

Table of Contents

General Information	1-1	Power and Signal Distribution	6-1
General Information	1-3	Data Communications	6-3
Body Systems	2-1	Electrical Component and Inline Harness	
Fixed and Moveable Windows	2-3	Connector End Views	6-31
Horns and Pedestrian Alerts	2-10	Electrical Component Locator and Harness	
Mirrors	2-13	Routing Views	6-893
Trailer Systems	2-21	Power Outlets	6-999
Vehicle Access	2-35	Wiring Systems and Power	
Driver Information and Entertainment	3-1	Management	6-1010
Image Display Cameras	3-3	Safety and Security	7-1
Engine/Propulsion	4-1	Immobilizer	7-3
12 V Starting and Charging	4-3	Parking Assistance Systems	7-8
HVAC	5-1	Remote Functions	7-15
Heating, Ventilation, and Air Conditioning	5-3	Seat Belts	7-24
HVAC - Automatic	5-4	Supplemental Restraints	7-29
		INDEX	INDEX-1

X225D Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.75	YE / WH	4635	I	—	HVAC Remote Enable 2 Signal	9	0.5	YE / WH	4635	V	—
10 - 13	—	—	—	—	—	Not Occupied	10 - 13	—	—	—	—	—
14	0.5	VT	4701	II	—	Retained Accessory Power Control	14	0.5	VT	4701	VII	—
15	0.5	GN / BK	2211	I	—	Rear Blower Motor Speed Control	15	0.5	GN / BK	2211	V	—
16	0.5	RD / BN	7540	I	—	Battery Positive Voltage	16	0.5	RD / BN	7540	V	—
17 - 18	—	—	—	—	—	Not Occupied	17 - 18	—	—	—	—	—
19	0.75	BK / VT	470	I	—	Sensor Low Reference	19	0.5	BK / VT	470	V	—
20	0.35	BN	404	I	—	Upper Duct Air Temperature Sensor Signal	20	0.5	BN	404	V	—
21 - 25	—	—	—	—	—	Not Occupied	21 - 25	—	—	—	—	—
26	0.75 —	BK BK	5683 686	I I	KI4 KI5	120V AC Phase A 230 VAC Outlet Phase A	26	0.75 —	BK BN	5683 686	V V	KI4 KI5
27 - 34	—	—	—	—	—	Not Occupied	27 - 34	—	—	—	—	—
35	0.75	BU / BN	6807	I	—	DC/AC Inverter Control	35	0.75	BU / BN	6807	V	—
36 - 37	—	—	—	—	—	Not Occupied	36 - 37	—	—	—	—	—
38	—	BU / YE	4984	I	—	AUTOSAR CAN Bus [-] 5 Serial Data	38	—	BU / YE	4984	V	—
39	—	BU / WH	4985	I	—	AUTOSAR CAN Bus [+] 5 Serial Data	39	—	BU / WH	4985	V	—
40	0.5	YE	6817	I	—	LED Backlight Dimming Control 1	40	0.5	YE	6817	V	—
41	—	—	—	—	—	Not Occupied	41	—	—	—	—	—
42	0.75 —	RD BU	5684 6865	I I	KI4 KI5	120V AC Phase B 230V AC Phase B	42	0.75 —	RD BU	5684 6865	V V	KI4 KI5
43 - 49	—	—	—	—	—	Not Occupied	43 - 49	—	—	—	—	—

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

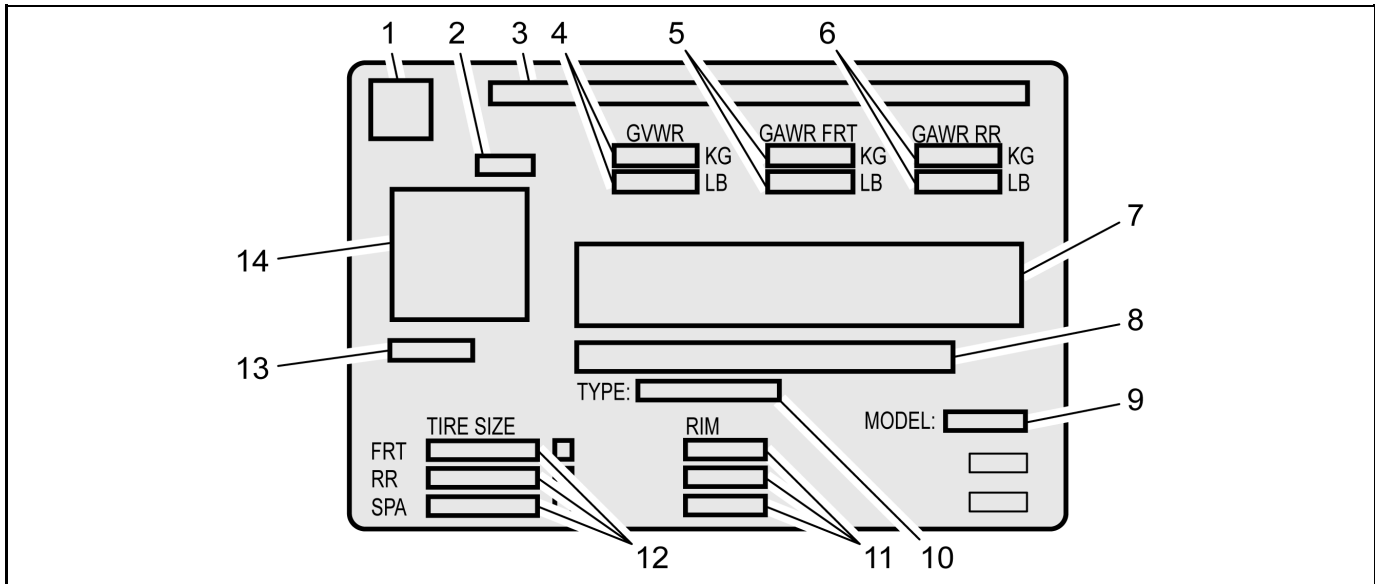
Engine Identification

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

Engine Identification

10L80 (MQC) Transmission ID and VIN Derivative**Location**

Transmission Identification Information

Vehicle Certification, Tire Placard, and Anti-Theft Label

4992823

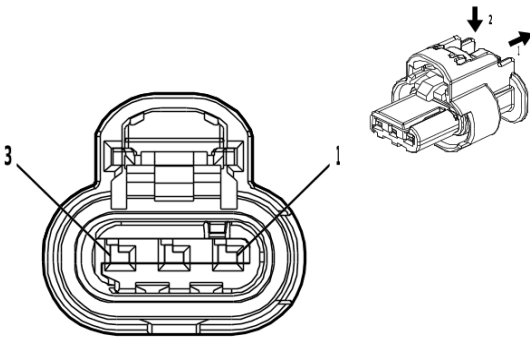
Vehicle Certification Label

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

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F34	HTD SEAT MDL ROW 2	F34RA	15A	• K29R Rear Seat Heater Control Module (KA6)
F35	HFCR	F35RA	10A	• K171 Rear Closure Hands Free Module (TC2) • K214 Trailer Tire Pressure Indicator Module (U1D)
F36	ELM	F36RA	20A	• K219 Lighting Control Module
F37	NOT USED	F37RA	10A	• Not Used
F38	PWR SLIDE CNSL	F38RA	15A	• K230 Front Floor Console Control Module (DCH)
F39	NOT USED	F39RA	30A	• Not Used
F40	NOT USED	F40RA	20A	• Not Used
F41	NOT USED	F41RA	20A	• Not Used
F42	NOT USED	F42RA	30A	• Not Used
F43	UPA	F43RA	10A	• K182 Parking Assist Control Module (UD5/UD7)
F44	NOT USED	F44RA	10A	• Not Used
F45	AFL AHL	F45RA	10A	• Not Used
F46	REAR HVAC BLWR MTR	F46RA	30A	• K8AB Blower Motor Control Module - Rear (C69)
F47	RH CINCH LATCH	F47RA	20A	• Not Used
F48	PWR SEAT RECL MDL	F48RA	30A	• K169 Folding 3rd Row Seat Module (AS8)
F49	LIFT GLASS	F49RA	10A	• M33 Liftgate Window Latch
F50	DRVR PWR SEAT	F50RA	30A	• K40D Driver Seat Adjuster Memory Module (A45) • S64D Front Seat Adjuster Switch - Driver • S65D Front Seat Lumbar Switch - Driver (AL9)
F51	PWR TAILGATE MDL	F51RA	30A	• K194 Rear Gate Module (TC2)
F52	PASS PWR SEAT	F52RA	30A	• K40P Passenger Seat Adjuster Memory Module (A45) • S64P Front Seat Adjuster Switch - Passenger • S65P Front Seat Lumbar Switch - Passenger (AT9)
Relays				
K53	NOT USED	—	—	• Not Used
K54	NOT USED	—	—	• Not Used
K55	L-GLASS	KR162 Liftgate Window Release Relay	—	• F49RA
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
—	—	KR5 Rear Defogger Relay	—	• F12RA • F20RA

B26 Crankshaft Position Sensor (LM2)



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

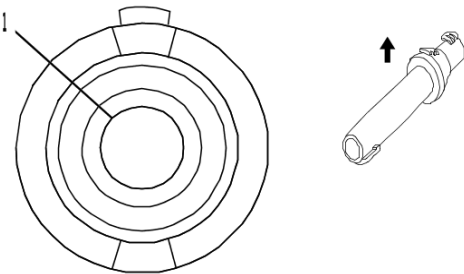
Terminal Part Information

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

B26 Crankshaft Position Sensor (LM2)

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

E12F Glow Plug 6



2231591

Connector Part Information

Harness Type: Diesel Glow Plug Wiring Harness
OEM Connector: 284818-1
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series(BK)

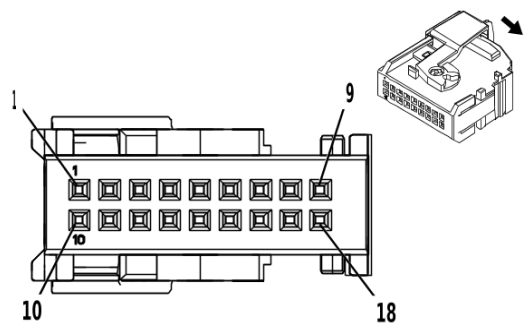
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-37 (L-BU)	No Tool Required

E12F Glow Plug 6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	1586	Glow Plug 6 Control	I	—

K157 Video Processing Module X1 (UV2-TRG)



4329088

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 35332167
Service Connector: 84976200
Description: 18-Way F Micro-Quadlock Series(BK)

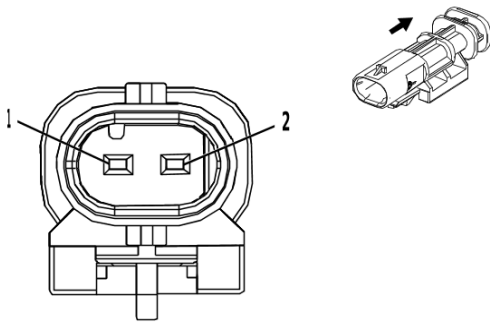
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19300632	J-35616-64B (L-BU)	J-38125-215A

K157 Video Processing Module X1 (UV2-TRG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK / WH	1351	Signal Ground	I	—
4 - 9	—	—	—	Not Occupied	—	—
10	0.5	RD / VT	1640	Battery Positive Voltage	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.5	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
14	0.35	WH	4986	AUTOSAR CAN Bus [-] 1 Serial Data	I	—
15	0.5	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
16	0.35	BU	4987	AUTOSAR CAN Bus [+] 1 Serial Data	I	—
17 - 18	—	—	—	Not Occupied	—	—

P45L Front Seat Lane Departure Warning Actuator - Left



2474755

Connector Part Information

Harness Type: Front Seat Wiring Harness - Driver
OEM Connector: 13591337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(BK)

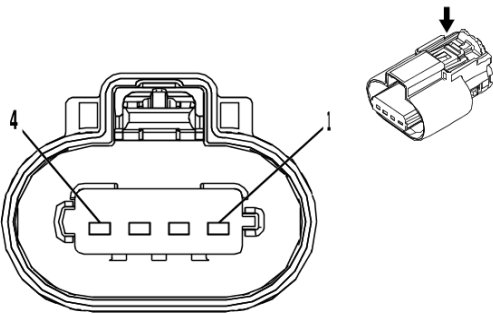
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-13 (BU)	No Tool Required

P45L Front Seat Lane Departure Warning Actuator - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1150	Ground	I	—
2	0.35	YE / BN	3037	Driver Seat Left Rear Haptic Movement Motor Control	I	—

T8H Ignition Coil 8



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

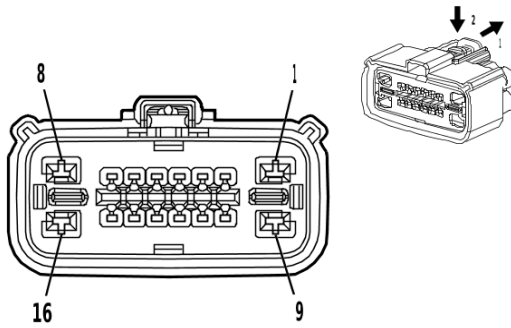
T8H Ignition Coil 8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	6450	Engine Even Bank Ground	I	—
2	0.75	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	VT / WH	2128	Ignition Control 8	I	—
4	0.75	VT / BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

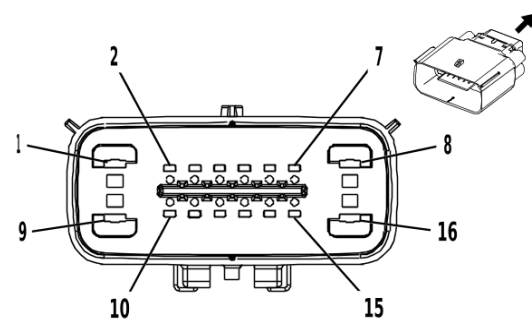
X225D Front Seat Wiring Harness - Center to Body Wiring Harness (AZ3) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
50	0.35	BU / YE	4984	I	—	AUTOSAR CAN Bus [-] 5 Serial Data	50	0.35	BU / YE	4984	V	—
51	0.35	BU / WH	4985	I	—	AUTOSAR CAN Bus [+] 5 Serial Data	51	0.35	BU / WH	4985	V	—
52 - 53	—	—	—	—	—	Not Occupied	52 - 53	—	—	—	—	—
54	1 —	BK BK / WH	2519 2519	I I	KI4 KI5	120V AC Outlet Low Reference 120V AC Outlet Low Reference	54	1	BK / WH	2519	VI	—
55	0.75	BK	1250	III	—	Ground	55	2	BK	1250	IV	—

X403 Engine Wiring Harness to Chassis Wiring Harness (L84/L87)



4283035



2373686

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 35382404

Service Connector: 19352906

Description: 16-Way F 1.5, 2.8 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 33129084

Service Connector: 19331031

Description: 16-Way M 1.5, 2.8 MX Series, Sealed(BK)

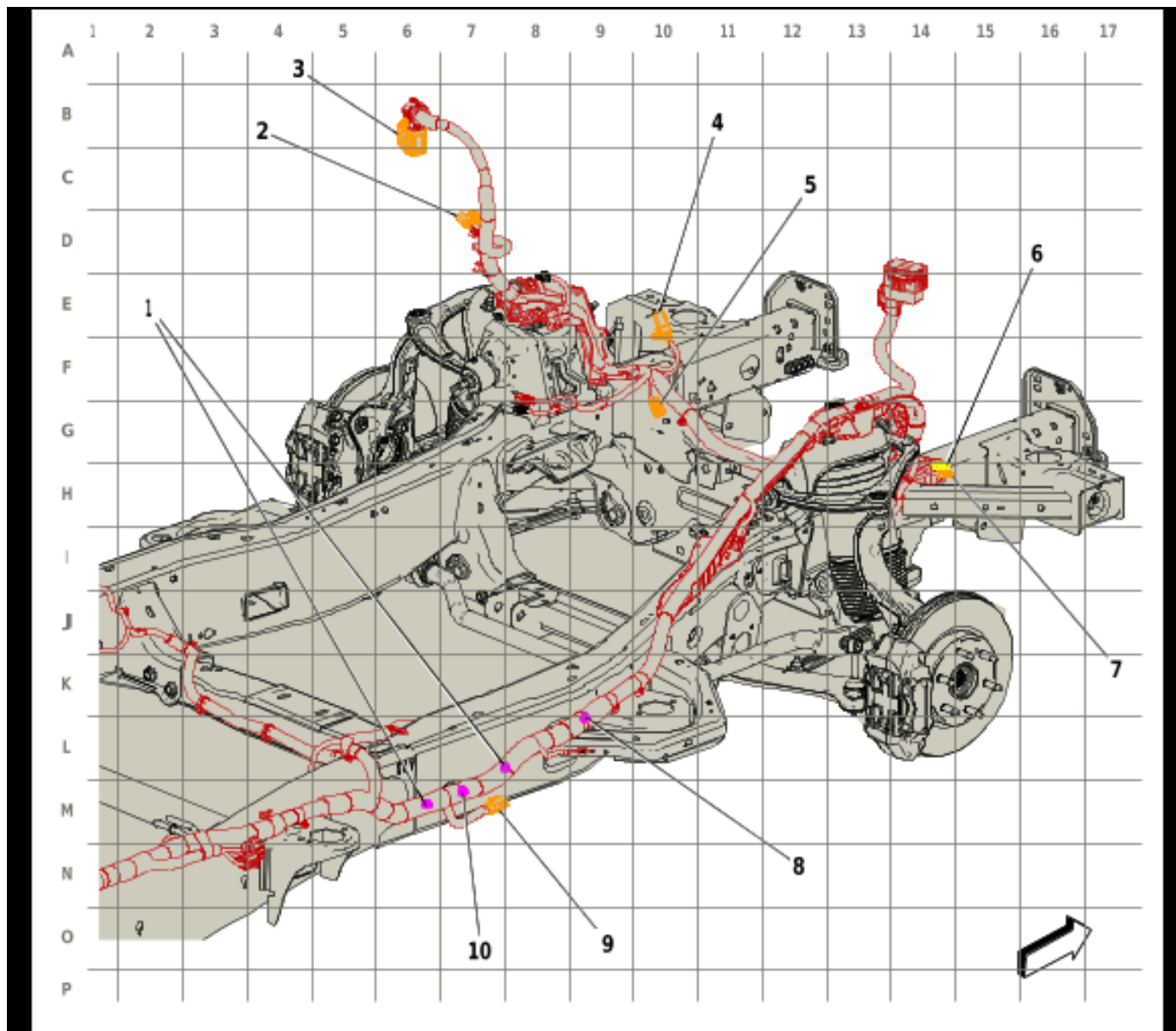
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	85528055	J-35616-2A (GY)	J-38125-217
II	19366658	J-35616-5 (PU)	J-38125-12A
III	86800300	J-35616-3 (GY)	J-38125-217

X403 Engine Wiring Harness to Chassis Wiring Harness (L84/L87)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	—	—	—	—	—	Not Occu-pied	1 - 2	—	—	—	—	—
3	0.5	GN / GY	465	I	—	Fuel Pump Primary Re-lay Control	3	0.5	GN / GY	465	III	—
4	—	—	—	—	—	Not Occu-pied	4	—	—	—	—	—
5	0.5	WH	4976	I	—	AUTOSAR CAN Bus [-] 3 Serial Data	5	0.5	WH	4976	III	—
6	0.5	BU / BK	4977	I	—	AUTOSAR CAN Bus [+] 3 Serial Data	6	0.5	BU / BK	4977	III	—
7 - 8	—	—	—	—	—	Not Occu-pied	7 - 8	—	—	—	—	—
9	—	—	—	—	—	Run/Crank Ignition 1 Voltage	9	0.5	VT / BK	2139	II	—
10	—	—	—	—	—	Not Occu-pied	10	—	—	—	—	—
11	0.5	VT / GN	4320	I	—	Powertrain Sensor Bus Enable	11	0.5	VT / GN	4320	III	—
12	—	—	—	—	—	Not Occu-pied	12	—	—	—	—	—

Harness Routing Views (Vehicle Underbody - Chassis Harness - Front)

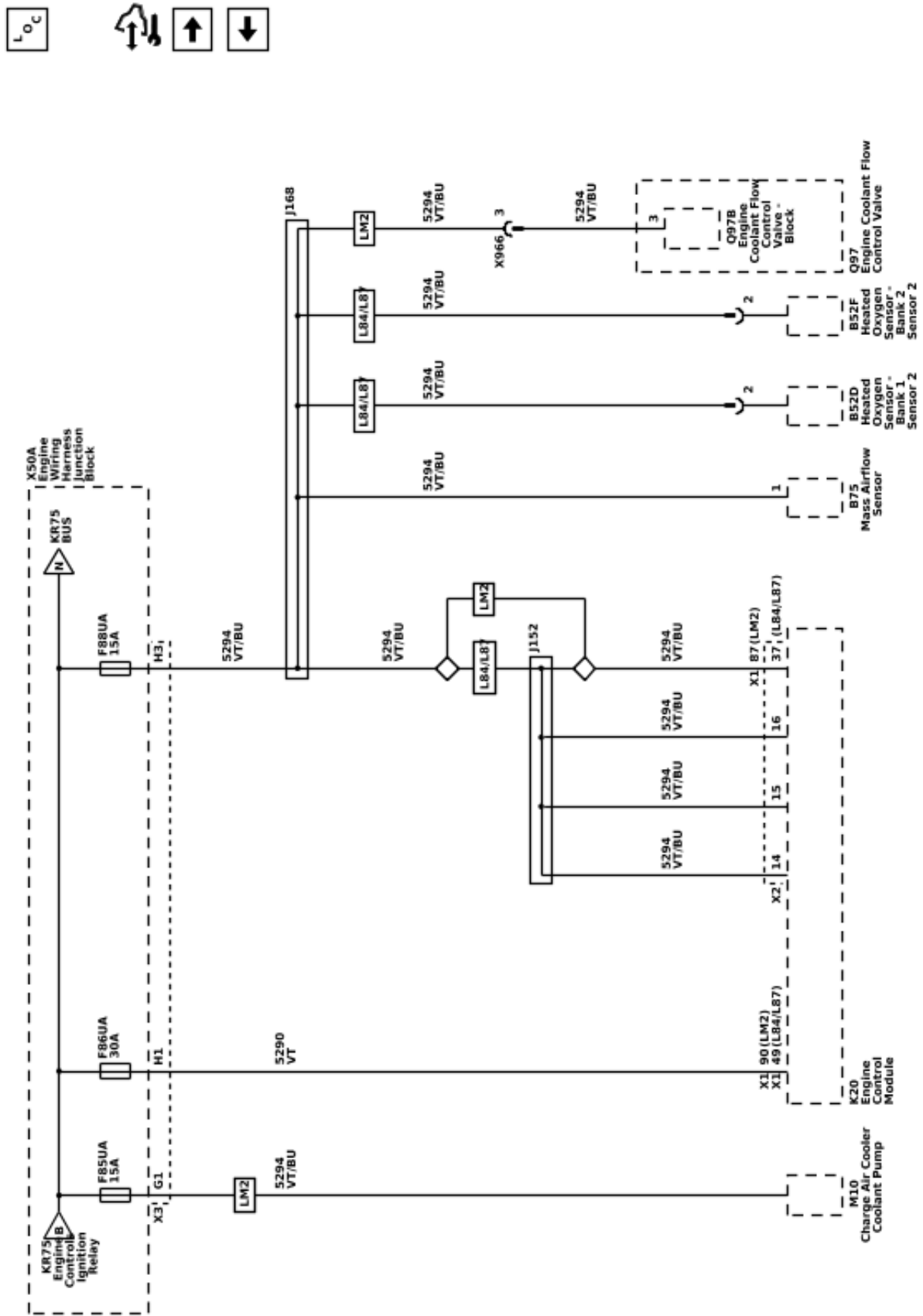


5966163

Items

- | | |
|--|---|
| (1) J372 Chassis Wiring Harness | (6) X402A Body Wiring Harness to Chassis Wiring Harness (UV2+TRG) |
| (2) X401 Body Wiring Harness to Chassis Wiring Harness | (7) X402B Body Wiring Harness to Chassis Wiring Harness (UV2+TRG) |
| (3) X400 Chassis Wiring Harness to Body Wiring Harness | (8) J370 Chassis Wiring Harness |
| (4) X403 Engine Wiring Harness to Chassis Wiring Harness (Z95) | (9) X404R Right Assist Step Harness to Chassis Wiring Harness (B3L) |
| (5) X405D Chassis Wiring Harness to Power Steering Control Module Wiring Harness | (10) J371 Chassis Wiring Harness |

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



598385

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q18A	Fuel Pressure Regulator 1	LM2	In the engine compartment, left rear side of engine, below Q18C Fuel Pressure Regulator 3, attached to G18 High Pressure Fuel Pump	Engine Components - Left Front (LM2)	Q18A Fuel Pressure Regulator 1 (LM2)
Q18B	Fuel Pressure Regulator 2	LM2	In the engine compartment, left side of engine, mounted to the left rear side of the valve cover	Engine Components - Left Front (LM2)	Q18B Fuel Pressure Regulator 2 (LM2)
Q18C	Fuel Pressure Regulator 3	LM2	In the engine compartment, left rear side of engine, above Q18A Fuel Pressure Regulator 1, attached to G18 High Pressure Fuel Pump	Engine Components - Left Front (LM2)	Q18C Fuel Pressure Regulator 3 (LM2)
Q20	Intake Air Flow Valve	LM2	In the engine compartment, left front, to the left of the valve cover	Engine Components - Left Front (LM2)	Q20 Intake Airflow Control Valve (LM2)
Q22	Intake Manifold Tuning Solenoid Valve	LM2	In the engine compartment, front center, attached to the front of the intake manifold	Engine Components - Left Front (LM2)	Q22 Intake Manifold Tuning Solenoid Valve (LM2)
Q37LFB	Front Shock Absorber Actuator - Left	Z95	In the left front wheel well, attached to the left front lower control arm and left front strut tower, part of strut assembly	—	Q37LFB Front Shock Absorber Actuator - Left (Z95)
Q37LRB	Rear Shock Absorber Actuator - Left	Z95	In the left rear wheel well, attached to the left rear lower control arm and left rear strut tower, part of strut assembly	—	Q37LRB Rear Shock Absorber Actuator - Left (Z95)
Q37RFB	Front Shock Absorber Actuator - Right	Z95	In the right front wheel well, attached to the right front lower control arm and right front strut tower, part of strut assembly	—	Q37RFB Front Shock Absorber Actuator - Right (Z95)
Q37RRB	Rear Shock Absorber Actuator - Right	Z95	In the right rear wheel well, attached to the right rear lower control arm and right rear strut tower, part of strut assembly	—	Q37RRB Rear Shock Absorber Actuator - Right (Z95)
Q38	Throttle Body	L84/L87	In the engine compartment, at the front of the engine, mounted to the intake manifold inlet	Engine Components - Left Front (L84/L87)	Q38 Throttle Body (L84/L87)
Q44	Engine Oil Pressure Control Solenoid Valve	—	In the engine compartment, at the front of the engine, behind the front cover	Engine Components - Right Front (LM2)	Q44 Engine Oil Pressure Control Solenoid Valve (L87) Q44 Engine Oil Pressure Control Solenoid Valve (LM2)
Q46	Air Conditioning Compressor Solenoid Valve	—	In the engine compartment, right front, mounted to the right lower side of the engine, part of G1 A/C Compressor	Engine Components - Left Front (LM2) Engine Components - Right Front (L84/L87)	Q46 Air Conditioning Compressor Solenoid Valve

