

Symptom:

P1490-LOW SPEED FAN CONTROL RELAY CIRCUIT

When Monitored and Set Condition:

P1490-LOW SPEED FAN CONTROL RELAY CIRCUIT

When Monitored: With the ignition on and battery voltage greater than 10 volts.

Set Condition: An open or shorted condition is detected in the low speed fan relay control circuit.

POSSIBLE CAUSES

RADIATOR FAN CTRL RLY CIRCUIT WIRE HARN INTERMITTENT PROBLEM
 RADIATOR FAN CTRL RLY CIRCUIT WIRE HARN OBSERVABLE PROBLEM
 FUSED IGNITION SWITCH OUTPUT CIRCUIT OPEN
 RADIATOR FAN RELAY CONTROL CIRCUIT OPEN
 RADIATOR FAN RELAY CONTROL CIRCUIT SHORTED TO GROUND
 RADIATOR FAN RELAY
 POWERTRAIN CONTROL MODULE

TEST	ACTION	APPLICABILITY
1	Turn the ignition on. With the DRB, actuate the Low Speed Radiator Fan Relay. Does the Radiator Fan Motor cycle on and off? Yes → Go To 2 No → Go To 4	All
2	Turn the ignition on. With the DRB, actuate the Radiator Fan Relay. Wiggle the wiring harness between the Radiator Fan Relay(s) and the PCM. Did the wiggling interrupt the Radiator Fan Relay cycling? Yes → Repair as necessary where wiggling caused the cycling to be interrupted. Perform POWERTRAIN VERIFICATION TEST VER - 2. No → Go To 3	All
3	Turn the ignition off. Using the schematic as a guide, inspect the wiring and connectors. Were any problems found? Yes → Repair as necessary. Perform POWERTRAIN VERIFICATION TEST VER - 2. No → Test Complete.	All

P1490-LOW SPEED FAN CONTROL RELAY CIRCUIT — Continued

TEST	ACTION	APPLICABILITY
4	Turn the ignition off. Remove the Radiator Fan Relay. Measure the voltage of the Fused Ignition Switch Output circuit in the relay connector. Is the voltage above 10.0 volts? Yes → Go To 5 No → Repair the Fused Ignition Switch Output circuit for an open. Perform POWERTRAIN VERIFICATION TEST VER - 2.	All
5	Turn the ignition off. Disconnect the PCM harness connector. Remove the Radiator Fan Relay. Measure the resistance of the Radiator Fan Relay Control circuit. Is the resistance below 5.0 ohms? Yes → Go To 6 No → Repair the Radiator Fan Relay Control circuit for an open. Perform POWERTRAIN VERIFICATION TEST VER - 2.	All
6	Turn the ignition off. Remove the Radiator Fan Relay. Disconnect the PCM harness connector. Measure the resistance between ground and the Radiator Fan Relay Control circuit. Is the resistance above 100 kohms? Yes → Go To 7 No → Repair the Radiator Fan Relay Control circuit for a short to ground. Perform POWERTRAIN VERIFICATION TEST VER - 2.	All
7	Turn the ignition off. Disconnect the PCM harness connector. Turn the ignition on. Connect a jumper wire to the Radiator Fan Relay Control circuit in the PCM harness connector. Momentarily connect the other end of the jumper wire to ground. Did the Radiator Fan Relay actuate? Yes → Go To 8 No → Replace the Radiator Fan Relay. Perform POWERTRAIN VERIFICATION TEST VER - 2.	All
8	If there are no possible causes remaining, view repair. Repair Replace the Powertrain Control Module. Perform POWERTRAIN VERIFICATION TEST VER - 2.	All