

Measure the resistance of the (K122) TP Signal 2 circuit from the Throttle Body harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

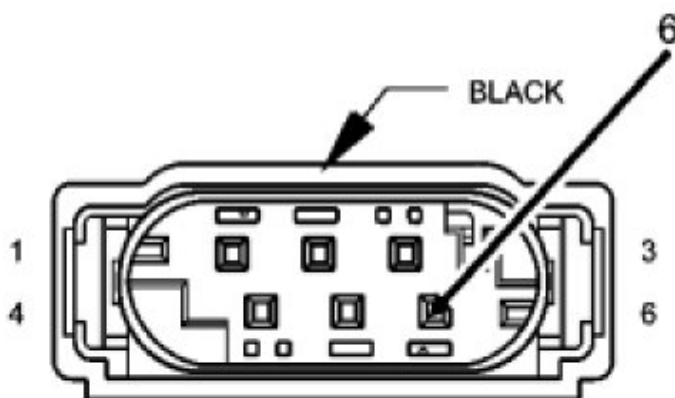
Yes

- Go To 10

No

- Repair the excessive resistance in the (K122) TP Signal 2 circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

10. (K22) TP SIGNAL 1 CIRCUIT SHORTED TO GROUND



THROTTLE
BODY
(GAS)

819128fd

Measure the resistance between ground and the (K22) TP Signal 1 circuit at the Throttle Body harness connector.

Is the resistance above 100k ohms?

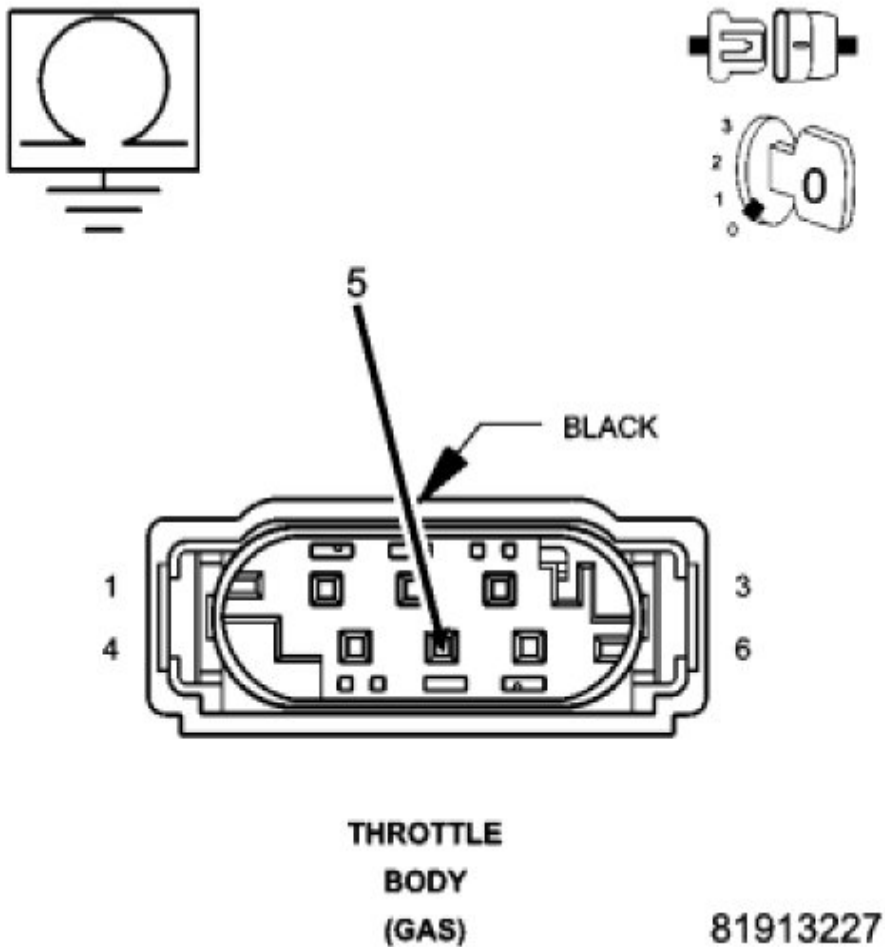
Yes

- Go To 11

No

- Repair the short to ground in the (K22) TP Signal 1 circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

11. (K122) TP SIGNAL 2 CIRCUIT SHORTED TO GROUND



Measure the resistance between ground and the (K122) TP Signal 2 circuit at the Throttle Body harness connector.

Is the resistance above 100k ohms?

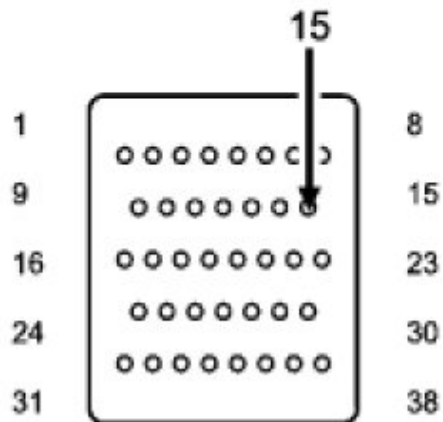
Yes

- Go To 12

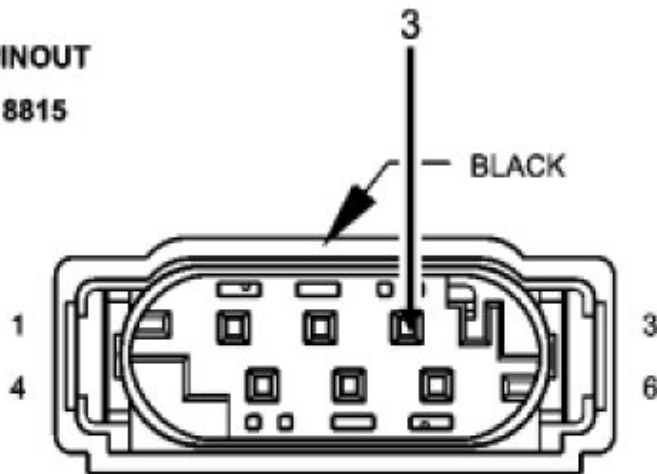
No

- Repair the short to ground in the (K122) TP Signal 2 circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

12. RESISTANCE IN THE (K922) TP RETURN CIRCUIT



**PCM PINOUT
BOX 8815**



**THROTTLE
BODY
(GAS) 81912993**

Measure the resistance of the (K922) TP Return circuit from the Throttle Body harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

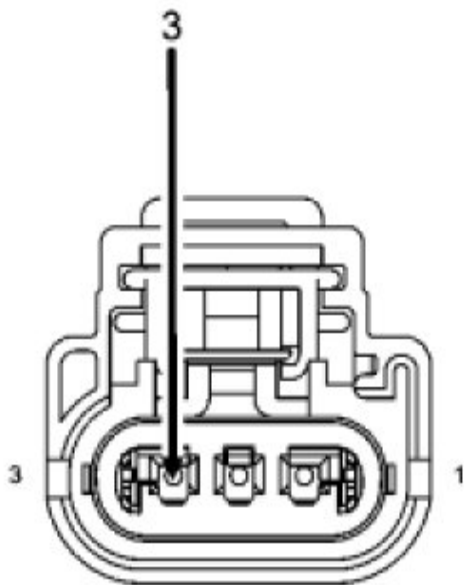
Yes

- Go To 19

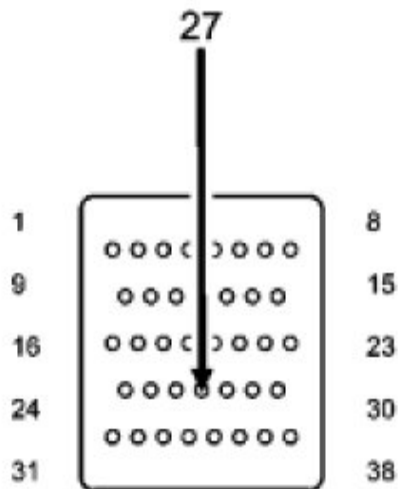
No

- Repair the excessive resistance in the (K922) TP Return circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

13. RESISTANCE IN THE (F856) 5-VOLT SUPPLY CIRCUIT



**SENSOR-
MAP**



**PCM PINOUT
BOX 8815**

8132b308

Turn the ignition off.

Disconnect the MAP Sensor harness connector.

Disconnect the C1 PCM harness connector.

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 (F856) **5-volt** Supply circuit from the MAP Sensor harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

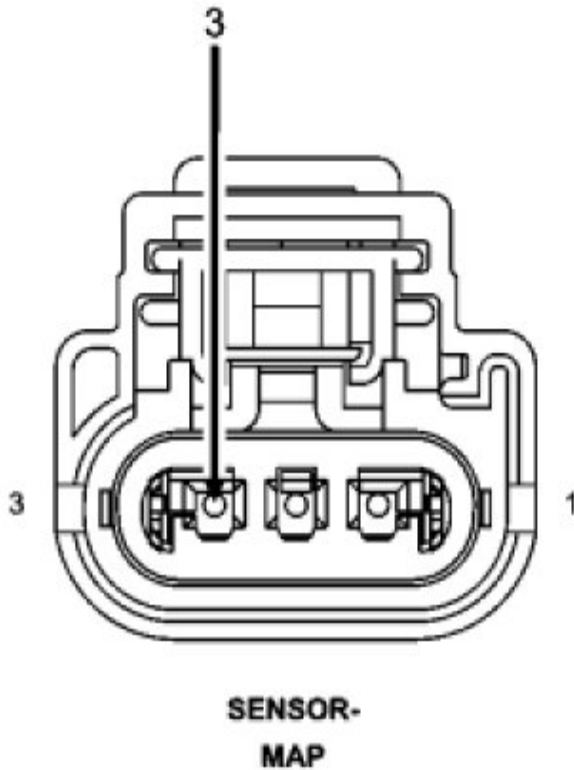
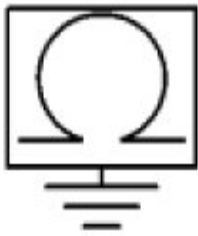
Yes

- Go To 14

No

- Repair the excessive resistance in the (F856) **5-volt** Supply circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

14. (F856) 5-VOLT SUPPLY CIRCUIT SHORTED TO GROUND



8132b312

Measure the resistance between ground and the (F856) **5-volt** Supply circuit in the MAP Sensor harness connector.

Is the resistance above 100k ohms?

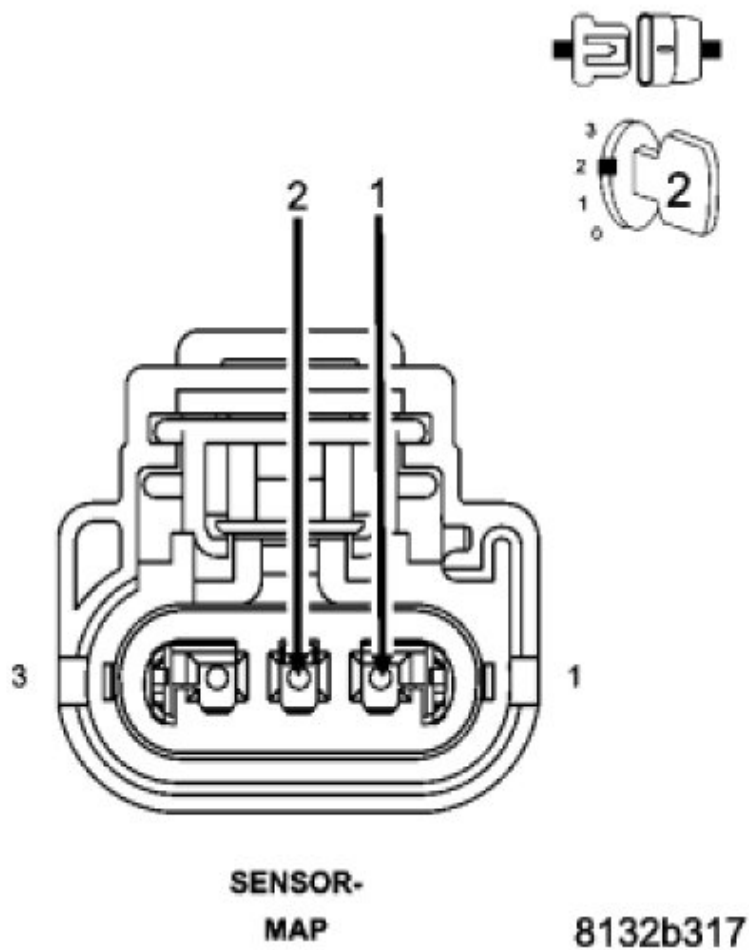
Yes

- Go To 15

No

- Repair the short to ground in the (F856) **5-volt** Supply circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

15. MAP SENSOR



Connect the C1 PCM harness connector.

Ignition on, engine not running.

With a scan tool, monitor the MAP Sensor voltage.

Connect a jumper wire between the (K1) MAP Signal circuit and the (K900) Sensor ground circuit in the MAP Sensor harness connector.

Cycle the ignition switch from off to on.

With a scan tool, monitor the MAP Sensor voltage.

Does the scan tool display MAP voltage from approximately 4.9 volts to below 0.5 volt with the jumper wire installed?

Yes

- Replace the MAP Sensor.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

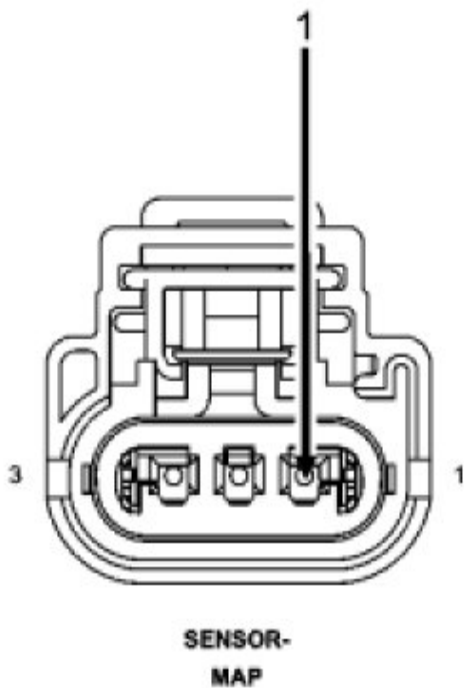
No

- Go To 16

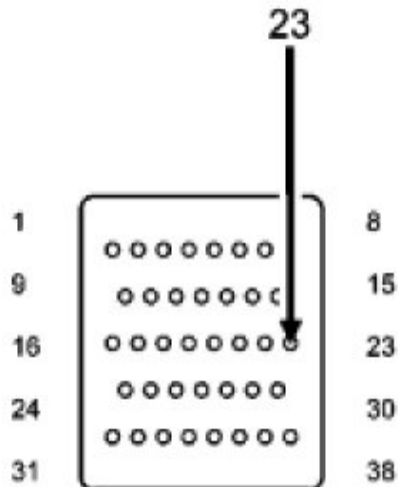
-

NOTE: Remove the jumper wire before continuing.

16. RESISTANCE IN THE (K1) MAP SIGNAL CIRCUIT



**SENSOR-
MAP**



**PCM PINOUT
BOX 8815**

8132b31b

Turn the ignition off.

Disconnect the C2 PCM harness connector.

Measure the resistance of the (K1) MAP Signal circuit from the MAP Sensor harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

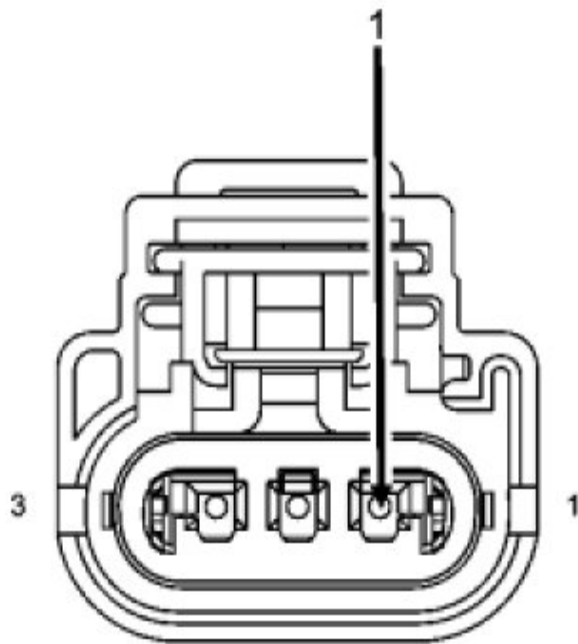
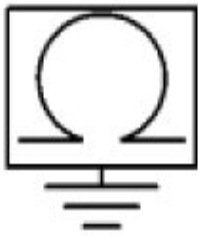
Yes

- Go To 17

No

- Repair the excessive resistance in the (K1) MAP Signal circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

17. (K1) MAP SIGNAL CIRCUIT SHORTED TO GROUND



**SENSOR-
MAP**

8132b323

Measure the resistance between ground and the (K1) MAP Signal circuit at the MAP Sensor harness connector.

Is the resistance above 100k ohms?

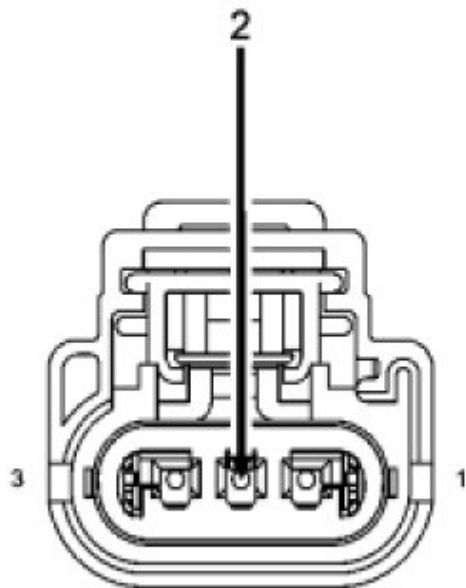
Yes

- Go To 18

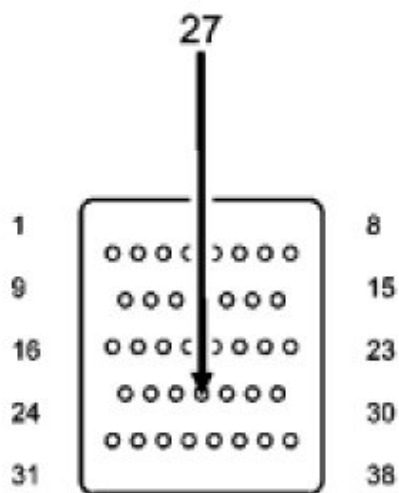
No

- Repair the short to ground in the (K1) MAP Signal circuit.
- Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test

18. RESISTANCE IN THE (K900) SENSOR GROUND CIRCUIT



**SENSOR-
MAP**



**PCM PINOUT
BOX 8815**

8132b327

Measure the resistance of the (K900) Sensor ground circuit from the MAP Sensor harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

Yes

- Go To 19

No

- Repair the excessive resistance in the (K900) Sensor ground circuit.
 - Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests
- > Powertrain Verification Test

19. PCM

NOTE: Before continuing, check the PCM harness connector terminals for corrosion, damage, or terminal push out. Repair as necessary.

Using the schematics as a guide, inspect the wire harness and connectors. Pay particular attention to all Power and Ground circuits.

Were there any problems found?

Yes

- Repair as necessary.
 - Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests
- > Powertrain Verification Test

No

- Replace and program the Powertrain Control Module.
 - Perform the POWERTRAIN VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests
- > Powertrain Verification Test