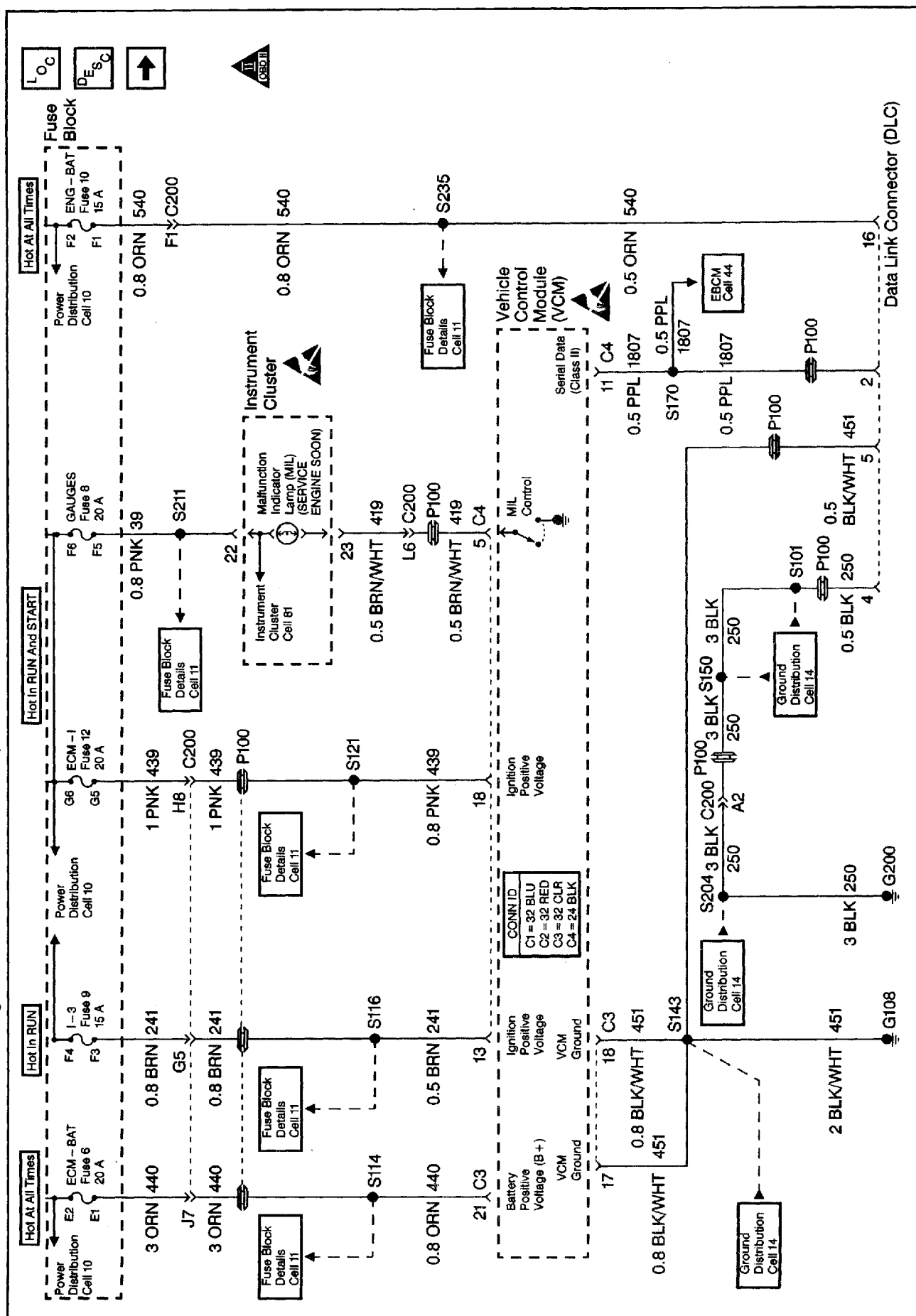
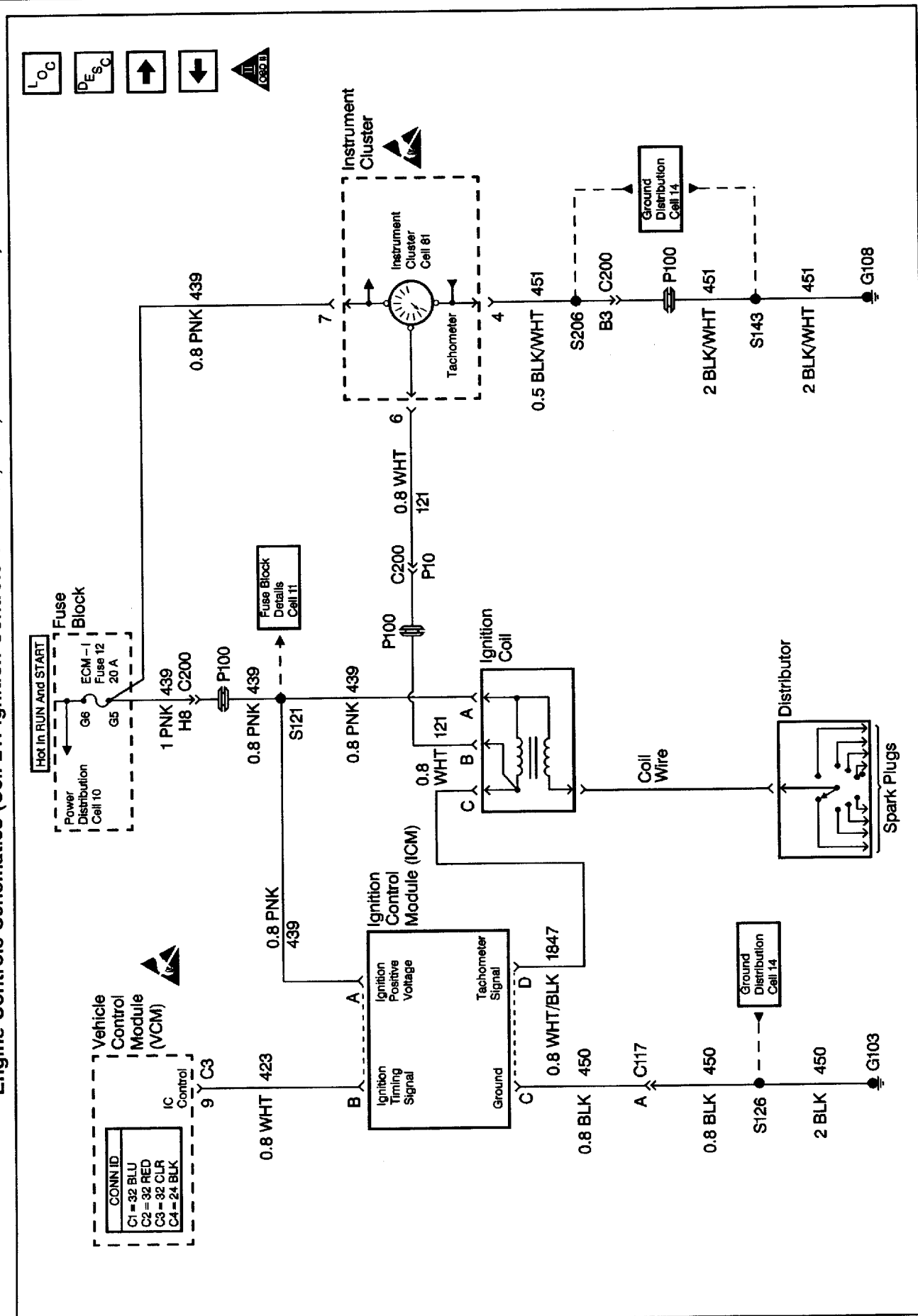


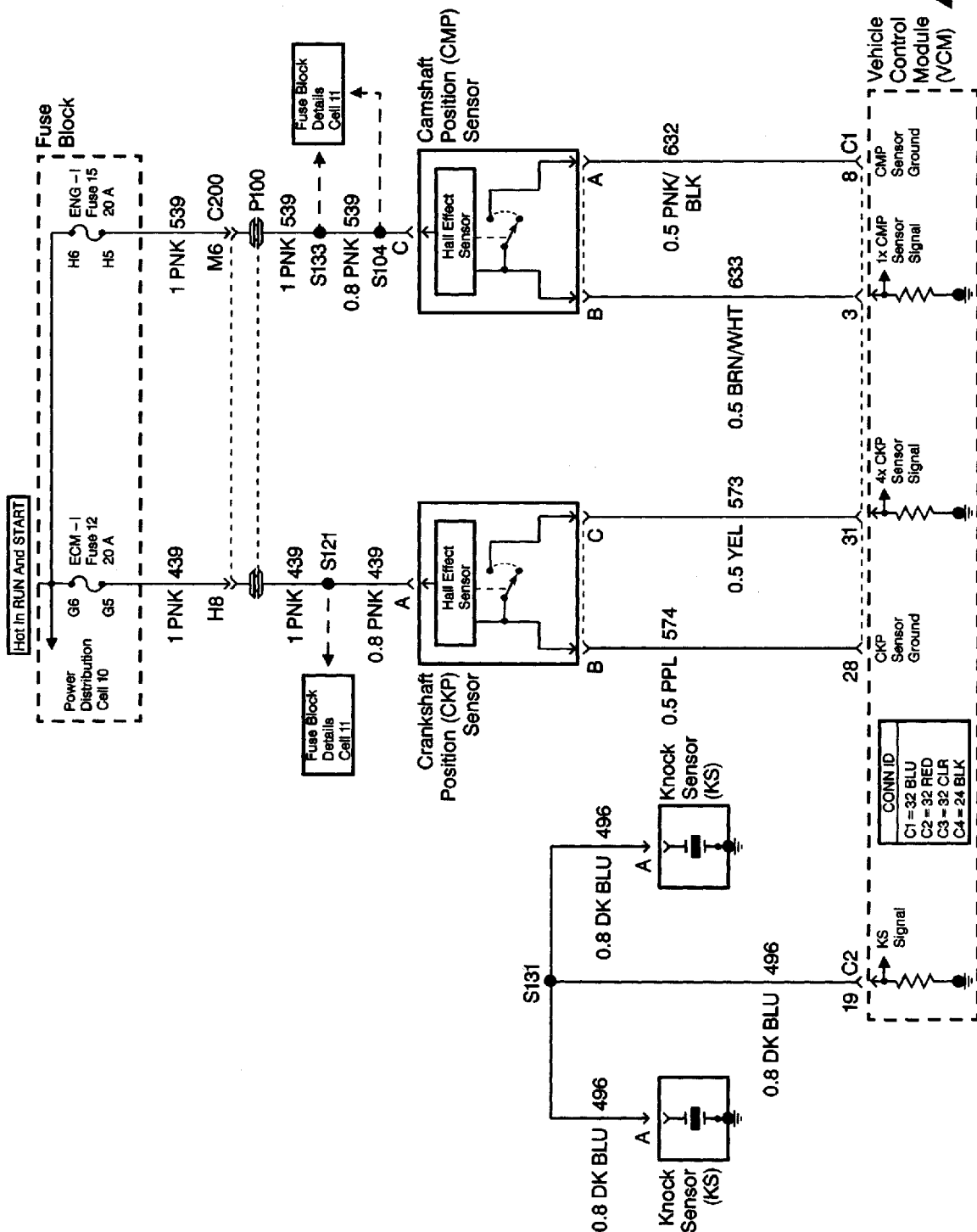
LOC DESC



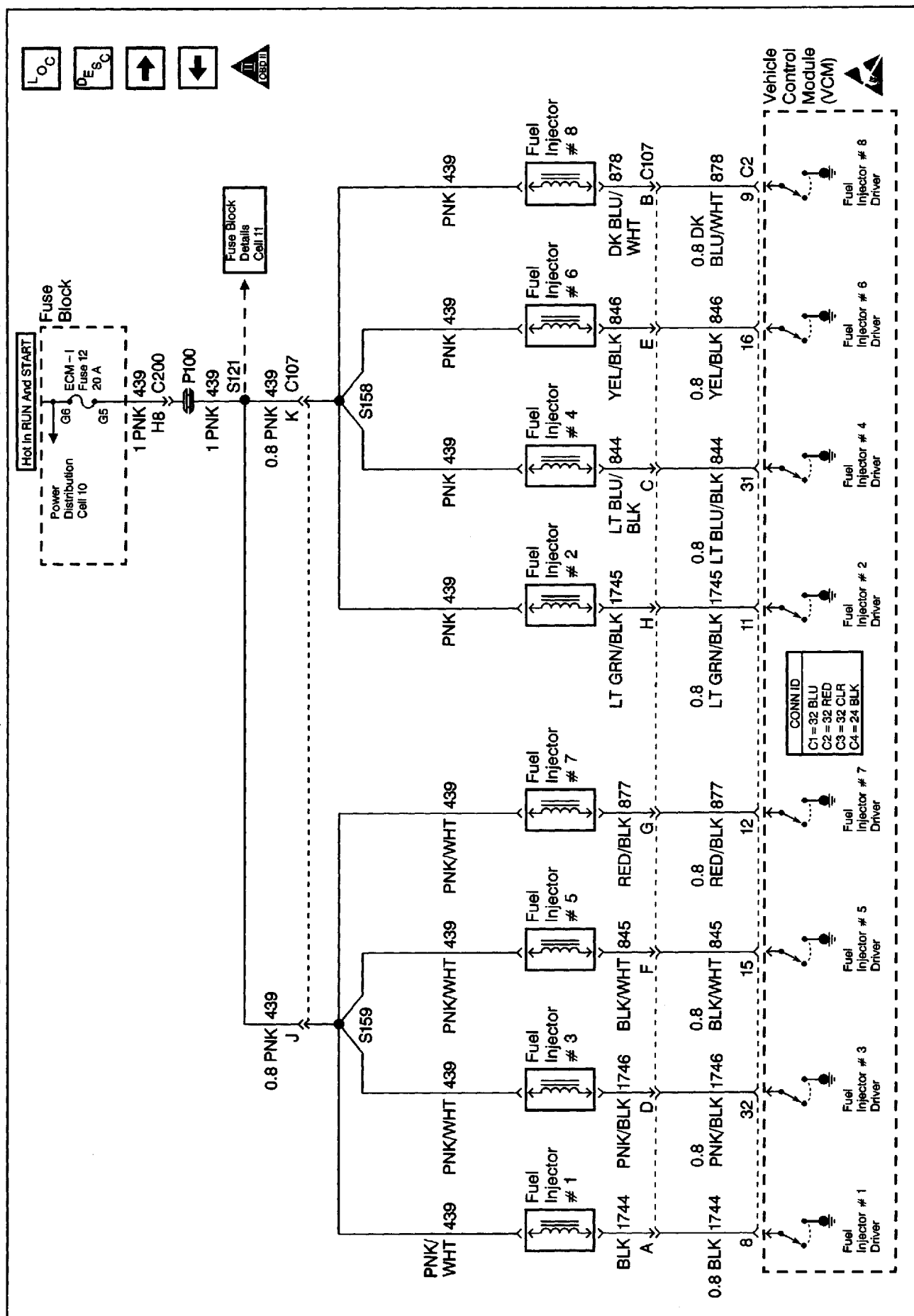
Engine Controls Schematics (Cell 21: Ignition Controls 1 — ICM, Coil, and Tachometer)



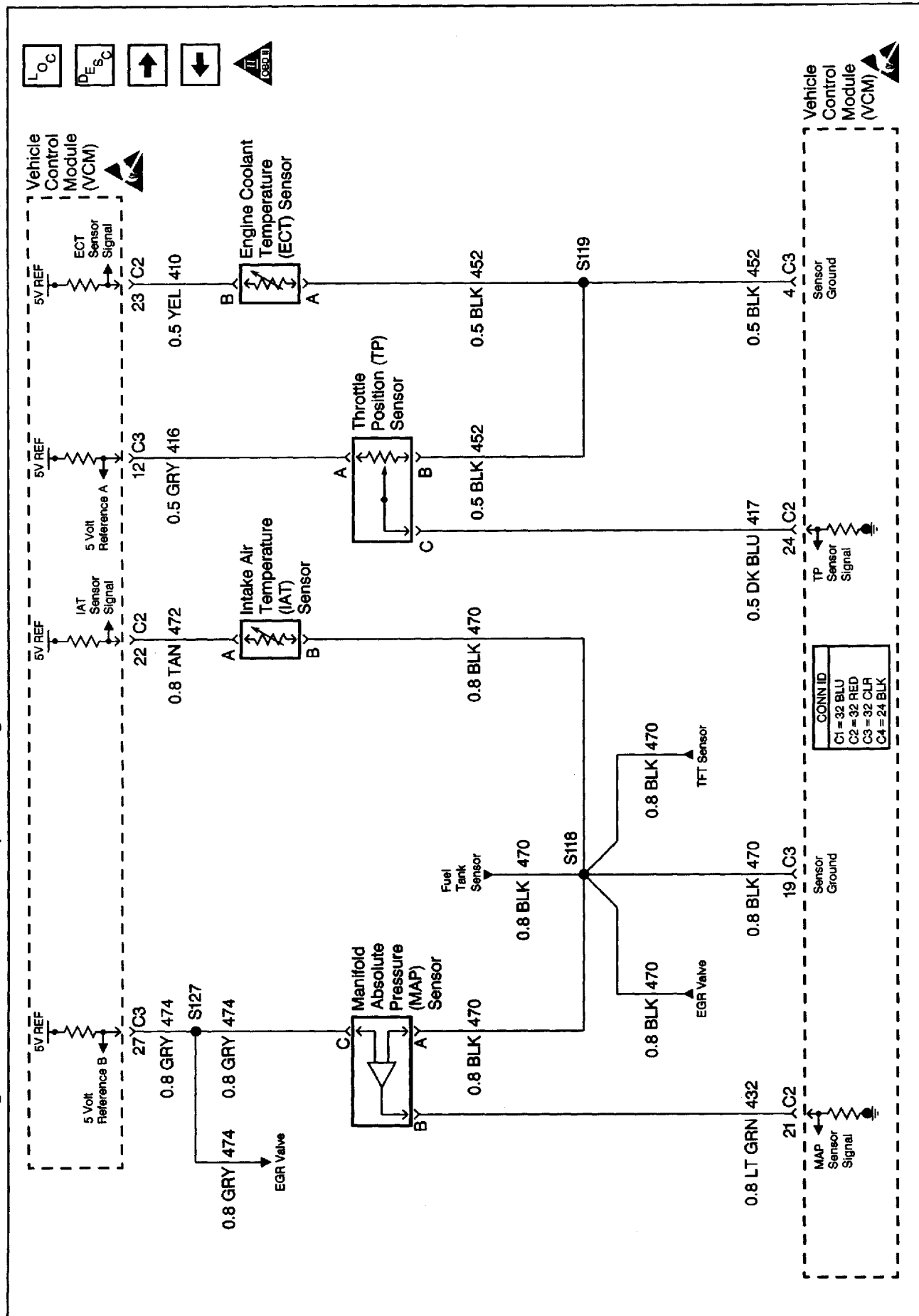
Engine Controls Schematics (Cell 21: Ignition Controls 2 — KS, CKP, CMP)



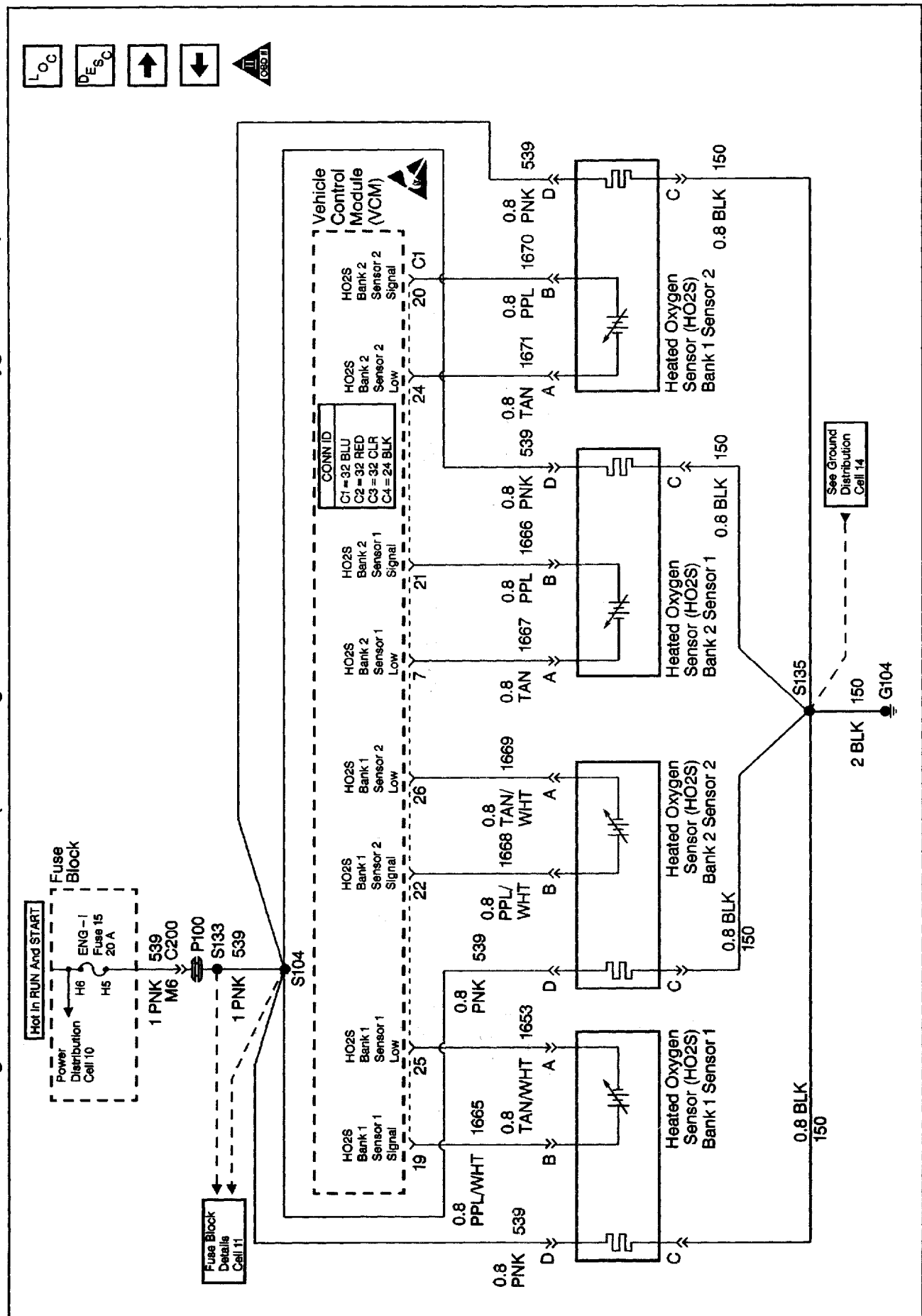
Engine Controls Schematics (Cell 21: Fuel Controls 2 — Fuel Injectors)



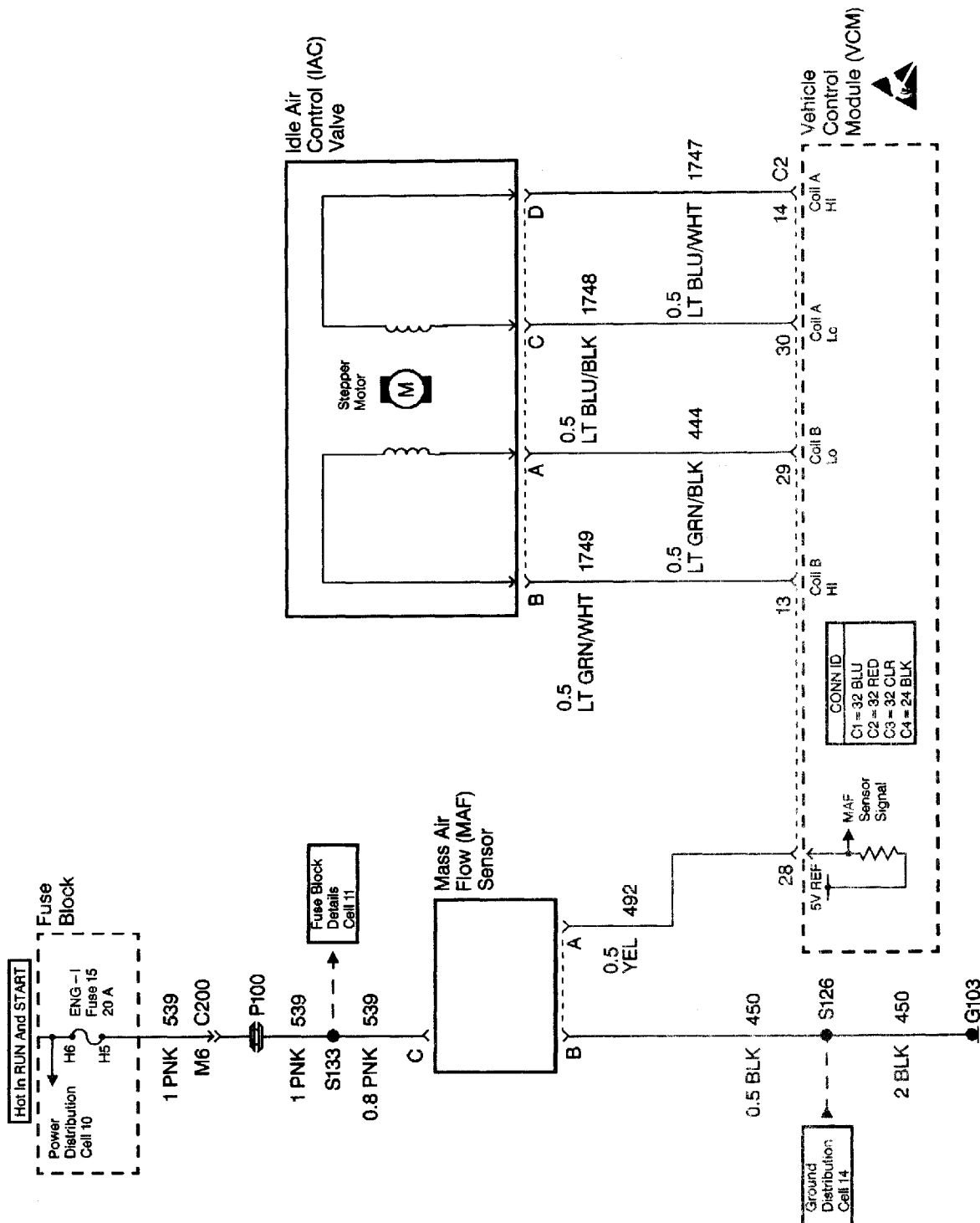
Engine Controls Schematics (Cell 21: Engine Data Sensors 1— MAP, IAT, TP Sensor, and ECT)



Engine Controls Schematics (Cell 21: Engine Data Sensors 2— Heated Oxygen Sensors)

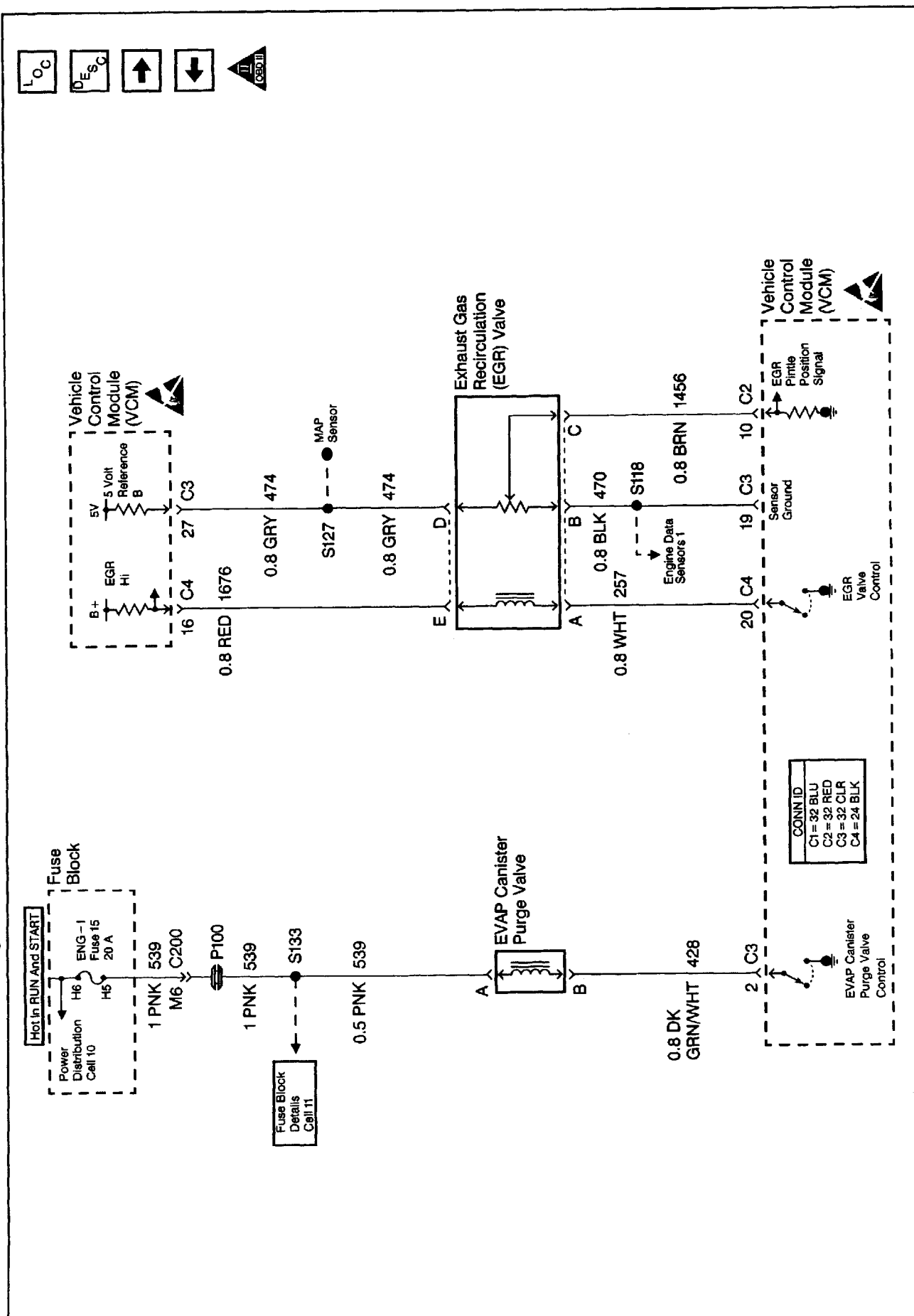


Engine Controls Schematics (Cell 21: Engine Data Sensors 3— MAF and IAC and IAC Circuits)

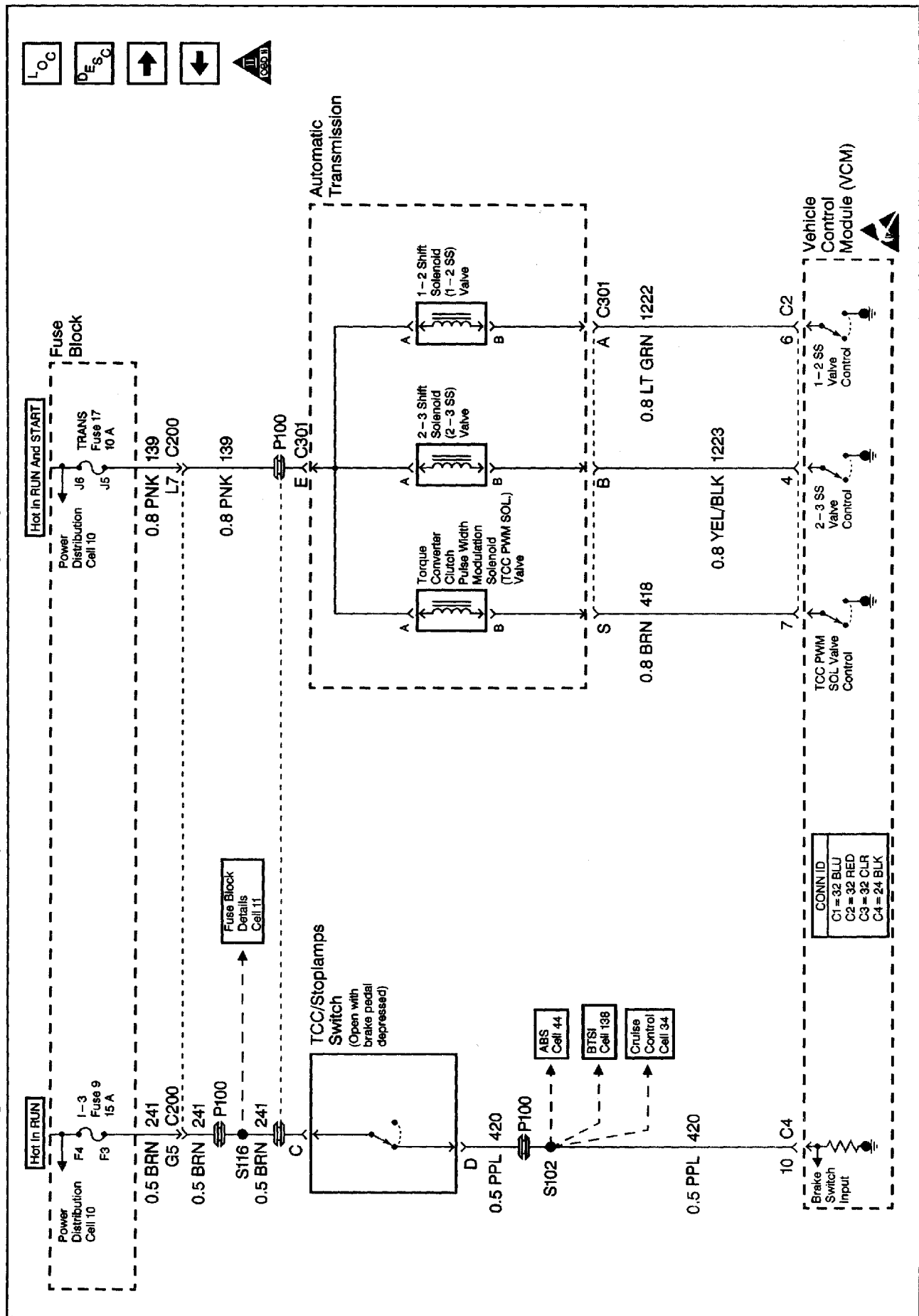


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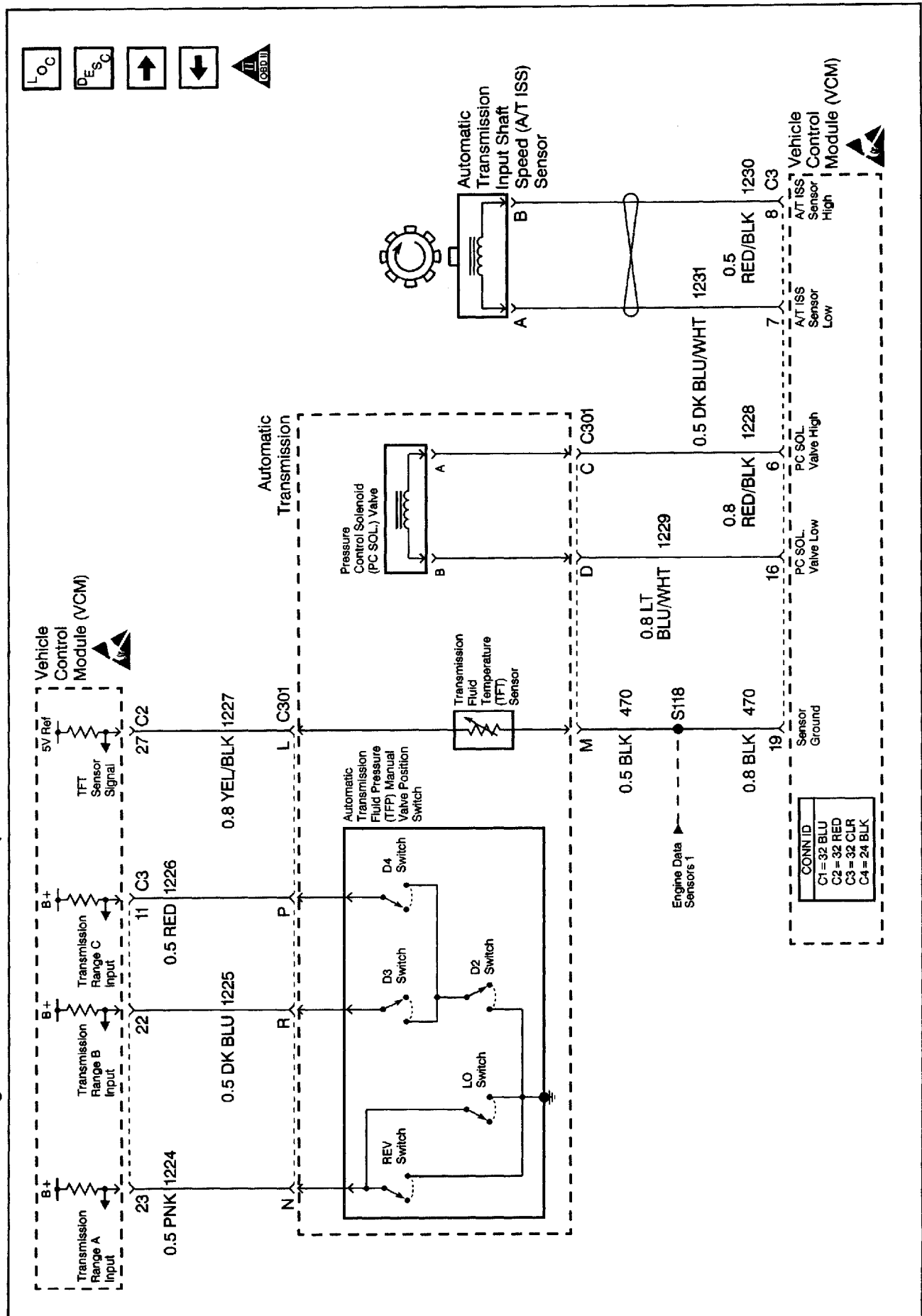
Engine Controls Schematics (Cell 21: EVAP and EGR Controls)



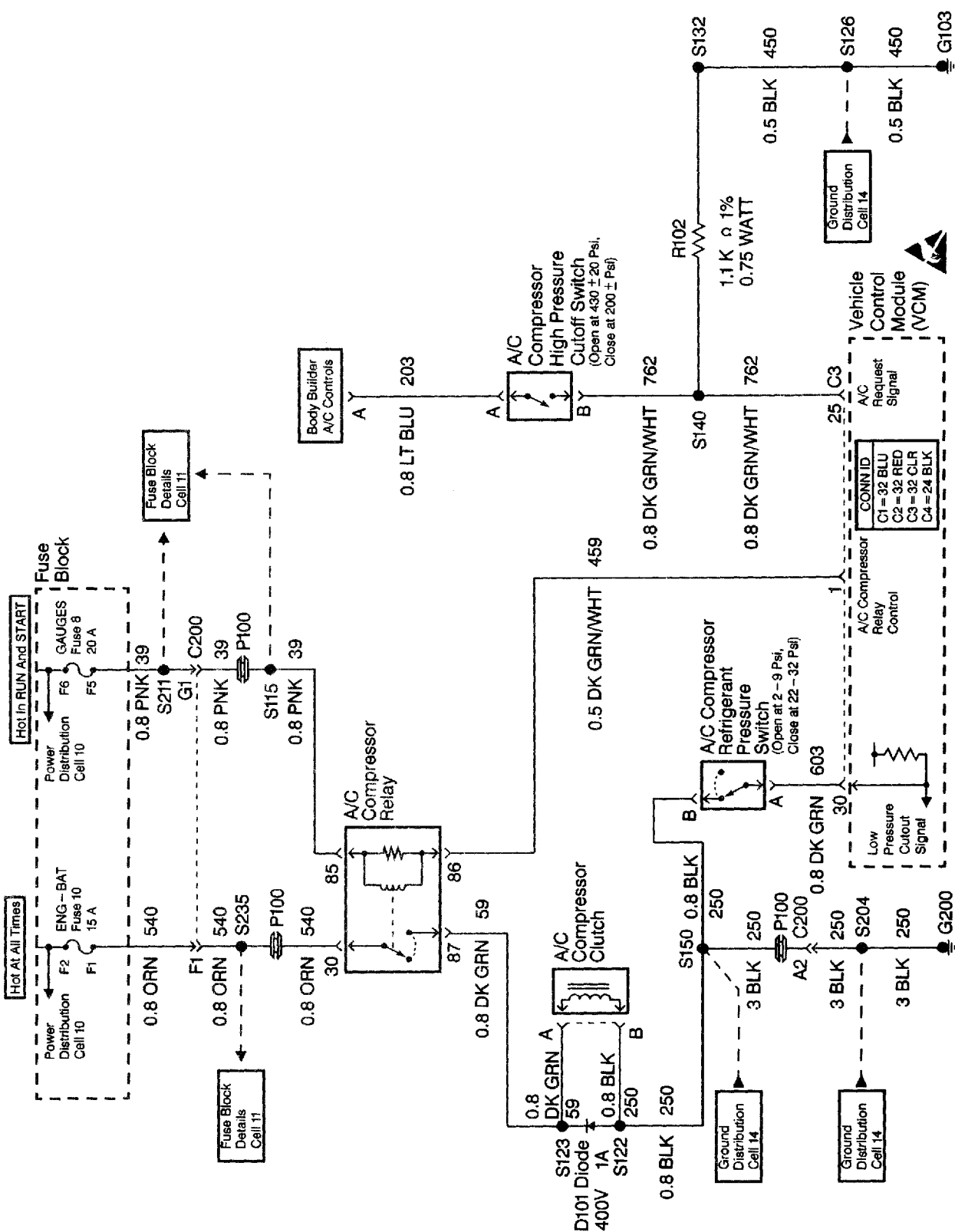
Engine Controls Schematics (Cell 21: A/T Controls 1 — Stoplamp/TCC Switch, Internal Solenoids)



Engine Controls Schematics (Cell 21: A/T Controls 2 — TR, TFT, TISS, and PC Solenoid Valve)



LOC



Component Locator

Engine Controls Components

Name	Location	Locator View	Connector End View
A/C Compressor Clutch	At the front LH side of the engine	<i>HVAC Component Views (Motorhome) in HVAC Systems with A/C-Manual</i>	<i>HVAC Connector End Views in HVAC Systems with A/C-Manual</i>
A/C Compressor High Pressure Cut-Off Switch	At the rear of the A/C compressor	<i>HVAC Component Views (Motorhome) in HVAC Systems with A/C-Manual</i>	<i>HVAC Connector End Views in HVAC Systems with A/C-Manual</i>
A/C Compressor Refrigerant Pressure Switch	Located by the body builder	—	<i>HVAC Connector End Views in HVAC Systems with A/C-Manual</i>
A/C Compressor Relay	On the RH side of the driver's island	<i>HVAC Component Views (Motorhome) in HVAC Systems with A/C-Manual</i>	<i>HVAC Connector End Views in HVAC Systems with A/C-Manual</i>
Auxiliary Engine Coolant Fan A/C Pressure Switch	In front of the radiator, on the RH side of the auxiliary engine coolant fan	<i>Cooling System Component Views in Engine Cooling</i>	<i>Cooling System Connector End Views in Engine Cooling</i>
Auxiliary Engine Coolant Fan	At the front of the engine, in front of the radiator	<i>Cooling System Component Views in Engine Cooling</i>	<i>Cooling System Connector End Views in Engine Cooling</i>
Battery Junction Block	On the forward LH side of the bulkhead above P100	<i>Power and Grounding Component Views in Wiring Systems</i>	—
Camshaft Position Sensor	In the distributor at the top rear of the engine	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Crankshaft Position Sensor	At the lower RH front of the engine, behind the crankshaft balancer pulley	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Cruise Control Module	On the radiator support bracket, left and behind the VCM	<i>Cruise Control Component Views in Cruise Control</i>	<i>Cruise Control Connector End Views in Cruise Control</i>
Data Link Connector (DLC)	At the lower LH side of the steering column on the support bracket	<i>Data Link Communications Component Views (Motorhome) in Data Link Communications</i>	<i>Data Link Communications Connector End Views in Data Link Communications</i>
Distributor	At the top rear of the engine	<i>Engine Controls Component Views</i>	—
Electronic Brake Control Module (EBCM)	Below the radiator on the lower crossmember	<i>Antilock Brakes System Component Views in Antilock Brakes</i>	<i>Antilock Brakes System Connector End Views in Antilock Brakes</i>
Engine Coolant Temperature (ECT) Sensor	At the top front of the engine near the thermostat housing	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Evaporate Emissions Canister Purge Valve	At the LH center of the intake manifold	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Exhaust Gas Recirculation (EGR) Valve	At the front LH top of the intake manifold	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Fan Control Relay	On top of the steering column support, behind the steering column	<i>Cooling System Component Views in Engine Cooling</i>	<i>Cooling System Connector End Views in Engine Cooling</i>
Fuel Pump Module	At the top center of the fuel tank	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Fuel Pump Prime Connector	At the engine harness the battery junction block in the engine compartment	<i>Engine Controls Component Views</i>	—

Engine Controls Components (cont'd)

Name	Location	Locator View	Connector End View
Fuel Pump Relay	On the RH side of the driver's island	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1	In the LH exhaust pipe ahead of the catalytic converter	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 2	In the LH exhaust pipe behind the catalytic converter	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 1	In the RH exhaust pipe ahead of the catalytic converter	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 2	In the RH exhaust pipe behind the catalytic converter	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Idle Air Control Valve	At the RH center of the intake manifold	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Ignition Coil	At the top rear of the intake manifold, near the distributor	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Ignition Control Module	On a bracket at the top rear of the intake manifold, near the ignition coil	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Instrument Cluster	Body builder installed	—	<i>Instrument Cluster Connector End Views in Instrument Panel, Gauges and Console</i>
Intake Air Temperature Sensor	At the front RH side, in the engine air induction system elbow behind the remote air cleaner	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
IP Fuse Block	Located by the body builder	<i>Electrical Center Identification (Motorhome) in Wiring Systems</i>	<i>Power and Grounding Connector End Views in Wiring Systems</i>
Knock Sensors	On the sides of the engine block, below the exhaust manifolds	<i>Engine Controls Component Views</i>	—
Manifold Absolute Pressure Sensor	At the front of the intake manifold, behind the thermostat	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Mass Air Flow Sensor	At the front RH side, in the engine air induction system elbow near the remote air cleaner	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Throttle Position Sensor	At the RH center of the intake manifold near the idle air control valve	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Torque Converter Clutch (TCC) and Stoplamps Switch	Above the brake pedal at the RH side of the steering column	<i>Lighting Systems Component Views (Motorhome) in Lighting Systems</i>	<i>Lighting Systems Connector End Views (Motorhome) in Lighting Systems</i>
Transmission Input Speed Sensor	On LH side of the transmission near the middle	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Transmission Output Speed Sensor	On LH side of the transmission near the middle	<i>Engine Controls Component Views</i>	<i>Engine Controls Connector End Views (7.4L)</i>
Vehicle Control Module	Mounted on top of the radiator support	<i>Engine Controls Component Views</i>	<i>VCM Connector End Views</i>

Engine Controls Components (cont'd)

Name	Location	Locator View	Connector End View
C107	Engine harness to the fuel injector harness, at the LH rear of the engine near the distributor	<i>Harness Routing Views (Motorhome) in Wiring Systems</i>	<i>Inline Harness Connector End Views (Motorhome) in Wiring Systems</i>
C110	Engine harness to the ABS harness, at the front of the LH frame rail near the steering gearbox	<i>Harness Routing Views (Motorhome) in Wiring Systems</i>	<i>Inline Harness Connector End Views (Motorhome) in Wiring Systems</i>
C115	Internal to the engine harness, 10 cm (4 in) from the breakout for the bank 2 Sensor 1 HO2S, toward the transmission	—	—
C117	Internal to the engine harness, 10 cm (4 in) from the breakout for the generator connector	—	—
C200	At the top front of the steering column support near the park brake pull button switch	<i>Harness Routing Views (Motorhome) in Wiring Systems</i>	<i>Inline Harness Connector End Views (Motorhome) in Wiring Systems</i>
C300	Engine harness to the rear chassis harness, near the middle of the chassis at the outside of the LH frame rail	<i>Harness Routing Views (Motorhome) in Wiring Systems</i>	<i>Inline Harness Connector End Views (Motorhome) in Wiring Systems</i>
C301	Engine harness to the transmission, on the LH side of the transmission near the middle	<i>Automatic Transmission Electronic Component Views (Internal) in Automatic Transmission - 4L80-E</i>	<i>AT Inline Harness Connector End View in Automatic Transmission - 4L80-E</i>
C401	Rear chassis harness to the fuel pump module harness, along the LH frame rail next to the fuel tank	—	<i>Inline Harness Connector End Views (Motorhome) in Wiring Systems</i>
D101	In the engine harness, 25 cm (10 in) from the A/C compressor clutch connector	—	—
G103	At the rear of the RH cylinder head	<i>Power and Grounding Component Views in Wiring Systems</i>	—
G104	At the rear of the RH cylinder head	<i>Power and Grounding Component Views in Wiring Systems</i>	—
G108	At the thermostat housing	<i>Power and Grounding Component Views in Wiring Systems</i>	—
G200	Mounted to the top front of the steering column support plate	—	—
G400	At the LH frame rail in front of the fuel tank	—	—
P100	Main wiring pass through at the bulkhead	<i>Harness Routing Views (Motorhome) in Wiring Systems</i>	—
R102	In the engine harness breakout for the PCM, 20 cm (8 in) from the main harness toward the fuel pump relay	—	—
S101	In the engine harness, 19 cm (8 in) from the breakout for C100 and C207, toward the auxiliary engine coolant fan motor	—	—
S102	In the engine harness, 45 cm (18 in) from P100 toward breakout for the mass air flow sensor	—	—
S114	In the engine harness, 44 cm (17 in) from the breakout for the A/C compressor clutch and the EGR valve, toward P100	—	—
S115	In the engine harness, 14 cm (6 in) from the breakout for C100 and C207, toward the the breakout for the MAF sensor	—	—

Engine Controls Components (cont'd)

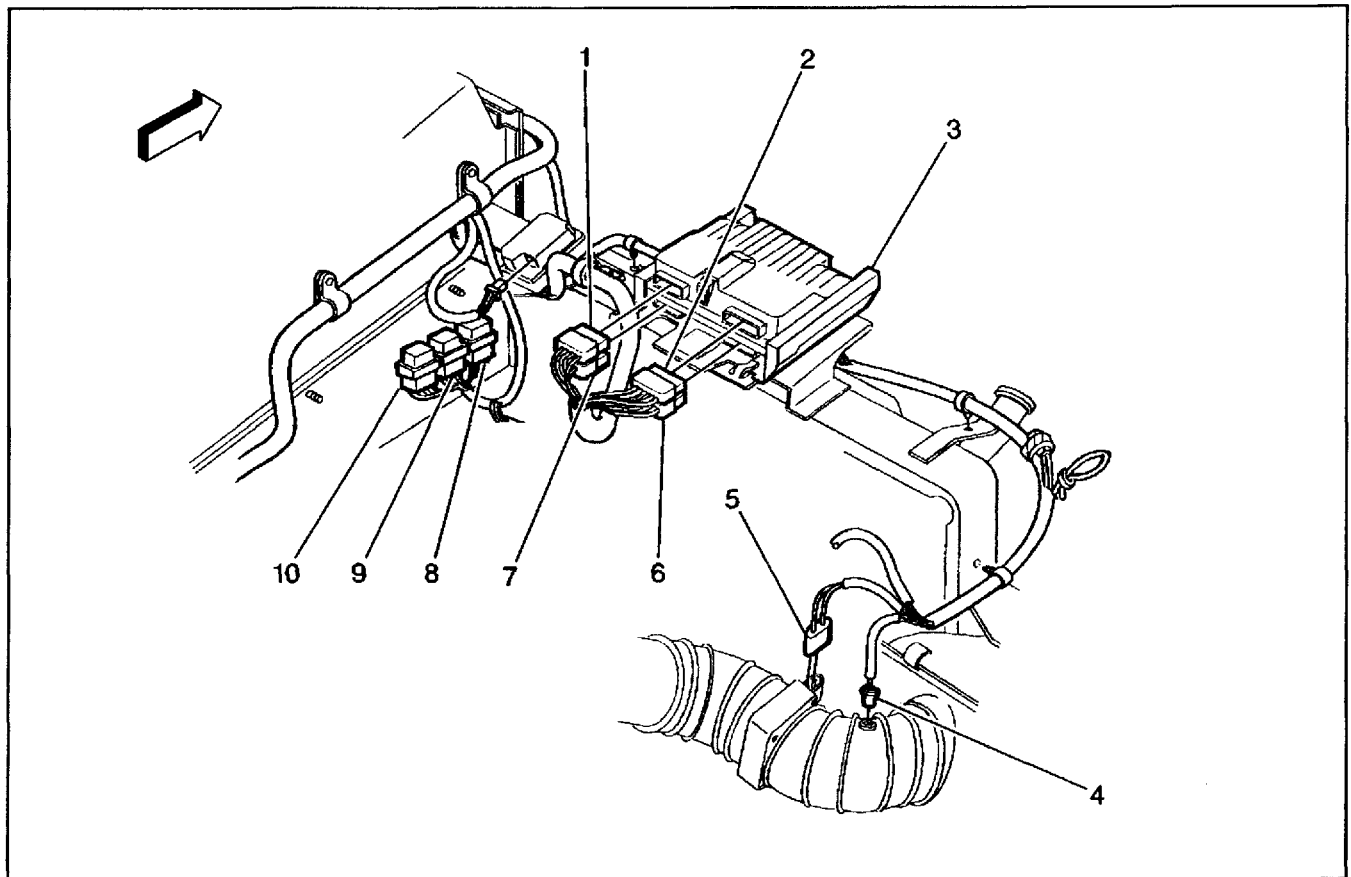
Name	Location	Locator View	Connector End View
S116	In the engine harness, 32 cm (12 in) from the breakout for C100 and C207, toward the breakout for the MAF sensor	—	—
S118	In the engine harness, 21 cm (8 in) from the breakout for the A/C compressor clutch and the EGR valve, toward P100	—	—
S119	In the engine harness, 4 cm (2 in) from the breakout for the A/C compressor clutch and the EGR valve, toward P100	—	—
S120	In the engine harness, 4 cm (2 in) from the breakout for the cruise control module, toward the fuel pump relay breakout	—	—
S121	In the engine harness, 28 cm (11 in) from the breakout for the A/C compressor clutch and the EGR valve, toward the breakout for the camshaft position sensor	—	—
S122/S123 (Diode Splice)	At diode D101 in the engine harness, 25 cm (10 in) from the A/C compressor clutch connector, toward the A/C compressor clutch breakout	—	—
S126	In the engine harness, 18 cm (7 in) from the breakout for the A/C compressor clutch and the EGR valve, toward the VCM	—	—
S127	In the engine harness, 28 cm (11 in) from the breakout for the A/C compressor clutch and the EGR valve, toward P100	—	—
S131	In the engine harness, 12 cm (5 in) from the breakout for the A/C compressor clutch and the EGR valve, toward the breakout for the camshaft position sensor	—	—
S132/S140 (Resistor Splice)	At resistor R102 in the engine harness branch for the PCM, 20 cm (8 in) from the main harness	—	—
S133	In the engine harness, 11 cm (4 in) from the breakout for the A/C compressor clutch and the EGR valve, toward P100	—	—
S135	In the engine harness, 28 cm (11 in) from the ignition coil breakout, toward the breakout for C300	—	—
S143	In the engine harness, 5 cm (2 in) from the breakout for the cruise control module, toward P100	—	—
S150	In the engine harness, 4 cm (2 in) from the breakout for the battery junction block toward the breakout for C100 and C207	—	—
S158	In the fuel injection assembly harness	—	—
S159	In the fuel injection assembly harness	—	—
S170	In the engine harness, 15 cm (6 in) from the breakout for the cruise control module, toward the battery junction block	—	—
S173	In the engine harness, 7 cm (3 in) from the breakout for the mass air flow sensor, toward the battery junction block	—	—
S204	In the IP harness, 16 cm (6 in) from the horn relay breakout, toward the IP fuse block	—	—
S206	In the IP harness, 25 cm (10 in) from the instrument cluster connector	—	—

Engine Controls Components (cont'd)

Name	Location	Locator View	Connector End View
S211	In the IP harness, 6 cm (2 in) from the dimmer switch and the IP cluster connector breakout, toward the IP fuse block	—	—
S235	In the IP side of the engine harness, 26 cm (10 in) from P100 toward C200	—	—
S400	In the rear chassis harness, 10 cm (4 in) from the breakout for G400 toward the fuel pump module	—	—

Engine Controls Component Views

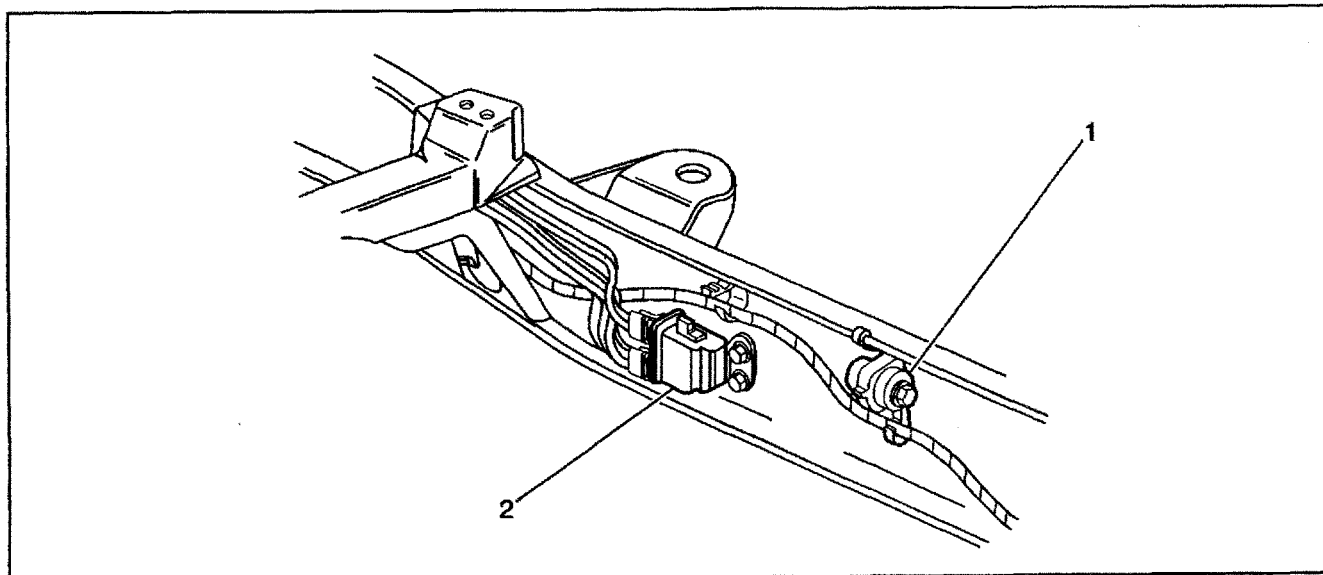
VCM, Connector Ends, IAT, MAF, Starter Relay, A/C Relay, Fuel Pump Relay



239806

Legend

- | | |
|--|------------------------------|
| (1) VCM connector, black (C4) | (6) VCM connector, blue (C1) |
| (2) VCM connector, gray, clear white, (C3) | (7) VCM connector red (C2) |
| (3) Vehicle Control Module (VCM) | (8) Starter Relay |
| (4) Intake Air Temperature Sensor (IAT) | (9) A/C Relay |
| (5) Mass Air Flow Sensor (MAF) | (10) Fuel Pump Relay |

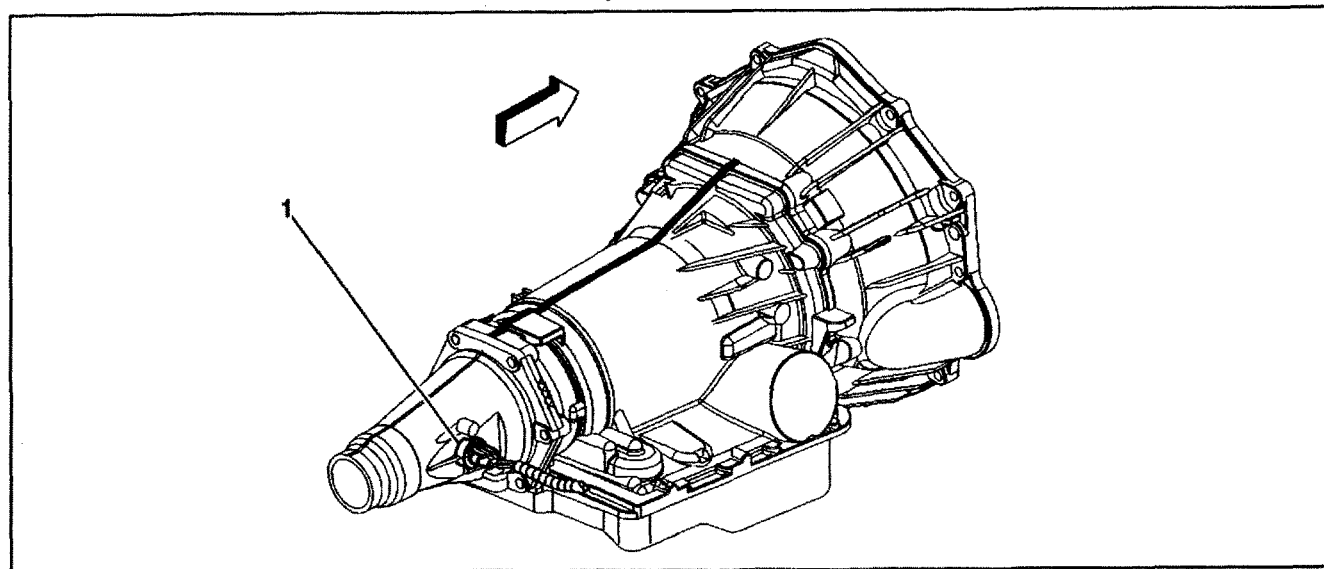
Fuel Balance Module and Fuel Balance Pump (dual tanks only)

209617

Legend

(1) Fuel balance pump module

(2) Fuel balance pump

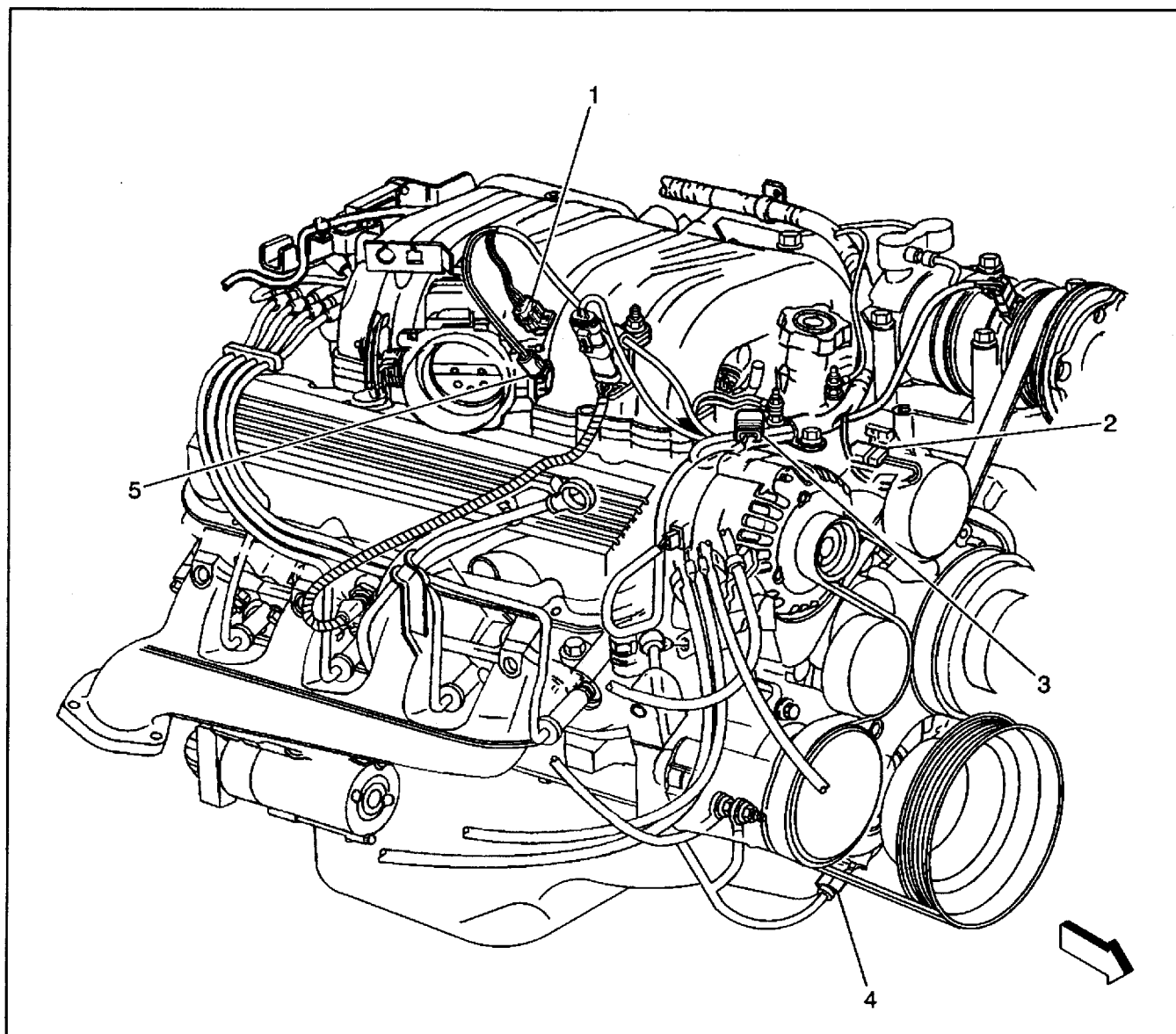
Vehicle Speed Sensor (2WD)

209622

Legend

(1) Vehicle Speed Sensor (VSS)

Idle Air Control, Manifold Absolute Pressure, Engine Coolant Temperature,
Throttle Position Sensors

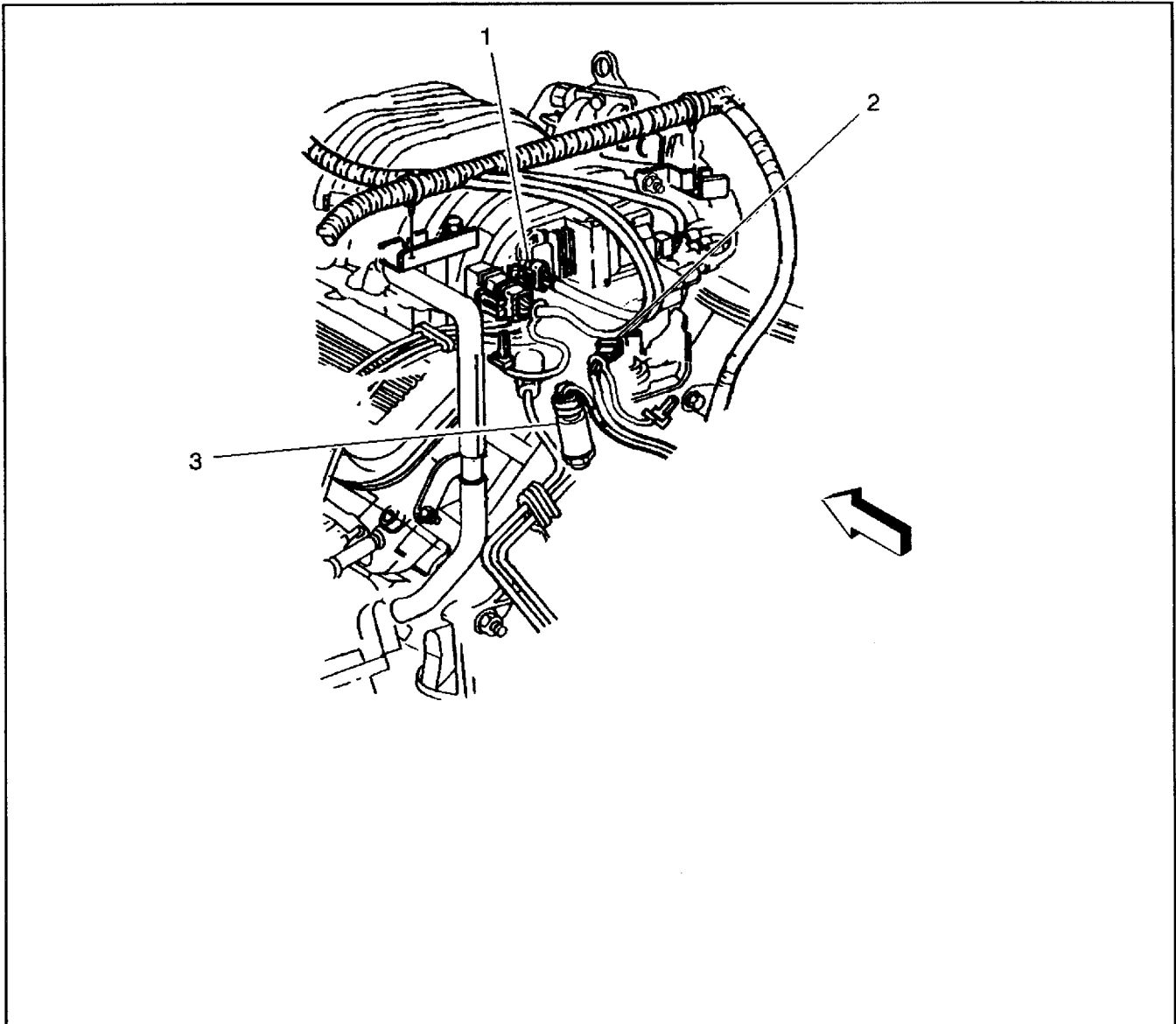


214402

Legend

- | | |
|--|---------------------------------------|
| (1) Idle Air Control (IAC) valve motor. | (4) Crankshaft Position (CKP) Sensor. |
| (2) Engine Coolant Temperature (ECT) Sensor. | (5) Throttle Position (TP) Sensor. |
| (3) Manifold Absolute Pressure (MAP) Sensor. | |

Ignition Control Module,Camshaft Position Sensor,Knock Sensor

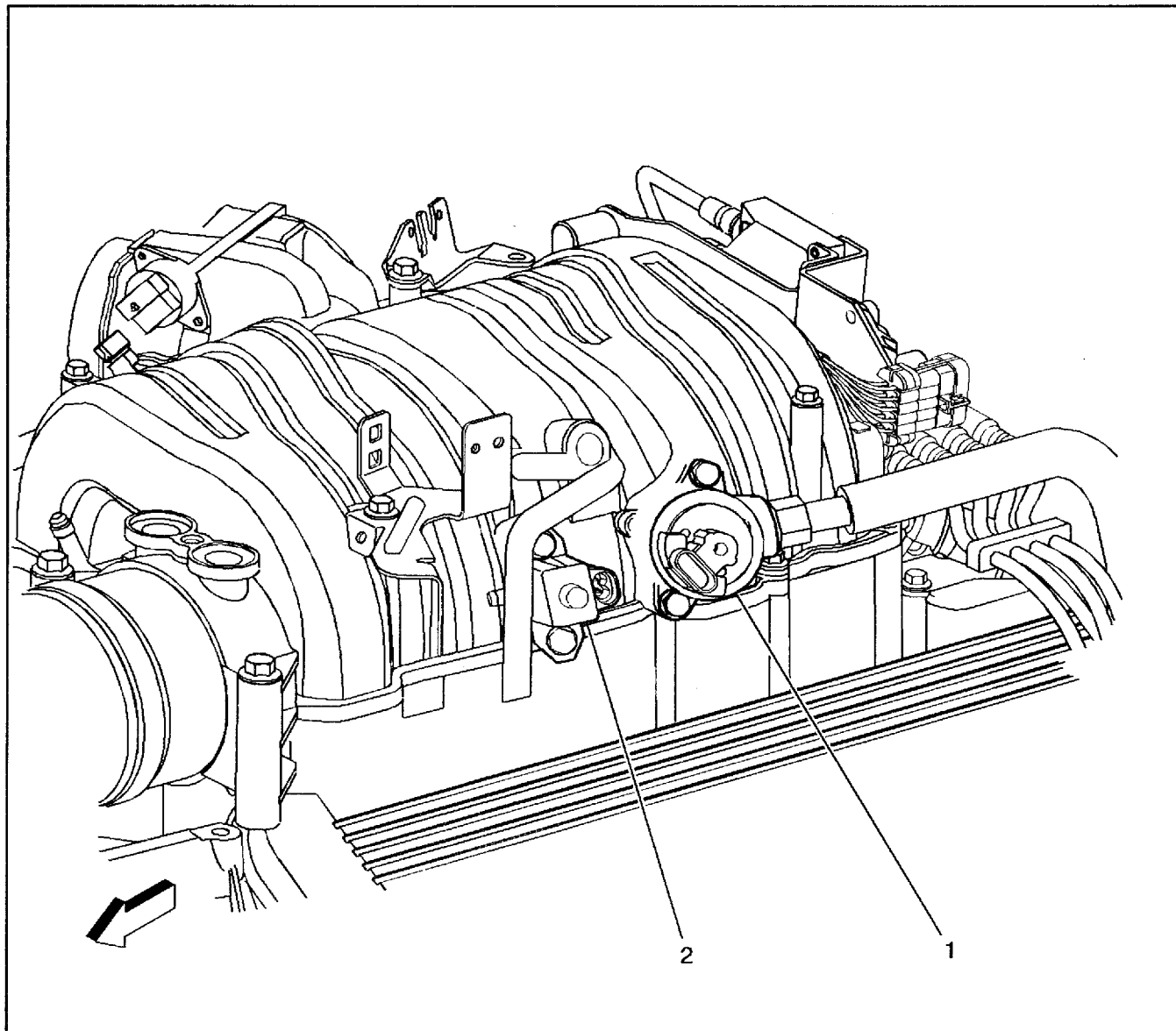


214403

Legend

- | | |
|------------------------------|--|
| (1) Ignition Control Module | (3) Knock Sensor |
| (2) Camshaft Position Sensor | (4) Fuel Pump/Engine Oil Pressure Switch |

Canister Purge, Linear EGR, Knock Sensor

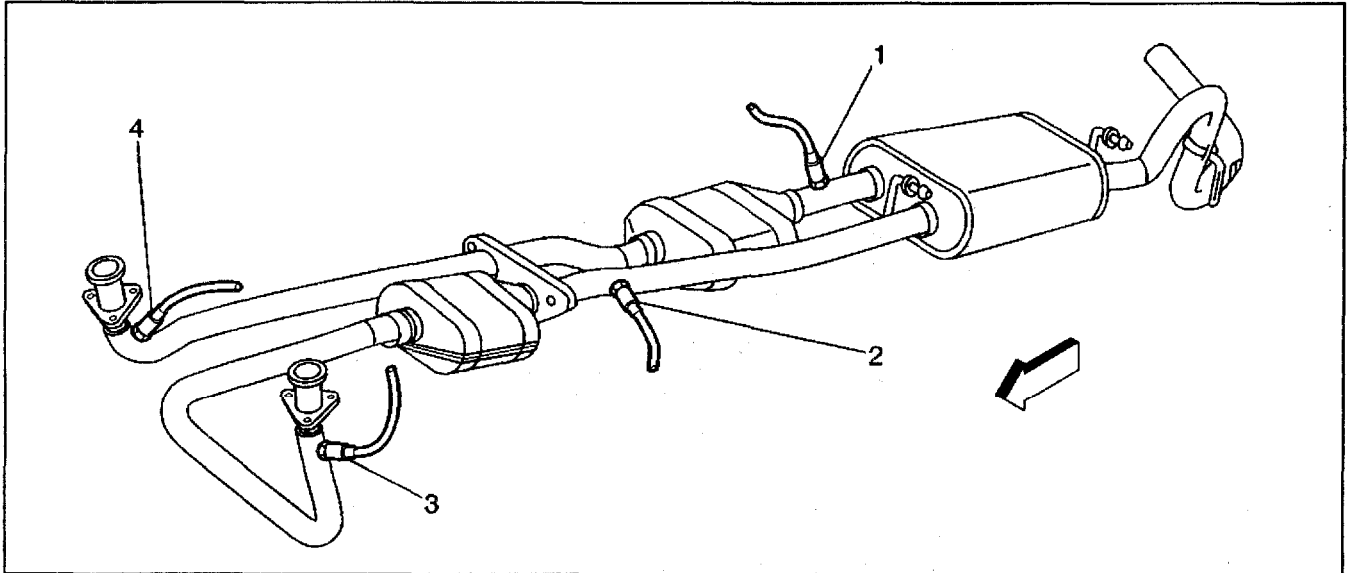


214405

Legend

- | | |
|---|-------------------|
| (1) Canister Purge Valve Solenoid | (3) Knock Sensor. |
| (2) Linear Exhaust Gas Recirculation (EGR) Valve. | |

Heated Oxygen Sensors



404297

Legend

- (1) HO2S Bank 2 Sensor 2
- (2) HO2S Bank 1 Sensor 2

- (3) HO2S Bank 1 Sensor 1
- (4) HO2S Bank 2 Sensor 1