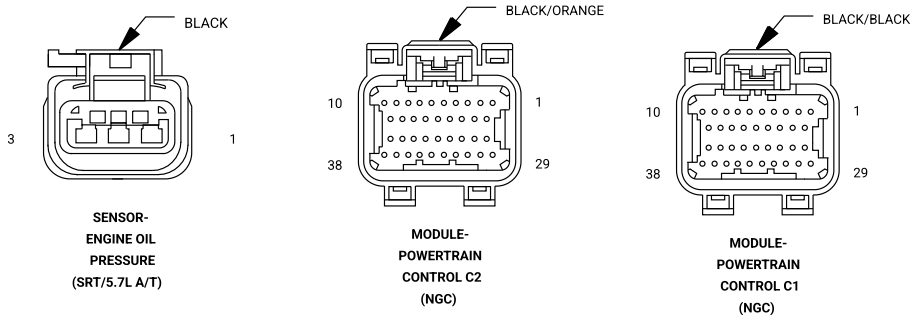
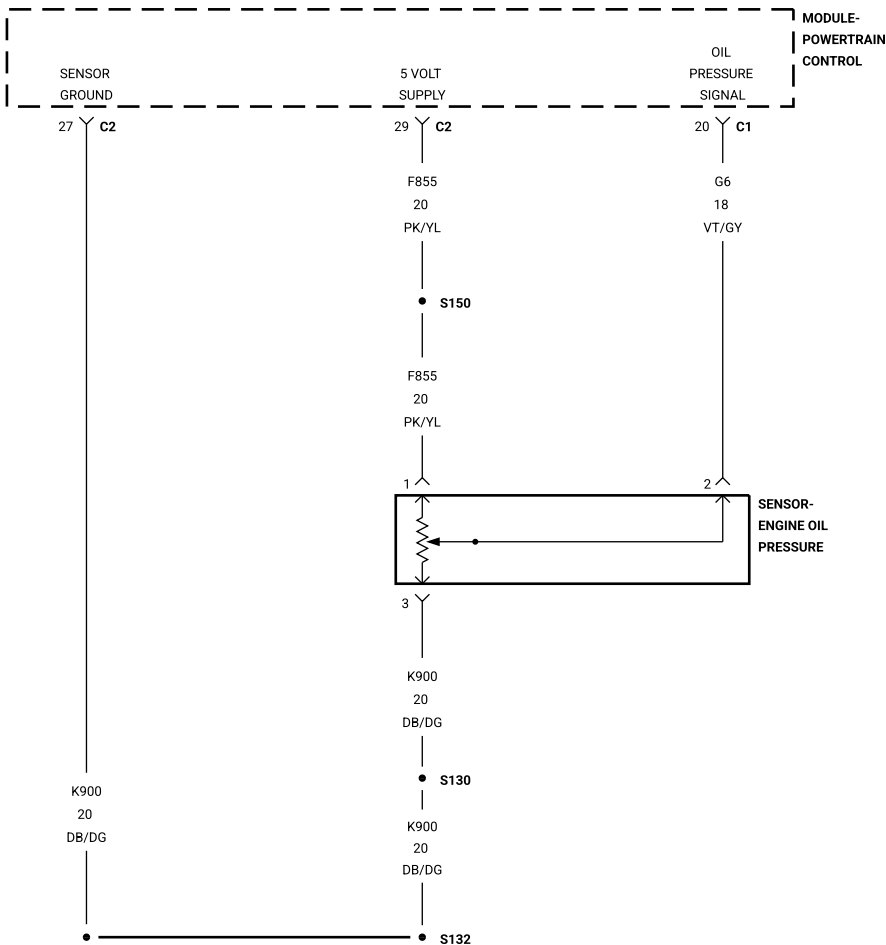


P0523-ENGINE OIL PRESSURE SENSOR CIRCUIT HIGH

Special Tools: Click to display a list of tools used in this procedure



- **When Monitored:**

With the ignition on. Battery voltage greater than 10 Volts.

- **Set Condition:**

The Engine Oil pressure signal is greater than the calibrated amount. One Trip Fault. Three good trips to clear the MIL.

Possible Causes
(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT SHORTED TO VOLTAGE
(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT OPEN
(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT SHORTED TO THE (F855) 5-VOLT SUPPLY CIRCUIT
(K900) SENSOR GROUND CIRCUIT OPEN
ENGINE OIL PRESSURE SENSOR
POWERTRAIN CONTROL MODULE (PCM)

Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

1. ACTIVE DTC

NOTE: Make sure that the engine oil is at the proper level. Also, check the customers oil change history to make sure that the oil is being changed at the correct intervals and that the proper oil viscosity is being used.

1. Start the engine and allow it to reach normal operating temperature.

WARNING: When the engine is operating, do not stand in direct line with the fan. Do not put your hands near the pulleys, belts or fan. Do not wear loose clothing. Failure to follow these instructions may result in possible serious or fatal injury.

NOTE: Diagnose and repair any system voltage or sensor supply voltage DTCs before continuing with this test.

2. With the scan tool, select View DTCs.

Is the DTC Active at this time?

Yes

- Go To [2](#)

No

- Perform the INTERMITTENT CONDITION diagnostic procedure. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

2. ENGINE OIL PRESSURE SENSOR

1. Turn the ignition off.
2. Disconnect the Engine Oil Pressure Sensor harness connector.
3. Ignition on, engine not running.
4. With the scan tool, monitor the Engine Oil Pressure Sensor voltage.
5. Connect a jumper wire between the (G6) Engine Oil Pressure Signal circuit and the (K900) Sensor Ground circuit in the Engine Oil Pressure Sensor harness connector.

NOTE: The sensor voltage should be approximately 0.0 Volts (plus or minus .1 of a volt) with the jumper wire in place.

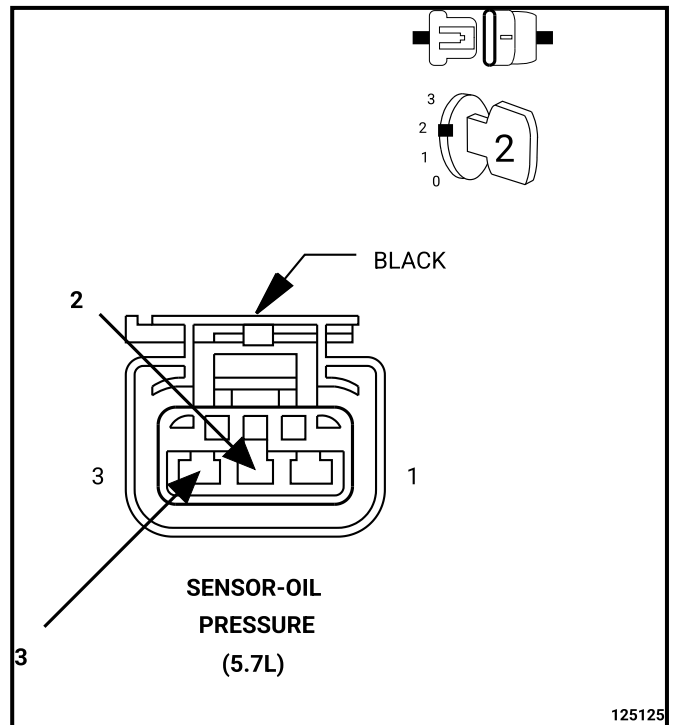
Does the scan tool display the voltage as described above?

Yes

- Verify that there is good pin to terminal contact in the Oil Pressure Sensor and the Powertrain Control Module connectors. Replace the Engine Oil Pressure Sensor if no problems were found with the connectors.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

No

- Go To [3NOTE](#): Remove the jumper wire before continuing.



3.(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT SHORTED TO VOLTAGE

1. Turn the ignition off.
2. Disconnect the C1 and C2 PCM harness connectors.
3. Ignition on, engine not running.
4. Measure the voltage on the (G6) Engine Oil Pressure Signal circuit in the Engine Oil Pressure Sensor harness connector.

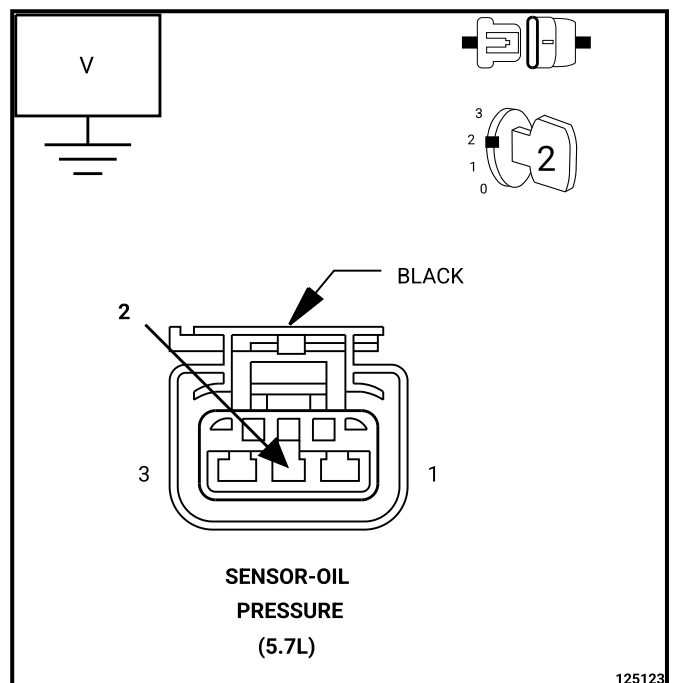
Is there any voltage present?

Yes

- Repair the short to voltage in the (G6) Engine Oil Pressure Signal circuit.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

No

- Go To [4](#)



4.(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT OPEN

1. Turn the ignition off.

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 the PCM Pinout Box [Kit, NGC, 38 Position 8815A](#) to perform diagnosis.

2. Measure the resistance of the (G6) Engine Oil Pressure Signal circuit from the Engine Oil Pressure Sensor harness connector to the appropriate terminal of PCM Pinout Box [8815A](#).

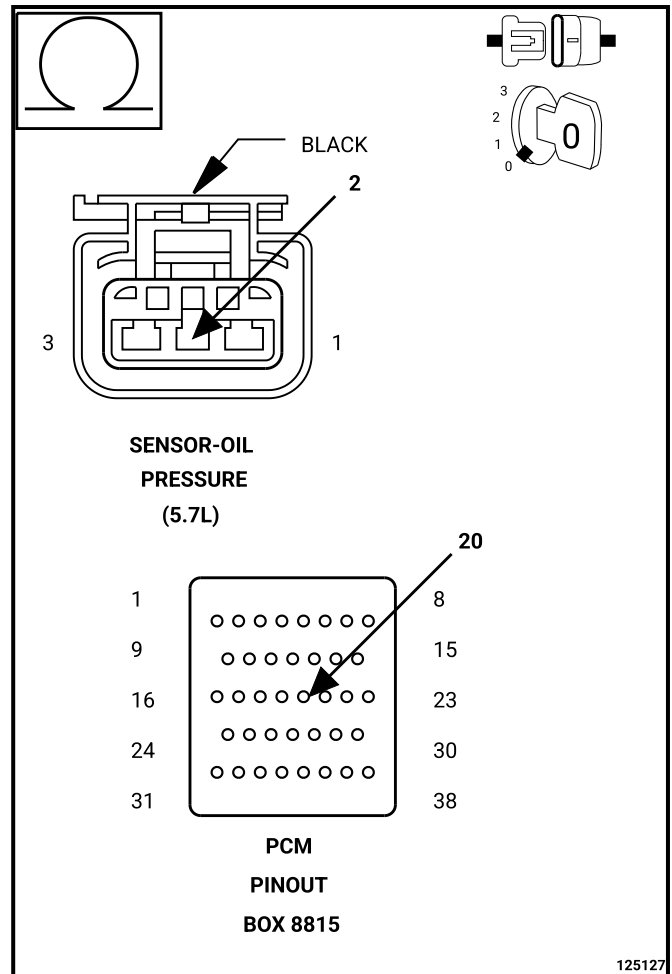
Is the resistance below 5.0 Ohms?

Yes

- Go To [5](#)

No

- Repair the open in the (G6) Engine Oil Pressure Signal circuit.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).



5.(G6) ENGINE OIL PRESSURE SIGNAL CIRCUIT SHORTED TO THE (F855) 5-VOLT SUPPLY CIRCUIT

1. Measure the resistance between the (G6) Engine Oil Pressure Signal circuit and the (F855) 5-volt Supply circuit in the Engine Oil Pressure Sensor harness connector.

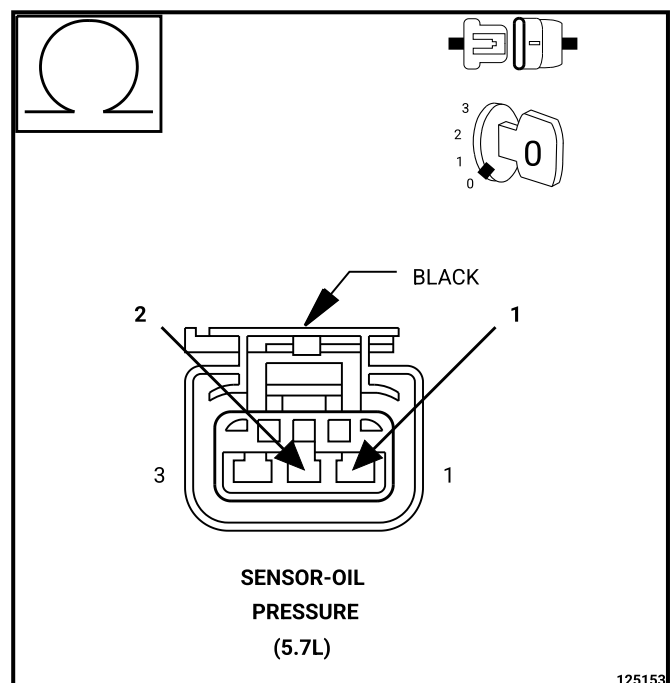
Is the resistance below 100 Ohms?

Yes

- Repair the short between the (F855) 5-volt Supply circuit and the (G6) Engine Oil Pressure Signal circuit.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

No

- Go To [6](#)



6.(K900) SENSOR GROUND CIRCUIT OPEN

1. Measure the resistance of the (K900) Sensor Ground circuit from the Engine Oil Pressure Sensor harness connector to the appropriate terminal of PCM Pinout Box [8815A](#).

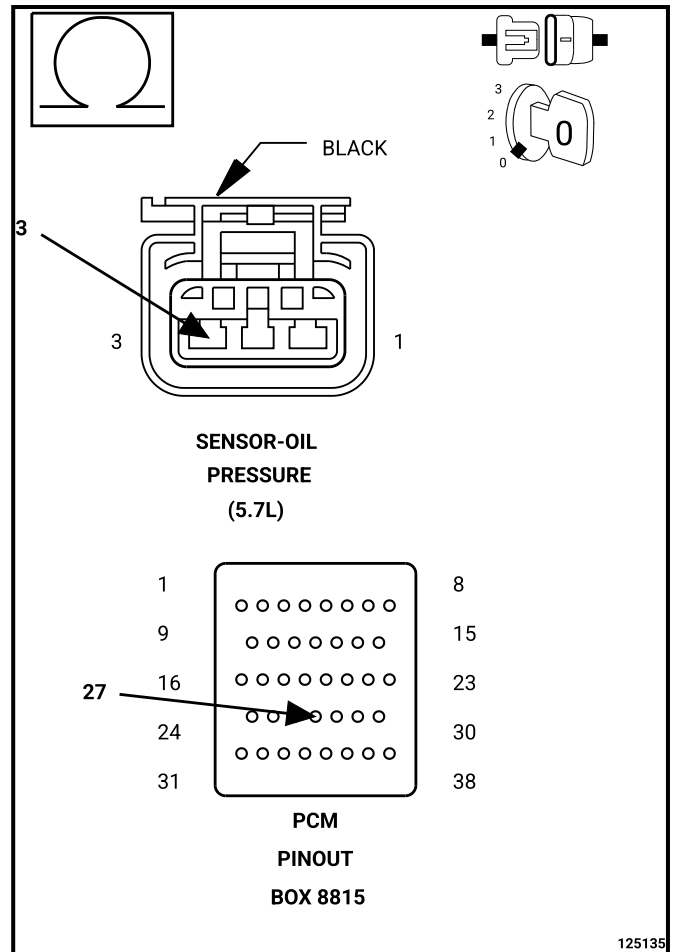
Is the resistance below 5.0 Ohms?

Yes

- Go To [Z](#)

No

- Repair the open in the (K900) Sensor Ground circuit.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).



7.POWERTRAIN CONTROL MODULE (PCM)

1. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors between the related Oil Pressure Sensor and the Powertrain Control Module (PCM).
2. Look for any chafed, pierced, pinched or partially broken wires.
3. Look for broken, bent, pushed out or corroded terminals. Verify that there is good pin to terminal contact in the Oil Pressure Sensor and the Powertrain Control Module connectors.
4. Refer to any Technical Service Bulletins that may apply.

Were there any problems found?

Yes

- Repair as necessary.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).

No

- Replace and program the Powertrain Control Module in accordance with the Service Information.
- Perform the POWERTRAIN VERIFICATION TEST. ([Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control \(PCM\) - Standard Procedure](#)).