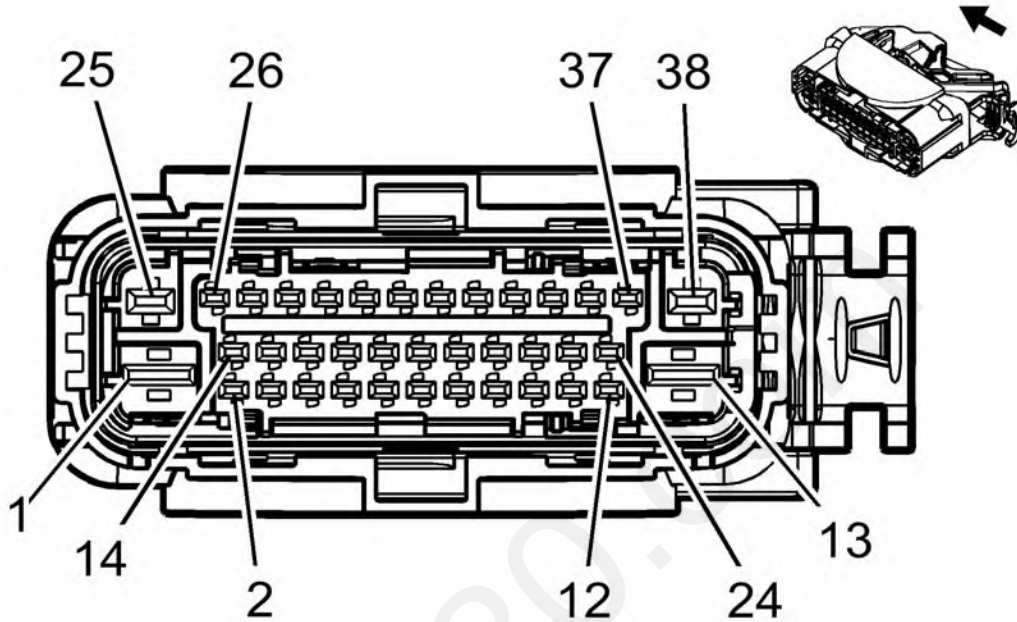


ELECTRICAL

Wiring Systems and Power Management - Component Locator - Component Connector End Views - Canyon, Colorado

COMPONENT CONNECTOR END VIEWS

K17 ELECTRONIC BRAKE CONTROL MODULE



Connector Part Information

- Harness Type: Chassis
- OEM Connector: 1928405629
- Service Connector: 19299780
- Description: 38-Way F 1.5, 2.8, 4.8 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13578852	J-35616-40 (BU)	J-38125-561	Not Available	Not Available	Not Available	Not Available
II	13578853	J-35616-35 (VT)	J-38125-561	Not Available	Not Available	Not Available	Not Available
III	13584537	J-35616-14 (GN)	J-38125-560	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-----	------	-------	---------	----------	------------------	--------

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/GY	1042	Battery Positive Voltage	I	-
2 - 3	-	-	-	Not Occupied	-	-
4	0.5	YE/VT	6030	Brake Vacuum Sensor Signal	III	-
5	-	-	-	Not Occupied	-	-
6	0.5	WH/L-BU	5986	Serial Data Communication Enable	III	-
7 - 8	-	-	-	Not Occupied	-	-
9	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	-
10	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	-
11	0.5	L-BU	2500	High Speed GMLAN Serial Data (+) (1)	III	-
12	0.5	L-BU	2500	High Speed GMLAN Serial Data (+) (1)	III	-
13	4	BK	550	Ground	I	-
14 - 15	-	-	-	Not Occupied	-	-
16	0.5	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	III	-
17	-	-	-	Not Occupied	-	-
18	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	III	-
19	0.5	L-BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	III	-
20	-	-	-	Not Occupied	-	-
21	0.5	L-GN/GY	333	Brake Fluid Level Sensor Signal	III	-
22	0.5	BK/YE	6032	Brake Vacuum Sensor Low Reference	III	-
23 - 24	-	-	-	Not Occupied	-	-
25	2.5	RD/YE	442	Battery Positive Voltage	II	-
26	0.5	YE	872	Wheel Speed Sensor Signal Right Front	III	-
27	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	III	-
28	0.5	BN	6305	Brake Vacuum Switch Signal	III	LFX
29	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	III	-
30	0.5	L-BU	884	Wheel Speed Sensor Signal Left Rear	III	-
31 - 32	-	-	-	Not Occupied	-	-
33	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	III	-
34	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	III	-
35	-	-	-	Not Occupied	-	-
36	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	III	-

Pin	Size	Terminal Color	Circuit	Terminal Removal	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
37	0.5	GY	830	Wheel Speed Sensor Signal Left Front				III		
38	-	-	-	Not Occupied				-		-

K20 ENGINE CONTROL MODULE X1 (LCV)

Connector Part Information

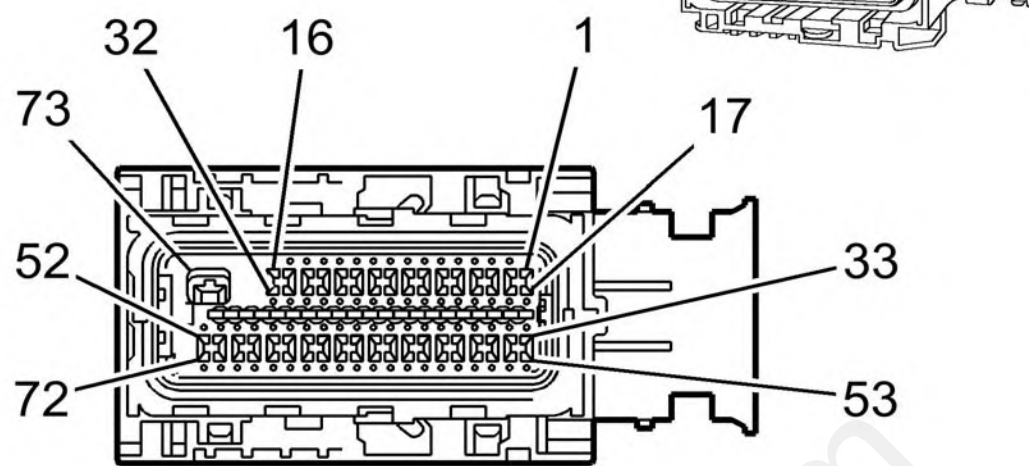
- Harness Type: Engine
- OEM Connector: 34566-0303
- Service Connector: 13574782
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

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	33467-0003	Delphi 23	J	J
II	13579769	J-35616-35 (VT)	J-38125-11A	7116-4151-02	Yazaki 9	C	1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	-	-	-	Not Occupied	-	-
7	0.5	WH	7494	High Speed GMLAN Serial Data (-) (3)	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	0.5	L-BU/YE	7493	High Speed GMLAN Serial Data (+) (3)	I	-
9	0.5	L-BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
10	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
11	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
12	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-
13	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	-
14	0.5	VT/GY	139	Run/Crank Ignition 1 Voltage	I	-
15	0.5	RD/WH	140	Battery Positive Voltage	I	-
16	0.75	VT/L-BU	5290	Powertrain Main Relay Fused Supply (1)	I	-
17 - 24	-	-	-	Not Occupied	-	-
25	0.5	BK/YE	5382	Brake Position Sensor Low Reference	I	-
26	0.5	BK/GY	6110	Clutch Apply Sensor Low Reference	I	N8D
27	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	-
28	0.5	BK/L-BU	1271	Accelerator Pedal Position Low Reference (1)	I	-
29 - 32	-	-	-	Not Occupied	-	-
33	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
34	0.5	L-GN/WH	492	Mass Air Flow Sensor Signal	I	-
35 - 36	-	-	-	Not Occupied	-	-
37	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-
38 - 40	-	-	-	Not Occupied	-	-
41	0.5	WH/RD	5381	Brake Position Sensor 5 Volt Reference	I	-
42	0.5	GY/RD	6109	Clutch Apply Sensor 5 Volt Reference	I	N8D
43	-	-	-	Not Occupied	-	-
44	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	I	-
45	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	I	-
46	0.5	YE/BK	3000	Coolant Temperature Sensor 2 Signal	I	-
47	0.5	L-BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
48	0.5	WH/L-BU	6289	Induction Air Temperature Sensor Signal	I	-
49	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	MYB
50	0.5	WH/L-BU	6311	Cruise/ETC/TCC Brake Signal	I	-

Terminal Type ID	Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Core Crimp	Insulation Crimp
									
Connector Part Information • Harness Type: Engine • OEM Connector: 34566-0303 • 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	33467-0003	Delphi 23	J	J

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	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference	I	-
6	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	I	-
7 - 8	-	-	-	Not Occupied	-	-
9	0.5	L-BU/WH	890	Fuel Tank Pressure Sensor Signal	I	-
10	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5 Volt Reference	I	-
11 - 12	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
13	0.5	L-BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
14	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt 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 5 Volt Reference	I	-
22	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	-
23 - 24	-	-	-	Not Occupied	-	-
25	0.5	L-BU/VT	1589	Primary Fuel Level Sensor Signal	I	-
26	0.5	BK/L-GN	6281	Fuel Level Sensor Low Reference	I	-
27 - 29	-	-	-	Not Occupied	-	-
30	0.5	BK/L-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 5 Volt Reference (2)	I	-
34	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
35 - 38	-	-	-	Not Occupied	-	-
39	0.5	L-BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
41 - 43	-	-	-	Not Occupied	-	-
44	0.5	GY	5660	Fuel Pump Controller Data Out Signal	I	-
45	-	-	-	Not Occupied	-	-
46	0.5	BN/WH	419	Check Engine Indicator Control	I	-
47	0.5	WH/RD	5381	Brake Position Sensor 5 Volt Reference	I	-
48	0.5	WH/L-GN	5380	Brake Position Sensor Signal	I	-
49 - 50	-	-	-	Not Occupied	-	-
51	0.5	VT/GY	139	Run/Crank Ignition 1 Voltage	I	-
52	0.5	RD/WH	140	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/L-BU	6311	Cruise/ETC/TCC Brake Signal	I	-
58	-	-	-	Not Occupied	-	-
59	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	I	-
60 - 61	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function			Terminal Type ID	Option
62	0.75	VT/L-BU	5291	Powertrain Main Relay Fused Supply (2)	Tray	Core	I	Insulation
63	0.5	VT/GY	6386	Starter Enable Relay (PHI 3) Control	Tray	Crimp		
64 - 65	-	-	-	Not Occupied			-	-
66	0.5	WH	1310	EVAP Canister Vent Solenoid Control			I	-
67	0.75	VT/L-BU	5292	Powertrain Main Relay Fused Supply (3)			I	-
68	0.5	BK/YE	5382	Brake Position 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	1	VT/L-BU	5290	Powertrain Main Relay Fused Supply (1)			I	-

K20 ENGINE CONTROL MODULE X1 (LWN)

Connector Part Information

- Harness Type: Engine
- OEM Connector: 13647470
- Service Connector: 19181736
- Description: 66-Way F 0.64, 2.8, 6.3 Series, Sealed

Terminal Part Information

Pin Type ID	Size	Color Lead	Diagnostic Test Probe	Terminal Removal Tool	Function Service Terminal	Tray Name	Terminal Type ID Core Crimp	Insulation Crimp
Terminal Type ID	Terminated Lead	J-35616-4A Diagnostic Test Probe (PU)	J-38125-36 Terminal Removal Tool	4-964286-1 Service Terminal	Lear 16 Tray Name	E Core Crimp	1 Insulation Crimp	
II	13584448	J-35616-64B (LT BU)	J-38125-12A	1719532-5	Lear 7	J	J	
III	13584529	J-35616-42 (RD)	J-38125-11A	Not Available	Not Available	Not Available	Not Available	
IV	13584530	J-35616-4A (PU)	J-38125-36	4-964273-1	Yazaki 15	C	5	
V	13584530	J-35616-4A (PU)	J-38125-36	4-964273-1	Yazaki 15	E	1	
VI	13584530	J-35616-4A (PU)	J-38125-36	4-964286-1	Lear 16	E	1	

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	VT/L-BU	5290	Powertrain Main Relay Fused Supply (1)	IV	-
2	0.75	VT/L-BU	5291	Powertrain Main Relay Fused Supply (2)	I	-
3	1.5	VT/L-BU	5292	Powertrain Main Relay Fused Supply (3)	V	-
4	0.5	RD/WH	140	Battery Positive Voltage	VI	-
5	6	BN/L-BU	104	Glow Plug Control	III	-
6	6	BK/WH	451	Signal Ground	III	-
7	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	-
8 - 10	-	-	-	Not Occupied	-	-
11	0.5	L-BU/YE	6861	Water In Fuel Sensor Signal	II	-
12	-	-	-	Not Occupied	-	-
13	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	II	-
14	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	II	-
15	0.5	L-GN/WH	1162	Accelerator Pedal Position Signal (2)	II	-
16	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	II	-
17	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	-
18	0.5	BN/WH	419	Check Engine Indicator Control	II	-
19	0.5	L-GN/BN	507	Wait To Start Indicator Control	II	-
20	-	-	-	Not Occupied	-	-
21	0.5	YE	2928	Fuel Metering Valve High Control	II	-
22	0.5	VT/GY	139	Run/Crank Ignition 1 Voltage	II	-
23	0.5	WH/L-BU	6311	Cruise/ETC/TCC Brake Signal	II	-
24	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	II	MYB

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	L-GN/WH	492	Mass Air Flow Sensor Signal	II	-
26	0.5	L-BU/VT	2364	Cooling Fan Speed Signal	II	-
27	0.5	BK/L-BU	1271	Accelerator Pedal Position Low Reference (1)	II	-
28	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	II	-
29	0.5	L-BU/RD	1688	5 Volt Reference	II	NQ6/NQ7
30	0.5	VT/WH	821	Vehicle Speed Sensor Signal	II	NQ6/NQ7
31	0.5	BK/L-GN	822	Vehicle Speed Sensor Low Reference	II	NQ6/NQ7
32	-	-	-	Not Occupied	-	-
33	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	-
34 - 35	-	-	-	Not Occupied	-	-
36	0.5	BN/BK	2929	Fuel Metering Valve Low Control	II	-
37 - 38	-	-	-	Not Occupied	-	-
39	0.5	WH	4499	High Speed GMLAN Serial Data (-) (7)	II	-
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
41 - 42	-	-	-	Not Occupied	-	-
43	0.5	BK/YE	5382	Brake Position Sensor Low Reference	II	-
44	0.5	WH/RD	5381	Brake Position Sensor 5 Volt Reference	II	-
45	0.5	WH/L-BU	6289	Induction Air Temperature Sensor Signal	II	-
46	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	II	-
47	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	II	-
48	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	II	-
49	-	-	-	Not Occupied	-	-
50	0.5	L-GN/GY	465	Fuel Pump Primary Relay Control	II	-
51	0.5	YE	5991	Powertrain Relay Coil Control	II	-
52 - 53	-	-	-	Not Occupied	-	-
54	0.5	L-BU/BN	4498	High Speed GMLAN Serial Data (+) (7)	II	-
55	0.5	L-BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
56 - 58	-	-	-	Not Occupied	-	-
59	0.5	WH/L-GN	5380	Brake Position Sensor Signal	II	-
60	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	II	-
61 - 63	-	-	-	Not Occupied	-	-

Terminal Type ID	Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
64	0.5	VT/BN	2927	Hydrocarbon	Throttle Injector Low Control			II		-
65	-	-	-	Not Occupied				-		-
66	0.5	VT/GY	6386		Starter Enable Relay (PPEI 3) Control			II		-

K20 ENGINE CONTROL MODULE X2 (LCV)

Connector Part Information

- Harness Type: Engine
- OEM Connector: 34566-0103
- 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	33467-0003	Delphi 23	J	J
II	13579770	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

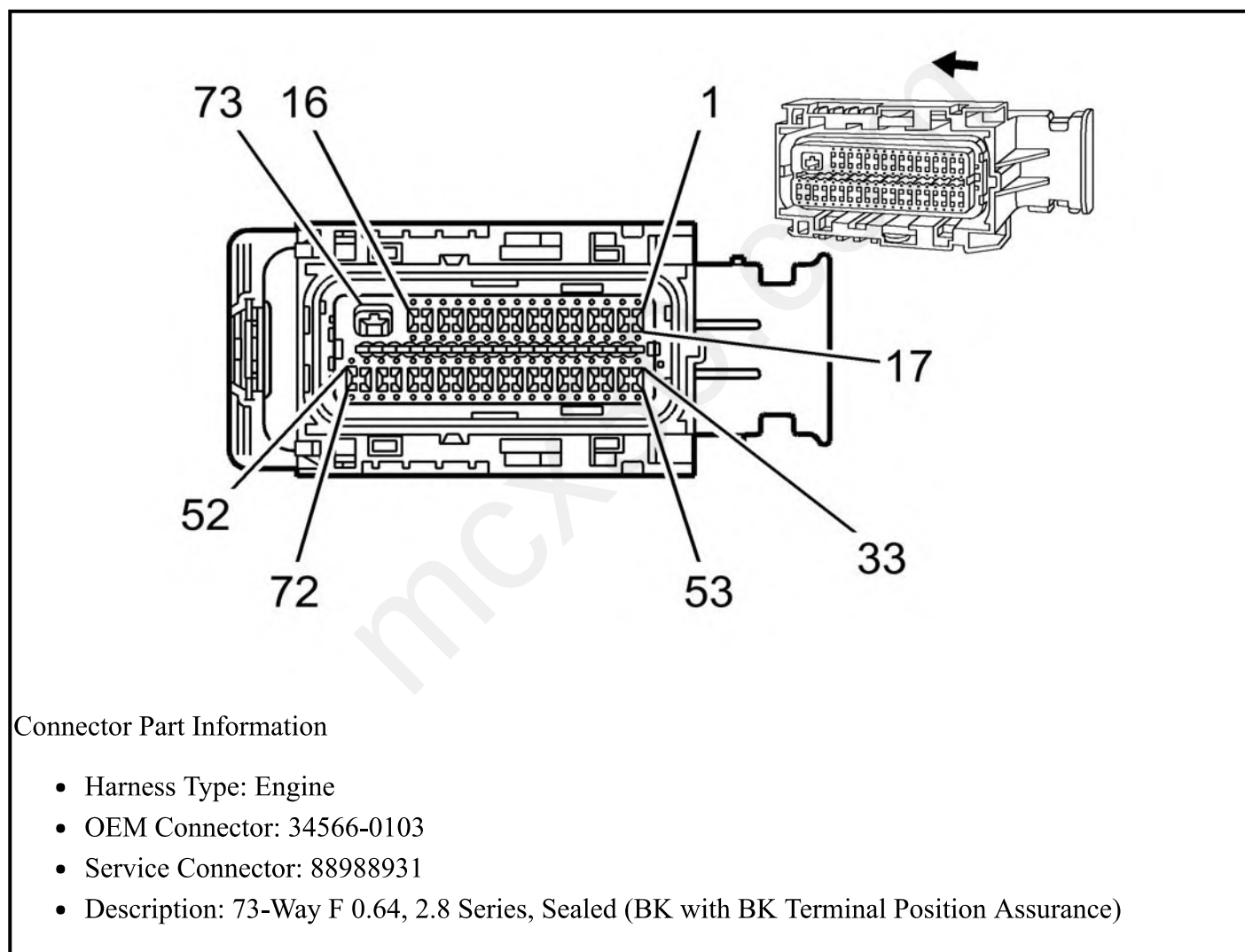
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	0.5	L-BU	410	Engine Coolant Temperature Sensor Signal	I	-
3	-	-	-	Not Occupied	-	-
4	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5 Volt Reference	I	-
5	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
6	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control (1)	I	-
7	0.5	GY/L-BU	5300	Camshaft Position Intake Sensor Control (1)	I	-
8	-	-	-	Not Occupied	-	-
9	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	I	-
10 - 11	-	-	-	Not Occupied	-	-
12	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-
13	0.5	L-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	-
14	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	-
15	0.5	VT/L-BU	6270	Crankshaft 60X Sensor 5 Volt Reference	I	-
16 - 19	-	-	-	Not Occupied	-	-
20	0.5	L-BU/WH	7446	Fuel Line Pressure Sensor Signal	I	-
21	0.5	BK/L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
22	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference (1)	I	-
23	0.5	BK/L-GN	5301	Camshaft Position Intake Sensor Low Reference (1)	I	-
24	-	-	-	Not Occupied	-	-
25	0.5	BK/L-GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-
26	0.5	L-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
27	-	-	-	Not Occupied	-	-
28	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
29	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	-
30	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	-
31	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
32	-	-	-	Not Occupied	-	-
33	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
34	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
35	-	-	-	Not Occupied	-	-
36	0.5	BK/VT	6754	Cam Phaser X Low Reference	I	-
37	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	-
38	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor (1)	I	-
39	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	I	-
40	0.5	L-GN	6271	Crankshaft 60X Sensor Signal	I	-
41 - 42	-	-	-	Not Occupied	-	-
43	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	-
44	0.5	BK/L-BU	2129	Ignition Control Low Reference Bank 1	I	-
45	0.5	L-GN/L-BU	2123	Ignition Control (3)	I	-
46	0.5	L-BU/VT	2121	Ignition Control (1)	I	-
47	-	-	-	Not Occupied	-	-
48	0.75	L-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-
49	0.75	GY/L-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-
50	0.75	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-
51	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	-
52	0.5	YE	581	Throttle Actuator Control Open	I	-
53	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-
54	0.5	VT/L-BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-
55	-	-	-	Not Occupied	-	-
56	0.5	GY/L-BU	5282	Camshaft Phaser Exhaust Solenoid (1)	I	-
57	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	-
58 - 59	-	-	-	Not Occupied	-	-
60	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
61	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-
62 - 63	-	-	-	Not Occupied	-	-
64	0.5	L-BU	179	Oil Pump Command Signal	I	-
65	0.5	L-BU/WH	2122	Ignition Control (2)	I	-
66	0.5	YE/L-BU	2124	Ignition Control (4)	I	-
67	-	-	-	Not Occupied	-	-

Pin Type ID	Terminal Size	Terminal Lead	Color	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
68	0.75	L-BU/GY		4902		Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2			I		
69	0.75	L-BU/WH		4904		Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4			I		-
70	0.75	L-GN/GY		4903		Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3			I		-
71	0.75	BN/WH		4901		Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1			I		-
72	0.5	BN/WH		582		Throttle Actuator Control Close			I		-
73	2.5	BK/WH		1451		Signal Ground			II		-

K20 ENGINE CONTROL MODULE X2 (LFX)



Terminal Part Information

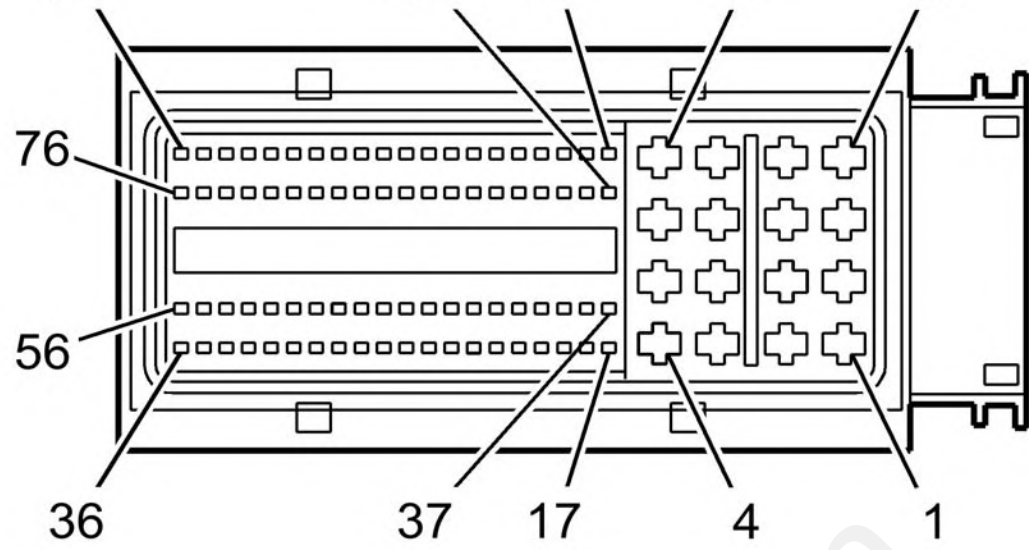
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575812	J-35616-64B (LT BU)	J-38125-213	33467-0003	Delphi 23	J	J

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	-	-	-	Not Occupied	-	-
5	0.5	L-BU/RD	1688	5 Volt Reference	I	NQ6/NQ7
6 - 7	-	-	-	Not Occupied	-	-
8	0.5	VT/WH	821	Vehicle Speed Sensor Signal	I	NQ6/NQ7
9	-	-	-	Not Occupied	-	-
10	0.5	VT/GY	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/L-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	GY/L-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 5 Volt Reference	I	-
19	0.5	L-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
20	-	-	-	Not Occupied	-	-
21	0.5	BK/L-GN	822	Vehicle Speed Sensor Low Reference	I	NQ6/NQ7
22 - 25	-	-	-	Not Occupied	-	-
26	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-
27	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
28	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
29	0.5	YE/L-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	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-
35	-	-	-	Not Occupied	-	-
36	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
37	0.5	WH/GY	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	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
42	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
43	0.5	L-GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	-
44	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
45 - 48	-	-	-	Not Occupied	-	-
49	0.5	WH/L-BU	6289	Induction Air Temperature Sensor Signal	I	-
50	-	-	-	Not Occupied	-	-
51	0.5	L-GN/L-BU	428	EVAP Canister Purge Solenoid Control	I	-
52	0.5	L-GN/WH	492	Mass Air Flow Sensor Signal	I	-
53	0.5	L-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	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-
57	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-
58	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	MYB
59	-	-	-	Not Occupied	-	-
60	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	-
61	0.5	L-GN/YE	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	BK/L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
64	-	-	-	Not Occupied	-	-
65	0.5	BK/L-BU	61	Outside Ambient Temperature Sensor Low Reference	I	-
66 - 68	-	-	-	Not Occupied	-	-
69	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	-
70	0.5	L-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	-
71 - 72	-	-	-	Not Occupied	-	-
73	2.5	BK/WH	1451	Signal Ground	I	-

K20 ENGINE CONTROL MODULE X2 (LWN)

--

Terminal Type ID	Terminal Size	Terminal Color	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
										
Connector Part Information • Harness Type: Engine • OEM Connector: 13647524 • Service Connector: 13407086 • 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

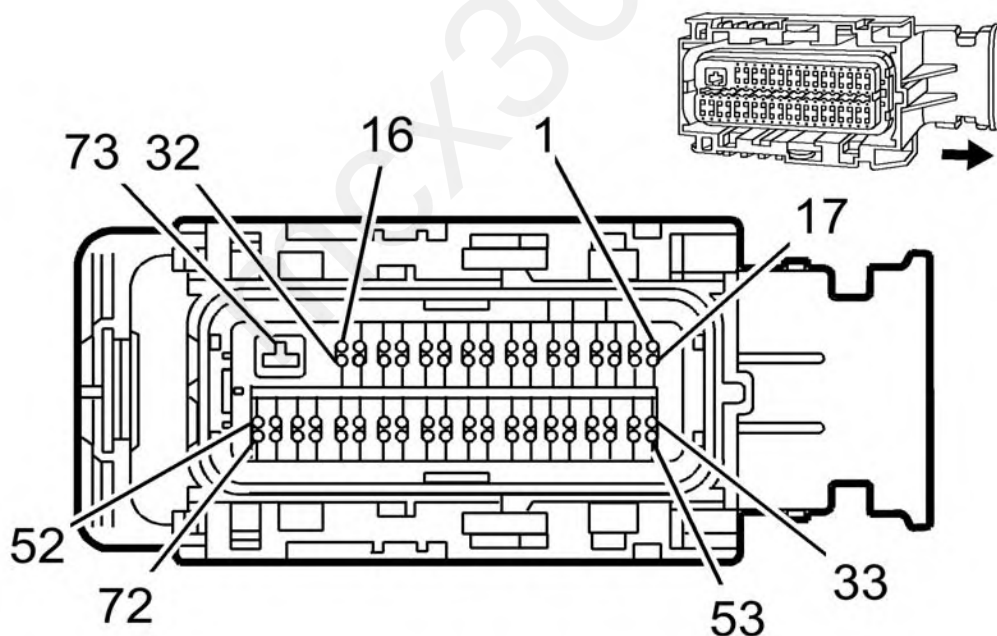
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	L-BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	III	-
2	1.5	L-GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	III	-
3	1.5	L-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	III	-
4	1.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	III	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	1.5	L-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/L-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	-
16	2	GY/L-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 5 Volt 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	L-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	0.5	BN	25	Charge Indicator Control	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/L-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 5 Volt Reference	I	-
44	0.5	L-BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	-
45	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
46	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
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/L-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	0.5	BN/L-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	L-BU/RD	5047	Exhaust Gas Recirculation 5 Volt 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 5 Volt Reference	I	-
63 - 66	-	-	-	Not Occupied	-	-
67	0.5	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	-
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/L-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 5 Volt Reference	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
83	0.5	VT/L-BU	6270	Crankshaft 60X Sensor 5 Volt 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	L-BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
89	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt 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/L-BU	3231	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	-
95	0.5	GY/L-BU	3230	Exhaust Gas Recirculation Cooler Bypass Solenoid Control	I	-
96	0.5	L-BU/WH	2530	Fuel Rail Pressure Solenoid Control	I	-

K20 ENGINE CONTROL MODULE X3 (LCV)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 34566-0203
- Service Connector: 88988372

Pin: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)							
Terminal Size	Terminal Color	Diagnostic	Terminal Removal	Function	Service Terminal	Tray Name	Terminal Core Crimp
Type ID	Lead	Test Probe	Tool		Terminal	Name	Crimp

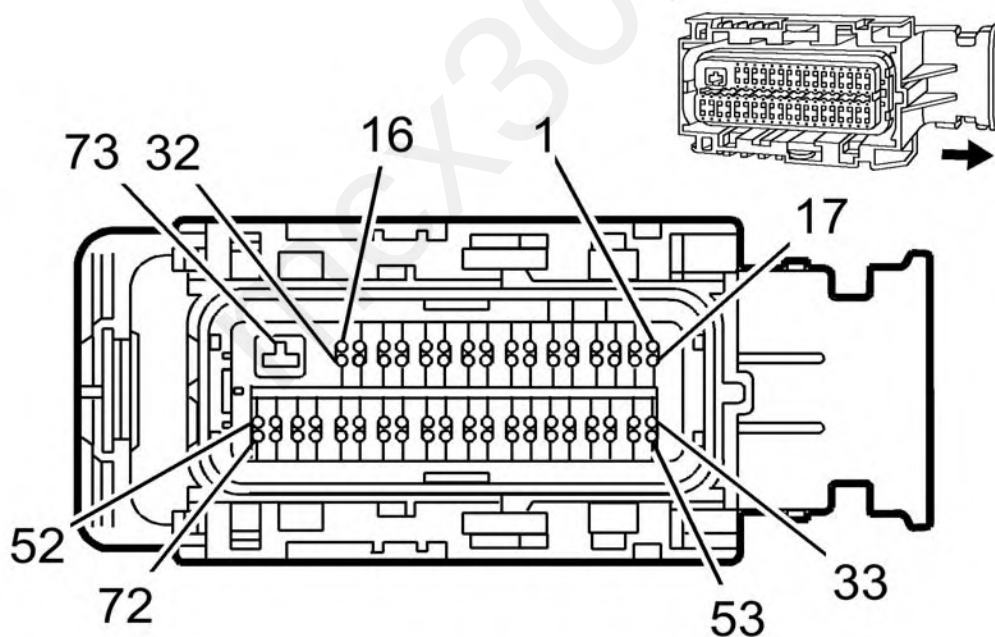
Terminal Part Information

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	33467-0003	Delphi 23	J	J
II	13579770	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
4	0.5	L-GN/L-BU	428	EVAP Canister Purge Solenoid Control	I	-
5 - 7	-	-	-	Not Occupied	-	-
8	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5 Volt Reference	I	-
9 - 10	-	-	-	Not Occupied	-	-
11	0.5	L-BU/RD	1688	5 Volt Reference	I	N8D OR NQ6/NQ7
12 - 13	-	-	-	Not Occupied	-	-
14	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference	I	-
15	-	-	-	Not Occupied	-	-
16	0.5	VT/L-BU	5293	Powertrain Main Relay Fused Supply (4)	I	-
17	-	-	-	Not Occupied	-	-
18	0.5	L-BU/WH	225	Generator Turn On Signal	I	-
19	0.5	GY	23	Generator Field Duty Cycle Signal	I	-
20	0.5	BK/L-GN	6281	Fuel Level Sensor Low Reference	I	-
21 - 26	-	-	-	Not Occupied	-	-
27	0.5	BK/L-GN	822	Vehicle Speed Sensor Low Reference	I	N8D OR NQ6/NQ7
28 - 39	-	-	-	Not Occupied	-	-
40	0.5	L-GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	-
41	0.5	BN/L-GN	1174	Oil Level Switch Signal	I	-
42	-	-	-	Not Occupied	-	-
43	0.5	L-BU/VT	1589	Primary Fuel Level Sensor Signal	I	-
44 - 45	-	-	-	Not Occupied	-	-
46	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	-
47 - 51	-	-	-	Not Occupied	-	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
52	0.5	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	-
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	GY	3890	Aero Shutter Control 2	I	-
56 - 58	-	-	-	Not Occupied	-	-
59	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-
60	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
61	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-
62	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
63	0.5	VT/WH	821	Vehicle Speed Sensor Signal	I	N8D OR NQ6/NQ7
64 - 66	-	-	-	Not Occupied	-	-
67	0.5	L-GN/WH	5007	Reverse Switch Signal	I	N8D
68	0.5	L-BU/WH	890	Fuel Tank Pressure Sensor Signal	I	-
69 - 71	-	-	-	Not Occupied	-	-
72	0.5	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	-
73	2.5	BK/WH	1451	Signal Ground	II	-

K20 ENGINE CONTROL MODULE X3 (LFX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 34566-0203
- Service Connector: 88988372
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Type ID	Size	Color	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
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	33467-0003	Delphi 23	J	J			

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 5 Volt Reference	I	-
3 - 7	-	-	-	Not Occupied	-	-
8	0.5	L-BU	410	Engine Coolant Temperature Sensor Signal	I	-
9	-	-	-	Not Occupied	-	-
10	0.5	VT/L-BU	6270	Crankshaft 60X Sensor 5 Volt Reference	I	-
11 - 12	-	-	-	Not Occupied	-	-
13	0.5	BN/L-BU	2126	Ignition Control (6)	I	-
14	0.5	L-BU/GY	2125	Ignition Control (5)	I	-
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
16	0.5	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/L-BU	2124	Ignition Control (4)	I	-
28	0.5	L-GN/L-BU	2123	Ignition Control (3)	I	-
29	0.5	L-BU/WH	2122	Ignition Control (2)	I	-
30	0.5	L-BU/VT	2121	Ignition Control (1)	I	-
31	0.5	BK/L-BU	2129	Ignition Control Low Reference Bank 1	I	-
32	0.5	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/L-BU	5300	Camshaft Position Intake Sensor Control (1)	I	-
35	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor (1)	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
36	0.5	YE	5276	Camshaft Position Intake Sensor (2)	I	-
37	0.5	WH/L-BU	5302	Camshaft Position Intake Sensor Control (2)	I	-
38	0.5	VT/L-BU	5274	Camshaft Position Exhaust Sensor (2)	I	-
39	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	-
40	0.5	GY/L-BU	5282	Camshaft Phaser Exhaust Solenoid (1)	I	-
41	0.5	L-GN	5272	Camshaft Phaser Intake Solenoid (2)	I	-
42	0.5	L-GN/BN	5283	Camshaft Phaser Exhaust Solenoid (2)	I	-
43 - 45	-	-	-	Not Occupied	-	-
46	0.75	GY/L-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-
47	0.75	WH/L-GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	-
48	0.75	L-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-
49	-	-	-	Not Occupied	-	-
50	0.75	L-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-
51	0.75	VT/L-GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	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	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control (1)	I	-
55	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference (1)	I	-
56	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference (2)	I	-
57	0.5	L-GN/BN	5298	Camshaft Position Exhaust Sensor Control (2)	I	-
58	0.5	BK/BN	5299	Camshaft Position Exhaust Sensor Low Reference (2)	I	-
59	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	-
60	0.5	BK/VT	6754	Cam Phaser X Low Reference	I	-
61	0.5	BK/L-BU	6755	Cam Phaser Y Low Reference	I	-
62	0.5	BK/GY	6756	Cam Phaser Z Low Reference	I	-
63 - 65	-	-	-	Not Occupied	-	-
66	0.75	L-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	-

Terminal Type ID	Terminal Size	Terminated Lead	Color	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type	Core Crimp	Insulation Crimp
67	0.75	L	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5				I		
68	0.75	L	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2				I		-
69	-	-	-	-	Not Occupied				-		-
70	0.75	L	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3				I		-
71	0.75	VT	GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6				I		-
72	0.75	BN	WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1				I		-
73	2.5	BK	WH	1451	Signal Ground				I		-

K20 ENGINE CONTROL MODULE X3 (LWN)

Connector Part Information

- Harness Type: Engine
- OEM Connector: 34576-0703
- 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

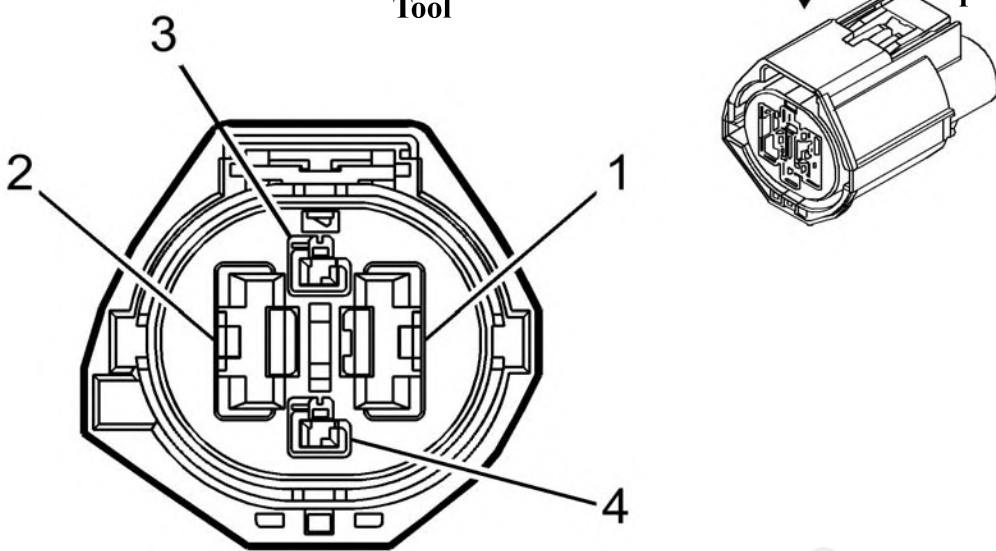
Terminal Type ID	Size	Terminal Color Lead	Diagnostic Test Probe	Terminal Removal Tool	Function Service Terminal	Tray Name	Terminal Core ID Crimp	Option Crimp
I		19301532	J-35616-64B (LT BU)	J-38125-213	33467-0003	Delphi 23	J	J

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 5 Volt Reference	I	-
8	0.5	BK/L-BU	61	Outside Ambient Temperature Sensor Low Reference	I	-
9	0.5	BK/VT	3661	Exhaust Gas Temperature Sensor 5 Low Reference	I	-
10	0.5	BK/L-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/L-BU	6783	Exhaust Gas Temperature Sensor 2 Low Reference	I	-
14	0.5	L-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	L-BU/VT	1589	Primary Fuel Level Sensor Signal	I	-
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 5 Volt Reference	I	-
22	0.5	L-BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
23	0.5	L-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	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
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	L-BU/L-GN	5377	Exhaust Gas Temperature Sensor (2)	I	-
29	-	-	-	Not Occupied	-	-
30	0.5	YE/L-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/L-BU	3889	DEF Power Module Relay Control	I	-
44	-	-	-	Not Occupied	-	-
45	0.5	L-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 5 Volt Reference (1)	I	-
51	0.5	L-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	-	-

K22 COOLING FAN CONTROL MODULE (LCV/LFX)

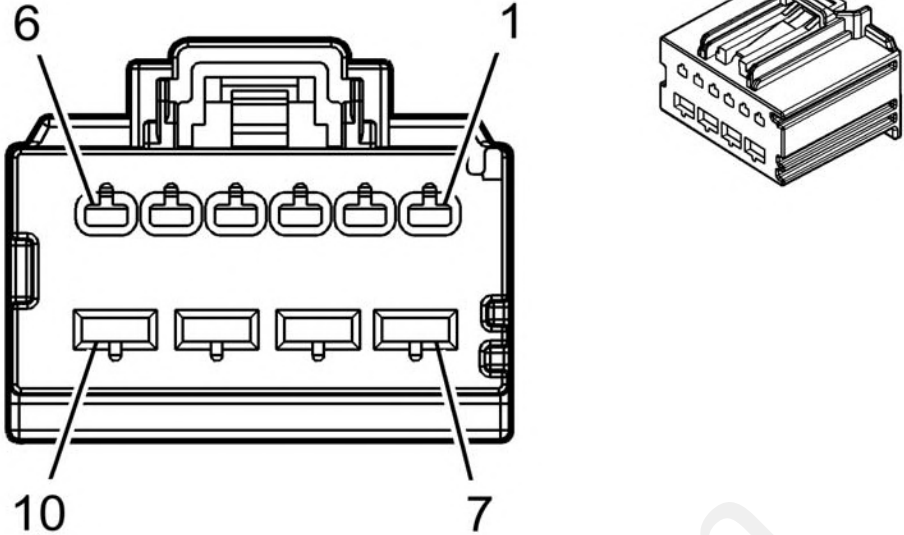


Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Terminal Core Crimp	Insulation Crimp
							
Connector Part Information • Harness Type: Forward Lamp • OEM Connector: 7287-1404-10 • Service Connector: Service by Harness - See Parts Catalog • Description: 4-Way F 1.5, 9.5 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-35616-22 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	BK	1350	Ground	I	LCV
	10	BK	1350		III	LFX
2	6	RD/GY	4840	Battery Positive Voltage	I	LCV
	10	RD/GY	4840		III	LFX
3	-	-	-	Not Occupied	-	-
4	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	-

Terminal Type ID	Terminal Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Terminal Type ID	Core Crimp	Insulation Crimp
									
Connector Part Information • Harness Type: Passenger Seat Cushion • 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	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BN	2481	Passenger Heated Back Element Control	I	-
2	0.75	BN/L-BU	2479	Passenger Heated Seat Element Control	I	-
3	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	-
4	0.75	VT/BK	2424	Driver Heated Back Element Low Reference	I	-
5	0.75	BN	2432	Driver Heated Back Element Control	I	-
6	0.75	BN/VT	2077	Driver Heated Seat Element Control	I	-

Terminal Type ID	Size	Color	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Terminal Core Crimp	Insulation Crimp
7	0.75	RD/L-GN	6140	Battery Positive Voltage			I	-
8	0.75	BK	3850	Ground			I	-
9	-	-	-	Not Occupied			-	-
10	0.75	RD/L-GN	5140	Battery Positive Voltage			I	-

K29 SEAT HEATING CONTROL MODULE X2 (KA1)

Connector Part Information

- Harness Type: Passenger Seat Cushion
- OEM Connector: 15136073
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F 0.64 Kaizen Series (BK)

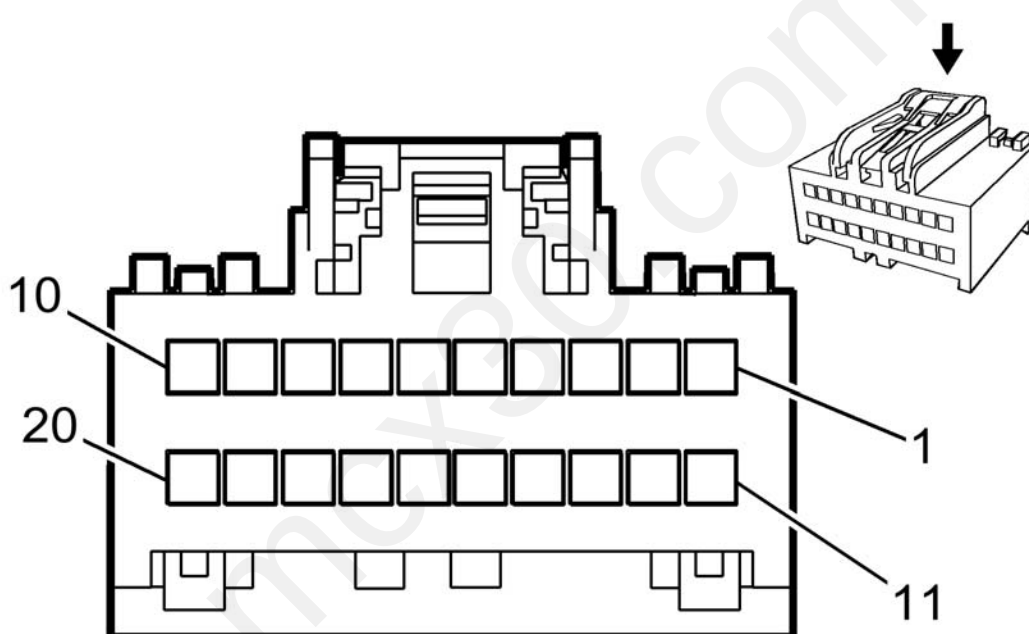
Terminal Part Information

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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	-
2	0.75	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	-

Terminal Type ID	Size	Terminated Lead	Color	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Insulation Crimp
3	0.75	L-BU		2425	Driver Heated Back NTC Signal				I		-
4	0.75	WH/L-BU		2436	Passenger Heated Back NTC Signal				I		-
5	0.75	WH/GY		2434	Passenger Heated Seat NTC Signal				I		-
6	0.75	YE/GY		2079	Driver Heated Seat NTC Signal				I		-
7	-	-		-	Not Occupied				-		-
8	0.5	L-GN/L-BU		6133	Local Interconnect Network Serial Data Bus 2				I		-
9-11	-	-		-	Not Occupied				-		-
12	0.75	BK/L-GN		2482	Passenger Heated Back NTC Low Reference				I		-
13-16	-	-		-	Not Occupied				-		-

K33 HVAC CONTROL MODULE X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 31410-1203
- Service Connector: 13576644
- Description: 20-Way F 0.64 Series (GN)

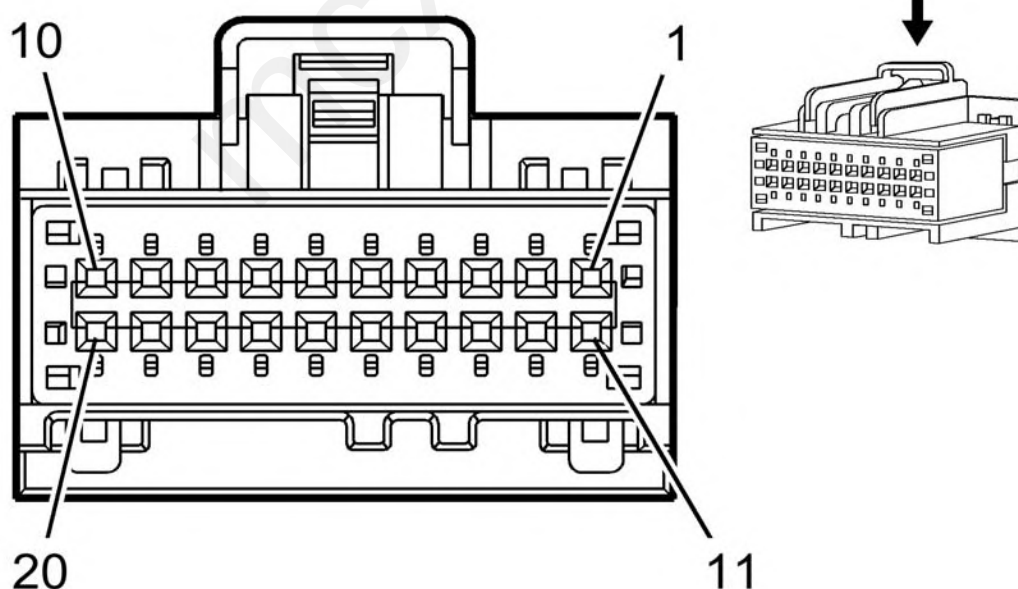
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

Terminal Type ID	Size	Terminal Color	Lead	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Type ID	Core Crimp	Option Crimp
I			13575845	J-35616-64B (LT BU)	J-38125-215A		SAIT-A03T-M064	Yazaki 14	P		P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	GY/L-GN	7565	Windscreen Temp Sensor Signal	I	C68
3	-	-	-	Not Occupied	-	-
4	0.35	L-BU/WH	734	Inside Air Temperature Sensor Signal	I	-
5	0.35	YE/L-BU	3197	Humidity Temperature Sensor Signal	I	C68
6	0.35	YE/RD	597	5 Volt Reference	I	C68
7	0.35	BK/L-BU	7566	Humidity/Windscreen Temp Sensor Low Reference	I	C68
8 - 11	-	-	-	Not Occupied	-	-
12	0.35	GY/L-BU	7564	Humidity Sensor Signal	I	C68
13	-	-	-	Not Occupied	-	-
14	0.35	YE/VT	1783	Twilight Sentinel Delay Signal	I	-
15 - 17	-	-	-	Not Occupied	-	-
18	0.5	BN	518	Lower Left Air Temperature Sensor Signal	I	C68
19 - 20	-	-	-	Not Occupied	-	-

K33 HVAC CONTROL MODULE X2



Connector Part Information

Terminal Type ID	Terminal Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Tray Name	Terminal Core Crimp	Insulation Option Crimp
I	0.5	RD/VT	3340	Battery Positive Voltage	I	-			
2	0.35	L-GN	5060	Low Speed GMLAN Serial Data	I	-			
3	-	-	-	Not Occupied	-	-			
4	0.35	L-GN/YE	7531	Local Interconnect Network Serial Data Bus 9	I	-			
5 - 6	-	-	-	Not Occupied	-	-			
7	0.5	VT	3195	Auxiliary Heater Control	I	LWN			
8	0.5	BK	2050	Ground	I	-			
9	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	-			
10	0.5	L-BU/YE	7574	Electric Variable Displacement Control	I	-			
11	0.5	L-BU/BN	7573	Electric Variable Displacement Supply	I	-			
12 - 14	-	-	-	Not Occupied	-	-			
15	0.35	L-BU/GY	754	Blower Motor Speed Control	I	-			
16 - 17	-	-	-	Not Occupied	-	-			
18	0.35	BK/YE	1791	Air Temperature Door Control Low Reference	I	-			
19	0.35	BN/VT	193	Rear Defog Relay Control	I	-			
20	-	-	-	Not Occupied	-	-			

- Description: 20-Way F 64 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	13575867	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	Yazaki 14	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/VT	3340	Battery Positive Voltage	I	-
2	0.35	L-GN	5060	Low Speed GMLAN Serial Data	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	L-GN/YE	7531	Local Interconnect Network Serial Data Bus 9	I	-
5 - 6	-	-	-	Not Occupied	-	-
7	0.5	VT	3195	Auxiliary Heater Control	I	LWN
8	0.5	BK	2050	Ground	I	-
9	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	-
10	0.5	L-BU/YE	7574	Electric Variable Displacement Control	I	-
11	0.5	L-BU/BN	7573	Electric Variable Displacement Supply	I	-
12 - 14	-	-	-	Not Occupied	-	-
15	0.35	L-BU/GY	754	Blower Motor Speed Control	I	-
16 - 17	-	-	-	Not Occupied	-	-
18	0.35	BK/YE	1791	Air Temperature Door Control Low Reference	I	-
19	0.35	BN/VT	193	Rear Defog Relay Control	I	-
20	-	-	-	Not Occupied	-	-

K33 HVAC CONTROL MODULE X3

--

Terminal Type ID	Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Function	Service Terminal	Terminal Tray Type ID	Core Crimp	Insulation Crimp
------------------	------	-----------------	-----------------------	-----------------------	----------	------------------	-----------------------	------------	------------------

Connector Part Information

- Harness Type: HVAC
- OEM Connector: 15126711
- Service Connector: 15126711
- Description: 20-Way F 0.64 Series (BK)

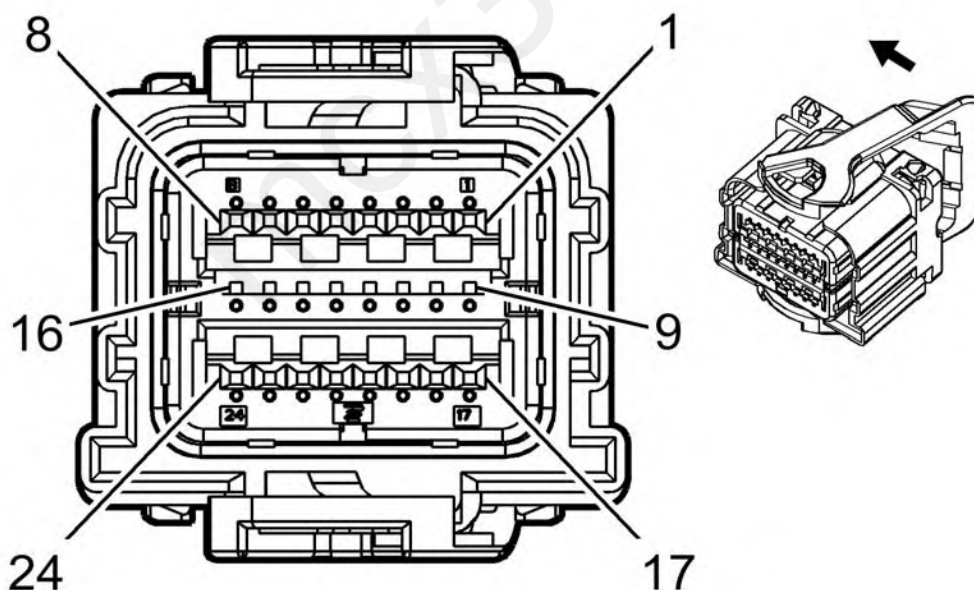
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13327119	J-35616-64B (L-BU)	J-38125-215A	SAIT-A03T-M064	14	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	516	Upper Left Air Temperature Sensor Signal	I	-
2	0.35	YE	3165	Mode Door Stepper Motor Control (1)	I	-
3	0.35	WH/RD	3166	Mode Door Stepper Motor Control (2)	I	-
4	0.35	GY/BN	3167	Mode Door Stepper Motor Control (3)	I	-
5	0.35	L-GN/WH	3168	Mode Door Stepper Motor Control (4)	I	-
6-8	-	-	-	Not Occupied	-	-
9	0.35	BK/YE	407	Low Reference	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
10	-	-	-	Not Occupied	-	-
11	0.35	D-GN	3169	Temp Door Stepper Motor Control (1)	I	-
12	0.35	WH/RD	3170	Temp Door Stepper Motor Control (2)	I	-
13	0.35	GY/RD	3171	Temp Door Stepper Motor Control (3)	I	-
14	0.35	RD/BK	3172	Temp Door Stepper Motor Control (4)	I	-
15	0.8	BK	7572	HVAC Motor Supply Voltage	I	-
16	0.35	GY	3173	Air Inlet Door Stepper Motor Control (1)	I	-
17	0.35	D-BU/WH	3174	Air Inlet Door Stepper Motor Control (2)	I	-
18	0.35	BN/L-GN	3175	Air Inlet Door Stepper Motor Control (3)	I	-
19	0.35	RD/L-GN	3176	Air Inlet Door Stepper Motor Control (4)	I	-
20	0.35	GY	6137	EVAP Core Temperature Sensor Signal	I	-

K36 INFLATABLE RESTRAINT SENSING AND DIAGNOSTIC MODULE X1



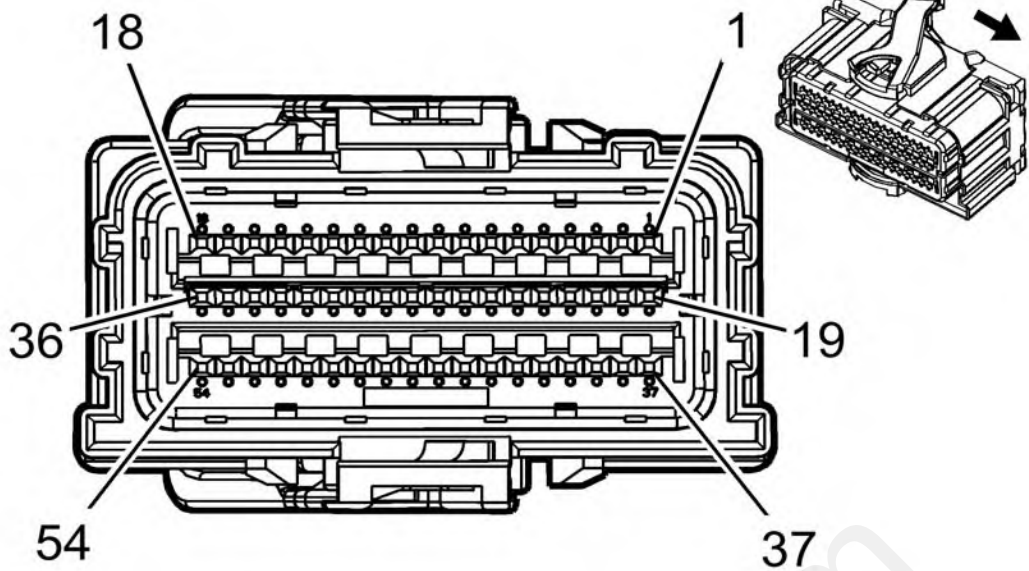
Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 2098923-7
- Service Connector: 19299778

Terminal Type ID	Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Terminal Core Crimp	Insulation Crimp
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	

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/L-GN	3023	Steering Wheel Module Stage 2 High Control	I	-
2	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	I	-
3	0.35	BN/OG	3020	Steering Wheel Module Stage 1 Low Control	I	-
4	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	I	-
5	0.35	YE/OG	3025	Passenger IP Module Stage 1 High Control	I	-
6	0.35	OG/WH	3024	Passenger IP Module Stage 1 Low Control	I	-
7	0.35	OG/VT	3026	Passenger IP Module Stage 2 Low Control	I	-
8	0.35	GY/OG	3027	Passenger IP Module Stage 2 High Control	I	-
9	0.5	RD/L-GN	4440	Battery Positive Voltage	I	-
10	0.35	VT/WH	5234	Passenger Seat Belt Indicator Control	I	-
11	0.35	L-BU	2307	Passenger Air Bag On Indicator Control	I	-
12	0.35	L-GN	2308	Passenger Air Bag Off Indicator Control	I	-
13 - 14	-	-	-	Not Occupied	-	-
15	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	-
16	-	-	-	Not Occupied	-	-
17	0.5	WH/L-BU	5986	Serial Data Communication Enable	I	-
18	0.5	L-BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
19	0.5	BK/WH	2251	Signal Ground	I	-
20	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
21 - 24	-	-	-	Not Occupied	-	-

K36 INFLATABLE RESTRAINT SENSING AND DIAGNOSTIC MODULE X2

Terminal Type ID	Terminal Size	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Terminal Core Crimp	Insulation Crimp
								
Connector Part Information • Harness Type: Body • OEM Connector: 2098922-9 • 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

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 8	-	-	-	Not Occupied	-	-
9	0.35	OG/YE	3481	Driver Seat Belt Anchor Pretensioner High Control	I	-
10	0.35	YE/OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	-
11	0.35	GY/OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	I	-
12	0.35	OG/BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	I	-
13	0.35	OG/L-BU	3068	Driver Side Impact Module High Control	I	-
14	0.35	L-GN/OG	3069	Driver Side Impact Module Low Control	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
15	0.35	BN/OG	3067	Passenger Side Impact Module Low Control	I	-
16	0.35	OG/GY	3066	Passenger Side Impact Module High Control	I	-
17	0.5	OG/L-GN	5019	Left Front Head Curtain Module High Control	I	-
18	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	-
19	0.35	OG/L-GN	2132	Left Front Side Impact Sensing Module Signal	I	-
20	0.35	BK/OG	6628	Left Front Side Impact Sensing Module Low Reference	I	-
21	0.35	BK/OG	6629	Right Front Side Impact Sensing Module Low Reference	I	-
22	0.35	BN/OG	2134	Right Front Side Impact Sensing Module Signal	I	-
23	0.5	OG/YE	354	Left Front Discriminating Sensor Signal	I	-
24	0.5	BK/OG	5045	Left Front Discriminating Sensor Low Reference	I	-
25	0.5	BK/OG	5600	Right Front Discriminating Sensor Low Reference	I	-
26	0.5	OG/L-GN	1409	Right Front Discriminating Sensor Signal	I	-
27	0.35	OG/L-BU	6620	Left Middle Side Impact Sensing Module Signal	I	-
28	0.35	BK/OG	6621	Left Middle Side Impact Sensing Module Low Reference	I	-
29	0.35	BK/OG	6625	Right Middle Side Impact Sensing Module Low Reference	I	-
30	0.35	OG/VT	6624	Right Middle Side Impact Sensing Module Signal	I	-
31 - 36	-	-	-	Not Occupied	-	-
37	0.5	OG/WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	-
38	0.5	GY/OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	-
39	0.5	WH/OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	-
40	0.5	OG/L-GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	-
41	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	-
42	-	-	-	Not Occupied	-	-
43	0.35	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	-
44	0.35	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
45	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	-
46 - 52	-	-	-	Not Occupied	-	-
53	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	-
54	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	-

mcx30.com