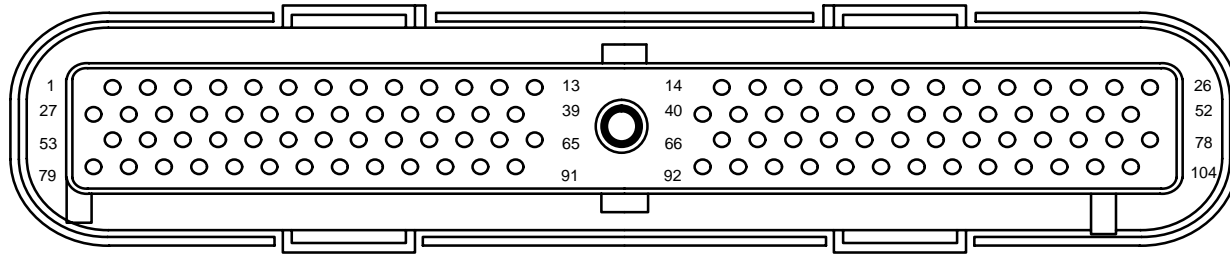


C175

12B637

A147
Powertrain Control
Module (PCM)
(12A650)



F104001

Pin	Circuit	Circuit function
1	315 (VT/OG)	Shift solenoid B
2	658 (PK/LG)	Malfunction Indicator Lamp (MIL), control
3	1144 (YE/BK)	Digital Transmission Range (DTR) sensor, TR1
4	–	not used
5	–	not used
6	970 (DG/WH)	Turbine shaft speed sensor (7M101)
7	–	not used
8	1107 (WH)	Swirl control monitor, to, Powertrain Control Module (PCM) (12A650) – 2.3L
9	–	not used
10	–	not used
11	–	not used
12	29 (YE/WH)	Fuel pump/fuel gauge sender
13	107 (VT)	Module programming signal
14	784 (LB/BK)	Four-wheel drive, indicator, Low
15	915 (PK/LB)	SCP Bus -
16	914 (TN/OG)	SCP Bus +
17	1216 (GY/OG)	RX, signal
18	1215 (WH/LG)	TX, signal
19	464 (BK/PK)	Engine Coolant Temperature (ECT) sender, input - 2.3L
20	–	not used
21	349 (DB)	Crankshaft position sensor (6C315) +
22	350 (GY)	Crankshaft position sensor (6C315) –

Pin	Circuit	Circuit function
23	–	not used
24	570 (BK/WH)	Ground
25	57 (BK)	Ground
26	95 (TN/WH)	Ignition coil (12029)
27	237 (OG/YE)	Shift solenoid A
28	924 (BN/OG)	Shift solenoid D
29	224 (TN/WH)	PCM, to transmission overdrive cancel switch
30	343 (DB/LG)	Anti-theft, indicator, input
31	330 (YE/LG)	Power steering pressure switch, input, 2.3L
32	1273 (YE)	Knock sensor (12A699) – 2.3L, 3.0L
	311 (DG/VT)	Knock sensor (12A699) – 4.0L
33	–	not used
34	–	not used
35	392 (RD/LG)	Heated Oxygen Sensor (HO2S) #12 (9G444), input
36	968 (TN/LB)	Mass Air Flow (MAF) sensor (12B579), signal, return
37	923 (OG/BK)	Transmission Fluid Temperature (TFT) sensor, input
38	354 (LG/RD)	Engine Coolant Temperature (ECT) sensor (12A648), input – 3.0L, 4.0L
39	743 (GY)	Intake Air Temperature (IAT) sensor (12A697), input
40	238 (DG/YE)	Fuel pump relay, switched power, output
41	348 (VT)	A/C demand signal
42	1276 (WH/OG)	Swirl control solenoid valve, to, Powertrain Control Module (PCM) (12A650) – 2.3L

Pin	Circuit	Circuit function
43	–	not used
44	325 (DB/OG)	Starter relay (11450), control
45	3702 (OG/WH)	Engine cooling fan relay, control - 2.3L
46	653 (DB)	Electronic thermostat, to, Powertrain Control Module (PCM) (12A650) – 2.3L
47	360 (BN/PK)	EGR Vacuum Regulator (EVR), control – 4.0L
48	11 (TN/YE)	Tachometer
49	1145 (LB/BK)	Digital Transmission Range (DTR) sensor, TR2
50	1143 (WH/BK)	Digital Transmission Range (DTR) sensor, TR4
51	570 (BK/WH)	Ground
52	96 (TN/OG)	Ignition coil (12029)
53	971 (PK/BK)	Shift solenoid C
54	480 (VT/YE)	Torque Converter Clutch (TCC) solenoid
55	37 (YE)	Voltage supplied at all times (overload protected) - 2.3L, 3.0L
	785 (BK/LG)	Voltage supplied at all times (overload protected) - 4.0L
56	191 (LG/BK)	Powertrain Control Module (PCM) (12A650), EVAP canister purge valve
57	310 (YE/RD)	Knock sensor (12A699)
58	–	not used
59	134 (GY/OG)	Powertrain Control Module (PCM) (12A650) - Intermediate Shaft Speed (ISS) sensor (7M183) – 2.3L, 3.0L, 4.0L, automatic transmission
60	74 (GY/LB)	Heated Oxygen Sensor (HO2S) #11 (9F472), input
61	–	not used
62	791 (RD/PK)	Fuel tank pressure transducer sensor (9C968)
63	358 (LG/BK)	Manifold Absolute Pressure (MAP) sensor, to, Powertrain Control Module (PCM) (12A650) – 2.3L
64	199 (LB/YE)	Digital Transmission Range (DTR) sensor, TR3A – automatic transmission
	199 (LB/YE)	Clutch pedal position switch, to, Powertrain Control Module (PCM) (12A650) – manual transmission, 2.3L, 4.0L

Pin	Circuit	Circuit function
65	352 (BN/LG)	Differential Pressure Feedback EGR (DPFE) sensor, input – 4.0L
66	1102 (YE/LG)	Cylinder-head temperature sensor (6G004), to, Powertrain Control Module (PCM) (12A650) 2.3L
67	91 (VT/WH)	Canister vent
68	679 (GY/BK)	Vehicle Speed Sensor (VSS)
69	331 (PK/YE)	A/C clutch relay, control
70	–	not used
71	361 (RD)	Voltage supplied in Start and Run (overload protected)
72	337 (GY/RD)	EGR stepper motor – B1 2.3L
73	559 (TN/BK)	Fuel injector 5, control – 3.0L, 4.0L
	335 (VT/OG)	EGR stepper motor – A1 2.3L
74	557 (BN/YE)	Fuel injector 3, control
75	555 (TN)	Fuel injector 1, control
76	570 (BK/WH)	Ground
77	570 (BK/WH)	Ground
78	97 (TN/LG)	Ignition coil (12029) – 3.0L, 4.0L
79	911 (WH/LG)	Transmission Control Indicator Lamp (TCIL)
80	926 (LB/OG)	Fuel pump relay, control
81	925 (WH/YE)	Electronic Pressure Control (EPC) solenoid
82	1017 (BK/WH)	Check cap indicator lamp
83	264 (WH/LB)	Idle air control valve (IAC) (9F715), control
84	136 (DB/YE)	Powertrain Control Module (PCM) (12A650) - Output Shaft Speed (OSS) sensor (7M101)
85	282 (DB/OG)	Camshaft position sensor (6B288), input
86	347 (BK/YE)	A/C clutch relay, switched output
87	94 (RD/BK)	Heated Oxygen Sensor (HO2S) #21 (9F472), input - 3.0L, 4.0L
88	967 (LB/RD)	Mass Air Flow (MAF) sensor (12B579), output
89	355 (GY/WH)	Throttle Position Sensor (TPS) (9B989), input
90	351 (BN/WH)	Reference, voltage
91	359 (GY/RD)	signal, return
92	810 (RD/LG)	Brake pedal position switch (13480), input

Pin	Circuit	Circuit function
93	387 (RD/WH)	Heated Oxygen Sensor (HO2S) #11 (9F472), heater
94	388 (YE/LB)	Heated Oxygen Sensor (HO2S) #21 (9F472), heater - 3.0L, 4.0L
95	389 (WH/BK)	Heated Oxygen Sensor (HO2S) #12 (9G444), heater
96	–	not used
97	361 (RD)	Voltage supplied in Start and Run (overload protected)
98	338 (TN/RD)	EGR stepper motor – B2 2.3L
99	560 (LG/OG)	Fuel injector 6, control - 3.0L, 4.0L
	336 (DG)	EGR stepper motor – A2 2.3L
100	558 (BN/LB)	Fuel injector 4, control
101	556 (WH)	Fuel injector 2, control
102	–	not used
103	570 (BK/WH)	Ground
104	–	not used