X321 Upfitter Provision Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	RD/ BK	1042	I	—	Battery Positive Voltage	A	5	RD/ BK	1042	II	—
B	5	BN	541	I	—	Run Ignition 3 Voltage	B	5	BN	541	II	—
C	5	BK	450	I	—	Ground	C	5	BK	450	II	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—

X323 Body Harness to Left Rear Side Impact Sensor Jumper Harness



523630



681875

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 13510099
Service Connector: 13580103
Description: 2-Way M 150 GT Series, Sealed (BK)

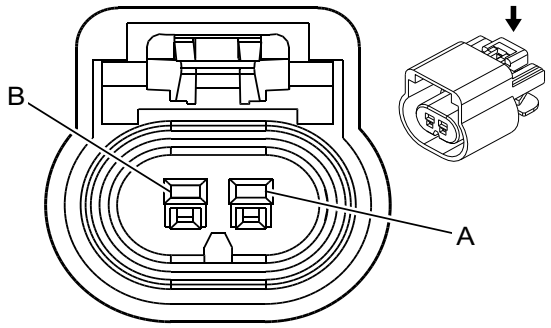
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

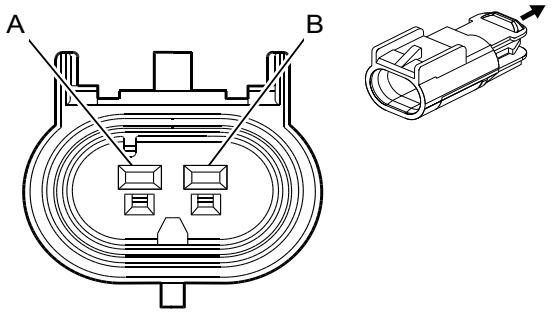
X323 Body Harness to Left Rear Side Impact Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	GY/ BK	6621	I	—	Left Middle Side Impact Sensing Module Low Reference	A	0.5	GY/ BK	6621	II	—
B	0.5	D-GN/ WH	6620	I	—	Left Middle Side Impact Sensing Module Signal	B	0.5	D-GN/ WH	6620	II	—

X324 Body Harness to Right Rear Side Impact Sensor Jumper Harness



523630



681875

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 13510099
Service Connector: 13580103
Description: 2-Way M 150 GT Series, Sealed (BK)

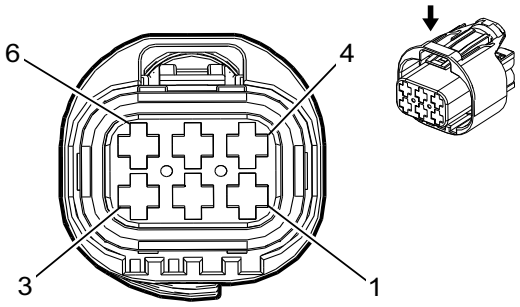
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

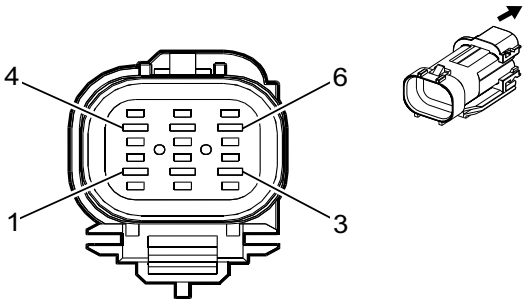
X324 Body Harness to Right Rear Side Impact Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	L-GN/ WH	6625	I	—	Right Middle Side Impact Sensing Module Low Reference	A	0.5	L-GN/ WH	6625	II	—
B	0.5	L-BU/ BK	6624	I	—	Right Middle Side Impact Sensing Module Signal	B	0.5	L-BU/ BK	6624	II	—

X328 Body Harness to Upfitter Jumper Harness



2042938



2042939

Connector Part Information

Harness Type: Body

OEM Connector: 10865192

Service Connector: 19332889

Description: 6-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Connector Part Information

Harness Type: Body

OEM Connector: 10865189

Service Connector: 93185233

Description: 6-Way M 2.8 Series, Sealed (BK)

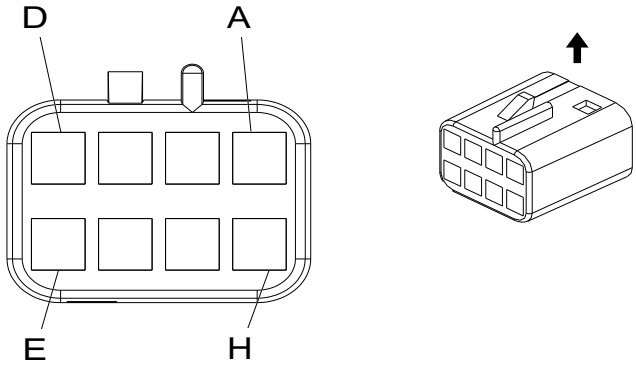
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

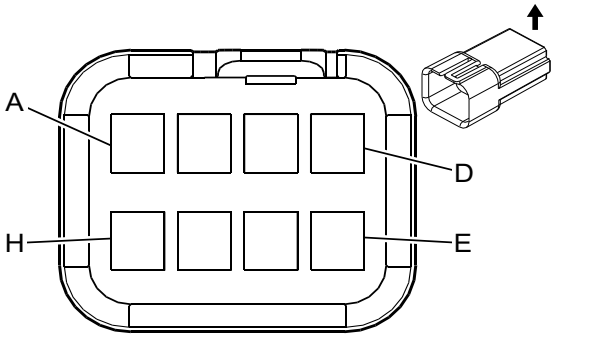
X328 Body Harness to Upfitter Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN	6842	I	—	Auxiliary Device Relay 1 Control	1	0.5	BN	6842	II	—
2	0.5	BU/YE	6843	I	—	Auxiliary Device Relay 2 Control	2	0.5	BU/YE	6843	II	—
3	0.5	BK	450	I	—	Ground	3	0.5	BK	450	II	—
4	0.5	BK	450	I	—	Ground	4	0.5	BK	450	II	—
5 - 6	—	—	—	—	—	Not Occupied	5 - 6	—	—	—	—	—

X329 Instrument Panel Harness to Body Harness



62439



62434

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12047886
Service Connector: 13584485
Description: 8-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

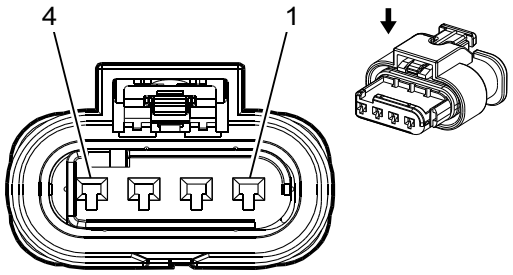
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

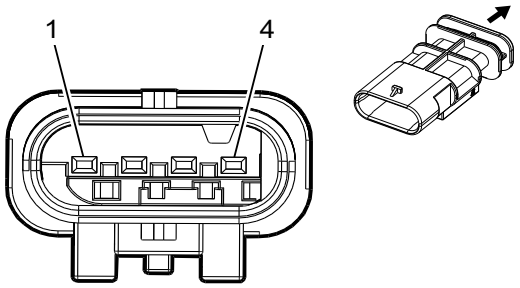
X329 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - C	—	—	—	—	—	Not Occupied	A - C	—	—	—	—	—
D	0.5	L-GN	24	I	—	Backup Lamp Control	D	0.5	L-GN	24	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G - H	—	—	—	—	—	Not Occupied	G - H	—	—	—	—	—

X330 Instrument Panel Harness to Body Harness



2684560



2684557

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 13854529
Service Connector: 19299698
Description: 4-Way M 1.2 Series, Sealed (YE)

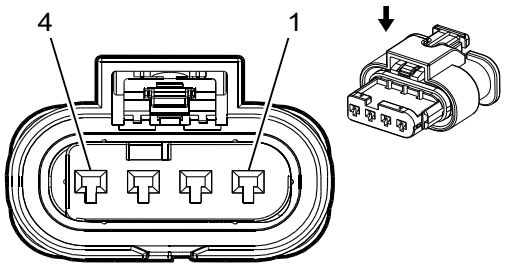
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-12 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

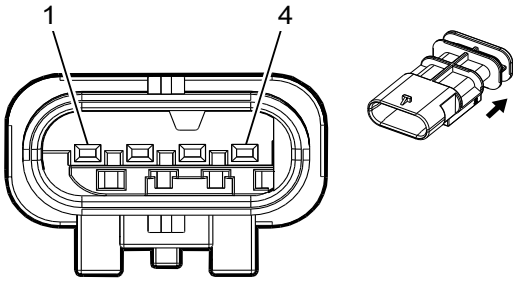
X330 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	TN	3021	I	—	Steering Wheel Module Stage 1 High Control	1	0.5	TN	3021	II	—
2	0.5	BN	3020	I	—	Steering Wheel Module Stage 1 Low Control	2	0.5	BN	3020	II	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—

X331 Instrument Panel Harness to Body Harness



2684564



2684563

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13854532
Service Connector: 13586575
Description: 4-Way F 1.2 Series, Sealed (YE)

Connector Part Information

Harness Type: Body
OEM Connector: 13854530
Service Connector: 13586576
Description: 4-Way M 1.2 Series, Sealed (YE)

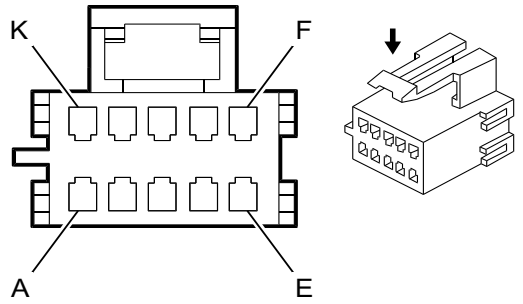
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

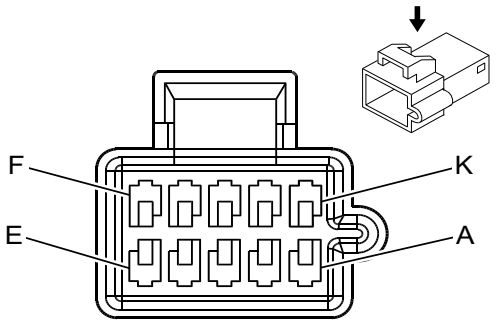
X331 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE	3025	I	—	Passenger IP Module Stage 1 High Control	1	0.5	YE	3025	II	—
2	0.5	OG	3024	I	—	Passenger IP Module Stage 1 Low Control	2	0.5	OG	3024	II	—
3 - 4	—	—	—	—	—	Not Occupied	3 - 4	—	—	—	—	—

X400 Right Rear Cargo Door Harness to Body Harness



603055



808703

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 15324054
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 15324758
Service Connector: 19179279
Description: 10-Way M 150 Metri-Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575462	J-35616-3 (GY)	J-38125-12A	12047581	Delphi 2	E	A
III	13575462	J-35616-3 (GY)	J-38125-12A	12047581	Delphi 2	E	C

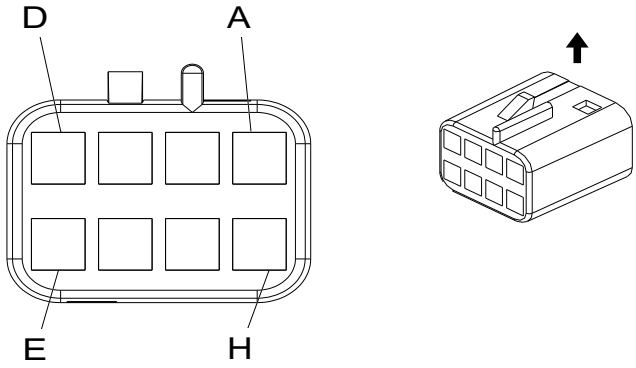
X400 Right Rear Cargo Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	TN	1855	I	—	Right Rear Midrange Speaker Control (+)	A	1	TN	1855	II	—
B	1	OG	1955	I	—	Right Rear Midrange Speaker (-) Low Refer-ence	B	1	OG	1955	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.35	BK/ WH	1051	I	—	Signal Ground	D	1	BK/ WH	1051	II	—
E	0.35	D-BU	245	I	—	Passenger Door Lock Switch Unlock Control	E	0.35	D-BU	245	III	—
F	1	GY	295	I	—	Door Lock Actuator Lock Control	F	1	GY	295	II	—

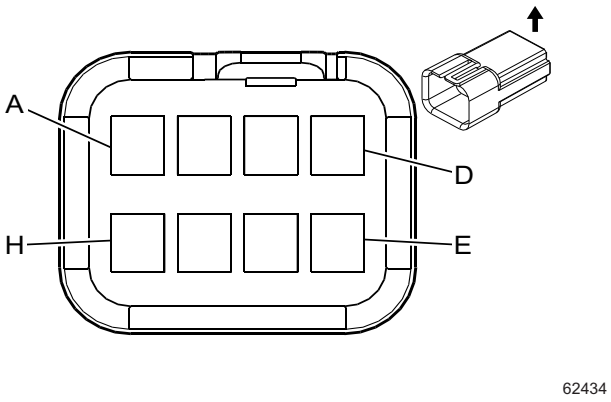
X400 Right Rear Cargo Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
G	1	TN/ BK	1095	I	—	Right Rear Door Lock Actuator Unlock Control	G	1	TN/ BK	1095	II	—
H	0.35	L-GN	5926	I	—	Rear Access Open Switch Signal	H	0.35	L-GN	5926	III	—
J	0.35	PK/ BK	1303	I	—	Lift Gate Ajar Switch Signal 1	J	0.35	PK/ BK	1303	III	—
K	0.35	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	K	0.35	L-BU	244	III	—

X403 Right Rear Cargo Door Harness to Body Harness (CARGO)



62439



62434

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

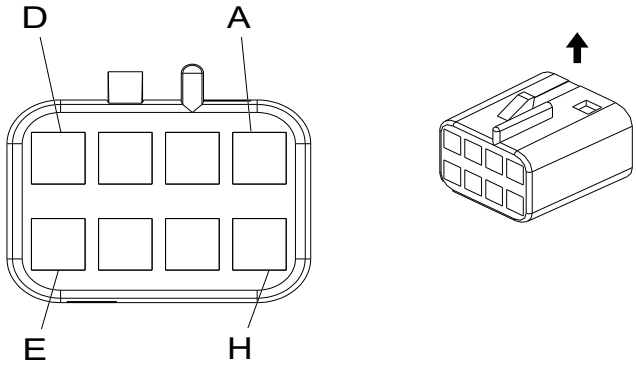
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

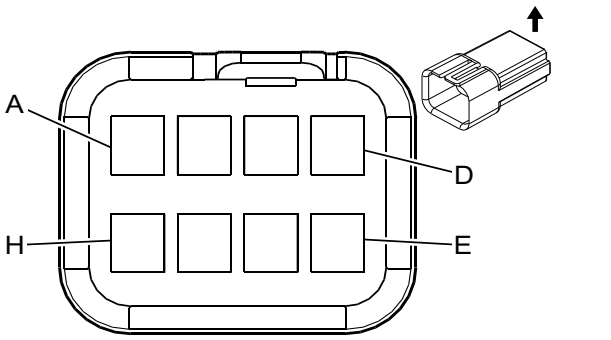
X403 Right Rear Cargo Door Harness to Body Harness (CARGO)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	YE	7641	I	—	Camera Rear Vision Signal +	A	0.5	WH	7641	II	—
B	0.5	L-BU	7642	I	—	Camera Rear Vision Signal (-)	B	0.5	L-BU	7642	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.5	BK	351	I	—	Signal Ground	D	0.35	BK/ WH	351	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	—	—	—	—	—	Not Occupied	G	—	—	—	—	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.5	Bare	6799	II	—

X403 Rearview Camera Harness to Body Harness (CUTAWAY)



62439



62434

Connector Part Information

Harness Type: Rearview Camera
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12045688
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

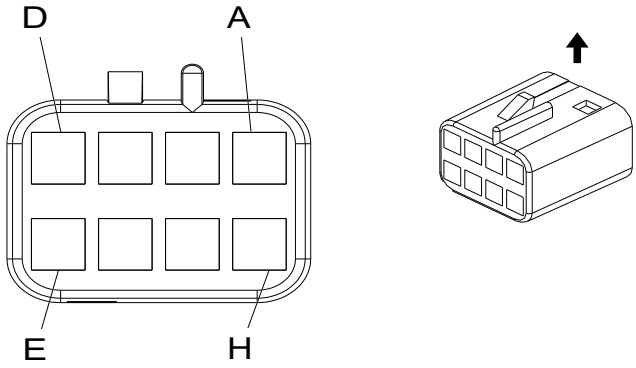
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

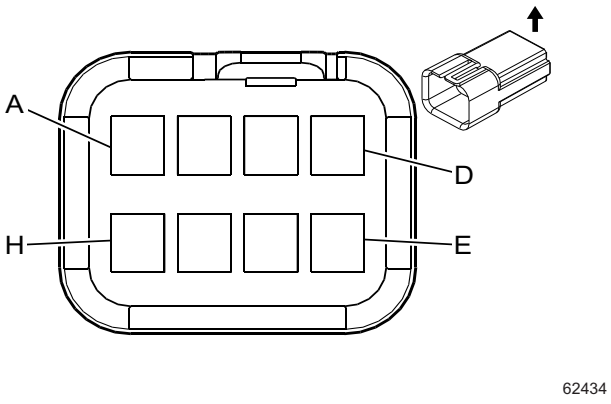
X403 Rearview Camera Harness to Body Harness (CUTAWAY)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	WH	7641	I	—	Camera Rear Vision Signal +	A	0.35	WH	7641	II	—
B	0.5	L-BU	7642	I	—	Camera Rear Vision Signal (-)	B	0.35	L-BU	7642	II	—
C - D	—	—	—	—	—	Not Occupied	C - D	—	—	—	—	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	0.5	BK/ WH	351	I	—	Signal Ground	G	0.35	BK/ WH	351	II	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.35	Bare	6799	II	—

X403 Right Rear Cargo Door Harness to Body Harness (CUTAWAY+5BV)



62439



62434

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

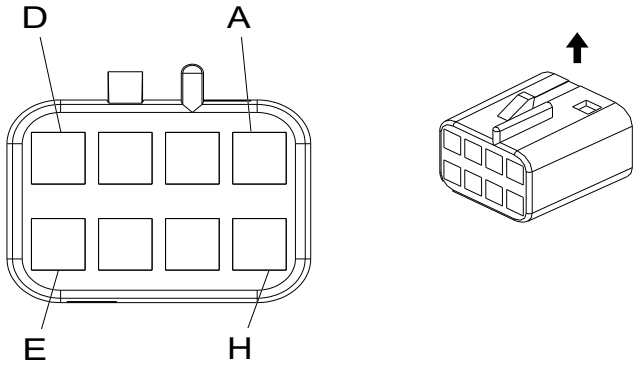
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

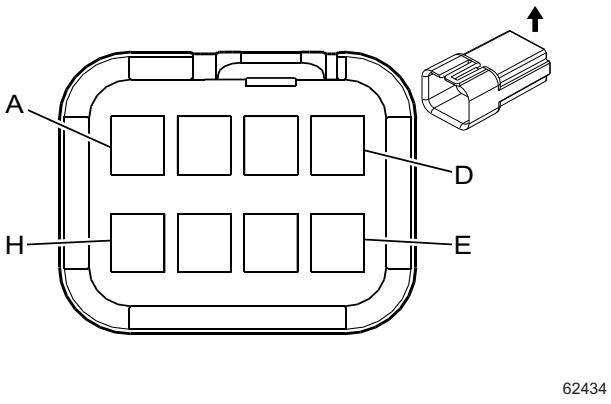
X403 Right Rear Cargo Door Harness to Body Harness (CUTAWAY+5BV)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	WH	7641	I	—	Camera Rear Vision Signal +	A	0.5	WH	7641	II	—
B	0.5	L-BU	7642	I	—	Camera Rear Vision Signal (-)	B	0.5	L-BU	7642	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.35	BK/WH	351	I	—	Signal Ground	D	0.35	BK/WH	351	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	—	—	—	—	—	Not Occupied	G	—	—	—	—	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.5	Bare	6799	II	—

X403 Right Rear Cargo Door Harness to Body Harness (PASSENGER)



62439



62434

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series (BK)

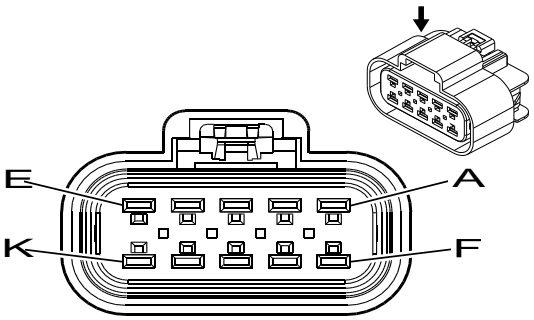
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

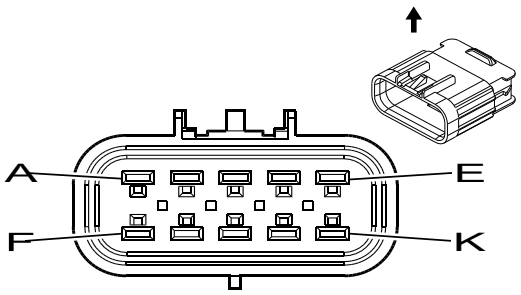
X403 Right Rear Cargo Door Harness to Body Harness (PASSENGER)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	WH	7641	I	—	Camera Rear Vision Signal +	A	0.5	WH	7641	II	—
B	0.5	L-BU	7642	I	—	Camera Rear Vision Signal (-)	B	0.5	L-BU	7642	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.35	BK/WH	351	I	—	Signal Ground	D	0.35	BK/WH	351	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	—	—	—	—	—	Not Occupied	G	—	—	—	—	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.5	Bare	6799	II	—

X405 Rear Lamp Harness to Chassis Rear Extension Harness (8S3)



655815



655819

Connector Part Information

Harness Type: Rear Lamp
OEM Connector: 15326660
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis Rear Extension
OEM Connector: 15326661
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M 280 GT Series, Sealed (BK)

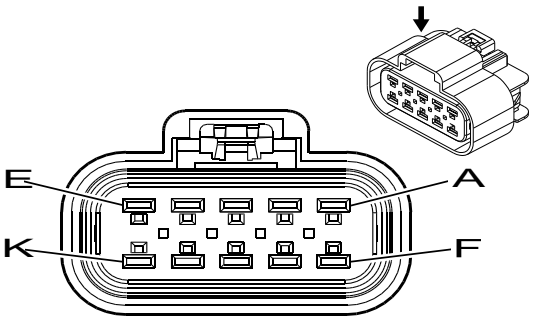
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

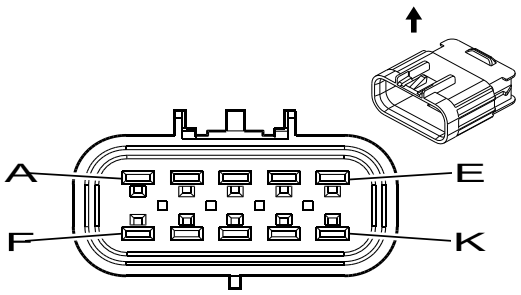
X405 Rear Lamp Harness to Chassis Rear Extension Harness (8S3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - B	—	—	—	—	—	Not Occupied	A - B	—	—	—	—	—
C	1	WH	17	I	—	Stop Lamp Switch Signal	C	1	L-BU	1320	II	—
D	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	D	1	YE	618	II	—
E	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	E	1	D-GN	619	II	—
F	1	BN	2109	I	—	Trailer Park Lamp Control	F	1	BN	2109	II	—
G	1	BK	150	I	—	Ground	G	1	L-BU	150	II	—
H	1	L-GN	1624	I	—	Trailer Backup Lamp Control	H	1	OG	1624	II	—
J	—	—	—	—	—	Not Occupied	J	—	—	—	—	—
K	0.8	BU/ WH	149	I	—	Courtesy Lamp Control	K	0.8	BU/ WH	149	II	—

X405 Chassis Harness to Chassis Harness (-8S3)



655815



655819

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326660
Service Connector: 88986262
Description: 10-Way F 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326661
Service Connector: 88986245
Description: 10-Way M 280 GT Series, Sealed (BK)

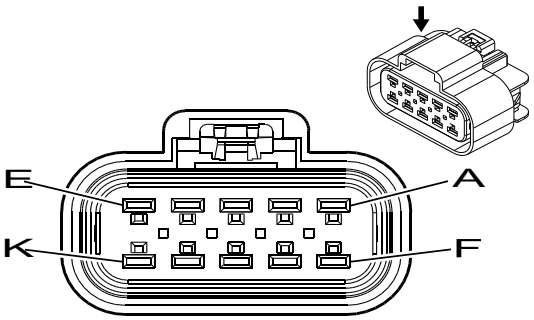
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13576356	J-35616-4A (PU)	J-38125-553	15304719	Delphi 19	2	5
II	13580826	J-35616-5 (PU)	J-38125-553	15304731	Delphi 19	2	5
III	13580826	J-35616-5 (PU)	J-38125-553	15304731	Delphi 19	C	5
IV	19368626	J-35616-5 (PU)	J-38125-553	Not Available	Not Available	Not Available	Not Available

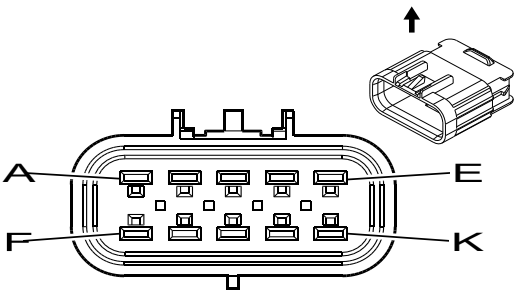
X405 Chassis Harness to Chassis Harness (-8S3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - B	—	—	—	—	—	Not Occupied	A - B	—	—	—	—	—
C	0.8	L-BU	1320	I	—	CHMSL Control	C	0.8	L-BU	1320	III	—
D	—	—	—	—	—	Not Occupied	D	—	—	—	—	—
E	—	—	—	—	—	Right Rear Turn Signal Lamp Control	E	1	D-GN	619	IV	—
F	—	—	—	—	—	Not Occupied	F	—	—	—	—	—
G	0.8	BK	150	I	—	Ground	G	1	BK	150	II	—
H	—	—	—	—	—	Trailer Backup Lamp Control	H	1	L-GN	1624	II	—
J	—	—	—	—	—	Not Occupied	J	—	—	—	—	—
K	—	—	—	—	—	Courtesy Lamp Control	K	0.8	BU/ WH	149	III	—

X405 Chassis Harness to Chassis Harness (-K08)



655815



655819

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326660
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: Not Available
Service Connector: Pending
Description: 10-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Avail-able	J-35616-5 (PU)	Not Available	Not Available	Not Avail-able	Not Avail-able	Not Avail-able

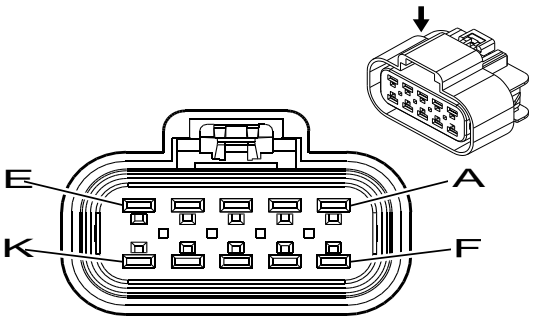
X405 Chassis Harness to Chassis Harness (-K08)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
J	0.5	WH/ D-BU	5986	I	—	Serial Data Communica-tion Enable	J	0.5	WH/ D-BU	5986	II	—
H	2	BK	150	I	—	Ground	H	2	BK	150	II	—
F	0.8	BU/L-GN	7077	I	—	Fuel Operated Heater Dosing Pump Control	F	0.8	BU/L-GN	7077	II	—
E	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	E	0.5	BU	2500	II	—
D	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	D	0.5	WH	2501	II	—
C	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) 1	C	0.5	BU	2500	II	—
B	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) 1	B	0.5	WH	2501	II	—

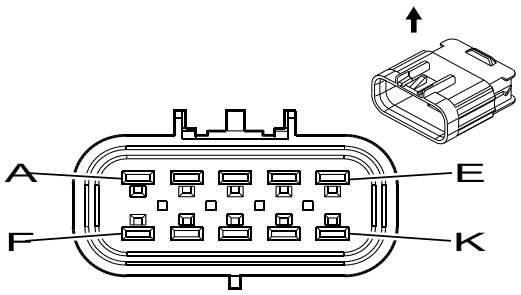
X405 Chassis Harness to Chassis Harness (-K08) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	2	RD/ WH	1740	I	—	Battery Positive Voltage	A	2	RD/ WH	1740	II	—
G - K	—	—	—	—	—	Not Occupied	G - K	—	—	—	—	—

X405 Chassis Rear Extension Harness to Chassis Harness (CUTAWAY+8S3)



655815



655819

Connector Part Information

Harness Type: Chassis Rear Extension
OEM Connector: 15326660
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M

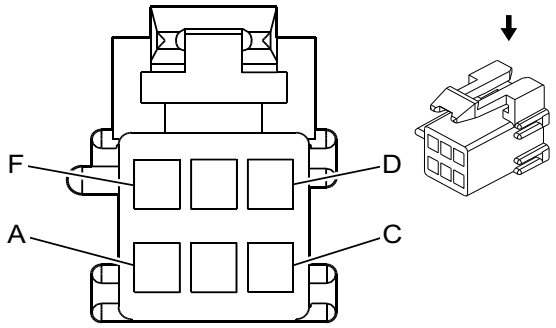
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Available	Not Available	Not Available	Not Available

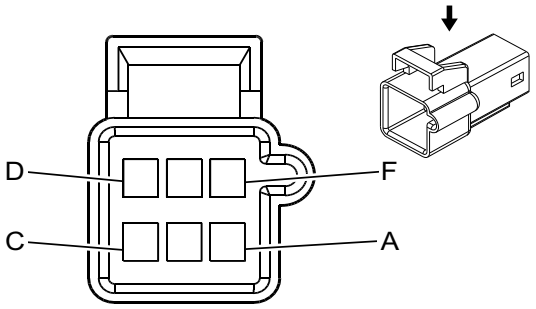
X405 Chassis Rear Extension Harness to Chassis Harness (CUTAWAY+8S3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - B	—	—	—	—	—	Not Occupied	A - B	—	—	—	—	—
C	1	L-BU	1320	I	—	CHMSL Control	C	1	L-BU	1320	II	—
D	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	D	1	YE	618	II	—
E	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	E	1	D-GN	619	II	—
F	1	BN	2109	I	—	Trailer Park Lamp Control	F	1	BN	2109	II	—
G	1	BU	150	I	—	Ground	G	1	BU	150	II	—
H	1	WH	1624	I	—	Trailer Backup Lamp Control	H	1	WH	1624	II	—
J	—	—	—	—	—	Not Occupied	J	—	—	—	—	—
K	0.8	BU/ WH	149	I	—	Courtesy Lamp Control	K	0.8	BU/ WH	149	II	—

X407 Auxiliary HVAC Harness to Body Harness



40422



40425

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12064762
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 150 Metri-Pack Series (GY)

Connector Part Information

Harness Type: Body
OEM Connector: 12064763
Service Connector: 12101876
Description: 6-Way M 150 Metri-Pack Series (GY)

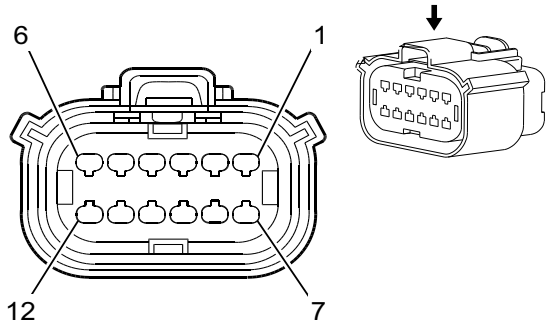
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

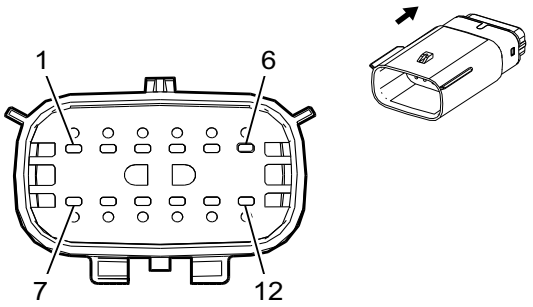
X407 Auxiliary HVAC Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	OG	2775	I	—	Rear Air Temperature Motor Control	A	0.35	OG	2775	II	—
B	0.35	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control	B	0.35	D-BU	1926	II	—
C	0.35	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	C	0.35	WH	1924	II	—
D	0.35	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control	D	0.35	OG	1925	II	—
E	0.35	BN	341	I	—	Run Ignition 3 Voltage	E	0.35	BN	341	II	—
F	0.35	GY	2599	I	—	Rear Mode Motor Signal	F	0.35	GY	2599	II	—

X408 Rear Bumper Harness to Chassis Harness



1825165



2424959

Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13653762
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 13534850
Service Connector: 13503540
Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119440	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
III	19119842	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available

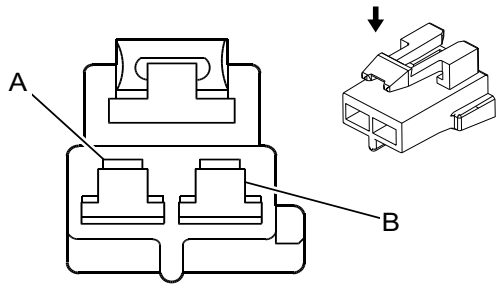
X408 Rear Bumper Harness to Chassis Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE/WH	2377	I	—	Right Rear Middle Object Sensor Signal	1	0.5	YE/WH	2377	III	—
2	0.5	YE/VT	2378	I	—	Right Rear Corner Object Sensor Signal	2	0.5	YE/VT	2378	II	—
3	0.5	BK/GY	2379	I	—	Object Sensor Low Reference Object Sensor Low Reference	3	0.5 0.5	BK/GY BK/GY	2379 2379	II III	-LWN LWN
4	0.5	BN/WH	2374	I	—	Object Sensor Control Object Sensor Control	4	0.5 0.5	BN/WH BN/WH	2374 2374	II III	-LWN LWN

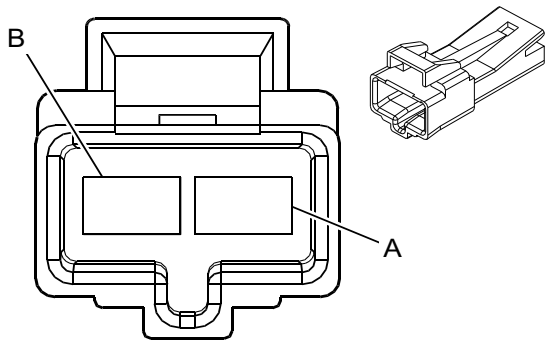
X408 Rear Bumper Harness to Chassis Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
5	0.5	YE	2375	I	—	Left Rear Corner Object Sensor Signal Left Rear Corner Object Sensor Signal	5	0.5 0.5	YE YE	2375 2375	II III	-LWN LWN
6	0.5	YE/D-BU	2376	I	—	Left Rear Middle Object Sensor Signal	6	0.5	YE/D-BU	2376	II	—
7	0.5	BK	2150	I	—	Ground Ground	7	0.5 0.5	BK BK	2150 2150	II III	— —
8	0.5	L-GN	5060	I	—	Low Speed GMLAN Serial Data Low Speed GMLAN Serial Data	8	0.5 0.5	L-GN L-GN	5060 5060	III II	— —
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	GY/YE	5853	I	—	Driver Side Object Detection LED Signal 1 Driver Side Object Detection LED Signal 1	10	0.5 0.5	GY GY/YE	5853 5853	III II	— —
11	0.5	GY	5861	I	—	Passenger Side Object Detection LED Signal 1 Passenger Side Object Detection LED Signal 1	11	0.5 0.5	GY/YE GY	5861 5861	III II	— —
12	0.5	RD/L-GN	3140	I	—	Battery Positive Voltage Battery Positive Voltage	12	0.5 0.5	RD/L-GN RD/L-GN	3140 3140	III II	— —

X409 Auxiliary HVAC Harness to Body Harness



808706



38284

Connector Part Information

Harness Type: Auxiliary HVAC
OEM Connector: 12064749
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 480 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12064750
Service Connector: 19368743
Description: 2-Way M 480 Metri-Pack Series (BK)

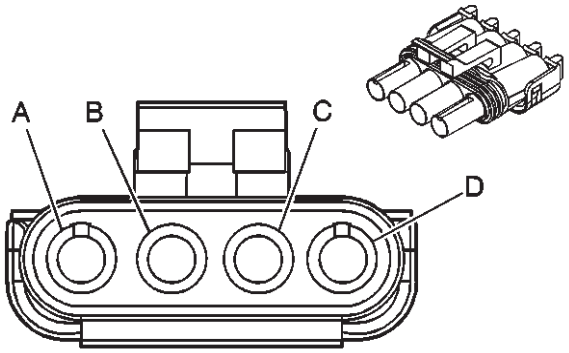
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-41 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X409 Auxiliary HVAC Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	RD/WH	1740	I	—	Battery Positive Voltage	A	5	RD/WH	1740	II	—
B	5	BK	850	I	—	Ground Ground	B	5 5	BK BK	450 850	II II	ENC C36/C69

X410 Left Rear Lamp Harness to Body Harness (CUTAWAY)



723661

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Connector Part Information

Harness Type: Rear Lamp
OEM Connector: 12015797
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Weather Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

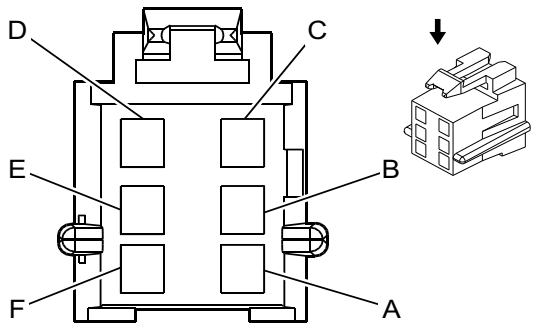
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-8 (OR)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-9 (OR)	No Tool Required	Not Required	Not Required	Not Required	Not Required

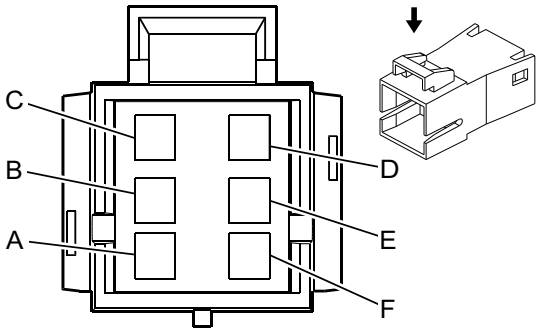
X410 Left Rear Lamp Harness to Body Harness (CUTAWAY)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	A	1	YE	618	II	—
B	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	B	1	D-GN	619	II	—
C	1	L-GN	1624	I	—	Trailer Backup Lamp Control	C	1	L-GN	1624	II	—
D	1	BN	2109	I	—	Trailer Park Lamp Control	D	1	BN	2109	II	—

X410 Left Rear Lamp Harness to Body Harness (-CUTAWAY)



62456



39689

Connector Part Information

Harness Type: Left Rear Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series (BK)

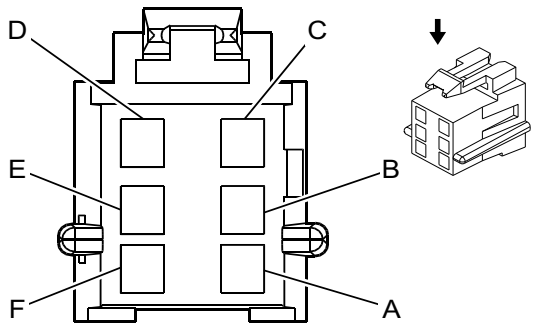
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

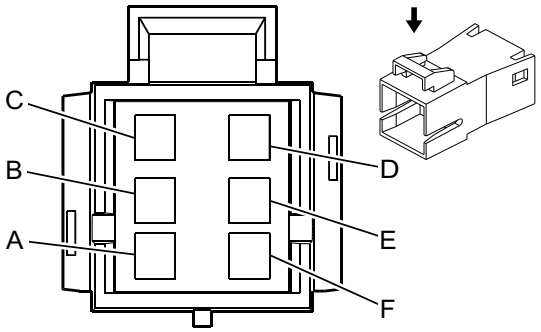
X410 Left Rear Lamp Harness to Body Harness (-CUTAWAY)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2509	I	—	Left Rear Park Lamp Control	A	0.5	BN	2509	II	—
B	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	B	1	YE	618	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.8	BK	850	I	—	Ground	D	0.8	BK	850	II	—
E	—	—	—	—	—	Not Occupied	E	—	—	—	—	—
F	0.8	L-GN	24	I	—	Backup Lamp Control	F	0.8	L-GN	24	II	—

X411 Left Rear Cargo Door Harness to Body Harness



62456



39689

Connector Part Information

Harness Type: Left Rear Cargo Door
OEM Connector: 12064752
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series (BK)

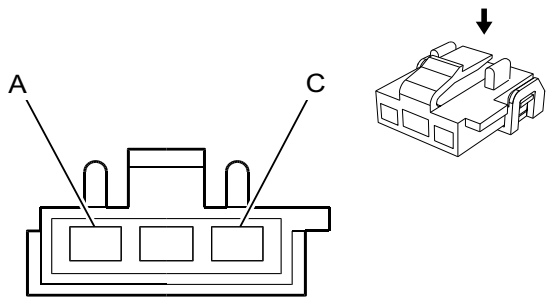
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

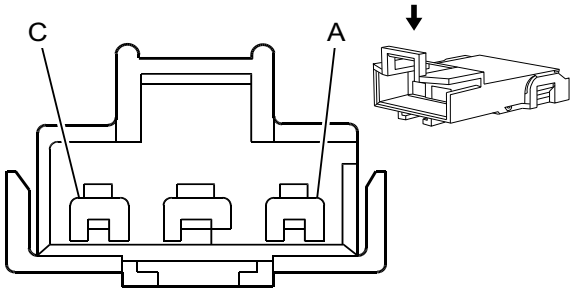
X411 Left Rear Cargo Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	TN	1859	I	—	Left Rear Midrange Speaker Control (+)	A	1	TN	1859	II	—
B	1	WH	1959	I	—	Left Rear Midrange Speaker (-) Low Reference	B	1	WH	1959	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	5	PU	293	I	—	Rear Defog Element Control	D	5	PU	293	II	—
E	3	BK	850	I	—	Ground	E	3	BK	850	II	—
F	—	—	—	—	—	Not Occupied	F	—	—	—	—	—

X412 Right Rear Cargo Door Harness to Body Harness



333042



1884161

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 12020014
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F Weather Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12045681
Service Connector: 19368744
Description: 3-Way M 280, 480 Metri-Pack Series (BK)

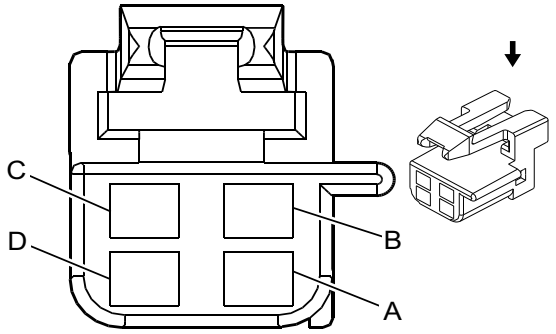
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-41 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

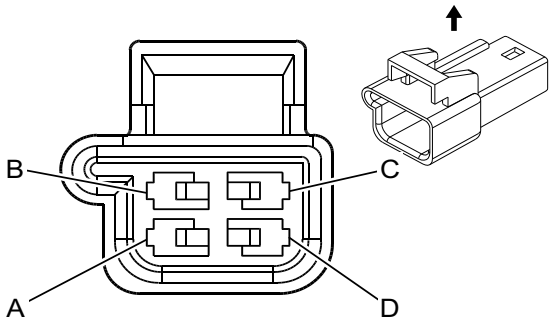
X412 Right Rear Cargo Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2509	II	—	Left Rear Park Lamp Control	A	0.5	BN	2509	IV	—
B	5	PU	293	I	—	Rear Defog Element Control	B	5	PU	293	III	—
C	3 0.5	BK BK	1050 1050	II II	C49 -C49	Ground Ground	C	3	BK	1050	IV	—

X415 Rear Speaker Harness to Body Harness



130637



40399

Connector Part Information

Harness Type: Rear Speaker
OEM Connector: 12064760
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 12065658
Service Connector: 19368719
Description: 4-Way M 150 Metri-Pack Series (BK)

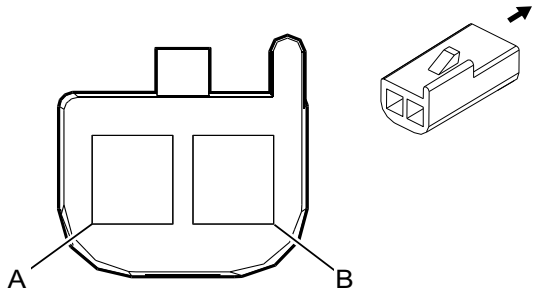
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

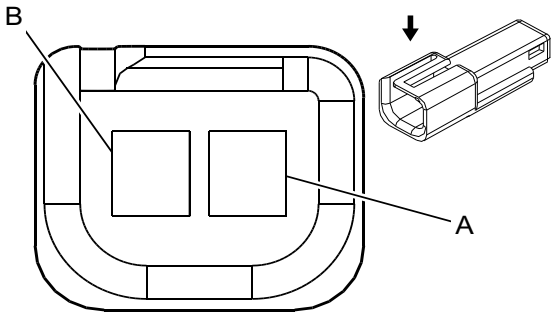
X415 Rear Speaker Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	WH	1959	I	—	Left Rear Midrange Speaker (-) Low Reference	A	1	WH	1959	II	—
B	1	TN	1859	I	—	Left Rear Midrange Speaker Control (+)	B	1	TN	1859	II	—
C	1	OG	1955	I	—	Right Rear Midrange Speaker (-) Low Reference	C	1	OG	1955	II	—
D	1	TN	1855	I	—	Right Rear Midrange Speaker Control (+)	D	1	TN	1855	II	—

X419 Center High Mounted Stop Lamp Harness to Body Harness



82383



1664595

Connector Part Information

Harness Type: Center High Mounted Stop Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12048457
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

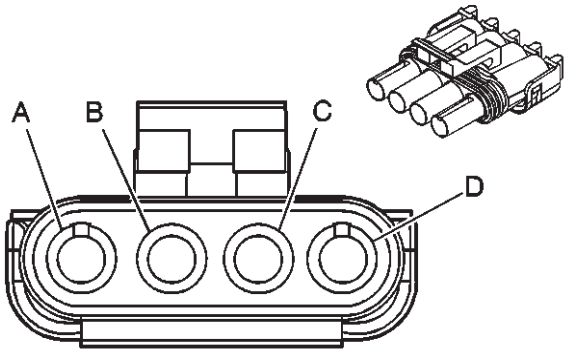
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X419 Center High Mounted Stop Lamp Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.8	L-BU	1320	I	—	CHMSL Control	A	0.8	L-BU	1320	II	—
B	0.8	BK	850	I	—	Ground	B	0.8	BK	850	II	—

X420 Right Rear Lamp Harness to Body Harness (CUTAWAY)



723661

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Connector Part Information

Harness Type: Rear Lamp
OEM Connector: 12015797
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Weather Pack Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

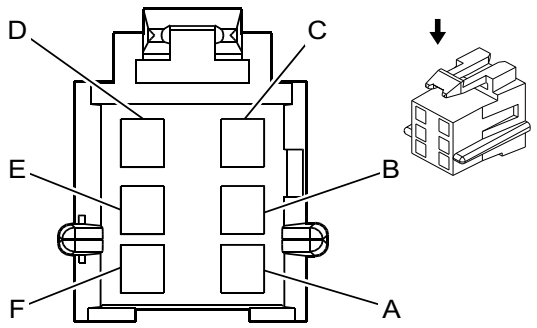
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-8 (OR)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-9 (OR)	No Tool Required	Not Required	Not Required	Not Required	Not Required

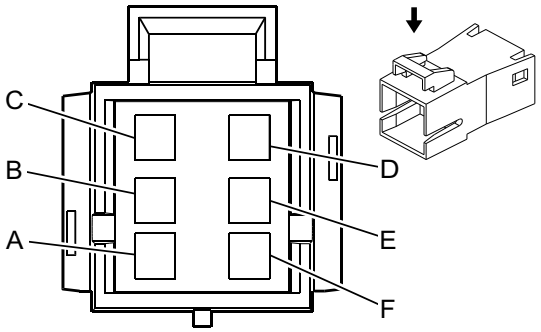
X420 Right Rear Lamp Harness to Body Harness (CUTAWAY)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.8	BU/WH	149	I	—	Courtesy Lamp Control	A	0.8	BU/WH	149	II	—
B	1	WH	17	I	—	Stop Lamp Switch Signal	B	1	WH	17	II	—
C	1	BN	2109	I	—	Trailer Park Lamp Control	C	1	BN	2109	II	—
D	1	BK	150	I	—	Ground	D	1	BK	150	II	—

X420 Right Rear Lamp Harness to Body Harness (-CUTAWAY)



62456



39689

Connector Part Information

Harness Type: Right Rear Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

Connector Part Information

Harness Type: Body
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series (BK)

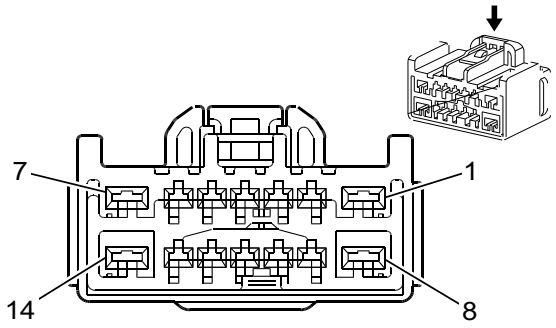
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

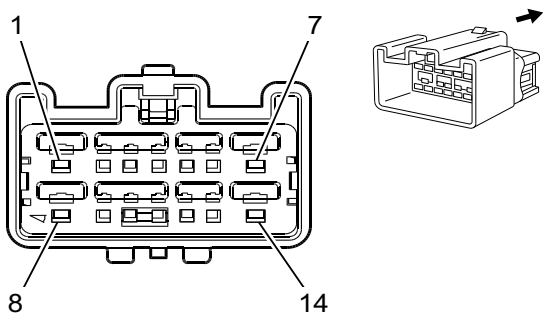
X420 Right Rear Lamp Harness to Body Harness (-CUTAWAY)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2609	I	—	Right Rear Park Lamp Control	A	0.5	BN	2609	II	—
B	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	B	1	D-GN	619	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.8	BK	1050	I	—	Ground	D	0.8	BK	1050	II	—
E	—	—	—	—	—	Not Occupied	E	—	—	—	—	—
F	0.8	L-GN	24	I	—	Backup Lamp Control	F	0.8	L-GN	24	II	—

X421 Body Harness to Rear Headliner Harness



823290



1283905

Connector Part Information

Harness Type: Body
OEM Connector: 10847017
Service Connector: 88956524
Description: 14-Way F 1.5, 2.8 Series (L-GY)

Connector Part Information

Harness Type: Headliner
OEM Connector: 10846900
Service Connector: 88956523
Description: 14-Way M 1.5, 2.8 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575832	J-35616-4A (PU)	J-38125-11A	7116-4112-02	Yazaki 9	C	D
II	13575839	J-35616-35 (VT)	J-38125-11A	7116-4111-02	Yazaki 9	E	A
III	13575850	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
IV	13575823	J-35616-5 (PU)	J-38125-11A	7114-4111-02	Yazaki 9	E	A
V	13575824	J-35616-5 (PU)	J-38125-11A	7114-4112-02	Yazaki 9	C	D
VI	19119780	J-35616-3 (GY)	J-38125-215A	Not Available	Not Available	Not Available	Not Available
VII	19119842	J-35616-3 (GY)	J-38125-217	Not Available	Not Available	Not Available	Not Available
VIII	19329828	J-35616-5 (PU)	J-38125-212	1326029-8	Lear 17	A	4

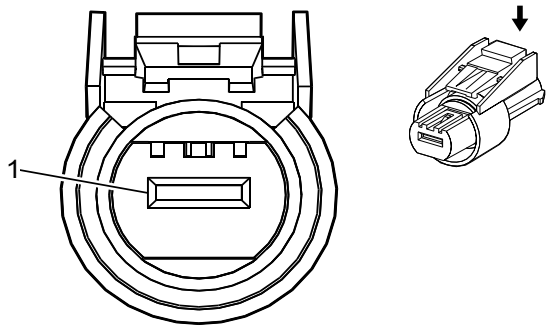
X421 Body Harness to Rear Headliner Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.8	D-BU/WH	149	II	—	Courtesy Lamp Control	1	0.8	D-BU/WH	149	IV	—
2	0.35	BN/WH	230	III	—	Instrument Panel Lamp Dimming Control	2	0.35	BN/WH	230	VII	—
3	0.5	WH	1924	III	—	Auxiliary Blower Motor High Speed Control	3	0.5	WH	1924	VII	—

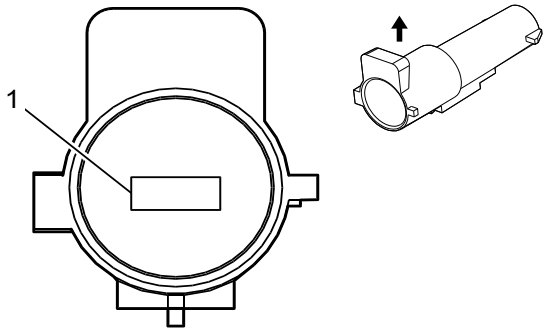
X421 Body Harness to Rear Headliner Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
4	0.5	OG	1925	III	—	Auxiliary Blower Motor Medium Speed Control	4	0.5	OG	1925	VII	—
5	0.5	D-BU	1926	III	—	Auxiliary Blower Motor Low Speed Control	5	0.5	D-BU	1926	VII	—
6	0.35	BN	341	III	—	Run Ignition 3 Voltage	6	0.35	BN	341	VII	—
7	3	BN	541	I	—	Run Ignition 3 Voltage	7	2	BN	541	VIII	—
8	0.8	D-BU/WH	149	II	—	Courtesy Lamp Control	8	0.8	D-BU/WH	149	IV	—
9	0.5	BN	5263	III	—	Dual Logic Module Rear Temperature Signal	9	0.5	BN	5263	VII	—
10	0.8	OG	1732	III	—	Electronic Control Unit 12V Reference 3	10	0.8	OG	1732	VI	—
11	0.5	PU/WH	5264	III	—	Dual Logic Module Rear Mode Signal	11	0.5	PU/WH	5264	VII	—
12	0.5	PK/BK	5265	III	—	Dual Logic Module Rear Control Signal	12	0.5	PK/BK	5265	VII	—
13	0.8	BK	1050	III	—	Ground	13	0.8	BK	1050	VI	—
14	3	BK	1050	I	—	Ground	14	2	BK	1050	V	—

X460 Chassis Harness to Trailer Provision Harness



814659



814660

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326120
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 800 Metri-Pack Series, Sealed (BK)

Connector Part Information

Harness Type: Chassis
OEM Connector: 15326119
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way M 800 Metri-Pack Series, Sealed (BK)

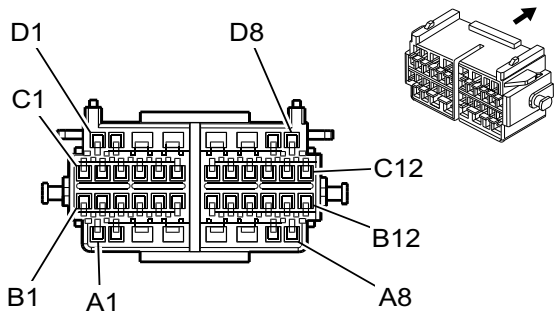
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-44 (YE)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-45 (YE)	No Tool Required	Not Required	Not Required	Not Required	Not Required

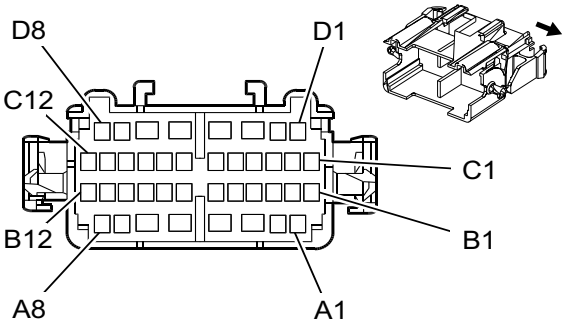
X460 Chassis Harness to Trailer Provision Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	8	WH	22	I	—	Trailer Ground	1	8	WH	22	II	—

X500 Driver Door Harness to Body Harness



1538788



1715230

Connector Part Information

Harness Type: Driver Door
OEM Connector: 15448129
Service Connector: Service by Harness - See Part Catalog
Description: 40-Way F 150, 280 GT Series (BK)

Connector Part Information

Harness Type: Body
OEM Connector: 15416976
Service Connector: 89047197
Description: 40-Way M 150, 280 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	4
IV	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	C
V	13575505	J-35616-5 (PU)	J-38125-553	15304722	Delphi 8	E	C
VI	13575510	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	A	D
VII	19177683	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	2	4

X500 Driver Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.35	TN	126	I	—	Left Front Door Open Switch Signal	A1	0.35	TN	126	IV	—
A2 - A4	—	—	—	—	—	Not Occupied	A2 - A4	—	—	—	—	—
A5	3	BK	450	II	—	Ground	A5	3	BK	450	VI	—
A6	0.35	BN/ WH	230	II	—	Instrument Panel Lamp Dimming Control	A6	0.35	BN/ WH	230	V	—

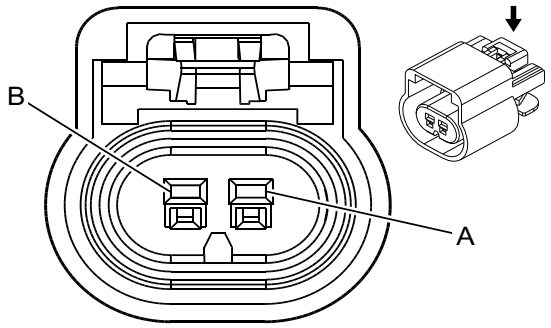
X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A7	0.8	OG	2267	I	—	Mirror Heating Element Control	A7	0.8	OG	2267	VII	—
A8	0.35	PU/WH	889	I	—	Right Mirror Motor Down Control	A8	0.5	PU/WH	889	III	—
B1	0.35	OG/BK	781	I	—	Driver Door Lock Switch Unlock Signal	B1	0.35	OG/BK	781	IV	—
B2	0.35	PK/BK	780	I	—	Driver Door Lock Switch Lock Signal	B2	0.35	PK/BK	780	IV	—
B3	0.35	GY/BK	745	I	—	Left Front Door Ajar Switch Signal	B3	0.35	GY/BK	745	IV	—
B4	0.35	BK	450	I	—	Ground	B4	0.35	BK	450	IV	—
B5 - B6	—	—	—	—	—	Not Occupied	B5 - B6	—	—	—	—	—
B7	0.8	TN	694	I	—	Driver Door Lock Actuator Unlock Control	B7	0.8	TN	694	VII	—
B8	0.8	GY	295	I	—	Door Lock Actuator Lock Control	B8	0.8	GY	295	VII	—
B9 - B1-1	—	—	—	—	—	Not Occupied	B9 - B11	—	—	—	—	—
B1-2	0.8	D-BU	1857	I	—	Left Front Midrange Speaker Control (+)	B1-2	0.8	D-BU	1857	VII	—
C1	0.5	PU/WH	6628	I	—	Left Front Side Impact Sensing Module Low Reference	C1	0.5	PU/WH	6628	III	—
C2	0.5	WH	2132	I	—	Left Front Side Impact Sensing Module Signal	C2	0.5	WH	2132	III	—
C3 - C6	—	—	—	—	—	Not Occupied	C3 - C6	—	—	—	—	—
C7	0.5 —	L-BU/WH GY/YE	1314 5853	I I	DEE UFT	Left Front Turn Signal Lamp Control Driver Side Object Detection LED Signal 1	C7	0.5 —	L-BU/WH GY/YE	1314 5853	III IV	DEE UFT
C8	0.5	RD/WH	4340	I	—	Battery Positive Voltage	C8	0.5	RD/WH	4340	III	—

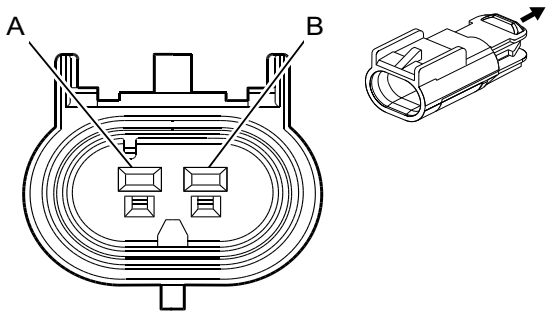
X500 Driver Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C9 - C1-1	—	—	—	—	—	Not Occupied	C9 - C1-1	—	—	—	—	—
C1-2	0.8	L-BU	1957	I	—	Left Front Midrange Speaker (-) Low Reference	C1-2	0.8	L-BU	1957	VII	—
D1 - D3	—	—	—	—	—	Not Occupied	D1 - D3	—	—	—	—	—
D4	3	TN	167	II	—	Power Window Master Switch Right Front Down Signal	D4	3	TN	167	VI	—
D5	3	L-BU	166	II	—	Power Window Master Switch Right Front Up Signal	D5	3	L-BU	166	VI	—
D6	3	D-GN	1001	II	—	Retained Accessory Power Ignition	D6	3	D-GN	1001	VI	—
D7	0.35	BN/WH	1498	I	—	Right Mirror Motor Up Control	D7	0.5	BN/WH	1498	III	—
D8	0.35	OG/WH	881	I	—	Right Mirror Motor Right Control	D8	0.5	OG/WH	881	III	—

X501 Driver Door Harness to Driver Side Impact Sensor Jumper Harness



523630



681875

Connector Part Information

Harness Type: Air Bag Jumper
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed (BK)

Connector Part Information

Harness Type: Driver Door
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

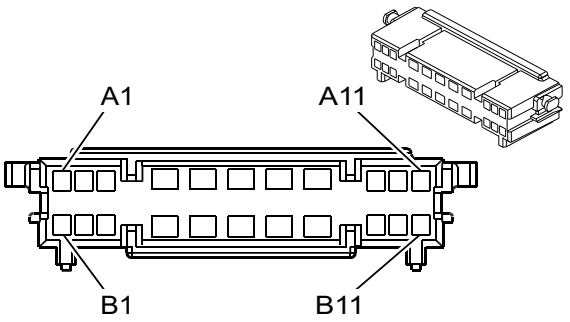
Terminal Part Information

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

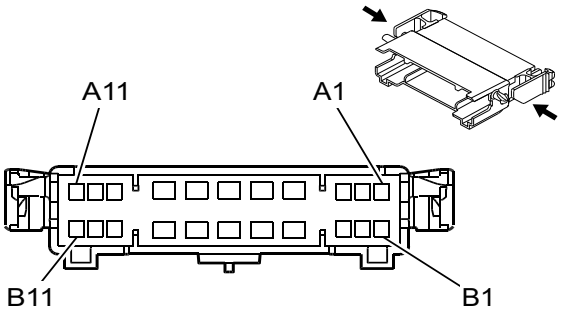
X501 Driver Door Harness to Driver Side Impact Sensor Jumper Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	PU/WH	6628	I	—	Left Front Side Impact Sensing Module Low Reference	A	0.5	PU/WH	6628	II	—
B	0.5	WH	2132	I	—	Left Front Side Impact Sensing Module Signal	B	0.5	WH	2132	II	—

X600 Passenger Door Harness to Body Harness



524205



524211

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15326063
Service Connector: Service by Harness - See Part Catalog
Description: 22-Way F 150, 280 GT Series (GY)

Connector Part Information

Harness Type: Body
OEM Connector: 15326064
Service Connector: 15326064
Description: 22-Way M 150, 280 GT Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	4
IV	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	C
V	13575505	J-35616-5 (PU)	J-38125-553	15304722	Delphi 8	E	C
VI	13575507	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	2	A
VII	13575510	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	A	D
VIII	19177683	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	2	4
IX	—	—	—	Not Available	Not Available	Not Available	Not Available

X600 Passenger Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.8	OG	1853	I	—	Right Front Midrange Speaker Control (+)	A1	0.8	OG	1853	VIII	—
A2	0.8	TN	294	I	—	Door Lock Actuator Unlock Control	A2	0.8	TN	294	VIII	—

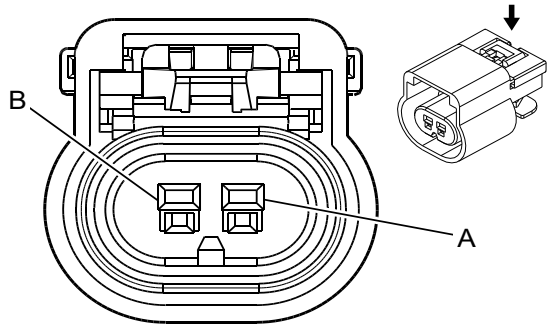
X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A3	0.8	OG	2267	I	—	Mirror Heating Element Control	A3	0.8	OG	2267	VIII	—
A4	3	L-BU	166	II	—	Power Window Master Switch Right Front Up Signal	A4	3	L-BU	166	VII	—
A5	0.35 0.8	BK BK	1850 1850	II II	— —	Ground Ground	A5	0.8	BK	1850	VI	—
A6	0.35	BN/WH	1498	II	—	Right Mirror Motor Up Control	A6	0.5	BN/WH	1498	V	—
A7	0.35	OG/WH	881	II	—	Right Mirror Motor Right Control	A7	0.5	OG/WH	881	V	—
A8	0.35	TN/WH	746	II	—	Right Front Door Ajar Switch Signal	A8	0.35	TN/WH	746	V	—
A9	0.35	BK	1850	I	—	Ground	A9	0.35	BK	1850	IV	—
A1-0	0.5	D-GN	2134	I	—	Right Front Side Impact Sensing Module Signal	A1-0	0.5	D-GN	2134	III	—
A1-1	0.35	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	A11	0.35	L-BU	244	IV	—
B1	0.8	D-GN	1953	I	—	Right Front Midrange Speaker (-) Low Reference	B1	0.8	D-GN	1953	VIII	—
B2	0.8	GY	295	I	—	Door Lock Actuator Lock Control	B2	0.8	GY	295	VIII	—
B3	0.5 0.5	D-BU/WH GY	1315 5861	I II	DEE UFT	Right Front Turn Signal Lamp Control Passenger Side Object Detection LED Signal 1	B3	0.5 0.5	D-BU/WH GY	1315 5861	III IX	DEE UFT
B4	3	TN	167	II	—	Power Window Master Switch Right Front Down Signal	B4	3	TN	167	VII	—
B5	3	D-GN	1001	II	—	Retained Accessory Power Ignition	B5	3	D-GN	1001	VII	—
B6	0.35	BN/WH	230	II	—	Instrument Panel Lamp Dimming Control	B6	0.35	BN/WH	230	V	—

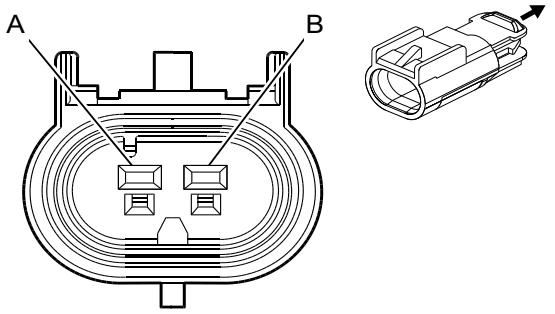
X600 Passenger Door Harness to Body Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
B7	0.35	PU/WH	889	II	—	Right Mirror Motor Down Control	B7	0.5	PU/WH	889	V	—
B8	0.35	L-GN	1177	II	—	Right Front Door Open Switch Signal	B8	0.35	L-GN	1177	V	—
B9	—	—	—	—	—	Not Occupied	B9	—	—	—	—	—
B1-0	0.5	WH/BK	6629	I	—	Right Front Side Impact Sensing Module Low Reference	B1-0	0.5	WH/BK	6629	III	—
B1-1	0.35	D-BU	245	I	—	Passenger Door Lock Switch Unlock Control	B11	0.35	D-BU	245	IV	—

X601 Passenger Side Impact Sensor Jumper Harness to Passenger Door Harness



632351



681875

Connector Part Information

Harness Type: Passenger Side Impact Sensor Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 13510099
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 GT Series, Sealed (BK)

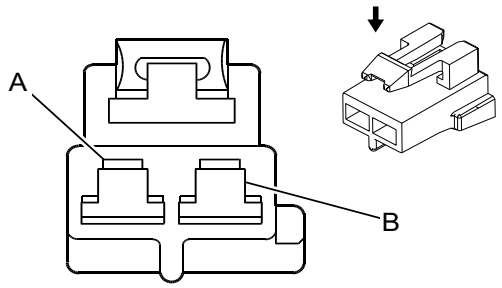
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

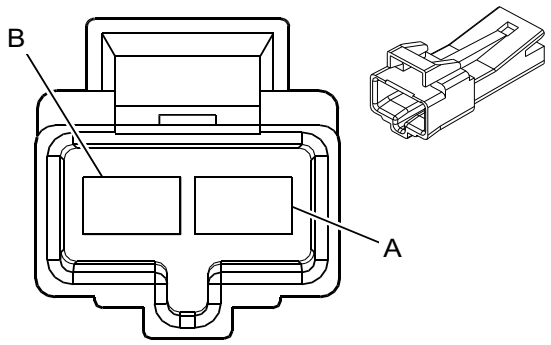
X601 Passenger Side Impact Sensor Jumper Harness to Passenger Door Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	VT/WH	6629	I	—	Right Front Side Impact Sensing Module Low Reference	A	0.5	WH/BK	6629	II	—
B	0.5	WH	2134	I	—	Right Front Side Impact Sensing Module Signal	B	0.5	D-GN	2134	II	—

X901 Defogger Jumper Harness to Left Rear Cargo Door Harness



808706



38284

Connector Part Information

Harness Type: Rear Window Defogger
OEM Connector: 12064749
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 480 Metri-Pack Series (BK)

Connector Part Information

Harness Type: Left Rear Cargo Door
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

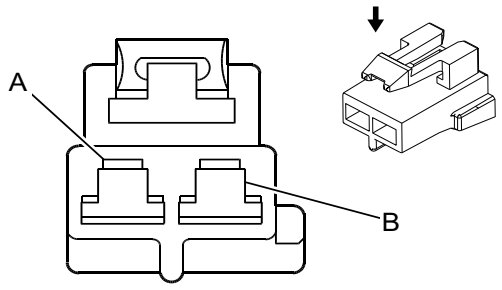
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-41 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

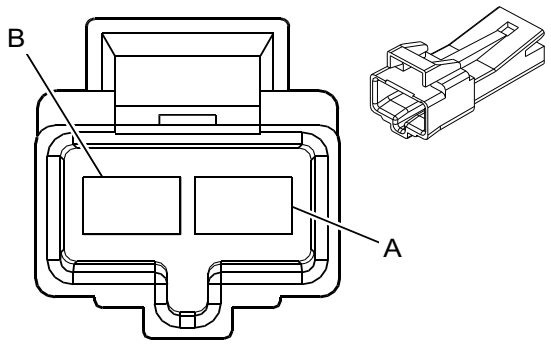
X901 Defogger Jumper Harness to Left Rear Cargo Door Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	PU	293	I	—	Rear Defog Element Control	A	5	PU	293	II	—
B	3	BK	850	I	—	Ground	B	3	BK	850	II	—

X902 Defogger Jumper Harness to Right Rear Cargo Door Harness



808706



38284

Connector Part Information

Harness Type: Rear Window Defogger Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

Connector Part Information

Harness Type: Right Rear Cargo Door
OEM Connector: 12064750
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 480 Metri-Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-40 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-41 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

X902 Defogger Jumper Harness to Right Rear Cargo Door Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	PU	293	I	—	Rear Defog Element Control	A	5	PU	293	II	—
B	3	BK	1050	I	—	Ground	B	3	BK	1050	II	—

Description and Operation

Power Mode Description and Operation

Serial Data Power Mode Master

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master (PMM). This vehicles PMM is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is usefull to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The PMM will also activate relays and other direct outputs of the PMM as needed. The PMM determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the PMM serial data message does not match what the individual module can see from its own connections.

The PMM receives ignition switch signals to identify the operators desired power mode. The PMM Power Mode Parameters table below illustrates the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

PMM Power Mode Parameters

Ignition Switch Position	Power Mode Transmitted	Ign. Off / Run / Crank (Run Crank Ignition 1 Voltage Circuit)	Ignition Accessory / Run (Accessory Voltage Circuit)	Ignition Run / Crank (Ignition 1 Voltage Circuit)
Off Key Out	Off	Key Out/ACC	Inactive	Inactive
Off Key IN	Off	Key In/Off	Inactive	Inactive
Accessory	Accessory	Key Out/ACC	Active	Inactive
Run	Run	Run	Active	Active
Start	Crank Request	Crank	Inactive	Active

Relay Controlled Power Mode

The body control module (BCM) uses the discrete ignition switch inputs Run/Crank Ignition 1 Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The RAP relay remains on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 6-719* for more information on the retained accessory power (RAP) function.

BCM Awake/Sleep States

The body control module (BCM) is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Retained Accessory Power Description and Operation

Retained Accessory Power (RAP)

The retained accessory power (RAP) system allows specific vehicle functions to operate for a specific amount of time after the ignition switch is turned OFF. The BCM monitors the ignition switch position, battery condition, and each door ajar/open switch status to determine whether RAP should be initiated or terminated. RAP is controlled with 2 different methods; serial data and relay control. Some modules receive a RAP message over the serial data circuits. Serial data controlled RAP is deactivated as required by their modules RAP power mode operation. Other subsystems are activated directly by the BCM through a RAP relay. Components and systems that are active in RAP are also activated anytime the ignition is any position other than OFF regardless of the door switch signals. The RAP relay is located in the body fuse block, is grounded at G302, and is controlled by the rap relay coil control circuit from the BCM.

Relay Controlled RAP

The BCM keeps the RAP relay energized during all power modes, except Off-Awake and Crank. The relay is also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled RAP will end when one of the following conditions is met:

- The BCM receives an input from any door ajar switch indicating the opening of any door after the ignition key is out of the ignition.

Important: If the BCM is receiving any door ajar signal from those switches when the ignition key is turned OFF, RAP will not initiate.

- The BCM internal timer for the RAP expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

The power window system is powered by the RAP relay during the retained accessory power (RAP) power mode.

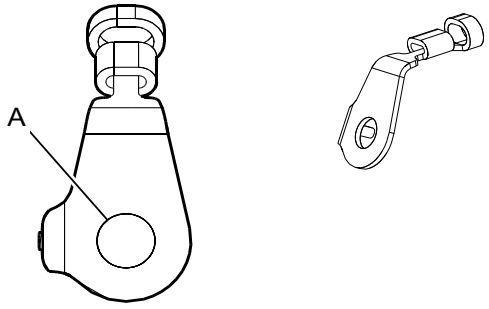
Serial Data Controlled RAP

RAP systems controlled by serial data are as follows:

Radio

Radio RAP activation/termination is the same as relay operation with 1 exception; the only door switch that will turn off the radio during RAP is the driver door open switch.

X50A Fuse Block - Underhood X6



4831192

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13595106
Service Connector: Pending
Description: 1-Way Ring Terminal

Terminal Part Information

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

X50A Fuse Block - Underhood X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	842	Battery Positive Voltage	I	—

C1B Battery - Auxiliary

—

Connector Part Information

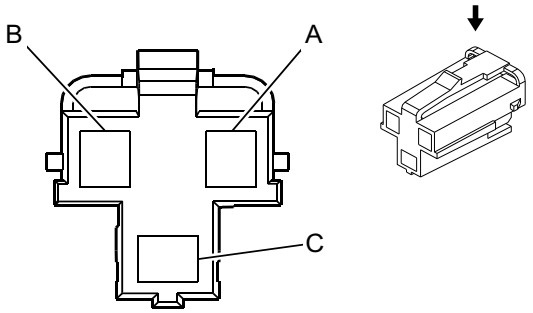
Harness Type: —
OEM Connector: —
Service Connector: —
Description: —

C1B Battery - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	—	—	—	—	—

is this ok

X80A Accessory Power Receptacle - Center Console 1 (-DT4)



362748

Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12176836
Service Connector: Pending
Description: 3-Way F 280 Metri-Pack Series (GY)

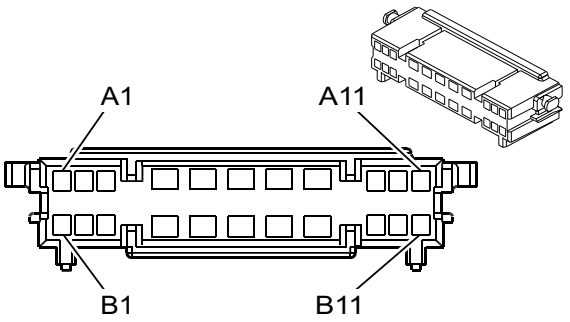
Terminal Part Information

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

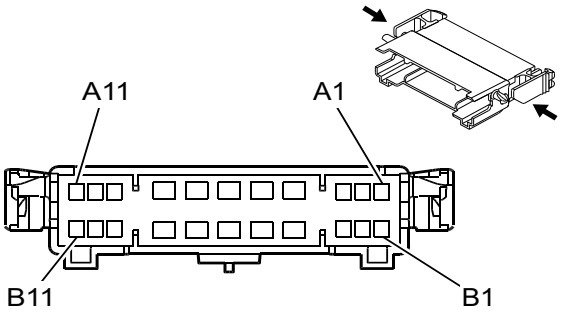
X80A Accessory Power Receptacle - Center Console 1 (-DT4)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD/WH	640	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

X600 Passenger Door Harness to Body Harness



524205



524211

Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15326063
Service Connector: Service by Harness - See Part Catalog
Description: 22-Way F 150, 280 GT Series (GY)

Connector Part Information

Harness Type: Body
OEM Connector: 15326064
Service Connector: 15326064
Description: 22-Way M 150, 280 GT Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	4
IV	13575500	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	E	C
V	13575505	J-35616-5 (PU)	J-38125-553	15304722	Delphi 8	E	C
VI	13575507	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	2	A
VII	13575510	J-35616-5 (PU)	J-38125-553	15304724	Delphi 8	A	D
VIII	19177683	J-35616-3 (GY)	J-38125-553	15304702	Delphi 19	2	4
IX	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

X600 Passenger Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.8	OG	1853	I	—	Right Front Midrange Speaker Control (+)	A1	0.8	OG	1853	VIII	—
A2	0.8	TN	294	I	—	Door Lock Actuator Unlock Control	A2	0.8	TN	294	VIII	—

Section 7

Safety and Security

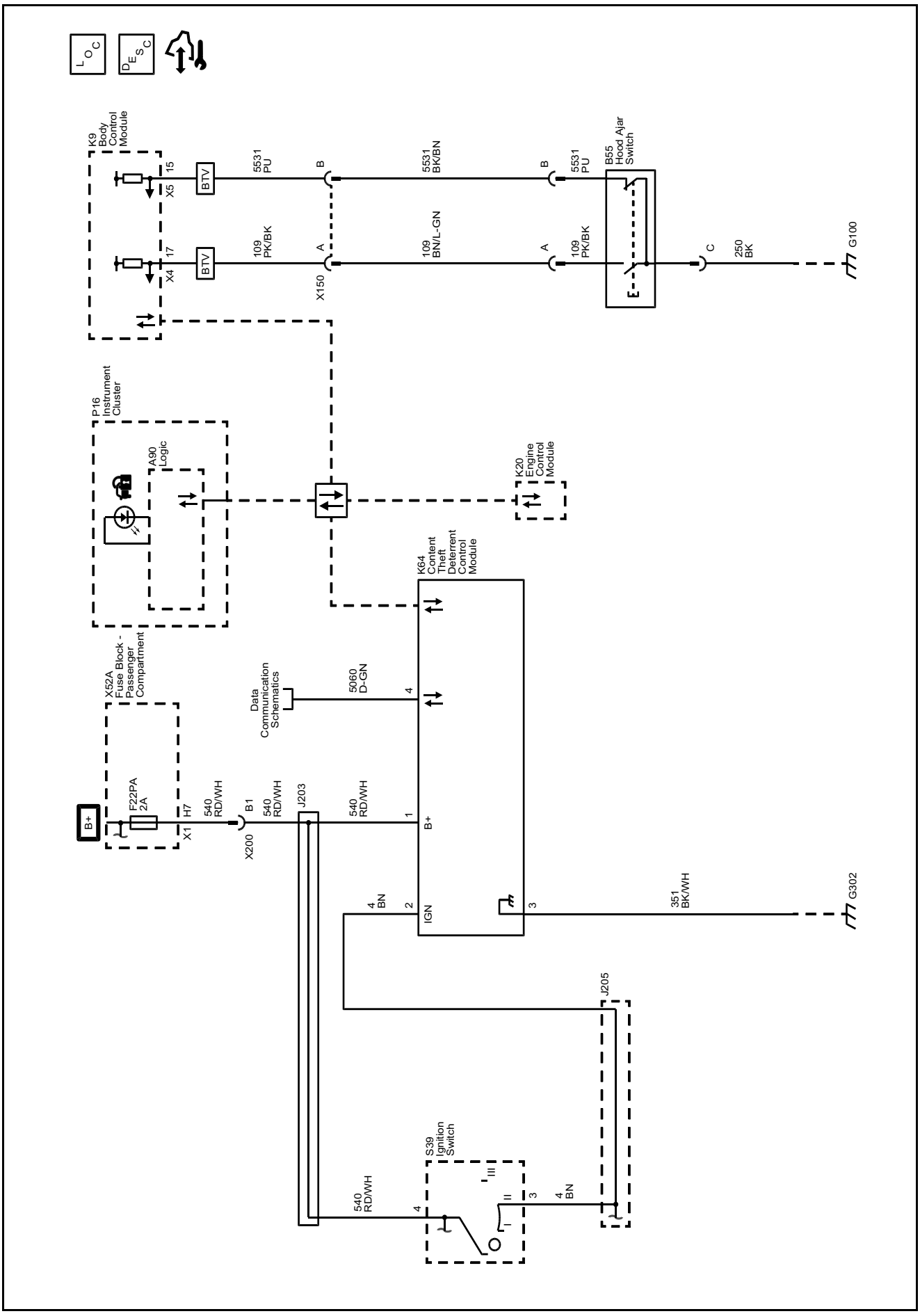
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BLANK

Immobilizer

Schematic and Routing Diagrams

Immobilizer Schematics (Immobilizer)



Description and Operation

Immobilizer Description and Operation

The immobilizer system functions are provided by the theft deterrent module (TDM) and the engine control module (ECM). When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the transponder embedded in the head of the key is energized by the exciter coil surrounding the ignition lock cylinder. This exciter coil is part of the TDM. The energized transponder transmits a signal that contains its unique value, which is received by the TDM. The TDM then compares this value to a value stored in memory. If the values match, the TDM will send the prerelease password via the serial data circuit to the ECM. If the transponders unique value is incorrect, the TDM will send the fuel disable password to the ECM.

When the ECM receives the TDM prerelease password, the ECM will challenge the password. The ECM sends this challenge back to the TDM via the serial data circuit. Both the ECM and TDM perform a calculation on this challenge. If the calculated response from the TDM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The components of the theft system are as follows:

- TDM
- ECM
- Ignition key (Transponder)
- Security indicator

Theft Deterrent Module (TDM)

Vehicles with steering column mounted ignition switches have the exciter integral with the theft deterrent module (TDM), which is located within the steering column. The TDM can learn up to 10 keys (transponder values).

The TDM uses the following inputs:

- Battery voltage
- Ignition switched voltage
- Ground circuit

The theft deterrent control module uses the following outputs:

- Password exchange
- Challenge/response with the engine control module (ECM)

When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the transponder embedded in the head of the key is energized by the exciter coils surrounding the ignition lock cylinder. The energized transponder transmits a signal that contains its unique value, which is received by the TDM. The TDM then compares this value to the learned key code stored in memory. The TDM then performs one of the following functions:

- If the transponder value matches the values stored in the TDM memory, the TDM will send the prerelease password to the ECM via the serial data circuit.
- If the transponders unique value does not match the value stored in the TDM, the TDM will send the fuel disable message to the ECM via the serial data circuit.
- If the TDM is unable to measure the ignition key transponder value, the TDM will not send any messages to the ECM.

Engine Control Module (ECM)

When the engine control module (ECM) receives the theft deterrent module (TDM) prerelease password, the ECM will challenge the password. The ECM sends this challenge back to the TDM via the serial data circuit. Both the ECM and TDM perform a calculation on this challenge. If the calculated response from the TDM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The ECM will disable vehicle starting if any of the following conditions occur:

- The prerelease password is invalid.
- The fuel disable password is sent by the TDM.
- No passwords are received. There is no communication with the TDM.
- The TDM calculated response to the challenge does not equal the calculation performed by the ECM.

The Ignition Key (Transponder)

Note: The ignition key will be stamped with a + or a + surrounded by a circle. This symbol only identifies the key as a PassKey III+ transponder key and is not a reliable way to determine if a particular key is the correct key for a vehicle. Service parts may have a different stamped symbol than the production part. The only way to determine the proper key for a vehicle is by referencing the parts catalog.

The ignition key for PassKey III+ (PK3+) equipped vehicles is a standard ignition key with a transponder located in the plastic head of the key. The transponder value is fixed and unable to be changed. The immobilizer system uses the ignition key transponder value to determine if a valid ignition key is being used to start the vehicle. There are approximately 3 trillion possible transponder values. There are no visible electrical contacts. The immobilizer system use the following types of ignition keys:

Master Keys

Master keys have a black plastic head for full access operation of the vehicle. Master keys may perform the following functions:

- Start the vehicle.
- Lock/unlock all of the door locks and rear compartment.
- Lock/unlock all of the storage compartments.

Valet Keys

Important: Valet keys are NOT standard equipment on all GM vehicle lines.

Valet keys have a gray plastic head and are for restricted operation of the vehicle. Valet keys may perform the following functions:

- Start the vehicle.
- Lock/unlock all of the door locks.

Fleet Keys

Important: Fleet keys are NOT standard equipment on all GM vehicle lines.

Fleets keys allow full access to the vehicle just as a master key would. However, unlike a master key which may only learn 10 keys to a particular vehicle, an unlimited number of fleet keys may be learned to the vehicle. Fleet keys are only used in vehicles configured for fleet use with RPO 6E2 or 6E8.

- Start the vehicle.
- Lock/unlock all of the door locks and rear compartment.
- Lock/unlock all of the storage compartments.

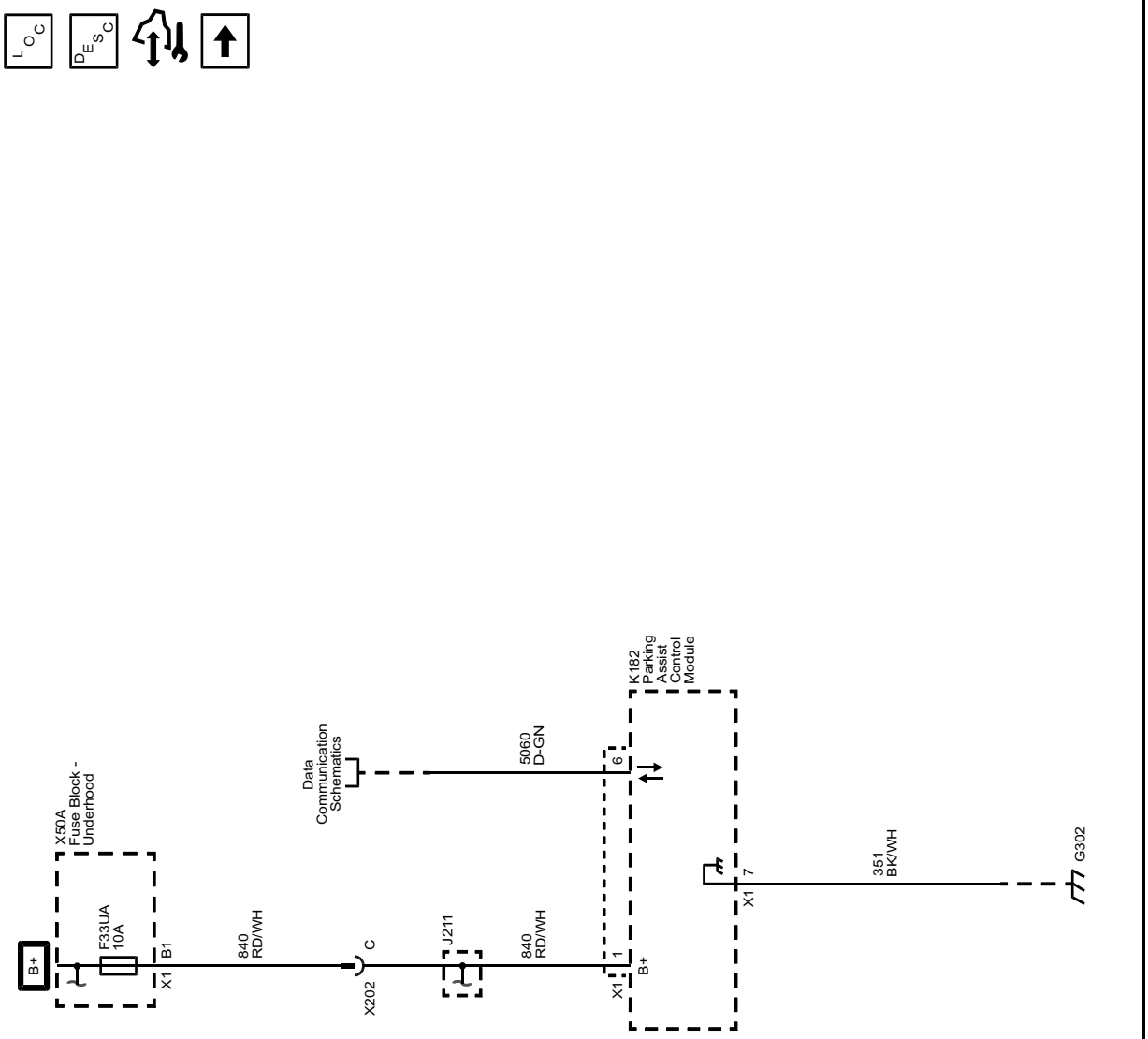
Security Indicator

The theft deterrent module (TDM) can command the instrument panel cluster (IPC) to illuminate the security indicator only when the ignition key is in the ON position. The TDM will command the security indicator be illuminated any time a fault is noted in the immobilizer system and when the engine starting is disabled.

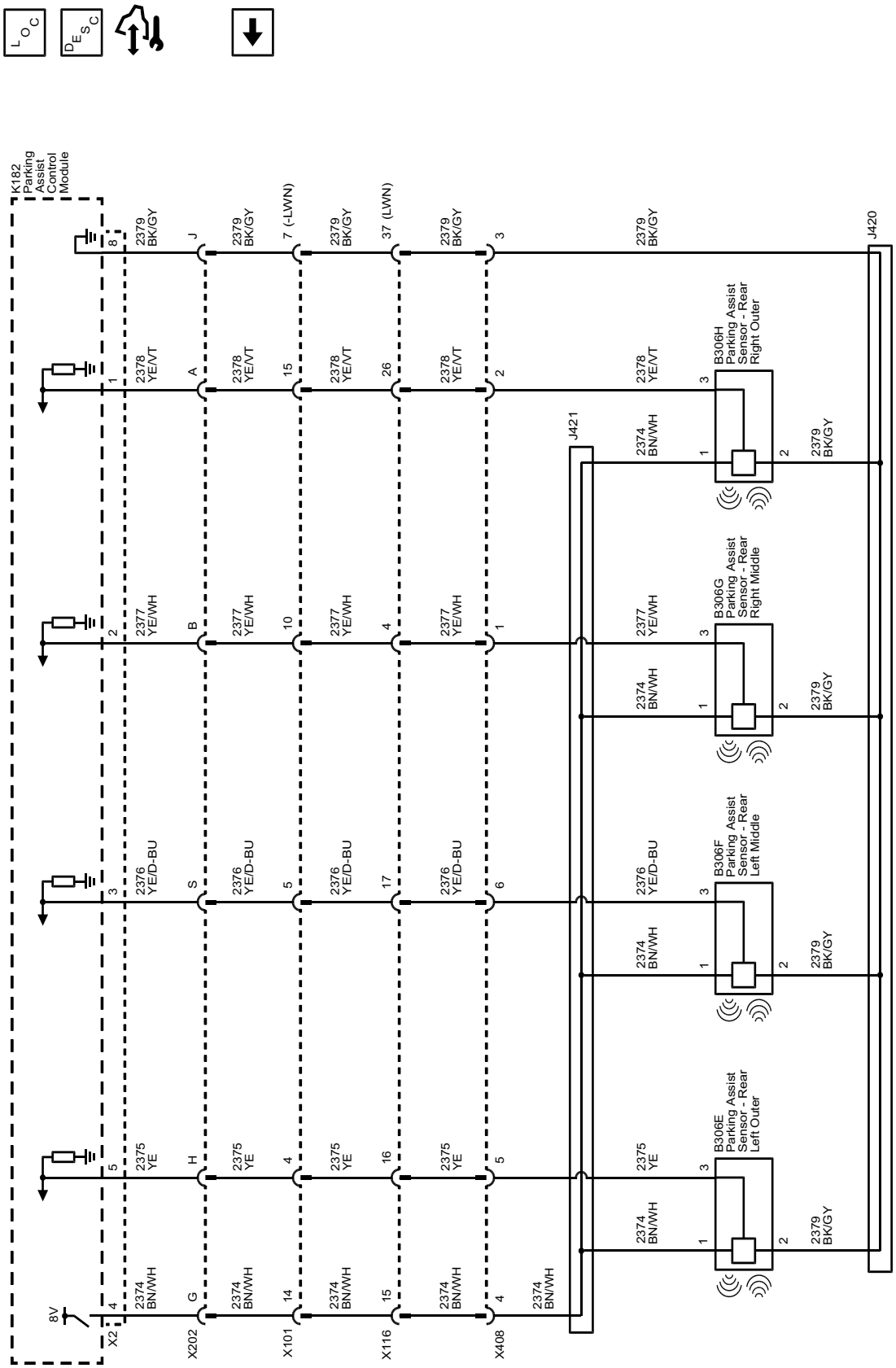
Parking Assistance Systems

Schematic and Routing Diagrams

Parking Assistance Systems Schematics (Rear Object Sensing Power, Ground, and Serial Data (UD7))



Parking Assistance Systems Schematics (Rear Object Sensors (UD7))



Description and Operation

Parking Assist Description and Operation

The parking assist system is designed to identify and notify the driver of an object in the vehicle path when reversing at speeds of less than 8 km/h (5 MPH). The distance and location of the object is determined by four object sensors located in the rear fascia. The parking assist system will notify the driver using audible beeps through the radio.

The parking assist system is made up of the following components:

- Rear parking assist control module
- Rear object sensors
- Radio

Parking Assist Control Module

The rear parking assist control module provides a reference voltage and a low reference to the four object alarm sensors. The rear parking assist control module receives individual signals from each of the four sensors and determines the location and distance of an object based on these inputs. When an object is detected, the rear parking assist control module will send a data message via serial data to the radio requesting an audible alert.

Object Sensors

The object sensors are located in the rear fascia. The sensors are used to determine the distance between an object and the rear of the vehicle. Each sensor emits an ultrasonic frequency which is reflected off an object behind the vehicle. These reflections are received by the sensors. The time difference between the emission of the frequency and when the reflection is received is known as sensor echo time, it is used to determine the distance to the object. The sensors report this information to the rear parking assist control module.

Radio

The radio controls the audible alert for the park assist alert. If the an object is detected the radio will command beeps as an audible alert to the driver.

Parking Assist Operation

When an object is within the measuring range of the sensor, the ultrasonic pulse is reflected and is received by the sending or a neighboring sensor. The sensor converts this signal into a voltage signal and sends this signal to the rear parking assist control module. The rear parking assist control module evaluates the received sensor signals. As soon as an object is within the measuring range, the rear parking assist control module sends a message via serial data to the radio to provide an alert signal.

The parking assist system can detect objects greater than 7.6 cm (3 in) wide and 25.4 cm (10 in) tall. The system cannot detect objects below the bumper, underneath the vehicle.

The parking assist can be activated and deactivated by pressing the parking assist switch. When REVERSE gear is selected, park assist is automatically activated. By subsequently pressing the parking assist switch the parking assist can be disabled again.

The rear parking assist control module carries out a self test and monitors the sensors for electrical and mechanical faults. Monitored is the power supply of each sensor and the sensor signals, which need to alter when the vehicle moves. If this is not the case, the sensor is acoustically blocked or faulty. Mud, ice and snow may cause obstruction of the function of the sensors. The rear parking assist control module also checks whether the correct type of sensor is installed. If any of these tests fails, a DTC with corresponding symptom is set, the parking assist is deactivated and the parking assist indicator in the instrument panel cluster is activated.

Parking Assist System Driver Information Center Messages

SERVICE PARK ASSIST

The driver information center displays SERVICE PARK ASSIST when the rear parking assist control module detects a malfunction in the parking assist system and the system is disabled. The driver information center also displays SERVICE PARK ASSIST when a loss of communication occurs with the rear parking assist control module.

PARK ASSIST OFF

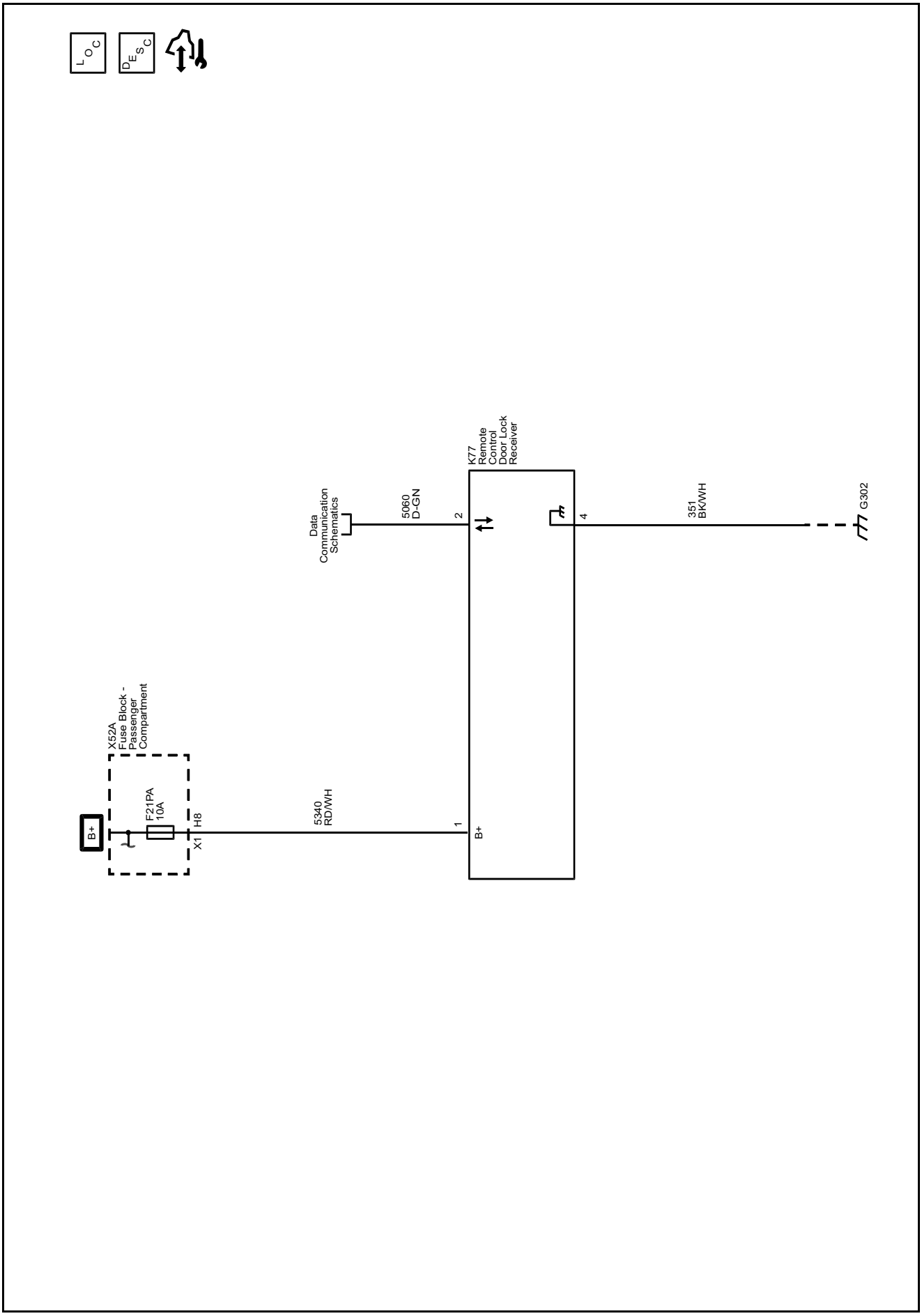
The PARK ASSIST OFF message is displayed in the driver information center when the parking assist system is disabled due to conditions that disable or inhibit the system. The rear parking assist control module requests the driver information center display PARK ASSIST OFF when it detects that one of the following conditions:

- The parking assist system is manually disabled using the parking assist switch.
- An object is attached to the rear of the vehicle, such as a trailer, bicycle rack, trailer hitch receiver, or tow bar. Also, an object extending beyond a lowered tailgate will disable the system.
- The parking assist sensors are covered by snow, mud, dirt, slush, or ice.
- The rear fascia is damaged.
- Excessive paint thickness on a replacement parking assist sensor.
- The parking assist sensors are disrupted by vibrations, like those caused by a large nearby vehicle or from heavy equipment such as a jackhammer.

Remote Functions

Schematic and Routing Diagrams

Remote Function Schematics (Keyless Entry (ATG or UJM))



Description and Operation

Keyless Entry System Description and Operation

The keyless entry system is a vehicle entry device. The keyless entry system is used in conjunction with the body control module (BCM) to remotely activate certain vehicle features. Keyless entry will lock/unlock the doors when a corresponding button on the keyless entry transmitter is pressed. This is accomplished by the transmitter sending a radio frequency to the remote control door lock receiver (RCDLR). The RCDLR interprets the signal and activates the requested function via a serial data message to the BCM. A low transmitter or vehicle battery or radio frequency (RF) interference from aftermarket devices, such as 2-way radios, power inverters, computers, etc., may cause a system malfunction. High RF traffic areas may also cause interference that could lead to a malfunction. Keyless entry allows you to operate the following components:

- Door locks
- Cargo door unlock
- Vehicle locator/Panic alarm
- Illuminated entry lamps

The keyless entry system has the following components:

- Keyless entry transmitters
- BCM
- RCDLR

Keyless Entry Transmitters

The keyless entry transmitter are used to lock and unlock the vehicle doors from a distance of up to 65 feet (20 m) away. Up to 8 transmitters may be programmed to a single vehicle.

OnStar® Remote Link

A vehicle operator may have the ability to perform some of the keyless entry functions using applications on personal devices such as smart phones. Refer to OnStar Description and Operation.

Remote Control Door Lock Receiver (RCDLR)

The remote control door lock receiver (RCDLR) is a multifunction module that operates both the keyless entry system as well as the tire pressure monitoring (TPM) system. The RCDLR has an internal antenna that is used to receive radio frequency (RF) communications sent by the keyless entry transmitters. When an RF message is received from a keyless entry transmitter, the RCDLR interprets this signal and will request via serial data that the body control module (BCM) perform the specific function, i.e. door lock, door unlock, or vehicle locate. The RCDLR also receives RF signals from the TPM sensors located at each wheel.

Unlock Driver Door Only

Momentarily press the transmitter UNLOCK button in order to perform the following functions:

- Unlock only the driver door.
- Illuminate the interior lamps for a determined length of time, or until the ignition is turned ON.
- Flash the exterior lights, if enabled through personalization.

Unlock All Doors – Second Operation

Momentarily press the transmitter UNLOCK button a second time, within 5 seconds of the first press, to perform the following functions:

- Unlock the remaining doors.
- Unlock the cargo doors.

Cargo Door Unlock

Momentarily press the transmitter cargo door unlock button a second time, within 5 seconds of the first press, to perform the following function:

Unlock only the cargo doors.

Lock All Doors

Press the transmitter LOCK button to perform the following functions:

- Lock all vehicle doors.
- Immediately turn OFF the interior lamps.
- Flash the exterior lights, if enabled through personalization.
- Chirp the horn, if enabled through personalization.

Vehicle Locator/Panic Alarm

A single press of the panic button performs the following functions. Some functions may be dependent on personalization settings:

- Pulse the horn three times.
- Flash the exterior lamps three times.

A press and hold of the panic button performs the following functions:

- Illuminate the interior lamps.
- Pulse the horn and flash the exterior lamps for 30 second or until the following conditions occur:
  - The panic button is pressed.
  - The ignition switch is turned to the RUN position with a valid key.

Remote Vehicle Start (RVS) – if equipped

The remote vehicle start (RVS) function allows engine starting while not in the vehicle. It also allows the vehicle HVAC system and other vehicle systems to enable, providing a comfortable vehicle upon entry. RVS functions have an operating range of up to 195 feet, depending on conditions. The RVS sequence begins by pressing and releasing the lock button and then pressing and holding the RVS buttons on the keyless entry transmitter. The turn signal lamps will illuminate to indicate the vehicle has received the remote start request. Each time an RVS is performed, the vehicle doors are locked, however they may then be unlocked/locked with the transmitter or vehicle key

at any time. Once activated, the engine is allowed to run for 10 minutes. The RVS time may be extended by an additional 10 minute by again pressing and releasing the lock button and then pressing and holding the RVS buttons on the transmitter. This feature is called a RVS continue and allows a maximum of 20 minutes of engine running. If the RVS continue is performed at 7 minutes into the initial 10 minute time-out, a total of 17 minutes of engine running would occur. The RVS event may be suspended at any time by pressing only the RVS button on the transmitter or by entering the vehicle and turning ON the hazard lamps.

In between ignition cycles, only two RVS events may occur or be attempted. Once two events or attempts have been made, future RVS events will be suspended until the vehicle is started using the ignition.

Enable/Disable RVS

Using the driver information center (DIC), RVS may be enabled or disabled as a part of vehicle personalization. Refer to the vehicle owners manual for more information.

Hood Ajar Switch

The hood switch provides status of the hood to the BCM for RVS purposes. The switch is integrated into the hood latch assembly. The hood ajar switch provides 2 separate inputs to the BCM. These separate inputs allow the BCM to actively monitor for a hood ajar switch fault.

RVS Circuit Description

The RCDLR receives a signal from the keyless entry transmitter indicating a RVS request. A message is then sent to the BCM which determines if a crank request message will be sent to the ECM to allow engine starting. To determine if conditions are correct for an RVS event, the BCM will ensure the following conditions are met:

- All vehicle doors are closed
- A valid hood ajar switch closed signal is present
- The doors are locked
- The hazard switch is OFF
- The vehicle power mode is correct
- No content theft deterrent (CTD) alarm triggers are present
- The vehicle is not in valet mode (if equipped)

When the BCM determines all conditions meet those required for an RVS event, a message is sent via serial data to the ECM. The ECM relies on the RVS message from BCM to enable RVS when the crank request signal is received. If the ECM does not receive a valid RVS message, it will not attempt to start the engine. While the ECM is in RVS mode it will suspend engine operation if any of the following additional conditions occur:

- Vehicle speed is greater than 0
- Transmission is not in PARK
- Excessive engine coolant temperature
- Low oil pressure
- The malfunction indicator lamp (MIL) is commanded ON
- Engine crank time is greater than 30 seconds
- Excessive engine speed
- Accelerator pedal position too high
- Remote start timer equals 0
- Immobilizer system indicates tamper

Keyless Entry Personalization

Vehicle lock/unlock functions and remote vehicle start (RVS) settings may be personalized. For functional descriptions and personalization instructions, refer to the vehicle owners manual.

Rolling Code

The Keyless Entry System uses rolling code technology. Rolling code technology prevents anyone from recording the message sent from the transmitter and using the message in order to gain entry to the vehicle. The term “rolling code” refers to the way that the Keyless Entry System sends and receives the signals. The transmitter sends the signal in a different order each time. The transmitter and the remote control door lock receiver (RCDLR) are synchronized to the appropriate order. If a programmed transmitter sends a signal that is not in the order that the RCDLR expects, then the transmitter is out of synchronization. This occurs after 256 presses of any transmitter button when it is out of range of the vehicle.

Automatic Synchronization

The keyless entry transmitters do not require a manual synchronization procedure. If needed, the transmitters automatically re-synchronize when any button on the transmitter is pressed within range of the vehicle. The transmitter will operate normally after the automatic synchronization.

Section 8

Transmission

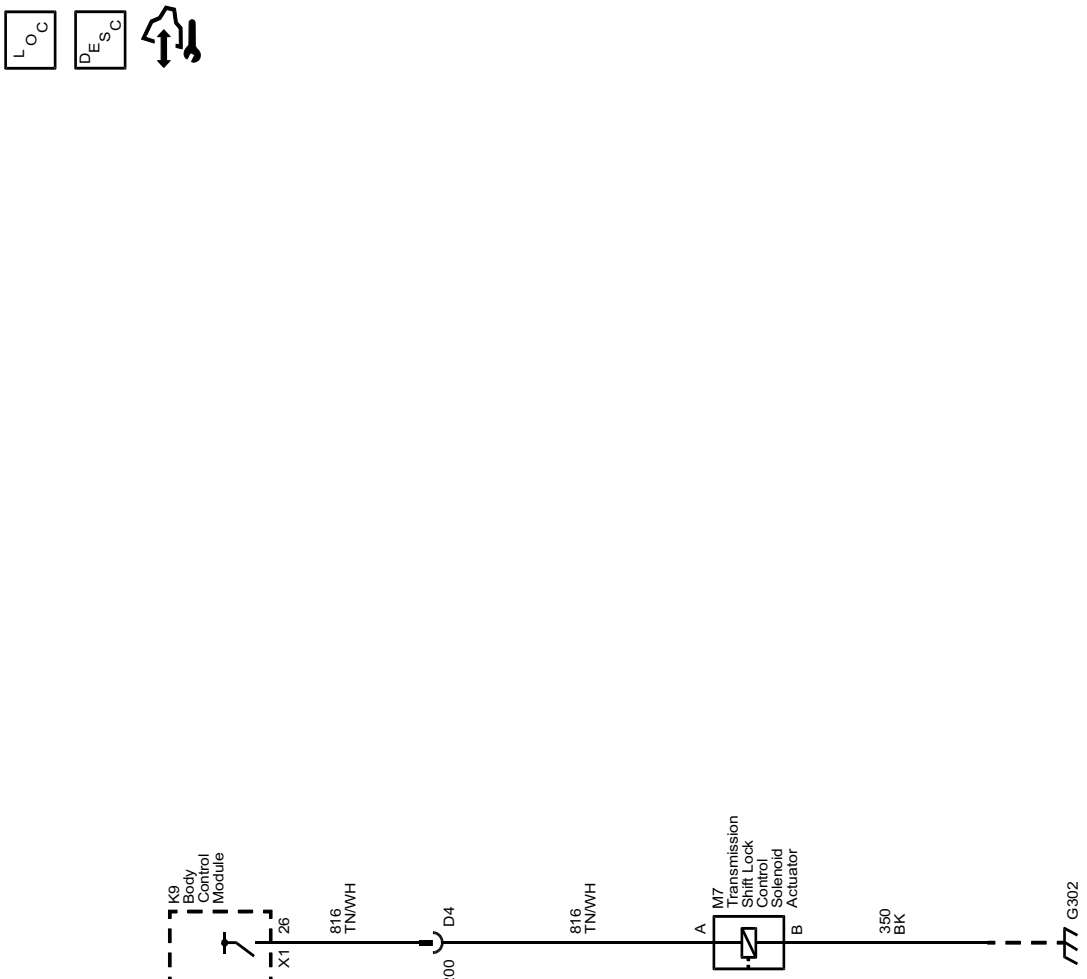
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Shift Lock Control

Schematic and Routing Diagrams

Shift Lock Control Schematics (Shift Lock Control)



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Description and Operation

Automatic Transmission Shift Lock Control Description and Operation

The automatic transmission shift lock control system is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the following components:

- The automatic transmission shift lock solenoid (serviced as the automatic transmission shift lock actuator), as well as the body control module (BCM) and the engine control module (ECM). The shift lock solenoid is located within the floor shift control assembly with vehicles equipped with floor shift.
- The BCM controls the voltage to the shift lock control solenoid through the shift lock control solenoid controlled voltage circuit. The following conditions must be met before the BCM will remove voltage from the shift lock solenoid:
  - The ignition is in the ON position.
  - The engine control module (ECM) sends an input via GMLAN serial data to the BCM indicating the transmission is in the PARK position.
  - The BCM determines the brake pedal is applied according the brake pedal position.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, mechanically locking the shift lever in the PARK position as the solenoid energizes. When the brake pedal is applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. The de-energized solenoid releases the mechanical lock allowing the driver to move the shift lever out of the PARK position. When the transmission is out of the PARK position, the shift lock control solenoid remains de-energized.

During remote start operation, the BCM will energize the shift lock control circuit, locking the shift lever in the PARK position.

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