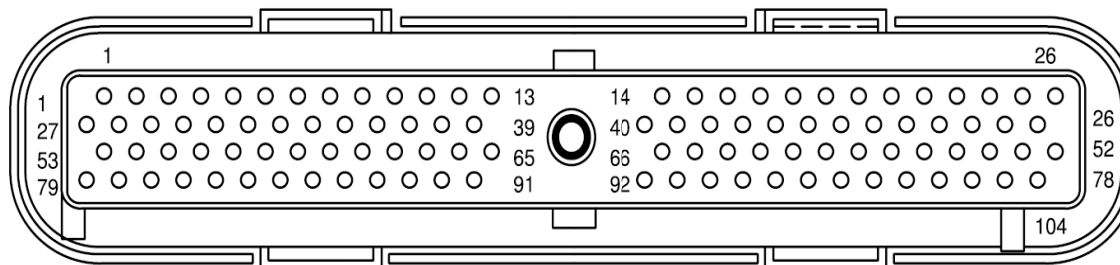


C175 Diesel engines

12A581

A147
Powertrain Control
Module (PCM)
(12A650)

* with automatic transmission



F104001

Pin	Circuit	Circuit function
1	–	not used
2	–	not used
3	3996 (RD/YE)	Manifold intake air heater relay, monitor
4	–	not used
5	162 (LG/RD)	Parking brake switch (15A851)
6	237 (OG/YE)*	Shift solenoid A
7	–	not used
8	1277 (WH/LG)	Glow plug relay, monitor
9	–	not used
10	1285 (RD/LG)	Idle validation switch
11	315 (VT/OG)*	Shift solenoid B
12	911 (WH/LG)*	Transmission Control Indicator Lamp (TCIL)
13	107 (VT)	Module programming signal
14	–	not used
15	915 (PK/LB)	SCP Bus –
16	914 (TN/OG)	SCP Bus +
17	1144 (YE/BK)	Digital Transmission Range (DTR) sensor, TR1
18	331 (PK/YE)	A/C clutch relay, control
19	76 (LG/WH)	Tachometer output
20	924 (BN/OG)*	Powertrain Control Module (PCM) (12A650), to transmission coast clutch solenoid
21	795 (DG)	Camshaft position sensor (6B288)
22	–	not used
23	–	not used

Pin	Circuit	Circuit function
24	357 (YE/WH)	Accelerator pedal position sensor, Ground
25	567 (LB/YE)	Ground
26	–	not used
27	–	not used
28	–	not used
29	224 (TN/WH)	Powertrain Control Module (PCM) (12A650), to transmission overdrive cancel switch – Automatic
	306 (TN/LB)	Clutch switch – Manual
30	553 (VT/LB)	Exhaust Back Pressure (EBP) sensor, monitor
31	307 (BK/YE)	Brake pressure switch (2B264), input
32	–	not used
33	–	not used
34	–	not used
35	1183 (WH/YE)	Generator
36	1280 (GY/RD)	Water-in-fuel sensor
37	923 (OG/BK)	Transmission Fluid Temperature (TFT) sensor, input – Automatic
	923 (OG/BK)	Engine Oil Temperature (EOT) sensor, signal – Manual
38	354 (LG/RD)	Engine Oil Temperature (EOT) sensor, signal
39	743 (GY)	Intake Air Temperature (IAT) sensor (12A697), input
40	787 (PK/BK)	Fuel pump, monitor
41	439 (TN/LG)	A/C high pressure switch (19D594)
42	318 (GY/RD)	Exhaust Pressure Regulator (EPR), control

Pin	Circuit	Circuit function
43	71 (OG/LG)	Powertrain Control Module (PCM) (12A650) – Data output link
44	–	not used
45	203 (OG/LB)	Cruise set, indicator, control
46	–	not used
47	1275 (WH/RD)	Waste gate solenoid, control
48	818 (GY/WH)	Injector Driver Module (IDM)
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	–	not used
53	–	not used
54	*480 (VT/YE)	Torque Converter Clutch (TCC) solenoid
55	729 (RD/WH)	Voltage supplied at all times (overload protected), keep alive memory
56	–	not used
57	–	not used
58	679 (GY/BK)	Vehicle Speed Sensor (VSS) +
59	136 (DB/YE)*	Powertrain Control Module (PCM) (12A650), – Output Shaft Speed (OSS) sensor (7M101)
60	1185 (YE)	Generator and Regulator
61	151 (LB/BK)	Speed control switch, input
62	1291 (RD/YE)	Air Charge Temperature (ACT) sensor
63	–	not used
64	199 (LB/YE)	TR3A – Automatic Clutch pedal position switch – Manual
65	796 (LB)	Camshaft position sensor (6B288), Signal return
66	322 (LB/YE)	PTO control
67	904 (LG/RD)	Generator/Battery indicator, control
68	–	not used
69	–	not used
70	–	not used
71	361 (RD)	Voltage supplied in Start and Run (overload protected)

Pin	Circuit	Circuit function
72–76	–	not used
77	570 (BK/WH)	Ground
78	–	not used
79	358 (LG/BK)	Manifold Absolute Pressure (MAP) sensor, to, Powertrain Control Module (PCM) (12A650)
80	814 (WH/BK)	Injector Driver Module (IDM) power relay, control
81	*925 (WH/YE)	Electronic Pressure Control (EPC) solenoid
82	–	not used
83	552 (YE/RD)	Injection Pressure Regulator (IPR), control
84	970 (DG/WH)	Turbine Shaft Speed (TSS) sensor
85	–	not used
86	–	not used
87	812 (DB/LG)	Injection pressure sensor, monitor
88	–	not used
89	355 (GY/WH)	Accelerator pedal position sensor, input
90	351 (BN/WH)	Reference voltage
91	359 (GY/RD)	Signal return
92	810 (RD/LG)	Brake pedal position switch (13480), input
93	–	not used
94	926 (LB/OG)	Fuel pump relay, control
95	821 (BN/OG)	fuel delivery command signal output
96	817 (YE/LB)	Injector Driver Module (IDM), cylinder identification
97	361 (RD)	Voltage supplied in Start and Run (overload protected)
98	462 (VT)	Manifold intake air heater relay, control
99	–	not used
100	–	not used
101	1086 (VT/OG)	Glow plugs, control
102	–	not used
103	570 (BK/WH)	Ground
104	–	not used