

# B0665 ABS data messages

## Circuit Description

The instrument cluster controls the operation of the ABS indicator. The 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.

## 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.

## 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.

Step	Action	Yes	No
<b>Connector End View Reference: ABS Connector End Views or Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages and Console</b>			
1	Did you perform the ABS Diagnostic System Check?	Go to Step 2	Go to Diagnostic System Check -ABS
2	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	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

Step	Action	Yes	No
4	<p>Test the ABS indicator signal circuit of the EBCM for the following conditions:</p> <ul style="list-style-type: none"> <li>• An open</li> <li>• A short to ground</li> <li>• A short to voltage</li> </ul> <p>Refer to Circuit Testing on page 8-1184 and Wiring Repairs in Wiring Systems. Did you find and correct the condition?</p>	Go to Step 9	Go to Step 5
5	<p>Inspect for poor connections at the harness connector of the EBCM. Refer to Testing for Intermittent and Poor Connections in Wiring Systems. Did you find and correct the condition?</p>	Go to Step 9	Go to Step 7
6	<p>Inspect for poor connections at the harness connector of the instrument panel cluster. Refer to Testing for Intermittent and Poor Connections in Wiring Systems. Did you find and correct the condition?</p>	Go to Step 9	Go to Step 8
7	<p><b>Important: Perform the setup procedure for the EBCM. An unprogrammed EBCM will result in the following conditions:</b></p> <ul style="list-style-type: none"> <li>• Inoperative or poorly functioning system operations</li> <li>• The EBCM sets DTC C0281 and DTC C0550</li> </ul> <p>Replace the EBCM. Refer to Electronic Brake Control Module (EBCM) Replacement. Did you complete the repair?</p>	Go to Step 9	—
8	<p>Replace the IPC. Refer to Instrument Panel Cluster (IPC) Replacement in Instrument Panel, Gages and Console. Did you complete the repair?</p>	Go to Step 9	—
9	<ol style="list-style-type: none"> <li>1. Use the scan tool in order to clear the DTCs.</li> <li>2. Operate the vehicle within the Conditions for Running the DTC as specified in the supporting text. Does the DTC reset?</li> </ol>	Go to Step 2	System OK