

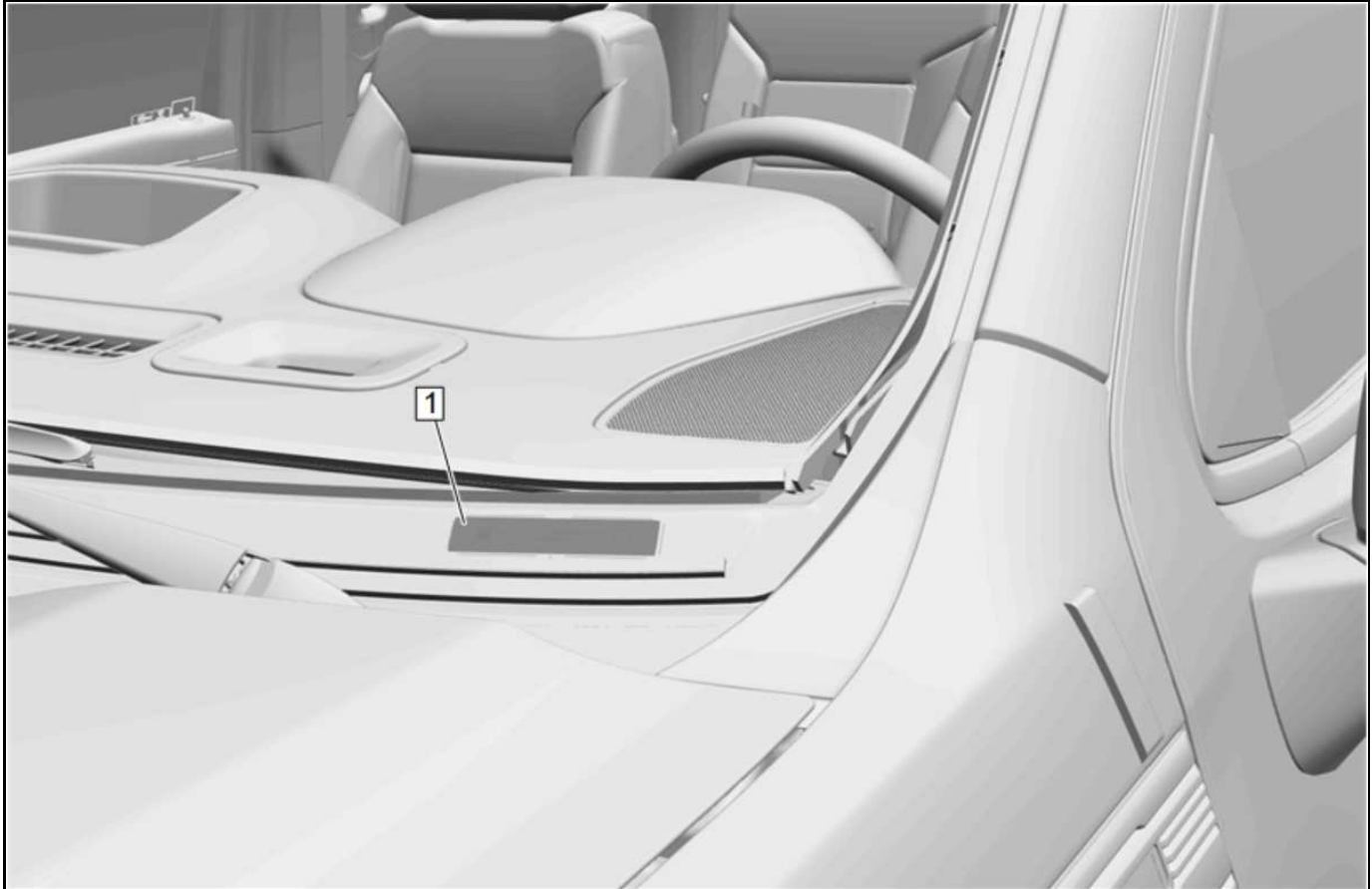
Table of Contents

General Information	1-1	HVAC	6-1
General Information	1-3	HVAC - Automatic	6-3
Body Systems	2-1	HVAC - Manual	6-14
Fixed and Moveable Windows	2-3	Power and Signal Distribution	7-1
Horns and Pedestrian Alerts	2-12	Data Communications	7-3
Lighting	2-15	Electrical Component and Inline Harness	
Mirrors	2-42	Connector End Views	7-30
Trailer Systems	2-50	Power Outlets	7-954
Vehicle Access	2-63	Wiring Systems and Power	
Wipers and Washers	2-80	Management	7-969
Brakes	3-1	Safety and Security	8-1
Park Brake	3-3	Driver Monitoring	8-3
Driver Information and Entertainment	4-1	Parking Assistance Systems	8-7
Image Display Cameras	4-3	Remote Functions	8-13
Engine/Propulsion	5-1	Transmission	9-1
12 V Starting and Charging	5-3	Shift Lock Control	9-3
		INDEX	INDEX-1

General Information

Introduction

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



5030997

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

Vehicle Identification Number (VIN) System

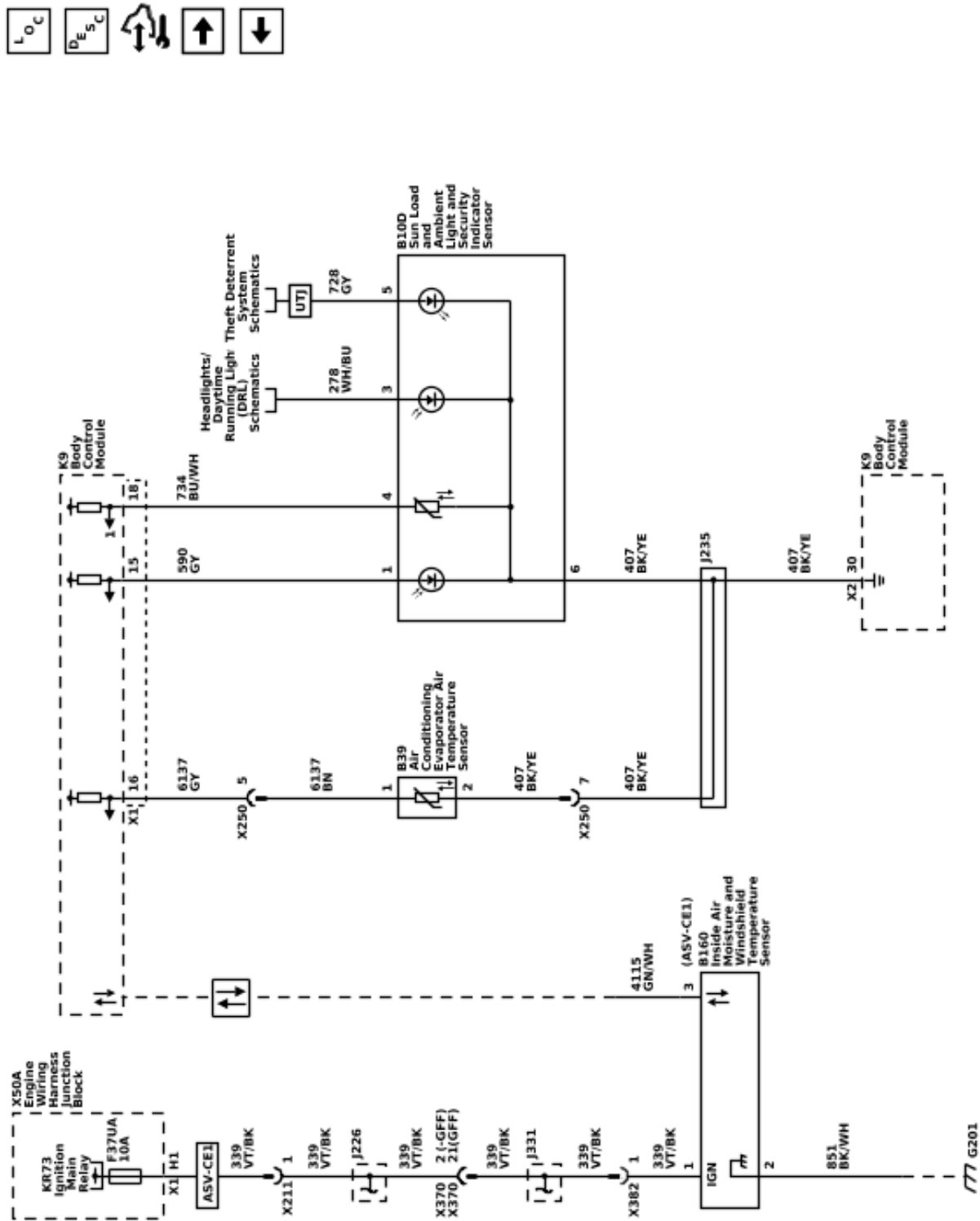
Position	Definition	Character	Description
1	Country of Origin	1	United States
		2	Canada
		3	Mexico
2	Manufacturer	G	General Motors
3	Vehicle Brand/Type	T	GMC Truck
		D	GMC Incomplete
4	GVWR/Brake System/Body Style	N	6,001–7,000 lbs/Hydraulic/Standard Cab
		P	6,001–7,000 lbs/Hydraulic/Crew Cab
		R	6,001–7,000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

1-12 General Information

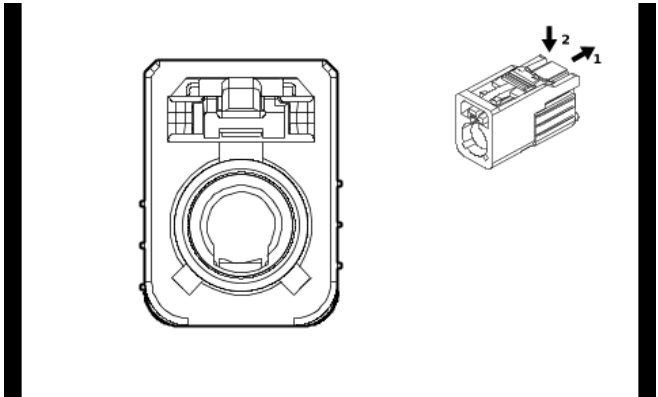
RPO	Description
SEH	ACCESSORY-WHEEL - 20" - ALUMINUM - DESIGN 1
SEM	ACCESSORY-WHEEL - 20" - ALUMINUM - DESIGN 5
SES	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 1
SEU	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 2
SEV	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 3
SEW	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 4
SEZ	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 6
SF0	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 7
SF1	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 8
SF6	ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - PAINTED
SFE	ACCESSORY-WHEEL LOCKS
SFJ	ACCESSORY-WINDOW SHADES - REFLECTIVE
SFZ	ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1
SG3	ACCESSORY-SPRINGS - SPORT SUSPENSION
SGM	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 9
SH0	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 7
SHD	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 10
SIE	ACCESSORY-PUBX TIERED STORAGE
SIL	ACCESSORY-RSE - PORTABLE MEDIA CONNECTIVITY PKG - W/INTEGRATED POWER
SKY	ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 1
SKZ	ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 2
SL7	ACCESSORY-PUBX LADDER / UTILITY RACK STANCHIONS
SL8	ACCESSORY-NAMEPLATE PACKAGE - EXTERIOR - DESIGN 1
SMR	WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 16
SMZ	ACCESSORY-OFF ROAD DRIVE SHAFT
SNR	SEAT RR-SPLIT, FOLDING, DELUXE STORAGE
SPY	ACCESSORY-LUG NUTS - ALT FINISH
SPZ	ACCESSORY-WHEEL LOCKS - ALT FINISH
SR3	ACCESSORY-RSE - DUAL HEADREST DISPLAY W/WIRELESS CONNECTIVITY & DVD
SRL	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 13

RPO	Description
SRV	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 14
SSI	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 15
SSW	ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 17
SUR	ACCESSORY-TRAILER TIRE PRESSURE MONITOR
T3U	LAMP FRT FOG-FRT FOG
T4Z	SEAT BELT SAFETY SYS-SHIFTER INTERLOCK, GEN 1, NON-CUSTOMIZABLE
T8Z	SEAT BELT SAFETY SYS-SHIFTER INTERLOCK, GEN 3, INFOTAINMENT CUSTOMIZABLE
TDM	MODE DRIVER SETTINGS-TEEN DRIVER, INFOTAINMENT
TQ5	HEADLAMP HIGH BEAM-AUTO CONTROL
TRG	VISION TRAILER-INSIDE VIEW, REAR VIEW
TRO	ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED
TT0	ACCESSORY-TRAILERING HOOKUP ASSIST
TUF	ORNAMENTATION-EMBLEM, "TEXAS EDITION"
U12	LAMP-EXTR, OSRV MIRROR, TASK
U2J	DIGITAL AUDIO SYSTEM-S-BAND - NONE
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U73	ANTENNA-FIXED, RADIO
U95	SPEAKER SYSTEM-2, BASE
UBC	RECPT USB ARMREST-DUAL, CHARGE, DATA
UBD	RECPT USB FLR CNSL F-DUAL, CHARGE, DATA
UBI	RECPT USB FLR CNSL R-DUAL, CHARGE
UBJ	RECPT USB IP LWR-DUAL, CHARGE, DATA
UD5	PARK ASSIST-FRONT AND REAR
UD7	PARK ASSIST-REAR
UDC	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (ONE COLOR GRAPHIC)
UDU	PROVISIONS-REAR CAMERA PREP
UDV	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED, FULL CLUSTER (MULTI COLOR GRAPHIC)
UE0	COMMUNICATION SYSTEM-VEHICLE - NONE
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UE4	SENSOR INDICATOR-FOLLOWING DISTANCE
UET	INDICATOR-SMART TRAILER INTEGRATION

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



A11 Radio X7 (IOR)



5794617

Connector Part Information

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

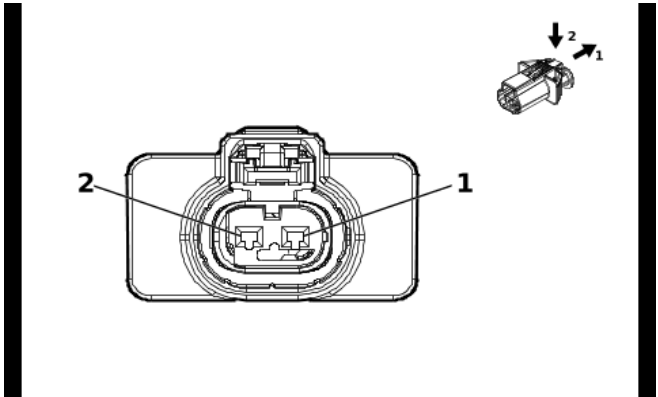
Terminal Part Information

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

A11 Radio X7 (IOR)

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

B63RR Airbag Side Impact Rear Sensor - Right Door - EXTENDED CAB/CREW CAB



5877154

Connector Part Information

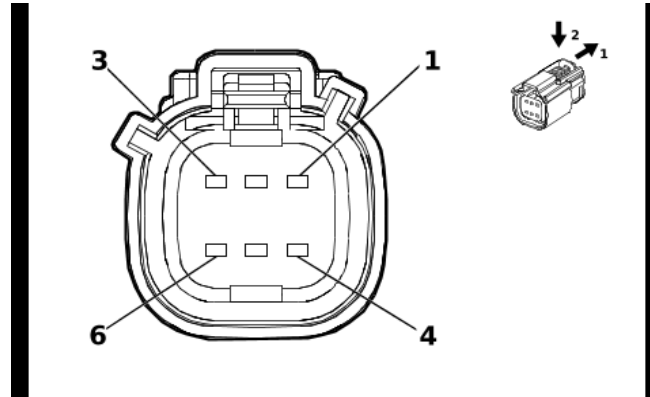
Harness Type: Rear Side Door Door Wiring Harness - Right
OEM Connector: 35242148
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MLK Series, Sealed(BK)

Terminal Part Information

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

B63RR Airbag Side Impact Rear Sensor - Right Door - EXTENDED CAB/CREW CAB

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG / WH	6626	Right Rear Side Impact Sensor Signal	I	—
2	0.5	BK / OG	6627	Right Rear Side Impact Sensor Low Reference	I	—

E42R Rear Body Structure Stop Lamp - Right (GA4/GFG/GFU/GFW/GFY)

5926694

Connector Part Information

Harness Type: Tail Lamp Wiring Harness - Right

OEM Connector: 33472-0617

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way F 1.5 Series, Sealed(GY)

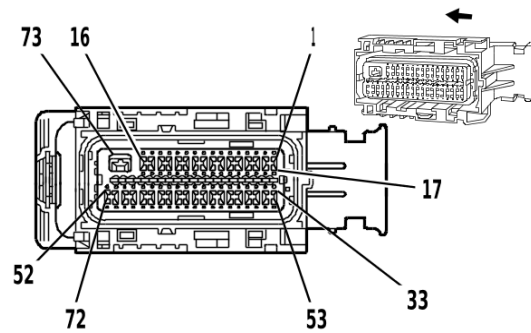
Terminal Part Information

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

E42R Rear Body Structure Stop Lamp - Right (GA4/GFG/GFU/GFW/GFY)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	6995	Right Rear Park Lamp Control	I	—
2	0.75	RD	7544	Right Rear Turn Signal Lamp Feedback Signal	I	—
3	—	—	—	Not Occupied	—	—
4	0.75	GN	24	Backup Lamp Control	I	—
5	0.75	GN	1335	Right Rear Turn Signal Lamp Control 2	I	—
6	0.75	BK	1850	Ground	I	—

K20 Engine Control Module X2 (L84/L87)



1673472

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35208299

Service Connector: 19333090

Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

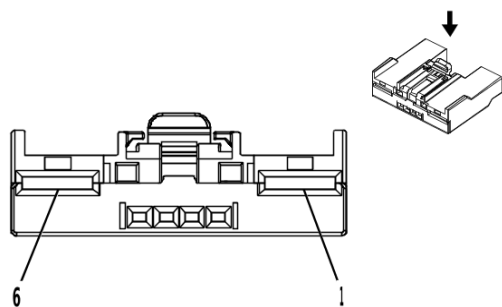
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19354746	J-35616-64B (L-BU)	J-38125-215A

K20 Engine Control Module X2 (L84/L87)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	II	—
2	0.5	GY	5493	Cylinder Deactivation Solenoid Valve Control 3	II	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	GN / YE	4622	Engine Control Module LIN Bus 2	II	—
8	0.5	GN / VT	4621	Engine Control Module LIN Bus 1	II	—
9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	II	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	II	—
12	0.5	YE / BU	2124	Ignition Control 4	II	—
13	0.5	BN / BU	2126	Ignition Control 6	II	—
14	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
15	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
16	0.5	VT / BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	II	—
18	0.5	YE / GY	2493	Cylinder Shutoff Solenoid Enable Signal 3	II	—
19 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	II	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	II	—
28	0.5	GN / BU	2123	Ignition Control 3	II	—
29	0.5	BU / GY	2125	Ignition Control 5	II	—

M8 Blower Motor



2904463

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13965831
Service Connector: 19356432
Description: 6-Way F 0.64 GET, 6.3 Series(BK)

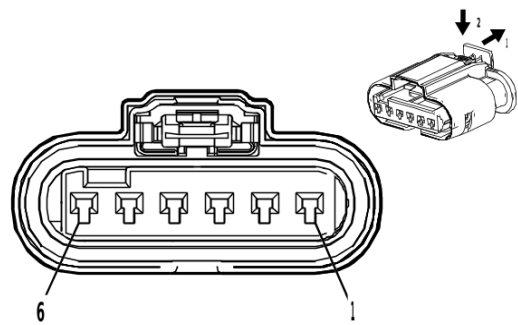
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-64B (L-BU)	No Tool Required

M8 Blower Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD / GY	1740	Battery Positive Voltage	I	—
2	0.35	BU / GY	754	Blower Motor Speed Control	II	—
3	0.35	GN / BU	761	Blower Speed Feedback Signal	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	4	BK	1050	Ground	I	—

M129C Intake Camshaft Profile Actuator 3 (L3B)



3960142

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35360829
Service Connector: 85005020
Description: 6-Way F 1.2 MCON-LL Series, Sealed(BK)

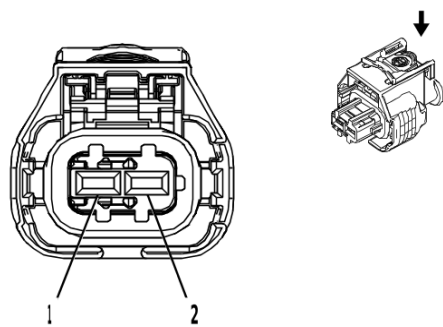
Terminal Part Information

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

M129C Intake Camshaft Profile Actuator 3 (L3B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BU	3587	Camshaft Position Motor Control D	I	—
2	0.5	BK / GN	3593	Camshaft Position Sensor 2 Ground	I	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4	0.5	BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
5	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
6	0.5	GY	3586	Camshaft Position Motor Control C	I	—

Q17E Fuel Injector 5 (LZ0)



2845578

Connector Part Information

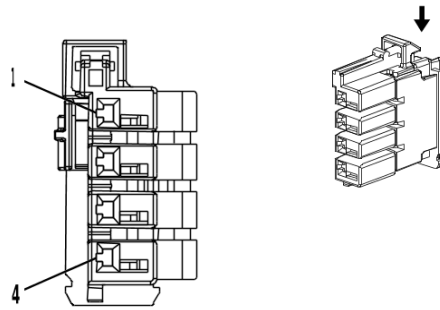
Harness Type: Fuel Injector Wiring Harness
OEM Connector: 1928405715
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

Q17E Fuel Injector 5 (LZ0)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
2	1.5	WH / GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—

S2 Automatic Transmission Manual Shift Shaft Position Switch (MQE)

4364148

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness - Control

OEM Connector: 2289524-1

Service Connector: Service by Harness - See Part Catalog

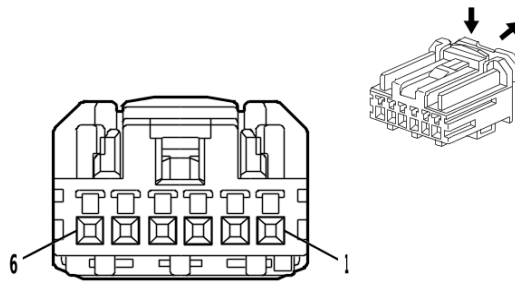
Description: 4-Way F 1.2 MCON Series(BN)

Terminal Part Information

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

S2 Automatic Transmission Manual Shift Shaft Position Switch (MQE)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN / YE	3337	Transmission Internal Mode Switch Mode Control Y	I	—
2	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
4	0.5	BU / WH	3338	Transmission Internal Mode Switch Mode Control X	I	—

S13D Door Lock Switch - Driver (AEQ)

4650256

Connector Part Information

Harness Type: Front Side Door Door Lock Door Wiring Harness - Driver

OEM Connector: 33315784

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way F 0.64 HCM Series(BK)

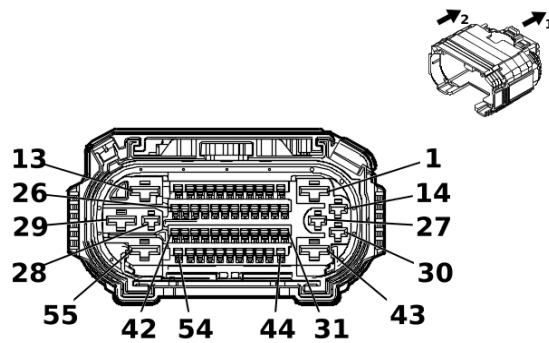
Terminal Part Information

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

S13D Door Lock Switch - Driver (AEQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	BN / GY YE	4784 6817	Left Front Door LED Backlight Dimming Control LED Backlight Dimming Control 1	I I	DEZ - DEZ
2	0.5	BN / YE	2771	Left Front Door Lock Switch Lock Signal	I	—
3	0.5	BN / WH	2772	Left Front Door Lock Switch Unlock Signal	I	—
4	0.5	BK	1550	Ground	I	—
5 - 6	—	—	—	Not Occupied	—	—

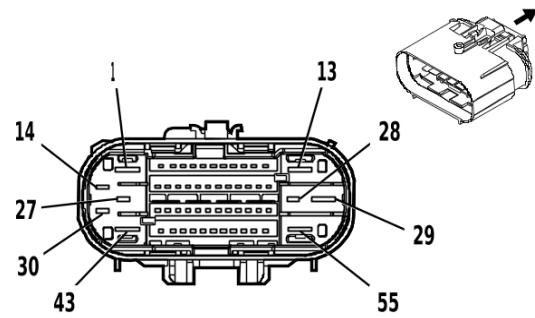
X125 Engine Wiring Harness to Body Wiring Harness (LZ0)



5246872

Connector Part Information

Harness Type: Engine Wiring Harness
 OEM Connector: 35580811
 Service Connector: 19371184
 Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series,
 Sealed(GY)



4994369

Connector Part Information

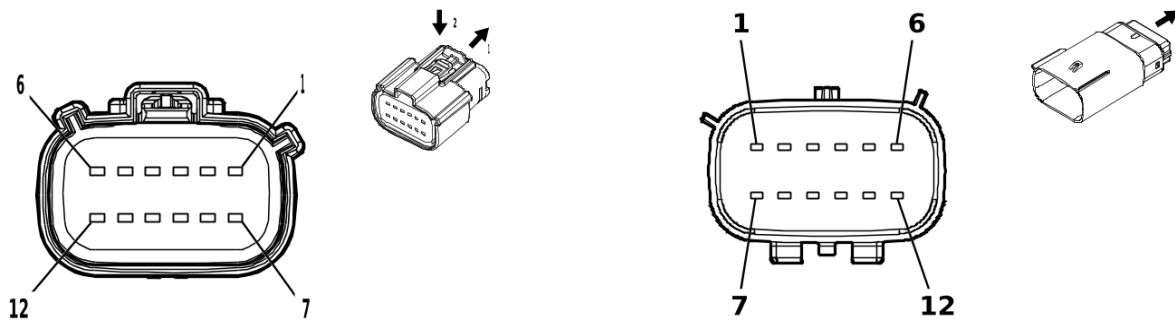
Harness Type: Body Wiring Harness
 OEM Connector: 35588062
 Service Connector: 84727363
 Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series,
 Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19332901	J-35616-35 (VT)	J-38125-212
II	19370818	J-35616-12 (BU)	J-38125-215A
III	19371217	J-35616-12 (BU)	J-38125-215A
IV	84634921	J-35616-42 (RD)	J-38125-212
V	84847992	J-35616-32 (OG)	J-38125-36
VI	84867140	J-35616-13 (BU)	J-38125-215A
VII	84867141	J-35616-13 (BU)	J-38125-215A
VIII	84992391	J-35616-5 (PU)	J-38125-215A

X125 Engine Wiring Harness to Body Wiring Harness (LZ0)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	BK / WH	251	IV	—	Signal Ground	1	3	BK / WH	251	V	—
2	1.5	RD / GN	1840	III	—	Battery Positive Voltage	2	1.5	RD / GN	1840	VII	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	0.5	BU / GY	4054	II	—	Private Serial Data Powertrain CAN Bus [-] Serial Data	4	0.5	BU / GY	4054	VI	—
5	0.5	WH	4055	II	—	Private Serial Data Powertrain CAN Bus [+] Serial Data	5	0.5	WH	4055	VI	—
6	0.5	WH	4976	II	—	AUTOSAR CAN Bus [-] 3 Serial Data	6	0.5	WH	4976	VI	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LZ0)

4584248

5187933

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 33221171

Service Connector: 19333239

Description: 12-Way F 1.5 MX Series, Sealed(D-GY)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness

OEM Connector: 33482-6261

Service Connector: Service by Harness - See Part Catalog

Description: 12-Way M 1.5 MX Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LZ0)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	1	1.5	BN / WH	4901	II	—
2	1.5	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	2	1.5	BN	4801	II	—
3	1.5	BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	3	1.5	BU / GY	4902	II	—
4	1.5	BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	4	1.5	BU	4802	II	—
5	1.5	GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	5	1.5	GN / GY	4903	II	—
6	1.5	GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	6	1.5	GN	4803	II	—