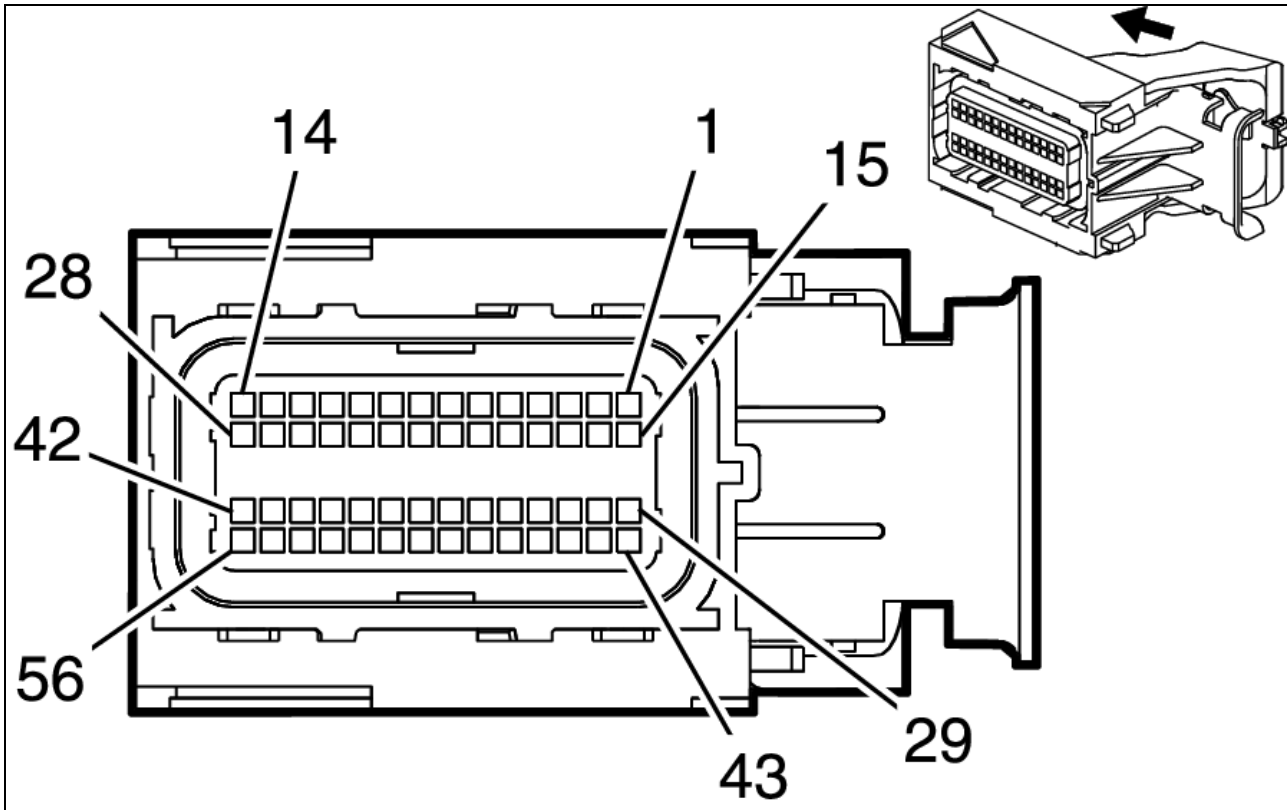


YMMS: 2011 Chevrolet Colorado
Engine: 5.3L Eng
VIN:

Feb 7, 2022
License:
Odometer:

Engine Control Module (ECM) X1 Connector End View

Fig 1: Engine Control Module (ECM) X1 Connector End View



Courtesy of GENERAL MOTORS CORP.

Connector Part Information

- Harness: Body
- OEM: 13599443
- Service: Pending
- Description: 56-Way F MX123 Series, Sealed (BU) with (BK) Case

Terminal Part Information

- Pins: 2, 4, 9, 12-13, 15-16, 19-20, 26, 29, 33-37, 40, 44, 47-49, 53, 55
- Terminated Lead: 13575811
- Release Tool: J-38125-213
- Diagnostic Test Probe: J-35616-64B (L-BU)
- Terminal/Tray: 33467-0003/23
- Core/Insulation Crimp: H/H

- Pins: 7, 18, 51
- Terminated Lead: 13575575
- Release Tool: J-38125-213
- Diagnostic Test Probe: J-35616-64B (L-BU)
- Terminal/Tray: 33467-0005/23
- Core/Insulation Crimp Pin: 18 :J/J
- Core/Insulation Crimp: Pins: 7, 51: K/K

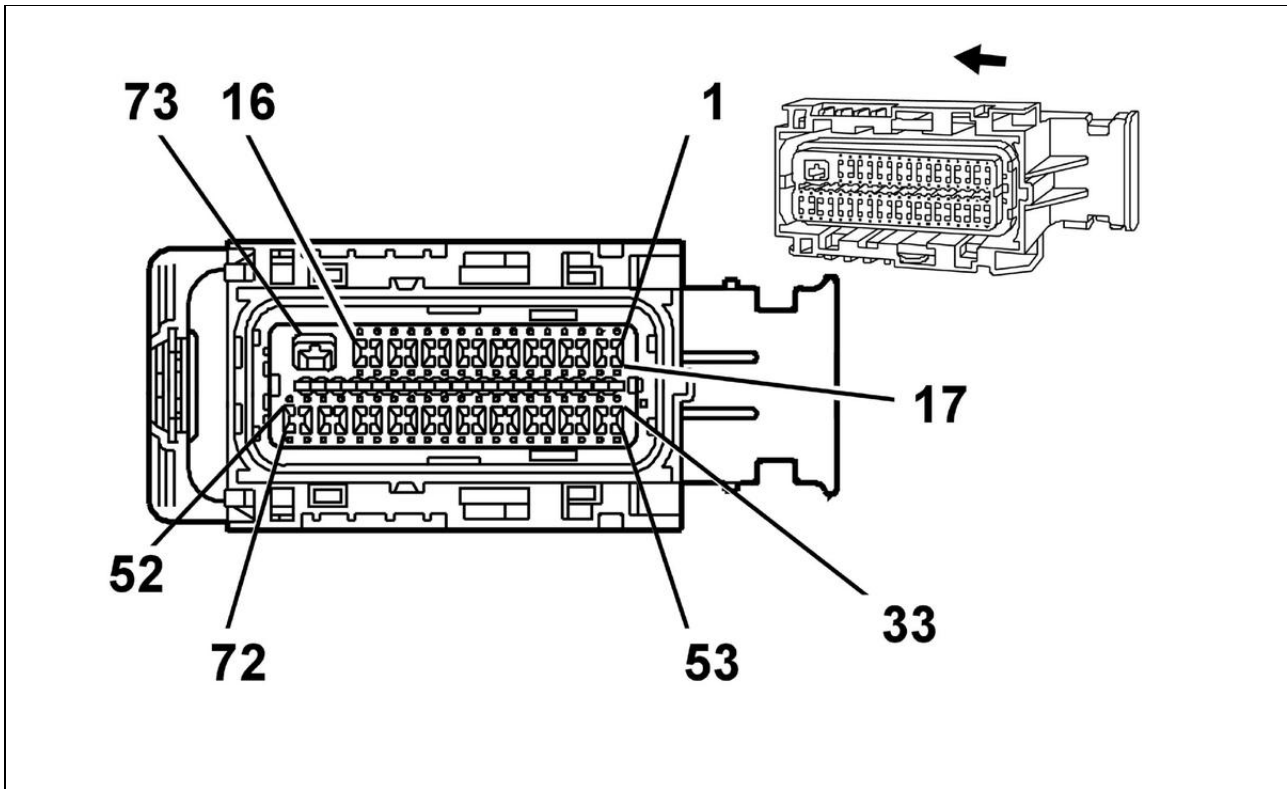
Engine Control Module (ECM) X1

| Pin | Wire | Circuit | Function |
|-------|--------------|---------|-------------------------------|
| 1 | - | - | Not Available |
| 2 | 0.35 PU | 420 | Cruise Control Release Signal |
| 3 | - | - | Not Available |
| 4 | 0.35 D-GN/WH | 1559 | 4WD Low Signal (NP1) |
| 5-6 | - | - | Not Available |
| 7 | 0.8 L-BU | 20 | Stop Lamp Control |
| 8 | - | - | Not Available |
| 9 | 0.35 BK | 2759 | Low Reference |
| 10-11 | - | - | Not Available |
| 12 | 0.35 BN/WH | 419 | MIL Control |
| 13 | 0.35 D-GN/WH | 465 | Fuel Pump Relay Control |
| 14 | - | - | Not Available |
| 15 | 0.35 PU | 1807 | Class 2 Serial Data |
| 16 | 0.35 PU | 1807 | Class 2 Serial Data |
| 17 | - | - | Not Available |
| 18 | 0.5 BN | 4 | Ignition Voltage |
| 19 | 0.35 PK | 639 | Ignition Voltage |
| 20 | 0.35 OG | 440 | Battery Positive Voltage |
| 21-23 | - | - | Not Available |
| 24 | - | - | Not Used |
| 25 | - | - | Not Available |
| 26 | 0.35 YE/BK | 625 | Starter Enable Relay Control |
| 27-28 | - | - | Not Available |
| 29 | 0.35 GY | 1884 | Cruise Control Switch Signal |
| 30-32 | - | - | Not Available |

| | | | |
|-------|--------------|------|-------------------------------------|
| 33 | 0.35 WH/BK | 1164 | 5-Volt Reference |
| 34 | 0.35 GY | 2709 | 5-Volt Reference |
| 35 | 0.35 TN | 1274 | 5-Volt Reference |
| 36 | 0.35 BN | 1271 | Low Reference |
| 37 | 0.35 PU | 1272 | Low Reference |
| 38-39 | - | - | Not Available |
| 40 | 0.35 YE | 5991 | Powertrain Relay Control |
| 41-43 | - | - | Not Available |
| 44 | 0.35 PU | 1589 | Fuel Level Sensor Signal |
| 45-46 | - | - | Not Available |
| 47 | 0.35 D-BU | 1161 | APP Sensor 1 Signal |
| 48 | 0.35 D-GN | 890 | Fuel Tank Pressure Sensor Signal |
| 49 | 0.35 L-BU | 1162 | APP Sensor 2 Signal |
| 50 | - | - | Not Available |
| 51 | 0.8 PU | 421 | AIR Solenoid Relay Control (K18) |
| 52 | - | - | Not Available |
| 53 | 0.35 D-GN/WH | 459 | A/C Compressor Clutch Relay Control |
| 54 | - | - | Not Available |
| 55 | 0.5 WH | 1310 | EVAP Canister Vent Solenoid Control |
| 56 | - | - | Not Available |

Engine Control Module (ECM) X2 Connector End View

Fig 2: Engine Control Module (ECM) X2 Connector End View



Courtesy of GENERAL MOTORS CORP.

Connector Part Information

- Harness: Engine
- OEM: 13711077 (LH9)
- OEM: 13600010 (LLR or LLV)
- Service: Pending
- Description: 73-Way F MX123 34566 Series, Sealed (BK) with (BK) Case

Terminal Part Information

- Pins: 1(LLR or LLV), 8(LLR or LLV), 9(LLR or LLV), 14, 17(LLR or LLV), 23(LLR or LLV), 27(LLR or LLV), 29, 33(LLR or LLV), 39(LLR or LLV), 43(LLR or LLV), 44, 46, 53(LLR or LLV), 54(LLR or LLV), 59(LLR or LLV), 63(LLR or LLV), 64, 66
- Terminated Lead: 13575811
- Release Tool: J-38125-213
- Diagnostic Test Probe: J-35616-64B (L-BU)
- Terminal/Tray: 33467-0003/23
- Core/Insulation Crimp: H/H
- Pins: 1(LH9), 2- 7, 8(LH9), 9(LH9), 11- 13, 16, 17(LH9), 18, 19, 23(LH9), 24, 27(LH9), 32, 33(LH9), 34, 35, 39(LH9), 40, 42, 43(LH9), 48, 49, 52, 53(LH9), 54(LH9), 55, 59(LH9), 60, 62, 63(LH9), 67- 72
- Terminated Lead: Pending
- Release Tool: Pending
- Diagnostic Test Probe: Pending
- Terminal/Tray: Pending

- Core/Insulation Crimp: Not Available
- Pins: 73
- Terminated Lead: Pending
- Release Tool: J-38125-11A
- Diagnostic Test Probe: J-35616-35 (VT)
- Terminal/Tray: 7116-4152-02/9
- Core/Insulation Crimp: 2/5

Engine Control Module (ECM) X2

| Pin | Wire | Circuit | Function |
|-----|-----------|---------|--|
| 1 | 0.5 PU | 2121 | IC 1 Control |
| 2 | 0.5 TN/WH | 1653 | HO2S Low Signal Sensor 1 (LLR or LLV) |
| | 0.5 TN | 1664 | HO2S Low Signal - Bank 1 Sensor 1 (LH9) |
| 3 | 0.5 D-GN | 1655 | HO2S High Signal - Sensor 1 (LLR or LLV) |
| | 0.5 PU/WH | 1665 | HO2S High Signal - Bank 1 Sensor 1 (LH9) |
| 4 | 0.5 PU/WH | 1668 | HO2S High Signal - Bank 1 Sensor 2 (LH9) |
| | | | HO2S High Signal - Sensor 2 (LLR or LLV) |
| 5 | 0.5 TN/WH | 1669 | HO2S Low Signal - Bank 1 Sensor 2 (LH9) |
| | | | HO2S Low Signal - Sensor 2 (LLR or LLV) |
| 6 | 0.8 L-BU | 1876 | Knock Sensor 2 Signal (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 7 | 0.8 GY | 2303 | Knock Sensor 2 Signal (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 8 | 0.8 D-BU | 496 | Knock Sensor 1 Signal (LH9) |
| | 0.35 L-BU | 1876 | Knock Sensor Signal (LLR or LLV) |
| 9 | 0.8 GY | 1716 | Knock Sensor 1 Signal (LH9) |
| | 0.35 GY | 2303 | Knock Sensor Signal (LLR or LLV) |
| 10 | - | - | Not Available |
| 11 | 0.5 YE | 581 | TAC Motor Control - 1 |
| 12 | 0.5 BN | 582 | TAC Motor Control - 2 |
| 13 | 0.5 PK | 739 | Ignition Voltage |
| 14 | 0.5 BN | 2198 | CMP Actuator Solenoid Control (LLR or LLV) |
| | 0.35 PU | 5284 | CMP Actuator Solenoid Control (LH9) |
| 15 | - | - | Not Available |

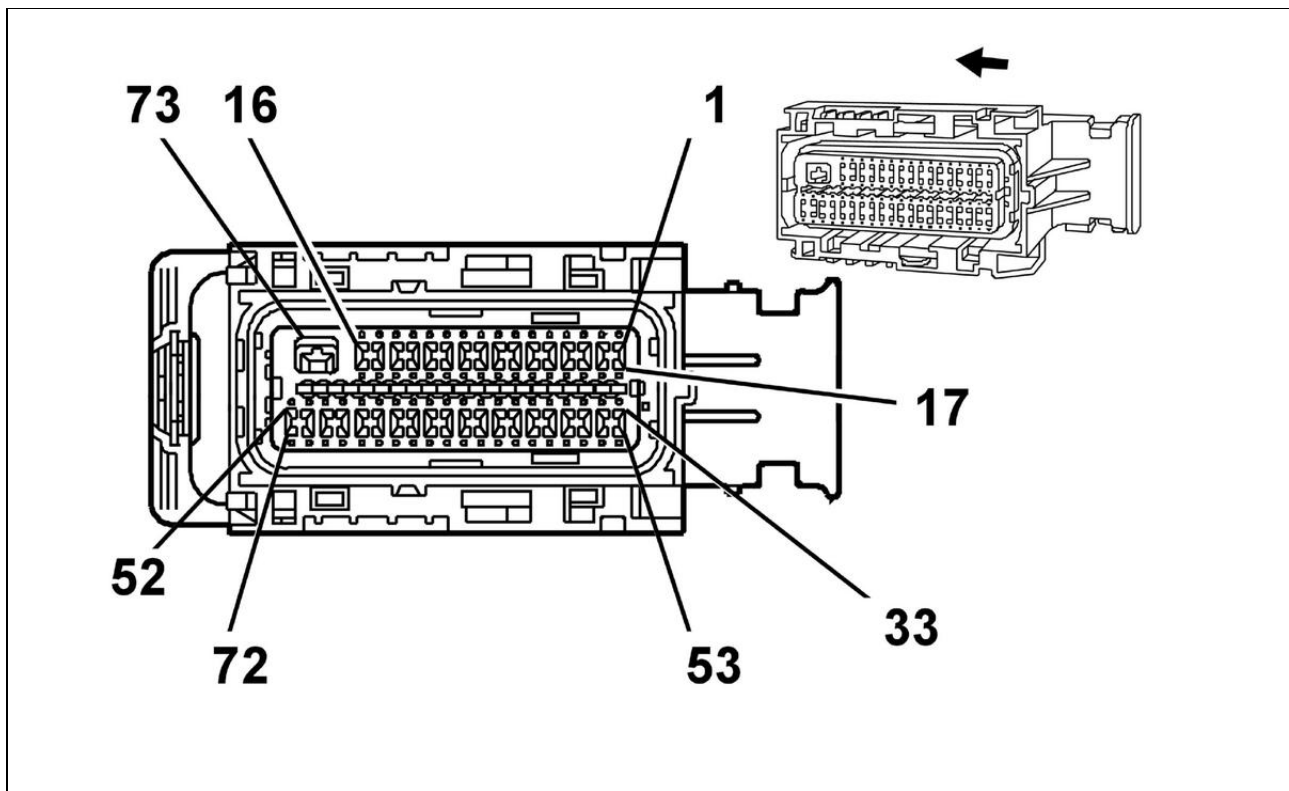
| | | | |
|-------|-------------|------|--------------------------------------|
| 16 | 0.8 PK/BK | 1746 | Fuel Injector 3 Control (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 17 | 0.5 PU/WH | 2128 | IC 8 Control (LH9) |
| | 0.5 L-BU | 2123 | IC 3 Control (LLR or LLV) |
| 18 | 0.5 D-GN/WH | 2124 | IC 4 Control (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 19 | 0.5 BN/WH | 2130 | Low Reference (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 20-22 | - | - | Not Available |
| 23 | 0.5 OG | 6260 | Low Reference (LH9) |
| | 0.5 PK/BK | 632 | Low Reference (LLR or LLV) |
| 24 | 0.5 BK | 2755 | Low Reference |
| 25-26 | - | - | Not Available |
| 27 | 0.5 GY/BK | 6272 | Low Reference (LH9) |
| | 0.5 D-BU/WH | 1869 | Low Reference (LLR or LLV) |
| 28 | - | - | Not Available |
| 29 | 0.35 BK | 2752 | Low Reference |
| 30-31 | - | - | Not Available |
| 32 | 0.5 L-GN/BK | 1745 | Fuel Injector 2 Control (LH9) |
| | 0.5 L-BU/BK | 844 | Fuel Injector 4 Control (LLR or LLV) |
| 33 | 0.5 RD | 2127 | IC 7 Control (LH9) |
| | 0.5 D-GN/WH | 2124 | IC 4 Control (LLV) |
| | 0.5 D-GN | 2125 | IC 5 Control (LLR) |
| 34 | 0.5 D-GN | 2125 | IC 5 Control (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 35 | 0.5 BN | 2129 | Low Reference (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 36-38 | - | - | Not Available |
| 39 | 0.5 D-BU | 6259 | 5-Volt Reference 1 (LH9) |
| | 0.35 RD | 631 | 5-Volt Reference (LLR or LLV) |
| 40 | 0.5 GY | 2705 | 5-Volt Reference 1 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 41 | - | - | Not Available |

| | | | |
|-------|-------------|------|--------------------------------------|
| 42 | 0.5 BK | 2760 | Low Reference |
| 43 | 0.5 PU/WH | 6270 | 5-Volt Reference (LH9) |
| | 0.5 L-GN | 1867 | 5-Volt Reference (LLR or LLV) |
| 44 | 0.5 GY | 2701 | 5-Volt Reference |
| 45 | - | - | Not Available |
| 46 | 0.35 BK | 2199 | Low Reference |
| 47 | - | - | Not Available |
| 48 | 0.8 D-BU/WH | 878 | Fuel Injector 8 Control (LH9) |
| | 0.5 PK/BK | 1746 | Fuel Injector 3 Control (LLR or LLV) |
| 49 | 0.8 BK/WH | 845 | Fuel Injector 5 Control (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 50-51 | - | - | Not Available |
| 52 | 0.8 YE/BK | 846 | Fuel Injector 6 Control (LH9) |
| | 0.5 L-GN/BK | 1745 | Fuel Injector 2 Control (LLR) |
| 53 | 0.5 RD/WH | 2122 | IC 2 Control (LH9) |
| | 0.5 OG/WH | 2122 | IC 2 Control (LLV) |
| | 0.5 D-GN/WH | 2124 | IC 4 Control (LLR) |
| 54 | 0.5 L-BU/WH | 2126 | IC 6 Control (LH9) |
| | 0.5 RD/WH | 2122 | IC 2 Control (LLR) |
| 55 | 0.5 L-BU | 2123 | IC 3 Control (LH9) |
| 56-58 | - | - | Not Available |
| 59 | 0.5 D-BU/WH | 6265 | CMP Sensor Signal (LH9) |
| | 0.5 BK | 630 | Low Reference (LLR or LLV) |
| 60 | 0.5 TN/WH | 331 | Oil Pressure Sensor Signal (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 61 | - | - | Not Available |
| 62 | 0.5 L-BU | 6289 | IAT Sensor Signal |
| 63 | 0.5 WH/BK | 6271 | CKP Sensor Signal (LH9) |
| | 0.35 YE/BK | 1868 | CKP Sensor Signal (LLR or LLV) |
| 64 | 0.5 D-GN | 485 | TP Sensor 1 Signal |
| 65 | - | - | Not Available |
| 66 | 0.5 PU | 486 | TP Sensor 2 Signal |
| 67 | 0.5 YE | 492 | MAF Sensor Signal |

| | | | |
|----|-------------|------|--|
| 68 | 0.5 BK/WH | 3113 | HO2S Heater Low Control - Bank 1 Sensor 1 (LH9) |
| | 0.5 D-GN | 676 | HO2S Heater High Control - Sensor 1 (LLR or LLV) |
| 69 | 0.5 BK/WH | 3122 | HO2S Heater Low Control - Bank 1 Sensor 2 (LH9) |
| | 0.5 BK/WH | 1423 | HO2S Heater Low Control - Sensor 2 (LLR or LLV) |
| 70 | 0.8 L-BU/BK | 844 | Fuel Injector 4 Control (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 71 | 0.8 RD/BK | 877 | Fuel Injector 7 Control (LH9) |
| | 0.5 L-BU/BK | 844 | Fuel Injector 4 Control (LLV) |
| | 0.5 BK/WH | 845 | Fuel Injector 5 Control (LLR) |
| 72 | 0.5 BK | 1744 | Fuel Injector 1 Control |
| 73 | 2 BK/WH | 451 | Ground |

Engine Control Module (ECM) X3 Connector End View

Fig 3: Engine Control Module (ECM) X3 Connector End View



Courtesy of GENERAL MOTORS CORP.

Connector Part Information

- Harness: Engine
- OEM: 13675624 (LH9)
- OEM: 13600012 (LLR or LLV with M30)
- OEM: 13597590 (MA5)

- Service: 88988372
- Description: 73-Way F MX123 34566 Series Sealed (GY) with (BK) Case

Terminal Part Information

- Pins: 3-7, 9, 12, 15, 17, 21, 23, 26, 27, 29, 33, 35(LH9), 37, 39, 42, 43, 48, 50, 53, 55, 57(LH9), 59, 62, 63, 66, 67
- Terminal/Tray: 33467-0005/23
- Core/Insulation Crimp: J/J
- Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

- Pins: 35(LLR or LLV), 46, 57(LLR or LLV), 65
- Terminal/Tray: 33467-0003/23
- Core/insulation Crimp: H/H
- Release Tool/Test Probe: J-38125-213/J-35616-64B (L-BU)

Engine Control Module (ECM) X3

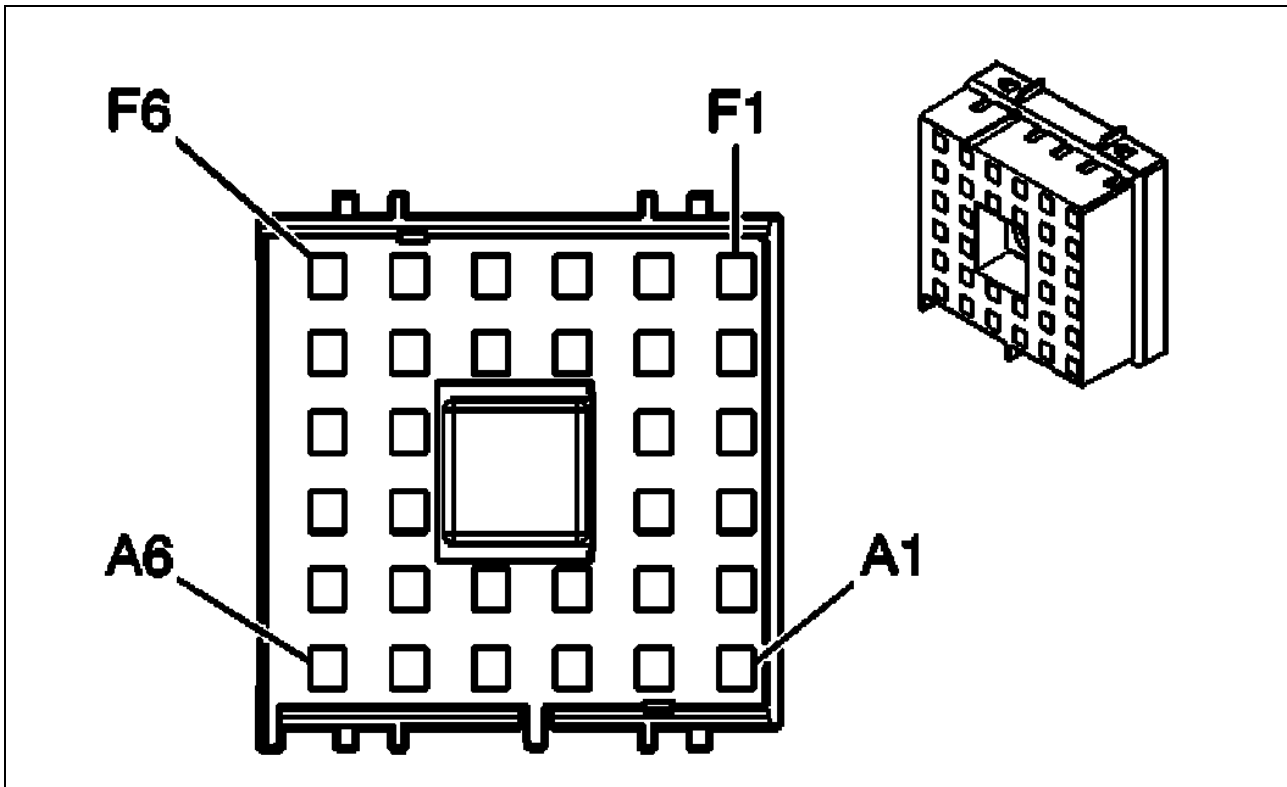
| Pin | Wire | Circuit | Function |
|-------|-----------|---------|---|
| 1-2 | - | - | Not Available |
| 3 | 0.5 TN | 1667 | HO2S Low Signal - Bank 2 Sensor 1 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 4 | 0.5 PU | 1666 | HO2S High Signal - Bank 2 Sensor 1 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 5 | 0.5 PU | 1670 | HO2S High Signal - Bank 2 Sensor 2 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 6 | 0.5 TN | 1671 | HO2S Low Signal - Bank 2 Sensor 2 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 7 | 0.5 PU | 5428 | Generator Regulator Control |
| 8 | - | - | Not Available |
| 9 | 0.5 BN | 436 | AIR Relay Control (K18) |
| | - | - | Not Available (LH9) |
| 10-11 | - | - | Not Available |
| 12 | 0.5 TN/BK | 464 | Delivered Torque Signal |
| 13-14 | - | - | Not Available |
| 15 | 0.5 L-GN | 3212 | HO2S Heater Low Control - Bank 2 Sensor 1 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 16 | - | - | Not Available |
| 17 | 0.5 OG/BK | 463 | Requested Torque Signal |

| | | | |
|-------|-------------|------|---|
| 18-20 | - | - | Not Available |
| 21 | 0.5 BK | 2751 | Low Reference |
| 22 | - | - | Not Available |
| 23 | 0.5 OG/BK | 469 | Low Reference |
| 24-25 | - | - | Not Available |
| 26 | 0.5 D-BU/WH | 6785 | Low Reference (K18) |
| | - | - | Not Available (LH9) |
| 27 | 0.5 D-GN/WH | 6294 | Low Reference (MA5) |
| | - | - | Not Available (M30) |
| 28 | - | - | Not Available |
| 29 | 0.5 GY | 23 | Generator Field Duty Cycle Signal |
| 30-32 | - | - | Not Available |
| 33 | 0.5 TN | 2501 | High Speed GMLAN Serial Data Bus - |
| 34 | - | - | Not Available |
| 35 | 0.5 BK | 2761 | Low Reference (LH9) |
| | 0.35 BK | 2761 | Low Reference (LLR or LLV) |
| 36 | - | - | Not Available |
| 37 | 0.5 GY | 2700 | 5-Volt Reference |
| 38 | - | - | Not Available |
| 39 | 0.5 GY | 2704 | 5-Volt Reference |
| 40-41 | - | - | Not Available |
| 42 | 0.5 BN/WH | 6789 | 5-Volt Reference (K18) |
| 43 | 0.5 D-GN | 6293 | 5-Volt Reference (MA5) |
| | - | - | Not Available (M30) |
| 44-45 | - | - | Not Available |
| 46 | 0.35 OG/BK | 1786 | Park/Neutral Signal (M30) |
| | - | - | Not Available (MA5) |
| 47 | - | - | Not Available |
| 48 | 0.5 D-GN/WH | 428 | EVAP Canister Purge Solenoid Control |
| 49 | - | - | Not Available |
| 50 | 0.5 RD/WH | 3223 | HO2S Heater Low Control - Bank 2 Sensor 2 (LH9) |
| | - | - | Not Available (LLR or LLV) |
| 51-52 | - | - | Not Available |

| | | | |
|-------|-------------|------|---|
| 53 | 0.5 TN/WH | 2500 | High Speed GMLAN Serial Data Bus + |
| 54 | - | - | Not Available |
| 55 | 0.5 YE | 410 | ECT Sensor Signal |
| 56 | - | - | Not Available |
| 57 | 0.5 OG/BK | 380 | A/C Refrigerant Pressure Sensor Signal (LH9) |
| | 0.35 OG/BK | 380 | A/C Refrigerant Pressure Sensor Signal (LLR or LLV) |
| 58 | - | - | Not Available |
| 59 | 0.5 L-GN | 432 | MAP Sensor Signal |
| 60-61 | - | - | Not Available |
| 62 | 0.5 YE | 6787 | Air Injection Reaction Control Valve Control (K18) |
| | - | - | Not Available (LH9) |
| 63 | 0.5 D-BU | 6306 | Clutch Pedal Position Signal (MA5) |
| | - | - | Not Available (M30) |
| 64 | - | - | Not Available |
| 65 | 0.35 TN/BK | 231 | Oil Pressure Switch Signal (LLR or LLV) |
| | - | - | Not Available (LH9) |
| 66 | 0.5 PU/WH | 821 | VSS High Signal (MA5) |
| | - | - | Not Available (M30) |
| 67 | 0.5 L-GN/BK | 822 | VSS Low Signal (MA5) |
| | - | - | Not Available (M30) |
| 68-72 | - | - | Not Available |
| 73 | - | - | Not Used |

Fuse Block - Underhood X6 Connector End View

Fig 4: Fuse Block - Underhood X6 Connector End View



Courtesy of GENERAL MOTORS CORP.

Connector Part Information

- Harness: Body
- OEM: 15319893
- Service: 15319893
- Description: 32-Way F Metri-Pack 280 Series Flexlock (D-GY)

Terminal Part Information

- Pins: A2, A4, B1-B3, B5, E3, E6, F1, F3- F5,
- Terminated Lead: 13575721
- Release Tool: J-38125-553
- Diagnostic Test Probe: J-35616-4A (PU)
- Terminal/Tray: 12110844/4
- Core/Insulation Crimp: Pins: A2, A4, E3, E6: E/A
- Core/Insulation Crimp Pins: B2-B3, B5, F1, F3, F4: E/4
- Core/Insulation Crimp: Pins: B1, F5: C/A

- Pin: A5
- Terminated Lead: Pending
- Release Tool: J-38125-553
- Diagnostic Test Probe: J-35616-4A (PU)
- Terminal/Tray: 12110842/4
- Core/Insulation Crimp: C/A

Fuse Block - Underhood X6

| Pin | Wire | Circuit | Function |
|-------|--------------|---------|------------------------------------|
| A1 | - | - | Not Used |
| A2 | 0.5 OG | 1440 | Battery Positive Voltage |
| A3 | - | - | Not Used |
| A4 | 0.5 OG | 1540 | Battery Positive Voltage (NP1) |
| A5 | 0.8 OG | 2240 | Battery Positive Voltage (AG1/AG2) |
| | 0.8 OG | 2240 | Battery Positive Voltage (AG1/AG2) |
| A6 | - | - | Not Used |
| B1 | 0.8 BK | 850 | Ground |
| B2 | 0.35 PK/WH | 1970 | Headlamp Relay Control |
| B3 | 0.35 PK | 339 | Ignition Voltage |
| B4 | - | - | Not Used |
| B5 | 0.35 D-BU/WH | 339 | Ignition Voltage |
| | 0.35 PK | 339 | Ignition Voltage |
| B6 | - | - | Not Used |
| C1-C2 | - | - | Not Used |
| C3-C4 | - | - | Not Available |
| C5-C6 | - | - | Not Used |
| D1-D2 | - | - | Not Used |
| D3-D4 | - | - | Not Available |
| D5-D6 | - | - | Not Used |
| E1-E2 | - | - | Not Used |
| E3 | 0.5 D-BU | 338 | Ignition Voltage |
| E4-E5 | - | - | Not Used |
| E6 | 0.5 PK | 739 | Ignition Voltage |
| F1 | 0.35 BN/WH | 301 | Park Lamp Relay Control |
| F2 | - | - | Not Used |
| F3 | 0.35 BK | 850 | Ground |
| F4 | 0.35 YE | 5991 | Powertrain Relay Control |
| F5 | 0.8 OG | 1240 | Battery Positive Voltage (ZQ6) |
| F6 | - | - | Not Used |

