CHILTON LIBRARY

Diagnosis & Testing - Pinch Sensor

DIAGNOSIS AND TESTING - PINCH SENSOR

WARNING

Use extreme caution when testing pinch sensor operation.

To verify power liftgate system and pinch sensor operation.

1. Cycle the power liftgate through two complete open and close cycles, during each of the final close cycles, **with the liftgate in mid-travel** , depress each of the pinch sensors to verify the power liftgate control module detects an obstruction and returns to the open position. If OK, pinch sensors and module are OK at this time. If NOT OK, go to >>>
2. Remove the liftgate trim panel to access and disconnect the inoperable pinch sensor's electrical connector. Using an ohmmeter, check for continuity on the two wires leading from the pinch sensor. While depressing either pinch sensor, continuity should be less than 400 ohms. While NOT depressing the left pinch sensor, continuity should be 10,000 ohms ± 500 ohms. While NOT depressing the right pinch sensor, continuity will vary with ambient temperature (see table below), but should always be greater than 4000 ohms. If the measured pinch sensor meets the stated continuity, then it is OK at this time. If the measured continuity is outside of the stated ranges, replace the pinch sensor.

THERMISTOR

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). Refer to the RIGHT PINCH SENSOR/THERMISTOR DIAGNOSTIC TABLE to test the thermistor resistance.

RIGHT PINCH SENSOR/THERMISTOR DIAGNOSTIC TABLE

TEMPERATURE	THERMISTOR RESISTANCE
0°C (32°F)	29330 - 35990 ohms

TEMPERATURE	THERMISTOR RESISTANCE
25°C (77°F)	9120 - 10880 ohms
40°C (104°F)	4900 - 5750 ohms