

Computers and Control Systems: Diagnostic Trouble Code Tests and Associated Procedures

B0665

DTC B0665

Circuit Description

The instrument cluster controls the operation of the ABS indicator. The electronic brake control module (**EBCM**) reports the desired status of the ABS indicator via serial data messages. The ABS indicator signal circuit is a back-up reporting circuit to the serial data messages. The EBCM supplies ground through the circuit when the ABS is operating properly. When there is a problem with ABS that should turn on the ABS indicator, the EBCM opens the ABS indicator signal circuit. If there is a problem with the ABS serial data messages, the instrument cluster uses the ABS indicator signal to determine if the ABS indicator should be illuminated. Using the serial data messages and back-up circuit, the instrument cluster decides whether to turn on the ABS indicator.

DTC Descriptor

This diagnostic procedure supports the following DTC:
DTC B0665 Service ABS Indicator Circuit

Conditions for Running the DTC

- ^ The ignition is ON.
- ^ Ignition voltage is greater than 8 volts.

Conditions for Setting the DTC

One of the following conditions exist for 0.3 seconds:

- ^ The ABS indicator signal circuit voltage is greater than 9 volts when the ABS indicator is commanded ON.
- ^ The ABS indicator signal circuit voltage is less than 3 volts when the ABS indicator is commanded OFF.

Action Taken When the DTC Sets

- ^ The ABS remains functional.
- ^ The ABS indicator remains OFF.

Conditions for Clearing the DTC

- ^ The condition for the DTC is no longer present and the DTC is cleared with a scan tool.
- ^ The electronic brake control module (**EBCM**) automatically clears the history DTC when a current DTC is not detected in 100 consecutive drive cycles.

Diagnostic Aids

The following conditions may cause this concern:

- ^ Open, short to ground, or short to voltage.
- ^ Internal EBCM failure.
- ^ Internal IPC failure.

Step	Action	Yes	No
Schematic Reference: ABS Schematics			
Connector End View Reference: ABS Connector End Views or Instrument Panel, Gages, and Console Connector End Views			
1	Did you perform the Diagnostic System Check – Vehicle?	Go to Step 2	Go to Diagnostic System Check - Vehicle
2	<ol style="list-style-type: none"> 1. Install a scan tool. 2. Turn ON the ignition, with the engine OFF. 3. With a scan tool, observe the ABS Warning Indicator parameter in the DRP/ABS/TCS/VSES data list. Does the scan tool display Off?	Go to Step 3	Go to Step 4
3	<ol style="list-style-type: none"> 1. Turn OFF the ignition. 2. Turn ON the ignition, with the engine OFF. 3. Observe the ABS indicator on the instrument panel cluster (IPC) during the bulb check. Does the ABS indicator illuminate during the bulb check?	Go to Step 4	Go to Step 6
4	Test the ABS indicator signal circuit of the electronic brake control module (EBCM) for the following conditions: <ul style="list-style-type: none"> • An open • A short to ground • A short to voltage Did you find and correct the condition?	Go to Step 9	Go to Step 5
5	Inspect for poor connections at the harness connector of the EBCM. Did you find and correct the condition?	Go to Step 9	Go to Step 7
6	Inspect for poor connections at the harness connector of the instrument panel cluster. Did you find and correct the condition?	Go to Step 9	Go to Step 8
7	Replace the EBCM. Did you complete the replacement?	Go to Step 9	—
8	Replace the IPC. Did you complete the replacement?	Go to Step 9	—
9	<ol style="list-style-type: none"> 1. Use the scan tool in order to clear the DTCs. 2. Operate the vehicle within the Conditions for Running the DTC as specified in the supporting text. Does the DTC reset?	Go to Step 2	System OK

Test Description

- The numbers below refer to the step numbers on the diagnostic table.
2. Use the scan tool to verify the normal state of the ABS indicator signal circuit.
 3. Ensure that the instrument panel cluster can operate the ABS indicator.