

DTC B3445

SIE-ID = 1967847 Owner = dmcgre01 LMD = 27-feb-2008 LMB = dmcgre01

Diagnostic Instructions

- Perform the Diagnostic System Check – Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptor

DTC B3445 00: Stop Lamp Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Center High Mounted Stop Lamp (CHMSL) Control	B3445 00	1	1	—
Center High Mounted Stop Lamp (CHMSL) Ground	—	1	—	—
1. Center High Mounted Stop Lamp (CHMSL) Malfunction				

Circuit/System Description

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5-volt reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will apply battery voltage to the right and left stop lamp control circuits and center high mounted stop lamp (CHMSL) control circuit. Ground for the left stop lamp and CHMSL is applied at G401 and the right stop lamp receives ground at G402. The stop lamps on this vehicle will not illuminate unless the ignition is in the accessory, run, or crank positions. When the ignition is in the OFF position the stop lamps will not illuminate when the brake pedal is applied.

Conditions for Running the DTC

- a) Battery voltage must be between 9-16 volts.
- b) Brakes APPLIED.

Conditions for Setting the DTC

The DTC will set when the BCM detects a short to ground in the CHMSL control circuit when the stop lamps are being commanded ON.

Action Taken When the DTC Sets

The BCM will not illuminate the CHMSL.

Conditions for Clearing the DTC

- a) The condition responsible for setting the DTC no longer exists.
- b) A history DTC will clear once 100 malfunction-free ignition cycles have occurred.

Diagnostic Aids

Important: The stop lamps will not illuminate unless the ignition is in the ON position. For more detailed information concerning stop lamp operation, refer to Exterior Lighting Systems Description and Operation

Circuit/System Testing

- 1) Ignition OFF, disconnect the harness connector at the CHMSL.
- 2) Ignition OFF, test for less than 5.0 ohms between the ground circuit terminal 1 and ground

If greater than the specified range, test the ground circuit for an open/high resistance.

- 3) Connect a test lamp between the control circuit terminal 2 and the ground circuit terminal 1.
- 4) Ignition ON, command the stop lamps ON and OFF by applying and releasing the brake pedal. The test lamp should turn ON and OFF when changing between the commanded states.

- If the test lamp is always ON, test the control circuit for a short to voltage.
If the circuit tests normal, replace the BCM.
- If the test lamp is always OFF, test the control circuit for a short to ground or an open/high resistance. If the circuit tests normal, replace the BCM.
- 5) If all circuits test normal, replace the CHMSL.

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