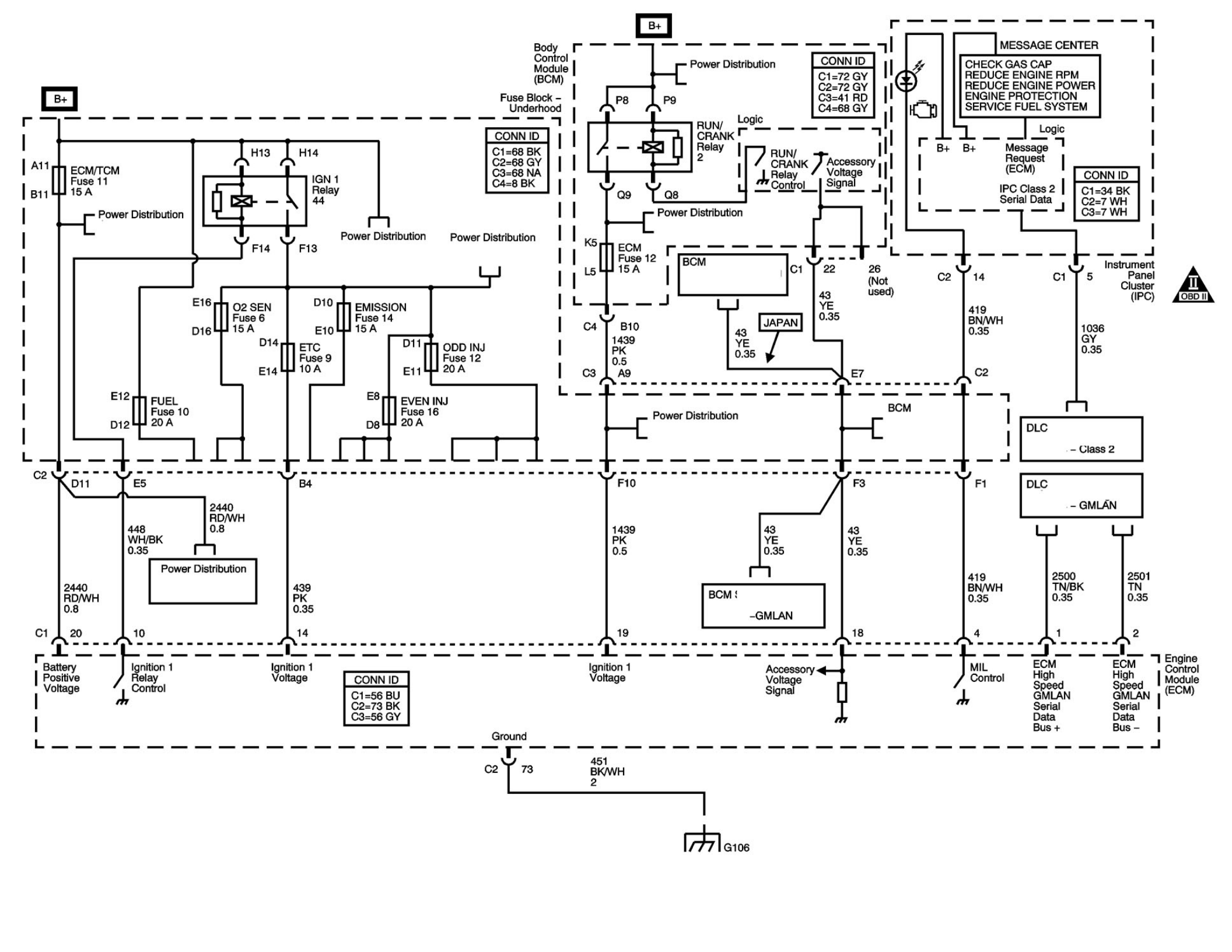
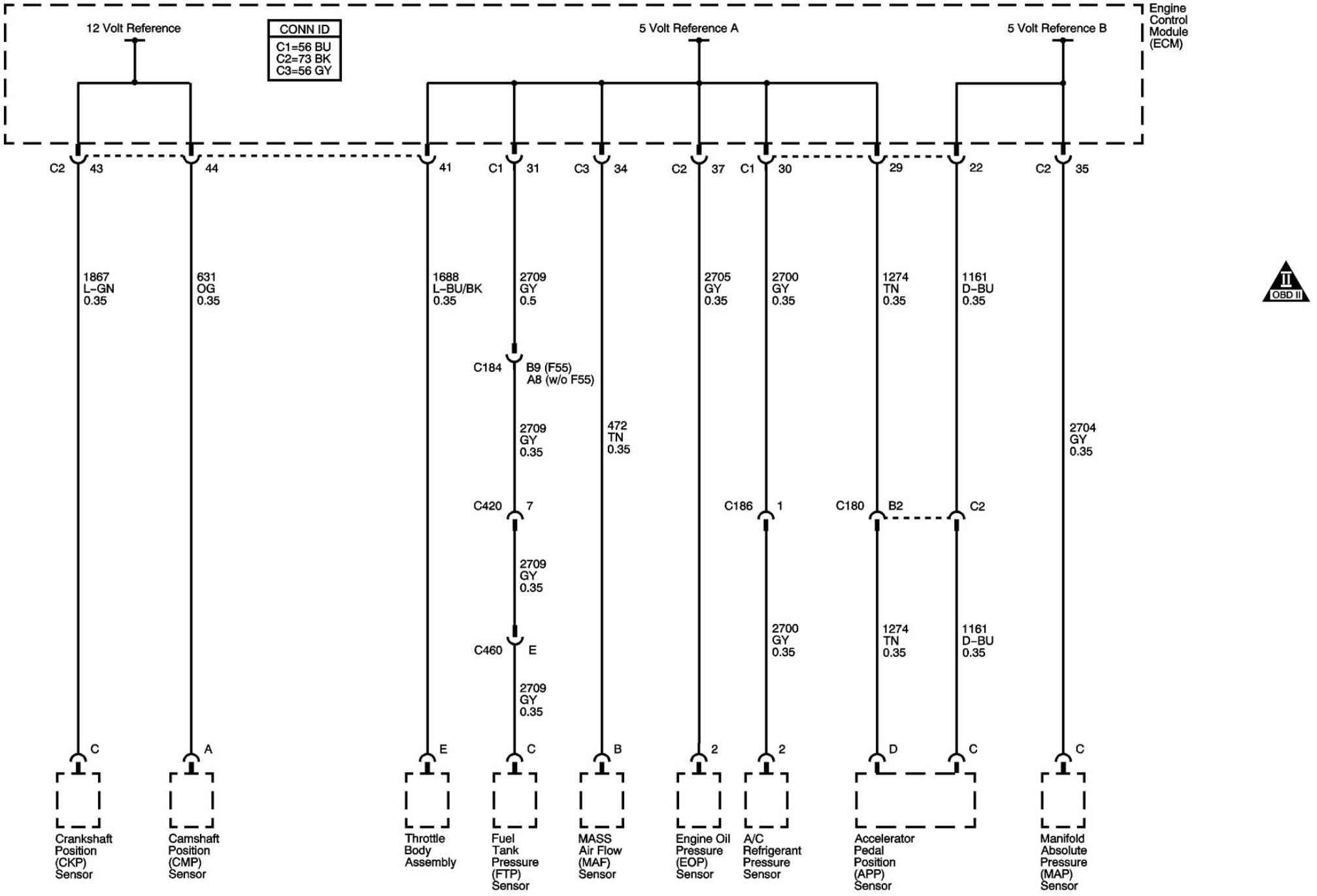
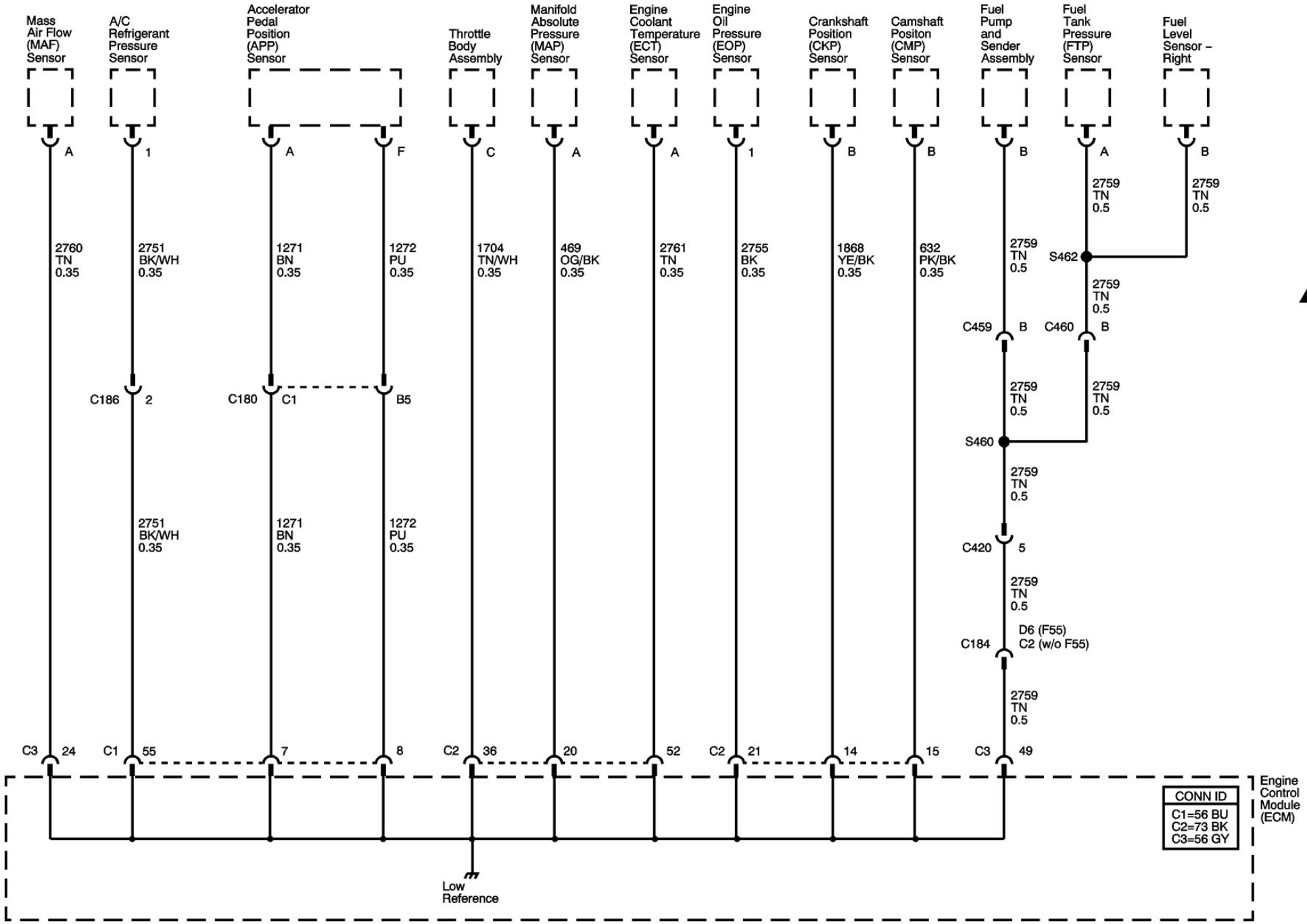
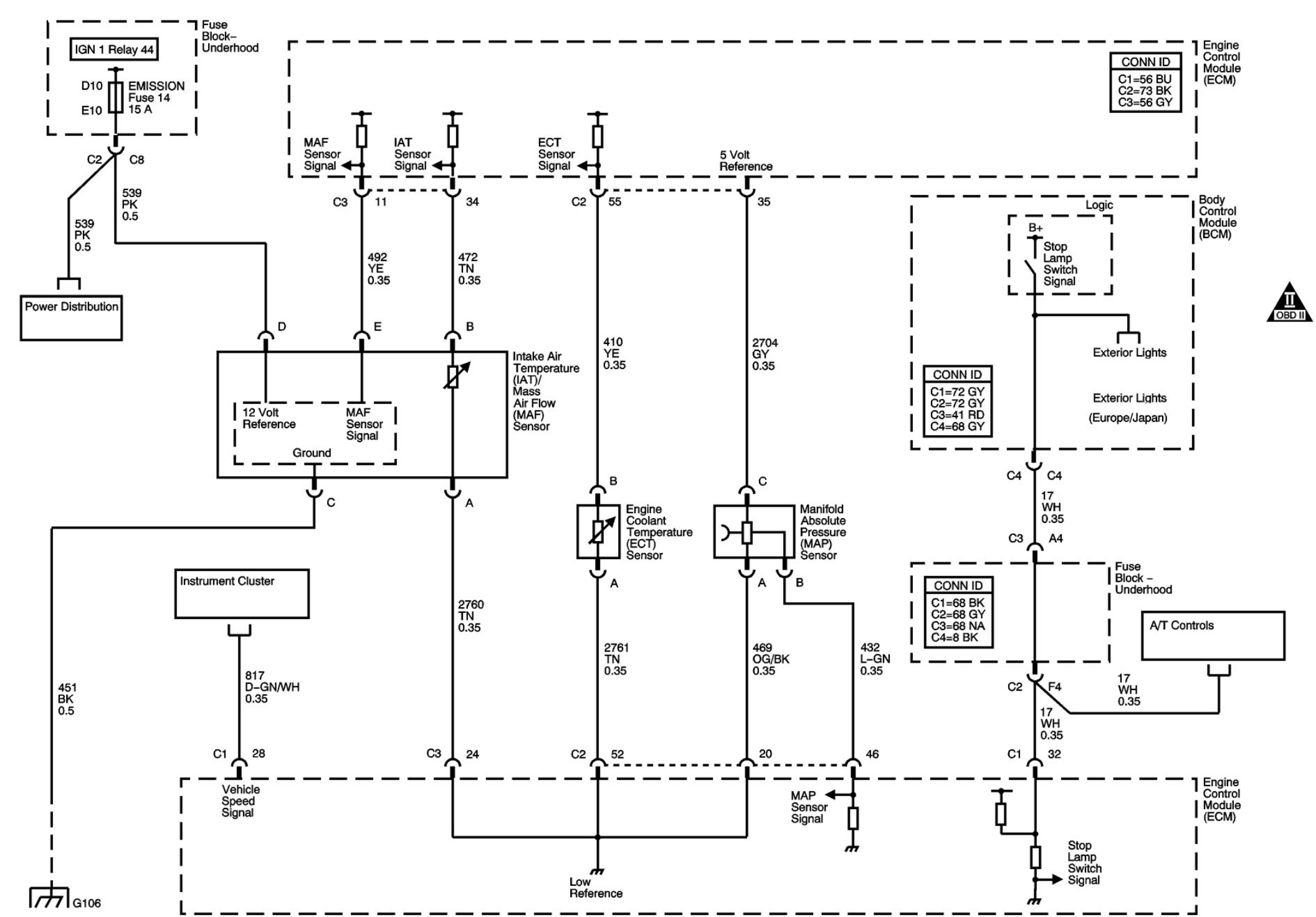
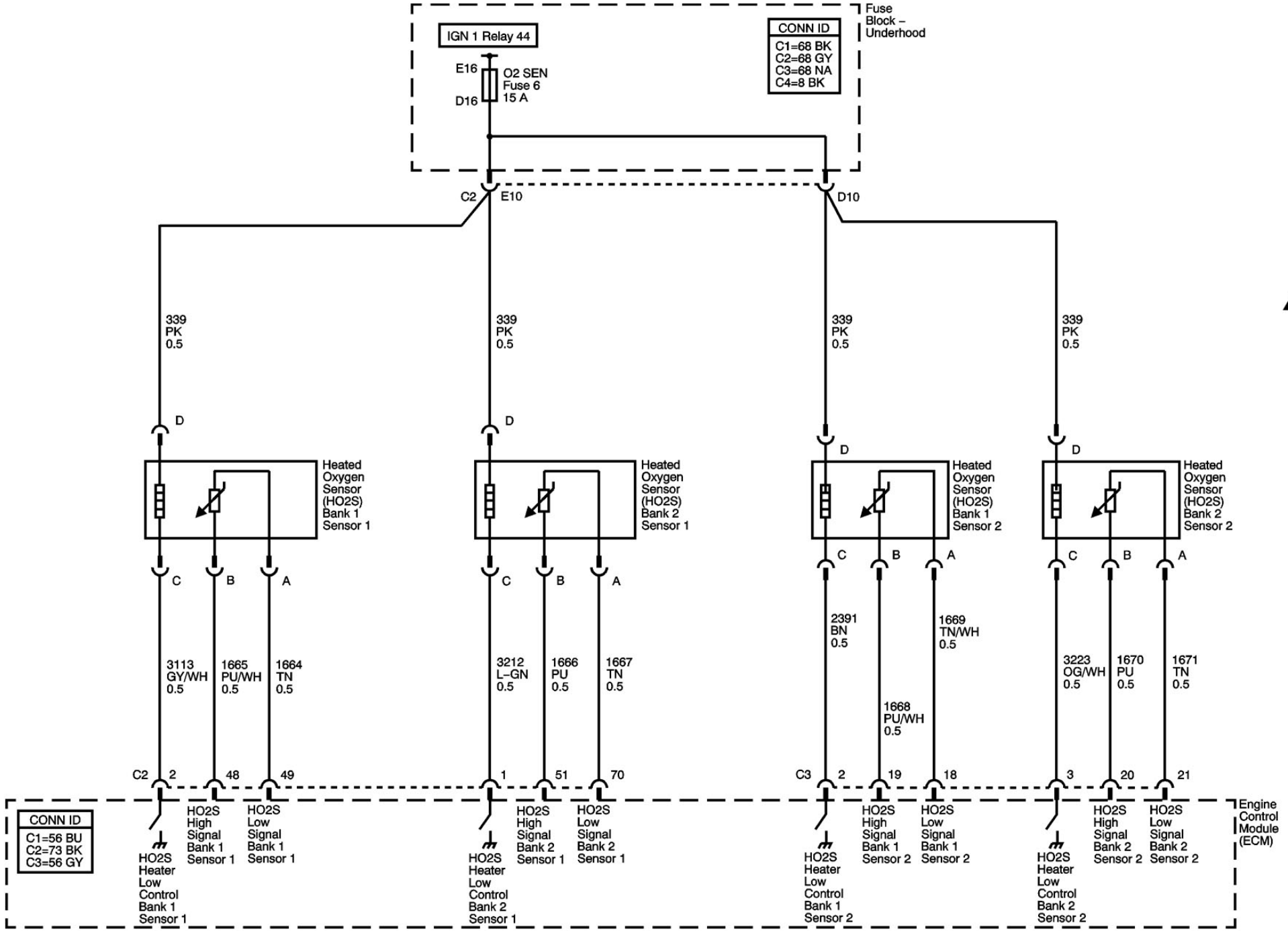
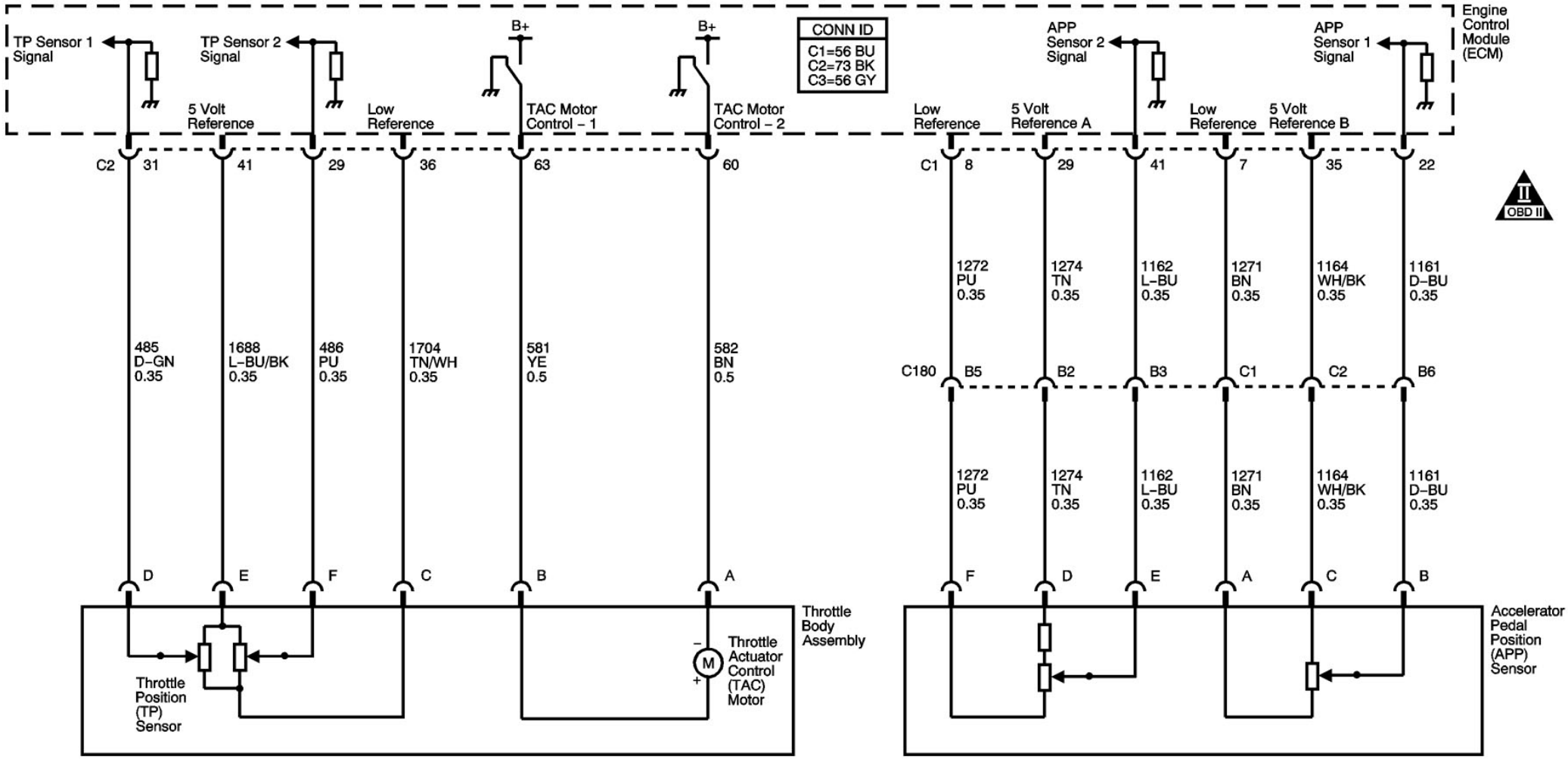

B+
Body Control Module (BCM)
Fuse Block – Underhood
Power Distribution
P8
P9
RUN/ CRANK Relay 2
Logic
RUN/ CRANK Relay Control
Accessory Voltage Signal
Q9
Q8
CONN ID
C1=72 GY
C2=72 GY
C3=41 RD
C4=68 GY
MESSAGE CENTER
CHECK GAS CAP
REDUCE ENGINE RPM
REDUCE ENGINE POWER
ENGINE PROTECTION
SERVICE FUEL SYSTEM
Message Request (ECM)
IPC Class 2 Serial Data
CONN ID
C1=34 BK
C2=7 WH
C3=7 WH
A11
B11
ECM/TCM Fuse 11 15 A
H13
H14
IGN 1 Relay 44
F14
F13
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
K5
L5
ECM Fuse 12 15 A
BCM
C1
22
26 (Not used)
43 YE 0.35
JAPAN
C4
B10
1439 PK 0.5
C3
A9
E7
C2
14
419 BN/WH 0.35
C1
5
Instrument Panel Cluster (IPC)
1036 GY 0.35
OBD II
E16
D16
O2 SEN Fuse 6 15 A
D10
E10
EMISSION Fuse 14 15 A
D14
E14
ETC Fuse 9 10 A
D11
E11
ODD INJ Fuse 12 20 A
E12
D12
FUEL Fuse 10 20 A
E8
D8
EVEN INJ Fuse 16 20 A
DLC – Class 2
DLC – GMLAN
C2
D11
E5
B4
F10
F3
F1
2440 RD/WH 0.8
448 WH/BK 0.35
439 PK 0.35
1439 PK 0.5
43 YE 0.35
419 BN/WH 0.35
2500 TN/BK 0.35
2501 TN 0.35
C1
20
10
14
19
18
4
1
2
Battery Positive Voltage
Ignition 1 Relay Control
Ignition 1 Voltage
Accessory Voltage Signal
MIL Control
ECM High Speed GMLAN Serial Data Bus +
ECM High Speed GMLAN Serial Data Bus –
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
Ground
C2
73
451 BK/WH 2
G106

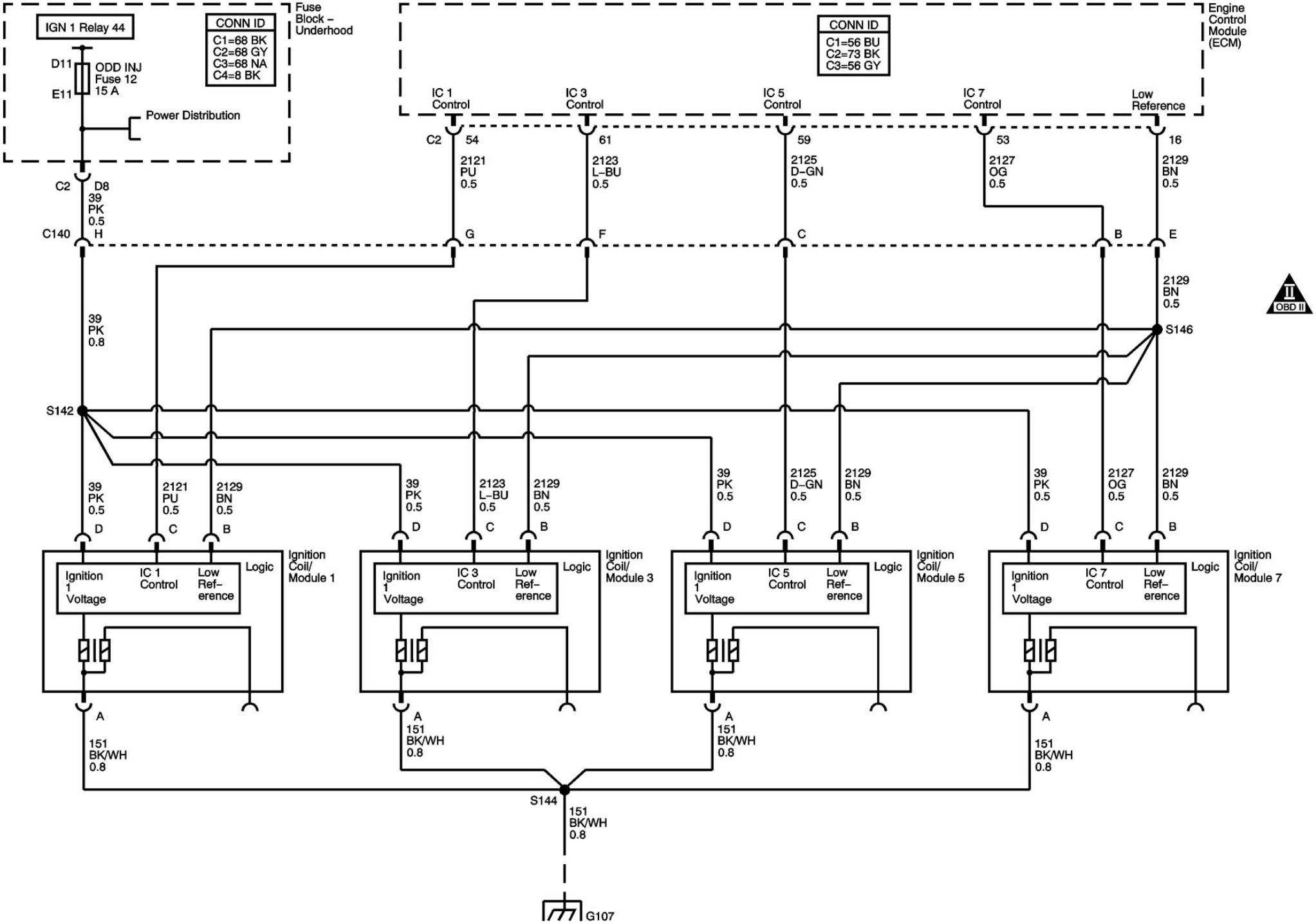

Engine Control Module (ECM)
12 Volt Reference
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
5 Volt Reference A
5 Volt Reference B
C2 43
44
41
C1 31
C3 34
C2 37
C1 30
29
22
C2 35
1867 L-GN 0.35
631 OG 0.35
1688 L-BU/BK 0.35
2709 GY 0.5
2705 GY 0.35
2700 GY 0.35
1274 TN 0.35
1161 D-BU 0.35
C184 B9 (F55) A8 (w/o F55)
2709 GY 0.35
472 TN 0.35
2704 GY 0.35
C420 7
C186 1
C180 B2
C2
2709 GY 0.35
2700 GY 0.35
1274 TN 0.35
1161 D-BU 0.35
C460 E
2709 GY 0.35
C
A
E
C
B
2
2
D
C
C
Crankshaft Position (CKP) Sensor
Camshaft Position (CMP) Sensor
Throttle Body Assembly
Fuel Tank Pressure (FTP) Sensor
MASS Air Flow (MAF) Sensor
Engine Oil Pressure (EOP) Sensor
A/C Refrigerant Pressure Sensor
Accelerator Pedal Position (APP) Sensor
Manifold Absolute Pressure (MAP) Sensor
II
OBD II

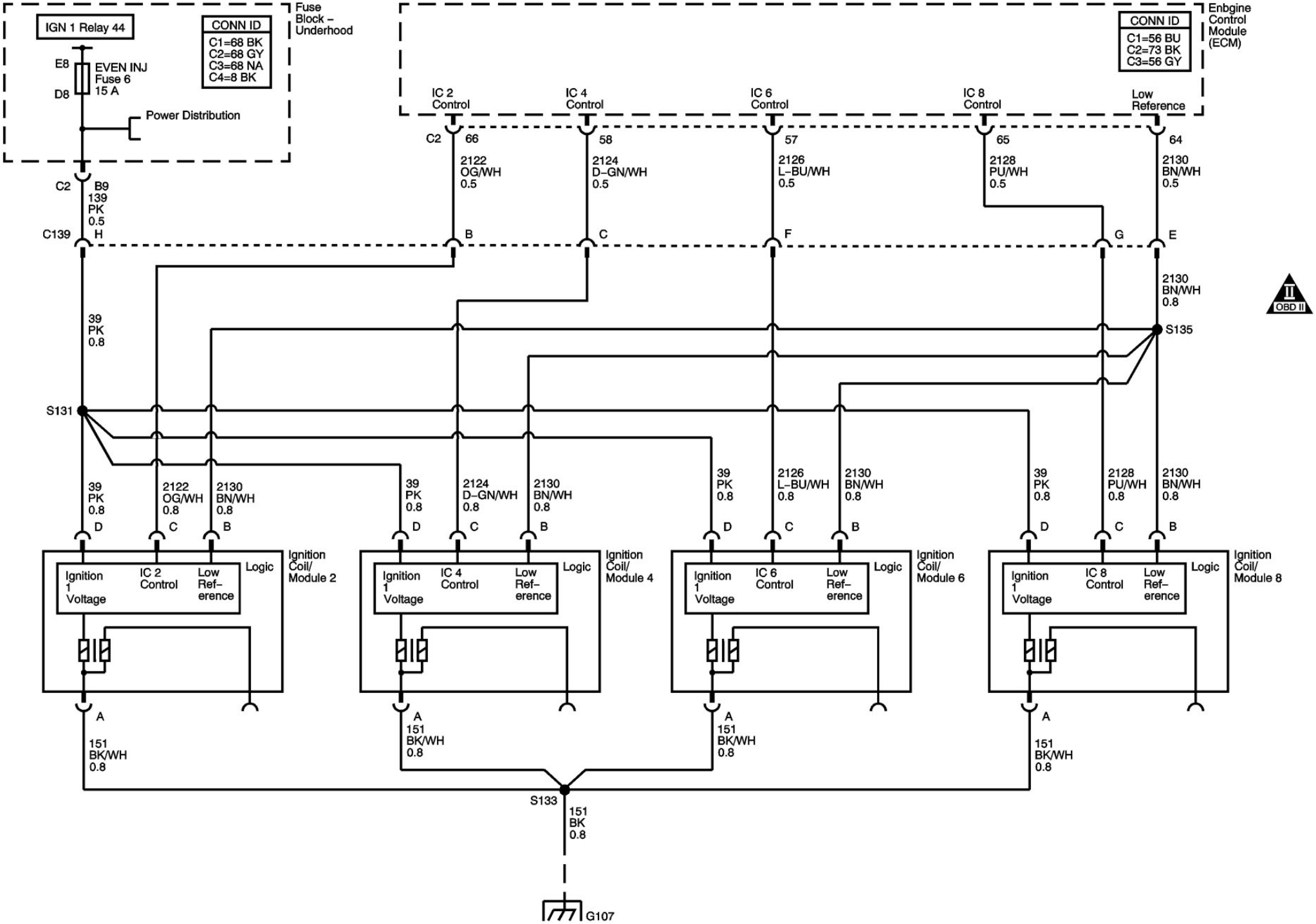

Mass Air Flow (MAF) Sensor
A/C Refrigerant Pressure Sensor
Accelerator Pedal Position (APP) Sensor
Throttle Body Assembly
Manifold Absolute Pressure (MAP) Sensor
Engine Coolant Temperature (ECT) Sensor
Engine Oil Pressure (EOP) Sensor
Crankshaft Position (CKP) Sensor
Camshaft Positon (CMP) Sensor
Fuel Pump and Sender Assembly
Fuel Tank Pressure (FTP) Sensor
Fuel Level Sensor – Right
A
1
A
F
C
A
A
1
B
B
B
A
B
2760 TN 0.35
2751 BK/WH 0.35
1271 BN 0.35
1272 PU 0.35
1704 TN/WH 0.35
469 OG/BK 0.35
2761 TN 0.35
2755 BK 0.35
1868 YE/BK 0.35
632 PK/BK 0.35
2759 TN 0.5
2759 TN 0.5
2759 TN 0.5
S462
2759 TN 0.5
2759 TN 0.5
C459 B
C460 B
2759 TN 0.5
2759 TN 0.5
S460
2759 TN 0.5
C420 5
2759 TN 0.5
C184 D6 (F55) C2 (w/o F55)
2759 TN 0.5
C186 2
C180 C1
B5
2751 BK/WH 0.35
1271 BN 0.35
1272 PU 0.35
C3 24
C1 55
7
8
C2 36
20
52
C2 21
14
15
C3 49
Low Reference
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
II
OBD II

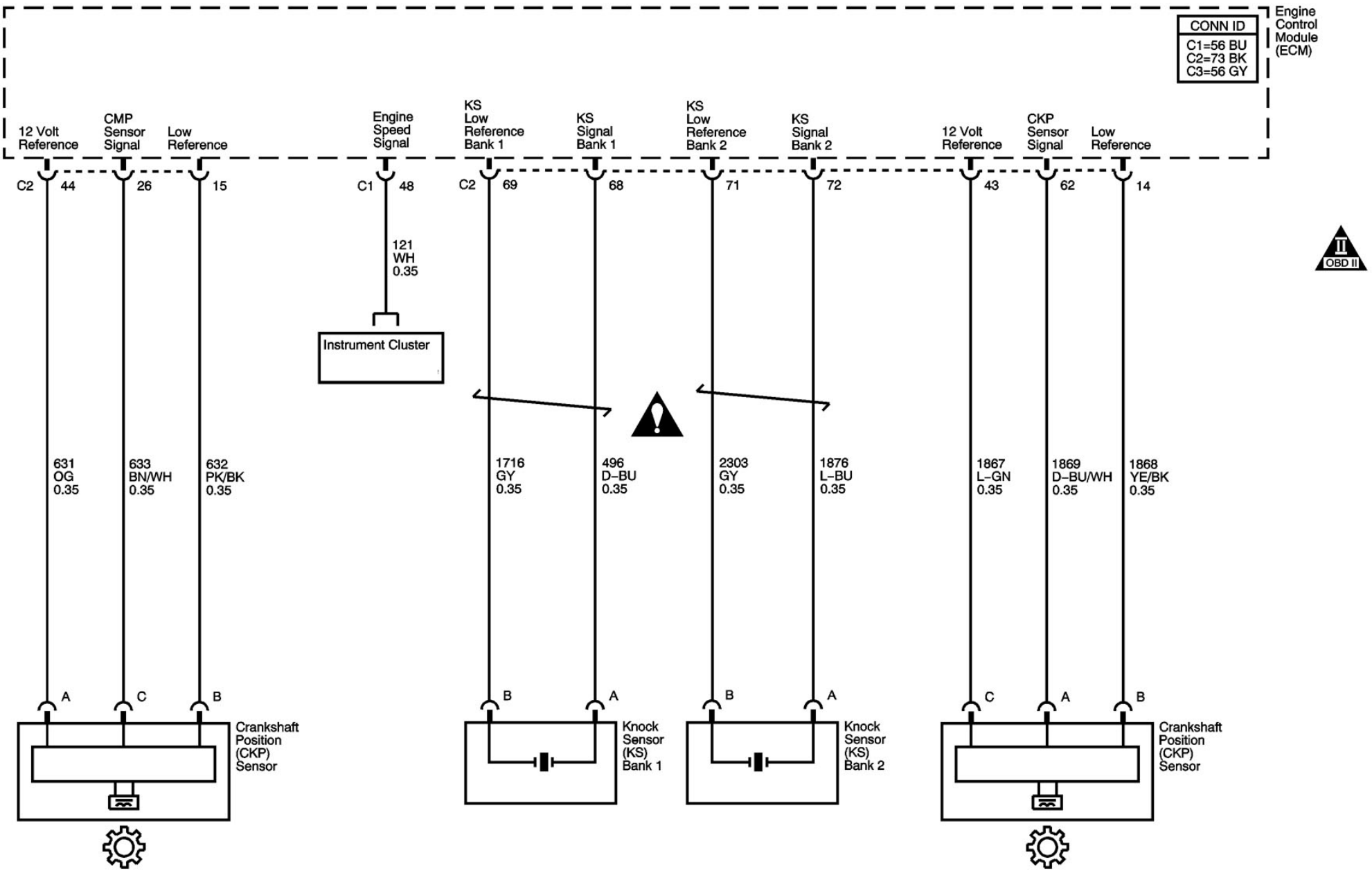

Fuse Block– Underhood
IGN 1 Relay 44
D10
E10
EMISSION Fuse 14 15 A
C2
C8
539 PK 0.5
539 PK 0.5
Power Distribution
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
MAF Sensor Signal
IAT Sensor Signal
ECT Sensor Signal
5 Volt Reference
C3 11
34
C2 55
35
492 YE 0.35
472 TN 0.35
410 YE 0.35
2704 GY 0.35
D
E
B
Intake Air Temperature (IAT)/ Mass Air Flow (MAF) Sensor
12 Volt Reference
MAF Sensor Signal
Ground
C
A
B
C
Engine Coolant Temperature (ECT) Sensor
Manifold Absolute Pressure (MAP) Sensor
A
A
B
Instrument Cluster
817 D–GN/WH 0.35
2760 TN 0.35
2761 TN 0.35
469 OG/BK 0.35
432 L–GN 0.35
451 BK 0.5
C1 28
C3 24
C2 52
20
46
Vehicle Speed Signal
Low Reference
MAP Sensor Signal
Engine Control Module (ECM)
Body Control Module (BCM)
Logic
B+
Stop Lamp Switch Signal
Exterior Lights
Exterior Lights (Europe/Japan)
CONN ID
C1=72 GY
C2=72 GY
C3=41 RD
C4=68 GY
C4 C4
17 WH 0.35
C3 A4
Fuse Block – Underhood
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
A/T Controls
C2 F4
17 WH 0.35
17 WH 0.35
C1 32
Stop Lamp Switch Signal
OBD II
G106

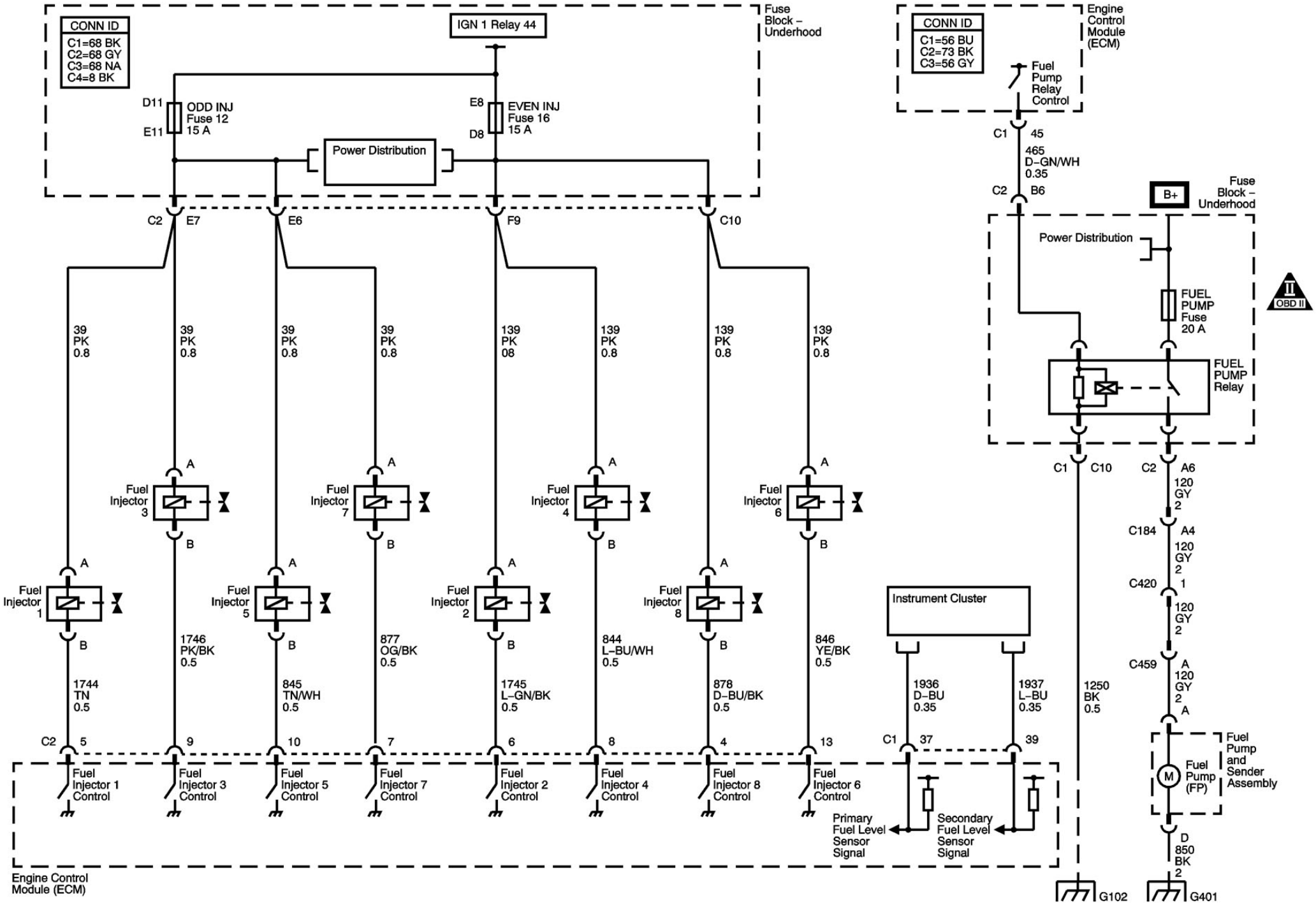

Fuse Block – Underhood
IGN 1 Relay 44
E16
D16
O2 SEN Fuse 6 15 A
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
C2
E10
D10
OBD II
339 PK 0.5
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 1
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 2
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 2
3113 GY/WH 0.5
1665 PU/WH 0.5
1664 TN 0.5
3212 L–GN 0.5
1666 PU 0.5
1667 TN 0.5
2391 BN 0.5
1668 PU/WH 0.5
1669 TN/WH 0.5
3223 OG/WH 0.5
1670 PU 0.5
1671 TN 0.5
C2 2 48 49
1 51 70
C3 2 19 18
3 20 21
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
HO2S Heater Low Control Bank 1 Sensor 1
HO2S High Signal Bank 1 Sensor 1
HO2S Low Signal Bank 1 Sensor 1
HO2S Heater Low Control Bank 2 Sensor 1
HO2S High Signal Bank 2 Sensor 1
HO2S Low Signal Bank 2 Sensor 1
HO2S Heater Low Control Bank 1 Sensor 2
HO2S High Signal Bank 1 Sensor 2
HO2S Low Signal Bank 1 Sensor 2
HO2S Heater Low Control Bank 2 Sensor 2
HO2S High Signal Bank 2 Sensor 2
HO2S Low Signal Bank 2 Sensor 2
Engine Control Module (ECM)

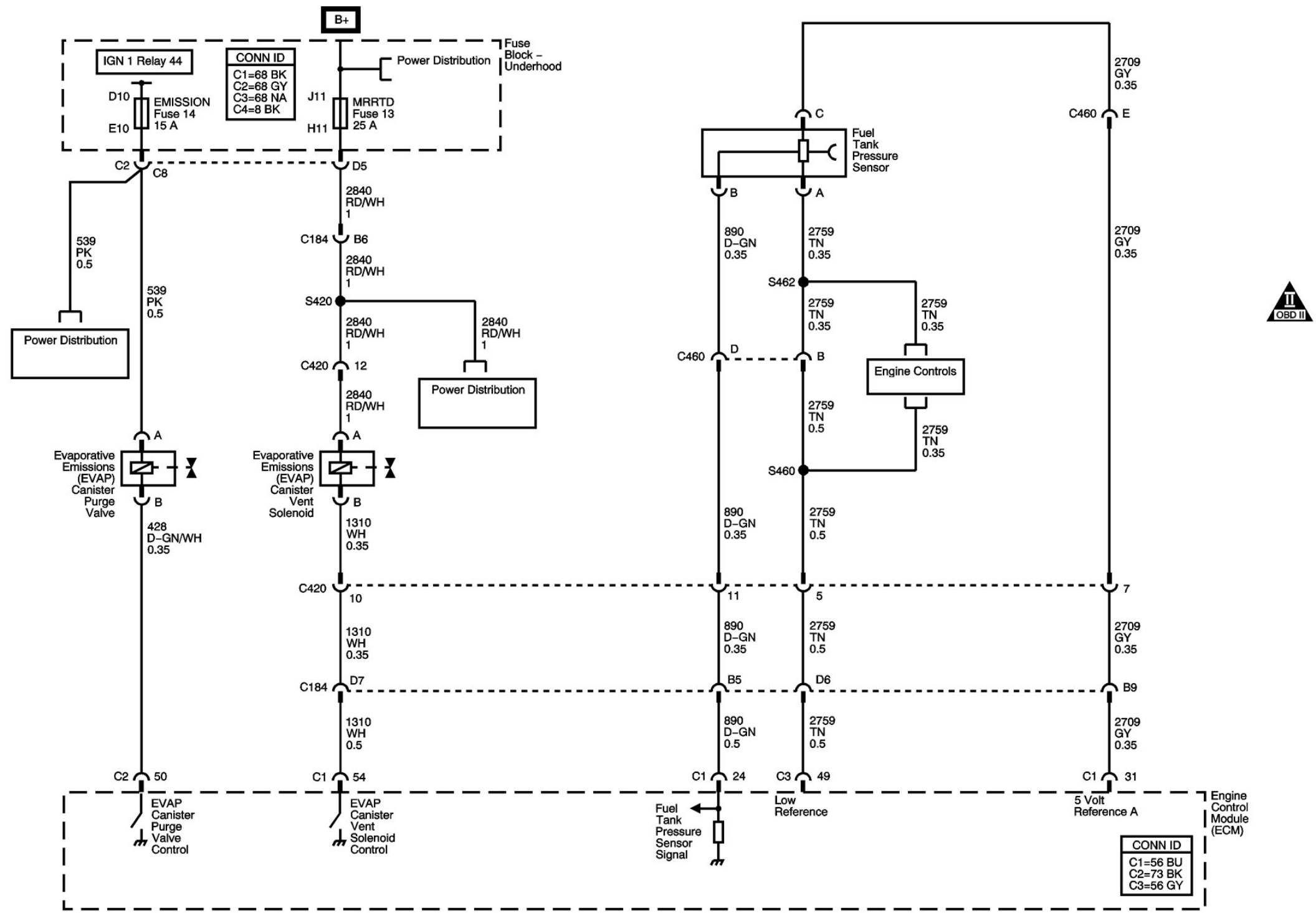

Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
TP Sensor 1 Signal
TP Sensor 2 Signal
B+
B+
APP Sensor 2 Signal
APP Sensor 1 Signal
5 Volt Reference
Low Reference
TAC Motor Control – 1
TAC Motor Control – 2
Low Reference
5 Volt Reference A
Low Reference
5 Volt Reference B
C2
31
41
29
36
63
60
C1
8
29
41
7
35
22
OBD II
485 D–GN 0.35
1688 L–BU/BK 0.35
486 PU 0.35
1704 TN/WH 0.35
581 YE 0.5
582 BN 0.5
1272 PU 0.35
1274 TN 0.35
1162 L–BU 0.35
1271 BN 0.35
1164 WH/BK 0.35
1161 D–BU 0.35
C180
B5
B2
B3
C1
C2
B6
1272 PU 0.35
1274 TN 0.35
1162 L–BU 0.35
1271 BN 0.35
1164 WH/BK 0.35
1161 D–BU 0.35
D
E
F
C
B
A
F
D
E
A
C
B
Throttle Body Assembly
Throttle Position (TP) Sensor
M
Throttle Actuator Control (TAC) Motor
Accelerator Pedal Position (APP) Sensor

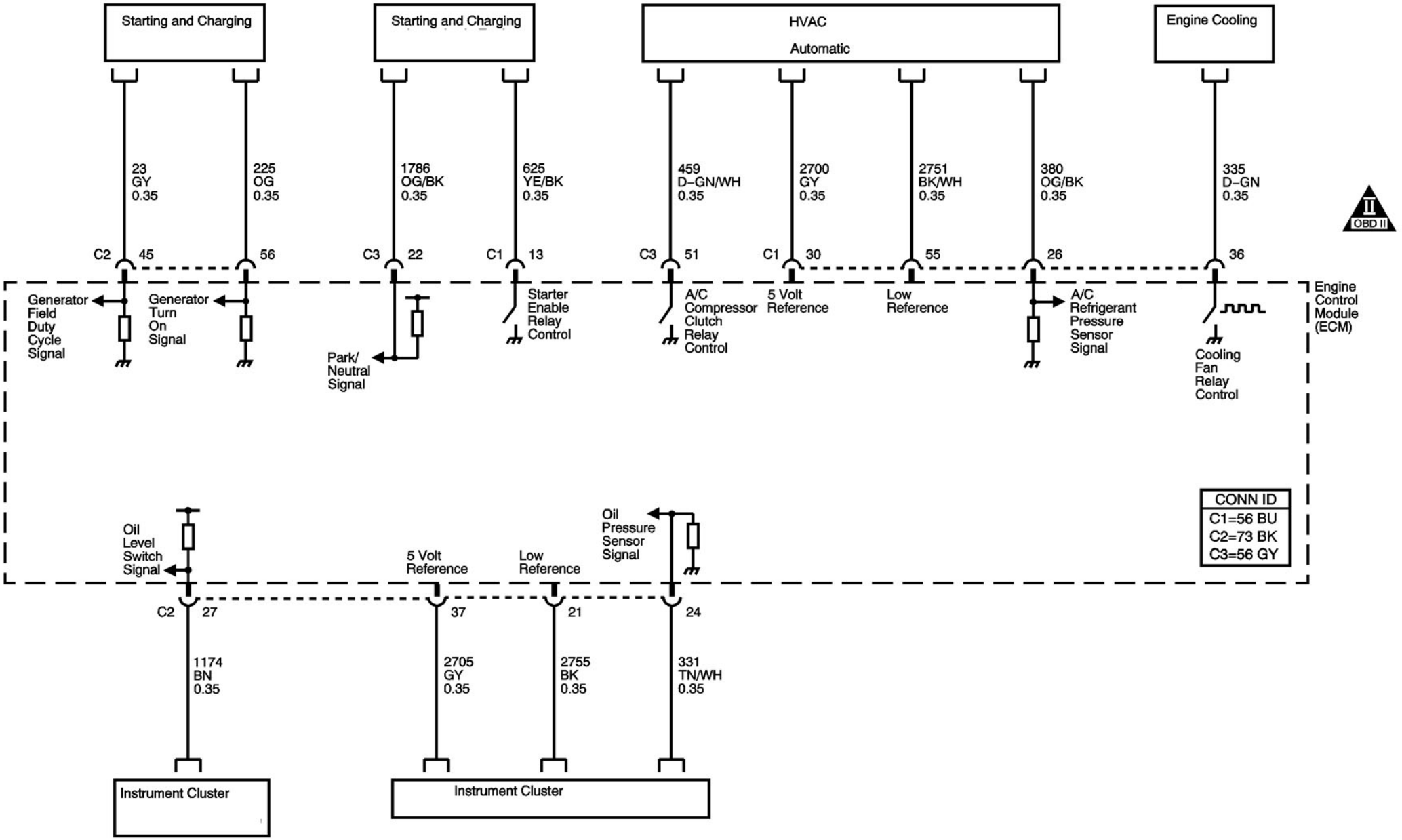

IGN 1 Relay 44
D11
ODD INJ Fuse 12 15 A
E11
Power Distribution
Fuse Block – Underhood
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
IC 1 Control
IC 3 Control
IC 5 Control
IC 7 Control
Low Reference
C2
54
61
59
53
16
2121 PU 0.5
2123 L–BU 0.5
2125 D–GN 0.5
2127 OG 0.5
2129 BN 0.5
C140
G
F
C
B
E
C2
D8
39 PK 0.5
H
39 PK 0.8
2129 BN 0.5
OBD II
S146
S142
39 PK 0.5
2121 PU 0.5
2129 BN 0.5
2123 L–BU 0.5
2125 D–GN 0.5
2127 OG 0.5
D
C
B
Ignition 1 Voltage
IC 1 Control
IC 3 Control
IC 5 Control
IC 7 Control
Low Ref–erence
Logic
Ignition Coil/ Module 1
Ignition Coil/ Module 3
Ignition Coil/ Module 5
Ignition Coil/ Module 7
A
151 BK/WH 0.8
S144
G107


IGN 1 Relay 44
E8
EVEN INJ
Fuse 6
15 A
D8
Power Distribution
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
Fuse Block – Underhood
Enbgine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
IC 2 Control
IC 4 Control
IC 6 Control
IC 8 Control
Low Reference
C2
66
58
57
65
64
2122 OG/WH 0.5
2124 D–GN/WH 0.5
2126 L–BU/WH 0.5
2128 PU/WH 0.5
2130 BN/WH 0.5
C139
B9
139
PK
0.5
H
B
C
F
G
E
2130 BN/WH 0.8
OBD II
39 PK 0.8
S135
S131
39 PK 0.8
2122 OG/WH 0.8
2130 BN/WH 0.8
39 PK 0.8
2124 D–GN/WH 0.8
2130 BN/WH 0.8
39 PK 0.8
2126 L–BU/WH 0.8
2130 BN/WH 0.8
39 PK 0.8
2128 PU/WH 0.8
2130 BN/WH 0.8
D
C
B
Ignition 1 Voltage
IC 2 Control
IC 4 Control
IC 6 Control
IC 8 Control
Low Ref–erence
Logic
Ignition Coil/ Module 2
Ignition Coil/ Module 4
Ignition Coil/ Module 6
Ignition Coil/ Module 8
A
151 BK/WH 0.8
151 BK/WH 0.8
151 BK/WH 0.8
151 BK/WH 0.8
S133
151 BK 0.8
G107


Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
12 Volt Reference
CMP Sensor Signal
Low Reference
Engine Speed Signal
KS Low Reference Bank 1
KS Signal Bank 1
KS Low Reference Bank 2
KS Signal Bank 2
12 Volt Reference
CKP Sensor Signal
Low Reference
C2 44
26
15
C1 48
C2 69
68
71
72
43
62
14
121 WH 0.35
Instrument Cluster
OBD II
631 OG 0.35
633 BN/WH 0.35
632 PK/BK 0.35
1716 GY 0.35
496 D-BU 0.35
2303 GY 0.35
1876 L-BU 0.35
1867 L-GN 0.35
1869 D-BU/WH 0.35
1868 YE/BK 0.35
A
C
B
B
A
B
A
C
A
B
Crankshaft Position (CKP) Sensor
Knock Sensor (KS) Bank 1
Knock Sensor (KS) Bank 2
Crankshaft Position (CKP) Sensor


CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
Fuse Block – Underhood
IGN 1 Relay 44
D11
E11
ODD INJ Fuse 12 15 A
E8
D8
EVEN INJ Fuse 16 15 A
Power Distribution
C2
E7
E6
F9
C10
39 PK 0.8
39 PK 0.8
39 PK 0.8
39 PK 0.8
139 PK 08
139 PK 0.8
139 PK 0.8
139 PK 0.8
Fuel Injector 1
Fuel Injector 3
Fuel Injector 5
Fuel Injector 7
Fuel Injector 2
Fuel Injector 4
Fuel Injector 8
Fuel Injector 6
1744 TN 0.5
1746 PK/BK 0.5
845 TN/WH 0.5
877 OG/BK 0.5
1745 L–GN/BK 0.5
844 L–BU/WH 0.5
878 D–BU/BK 0.5
846 YE/BK 0.5
C2 5
9
10
7
6
8
4
13
Fuel Injector 1 Control
Fuel Injector 3 Control
Fuel Injector 5 Control
Fuel Injector 7 Control
Fuel Injector 2 Control
Fuel Injector 4 Control
Fuel Injector 8 Control
Fuel Injector 6 Control
Engine Control Module (ECM)
Instrument Cluster
1936 D–BU 0.35
1937 L–BU 0.35
C1 37
39
Primary Fuel Level Sensor Signal
Secondary Fuel Level Sensor Signal
1250 BK 0.5
G102
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
Engine Control Module (ECM)
Fuel Pump Relay Control
C1 45
465 D–GN/WH 0.35
C2 B6
B+
Fuse Block – Underhood
Power Distribution
FUEL PUMP Fuse 20 A
FUEL PUMP Relay
OBD II
C1 C10
C2 A6
120 GY 2
C184 A4
120 GY 2
C420 1
120 GY 2
C459 A
120 GY 2
A
Fuel Pump (FP)
Fuel Pump and Sender Assembly
D
850 BK 2
G401


B+
IGN 1 Relay 44
CONN ID
C1=68 BK
C2=68 GY
C3=68 NA
C4=8 BK
Power Distribution
Fuse Block – Underhood
D10
EMISSION Fuse 14 15 A
E10
J11
MRRTD Fuse 13 25 A
H11
C2
C8
D5
539 PK 0.5
2840 RD/WH 1
C184
B6
S420
C420
12
Power Distribution
A
B
Evaporative Emissions (EVAP) Canister Purge Valve
Evaporative Emissions (EVAP) Canister Vent Solenoid
428 D-GN/WH 0.35
1310 WH 0.35
1310 WH 0.5
C2
50
C1
54
EVAP Canister Purge Valve Control
EVAP Canister Vent Solenoid Control
C
Fuel Tank Pressure Sensor
B
A
890 D-GN 0.35
2759 TN 0.35
2709 GY 0.35
C460
E
S462
2759 TN 0.5
S460
Engine Controls
D
11
5
7
B5
D6
B9
C1
24
C3
49
Fuel Tank Pressure Sensor Signal
Low Reference
5 Volt Reference A
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
OBD II


Starting and Charging
Starting and Charging
HVAC
Automatic
Engine Cooling
23
GY
0.35
225
OG
0.35
1786
OG/BK
0.35
625
YE/BK
0.35
459
D-GN/WH
0.35
2700
GY
0.35
2751
BK/WH
0.35
380
OG/BK
0.35
335
D-GN
0.35
C2 45
56
C3 22
C1 13
C3 51
C1 30
55
26
36
OBD II
Generator Field Duty Cycle Signal
Generator Turn On Signal
Park/ Neutral Signal
Starter Enable Relay Control
A/C Compressor Clutch Relay Control
5 Volt Reference
Low Reference
A/C Refrigerant Pressure Sensor Signal
Cooling Fan Relay Control
Engine Control Module (ECM)
CONN ID
C1=56 BU
C2=73 BK
C3=56 GY
Oil Level Switch Signal
5 Volt Reference
Low Reference
Oil Pressure Sensor Signal
C2 27
37
21
24
1174
BN
0.35
2705
GY
0.35
2755
BK
0.35
331
TN/WH
0.35
Instrument Cluster
Instrument Cluster