

2018 ELECTRICAL

Component Connector End Views (G13 - K29) - Traverse

COMPONENT CONNECTOR END VIEWS

G13 GENERATOR X2 (LFY)

Connector Part Information

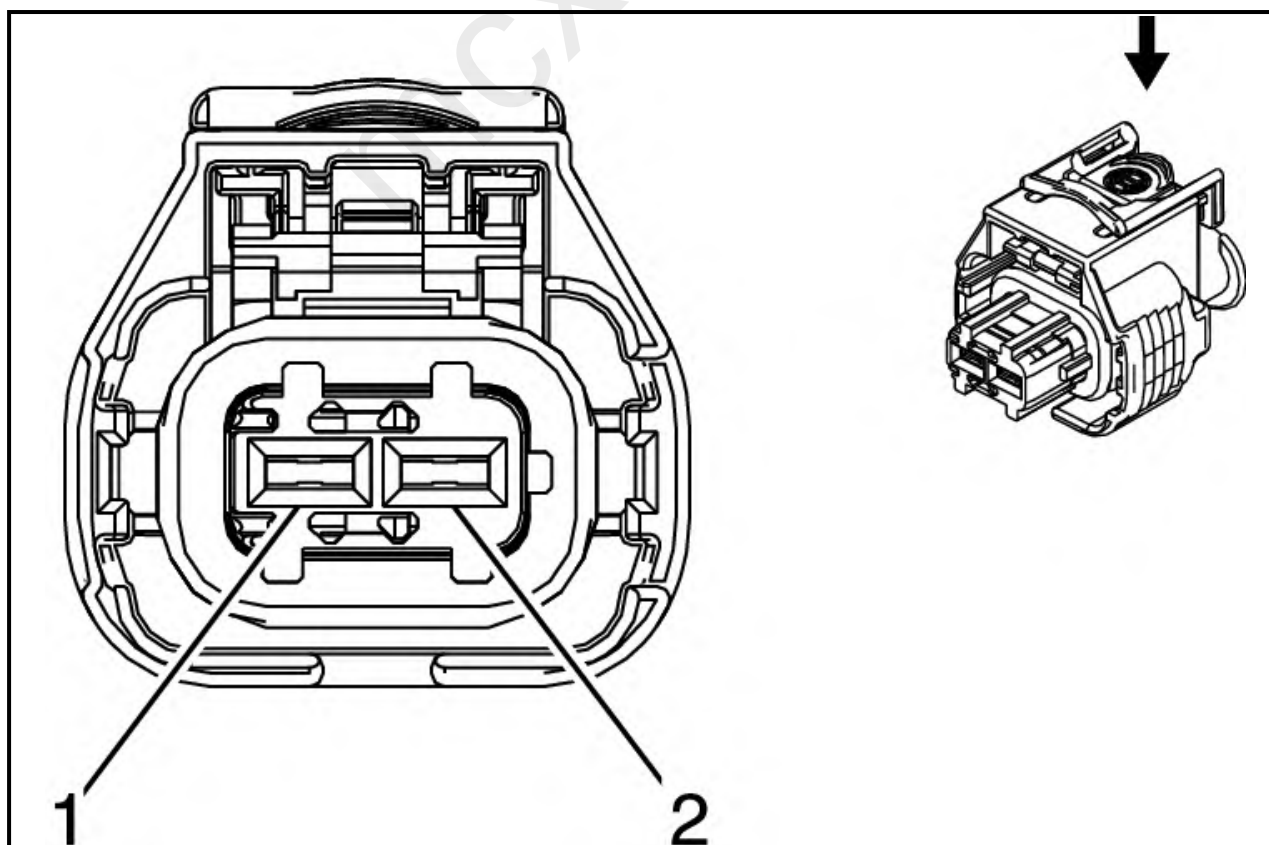
- Harness Type: Battery Cable
- OEM Connector: 13586896
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD/YE	2	Battery Positive Voltage	I	-

G13 GENERATOR X1 (LTG)



Connector Part Information

- Harness Type: Engine

- | |
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| <ul style="list-style-type: none">• OEM Connector: 13343443• Service Connector: 13384371• Description: 2-Way F 2.8 Series, Sealed (BK) |
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Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	-
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	-

G13 GENERATOR X2 (LTG)

- Harness Type: Battery Cable
- OEM Connector: 1199501
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

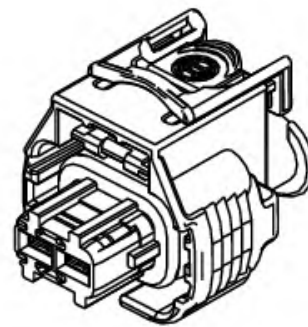
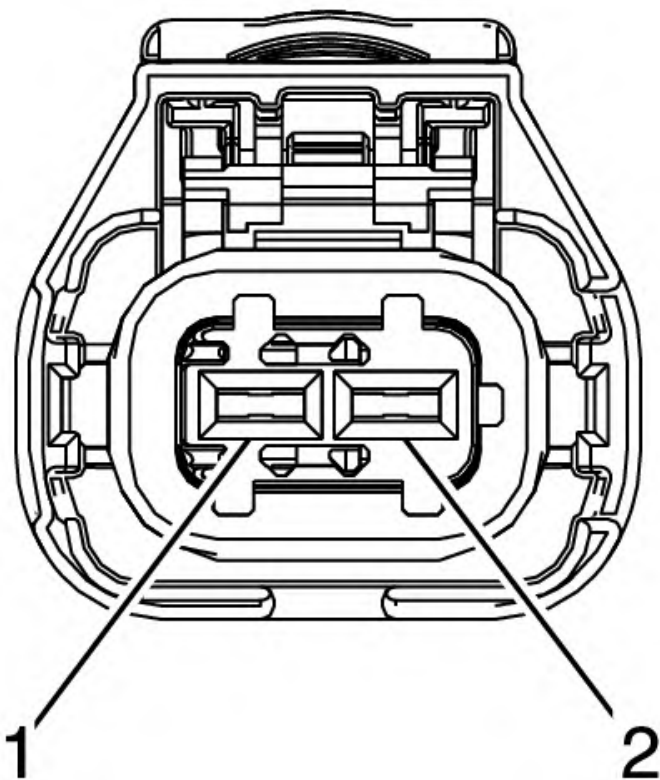
- **Harness Type:** Battery Cable
- **OEM Connector:** 1199501
- **Service Connector:** Service by Cable Assembly - See Part Catalog
- **Description:** 1-Way Ring Terminal

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD/YE	2	Battery Positive Voltage	I	-

G18 HIGH PRESSURE FUEL PUMP (LFY)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13343443
- Service Connector: 13384371
- Description: 2-Way F 2.8 Series, Sealed (BK)

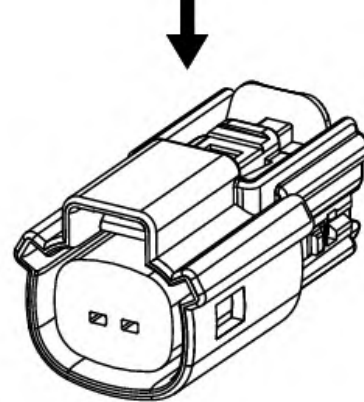
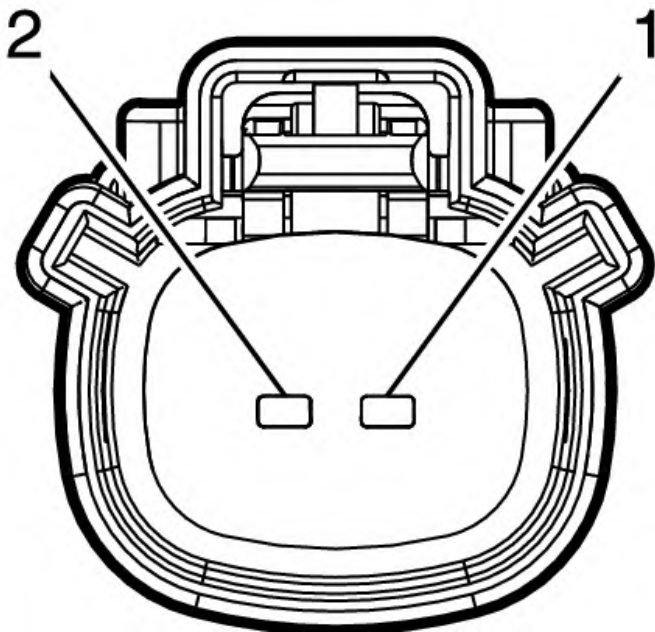
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	-
2	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	-

G18 HIGH PRESSURE FUEL PUMP (LTG)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 13583151
- Service Connector: 13577534
- Description: 2-Way F 150 MX Series, Sealed (BK)

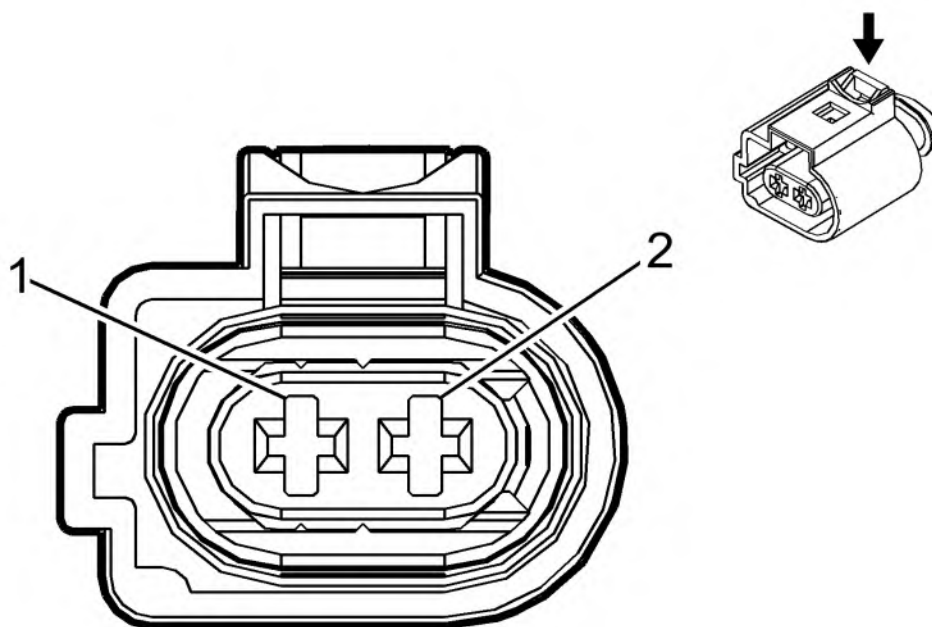
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	-
2	0.5	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	-

G19 REAR WINDOW WASHER PUMP





Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13583821
- Service Connector: 19301746
- Description: 2-Way F 2.8 MCP Series, Sealed (NA)

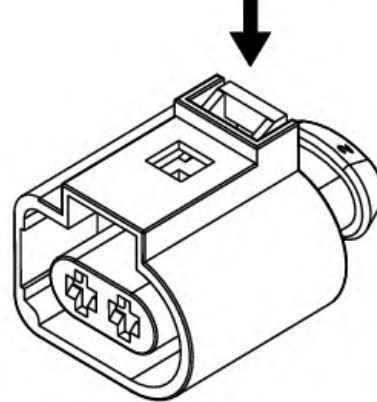
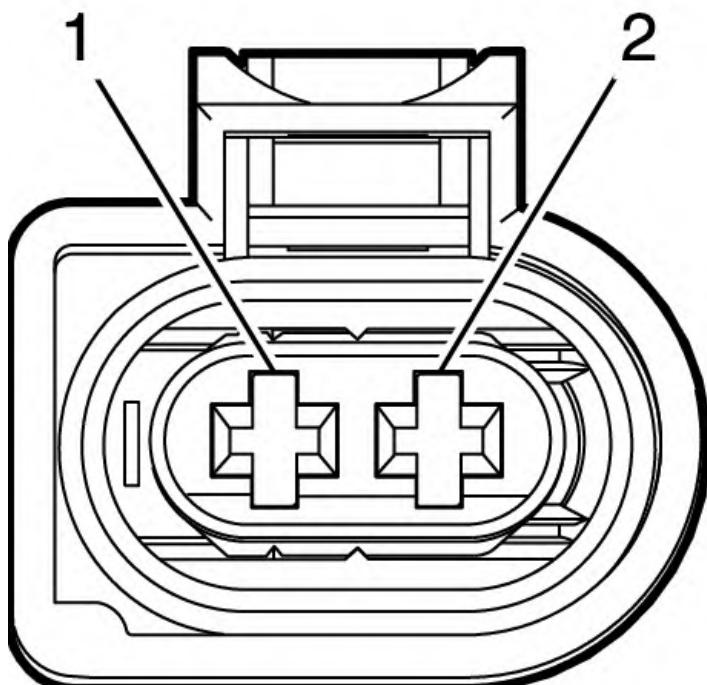
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/VT	392	Rear Window Washer Pump Control	I	-
2	0.75	BK	150	Ground	I	-

G24 WINDSHIELD WASHER PUMP





Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13269697
- Service Connector: 19368727
- Description: 2-Way F 2.8 MDK5 Series, Sealed (BK)

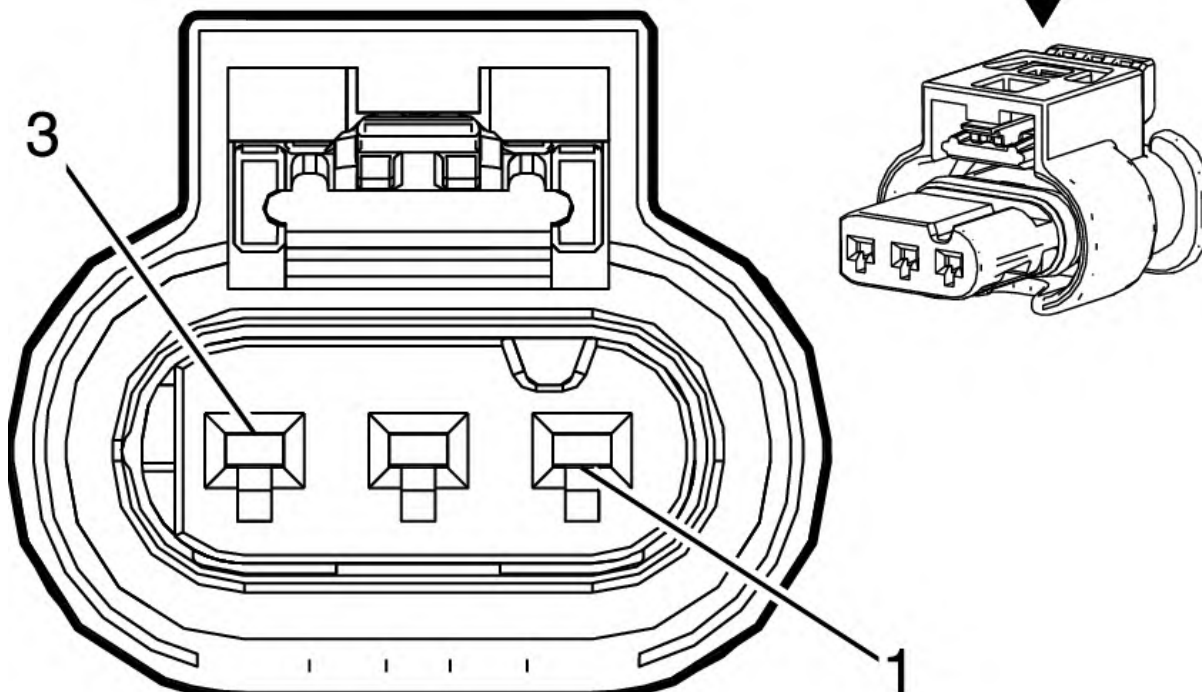
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/VT	228	Windshield Washer Pump Control	I	-
2	0.75	BK	150	Ground	I	-

G36 AUXILIARY HEATER COOLANT PUMP





Connector Part Information

- Harness Type: Engine
- OEM Connector: 55564249
- Service Connector: 13574937
- Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

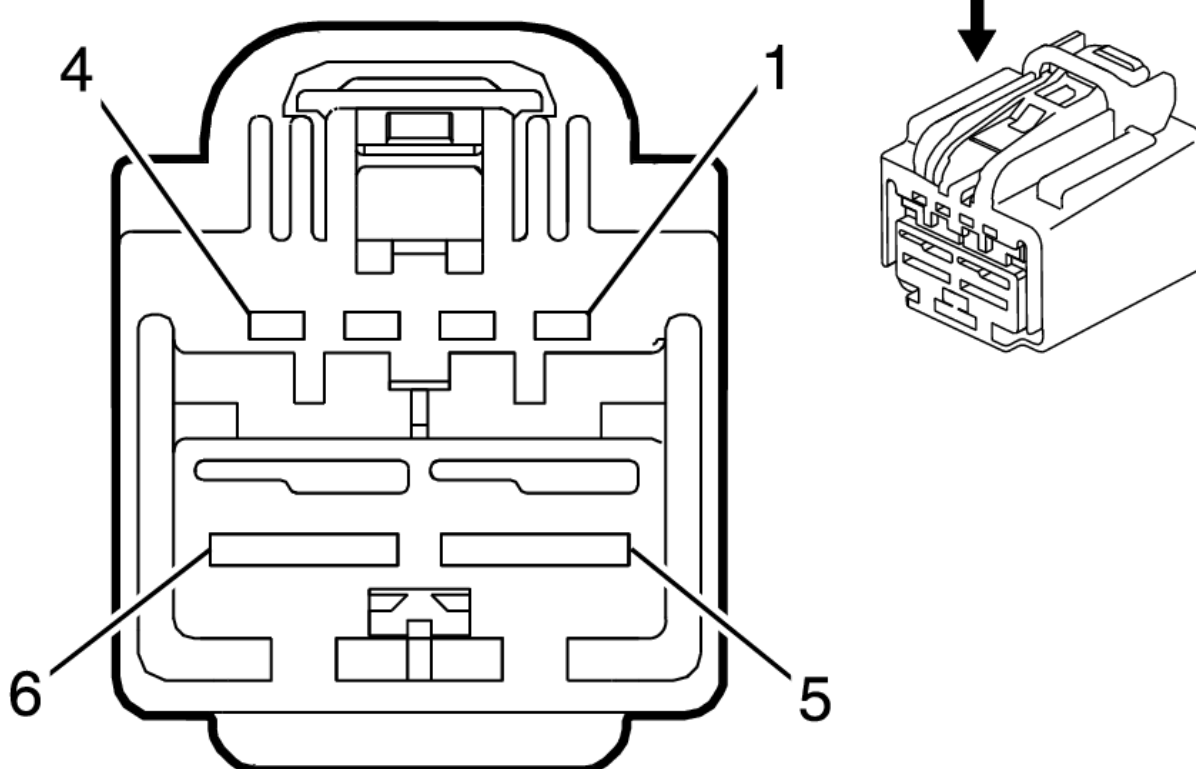
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	550	Ground	I	KL9
2	0.5	YE/BU	5126	After Boil Heater Pump Control	I	KL9
3	-	-	-	Not Occupied	-	-

K8A BLOWER MOTOR CONTROL MODULE - AUXILIARY X1





Connector Part Information

- Harness Type: HVAC Rear
- OEM Connector: 15226104
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F YESC Kaizen Series (BK)

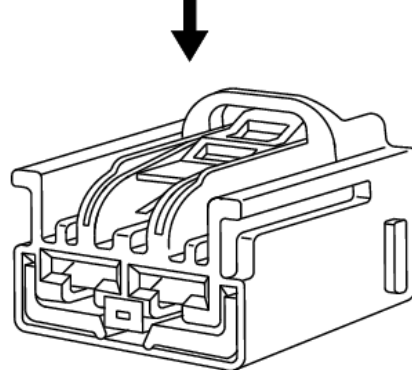
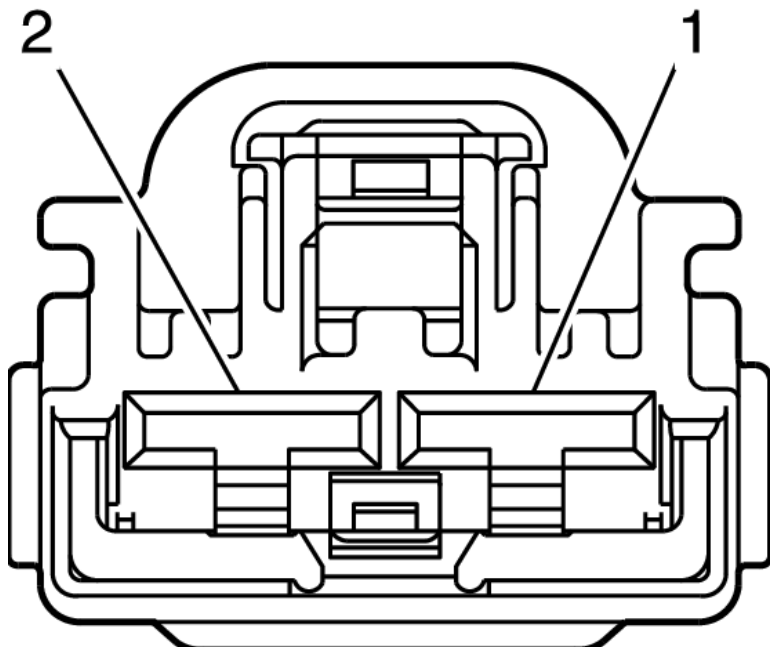
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	2.5	GN/BK	2211	Rear Blower Motor Speed Control	I	-
4	-	-	-	Not Occupied	-	-
5	2.5	BK	1450	Ground	I	-
6	2.5	RD/GY	1740	Battery Positive Voltage	I	-

K8A BLOWER MOTOR CONTROL MODULE - AUXILIARY X2





Connector Part Information

- Harness Type: HVAC Rear
- OEM Connector: 15226103
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 6.3 Series (L-GY)

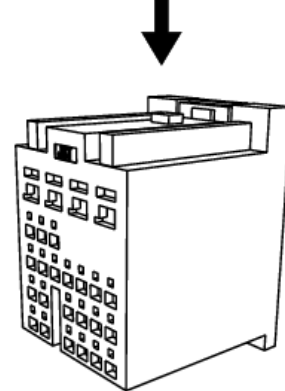
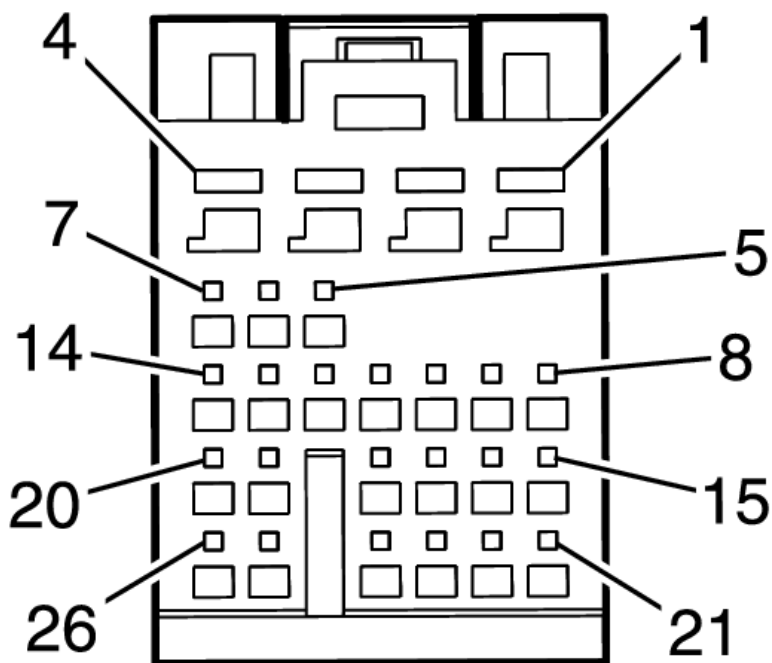
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD/GY	101	Blower Motor Control	I	-
2	2.5	OG/BK	5988	Rear Blower Motor Low Reference	I	-

K9 BODY CONTROL MODULE X1





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151262
- Service Connector: 19151262
- Description: 26-Way F 0.64, 2.8 Series (WH)

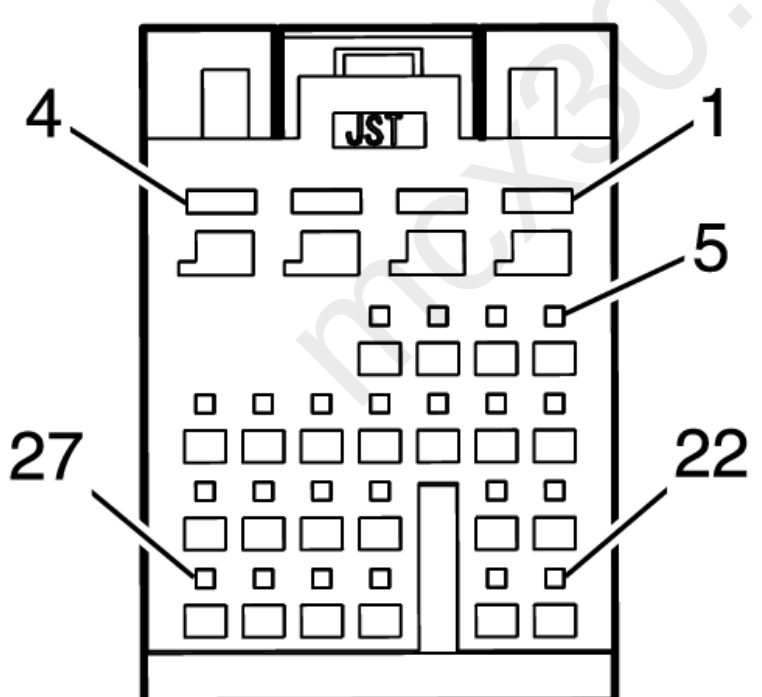
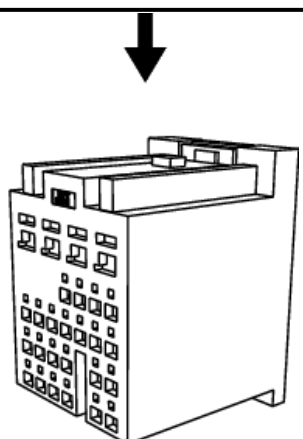
Terminal Part Information

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	SNAC-A061T-M2.8	Delphi 20	C	A
II	13578820	J-35616-64B (LT BU)	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	C	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK/WH	1751	Signal Ground	III	-
2	1	RD/BU	2540	Battery Positive Voltage	III	-
3	1	RD/GY	2140	Battery Positive Voltage	III	-
4	1	RD/BN	2240	Battery Positive Voltage	III	-
5	0.5	WH	6816	Indicator Dimming Control	II	-
6	-	-	-	Not Occupied	-	-
7	0.35	BK/YE	5005	Instrument Panel Lamp Dimmer Switch Low Reference	I	-
8	0.35	BN/BK	5720	Ignition Mode Switch Accessory LED Signal	I	-
9 - 10	-	-	-	Not Occupied	-	-
11	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	I	-
12	0.35	BU/GY	187	Rear Fog Lamp Switch Signal	I	T79
13	0.35	BU/RD	1688	5V Reference	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
14	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	I	-
15	0.35	BU/GY	192	Front Fog Lamp Switch Signal	I	T3U
16	0.35	WH/VT	103	Headlamp Switch On Signal	I	-
17	-	-	-	Not Occupied	-	-
18	0.35	BU/VT	5904	Steering Column Lock Status Signal	I	N06
19	0.5	BK/BN	5360	Brake Apply Sensor Low Reference	II	-
20	0.35	BU/BK	5719	Ignition Mode Switch Start LED Signal	I	-
21	0.35	GY	728	Security Indicator Control	I	-
22	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	I	-
23	-	-	-	Not Occupied	-	-
24	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-
25	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-
26	0.35	BU/WH	3275	Remote Function Actuator Receive Signal	I	-

K9 BODY CONTROL MODULE X2

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151266
- Service Connector: 19151266
- Description: 27-Way F 0.64, 2.8 Series (L-BU)

Terminal Part Information

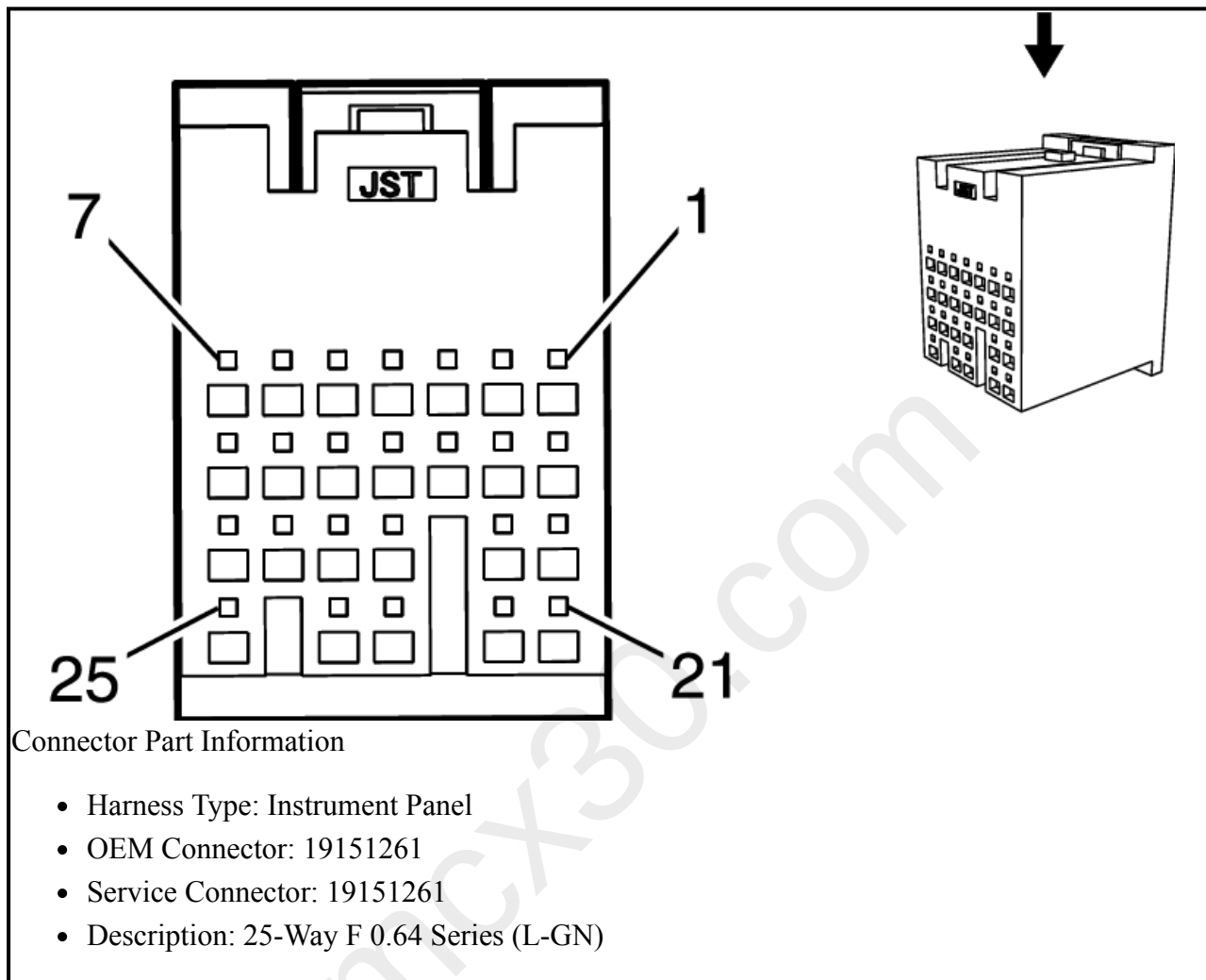
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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575789	J-35616-35 (VT)	J-38125-12A	SNAC-A081T-M2.8	Delphi 20	A	D
II	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
III	13578820	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
IV	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	C	A
V	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/WH	2740	Battery Positive Voltage	V	-
2	1	BK/WH	1751	Signal Ground	IV	-
3	-	-	-	Not Occupied	-	-
4	2	RD/VT	4040	Battery Positive Voltage	I	-
5	-	-	-	Not Occupied	-	-
6	0.5	VT/YE	2663	Driver Mode 5 Indicator Control	III	-
7	0.5	BU/YE	5361	Brake Apply Sensor Signal	III	-
8	0.35	YE	6817	LED Backlight Dimming Control	II	-
9	0.35	YE/GY	44	Instrument Panel Lamp Dimmer Switch Signal	II	-
10	0.35	WH/BU	278	Ambient Light Sensor Signal	II	-
11	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	II	-
12	0.35	BN/BU	391	Rear Window Wiper Switch Signal	II	-
13	0.5	WH	5359	Brake Apply Sensor Control	III	-
14	0.35	BU/VT	1788	Traction Control Switch Signal 1	II	-
15	0.35	BN/WH	781	Driver Door Lock Switch Unlock Signal	II	-
16	0.35	GY	3273	Remote Function Actuator Low Reference	II	-
17	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	II	-
18	0.35	BU	6856	Headlamp Automatic High Beam Dim Control	II	-
19	0.35	BN/YE	780	Driver Door Lock Switch Lock Signal	II	-
20	0.5	WH/BU	3691	Trailer Brake Apply Signal	III	-
21	0.35	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	II	-
22	0.35	GN	5060	Low Speed GMLAN Serial Data	II	-
23	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	III	-
24	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	III	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.35	GY/WH	3272	Remote Function Actuator Control	II	-
26	0.35	GN/WH	111	Hazard Switch Signal	II	-
27	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	II	-

K9 BODY CONTROL MODULE X3



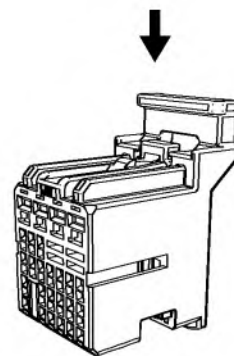
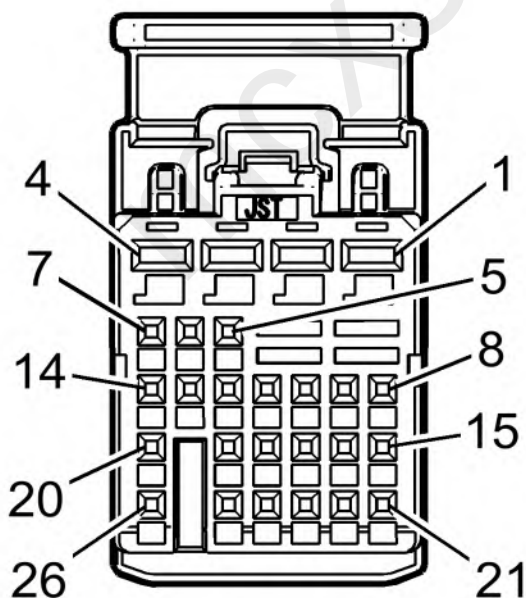
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	-
2	0.35	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	-
3	0.35	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	-
4	0.35	YE	7556	Lighting Control Switch Reference	I	-
5	0.35	VT/YE	4	Accessory Ignition Voltage	I	-
6	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	-
7	0.35	GN	11	Headlamp High Beam Control	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	-	-	-	Not Occupied	-	-
9	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	-
10	0.35	BK/GY	6009	Windshield Wiper Switch Low Reference	I	-
11	0.35	WH	524	Headlamp Dimmer Switch High Beam Signal	I	-
12	0.35	WH/GN	663	Hazard Switch Left Turn Signal	I	-
13	0.35	YE/BU	1714	Windshield Wiper Switch Low Signal	I	-
14 - 15	-	-	-	Not Occupied	-	-
16	0.35	GY/GN	5737	Adaptive Cruise Control Gap Up/Down Switch Signal	I	UEU
17	0.35	YE/BN	307	Headlamp Switch Flash To Pass Signal	I	-
18	0.35	GN/WH	3287	Horn Switch Signal	I	-
19	-	-	-	Not Occupied	-	-
20	0.35	GY	1715	Windshield Wiper Switch High Signal	I	-
21 - 22	-	-	-	Not Occupied	-	-
23	0.35	BU/GY	553	Shift Select Switch Performance Signal	I	W49
24	0.35	VT/BU	664	Hazard Switch Right Turn Signal	I	-
25	0.35	WH/BK	94	Windshield Washer Switch Signal	I	-

K9 BODY CONTROL MODULE X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151263
- Service Connector: 19151263
- Description: 26-Way F 0.64, 2.8 Series (BK)

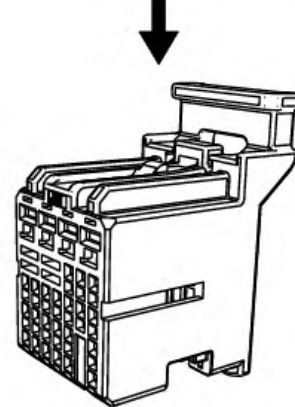
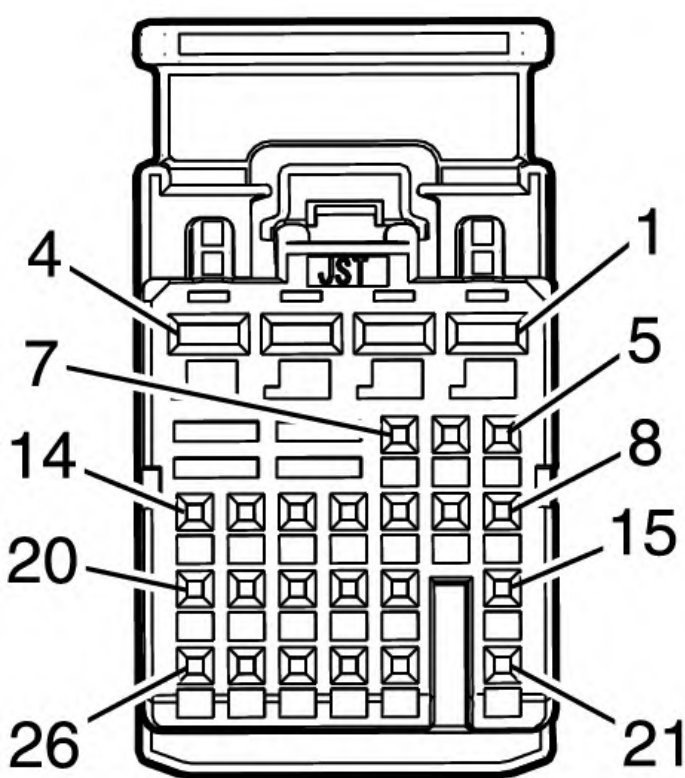
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
II	13578820	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
III	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/BN	309	Right Park Lamp Control	III	-
2	0.75	PU/GY	709	Left Park Lamp Control	III	-
3	0.75	GN/PU	1315	Right Front Turn Signal Lamp Control	III	-
4	0.75	BU/PU	1335	Right Rear Turn Signal Lamp Control	III	CZ3
5 - 6	-	-	-	Not Occupied	-	-
7	0.5	YE/BU	18	Left Rear Stop/Turn Lamp Control	II	-
8	0.35	GN/BN	5706	Endgate Latch Relay Control	I	-TB5/TC2
9	0.35	GY/PU	3264	Logistic Mode Relay Close Control	I	BAG
10	0.35	YE	5420	Rear Wiper Motor Relay Coil Control	I	-
11	0.5 0.35	PU/WH PU/WH	5065 5065	Stop Lamp Relay Coil Control Stop Lamp Relay Coil Control	II I	W49 X88
12	0.35	GY/GN	70	RAP Relay Switch Control	I	-
13	0.35	GN/YE	6846	Rear License Lamp Control	I	-
14	0.35	BN/GY	2268	Windshield Washer Relay Control	I	-
15	0.35	GN/PU	5199	Run/Crank Relay Coil Control	I	-
16	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	-
17	0.5	BN/GN	196	Windshield Wiper Motor Park Switch Signal	II	-
18 - 19	-	-	-	Not Occupied	-	-
20	0.5	RD/WH	2740	Battery Positive Voltage	II	-
21	-	-	-	Not Occupied	-	-
22	0.5	PU/YE	5985	Accessory Wakeup Serial Data	II	-
23	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
24	0.5	BN/GN	109	Hood Ajar Switch Signal	II	-
25	0.35	YE/BU	4086	Pushbutton Start Challenge Active Signal	I	-
26	0.5	BK	1050	Ground	II	-

K9 BODY CONTROL MODULE X5

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Connector Part Information

- Harness Type: Body
- OEM Connector: 19151264
- Service Connector: 19151264
- Description: 26-Way F 0.64, 2.8 Series (BN)

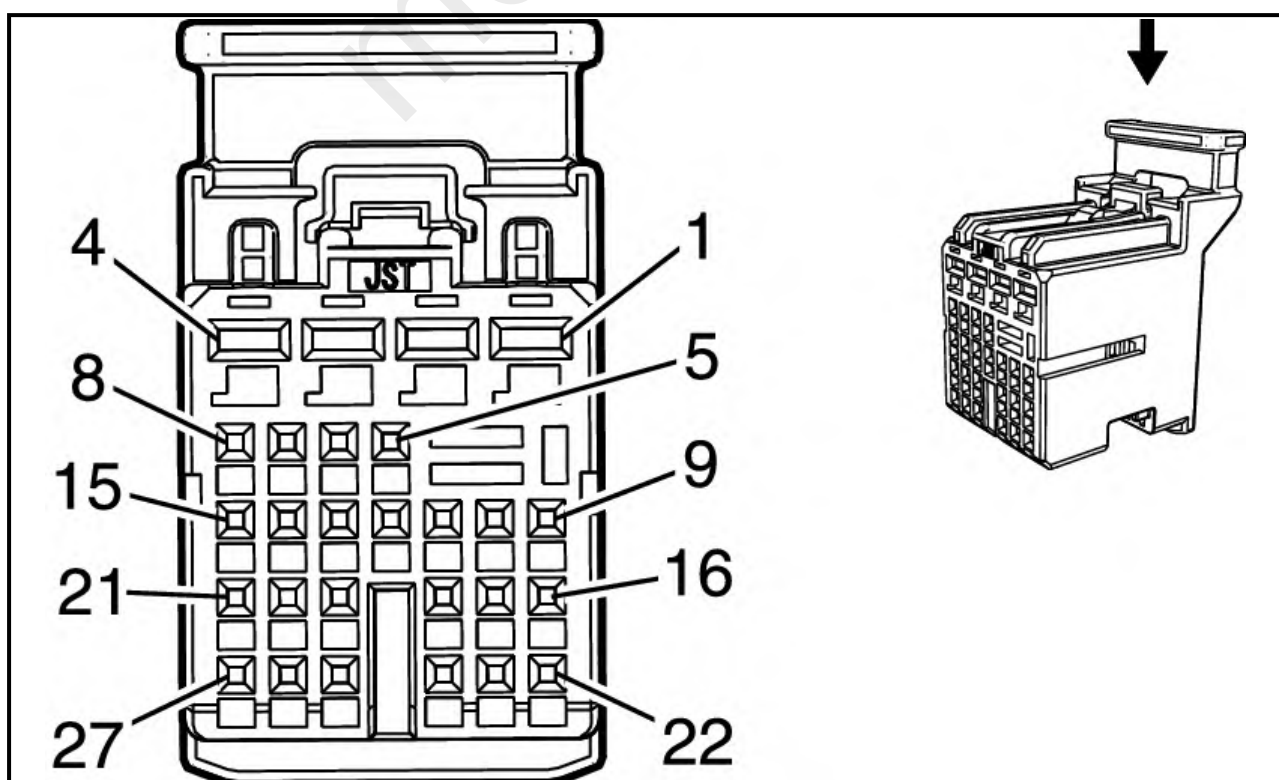
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	C	A
II	13578820	J-35616-64B (LT BU)	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	C	A
IV	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1334	Left Rear Turn Signal Lamp Control	IV	CZ3
2	0.75	BU/WH	1314	Left Front Turn Signal Lamp Control	IV	-
3	0.75	RD/GN	3840	Battery Positive Voltage	IV	-
4	1	RD/WH	3440	Battery Positive Voltage	III	-
5 - 6	-	-	-	Not Occupied	-	-
7	0.5	BN/GN	19	Right Rear Stop/Turn Lamp Control	II	CZ3
	0.5	BN/GN	19	Right Rear Stop/Turn Lamp Control	II	-CZ3
	0.5	BN/GN	19	Right Rear Stop/Turn Lamp Control	II	W49

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	0.35	BU/WH	5186	Left Trailer Turn Signal Lamp Control	I	-
9	0.35	BN/WH	1317	Fog Lamp Relay Control	I	T3U
10	0.5	BN/VT	2914	Driver Mode 4 Indicator Control	II	X88
11	0.35	GN/WH	2270	Rear Window Washer Relay Control	I	-
12	0.35	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	-
13	0.35	YE/BU	2228	Right Headlamp Relay Control	I	-
14	-	-	-	Not Occupied	-	-
15	0.5	YE	6812	Out of Park Signal	II	AS8
16	0.35	YE/GY	122	Rear Fog Lamp Control	I	T79
17	0.35	YE/GY	5187	Right Trailer Turn Signal Lamp Control	I	-
18	0.35	BU	45	Park Lamp Relay Control	I	-
19	0.35	BN/WH	28	Horn Relay Control	I	-
20	0.35	YE	5704	Endgate Latch Relay Coil Control	I	-TB5/TC2
21	0.5	YE/BU	2912	Driver Mode 2 Indicator Control	II	X88
22	0.35	YE/BN	2229	Left Headlamp Relay Control	I	-
23	0.5	WH/GN	2911	Driver Mode 1 Indicator Control	II	1NA+V92 4NA
	0.35	WH/GN	2911	Driver Mode 1 Indicator Control	I	
24	0.5	WH/VT	860	Front Windshield Wiper Switch High Signal	II	-
25	0.35	BU/BN	1378	Transmission Shift Selector Display Signal	I	M3W
26	-	-	-	Not Occupied	-	-

K9 BODY CONTROL MODULE X6



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151267
- Service Connector: 19151267
- Description: 27-Way F 0.64, 2.8 Series (PK)

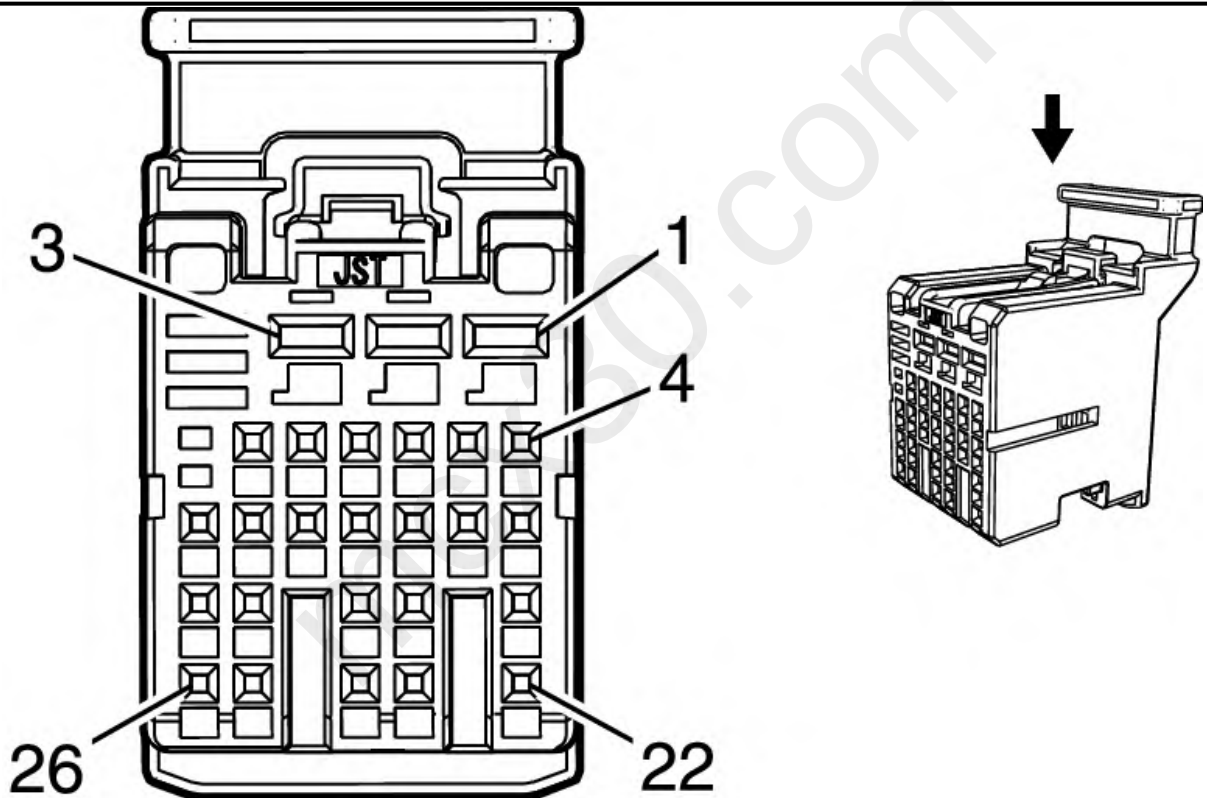
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A
II	13578820	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
III	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	C	A
IV	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	5911	Door Lock Actuator Lock Control 2	IV	-
2	1	GY	295	Door Lock Actuator Lock Control	III	-
3	1	BK	750	Ground	III	-
4	1	BN/YE	294	Door Lock Actuator Unlock Control	III	-
5	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal 1	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
8	-	-	-	Not Occupied	-	-
9	0.35 0.35	GN/BU GN/BU	6133 6133	Local Interconnect Network Serial Data Bus 2 Local Interconnect Network Serial Data Bus 2	I I	W49+KA1+KA6 W49+KA1-KA6
10	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	I	-
11	0.35	BU/GY	4672	Dome Lamp Off Indicator Control	I	-
12	0.35 0.35	WH/VT WH/VT	6567 6567	Rear Turn Lamp Feedback Signal Rear Turn Lamp Feedback Signal	I I	CZ3 -CZ3
13 - 14	-	-	-	Not Occupied	-	-
15	0.35	YE/BU	5797	Rear Closure Handle Switch Open Signal	I	-
16	0.35 0.35	GN/BN GN/BN	6132 6132	Local Interconnect Network Serial Data Bus 1 Local Interconnect Network Serial Data Bus 1	I I	C3U W49
17	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
18	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-F45/F48/UEU
19	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-F45/F48/UEU
20 - 23	-	-	-	Not Occupied	-	-
24	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	F45/F48/UEU -F45-F48-UEU
	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	
25	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	F45/F48/UEU -F45-F48-UEU
	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	
26	0.5	WH/BU	3691	Trailer Brake Apply Signal	II	V92
27	-	-	-	Not Occupied	-	-

K9 BODY CONTROL MODULE X7



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151265
- Service Connector: 19151265
- Description: 26-Way F 0.64, 2.8 Series (GY)

Terminal Part Information

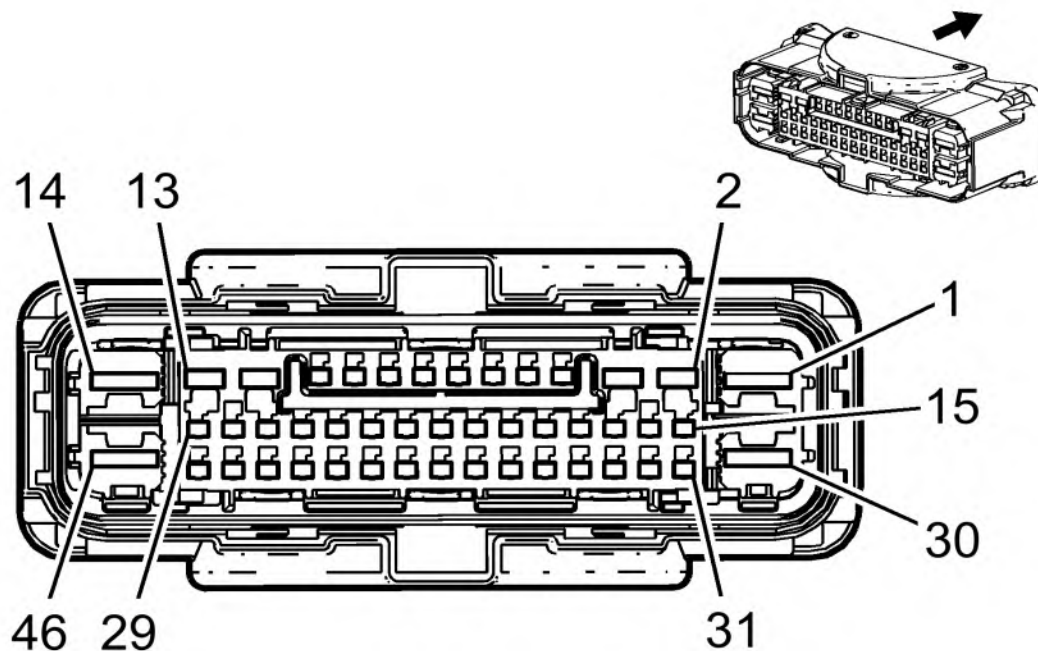
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
II	13578820	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	Delphi 20	J	J
III	13587507	J-35616-35 (VT)	J-38125-12A	SNAC-A061T-M2.8	Delphi 20	E	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	157	Interior Lamp Control	III	-
2	0.75	GN/WH	24	Backup Lamp Control	III	-
3	0.75	WH/BN	6815	Inadvertent Power Control	III	-
4	0.35	BN/YE	186	Fuel Door Lock Relay Control	I	N08
5	-	-	-	Not Occupied	-	-
6	0.35	VT/BK	7553	Park Lock Solenoid Control	I	M3V
7	0.35	GY/WH	149	Courtesy Lamp Control	I	-
8	0.5	YE/WH	58	Right Cornering Lamp Control	II	-
9	0.35	YE	6817	LED Backlight Dimming Control	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	YE/VT	244	Passenger Door Lock Switch Lock Control	I	-
12	0.35	BN/VT	245	Passenger Door Lock Switch Unlock Control	I	-
13	0.35	WH/VT	5905	Key Capture/Column Lock Shift Position Signal	I	X88
14 - 15	-	-	-	Not Occupied	-	-
16	0.35	VT/BU	3263	Logistic Mode Relay Open Control	I	BAG
17	0.5	BU/BN	38	Backup Lamp Relay Control	II	V92
18	-	-	-	Not Occupied	-	-
19	0.35	GY	156	Courtesy Lamp Switch Signal	I	-
20	-	-	-	Not Occupied	-	-
21	0.35	WH/BK	7544	Right Rear Turn Lamp Feedback Signal	I	-
22	-	-	-	Not Occupied	-	-
23	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
24	-	-	-	Not Occupied	-	-
25	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	K4C
26	-	-	-	Not Occupied	-	-

K17 ELECTRONIC BRAKE CONTROL MODULE

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13582922
- Service Connector: 19333357
- Description: 46-Way F 1.2, 2.8, 5.8 Series, Sealed (BK)

Terminal Part Information

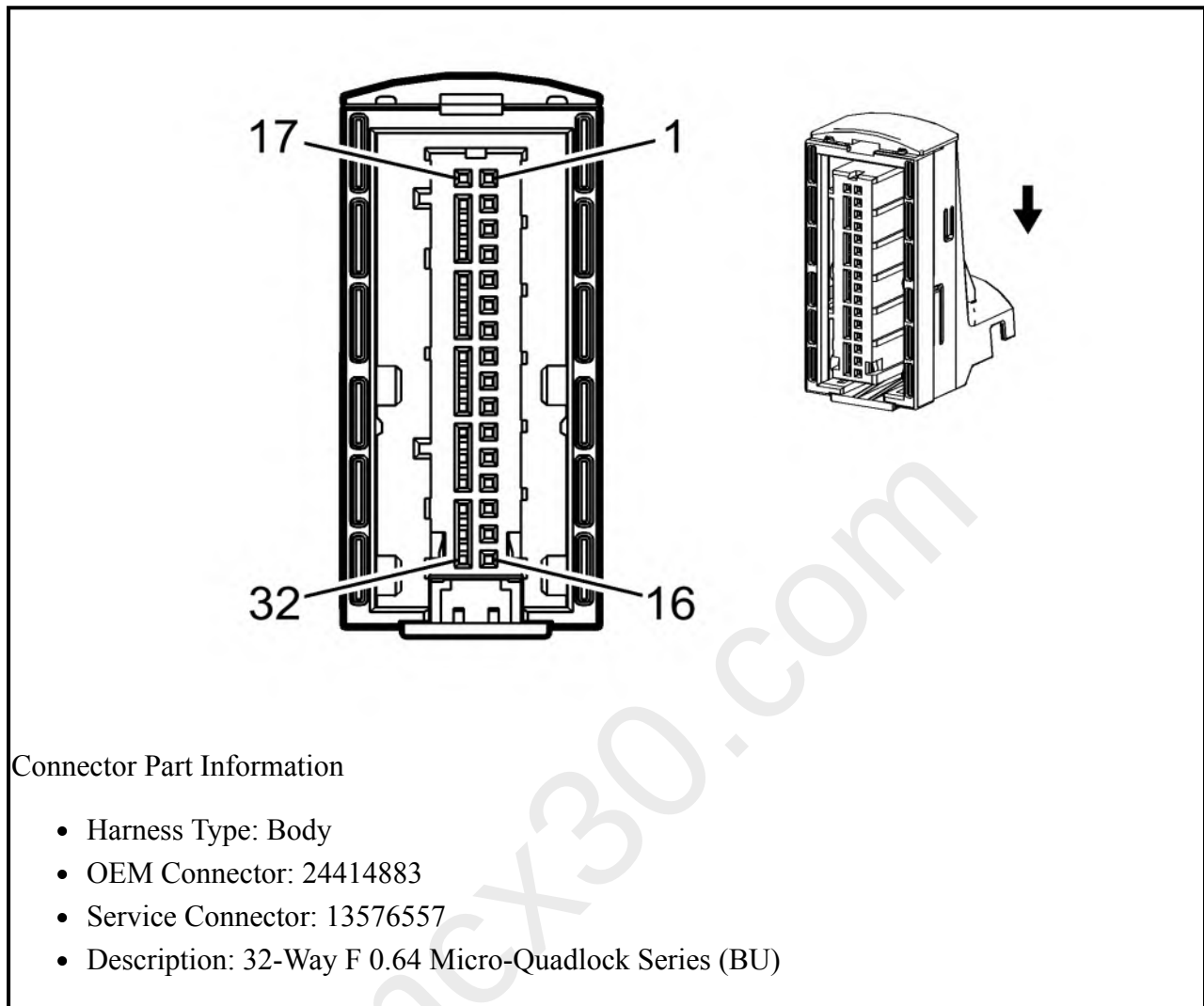
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19300444	J-35616-16 (LT GN)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
II	19300445	J-35616-16 (LT GN)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
III	19330700	J-35616-35 (VT)	J-38125-22	Not Available	Not Available	Not Available	Not Available
IV	19333305	J-35616-40 (BU)	J-38125-22	Not Available	Not Available	Not Available	Not Available
V	19369189	J-35616-40 (BU)	J-38125-22	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/YE	442	Battery Positive Voltage	V	-
2	2.5	WH	2001	Park Brake Motor Apply Left Rear Control	III	-
3	2.5	GY/BK	4369	Park Brake Motor Low Reference Left Rear	III	-
4	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	II	-
5	0.5	GY	830	Wheel Speed Sensor Signal Left Front	II	-
6	-	-	-	Not Occupied	-	-
7	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	0.5	WH	6106	High Speed GMLAN Serial Data (-) 2	II	-
9	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
10	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	II	-
11	0.5	YE	872	Wheel Speed Sensor Signal Right Front	II	-
12	2.5	GN/PU	1988	Park Brake Motor Apply Right Rear Control	III	-
13	2.5	GY	4368	Park Brake Motor Low Reference Right Rear	III	-
14	4	BK	1050	Ground	V	-
15	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	II	-
16	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	II	-
17 - 20	-	-	-	Not Occupied	-	-
21	0.35 0.35	YE/RD BN	7683 6107	Park Brake Release Switch Voltage Reference Park Brake Apply Switch Signal	I I	W49 X88
22	0.35 0.35	GY/RD YE	7684 1492	Park Brake Apply Switch Voltage Reference Park Brake Switch Supply Voltage	I I	W49 X88
23	0.35	BU/BK	6108	Park Brake Release Switch Signal	I	-
24	0.35 0.35	YE BU/PU	1492 1134	Park Brake Switch Supply Voltage Park Brake Switch Signal	I I	W49 X88
25	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-
26	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-
27	0.5 0.5	GN/GY GN/GY	333 333	Brake Fluid Level Sensor Signal Brake Fluid Level Sensor Signal	II II	W49 X88
28	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	II	-
29	0.5	PU	882	Wheel Speed Sensor Signal Right Rear	II	-
30	2.5	RD/GY	1042	Battery Positive Voltage	IV	-
31	0.35 0.35	BN GY/RD	6107 7684	Park Brake Apply Switch Signal Park Brake Apply Switch Voltage Reference	I I	W49 X88
32	0.35 0.35	BU/PU YE/RD	1134 7683	Park Brake Switch Signal Park Brake Release Switch Voltage Reference	I I	W49 X88
33 - 40	-	-	-	Not Occupied	-	-
41	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-
42	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
43	0.5	BN	6305	Brake Vacuum Switch Signal	II	-
44 - 45	-	-	-	Not Occupied	-	-
46	4	BK	1050	Ground	V	-

K19 SUSPENSION CONTROL MODULE (F45)



Terminal Part Information

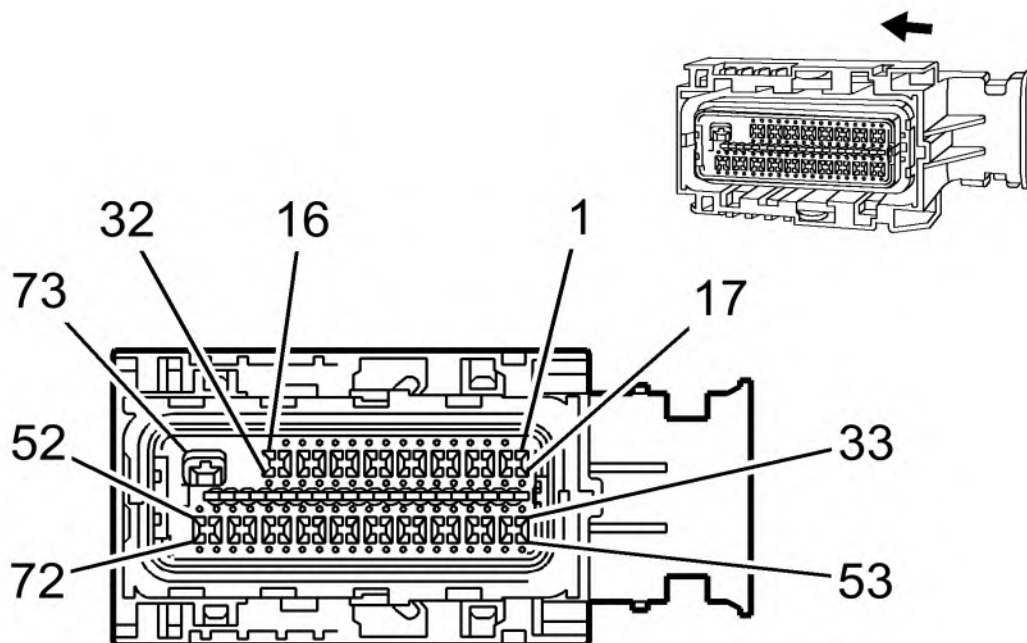
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575584	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
II	13575859	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GY	1740	Battery Positive Voltage	II	-
2	0.5	GN/GY	1119	Right Rear Damping Servo Control	II	-
3	0.5	BN/GN	1118	Right Rear Damping Servo Control	II	-
4	0.5	BU/GY	1114	Left Rear Damping Servo Control	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.5	GN/VT	1115	Left Rear Damping Servo Control	II	-
6	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
7	0.5	BN/RD	1819	Right Front Wheel Accelerometer 5V Reference	II	-
8	0.5	BK/GN	1105	Right Front Wheel Damping Accelerometer Low Reference	II	-
9	-	-	-	Not Occupied	-	-
10	0.5	WH	1100	Left Front Wheel Damping Accelerometer Signal	II	-
11	0.5	WH	1106	Right Front Wheel Damping Accelerometer Signal	II	-
12	0.5	YE/RD	1817	Left Front Wheel Accelerometer 5V Reference	II	-
13	0.5	GY/BU	1113	Left Front Damping Servo Control	II	-
14	0.5	BN/WH	1107	Left Front Damping Servo Control	II	-
15	0.5	BN/BU	1116	Right Front Damping Servo Control	II	-
16	0.5	GY/WH	1117	Right Front Damping Servo Control	II	-
17	-	-	-	Not Occupied	-	-
18	0.5	BK	2150	Ground	II	-
19	-	-	-	Not Occupied	-	-
20	0.5	BK/BN	1099	Left Front Wheel Damping Accelerometer Low Reference	II	-
21	-	-	-	Not Occupied	-	-
22	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-
23	0.35	BU	2500	High Speed GMLAN Serial Data (+) 1	I	-
24	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-
25	0.35	WH	2501	High Speed GMLAN Serial Data (-) 1	I	-
26 - 27	-	-	-	Not Occupied	-	-
28	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	-
29	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) 2	I	-
30	0.35	WH	6106	High Speed GMLAN Serial Data (-) 2	I	-
31	0.35	WH	6106	High Speed GMLAN Serial Data (-) 2	I	-
32	-	-	-	Not Occupied	-	-

K20 ENGINE CONTROL MODULE X1 (LFY)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 12615654
- Service Connector: 13574782
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

Terminal Part Information

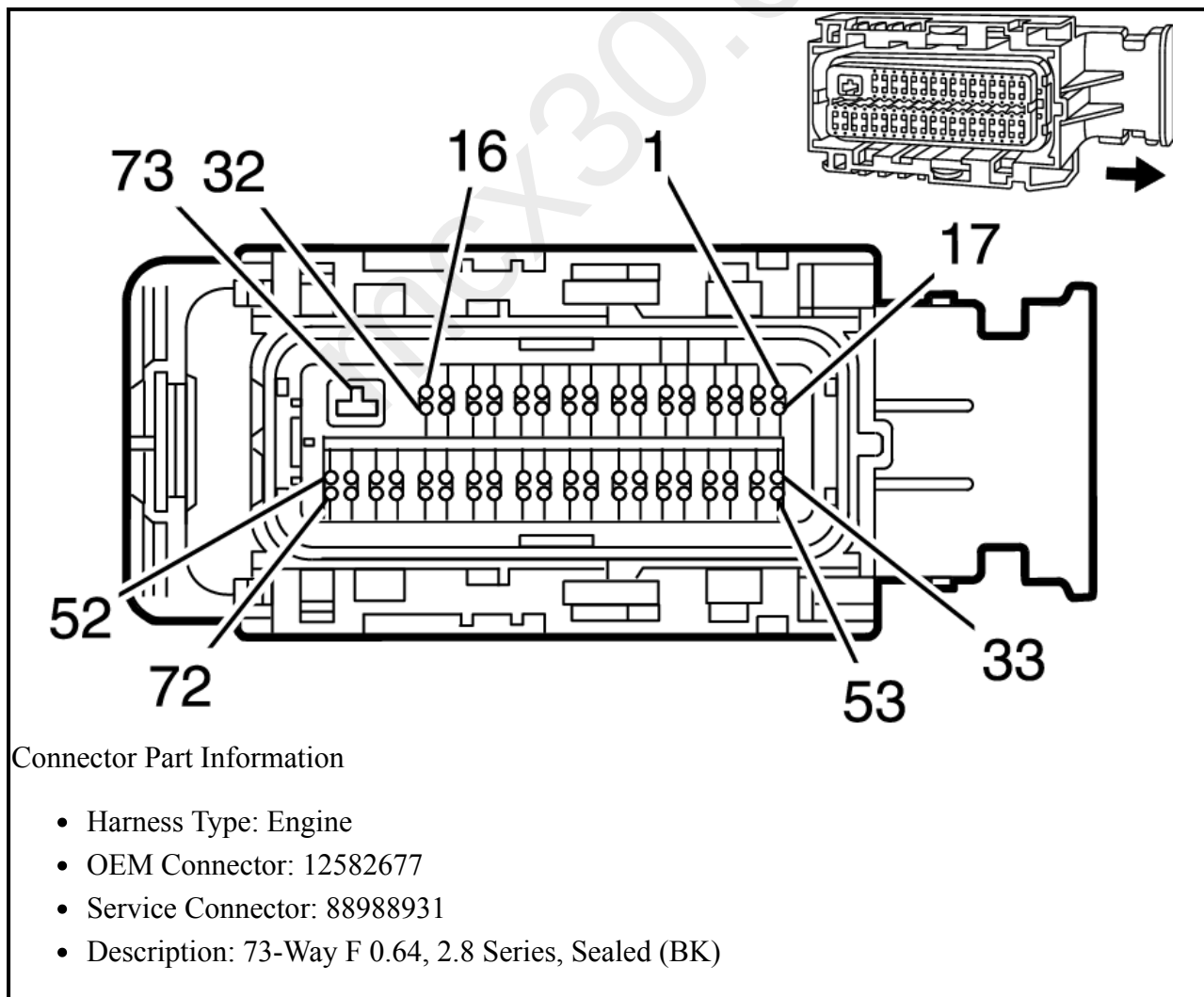
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	2	5
II	19330179	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	-	-	-	Not Occupied	-	-
5	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	II	-
6	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	II	-
7	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference 1	II	-
8	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	-
9	0.5	BK/YE	5382	Brake Position Sensor Low Reference	II	-
10 - 11	-	-	-	Not Occupied	-	-
12	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	-
13	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	-
14	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
15	0.5	YE	5991	Powertrain Relay Coil Control	II	-
16	0.5	BN/WH	419	Check Engine Indicator Control	II	-
17	0.5	WH	2368	Cooling Fan Control Signal	II	-
18 - 20	-	-	-	Not Occupied	-	-
21	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	II	-
22	0.5	GN/WH	1162	Accelerator Pedal Position Signal 2	II	-
23	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	II	-
24	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	-
25	0.5	WH/RD	5381	Brake Position Sensor 5V Reference	II	-
26	0.5	WH/GN	5380	Brake Position Sensor Signal	II	-
27	-	-	-	Not Occupied	-	-
28	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	-
29	-	-	-	Not Occupied	-	-
30	0.5	GN/WH	492	Mass Air Flow Sensor Signal	II	-
31	0.5	YE/BK	625	Starter Enable Relay Control	II	-
32 - 33	-	-	-	Not Occupied	-	-
34	0.5	GY	5127	After Boil Heater Relay Control	II	-
35 - 37	-	-	-	Not Occupied	-	-
38	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	II	-
39	0.5	BN/GY	4008	Humidity Sensor Signal	II	-
40	0.5	YE/BU	4171	Transmission Position Sensor A 9V Reference	II	-
41 - 43	-	-	-	Not Occupied	-	-
44	0.5	BK/WH	2151	Signal Ground	II	-
45	0.5	YE/RD	6031	Brake Vacuum Sensor 5V Reference	II	-
46	0.5	GY	4109	Driver Mode Switch 5V Reference	II	-
47	0.5	BN/RD	2700	A/C Pressure Sensor 5V Reference	II	-
48	-	-	-	Not Occupied	-	-
49	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply 3	II	-
50	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	II	-
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	-
52	0.5	RD/WH	140	Battery Positive Voltage	II	-
53	-	-	-	Not Occupied	-	-
54	0.5	WH	1310	EVAP Canister Vent Solenoid Control	II	-
55	-	-	-	Not Occupied	-	-
56	0.5	YE	5530	Hood Open Switch Signal	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
57 - 59	-	-	-	Not Occupied	-	-
60	0.5	WH/BU	5726	Ignition Mode Switch Mode Control Backup	II	-
61 - 63	-	-	-	Not Occupied	-	-
64	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	-
65	0.5	YE/VT	6030	Brake Vacuum Sensor Signal	II	-
66	0.5	WH/VT	4108	Driver Mode Switch Signal	II	-
67	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	-
68	-	-	-	Not Occupied	-	-
69	0.5	GN/GY	465	Fuel Pump Primary Relay Control	II	-
70	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	II	-
71	0.5	VT/GY	139	Run/Crank Ignition 1 Voltage	II	-
72	0.5	VT/BU	5705	Powertrain Main Relay Fused Control 6	II	-
73	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	-

K20 ENGINE CONTROL MODULE X2 (LFY)



Terminal Part Information

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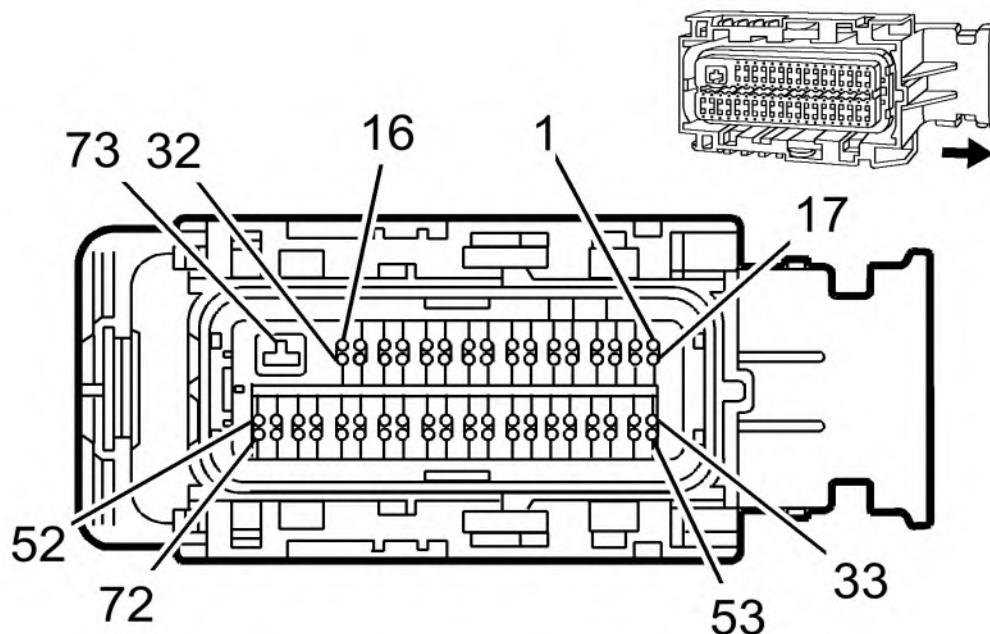
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	-
2	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2	II	-
3 - 6	-	-	-	Not Occupied	-	-
7	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	II	-
8	-	-	-	Not Occupied	-	-
9	0.5	BN/GN	1174	Oil Level Switch Signal	II	-
10	-	-	-	Not Occupied	-	-
11	0.5	YE/BN	331	Oil Pressure Sensor Signal	II	-
12	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	II	-
13 - 16	-	-	-	Not Occupied	-	-
17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	-
18	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1	II	-
19 - 20	-	-	-	Not Occupied	-	-
21	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	II	-
22	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	II	-
23 - 27	-	-	-	Not Occupied	-	-
28	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	-
29 - 34	-	-	-	Not Occupied	-	-
35	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor 1	II	-
36	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor 1	II	-
37	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	-
38	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor 2	II	-
39	0.5	BK/YE	1716	Knock Sensor Low Reference 1	II	-
40	0.5	BK/GY	2303	Knock Sensor Low Reference 2	II	-
41	-	-	-	Not Occupied	-	-
42	0.5	VT/BU	7330	Pre Throttle Air Temp and Press (TMAP) Air Pressure Signal	II	-
43	0.5	GY/RD	7331	Pre Throttle Air Temp and Press (TMAP) 5V Reference	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
44 - 45	-	-	-	Not Occupied	-	-
46	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	II	-
47	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	-
48	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	II	-
49 - 50	-	-	-	Not Occupied	-	-
51	0.5	BK/GY	3927	IMS Mode Switch Low Reference	II	-
52	0.5	BN/WH	582	Throttle Actuator Control Close	II	-
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor 1	II	-
56	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor 1	II	-
57	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	-
58	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2	II	-
59	0.5	VT/GY	496	Knock Sensor Signal 1	II	-
60	0.5	WH/GY	1876	Knock Sensor Signal 2	II	-
61 - 62	-	-	-	Not Occupied	-	-
63	0.5	BK/VT	7332	Pre Throttle Air Temp and Press (TMAP) Low Reference	II	-
64 - 66	-	-	-	Not Occupied	-	-
67	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	II	-
68 - 69	-	-	-	Not Occupied	-	-
70	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	II	-
71	-	-	-	Not Occupied	-	-
72	0.5	YE	581	Throttle Actuator Control Open	II	-
73	2.5	BK/WH	451	Signal Ground	I	-

K20 ENGINE CONTROL MODULE X3 (LFY)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 12582678
- 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	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64B (LT BU)	J-38125-213	Not Available	Not Available	Not Available	Not Available

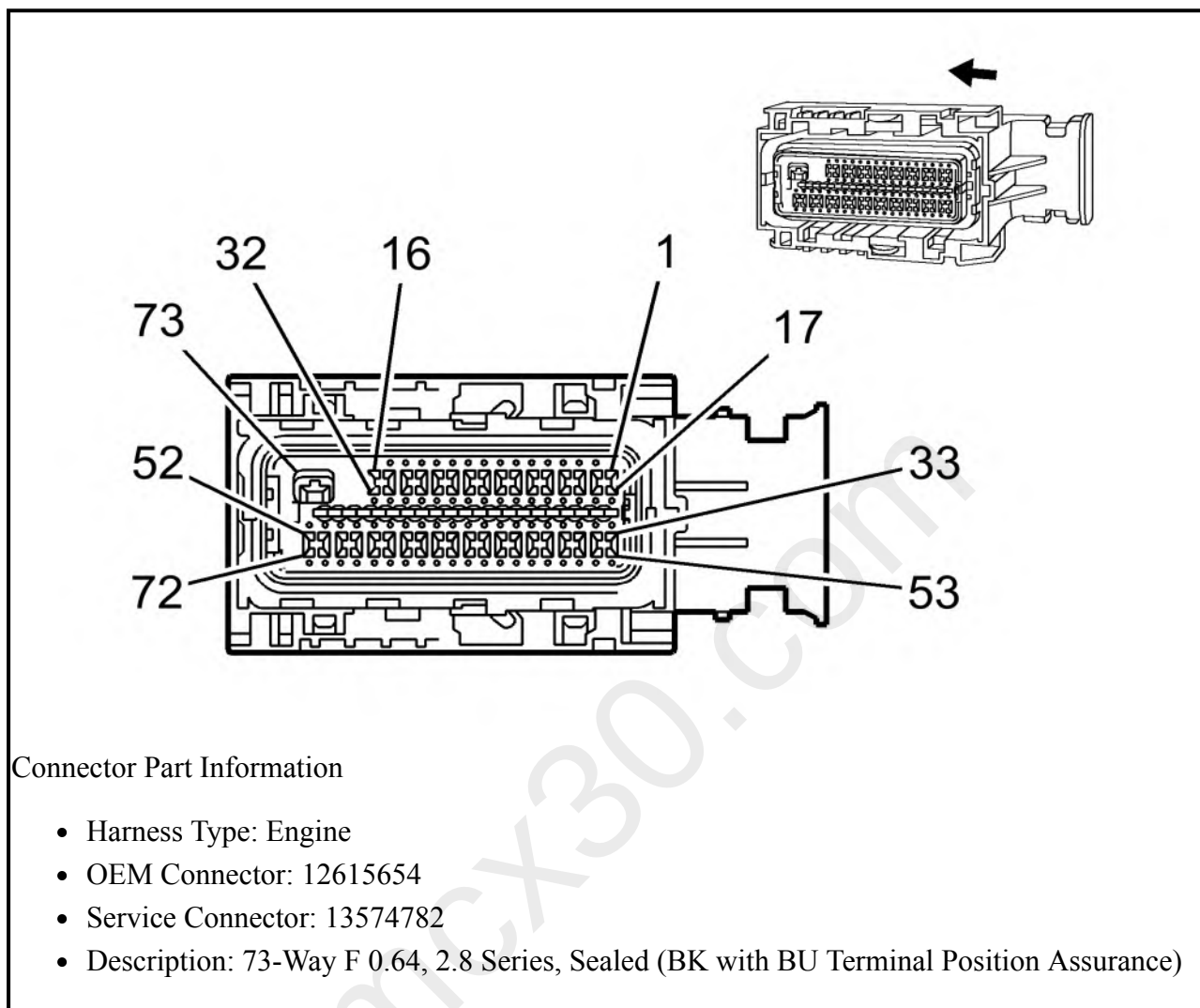
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	0.5	GN/BN	5298	Camshaft Position Exhaust Sensor Control 2	II	-
4	0.5	YE	5276	Camshaft Position Intake Sensor 2	II	-
5	0.5	WH/BU	5302	Camshaft Position Intake Sensor Control 2	II	-
6	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	-
7	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	-
8	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	-
9	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	-
10 - 11	-	-	-	Not Occupied	-	-
12	0.5	BN/BU	2126	Ignition Control 6	II	-
13	0.5	BU/GY	2125	Ignition Control 5	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
14	0.5	YE/BU	2124	Ignition Control 4	II	-
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	-
16	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	-
17 - 18	-	-	-	Not Occupied	-	-
19	0.5	BK/BN	5299	Camshaft Position Exhaust Sensor Low Reference 2	II	-
20	0.5	VT/BU	5274	Camshaft Position Exhaust Sensor 2	II	-
21	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference 2	II	-
22	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	-
23	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	II	-
24	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	II	-
25	-	-	-	Not Occupied	-	-
26	0.5	BN	25	Charge Indicator Control	II	-
27	-	-	-	Not Occupied	-	-
28	0.5	GN/BU	2123	Ignition Control 3	II	-
29	0.5	BU/WH	2122	Ignition Control 2	II	-
30	0.5	BU/VT	2121	Ignition Control 1	II	-
31	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	II	-
32	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	II	-
33	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	-
34	-	-	-	Not Occupied	-	-
35	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	II	-
36	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	II	-
37	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	II	-
38	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	-
39	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	II	-
40	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	II	-
41	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	II	-
42	-	-	-	Not Occupied	-	-
43	0.5	BK/BU	6755	Cam Phaser Y Low Reference	II	-
44	0.5	GN	5272	Camshaft Phaser Intake Solenoid 2	II	-
45	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	-
46	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
47	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	-
48	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	-
49	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	-
50	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	-
51	0.75	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	-
52	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	-
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	-
56	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	II	-
57	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	-
58	-	-	-	Not Occupied	-	-
59	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	-
60	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	-
61	0.5	GY	23	Generator Field Duty Cycle Signal	II	-
62	-	-	-	Not Occupied	-	-
63	0.5	BK/GY	6756	Cam Phaser Z Low Reference	II	-
64	0.5	GN/BN	5283	Camshaft Phaser Exhaust Solenoid 2	II	-
65	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid 1	II	-
66	0.5	BK/VT	6754	Cam Phaser X Low Reference	II	-
67	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	-
68	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	-
69	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	-
70	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	-
71	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
72	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	-
73	2.5	BK/WH	451	Signal Ground	I	LFY

K20 ENGINE CONTROL MODULE X1 (LTG)



Terminal Part Information

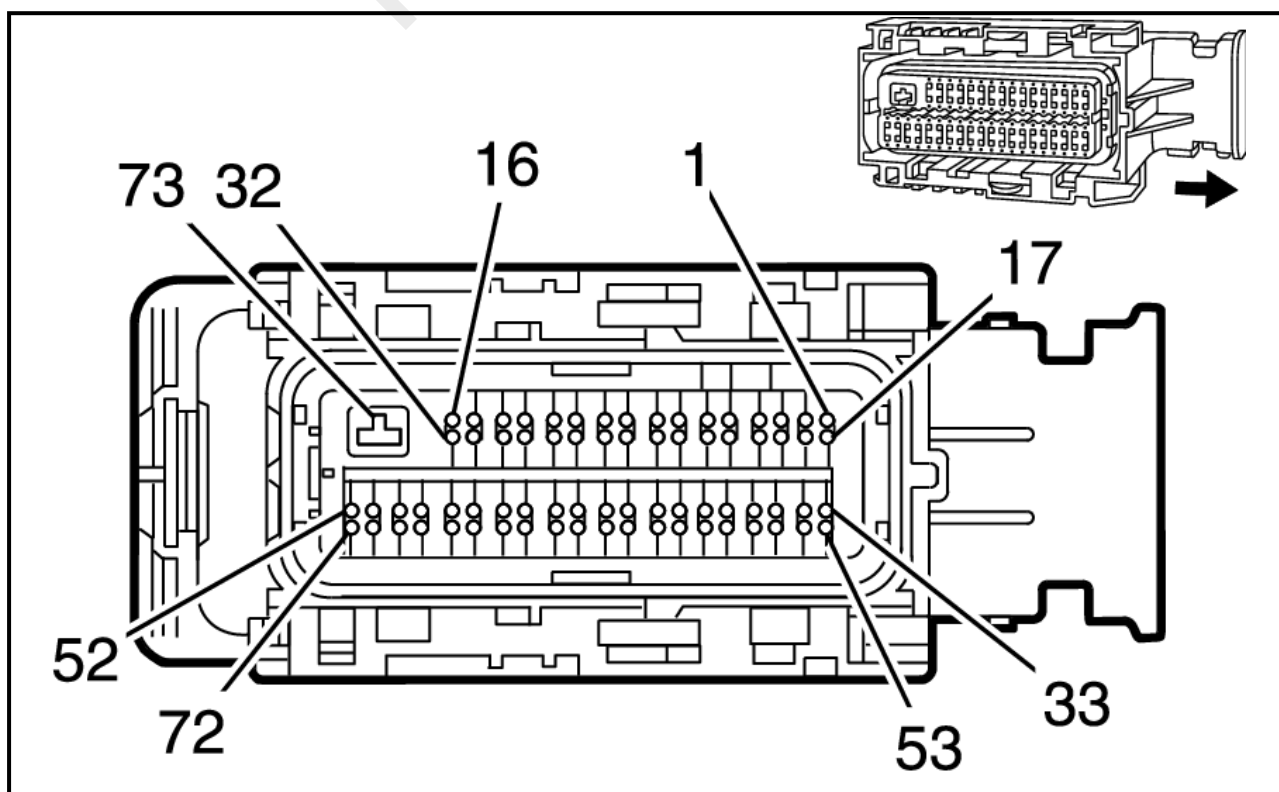
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	7116-4152-02	Yazaki 9	2	5
II	19330179	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	-	-	-	Not Occupied	-	-
7	0.5	WH	7494	High Speed GMLAN Serial Data (-)3	II	-
8	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)3	II	-
9	0.5	BU	2500	High Speed GMLAN Serial Data (+) 1	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
10	0.5	WH	2501	High Speed GMLAN Serial Data (-) 1	II	-
11	0.5	BN/RD	1274	Accelerator Pedal Position 5V Reference 2	II	-
12	0.5	WH/RD	1164	Accelerator Pedal Position 5V Reference 1	II	-
13	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	-
14	0.5	VT/GY	139	Run/Crank Ignition 1 Voltage	II	-
15	0.5	RD/WH	140	Battery Positive Voltage	II	-
16	0.5	VT/BU	5705	Powertrain Main Relay Fused Control 6	II	-
17	0.5	YE	5530	Hood Open Switch Signal	II	-
18	0.5	GY/RD	3053	Turbo Intake Pressure Sensor High Reference Bank 1	II	-
19 - 22	-	-	-	Not Occupied	-	-
23	0.5	BK/GY	3927	IMS Mode Switch Low Reference	II	-
24	-	-	-	Not Occupied	-	-
25	0.5	BK/YE	5382	Brake Position Sensor Low Reference	II	-
26	-	-	-	Not Occupied	-	-
27	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference 2	II	-
28	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference 1	II	-
29 - 31	-	-	-	Not Occupied	-	-
32	0.5	YE/VT	6030	Brake Vacuum Sensor Signal	II	-
33	0.5	GN/WH	1162	Accelerator Pedal Position Signal 2	II	-
34	0.5	GN/WH	492	Mass Air Flow Sensor Signal	II	-
35 - 36	-	-	-	Not Occupied	-	-
37	0.5	BN/RD	2700	A/C Pressure Sensor 5V Reference	II	-
38	0.5	GY	4109	Driver Mode Switch 5V Reference	II	-
39	0.5	YE/BU	4171	Transmission Position Sensor A 9V Reference	II	-
40	-	-	-	Not Occupied	-	-
41	0.5	WH/RD	5381	Brake Position Sensor 5V Reference	II	-
42 - 43	-	-	-	Not Occupied	-	-
44	0.5	YE/VT	4325	Starter Pinion Solenoid Relay Control	II	-
45	0.5	YE/WH	1161	Accelerator Pedal Position Signal 1	II	-
46	-	-	-	Not Occupied	-	-
47	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	-
48	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
49	-	-	-	Not Occupied	-	-
50	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	-
51	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply 2	II	-
52	0.5	WH	2368	Cooling Fan Control Signal	II	-
53	-	-	-	Not Occupied	-	-
54	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	-
55 - 56	-	-	-	Not Occupied	-	-
57	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	-
58	0.5	WH/VT	4108	Driver Mode Switch Signal	II	-
59	0.5	WH/BU	5726	Ignition Mode Switch Mode Control Backup	II	-
60	0.5	BN/GY	4008	Humidity Sensor Signal	II	-
61	0.5	WH/GN	5380	Brake Position Sensor Signal	II	-
62 - 63	-	-	-	Not Occupied	-	-
64	0.5	GN/GY	465	Fuel Pump Primary Relay Control	II	-
65	0.5	WH	1310	EVAP Canister Vent Solenoid Control	II	-
66	0.5	GY	5127	After Boil Heater Relay Control	II	-
67	0.5	YE	5991	Powertrain Relay Coil Control	II	-
68 - 69	-	-	-	Not Occupied	-	-
70	0.5	YE/BK	625	Starter Enable Relay Control	II	-
71	0.5	BN/WH	419	Check Engine Indicator Control	II	-
72	-	-	-	Not Occupied	-	-
73	2	VT/BU	5290	Powertrain Main Relay Fused Supply 1	I	-

K20 ENGINE CONTROL MODULE X2 (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12582677
- Service Connector: 88988931
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK)

Terminal Part Information

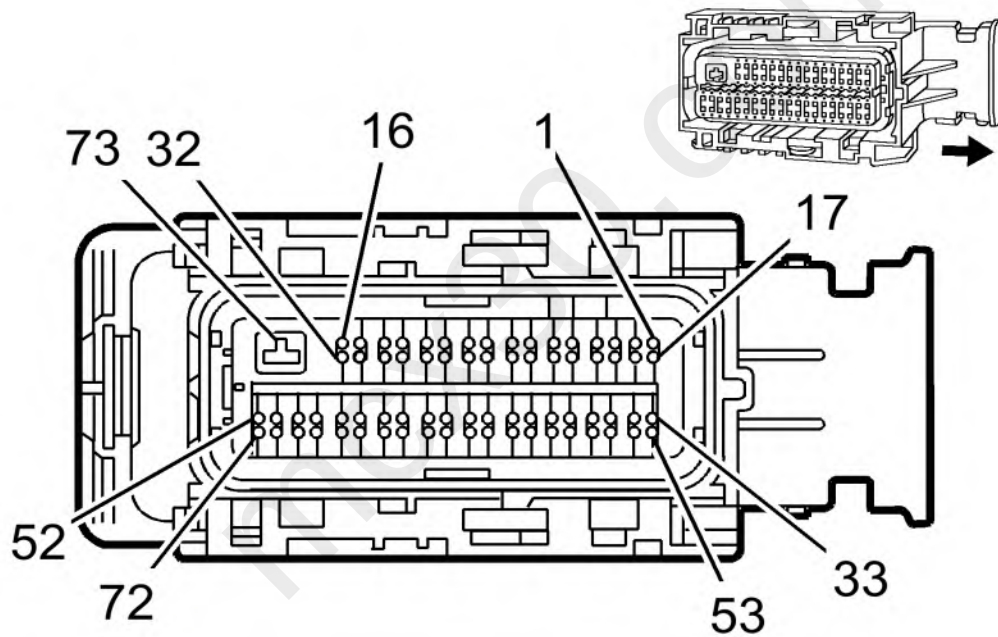
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	19330179	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	-
3	-	-	-	Not Occupied	-	-
4	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	II	-
5	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5V Reference	II	-
6	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control 1	II	-
7	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control 1	II	-
8 - 11	-	-	-	Not Occupied	-	-
12	0.5	BN/RD	2701	Throttle Position Sensor 5V Reference	II	-
13	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	II	-
14	0.5	WH/RD	2705	Oil Pressure Sensor 5V Reference	II	-
15	0.5	VT/BU	6270	Crankshaft 60X Sensor 5V Reference	II	-
16 - 19	-	-	-	Not Occupied	-	-
20	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	-
21	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	II	-
22	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference 1	II	-
23	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference 1	II	-
24 - 27	-	-	-	Not Occupied	-	-
28	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	II	-
29	0.5	YE/BN	331	Oil Pressure Sensor Signal	II	-
30	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
31	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	-
32	0.5	GN	3060	Turbo Bypass Solenoid Control Bank 1	II	-
33	-	-	-	Not Occupied	-	-
34	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor 2	II	-
35	-	-	-	Not Occupied	-	-
36	0.5	BK/VT	6754	Cam Phaser X Low Reference	II	-
37	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	-
38	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor 1	II	-
39	0.5	YE/VT	5275	Camshaft Position Intake Sensor 1	II	-
40	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	-
41	-	-	-	Not Occupied	-	-
42	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	-
43	0.5	BK/WH	2051	Signal Ground	II	-
44	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	II	-
45	0.5	GN/BU	2123	Ignition Control 3	II	-
46	0.5	BU/VT	2121	Ignition Control 1	II	-
47	-	-	-	Not Occupied	-	-
48	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	-
49	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	-
50	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	-
51	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	-
52	0.5	YE	581	Throttle Actuator Control Open	II	-
53	-	-	-	Not Occupied	-	-
54	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor 2	II	-
55	-	-	-	Not Occupied	-	-
56	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid 1	II	-
57	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid 1	II	-
58 - 59	-	-	-	Not Occupied	-	-
60	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2	II	-
61 - 62	-	-	-	Not Occupied	-	-
63	0.5	BN/YE	258	Waste Gate Solenoid Control	II	-
64	0.5	BU	179	Oil Pump Command Signal	II	-
65	0.5	BU/WH	2122	Ignition Control 2	II	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
66	0.5	YE/BU	2124	Ignition Control 4	II	-
67	-	-	-	Not Occupied	-	-
68	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	-
69	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	-
70	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	-
71	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	-
72	0.5	BN/WH	582	Throttle Actuator Control Close	II	-
73	1.5	BK/WH	451	Signal Ground	I	-

K20 ENGINE CONTROL MODULE X3 (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12582678
- Service Connector: 88988372
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

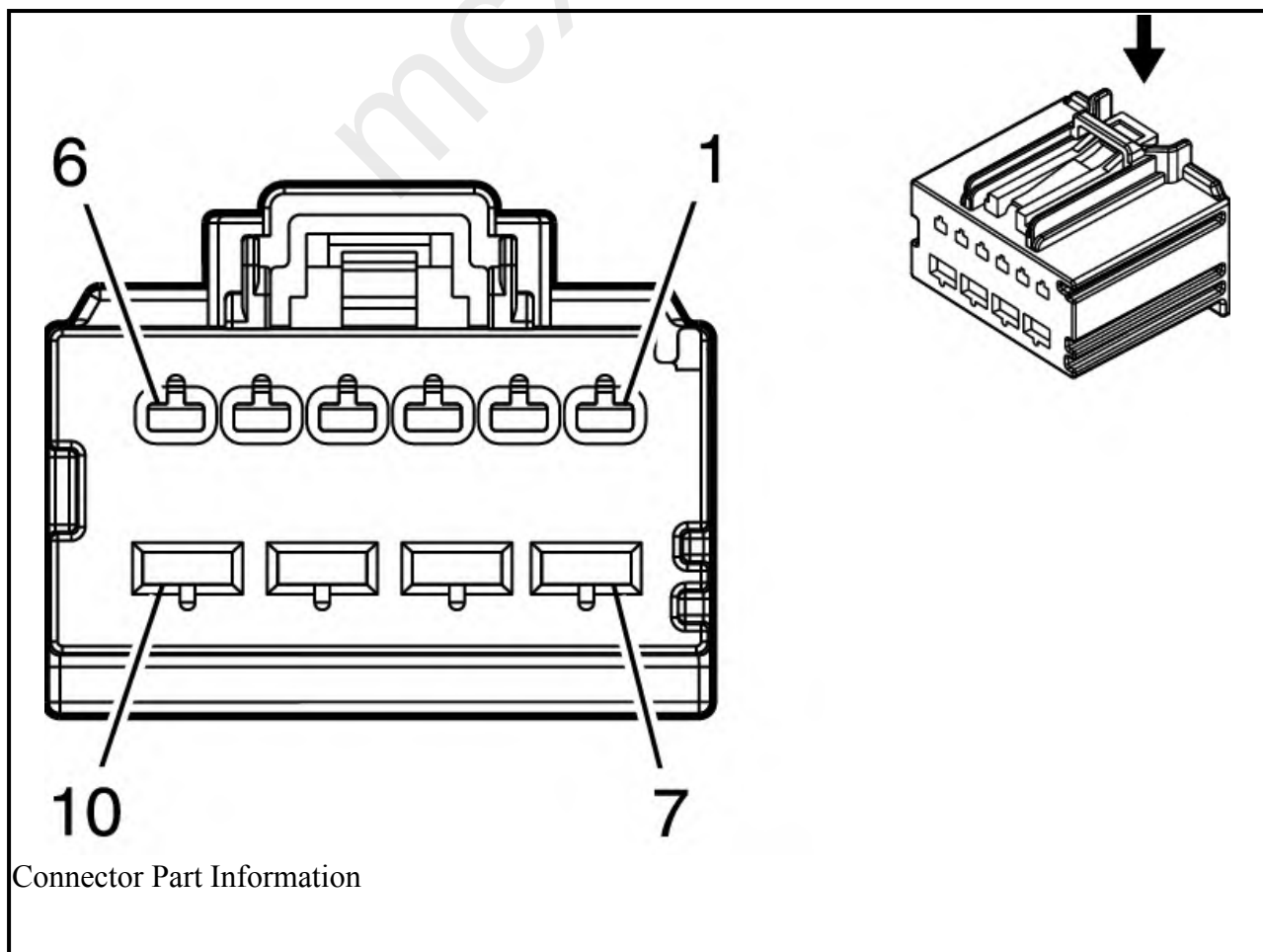
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13579770	J-35616-4A (PU)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
II	19330179	J-35616-64B (LT BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1	II	-
2 - 3	-	-	-	Not Occupied	-	-
4	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	-
5	-	-	-	Not Occupied	-	-
6	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5V Reference	II	-
7	-	-	-	Not Occupied	-	-
8	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5V Reference	II	-
9 - 13	-	-	-	Not Occupied	-	-
14	0.5	GY/RD	7331	Pre Throttle Air Temp and Press (TMAP) 5V Reference	II	-
15	0.5	YE/RD	6031	Brake Vacuum Sensor 5V Reference	II	-
16	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply 5	II	-
17	-	-	-	Not Occupied	-	-
18	0.5	BN	25	Charge Indicator Control	II	-
19	0.5	GY	23	Generator Field Duty Cycle Signal	II	-
20	0.5	BK/WH	2151	Signal Ground	II	-
21	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	-
22	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	II	-
23 - 29	-	-	-	Not Occupied	-	-
30	0.5	BK/VT	7332	Pre Throttle Air Temp and Press (TMAP) Low Reference	II	-
31 - 34	-	-	-	Not Occupied	-	-
35	0.5	GN	6935	Heated Oxygen Sensor Current Adjust Signal	II	-
36	0.5	YE/GY	6936	Heated Oxygen Sensor Collector Signal	II	-
37	0.5	BN/WH	6933	Heated Oxygen Sensor Current Pump Signal	II	-
38	0.5	BN	6934	Heated Oxygen Sensor Ground	II	-
39	-	-	-	Not Occupied	-	-
40	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	II	-
41	0.5	BN/GN	1174	Oil Level Switch Signal	II	-
42	-	-	-	Not Occupied	-	-
43	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	II	-
44 - 45	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
46	0.5	VT/BU	7330	Pre Throttle Air Temp and Press (TMAP) Air Pressure Signal	II	-
47	0.5	WH/BU	7329	Pre-Throttle Air Temp and Press (TMAP) Temperature Signal	II	-
48	0.5	YE	3054	Turbo Intake Pressure Sensor Signal Bank 1	II	-
49 - 51	-	-	-	Not Occupied	-	-
52	0.5	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	II	-
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	GN/VT	4621	Local Interconnect Network Serial Data Bus 21	II	-
56 - 58	-	-	-	Not Occupied	-	-
59	0.5	BK/GY	2303	Knock Sensor Low Reference 2	II	-
60	0.5	WH/GY	1876	Knock Sensor Signal 2	II	-
61	0.5	BK/YE	1716	Knock Sensor Low Reference 1	II	-
62	0.5	VT/GY	496	Knock Sensor Signal 1	II	-
63 - 67	-	-	-	Not Occupied	-	-
68	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	II	-
69 - 71	-	-	-	Not Occupied	-	-
72	0.5	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	-
73	1.5	BK/WH	451	Signal Ground	I	-

K29 SEAT HEATING CONTROL MODULE X1 (KA1)



- Harness Type: Passenger Seat
- OEM Connector: 13582823
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.5, 2.8 Series (BK)

Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	BN/BU	2479	Passenger Heated Seat Element Control	I	-
3	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	-
4	0.75	BN/BK	2078	Driver Heated Seat Element Low Reference	I	-
5	-	-	-	Not Occupied	-	-
6	0.75	BN/VT	2077	Driver Heated Seat Element Control	I	-
7	1.5	RD/YE	1442	Battery Positive Voltage	I	-
8	1.5	BK	650	Ground	I	-
9	-	-	-	Not Occupied	-	-
10	1.5	RD/GY	1342	Battery Positive Voltage	I	-