

DUAL FAN WIRING HARNESS Kit (FAN PRO)

This is a generic harness which will run two fans independent of each other or at the same time, depending how you wire the harness. High and low speed wiring schematics are included in this document, but may not be functional with this harness.

There are labels on each wire to indicate their wiring position.

Typically—most computers 'ground' the terminal to trigger the fan relay.

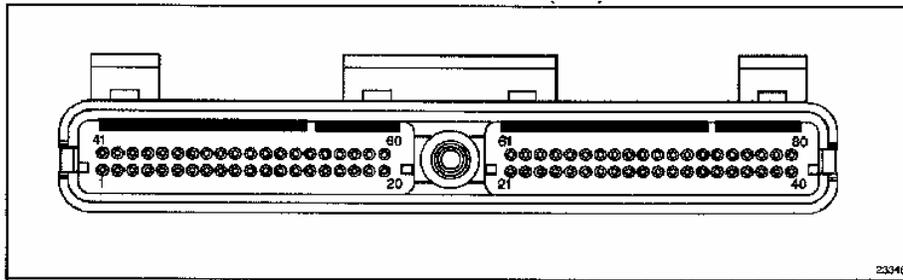
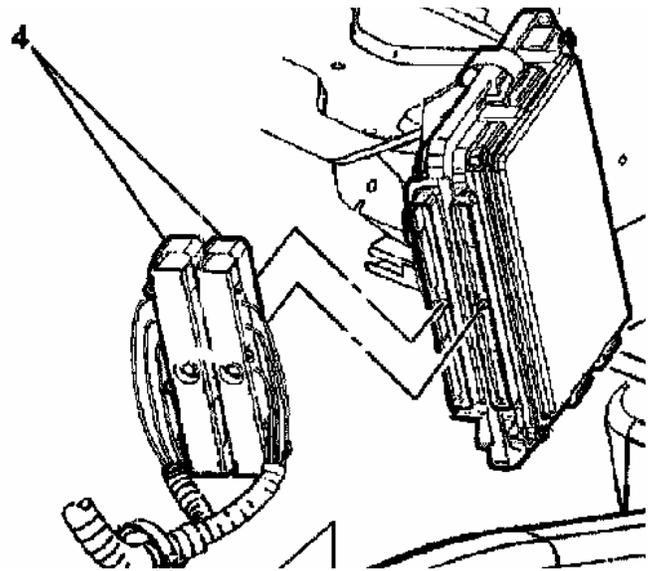
Note that each harness has two "+" and two "-" connections, two large battery "+" connections, one large ground connection. There are two relays and two fuse locations built into the harness to make a simple, quality fan installation.

1. First access the computer connectors.

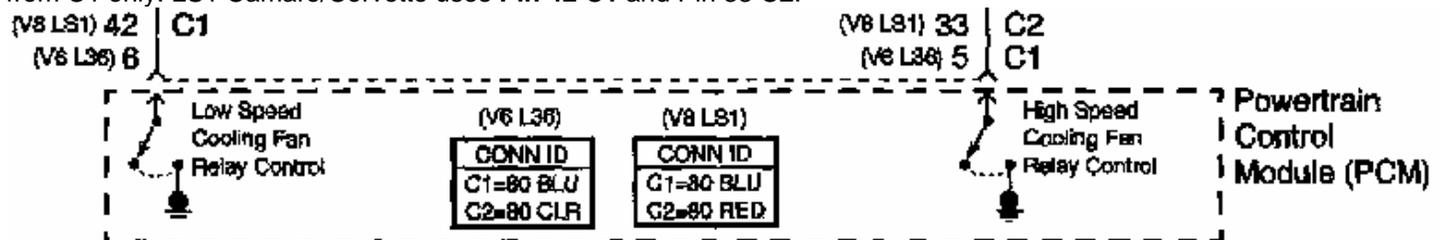
Connector Location at Computer GM Truck

2. Trigger fans with ECM -- use **Pin 42 Connector C1** (ground trigger) and connect corresponding fan "+" to 12V Key ON. If this is a truck, the C1 Pin 42 location will be empty. There are two fan "+" and two fan "-" wires. The ECM will have had to have been 'auxiliary fan' enabled to make this work.

GM Blue Connector C1



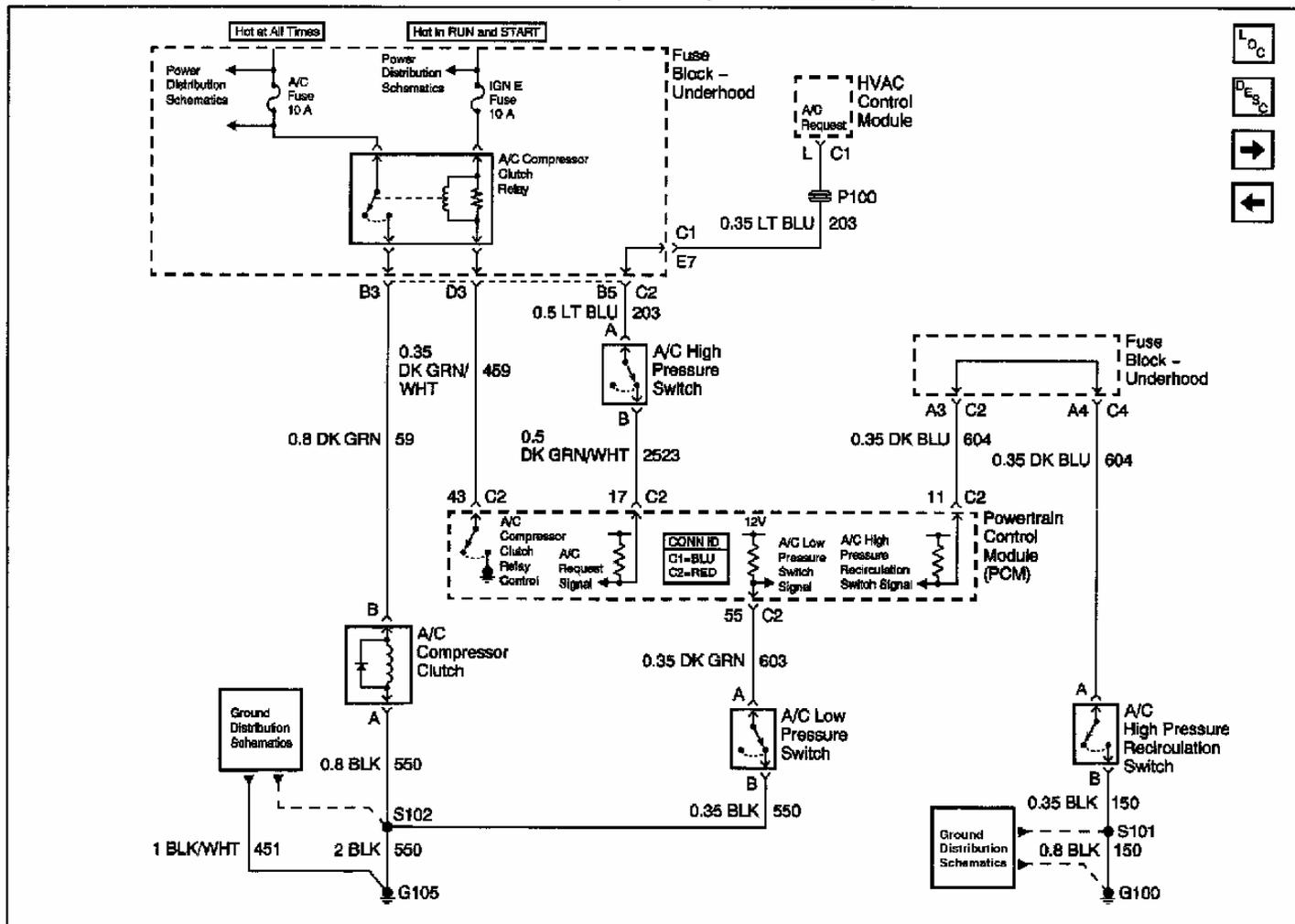
PIN 42 is used for most applications (1998-2007 LS1 Style PCM). Software can be modified for High and Low Speed fan operation using 3 relays and both ECM connector outputs. V6's use PIN 6 for Low Speed and Pin 5 for High Speed from C1 only. LS1 Camaro/Corvette uses **Pin 42 C1** and Pin 33 C2.



3. Trigger fan with A/C request -- Fan "+" to A/C clutch 12V feed "B" (right at the clutch) and ground corresponding fan "-" to ground. Check schematic on next page.

IMPORTANT: If you can access the A/C clutch relay, wire the fan this way:
Fan "-" to the ECM pin 43 in the ECM C2 connector and the other corresponding FAN "+" to a 12 V positive source when the key is in the RUN position. **DO NOT WIRE THIS BACKWARD** or you could damage the engine ECM circuitry.

HVAC Schematics (A/C Compressor Controls)



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This 2 relay Harness Combinations can be set up differently:

Fan 1 -- Trigger with ECM -- Pin 42 C1 for ground trigger based on engine temp -- Corresponding fan "+" to 12V Key ON source.

Fan 2 -- Trigger with A/C -- Fan "-" to ground and Fan "+" to A/C 12V (compressor clutch). Remember you can also combo this to A/C relay command from the ECM and wire the fan "+" to 12Volts key on.

Fan 1 comes on with engine temp, fan 2 is on with A/C requested.

Fan 1 -- Trigger with ECM -- Pin 42 C1 for ground trigger based on engine temp -- Corresponding fan "+" to 12V Key ON source.

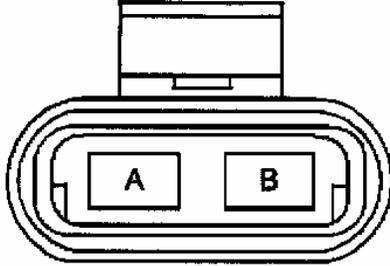
Fan 2 -- Trigger with ECM -- Pin 42 C1 for ground trigger based on engine temp -- Corresponding fan "+" to 12V Key ON source.

Fan 1 and 2 come on with engine temp.

Fan 1 -- Trigger with ECM -- Pin 42 for ground trigger based on engine temp -- Corresponding fan "+" to 12V Key ON source.

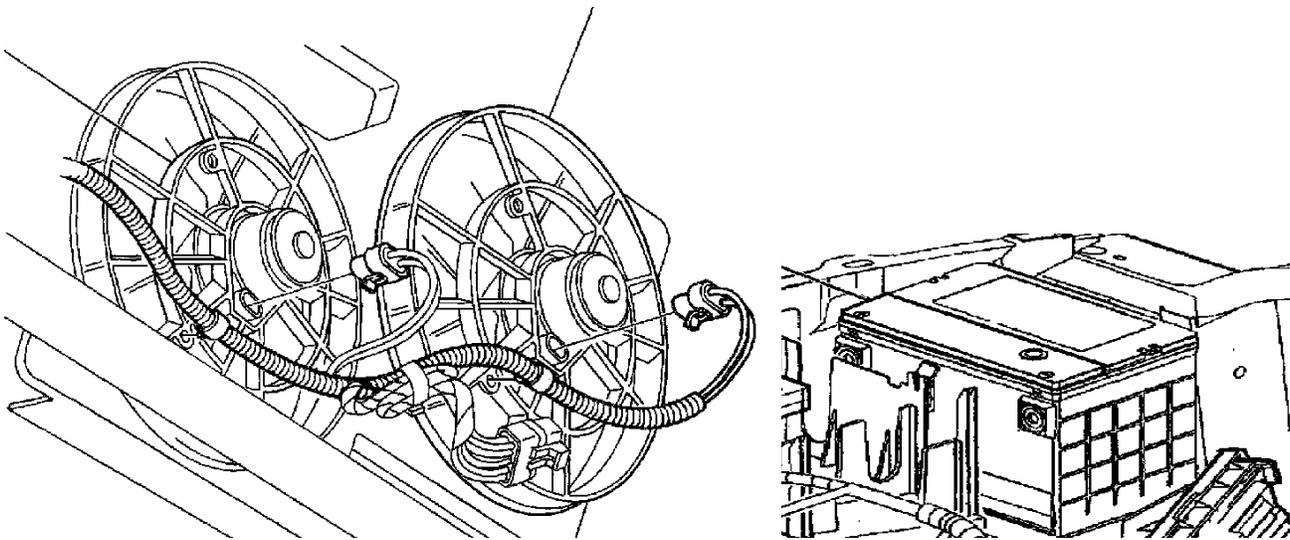
Fan 2 -- Trigger with ECM -- Ground "-" wire -- Corresponding fan "+" to 12V Key ON source through toggle switch.

Fan 1 is on with Engine temp, Fan two is switch on with toggle switch. Remember you can also combo this to A/C relay command from the ECM

			
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Connector Part Information		<ul style="list-style-type: none"> • 1203-3769 • 2-Way F Metri-Pack 630 Series (BLK) 	
Pin	Wire Color	Circuit No.	Function
A	GRY	532	Cooling Fan Motor Supply Voltage
B	LT BLU	409	Cooling Fan Motor Supply Voltage

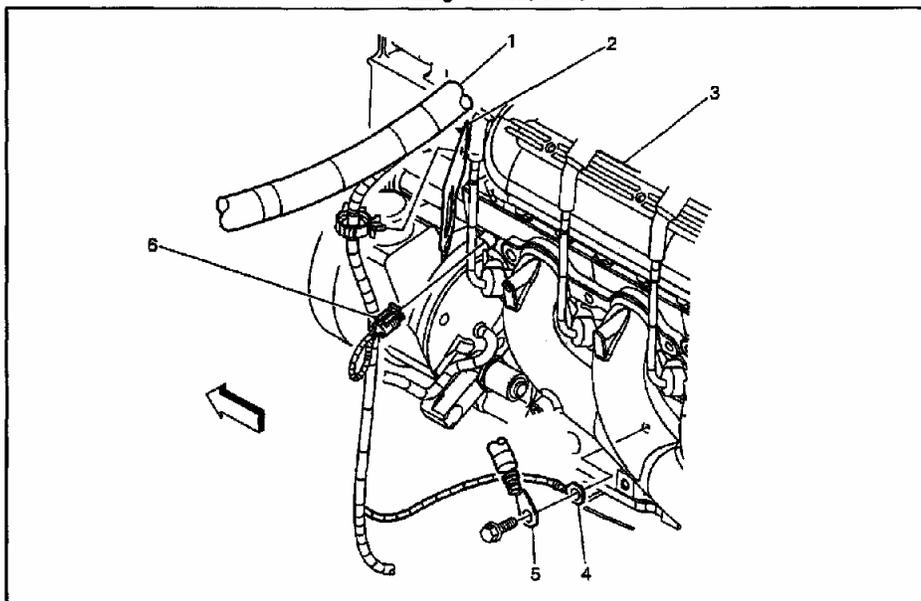
Fan Electrical Plug (2 for two fans)

If you wish to make a 'pusher' fan setup, swap the A and B wires at the connector that plugs into the FAN. Pusher fans are always mounted at the FRONT of the Radiator.



Connect main power for fans either at the BATTERY "+" or at the junction stud and negative connection at the engine block (best) at the large engine block stud for ground wire from the battery.

LH Side of Engine 4.8L, 5.3L, 6.0L

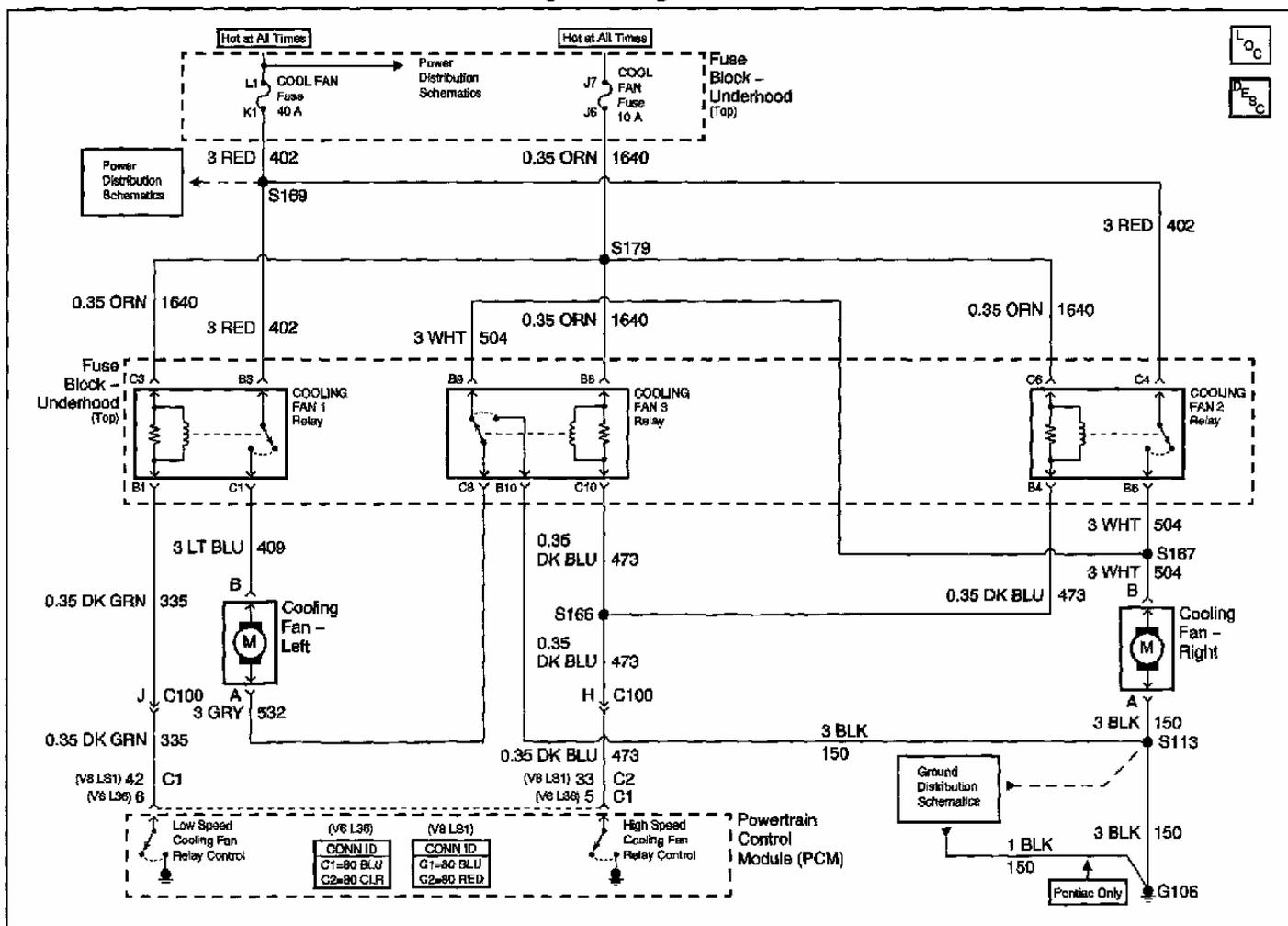


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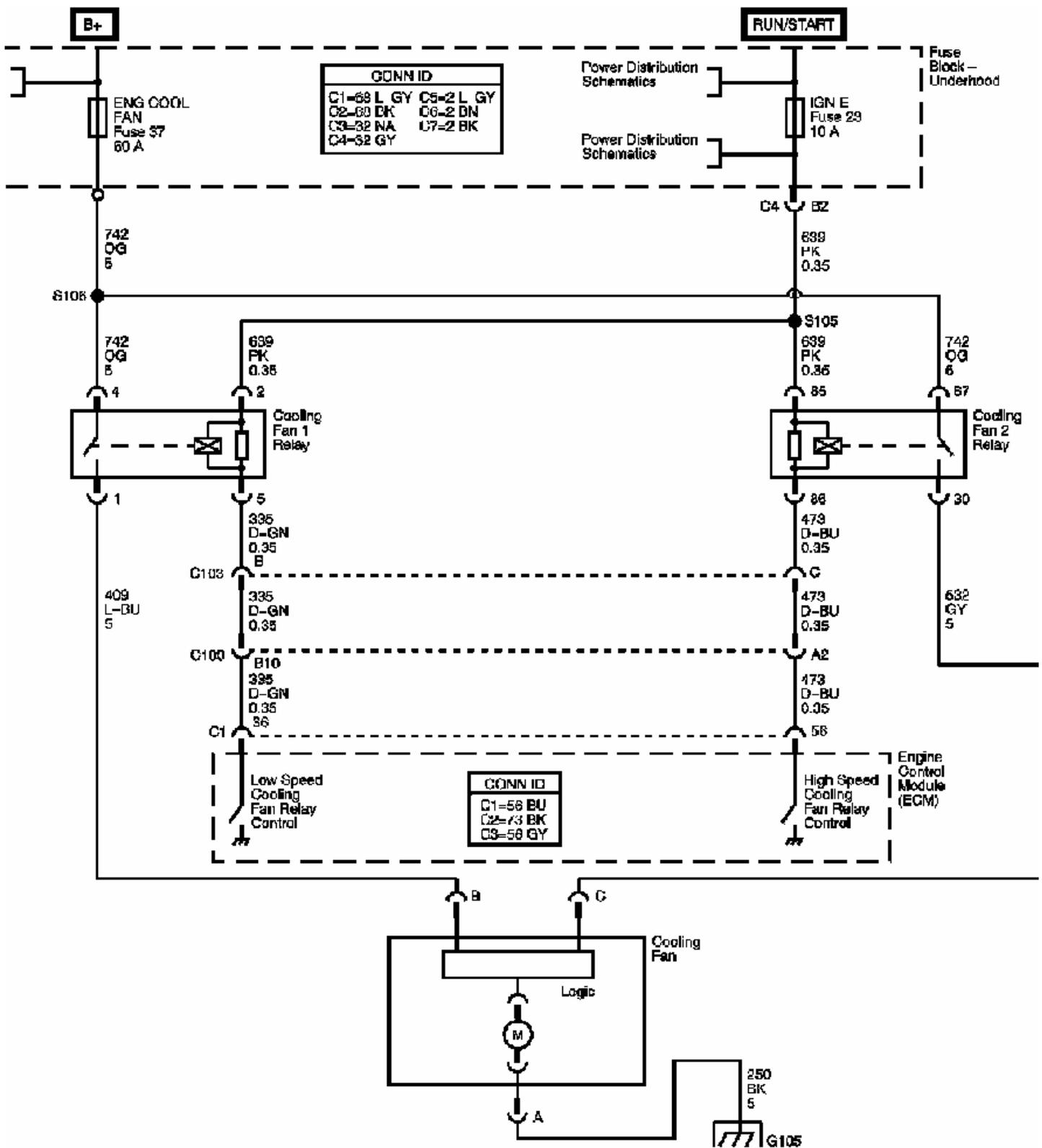
Legend

- (1) Engine Harness
- (2) Battery Cable Junction Block Bracket
- (3) LH Rocker Cover
- (4) Ground 102 (G102)
- (5) Negative Battery Cable
- (6) Engine Coolant Temperature (ECT) Sensor Connector

Engine Cooling Schematics

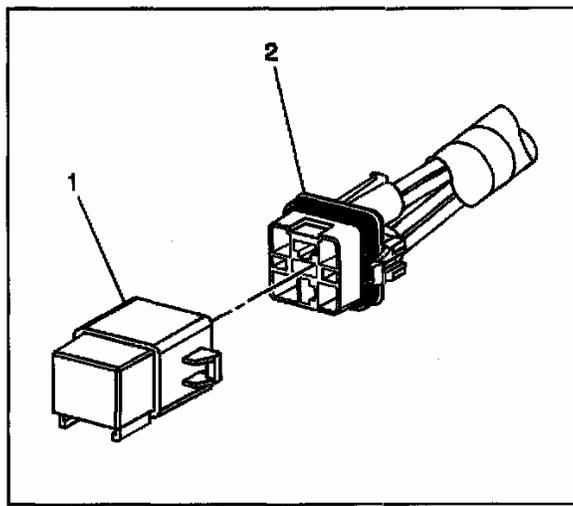


3 Relay Schematic for High and Low speed fan control.



2 Relay typical wiring schematic for single fan operation, but two-speed. This is a pulse width modulated circuit to make a lower voltage pulse to the Fan motor.

Should you need to replace a relay, they easily unplug from the harness electrical and can be found at most automotive retailers. Note—use a minimum 30 amp relay !



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TEST your setup.

1. Turn the key on or start the vehicle.
2. Test the A/C setting
3. Wait till the engine warms up enough to trigger the fan.
4. If any step fails, recheck your connections and don't overlook the fan harness fuses!!



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