Interior Lighting

NOTE: The smart junction box (SJB) is also known as the generic electronic module (GEM).

The interior lighting system consists of the following components:

- SJB
- · Bussed electrical center
- Illumination dimmer switch
- Dome/map lamps
- · Door ajar switches
- Luggage compartment lamp
- Luggage compartment lid ajar switch
- Ambient lighting module (if equipped)
- Ambient lighting switch (if equipped)

The interior lighting system may consist of up to 3 subsystems:

- Courtesy lamps
- Demand lamps
- Ambient lighting (if equipped)

The bussed electrical center (BEC) supplies power to the interior lighting system through the SJB. The SJB sets DTCs if certain circuit failures exist with the interior lighting system.

Courtesy Lamps

The courtesy lamps are controlled by the SJB. The courtesy lamp subsystem consists of the interior dome lamps. The SJB controls the courtesy lamps by providing power and ground to the courtesy lamps. The courtesy lighting feature requests the courtesy lamps to be illuminated when any of the vehicle doors are opened or become ajar and the vehicle speed is less than 15 km/h (9 mph). The courtesy lamps turn off when the doors are closed or the vehicle speed reaches 15 km/h (9 mph). The courtesy lamps can also be turned on by rotating the instrument panel dimmer switch to the highest point. The theatre dimming feature raises the courtesy lamps over 0.7 seconds when courtesy lamp activation is requested, and lowers the courtesy lamps over 1.7 seconds when courtesy lighting deactivation is requested.

Demand Lamps

The demand lamp subsystem consists of the map lamps and the luggage compartment lamp. Map lamps are switched individually and share a common ground circuit. The luggage compartment lamp is illuminated when the trunk is opened.

Ambient Lighting

The ambient lighting system consists of the ambient lighting switch, the ambient lighting module, and the harness with hard-wired light emitting diodes (LEDs) located within the front and rear footwells and the floor console cup holders. The ambient lighting is powered on when the ignition key is in the run or accessory position. The ambient lighting module is powered through the electrochromatic (EC) mirror circuit. The ambient lighting switch is used to cycle the LEDs through 7 different color combinations or to turn the ambient lighting off. The ambient lighting module provides the necessary voltage to the LEDs to illuminate the cup holders and the front and rear footwell areas.

© Copyright 2024, Ford Motor Company.