

voltage to the high beam, low beam, parking and turn Light Emitting Diodes (LEDs) within the headlamp assembly and the low beam DRL function.

The BCM also provides Field Effect Transistor (FET) protection of the turn lamp output circuits. When an excessive current draw is detected, the BCM disables the affected turn lamp circuit driver.

Refer to: Module Controlled Functions - Overview .

Hazard Lamps

The BCM sends a voltage signal to the hazard flasher lamp switch to monitor for a hazard lamp function request. When the hazard flasher lamp switch is pressed, the voltage signal is routed to ground, indicating a request to activate or deactivate the hazard lamp function.

When the BCM receives a request for the hazard lamps, the BCM supplies on/off voltage to all the turn lamps.

The timed on/off cycle for the hazard lamps is approximately 70 times per minute, regardless of bulb outage.

DESCRIPTION AND OPERATION > EXTERIOR LIGHTING - SYSTEM OPERATION AND COMPONENT DESCRIPTION > PARKING, REAR, AND LICENSE PLATE LAMPS

System Diagram



Parking Lamps

The BCM monitors the headlamp switch position by sending voltage signals on multiple circuits to the headlamp switch. There is one circuit for each headlamp switch position. At any given time, one of the signal circuits is switched to ground to indicate the headlamp switch position.

If the BCM detects a fault from the headlamp switch or loses communication with the headlamp switch, the BCM turns the parking and headlamps on. This is normal behavior of the BCM when a fault has been detected with the inputs from the headlamp switch.

When the BCM receives an input requesting the parking lamps on, it provides voltage to the parking lamps.

Vehicles with LED headlamps utilize a ballast, mounted to each headlamp assembly, that controls the voltage to the high beam, low beam, parking and turn Light Emitting Diodes (LEDs) within the headlamp assembly and the low beam DRL function.

The BCM also provides Field Effect Transistor (FET) protection of the parking lamps output circuits. When an excessive current draw is detected, the BCM disables the affected parking lamps circuit driver.