

# DTC B1001 Option Configuration Error

## Circuit Description

When the ignition key is first turned to the RUN position, the inflatable restraint sensing and diagnostic module (SDM) compares the restraints ID that is stored in the SDM to the restraints ID that is stored in the BCM. The restraints ID that is being compared contains the last four digits of the SDM part number. Next, the SDM compares the VIN that is stored in the SDM to the VIN that is stored in the BCM. For more detailed information concerning the Class 2 data lines, refer to *Data Link Connector Circuit Description* in Data Link Communications.

## Conditions for Setting the DTC

- Ignition 1 voltage is within the normal operating voltage range.
- The restraints ID that is stored in the SDM does not match the restraints ID that is stored in the BCM or the VIN information that is stored in the SDM does not match the VIN information that is stored in the BCM.

This test is only run once during power up initialization.

## Action Taken When the DTC Sets

- The SDM sets a DTC B1001.
- The SDM commands ON the AIR BAG warning lamp via Class 2 serial data.
- The SDM disables all deployments.

## Conditions for Clearing the DTC

The restraints ID that is stored in the SDM matches the restraints ID that is stored in the BCM and the VIN information that is stored in the SDM matches the VIN information that is stored in the BCM.

## Diagnostic Aids

DTC B1001 is an indication that the restraints ID's stored in both the BCM and SDM do not match or that the VIN's stored in both the BCM and SDM do not match. If either the BCM and/or PCM were replaced, the replacement modules need to be reprogrammed for proper operation.

## Test Description

The number(s) below refer to the step number(s) on the diagnostic table.

2. This step checks to see if the correct VIN is programmed in the powertrain control module (PCM).
4. This step checks to see if the body control module (BCM) has been replaced.
5. This step explains the proper steps to perform after a BCM has been replaced in order for the

BCM to operate properly.

6. This step checks to see if the correct VIN is programmed in the BCM.
7. This step explains how to properly program the VIN into the BCM.

### **DTC B1001 Option Configuration Error**

<b>Step</b>	<b>Action</b>	<b>Value (s)</b>	<b>Yes</b>	<b>No</b>
1	Was the SIR Diagnostic System Check performed?	--	<a href="#">Go to Step 2</a>	Go to <a href="#">SIR Diagnostic System Check</a>
2	<ol style="list-style-type: none"> <li>1. Install the scan tool.</li> <li>2. Use the scan tool to verify that the PCM is programmed with the correct VIN by comparing the VIN that is stored in the PCM to the VIN plate of the vehicle.</li> </ol> <p>Is the PCM programmed with the correct VIN?</p>	--	<a href="#">Go to Step 4</a>	<a href="#">Go to Step 3</a>
3	<p>Use the scan tool and/or the techline machine to program the correct VIN into the PCM.</p> <p>Is the programming procedure complete?</p>	--	<a href="#">Go to Step 9</a>	--
4	Was the BCM replaced?	--	<a href="#">Go to Step 5</a>	<a href="#">Go to Step 6</a>
5	<ol style="list-style-type: none"> <li>1. Use the F2 function key and follow the instructions on the scan tool under the BCM SPECIAL FUNCTIONS to reprogram the BCM. This allows the BCM to learn the Restraints ID from the SDM and also to learn other important data that is required.</li> <li>2. Use the F6 function key and follow the instructions on the scan tool under the BCM SPECIAL FUNCTIONS to program the correct VIN into the BCM.</li> <li>3. Use the techline machine to perform the theft relearn procedures for the replacement BCM.</li> </ol> <p>Are the programming procedures complete?</p>	--	<a href="#">Go to Step 9</a>	--
6	<p>Use the scan tool to verify that the BCM is programmed with the correct VIN by comparing the VIN that is stored in the BCM to the VIN that is stored in the PCM.</p> <p>Is the BCM programmed with the correct VIN?</p>	--	<a href="#">Go to Step 8</a>	<a href="#">Go to Step 7</a>
7	<p>Use the F6 function key and follow the instructions on the scan tool under the BCM SPECIAL FUNCTIONS to program the correct VIN into the BCM.</p> <p>Is the reprogramming procedure complete?</p>	--	<a href="#">Go to Step 9</a>	--
	<ol style="list-style-type: none"> <li>1. Turn the ignition switch to the OFF position.</li> <li>2. Replace the SDM. Refer to <a href="#">Inflatable Restraint</a></li> </ol>			

