

Engine Control Module Connector End Views

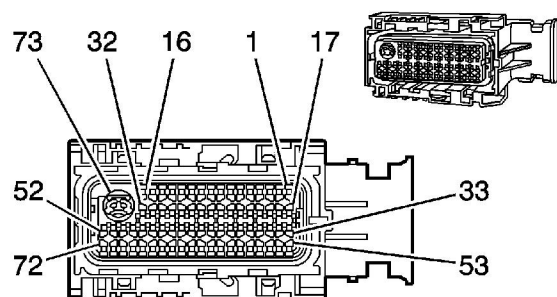
Connector 1: [Engine Control Module \(ECM\) C1 \(MM6/MZ6\)](#)

Connector 2: [Engine Control Module \(ECM\) C1 \(MYC\)](#)

Connector 3: [Engine Control Module \(ECM\) C2 \(MM6/MZ6\)](#)

Connector 4: [Engine Control Module \(ECM\) C2 \(MYC\)](#)

Engine Control Module (ECM) C1 (MM6/MZ6)



Connector Part Information

- I OEM: 34566-4403
- I Service: See Catalog
- I Description: 73-Way F MX123 Harness Connector Assemb (BK)

Terminal Part Information

- I Pins: 4, 6, 9-13, 16, 18-20, 23, 24, 27-34, 36-38, 41, 47-50, 56-59, 61, 63-72
- I Terminal/Tray: 33467-0003/23
- I Core/Insulation Crimp: Pins 4, 10, 11, 19, 20, 47, 49, 64-66, 69 - See Terminal Repair Kit
- I Core/Insulation Crimp: Pins 6, 9, 12, 13, 16, 18, 23, 24, 27-34, 36-38, 41, 48, 50, 56-59, 61, 63, 67, 68, 70-72 - H/H
- I Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

- I Pins: 73
- I Terminal/Tray: 7116-4152-02/9
- I Core/Insulation Crimp: 2/5
- I Release Tool/Test Probe: 12094430/J-35616-35 (VT)

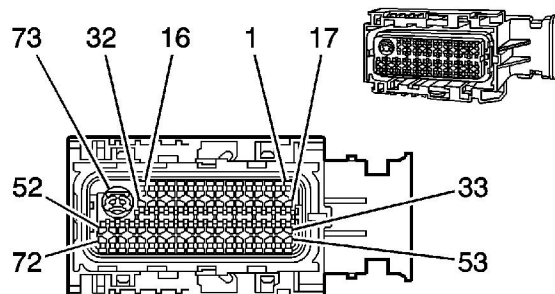
Engine Control Module (ECM) C1 (MM6/MZ6)

Pin	Wire Color	Circuit No.	Function
1-3	--	--	Not Used
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4	PU/WH	1035	Starter Relay Coil Supply Voltage
5	--	--	Not Used
6	GY/BK	48	CPP Switch Signal
7-8	--	--	Not Used
9	WH	17	Stop Lamp Switch Signal
10	PU/WH	1668	HO2S High Signal Bank 1 Sensor 2
11	TN/WH	1669	HO2S Low Signal Bank 1 Sensor 2
12	OG/BK	380	A/C Refrigerant Pressure Sensor Signal
13	BK/WH	2751	Low Reference
14-15	--	--	Not Used
16	D-BU	1936	Fuel Level Sensor Signal - Secondary
17	--	--	Not Used
18	YE	43	Accessory Voltage
19	PK	1439	Ignition 1 Voltage
20	RD/WH	2440	Battery Positive Voltage
21-22	--	--	Not Used
23	PU	1272	Low Reference
24	D-GN	890	Fuel Tank Pressure Sensor Signal
25-26	--	--	Not Used
27	TN	2501	ECM High Speed GMLAN Serial Data Bus -
28	TN/BK	2500	ECM High Speed GMLAN Serial Data Bus +
29	D-BU	1161	APP Sensor 1 Signal
30	BN	1271	Low Reference
31	TN	2759	Low Reference
32	L-BU	1162	APP Sensor 2 Signal
33	GY	2709	5-Volt Reference 1
34	GY	2700	5-Volt Reference 1
35	--	--	Not Used
36	TN	1274	5-Volt Reference 1
37	TN	472	IAT Sensor Signal
38	TN	2760	Low Reference
39-40	--	--	Not Used
41	YE	492	MAF Sensor Signal
42-46	--	--	Not Used
47	PK	439	Ignition 1 Voltage
48	WH	121	Engine Speed Signal
49	TN	1671	HO2S Low Signal Bank 2 Sensor 2
50	D-GN/WH	465	Fuel Pump Relay Control
51-55	--	--	Not Used
56	WH/BK	1164	5-Volt Reference 2

57	D-GN/WH	817	Vehicle Speed Signal
58	D-GN	335	Cooling Fan Relay Control
59	WH/BK	448	Ignition 1 Relay Control
60	--	--	Not Used
61	WH	1310	EVAP Canister Vent Solenoid Control
62	--	--	Not Used
63	D-GN/WH	459	A/C Compressor Clutch Relay Control
64	OG/WH	3223	HO2S Heater Low Control Bank 2 Sensor 2
65	BN	2391	HO2S Heater Low Control Bank 1 Sensor 2
66	GY	587	Skip Shift Solenoid Control
67	YE/BK	625	Starter Enable Relay Control
68	BN/WH	419	MIL Control
69	PU	1670	HO2S High Signal Bank 2 Sensor 2
70	L-BU	1937	Fuel Level Sensor Signal - Right
71	YE	400	VSS High Signal
72	PU	401	VSS Low Signal
73	BK/WH	451	Ground

Engine Control Module (ECM) C1 (MYC)



Connector Part Information

- I OEM: 34566-4303
- I Service: 88988931
- I Description: 73-Way F MX123 Harness Connector Assemb (BK)

Terminal Part Information

- I Pins: 1, 9-13, 16, 18-20, 23, 24, 27-34, 36-38, 41, 47-50, 56-59, 61, 63-65, 67-70
- I Terminal/Tray: 33467-0003/23
- I Core/Insulation Crimp: Pins 1, 9, 12, 13, 16, 18, 23, 24, 27-34, 36-38, 41, 48, 50, 56-

59, 61, 63, 67, 68, 70 - H/H

I Core/Insulation Crimp: Pins 10, 11, 19, 20, 47, 49, 64, 65, 69 - See Terminal Repair Kit

I Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

I Pins: 73

I Terminal/Tray: 7116-4152-02/9

I Core/Insulation Crimp: 2/5

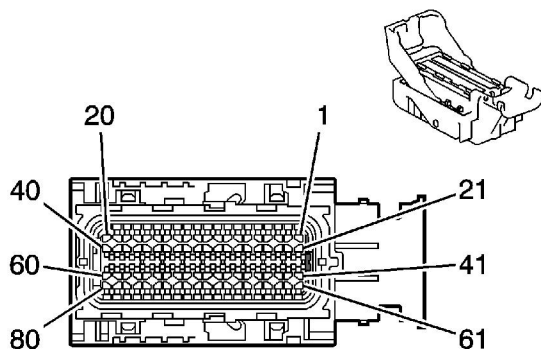
I Release Tool/Test Probe: 12094430/J-35616-35 (VT)

Engine Control Module (ECM) C1 (MYC)

Pin	Wire Color	Circuit No.	Function
1	OG/BK	1786	Park/Neutral Signal
2-8	--	--	Not Used
9	WH	17	Stop Lamp Switch Signal
10	PU/WH	1668	HO2S High Signal Bank 1 Sensor 2
11	TN/WH	1669	HO2S Low Signal Bank 1 Sensor 2
12	OG/BK	380	A/C Refrigerant Pressure Sensor Signal
13	BK/WH	2751	Low Reference
14-15	--	--	Not Used
16	D-BU	1936	Fuel Level Sensor Signal - Secondary
17	--	--	Not Used
18	YE	43	Accessory Voltage
19	PK	1439	Ignition 1 Voltage
20	RD/WH	2440	Battery Positive Voltage
21-22	--	--	Not Used
23	PU	1272	Low Reference
24	D-GN	890	Fuel Tank Pressure Sensor Signal
25-26	--	--	Not Used
27	TN	2501	ECM High Speed GMLAN Serial Data Bus -
28	TN/BK	2500	ECM High Speed GMLAN Serial Data Bus +
29	D-BU	1161	APP Sensor 1 Signal
30	BN	1271	Low Reference
31	TN	2759	Low Reference
32	L-BU	1162	APP Sensor 2 Signal
33	GY	2709	5-Volt Reference 1
34	GY	2700	5-Volt Reference 1
35	--	--	Not Used
36	TN	1274	5-Volt Reference 1
37	TN	472	IAT Sensor Signal
38	TN	2760	Low Reference
39-40	--	--	Not Used
41	YE	492	MAF Sensor Signal

42-46	--	--	Not Used
47	PK	439	Ignition 1 Voltage
48	WH	121	Engine Speed Signal
49	TN	1671	HO2S Low Signal Bank 2 Sensor 2
50	D-GN/WH	465	Fuel Pump Relay Control
51-55	--	--	Not Used
56	WH/BK	1164	5-Volt Reference 2
57	D-GN/WH	817	Vehicle Speed Signal
58	D-GN	335	Cooling Fan Relay Control
59	WH/BK	448	Ignition 1 Relay Control
60	--	--	Not Used
61	WH	1310	EVAP Canister Vent Solenoid Control
62	--	--	Not Used
63	D-GN/WH	459	A/C Compressor Clutch Relay Control
64	OG/WH	3223	HO2S Heater Low Control Bank 2 Sensor 2
65	BN	2391	HO2S Heater Low Control Bank 1 Sensor 2
66	--	--	Not Used
67	YE/BK	625	Starter Enable Relay Control
68	BN/WH	419	MIL Control
69	PU	1670	HO2S High Signal Bank 2 Sensor 2
70	L-BU	1937	Fuel Level Sensor Signal - Right
71-72	--	--	Not Used
73	BK/WH	451	Ground

Engine Control Module (ECM) C2 (MM6/MZ6)



Connector Part Information

I OEM: 34566-4503

- I Service: See Catalog
- I Description: 80-Way F Micro-Pack 64 Series (GY)

Terminal Part Information

- I Pins: 2, 3, 5, 6, 8, 11-13, 17-24, 26, 27, 29, 30, 32-35, 37-41, 43, 44, 50, 53, 56-61, 63-66, 68-79
- I Terminal/Tray: 33467-0003/23
- I Core/Insulation Crimp: Pins 2, 3, 21-24, 26, 27, 29, 30, 32-35, 41, 43, 44, 50, 53, 58, 61, 63-66, 68, 69 - H/H
- I Core/Insulation Crimp: Pins 5, 6, 8, 11-13, 17-20, 37-40, 56, 57, 59, 60, 70-79 - See Terminal Repair Kit
- I Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

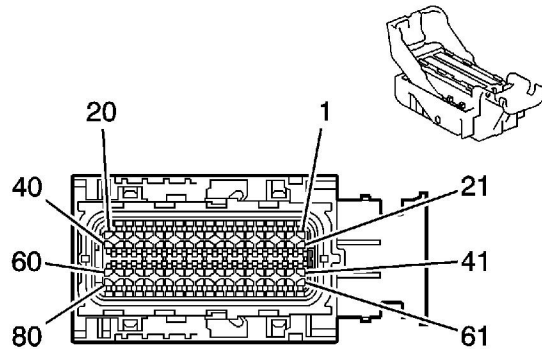
Engine Control Module (ECM) C2 (MM6/MZ6)

Pin	Wire Color	Circuit No.	Function
1	--	--	Not Used
2	L-GN	1867	5-Volt Reference 2
3	L-BU/BK	1688	5-Volt Reference 2
4	--	--	Not Used
5	BN	582	TAC Motor Control 2
6	YE	581	TAC Motor Control 1
7	--	--	Not Used
8	D-GN/WH	428	EVAP Canister Purge Valve Control
9-10	--	--	Not Used
11	L-GN	1652	Reverse Lockout Solenoid Control
12	GY/WH	3113	HO2S Heater Low Control Bank 1 Sensor 1
13	L-GN	3212	HO2S Heater Low Control Bank 2 Sensor 1
14-16	--	--	Not Used
17	D-BU/WH	878	Fuel Injector 8 Control
18	TN/WH	845	Fuel Injector 5 Control
19	YE/BK	846	Fuel Injector 6 Control
20	TN	1744	Fuel Injector 1 Control
21	YE	410	ECT Sensor Signal
22	TN	2761	Low Reference
23	TN/WH	585	Transmission Fluid Temperature Sensor Signal
24	OG/BK	586	Low Reference
25	--	--	Not Used
26	D-BU	496	KS Signal Bank 1
27	GY	1716	KS Low Reference Bank 1
28	--	--	Not Used
29	L-BU	1876	KS Signal Bank 2
30	GY	2303	KS Low Reference Bank 2
31	--	--	Not Used

32	GY	23	Generator Field Duty Cycle Signal
33	BN	1174	Oil Level Switch Signal
34	BK	2755	Low Reference
35	TN/WH	1704	Low Reference
36	--	--	Not Used
37	L-GN/BK	1745	Fuel Injector 2 Control
38	PK/BK	1746	Fuel Injector 3 Control
39	L-BU/BK	844	Fuel Injector 4 Control
40	OG/BK	877	Fuel Injector 7 Control
41	GY	2705	5-Volt Reference 1
42	--	--	Not Used
43	GY	2704	5-Volt Reference 1
44	OG	631	5-Volt Reference 1
45-49	--	--	Not Used
50	TN/WH	331	Oil Pressure Sensor Signal
51-52	--	--	Not Used
53	OG/BK	469	Low Reference
54-55	--	--	Not Used
56	TN	1664	HO2S Low Signal Bank 1 Sensor 1
57	PU/WH	1665	HO2S High Signal Bank 1 Sensor 1
58	L-GN	432	MAP Sensor Signal
59	PU	1666	HO2S High Signal Bank 2 Sensor 1
60	TN	1667	HO2S Low Signal Bank 2 Sensor 1
61	OG	225	Generator Turn On Signal
62	--	--	Not Used
63	PU	486	TP Sensor 2 Signal
64	BN/WH	633	CMP Sensor Signal
65	D-GN	485	TP Sensor 1 Signal
66	PK/BK	632	Low Reference
67	--	--	Not Used
68	D-BU/WH	1869	CKP Sensor Signal
69	YE/BK	1868	Low Reference
70	PU	2121	IC 1 Control
71	PU/WH	2128	IC 8 Control
72	OG	2127	IC 7 Control
73	OG/WH	2122	IC 2 Control
74	L-BU/WH	2126	IC 6 Control
75	D-GN	2125	IC 5 Control
76	D-GN/WH	2124	IC 4 Control
77	L-BU	2123	IC 3 Control

78	BN	2129	Low Reference
79	BN/WH	2130	Low Reference
80	--	--	Not Used

Engine Control Module (ECM) C2 (MYC)



Connector Part Information

- I OEM: 34566-4603
- I Service: 19115670
- I Description: 80-Way F Micro-Pack 64 Series (GY)

Terminal Part Information

- I Pins: 2, 3, 5, 6, 8, 12, 13, 17-22, 26, 27, 29, 30, 32-35, 37-41, 43, 44, 50, 53, 56-61, 63-66, 68-79
- I Terminal/Tray: 33467-0003/23
- I Core/Insulation Crimp: Pins 2, 3, 21, 22, 26, 27, 29, 30, 32-35, 41, 43, 44, 50, 53, 58, 61, 63-66, 68, 69 - H/H
- I Core/Insulation Crimp: Pins 5, 6, 8, 12, 13, 17-20, 37-40, 56, 57, 59, 60, 70-79 - See Terminal Repair Kit
- I Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

Engine Control Module (ECM) C2 (MYC)

Pin	Wire Color	Circuit No.	Function
1	--	--	Not Used
2	L-GN	1867	5-Volt Reference 2
3	L-BU/BK	1688	5-Volt Reference 2
4	--	--	Not Used
5	BN	582	TAC Motor Control 2
6	YE	581	TAC Motor Control 1
7	--	--	Not Used
8	D-GN/WH	428	EVAP Canister Purge Valve Control

9-11	--	--	Not Used
12	GY/WH	3113	HO2S Heater Low Control Bank 1 Sensor 1
13	L-GN	3212	HO2S Heater Low Control Bank 2 Sensor 1
14-16	--	--	Not Used
17	D-BU/WH	878	Fuel Injector 8 Control
18	TN/WH	845	Fuel Injector 5 Control
19	YE/BK	846	Fuel Injector 6 Control
20	TN	1744	Fuel Injector 1 Control
21	YE	410	ECT Sensor Signal
22	TN	2761	Low Reference
23-25	--	--	Not Used
26	D-BU	496	KS Signal Bank 1
27	GY	1716	KS Low Reference Bank 1
28	--	--	Not Used
29	L-BU	1876	KS Signal Bank 2
30	GY	2303	KS Low Reference Bank 2
31	--	--	Not Used
32	GY	23	Generator Field Duty Cycle Signal
33	BN	1174	Oil Level Switch Signal
34	BK	2755	Low Reference
35	TN/WH	1704	Low Reference
36	--	--	Not Used
37	L-GN/BK	1745	Fuel Injector 2 Control
38	PK/BK	1746	Fuel Injector 3 Control
39	L-BU/BK	844	Fuel Injector 4 Control
40	OG/BK	877	Fuel Injector 7 Control
41	GY	2705	5-Volt Reference 1
42	--	--	Not Used
43	GY	2704	5-Volt Reference 1
44	OG	631	5-Volt Reference 1
45-49	--	--	Not Used
50	TN/WH	331	Oil Pressure Sensor Signal
51-52	--	--	Not Used
53	OG/BK	469	Low Reference
54-55	--	--	Not Used
56	TN	1664	HO2S Low Signal Bank 1 Sensor 1
57	PU/WH	1665	HO2S High Signal Bank 1 Sensor 1
58	L-GN	432	MAP Sensor Signal
59	PU	1666	HO2S High Signal Bank 2 Sensor 1
60	TN	1667	HO2S Low Signal Bank 2 Sensor 1

61	OG	225	Generator Turn On Signal
62	--	--	Not Used
63	PU	486	TP Sensor 2 Signal
64	BN/WH	633	CMP Sensor Signal
65	D-GN	485	TP Sensor 1 Signal
66	PK/BK	632	Low Reference
67	--	--	Not Used
68	D-BU/WH	1869	CKP Sensor Signal
69	YE/BK	1868	Low Reference
70	PU	2121	IC 1 Control
71	PU/WH	2128	IC 8 Control
72	OG	2127	IC 7 Control
73	OG/WH	2122	IC 2 Control
74	L-BU/WH	2126	IC 6 Control
75	D-GN	2125	IC 5 Control
76	D-GN/WH	2124	IC 4 Control
77	L-BU	2123	IC 3 Control
78	BN	2129	Low Reference
79	BN/WH	2130	Low Reference
80	--	--	Not Used