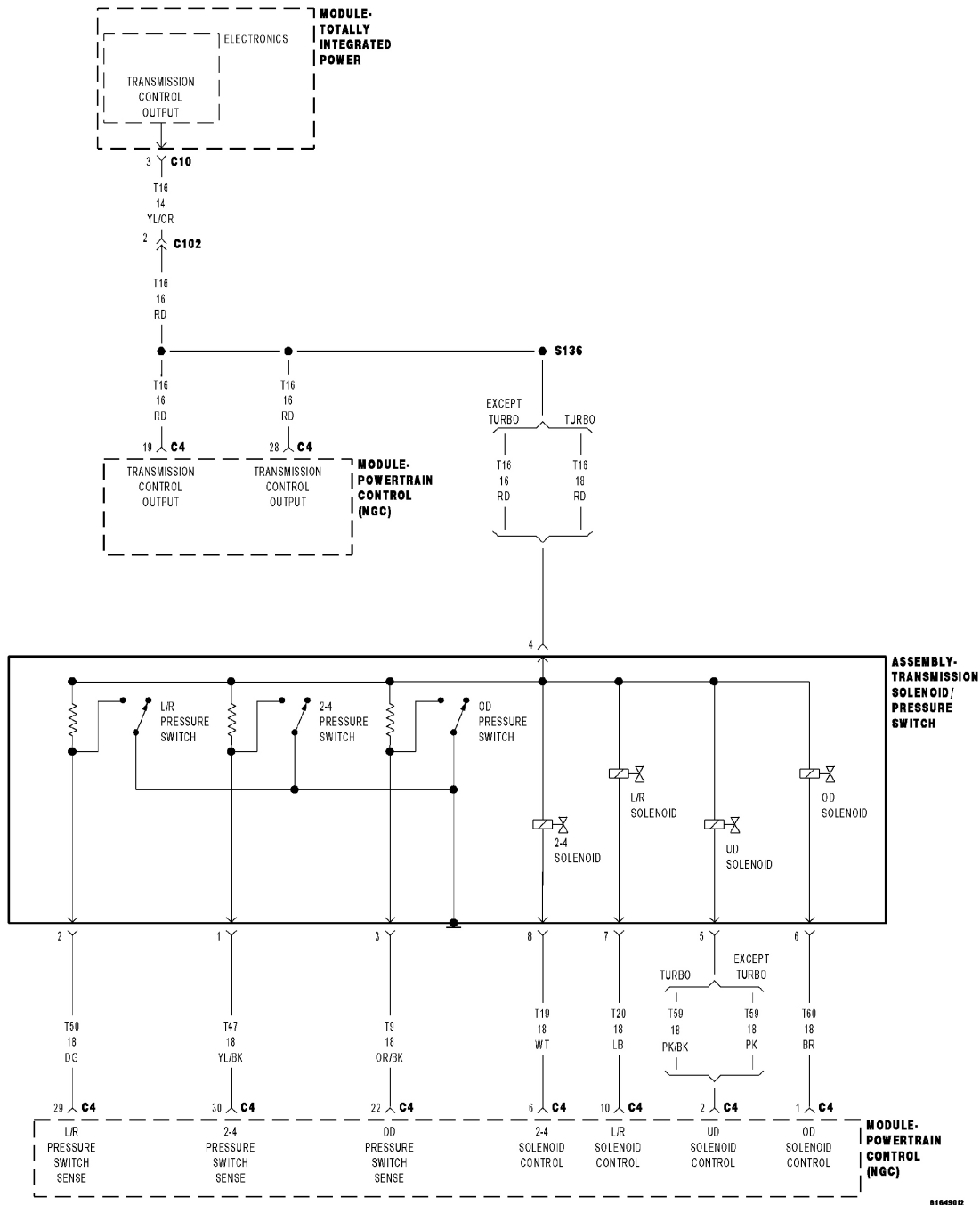


**P0871-OD PRESSURE SWITCH RATIONALITY**

**Circuit Schematic**



**Fig. 66: Pressure Control Solenoid/Switch Circuit Schematic**  
 Courtesy of CHRYSLER LLC

**Additional Wiring**

For complete wiring diagrams, refer to:

**SYSTEM WIRING DIAGRAMS** for Avenger.

**SYSTEM WIRING DIAGRAMS** for Sebring 2D Convertible.

**SYSTEM WIRING DIAGRAMS** for Sebring 4D Sedan.

The Transmission Control system uses three pressure switches to monitor the fluid pressure in the L/R, 2/4, and OD elements. The pressure switches are continuously monitored for the correct states in each gear. Normal operation will be experienced if no other codes are present. Transmission Control System will ignore the code. Limp-in condition will only occur if DTC P0871 is present with a DTC P0706.

**Monitor Conditions**

**When Monitored:**

Whenever the engine is running.

**Set Conditions**

- **Set Condition:**

The DTC is set if one of the pressure switches are open or closed at the wrong time in a given gear. If the problem is identified for 3 successive key starts, the transmission will go into Limp-in mode and the MIL will turn on after 10 seconds of vehicle operation.

**Possible Cause**

<b>Possible Causes:</b>	
RELATED DTCS PRESENT	
LOSS OF PRIME DTC PRESENT	
(T9) OD PRESSURE SIGNAL CIRCUIT OPEN	
(T9) OD PRESSURE SIGNAL CIRCUIT SHORT TO GROUND	
(T9) OD PRESSURE SIGNAL CIRCUIT SHORT TO VOLTAGE	
TRANSMISSION SOLENOID/PRESSURE SWITCH ASSEMBLY	
POWERTRAIN CONTROL MODULE	

Always perform the **40/41TE PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE** before proceeding.

**PRESSURE SWITCH STATES**

<b>GEAR</b>	<b>L/R</b>	<b>2/4</b>	<b>OD</b>
REVERSE	OPEN	OPEN	OPEN
P/N	CLOSED	OPEN	OPEN
1ST	CLOSED	OPEN	OPEN

**2008 Dodge Avenger R/T**

2008 AUTOMATIC TRANSMISSION 40/41TE (NGC) - Electrical Diagnostics - Avenger & Sebring

2ND	OPEN	CLOSED	OPEN
DRIVE	OPEN	OPEN	CLOSED
OD	OPEN	CLOSED	CLOSED

**Diagnostic Test**

**1. CHECK IF RELATED TCM DTCS ARE PRESENT**

With the scan tool, read DTCs

**Are there any Transmission Control Relay, TCM Power Input, or TIPM TCM Power Control circuit DTCs present also?**

**Yes**

Diagnose affected DTC(s) and perform the appropriate diagnostic procedure.

**No**

Go To step 2.

**2. CHECK FOR LOSS OF PRIME DTC**

With the scan tool, read DTCs

**Is the DTC P0944 present also?**

**Yes**

Diagnose affected DTC(s) and perform the appropriate diagnostic procedure.

**No**

Go To step 3.

**3. CHECK TO SEE IF P0841 IS CURRENT**

With the scan tool, read PCM DTCs

**Is the status Active for this DTC or is the STARTS SINCE SET counter 2 or less?**

**Yes**

Go To step 4.

**No**

Go To step 8.

4. **CHECK THE PCM AND WIRING**

Turn the ignition off to the lock position.

Remove the Ignition Switch Feed fuse from the TIPM.

**CAUTION: Removal of the Ignition Switch Feed fuse from the TIPM will prevent the vehicle from being started in gear.**

**WARNING: The Ignition Switch Feed fuse must be removed from the TIPM. Failure to do so can result in personal injury or death.**

Install the Transmission Simulator, Miller tool #8333 and the Electronic Transmission Adapter kit.

**NOTE: Check connectors - Clean/repair as necessary.**

Ignition on, engine not running.

With the Transmission Simulator, turn the Pressure Switch selector to OD.

With the scan tool, monitor the OD Pressure Switch state while pressing the Pressure Switch Test button on the Transmission Simulator.

**Did the OD Pressure Switch state change?**

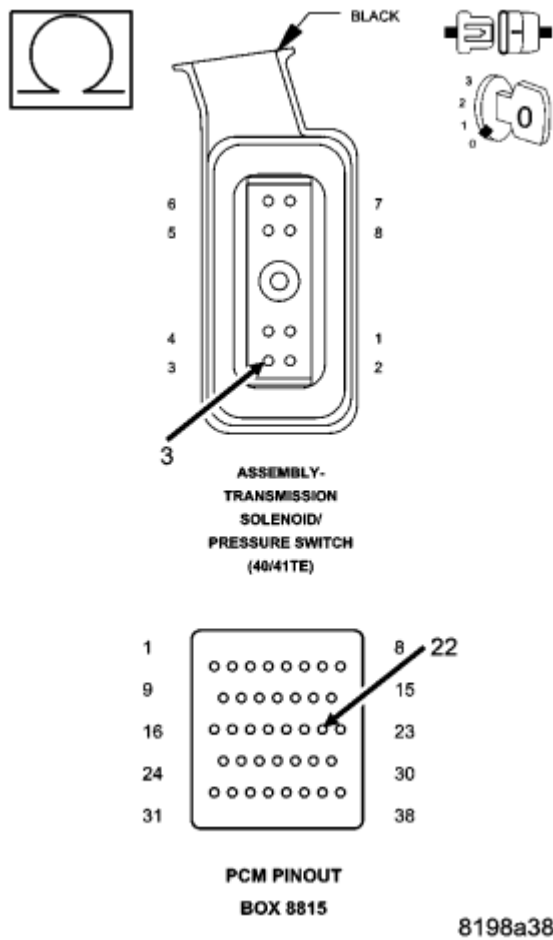
**Yes**

Replace the Transmission Solenoid/Pressure Switch Assembly per the Service Information.  
Perform **40/41TE TRANSMISSION VERIFICATION TEST**.

**No**

Go To step 5.

5. **(T9) OD PRESSURE SIGNAL CIRCUIT OPEN**



**Fig. 67: Checking OD Pressure Signal Circuit**  
 Courtesy of CHRYSLER LLC

Turn the ignition off to the lock position.

Disconnect the PCM C4 harness connector.

Disconnect the Transmission Solenoid/Pressure Switch Assembly harness connector.

**NOTE:** Check connectors - Clean/repair as necessary.

**CAUTION:** Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install Miller Special Tool #8815 to perform diagnosis.

Measure the resistance of the (T9) OD Pressure Signal circuit between the Transmission Solenoid/Pressure Switch Assembly harness connector and the appropriate terminal of Miller tool #8815.

**Is the resistance above 5.0 ohms?**

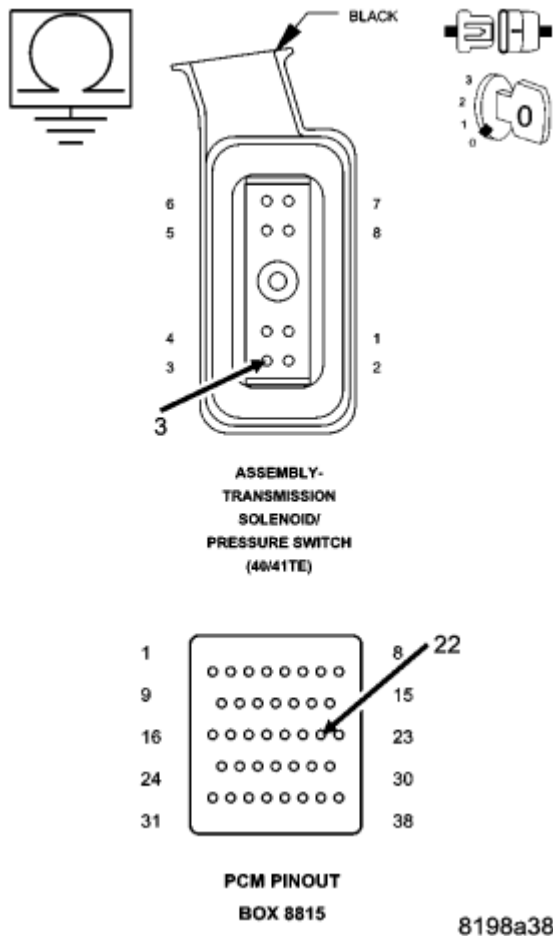
**Yes**

Repair the (T9) OD Pressure Signal circuit for an open.  
 Perform **40/41TE TRANSMISSION VERIFICATION TEST**.

**No**

Go To step 6.

**6. (T9) OD PRESSURE SIGNAL CIRCUIT SHORT TO GROUND**



**Fig. 68: Checking OD Pressure Signal Circuit**  
 Courtesy of CHRYSLER LLC

Measure the resistance between ground and the (T9) OD Pressure Signal circuit.

**Is the resistance below 5.0 ohms?**

**Yes**

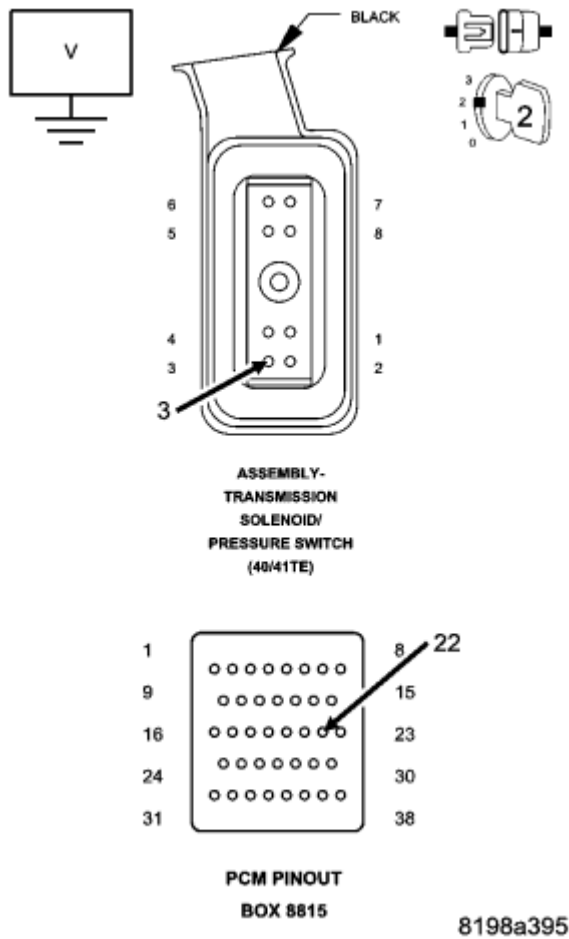
Repair the (T9) OD Pressure Signal circuit for a short to ground.

Perform **40/41TE TRANSMISSION VERIFICATION TEST.**

No

Go To step 7.

**7. (T9) OD PRESSURE SIGNAL CIRCUIT SHORT TO VOLTAGE**



**Fig. 69: Checking OD Pressure Signal Circuit**  
 Courtesy of CHRYSLER LLC

Ignition on, engine not running.

With the scan tool in the TIPM, actuate the TCM output.

Measure the voltage of the (T9) OD Pressure Signal circuit.

**Is the voltage above 0.5 volts?**

Yes

Repair the (T9) OD Pressure Signal circuit for a short to voltage.

Perform **40/41TE TRANSMISSION VERIFICATION TEST.**

**No**

Using the schematics as a guide, check the Powertrain Control Module (PCM) terminals for corrosion, damage, or terminal push out. Pay particular attention to all power and ground circuits. Check for Service Information Tune-ups or Service Bulletins for any possible causes that may apply. If no problems are found, replace and program the PCM per the Service Information. With the scan tool, perform QUICK LEARN.

Perform **40/41TE TRANSMISSION VERIFICATION TEST.**

**8. INTERMITTENT WIRING AND CONNECTORS**

The conditions necessary to set the DTC are not present at this time.

Using the schematics as a guide, inspect the wiring and connectors specific to this circuit.

Wiggle the wires while checking for shorted and open circuits.

With the scan tool, check the DTC EVENT DATA to help identify the conditions in which the DTC was set.

**Were there any problems found?**

**Yes**

Repair as necessary.

Perform **40/41TE TRANSMISSION VERIFICATION TEST.**

**No**

Test Complete.