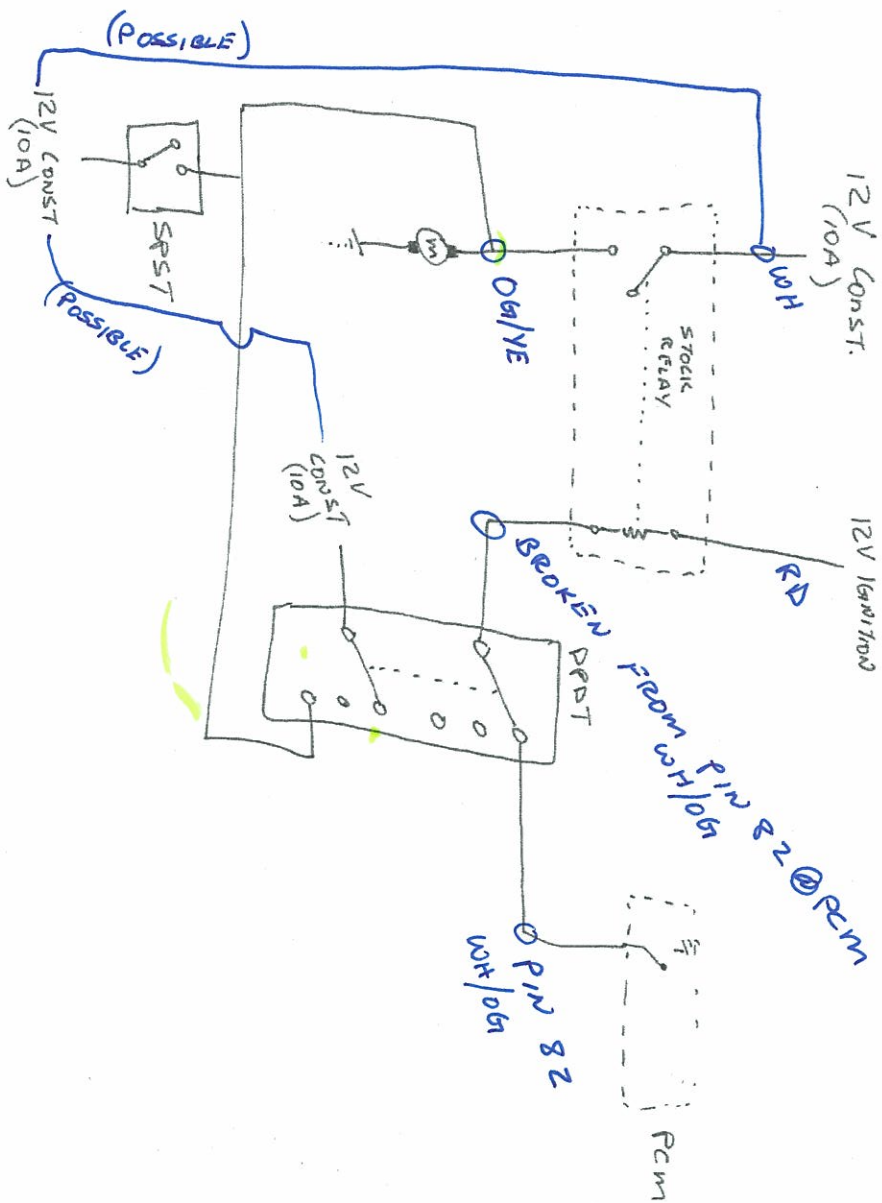


REF. 25-13, 25-2, 25-4



DPDT ON-OFF-ON: also inside the car and used in 3 positions: AUTO, OFF, & ON

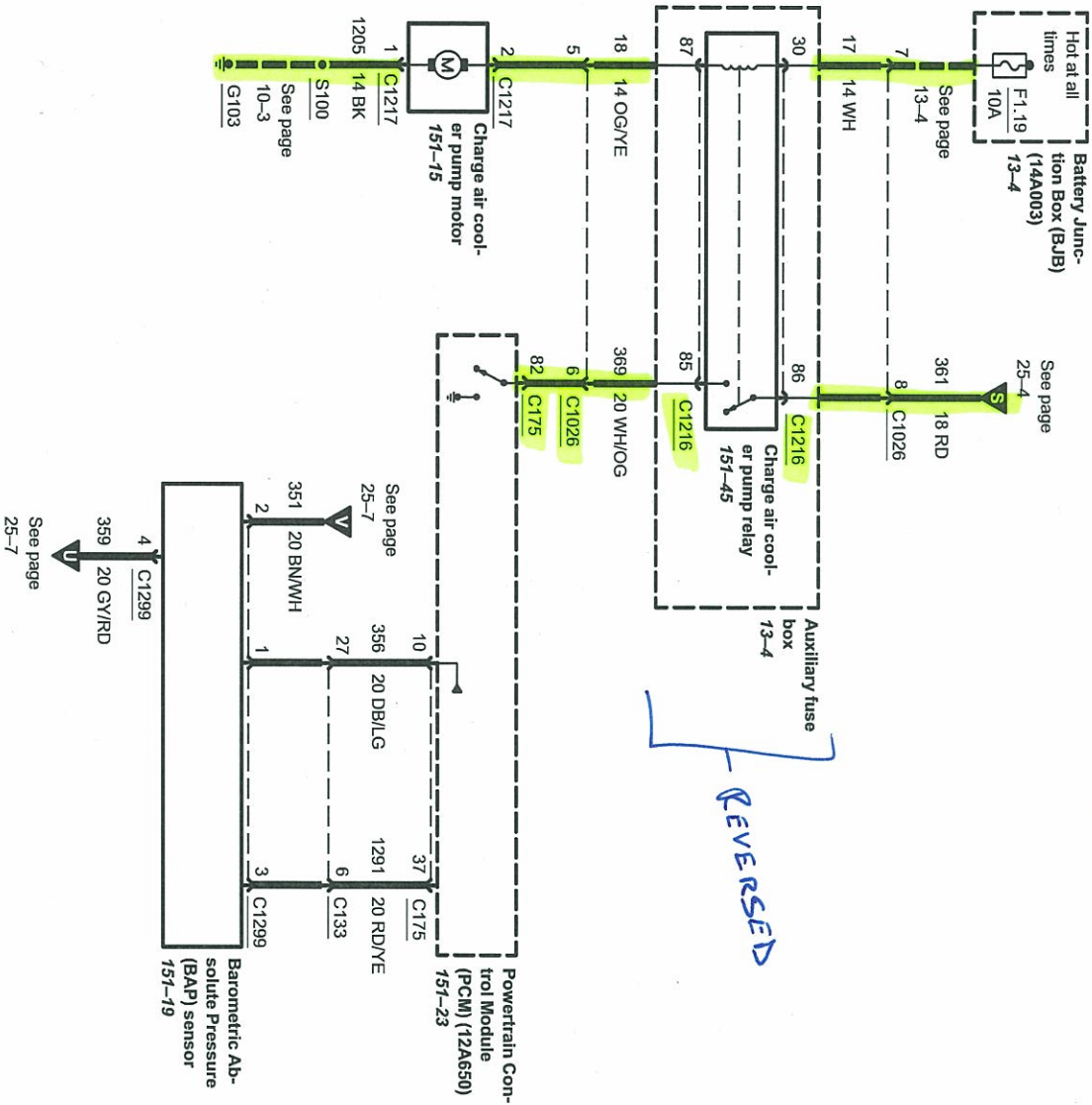
AUTO: Performs just like the factory

OFF: Change pump will not run

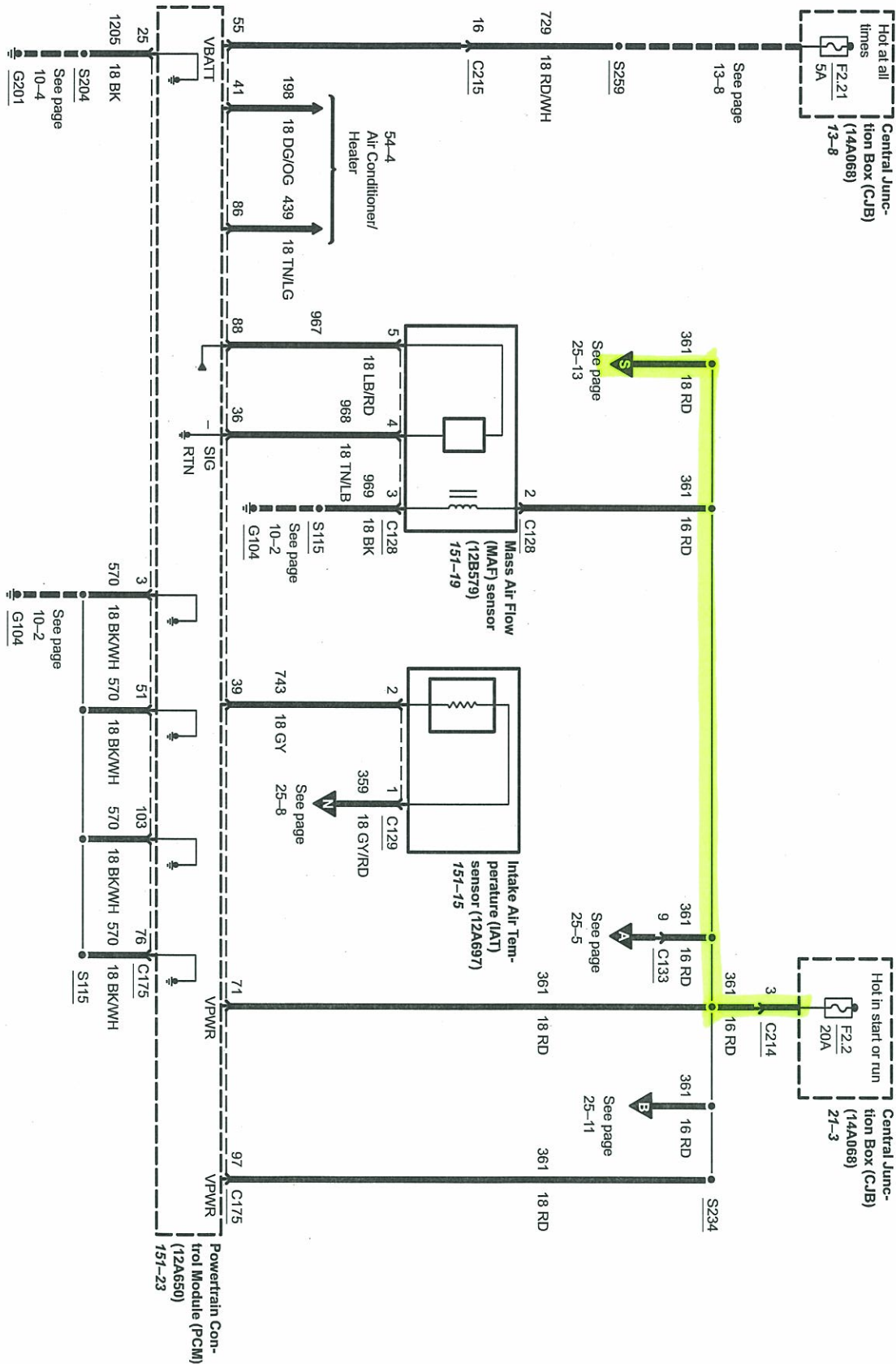
ON: Change pump runs all the time - even with ignitor off.

SPST: Runs the pump all the time - even with ignitor off. Works in place of jumper wire.

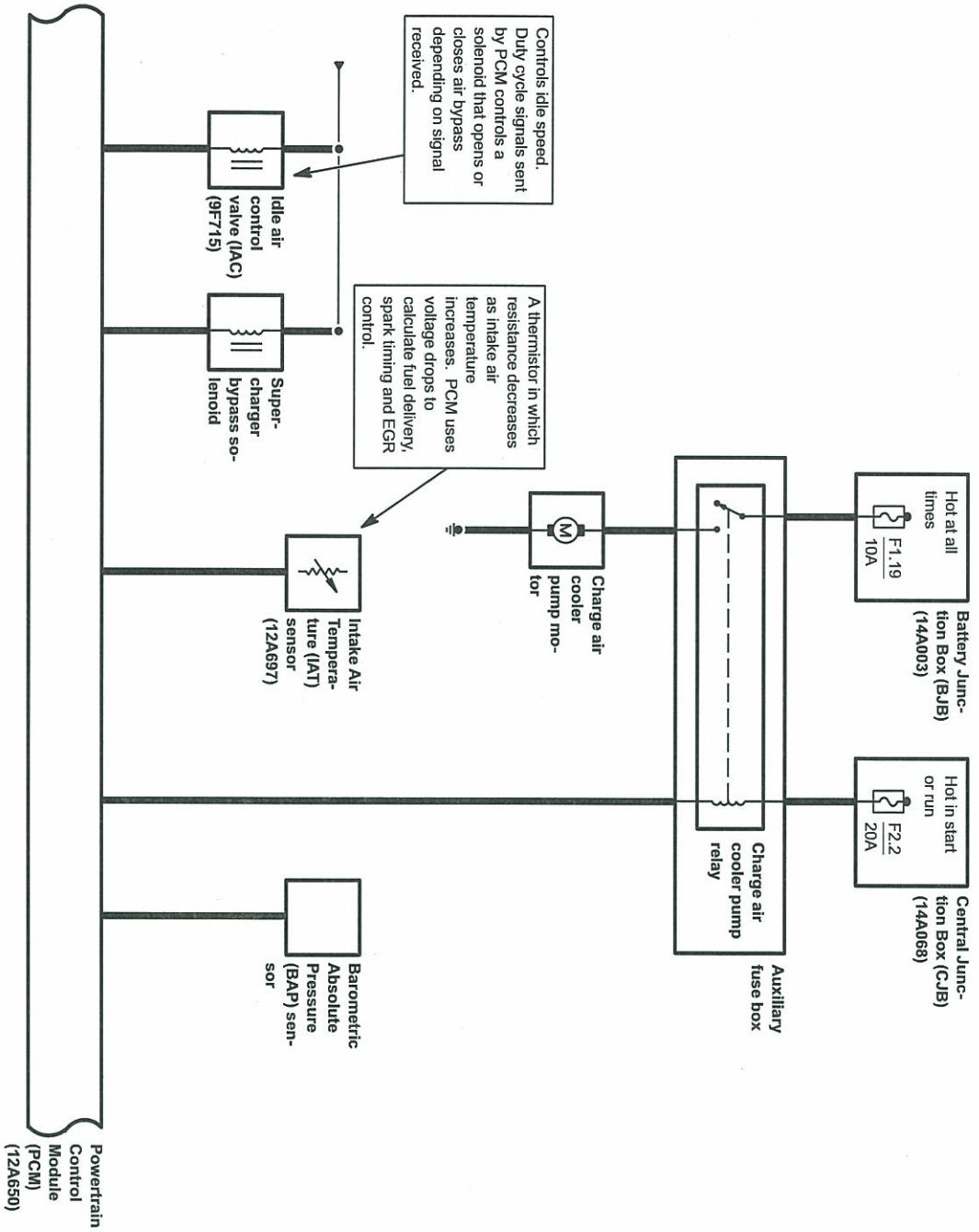
Cobra



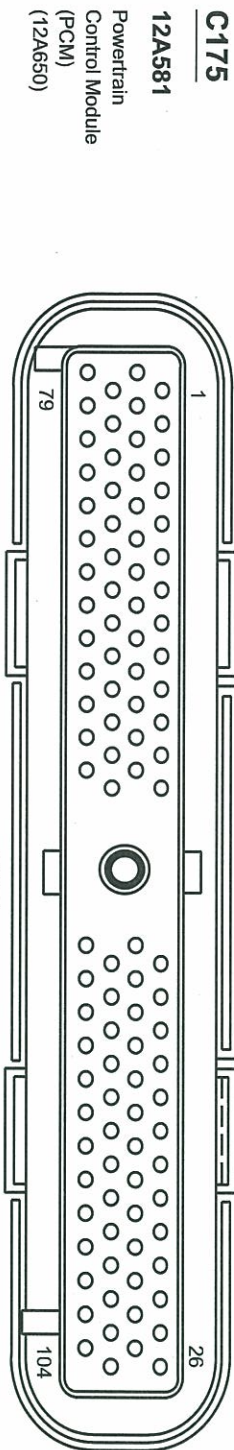
Cobra



Cobra, System overview



150-13 Connector Views



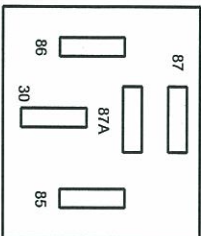
F104001

Pin	Circuit	Circuit function
1	315 (VT/OG)	Shift solenoid B
2	1025 (OG/YE)	Coil On Plug (COP) 6 (12029), control
3	1144 (YE/BK)	not used
4	570 (BK/WH)	Digital Transmission Range (DTR) sensor, TR1
5	–	Ground
6	237 (OG/YE)	not used
7	–	not used
8	1022 (DB/YE)	Shift solenoid A
9	–	not used
10	356 (DB/LG)	Intake Manifold Runner Control (IMRC) module, monitor
11	315 (VT/OG)	not used
12	–	Potentiometer (pressure or temperature), feed
13	107 (VT)	Shift solenoid B
14	–	not used
15	915 (PK/LB)	Module programming signal
16	914 (TN/OG)	SCP Bus –
17	–	SCP Bus +
18	–	not used
19	–	not used
20	898 (TN/RD)	Reverse lockout solenoid, control
21	349 (DB)	Crankshaft position sensor (6C315) +
22	350 (GY)	Crankshaft position sensor (6C315) –
23	1274 (DG/WH)	Powertrain Control Module (PCM) (12A650), to knock sensor
24	–	not used

Pin	Circuit	Circuit function
25	1205 (BK)	Ground
26	526 (DB/LG)	Powertrain Control Module (PCM) (12A650), to, ignition coil (12029)
27	1024 (LG/WH)	Coil On Plug (COP) 1 (12029), control
28	237 (OG/YE)	Shift solenoid A
29	1021 (LG/YE)	Coil On Plug (COP) 5 (12029), control
30	228 (DB)	Low speed fan control relay, control
31	224 (TN/WH)	Powertrain Control Module (PCM) (12A650), to transmission overdrive cancel switch
32	–	not used
33	1273 (YE)	not used
34	–	Powertrain Control Module (PCM) (12A650), to knock sensor
35	1144 (YE/BK)	not used
36	392 (RD/LG)	Digital Transmission Range (DTR) sensor, TR1
37	968 (TN/LB)	Heated Oxygen Sensor (HO2S) #12 (9G444), input
38	923 (OG/BK)	Mass Air Flow (MAF) sensor (12B579), signal, return
39	1291 (RD/YE)	Transmission Fluid Temperature (TFT) sensor, input
40	354 (LG/RD)	Barometric Absolute Pressure (BAP) sensor, to, Powertrain Control Module (PCM) (12A650)
41	743 (GY)	Reference voltage
42	928 (LB/OG)	Intake Air Temperature (IAT) sensor (12A697), input
43	198 (DG/OG)	Fuel pump driver module
44	367 (BN)	A/C high pressure switch (19D594), signal
45	–	Inlet Manifold Runner Control (IMRC) module, control
46	–	not used
47	–	not used

Pin	Circuit	Circuit function
45	965 (LG/VT)	Supercharger bypass solenoid, control
	228 (DB)	Low speed fan control relay, control
46	639 (LG/VT)	High speed fan control relay, control
47	360 (BN/PK)	EGR Vacuum Regulator (EVR), control
48	–	not used
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	527 (RD/LB)	Powertrain Control Module (PCM) (12A650), to, Ignition coil (12029)
	1028 (WH/PK)	Coil On Plug (COP) 3 (12029), control
53	1030 (DGN/T)	Coil On Plug (COP) 4 (12029), control
54	924 (BN/OG)	Torque Converter Clutch (TCC) solenoid, Torque Converter Clutch (TCC) solenoid
55	729 (RD/MH)	Voltage supplied at all times (overload protected)
56	191 (LG/BK)	Powertrain Control Module (PCM) (12A650), EVAP canister purge valve
57	310 (YE/RD)	Knock sensor (12A699)
58	–	not used
59	–	not used
60	74 (GY/LB)	Heated Oxygen Sensor (HO2S) #11 (9F472), input
61	393 (VT/LG)	Heated Oxygen Sensor (HO2S) #22 (9G444), input
62	791 (RD/PK)	Fuel tank pressure transducer sensor (9C968)
63	141 (RD/PK)	Fuel rail pressure transducer sensor, input
64	199 (LB/YE)	Digital Transmission Range (DTR) sensor, TR3A
65	352 (BN/LG)	Differential Pressure Feedback EGR (DPFE) sensor, input
66	1102 (YE/LG)	Cylinder-head temperature sensor (6G004), to, Powertrain Control Module (PCM) (12A650)
67	101 (GY/YE)	EVAP canister vent control solenoid, control
68	239 (WH/OG)	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	561 (TN/RD)	Injector 7, control
73	559 (TN/BK)	Injector 5, control
74	557 (BN/YE)	Injector 3, control
75	555 (TN)	Injector 1, control
76	570 (BK/WH)	Ground
77	570 (BK/WH)	Ground
78	528 (PK/WH)	Powertrain Control Module (PCM) (12A650), to, Ignition coil (12029)
79	1029 (WH/RD)	Coil On Plug (COP) 7 (12029), control
80	922 (WH/RD)	Fuel pump driver module (9H307), to, Powertrain Control Module (PCM) (12A650)
81	925 (WH/YE)	Electronic Pressure Control (EPC) solenoid, control
82	369 (WH/OG)	Charge air cooler pump relay, switched power, output
83	264 (WH/LB)	Idle air control valve (IAC) (9F715), control
84	970 (DGMH)	Output Shaft Speed (OSS) sensor (7M710)
85	282 (DB/OG)	Camshaft position sensor (6B288), input
86	439 (TN/LG)	A/C pressure switch, signal
87	94 (RD/BK)	Heated Oxygen Sensor (HO2S) #21 (9F472), input
88	967 (LB/RD)	Mass Air Flow (MAF) sensor (12B579), input
89	355 (GY/MH)	Throttle Position Sensor (TPS) (9B989), input
90	351 (BN/MH)	Reference, voltage
91	359 (GY/RD)	signal, return
92	511 (LG)	Hot with BPP switch engaged
93	387 (RD/MH)	Heated Oxygen Sensor (HO2S) #11 (9F472), heater
94	388 (YE/LB)	Heated Oxygen Sensor (HO2S) #21 (9F472), heater
95	389 (WH/BK)	Heated Oxygen Sensor (HO2S) #12 (9G444), heater
96	390 (TN/YE)	Heated Oxygen Sensor (HO2S) #22 (9G444), heater
97	361 (RD)	Voltage supplied in Start and Run (overload protected)
98	562 (LB)	Injector 8, control
99	560 (LG/OG)	Injector 6, control
100	558 (BN/LB)	Injector 4, control
101	556 (WH)	Injector 2, control
102	311 (DGN/T)	Knock sensor (12A699)
103	570 (BK/WH)	Ground
104	1026 (PK/WH)	Coil On Plug (COP) 2 (12029), control

150-57 Connector Views



F05129

C1216

14K095

Charge air cooler pump relay

Pin	Circuit	Circuit function
30	17 (WH)	Voltage supplied at all times (overload protected)
85	369 (WH/OG)	Charge air cooler pump relay, switched power, output
86	361 (RD)	Voltage supplied in Start and Run (overload protected)
87	18 (OG/YE)	Charge air cooler pump relay, control
87A	-	not used

C1217

12A581

Charge air cooler pump motor

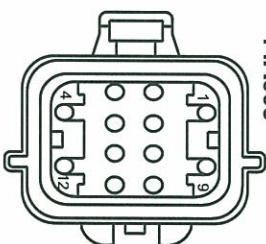


F02089

Pin	Circuit	Circuit function
1	1205 (BK)	Ground
2	18 (OG/YE)	Charge air cooler pump relay, control

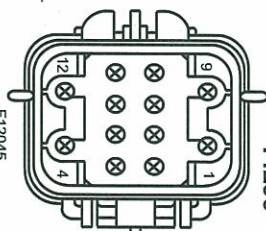
C1220

14A005



F-12046

14290



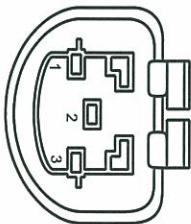
F-12045

- (1) 828 (VT/LB)
- (2) 647 (GY/LB)
- (3) -
- (4) 829 (WH/VT)
- (5) -
- (6) 646 (YEM/H)
- (7) 848 (DG/OG)
- (8) 3 (LG/MH)
- (9) 828 (VT/LB)
- (10) 28 (BK/PK)
- (11) -
- (12) 829 (WH/VT)

C1021

14290

Headlamp, left
(13008)



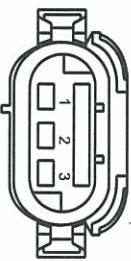
F03169

Pin	Circuit	Circuit function
1	12 (LG/BK)	Power, Hot with High Beams on
2	1205 (BK)	Ground
3	1055 (WH/LG)	Headlamp, left (13008) – fused feed

C1023

14290

Park/turn lamp,
left front
(13411)

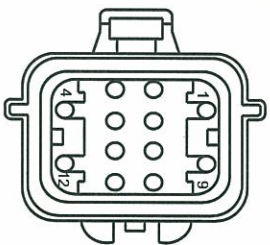


F03099

Pin	Circuit	Circuit function
1	1205 (BK)	Ground
2	14 (BN)	Power, Exterior lamps
3	3 (LG/WH)	Turn lamps, feed, left front

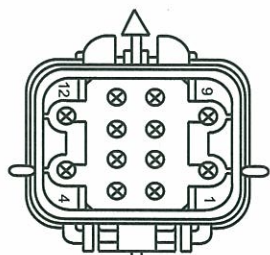
C1026

12A581



F-12062

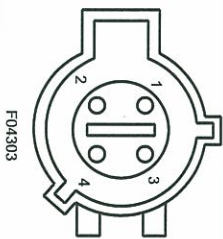
14K095



F-12060

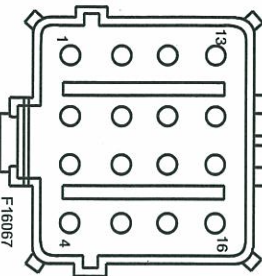
- (1)
- (2)
- (3)
- (4) 229 (RD/OG)
- (5) 18 (OG/YE)
- (6) 369 (WH/OG)
- (7) 17 (WH)
- (8) 361 (RD)
- (9) 229 (RD/OG)
- (10)
- (11)
- (12)

C142
7C078/
15525
 Heated Oxygen
 Sensor (HO2S)
 #12 (9G444)



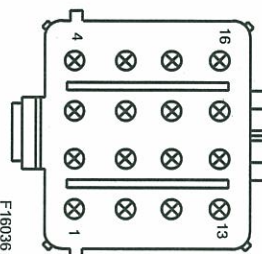
Pin	Circuit	Circuit function
1	391 (RD/YE)	Voltage supplied in Start and Run (overload protected)
2	389 (WH/BK)	Heated Oxygen Sensor (HO2S) #12 (9G444), heater
3	359 (GY/RD)	signal, return
4	392 (RD/LG)	Heated Oxygen Sensor (HO2S) #12 (9G444), input

C144



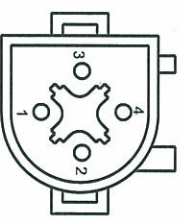
- (1) 33 (WH/PK)
- (2) 494 (TN/LG)
- (3) 38 (BK/OG)
- (4) 198 (DG/OG)
- (5) 32 (RD/LB)
- (6) 914 (TN/OG)
- (7) 198 (DG/OG)
- (8) 511 (LG)
- (9) 492 (BN)
- (10) 239 (WH/OG)
- (11) 511 (LG)
- (12) -
- (13) 915 (PK/LB)
- (14) 1059 (LB/OG)
- (15) 514 (YE/RD)
- (16) 516 (YE/BK)

12A581

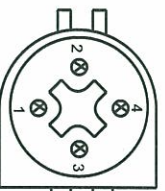


- (1) 33 (WH/PK)
- (2) 494 (TN/LG)
- (3) 38 (BK/OG)
- (4) 198 (DG/OG)
- (5) 32 (RD/LB)
- (6) 914 (TN/OG)
- (7) 198 (DG/OG)
- (8) 511 (LG)
- (9) 492 (BN)
- (10) 239 (WH/OG)
- (11) 511 (LG)
- (12) -
- (13) 915 (PK/LB)
- (14) 1059 (LB/OG)
- (15) 514 (YE/RD)
- (16) 516 (YE/BK)

C145

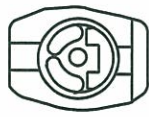


- (1) 570 (BK/WH)
- (2) 1205 (BK)
- (3) 1059 (LB/OG)
- (4) 554 (YE/BK)



- (1) 570 (BK/WH)
- (2) 1205 (BK)
- (3) 1059 (LB/OG)
- (4) 554 (YE/BK)

C146



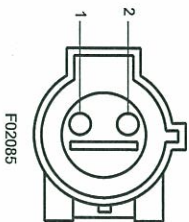
- (1) 33 (WH/PK)



- (1) 262 (BN/PK)

C150

14290
 Wheel speed
 sensor, left
 front (2C205)



Pin	Circuit	Circuit function
1	521 (TN/OG)	Wheel speed sensor, left front (2C205) +
2	522 (TN/BK)	Wheel speed sensor, left front (2C205) -

151-17 Component Location Views

