

9.16 DTC B0980 – Power Mode Switch Signal Malfunction

DTC Description

This diagnostic procedure supports DTC B0980 – Power Mode Switch Signal Malfunction.

Circuit Description

The power mode switch is a normally open switch that closes when the switch is activated. When activated, the switch supplies signal ground to the power ground signal circuit. The powertrain interface module (PIM) converts the signal ground input into serial data, which is used by the automatic transmission control module (TCM) to enable or disable the power mode, and by the instrument cluster to display power mode status.

Additional Information

- For the 4L60E automatic transmission, refer to [Section 7C1 Automatic Transmission – 4L60E – General Information](#):
 - Power mode switch description, operation and inspection procedure, and
 - TCM wiring diagram.
- For the 5L40E automatic transmission, refer to [Section 7E1 Automatic Transmission – 5L40E – General Information](#):
 - Power mode switch description, operation and inspection procedure, and
 - TCM wiring diagram.
- Refer to [6 Wiring Diagram and Connector](#) for the following information:
 - PIM connector illustration and terminal assignment, and
 - PIM wiring diagram.
- For intermittent fault conditions, refer to [8 Intermittent Fault Conditions](#).
- Since fault conditions in a wiring connector may trigger DTCs, always test the connectors related to this diagnostic procedure for shorted terminals or poor wiring connection before replacing any component. Refer to [Section 12P Wiring Diagrams](#) for information on electrical fault diagnosis.

Conditions for Running the DTC

Conditions for running the DTC are:

- The ignition is switched on.
- The ignition voltage is 10.0 – 16.0 V.

Conditions for Setting the DTC

The PIM detects the power mode switch is activated for 60 seconds or more.

Action Taken When the DTC Sets

When the DTC sets, there is no icon displayed on the multi-function display.

Conditions for Clearing the DTC

Refer to [4.1 Diagnostic General Descriptions](#) for information on the conditions for clearing DTCs.

Test Description

The following numbers refer to the step numbers in the diagnostic table:

- 2 This step tests the power mode switch using Tech 2.
- 6 This step tests the power mode switch signal circuit.

DTC B0980 Diagnostic Table

Step	Action	Yes	No
1	Has the Diagnostic System Check been performed?	Go to Step 2	Refer to 7.2 Diagnostic System Check
2	Using Tech 2, view the power mode switch status parameter in the PIM data list. Does Tech 2 display Power ?	Go to Step 4	Go to Step 3
3	1 Switch off the ignition for 10 seconds. 2 Operate the vehicle within the conditions for setting DTC B0980. 3 Using Tech 2, select the DTC display function. Does DTC B0980 fail this ignition cycle?	Go to Step 4	Refer to Additional Information in this Section
4	1 Disconnect connector S22 – X1 from the power mode switch. 2 Using Tech 2, view the power mode switch status parameter in the PIM data list. Does Tech 2 display Power ?	Go to Step 6	Go to Step 5
5	Replace the power mode switch. Refer to 1A3 Instrument Panel and Console. Has the repair been completed?	Go to Step 8	—
6	Test the power mode switch ground signal circuit for a short to ground. Refer to 12P Wiring Diagrams for information on electrical fault diagnosis. Has any fault been found and rectified?	Go to Step 8	Go to Step 7
7	Replace the PIM. Refer to 10.2 Powertrain Interface Module. Has the repair been completed?	Go to Step 8	—
8	1 Using Tech 2, clear the DTCs. 2 Switch off the ignition for 30 seconds. 3 Start the engine. 4 Operate the vehicle within the conditions for running the DTC. Does DTC B0980 fail this ignition cycle?	Go to Step 2	Go to Step 9
9	Using Tech 2, select the DTC display function. Does Tech 2 display any DTCs?	Go to the appropriate DTC Table	System OK
When all diagnosis and repairs are completed, clear all DTCs and check the system for correct operation.			