CHILTON LIBRARY

Description & Operation

DESCRIPTION AND OPERATION

DESCRIPTION

WARNING

Never attempt to operate the power liftgate system when the link rod is removed or disconnected. Damage to the power liftgate system will result.

WARNING

Always disconnect the negative battery cable before attempting any power liftgate system service.

WARNING

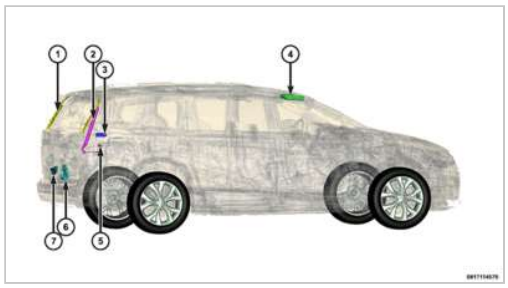
There is a small area located on each side of the liftgate from about the belt line down to the sill which is not protected by the power liftgate system pinch sensors. Extreme caution must be taken to prevent body extremities or other objects from entering this area once the liftgate reaches the secondary latch contact position, which is about 13 millimeters (1/2 inch) before the liftgate is fully closed. Failure to observe this warning may result in serious or fatal injury.

WARNING

Never attempt to enter, exit or reach through the liftgate opening with the power liftgate in motion. You could cause damage to the power liftgate system or components, and serious or fatal injuries may result.

WARNING

Never stick objects in the power liftgate when cinching closed. You could damage the power liftgate system or individual components and possibly cause personal injury.



Some vehicles are equipped with an automatic opening and closing power liftgate. The power liftgate system is a complex system consisting of many components. Refer to the following list for component reference:

Power Liftgate System Components

- Power Liftgate Drive Unit (2)
- Power Latch (7) and Actuator (6)
- Power Liftgate Control Module (3)
- Pinch Sensors (1)
- Thermistor (Integral part of the right pinch sensor)
- Overhead Console (4), D-Pillar and Key Fob Command Switches
- Chime (5)

The power liftgate system utilizes its own power liftgate control module. This power liftgate control module contains all the solid state hardware and software used to control the power liftgate system. For specific component information refer to the individual component descriptions later in this section.

For a complete wiring schematic of the power liftgate system, refer to the Wiring section of this manual. For system operation instructions refer to the vehicles owner manual. Refer to the Body Section of this manual for additional information on liftgate components such as the prop rods, hinges, door alignment and striker alignment.

OPERATION

Power Liftgate Operation:

- Battery voltage is supplied to the power liftgate system through a fuse located in the Power Distribution Center (PDC).
- 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 (switch is for close only) or two presses of the key fob power liftgate button.

- The D-Pillar switches are hardwired to the power liftgate control module, where as the key fob signal and overhead console switch 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.