#### **DTC B2610**

### **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.
- Diagnostic Procedure Instructions on page 6-58 provides an overview of each diagnostic category.

### **DTC Descriptor**

DTC B2610 00: Passenger Compartment Dimming 1 Circuit

## **Diagnostic Fault Information**

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
LED Backlight Lamp	B2610		4	
Control	00	2	l I	_
1. Interior LED Backlighting Does Not Dim				
2. Interior LED Backlighting Inoperative				

# 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 brightness 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 variable voltage through the LED backlight lamp control circuit illuminating the components listed below, if equipped:

- a) Clock
- b) Console flood lamp
- c) Diver information center (DIC) switch
- d) Driver window switch
- e) Headlamp switch
- f) Head up display (HUD) Switch
- g) Heated seat switches
- h) HVAC control head

- i) I/P switch assembly
- j) Radio
- k) Rear seat audio (RSA) control
- I) Rear video/HVAC control
- m) Steering wheel control switch

### **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 LED backlight lamp control circuit.

#### **Action Taken When the DTC Sets**

The BCM will not DIM or illuminate any LED backlighting supplied by the backlight lamp control circuits.

# **Conditions for Clearing the DTC**

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

## **Circuit/System Verification**

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

## **Circuit/System Testing**

- Ignition OFF, disconnect the harness connectors at all components fed by the LED backlight lamp control circuits listed below.
  - a) LED backlight lamp control terminal 18 X3
  - b) LED backlight lamp control terminal 21 X6
- 2) Ignition ON, clear the DTC with a scan tool.

3) Operate the vehicle 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.

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

If the DTC resets as current, test or replace the component responsible for setting the DTC.

