DTC B2652

SIE-ID = 1967366 Owner = dmcgre01 LMD = 13-aug-2007 LMB = tdedvu01

Diagnostic Instructions

a) Perform the Diagnostic System Check – Vehicle on page 6-60 prior to using this diagnostic procedure.
b) Review Strategy Based Diagnosis on page 6-57 for an overview of the diagnostic approach.
c) Diagnostic Procedure Instructions on page 6-58 provides an overview of each diagnostic category.

DTC Descriptor

DTC B2652 00: Passenger Compartment Dimming 3

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
B+, BCM X2 Terminal 2	B2652 00	B2652 00	—	—
I/P Lamps Control	B2652 00	2	1	—
1. Interior Backlighting Does Not Dim 2. Interior Backlighting Inoperative				

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Circuit/System Description

The body control module (BCM) supplies a voltage reference through the instrument panel (I/P) dimming voltage reference circuit to the interior lamp dimmer switch, which is part of the headlamp switch. When the dimmer switch is placed in a desired position, reference voltage is applied through the dimmer switch rheostat and the I/P lamps dimmer switch signal circuit to the BCM. The BCM interprets this voltage signal, then applies a pulse width modulated (PWM) voltage through the instrument panel lamp control circuits illuminating the components listed below.

a) Hazard Switch
b) I/P Cluster
c) Power Window Switches
d) Sunroof Switch
e) Garage Door Opener Transmitter

Conditions for Running the DTC

a) The ignition is ON.
b) The headlamps or park lamps ON.

Conditions for Setting the DTC

The BCM detects a short to ground on the instrument panel lamps control circuit.

Action Taken When the DTC Sets

The BCM does not attempt to illuminate the instrument panel lamps.

Conditions for Clearing the DTC

A history DTC will clear once 100 consecutive malfunction-free ignition cycles have occurred.

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Circuit/System Verification

Ignition ON, command Incandescent Dimming ON with a scan tool. The Incandescent Relay Command parameter should display On and the Incandescent Dimming should illuminate.

Circuit/System Testing

1) Ignition OFF, disconnect the X2 harness connector at the BCM.
2) Verify that a test lamp illuminates between the B+ circuit terminal 2 and ground.

If the test lamp does not illuminate, test the B+ circuit for a short to ground or an open/high resistance. If the circuit tests normal and the B+ circuit fuse is open, test the control circuits listed below for a short to ground.

a) Instrument panel lamp control circuit terminal 3 X2
b) Instrument panel lamp control circuit terminal 3 X6

3) Ignition OFF, connect the X2 harness connector to the BCM.
4) Disconnect the harness connectors at all components fed by the BCM control circuits listed below.

a) Instrument panel lamp control circuit terminal 3 X2

b) Instrument panel lamp control circuit terminal 3 X6

5) Ignition ON, clear the DTC with a scan tool.

6) Operate the system within the Conditions for Running the DTC and verify the DTC does not reset.

If the DTC resets, test the control circuits for a short to ground. If the circuits test normal,replace the BCM.

7) Reconnect each component one at a time and verify that the DTC does not reset.

If the DTC resets, test or replace thecomponent responsible for setting the DTC.

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