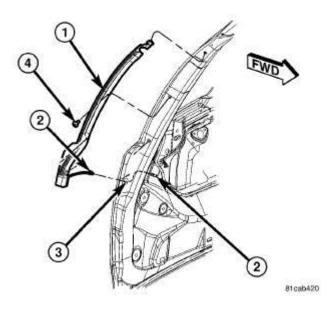
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Description & Operation

DESCRIPTION AND OPERATION

DESCRIPTION



Vehicles equipped with a power liftgate system utilize two pinch sensors (1). One pinch sensor is located on each side of the liftgate. These sensors look like weather-strips, however they consist of pieces of electrically conductive rubber (tapeswitch), wires (2), resistor, double sided tape, and a plastic carrier. The right side pinch sensor contains a thermistor that is integral to the pinch sensor assembly. The thermistor is a temperature sensor used by the power liftgate control module to enable proper liftgate operation in extreme climate conditions. Pinch sensors are used to provide additional protection against vehicle damage or personal injury caused by an obstacle being "pinched" between the liftgate and the liftgate opening of the vehicle.

The pinch sensors are wired in series with the power liftgate control module. If one pinch sensor becomes defective the module will act as though both sensors are defective. The power liftgate latch "Cinching" operation will be disabled if a problem is detected by the control module.

OPERATION

During a power liftgate "close" cycle, if either of the two conductive rubber strips (tapeswitch) of the pinch sensor come in contact with an obstacle, the pinch sensor circuit is completed. This tells the power liftgate control module that an obstruction is felt. The control module will stop the liftgate immediately and return it to the full open position.

The thermistor portion of the right pinch sensor provides the temperature signal to the power liftgate control module (temperature is provided when the pinch sensor is in an unpinched condition; when pinched, temperature is unavailable because the thermistor is shorted). As the outside temperature increases, the resistance reading decreases. As temperature decreases, the resistance reading increases.