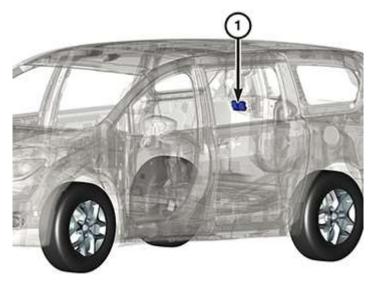
CHILTONLIBRARY



Description & Operation

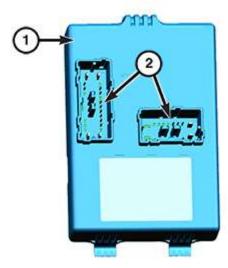
DESCRIPTION AND OPERATION

DESCRIPTION



0811098574

Vehicles equipped with a power liftgate system utilize a Power LiftGate control Module (PLGM) (1). This module is located on the right side of the vehicle behind the quarter trim panel and below the quarter glass. The power liftgate control module receives and monitors logic inputs from all the power liftgate system switches. This module also contains the software technology to detect liftgate obstructions and stop or reverse the door accordingly.



0811128608

Concealed and protected within the molded plastic housing of the PLGM (1) is the printed circuit board and the other electronic circuitry of the module. The module contains a microcontroller and communicates with other electronic modules in the vehicle over the Controller Area Network (CAN) Interior High Speed (IHS) data bus system. Two connector receptacles (2) integral to the PLGM housing are connected to the vehicle electrical system through two dedicated take outs and connectors of the body wire harness.

OPERATION

The power liftgate control module contains the electronic circuitry and software used to control the sequence of events for the power liftgate system. This module communicates on the Controller Area Network (CAN) to monitor many different inputs and outputs such as door lock status, transmission gear selector position and vehicle speed.

The power liftgate open/close command can be initiated by either one press of the power liftgate overhead console switch, one press of the power liftgate D-Pillar switch, two presses of the key fob power liftgate button or by the customer executing a valid "kick" under the liftgate signalling the Hands Free Module (HFM) to unlock and open the liftgate. The overhead console and D-Pillar switches are hardwired to the power liftgate control module, whereas the key fob and HFM signal is sent out on the Controller Area Network (CAN) Data Bus circuit. This signal is detected by the power liftgate control module. The power liftgate control module then interprets the information to confirm safety requirements are met before applying power to the power liftgate motor to start a power cycle.

During a power liftgate open or close cycle, if the power liftgate control module detects sufficient resistance to liftgate travel, such as an obstruction in the liftgate's path, the control module will immediately stop liftgate movement and reverse the direction of travel to the full open or closed position.

The power liftgate control module has the ability to relearn. After 8 miles have been recorded on the odometer, anytime the liftgate is fully opened and fully closed using the automatic system, the module will learn from its cycle. If a replacement power liftgate component is installed or a liftgate adjustment is made,

the module will relearn the effort and time required to open or close the liftgate. This learn cycle can be performed with a Diagnostic Scan Tool or with a complete cycle of the liftgate, using any of the command switches, (Refer to Electrical/Power Sliding Door/Standard Procedure) for detailed instructions.