

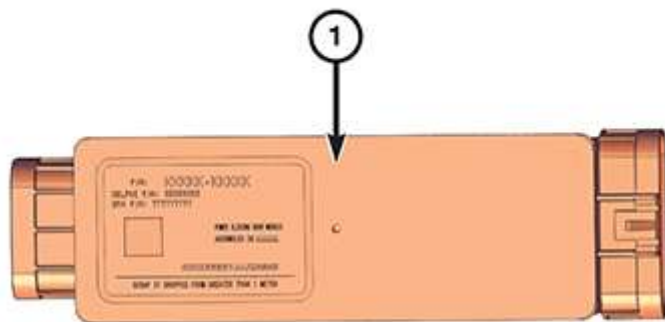
YOUR CURRENT VEHICLE

2018 Chrysler Pacifica

Description & Operation

DESCRIPTION AND OPERATION

DESCRIPTION



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Each power sliding door is equipped with a Power Sliding Door Control Module (PSDM) (1). The PSDM is mounted directly to the inboard side of the power sliding door drive assembly with two retaining screws. The drive assembly is mounted to the body near the bottom of the sliding door in the track cavity with the use of five retaining nuts. The wire harness and chain link track and the power sliding door drive assembly are visible with the door open in the lower door sill area.

Software technology has enabled the PSDM to detect resistance to door travel. This allows the power sliding door to stop and reverse direction any time an obstruction is felt or any of the command switches are operated. Battery voltage is supplied to the power sliding door system through a fuse located in the Power Distribution Center (PDC). The power sliding door lockout switch located in the front overhead console prevents opening or actuation of the power sliding door system when activated. In the unlikely event that the power sliding door system develops a fault, the power sliding door can still be operated manually from the interior or exterior door handle similar to a standard manual sliding door.

The PSDM communicates on the Controller Area Network (CAN) data bus circuit. Therefore, the PSDM can generate and store its own Diagnostic Trouble Codes (DTC's). The most reliable, efficient, and accurate means to diagnose the switches, modules, data bus or the electronic controls and communication related to the power sliding door system operation requires the use of a diagnostic scan tool. Refer to the appropriate diagnostic information.

The PSDM is available as a service part and can be serviced separately from the drive assembly should it become damaged or inoperative. Any time a power sliding door component is removed, replaced, door adjustment is performed or diagnostic trouble codes are addressed and erased, a learn cycle **must** be performed. The power sliding door learn cycle enables the power sliding door control module to learn or relearn critical information (travel limits, resistance to door travel, door position, etc.) which allows the system to perform properly and safely. To perform a power sliding door learn cycle, ([Refer to 08 - Electrical/Power Sliding Door/Standard Procedure](#)).

NOTE

It may be possible to generate Sliding Door Diagnostic Trouble Codes during normal power sliding door operation. Refer to the appropriate power sliding door diagnostic information for a complete list of diagnostic routines.

OPERATION

Battery voltage is supplied to the power sliding door system through a fuse, located in the Power Distribution Center (PDC). With the actuation of a power sliding door open/close command (key fob, overhead console, B-pillar mounted or Hands Free) a signal is received by the Power Sliding Door Control Module (PSDM). The PSDM receives this signal via the Controller Area Network (CAN) Data Bus circuit. The PSDM then signals the power sliding door cinching latch to release the door to the unlatched and movable position. The power sliding door drive assembly motor then starts an open cycle.

The status of the overhead power sliding door switches is continually monitored by the circuitry within the Instrument Cluster. The instrument cluster receives input messages from the overhead power sliding door switches over a hardwired connection. Whenever the instrument cluster receives an input from the overhead power sliding door switches it sends a function command signal to the selected PSDM. This message from the cluster to the PSDM is delivered via the Controller Area Network (CAN) data bus.

When one of the PSDMs receives a command signal it checks the following:

- PRNDL Status
- Vehicle Speed Status
- Ignition Status
- Vehicle Theft Alarm Armed/Disarmed Status
- Sliding Door Latch Status

- Sliding Door Full Open Status
- Ambient Temperature
- Door Lock Status
- Sliding Door B-Pillar Switch Lockout Status
- Sliding Door Window Up/Down Status

If the appropriate conditions exist the PSDM will send a command signal to the selected Rear Door Control Module (RDCM) so the sliding door can be latched/unlatched as needed. This command signal is sent via the CAN data bus. Once the PSDM senses the latch function it will power the motor on the power sliding door drive assembly to open/close the sliding door as requested by the overhead power sliding door switches.

During the door cycle, if the PSDM detects sufficient resistance to door travel, such as an obstruction in the door's path, it will immediately stop door movement and reverse door travel to the full open or closed position. The ability for the PSDM to detect resistance to door travel is accomplished by hall effect sensors detecting the door motor speed.

The PSDM has the ability to learn. Anytime a door is opened or closed using the power sliding door system the module learns from its cycle. If a replacement power sliding door component is installed or a door adjustment is made, the module must re-learn the effort required to open or close the door. A learn cycle can be performed with a complete cycle of the door, using any one of the command switches or with the use of a scan tool. ([Refer to Electrical/Power Sliding Door/Standard Procedure](#)) for detailed instructions.

The power sliding door system is designed with a number of system inhibitors. These inhibitors are necessary for safety and/or feasibility of the power sliding door system. The power sliding door system inhibitors are:

- The power sliding door must be in the **full** open or closed position in order for the power sliding door system to start a normal cycle. If the door is not in this position (based on the input from the switches integral to the cinching latch assembly) the PSDM will only perform a power open cycle.
- The transmission must be in **park or neutral** in order for the power sliding door system to start a cycle.
- The front overhead console lockout switch must be in the "UNLOCKED" position in order for the power sliding door systems B-pillar switches to function.
- If multiple obstacles are detected during the same power open or close cycle the power sliding door may go into full manual mode.
- If severe Diagnostic Trouble Codes (DTC) are stored in the PSDM the power sliding door may go into full manual mode.
- Due to the high pressure created in the passenger compartment with the blower motor on high, the power sliding door may not complete a power close cycle unless a window is cracked, allowing the pressure to escape. This situation will only be experienced on some vehicles, or vehicles with brand new side door weather seals installed.

The hard wired circuits for the power sliding door switches may be diagnosed using conventional diagnostic tools and procedures. Refer to the appropriate wiring information. However, conventional diagnostic methods will not prove conclusive in the diagnosis of the electronic controls and communication between other modules and devices that provide some features of the power sliding door system. The most reliable, efficient, and accurate means to diagnose the power sliding door switches or the electronic controls and communication related to the power sliding door system operation requires the use of a diagnostic scan tool. Refer to the appropriate diagnostic information.