

Symptom:**P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS****When Monitored and Set Condition:****P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS**

When Monitored: Continuously with the key on.

Set Condition: This code will set if the voltage detected on the Governor Pressure Solenoid Control circuit at the PCM is different than the expected voltage.

POSSIBLE CAUSES

P1765 DTC PRESENT
 INTERMITTENT GOVERNOR PRESSURE SOLENOID
 TRANSMISSION RELAY OUTPUT
 FUSED B+ CIRCUIT OPEN
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT OPEN
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT OPEN INTERNAL
 TRANSMISSION CONTROL RELAY OUTPUT CIRCUIT OPEN
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO GROUND
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO GROUND INTERNAL
 TRANSMISSION RELAY OUTPUT CIRCUIT SHORT TO GROUND
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO VOLTAGE
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO SOLENOID CIRCUITS INTERNAL
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO OTHER CIRCUITS
 GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT SHORT TO OTHER CIRCUITS INTERNAL
 TRANSMISSION CONTROL RELAY - POOR CONTACTS
 PCM - GOVERNOR PRESSURE SOLENOID CONTROL CIRCUIT

TEST	ACTION	APPLICABILITY
1	Ignition on, engine not running. With the DRBIII®, read DTCs. Is the Good Trip Counter for P0748 displayed and equal to 0? Yes → Go To 2 No → Go To 18	All

TRANSMISSION

P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS — Continued

TEST	ACTION	APPLICABILITY
2	With the DRBIII®, read Transmission DTCs. Is the DTC P1765 present? Yes → Perform diagnostics on P1765 TRANS 12-VOLT SUPPLY RELAY CTRL CIRCUIT first before proceeding. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 3	All
3	With the DRBIII®, read Transmission DTCs. Are DTCs P0743, P0748 and P0753 present? Yes → Go To 4 No → Go To 9	All
4	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connector. Ignition on, engine not running. Using a 12-volt test light connected to ground, check the Transmission Control Relay Output circuit in the Transmission Solenoid Assembly harness connector. Does the test light illuminate brightly? Yes → Replace the Transmission Solenoid Assembly in accordance with the Service Information. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 5	All
5	Turn the ignition off to the lock position. Remove the Transmission Control Relay. Ignition on, engine not running. Using a 12-volt test light connected to ground, check the Fused B+ circuit in the Transmission Control Relay connector. NOTE: The light must illuminate brightly, if it does not light, or lights dimly, the circuit must be repaired. If there is any doubt, compare the brightness when testing the circuit, to the brightness when connected directly to the battery positive post. Does the test light illuminate brightly? Yes → Go To 6 No → Repair the Fused B+ circuit for an open. If the fuse is open, make sure to check for a short to ground or excessive resistance in the Fused B+ circuit and repair as necessary. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
6	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connector. Remove the Transmission Control Relay. Measure the resistance between ground and the Transmission Relay Control Output circuit. Is the resistance below 5.0 ohms? Yes → Repair the Transmission Relay Output circuit for a short to ground. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 7	All

P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS — Continued

TEST	ACTION	APPLICABILITY
7	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connector. Check connectors - Clean/repair as necessary Ignition on, engine not running. Connect a jumper wire between the Fused Transmission Relay Output circuit and Fused B+ in the Transmission Relay connector. Using a 12-volt test light connected to ground, check the Transmission Relay Control Output circuit in the Transmission Solenoid Assembly harness connector. Does the test light illuminate brightly? Yes → Go To 8 No → Repair the Fused Transmission Control Relay Output circuit for an open. If the Fuse is open, make sure to check for a short to ground or excessive resistance in the Fused Transmission Control Relay Output circuit and repair as necessary. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
8	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connector. Check connectors - Clean/repair as necessary Ignition on, engine not running. Connect a jumper wire between the Transmission Relay Output circuit and the Fused B+ circuit in the Transmission Relay connector. Using a 12-volt test light connected to ground, check the Transmission Relay Control Output circuit in the Transmission Solenoid Assembly harness connector. Does the test light illuminate brightly? Yes → Replace the Transmission Control Relay. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Test Complete.	All
9	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connectors. Disconnect the PCM harness connector. Check connectors - Clean/repair as necessary. Measure the resistance of the Governor Pressure Solenoid Control circuit between the Transmission Solenoid Assembly harness connector and the PCM harness connector. Is the resistance below 5.0 ohms? Yes → Go To 10 No → Repair the Governor Pressure Solenoid Control circuit for an open. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
10	Turn the ignition off to the lock position. Disconnect the Transmission Solenoid Assembly harness connector. Disconnect the PCM harness connectors. Check connectors - Clean/repair as necessary Measure the resistance between ground and the Governor Pressure Solenoid Control circuit in the PCM harness connector. Is the resistance below 5.0 ohms? Yes → Repair the Governor Pressure Solenoid Control circuit for a short to ground. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 11	All

TRANSMISSION

P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS — Continued

TEST	ACTION	APPLICABILITY
11	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Disconnect the Transmission Solenoid Assembly harness connector. Ignition on, engine not running. Measure the voltage of the Governor Pressure Solenoid Control circuit. Is the voltage above 0.5 volt? Yes → Repair the Governor Solenoid Control circuit for a short to voltage. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 12	All
12	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Disconnect the Transmission Solenoid Assembly harness connector. Remove the Transmission Control Relay. Check connectors - Clean/repair as necessary Measure the resistance between the Governor Pressure Solenoid Control circuit and all other circuits in the Transmission Solenoid Assembly harness connector. Is the resistance below 100 kohms between any two circuits? Yes → Repair as necessary. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 13	All
13	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Remove the Transmission Control Relay. Measure the resistance of the Governor Pressure Solenoid Control circuit between the PCM harness connector and the Transmission Control Relay Output circuit connector. Is the resistance between 3.0 ohms and 6.0 ohms Yes → Go To 14 No → Replace the Transmission Solenoid Assembly in accordance with the Service Information. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
14	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Check connectors - Clean/repair as necessary Measure the resistance between the Governor Pressure Solenoid Control circuit and ground. Is the resistance below 5.0 ohms? Yes → Repair or Replace the Transmission Solenoid Assembly for a short to ground. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 15	All

P0748-PRESSURE SOL CONTROL/TRANS RELAY CIRCUITS — Continued

TEST	ACTION	APPLICABILITY
15	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Check connectors - Clean/repair as necessary NOTE: Resistance between the Governor Pressure Solenoid Control circuit and the listed circuits should be 28 to 68 ohms. Measure the resistance between the Governor Pressure Solenoid Control circuit and the... * TCC Solenoid Control circuit in the PCM harness connector. * 3-4 shift Solenoid Control circuit in the PCM harness connector. Is the resistance of both measurements within the range of 28 to 68 ohms? Yes → Go To 16 No → Replace Transmission Solenoid Assembly per Service Information. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
16	Turn the ignition off to the lock position. Disconnect the PCM harness connectors. Remove the Transmission Control Relay. Check connectors - Clean/repair as necessary NOTE: Resistance between the Governor Pressure Solenoid circuit and the listed circuits should not be below 100 kohms. Measure the resistance between the Governor Pressure Solenoid Control circuit and the... * Transmission 5-volt supply circuit in the C2 PCM harness connector. * Sensor Ground circuit in the C2 PCM harness connector. * Transmission Temp Sensor Signal circuit in the PCM harness connector. * Governor Pressure Sensor Signal circuit in the PCM harness connector. Are the resistance values for any of the above listed circuits below 100 kohms? Yes → Replace Transmission Solenoid Assembly per Service Information. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Go To 17	All
17	If there are no possible causes remaining, view repair. Repair Replace the Powertrain Control Module in accordance with the Service Information. Perform TRANSMISSION VERIFICATION TEST VER - 1.	All
18	At this time, the conditions required to set the DTC are not present. NOTE: Use the Freeze Frame Data to help duplicate the conditions that set the DTC. Pay particular attention to the DTC set conditions, such as, VSS, MAP, ECT, and Load. NOTE: Visually inspect the related wiring harness. Look for any chafed, pierced, pinched, broken, bent, pushed out, corroded terminals, or partially broken wires. NOTE: Refer to any technical service bulletins that may apply. Were any problems found? Yes → Repair as necessary. Perform TRANSMISSION VERIFICATION TEST VER - 1. No → Test Complete.	All