

ACCESSORIES & EQUIPMENT

Vehicle Access - Corvette

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Cable Sheath Actuator Screws	2 N.m	18 lb in
Door Latch Release Switch Outside Bezel Screws	3 N.m	27 lb in
Door Trim Switch Bezel Nut	1 N.m	9 lb in
Front Side Door Inside Handle Screws	12 N.m	9 lb ft
Front Side Door Latch Bolts	9 N.m	80 lb in
Front Side Door Lock Striker Nuts	24 N.m	18 lb ft
Liftgate Latch Screws	9 N.m	80 lb in
Liftgate Latch Striker Bolts	25 N.m	18 lb ft
Rear Compartment Lid Latch Bolts	9 N.m	80 lb in
Rear Compartment Lid Latch Striker Bolts	9 N.m	80 lb in

SCHEMATIC WIRING DIAGRAMS

DOOR LOCK/INDICATOR WIRING SCHEMATICS

Indicators Wiring Schematics

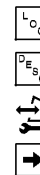
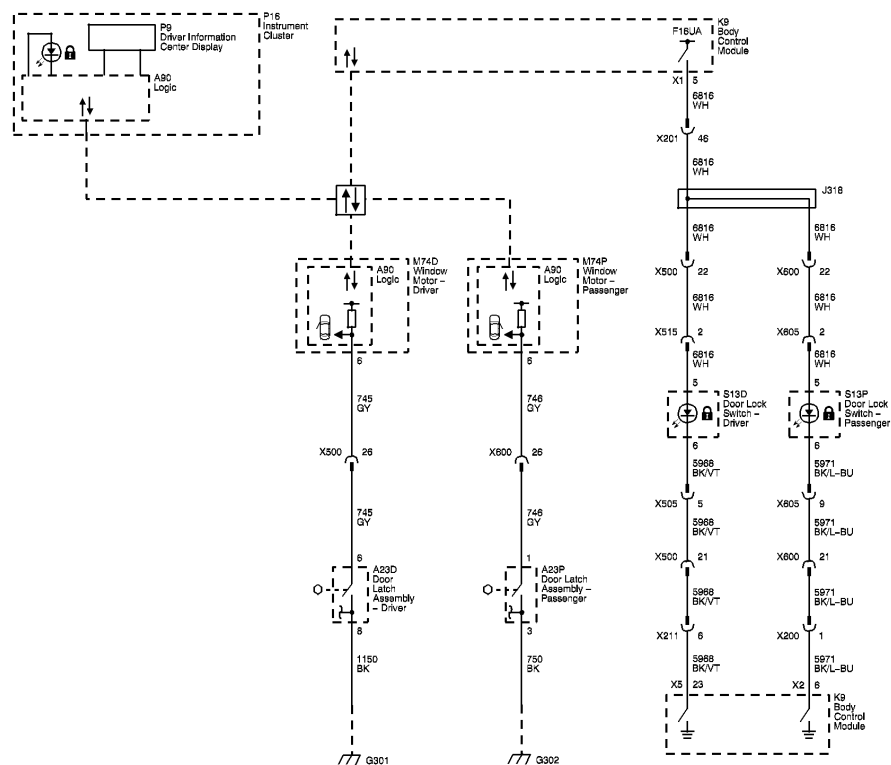


Fig. 1: Indicators Wiring Schematic
Courtesy of GENERAL MOTORS COMPANY

Actuators Wiring Schematics

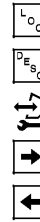
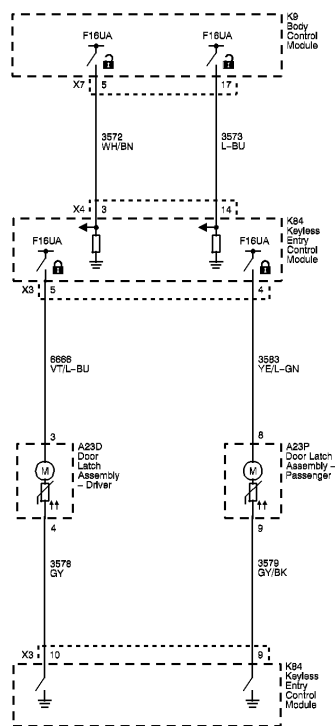


Fig. 2: Actuators Wiring Schematic
 Courtesy of GENERAL MOTORS COMPANY

Actuators (AF8) Wiring Schematics

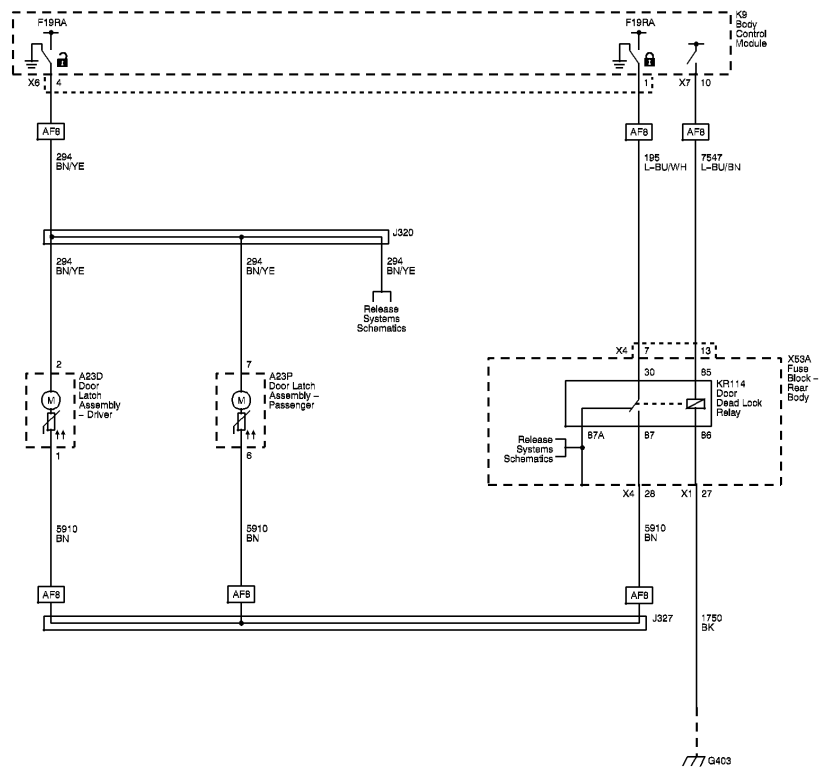


Fig. 3: Actuators (AF8) Wiring Schematic
Courtesy of GENERAL MOTORS COMPANY

Door Handle (ATH) and Lock Switches Wiring Schematics

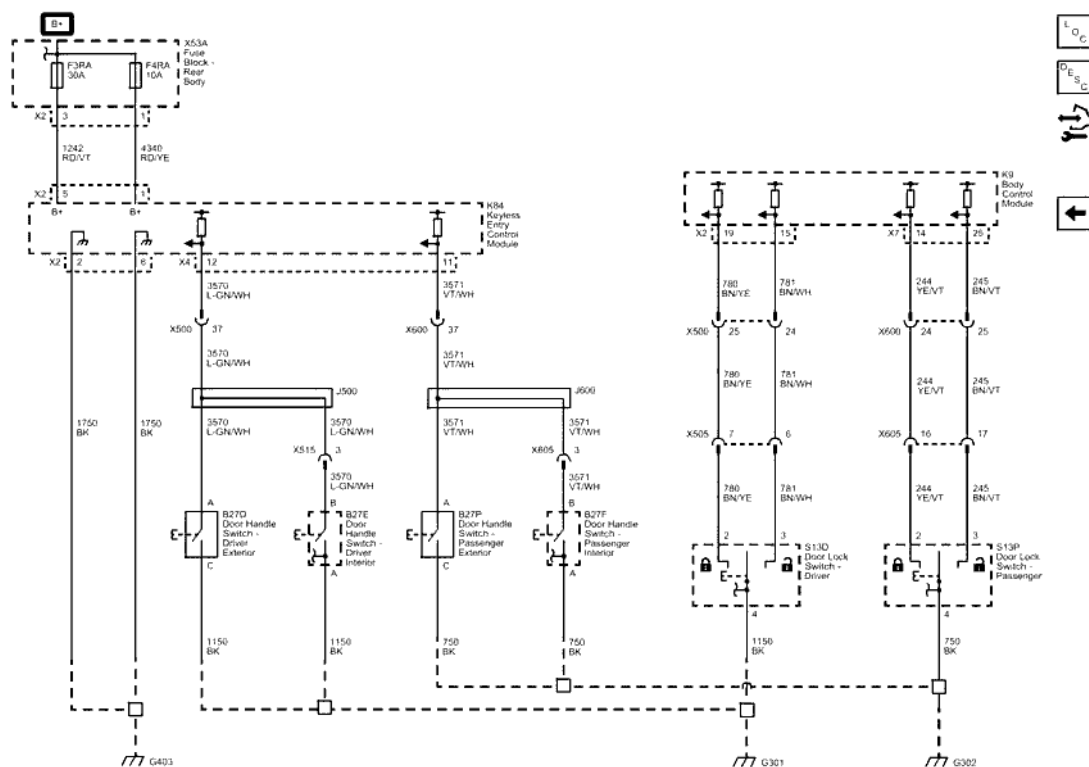


Fig. 4: Door Handle (ATH) and Lock Switches Wiring Schematic
Courtesy of GENERAL MOTORS COMPANY

DOOR LOCK RELEASE SYSTEMS WIRING SCHEMATICS

Rear Compartment Wiring Schematics

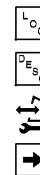
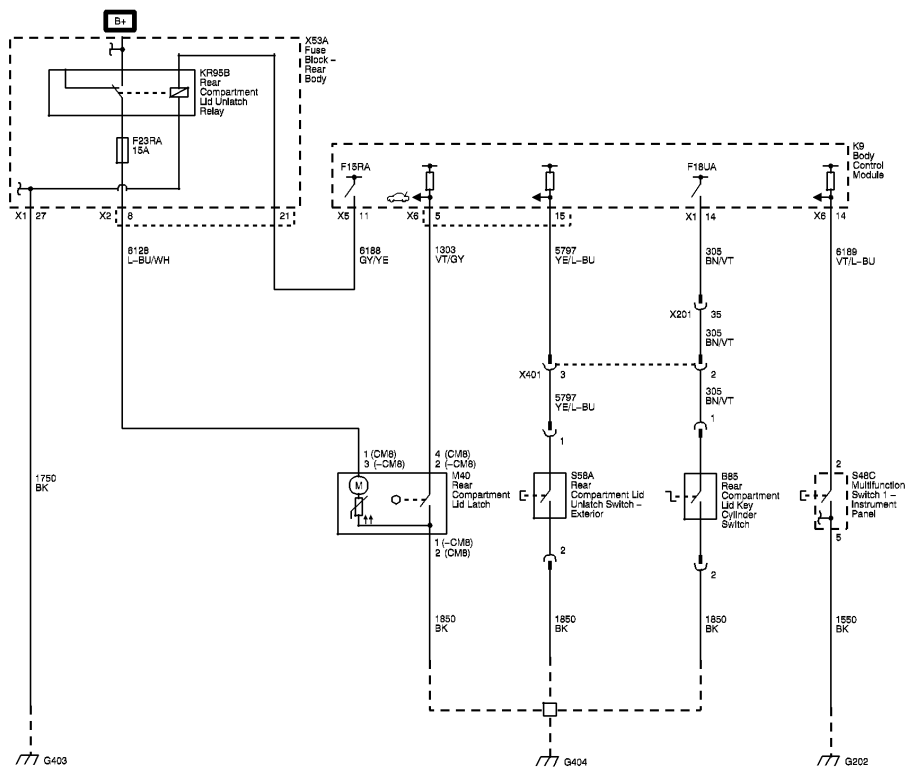


Fig. 5: Rear Compartment Wiring Schematic
Courtesy of GENERAL MOTORS COMPANY

Fuel Door - Locking Wiring Schematics

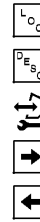
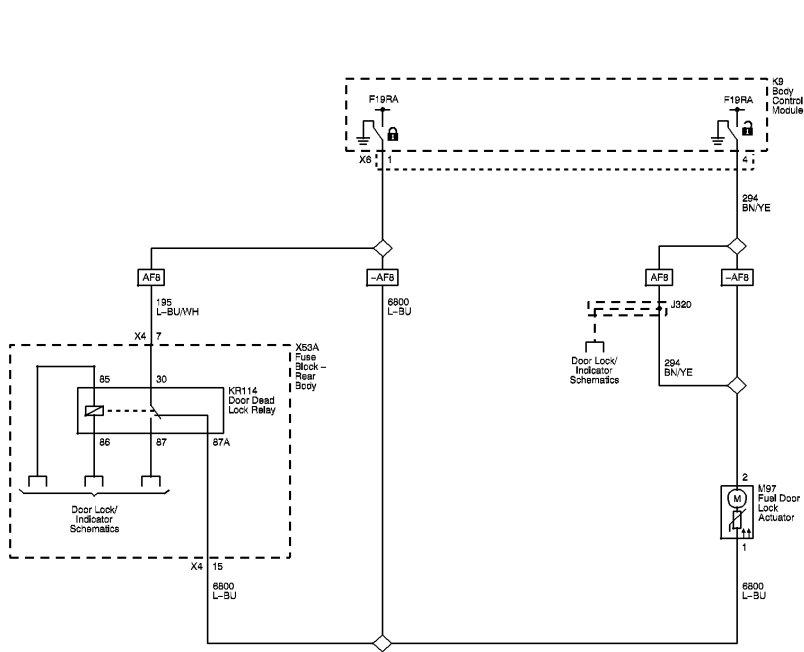


Fig. 6: Fuel Door - Locking Wiring Schematic
 Courtesy of GENERAL MOTORS COMPANY

IP Compartment Wiring Schematic

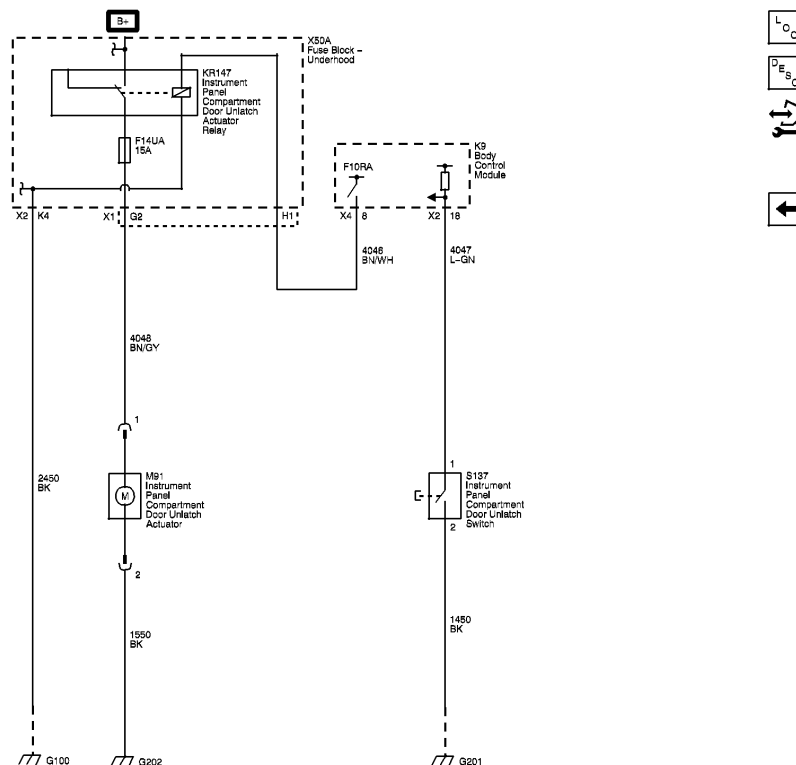


Fig. 7: IP Compartment Wiring Schematic
 Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC CODE INDEX

DIAGNOSTIC CODE INDEX

DTC	Description
<u>DTC B1474 or B3849</u>	DTC B1474 02 Passenger Exterior Door Handle Switch Circuit Short to Ground DTC B3849 02 Driver Exterior Door Handle Switch Circuit Short to Ground
<u>DTC B2494</u>	DTC B2494 00 Liftgate Handle Switch Circuit Malfunction
<u>DTC B250B</u>	DTC B250B 01 Driver Door Unlatch Low Control Circuit Short to Battery DTC B250B 02 Driver Door Unlatch Low Control Circuit Short to Ground
<u>DTC B251A-B251F</u>	DTC B251A All Door Unlatch Circuit DTC B251B Driver Door Unlatch High Control Circuit

	Control Circuit
<u>DTC B252A or B252B</u>	DTC B252A 01 Driver Door Unlatch Enable Circuit Short to Battery DTC B252B 01 Passenger Door Unlatch Enable Circuit Short to Battery
<u>DTC B2730</u>	DTC B2730 00 Interior Trunk Lid Unlatch Switch Circuit Malfunction
<u>DTC B297B or B297C</u>	DTC B297B 5A Driver Door Open Switch Circuit Not Plausible DTC B297C 5A Passenger Door Open Switch Circuit Not Plausible
<u>DTC B3125, B3130 or B3135</u>	DTC B3125 Driver Door Only Unlock Circuit DTC B3130 All Doors Unlock Circuit DTC B3135 All Doors Lock Circuit
<u>DTC B313A or B313B</u>	DTC B313A Driver Door Lock Status Indicator Control Circuit DTC B313B Passenger Door Lock Status Indicator Control Circuit
<u>DTC B3140, B3145, B3150 or B3155</u>	DTC B3140 00 Driver Door Unlock Switch Circuit DTC B3145 00 Passenger Door Unlock Switch Circuit DTC B3150 00 Driver Front Door Lock Switch Circuit DTC B3155 00 Passenger Front Door Lock Switch Circuit
<u>DTC B3265</u>	DTC B3265 Trunk Lid Unlatch Output Circuit
<u>DTC B3618</u>	DTC B3618 00 Exterior Liftgate Unlatch Switch Circuit Malfunction
<u>DTC B3797</u>	DTC B3797 02 All Door Dead Lock Circuit Short to Ground

DTC B1474 OR B3849: EXTERIOR DOOR HANDLE SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B1474 02

Passenger Exterior Door Handle Switch Circuit Short to Ground

DTC B3849 02

Driver Exterior Door Handle Switch Circuit Short to Ground

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Handle Switch Signal	B3849 02	1	1	-
Driver Door Handle Switch Ground	-	1	-	-
Passenger Door Handle Switch Signal	B1474 02	2	2	-
Passenger Door Handle Switch Ground	-	2	-	-
1. Driver Door Handle Switch Malfunction 2. Passenger Door Handle Switch Malfunction				

Circuit/System Description

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the interior or exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door unlatch request. The keyless entry control module provides a 12 V signal to each interior and exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signals from the keyless entry control module are pulled to ground.

Conditions for Running the DTC

Battery voltage is between 9-16 V.

Conditions for Setting the DTC

B1474 02

The keyless entry control module detects the passenger exterior door handle switch signal circuit is shorted to ground or closed for greater than 180 seconds.

B3849 02

The keyless entry control module detects the driver exterior door handle switch signal circuit is shorted to ground or closed for more than 180 seconds.

Action Taken When the DTC Sets

unlock when the affected door handle switch is pressed.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 40 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Exterior Driver Door Handle Switch parameter changes between Active and Inactive when pressing and releasing the B27D Door Handle Switch-Driver Exterior and the B27E Door Handle Switch-Driver Interior.
 - **If the parameter does not change**

Refer to Circuit/System Testing
 - **If the parameter changes**
3. Verify the scan tool Exterior Passenger Door Handle Switch parameters changes between

Active and Inactive when pressing and releasing the B27P Door Handle Switch-Passenger Exterior and the B27F Door Handle Switch-Passenger Interior.

- **If the parameter does not change**

Refer to Circuit/System Testing

- **If the parameter changes**

4. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Exterior and the B27 Door Handle Switch-Interior. Ignition ON.
2. Verify the scan tool Door Handle Switch parameter is Inactive.

- **If not Inactive**

1. Ignition OFF, disconnect the harness connectors at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between the signal circuit terminal listed below and ground.
 - B27 Door Handle Switch-Exterior - signal circuit terminal A
 - B27 Door Handle Switch-Interior - signal circuit terminal B
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K84 Keyless Entry Control Module

- **If Inactive**

3. Connect the harness connector at the B27 Door Handle Switch-Exterior.
4. Verify the scan tool Door Handle Switch parameter changes from Inactive to Active when pressing the B27 Door Handle Switch-Exterior.

- **If the parameter does not change**

Test or replace the B27 Door Handle Switch-Exterior.

- **If the parameter changes**

5. Connect the harness connector at the B27 Door Handle Switch-Interior
6. Verify the scan tool Door Handle Switch parameter changes from Inactive to Active when pressing the B27 Door Handle Switch-Interior.

- **If the parameter does not change**

Test or replace the B27 Door Handle Switch-Interior.

- **If the parameter changes**

7. All OK.

Component Testing

Exterior Door Handle Switch

1. Ignition OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Exterior.
2. Test for infinite resistance between the signal terminal A and the ground terminal C with the switch in the open position.
 - **If less than infinite resistance**

Replace the B27 Door Handle Switch-Exterior.

- **If infinite resistance**
3. Test for less than 5 ohms between the signal terminal A and the ground terminal C with the switch in the closed position.
 - **If 5 ohms or greater**

Replace the B27 Door Handle Switch-Exterior.

- **If less than 5 ohms**
4. All OK

Interior Door Handle Switch

1. Ignition OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Interior.
2. Test for infinite resistance between the signal terminal B and the ground terminal A with the switch in the open position.
 - **If less than infinite resistance**

Replace the B27 Door Handle Switch-Interior.

- **If infinite resistance**
3. Test for less than 5 ohms between the signal terminal B and the ground terminal A with the switch in the closed position.
 - **If 5 ohms or greater**

Replace the B27 Door Handle Switch-Interior.

- **If less than 5 ohms**
4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Door Lock Switch Replacement - Passenger Front**
- **Front Side Door Handle Switch Replacement**
- **Control Module References** for keyless entry control module replacement, programming and setup

DTC B2494: LIFTGATE HANDLE SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptor

DTC B2494 00

Liftgate Handle Switch Circuit Malfunction

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B2494 00	1	1	-
Ground	-	1	-	-
1. Exterior Rear Compartment Lid Release Switch Inoperative				

Circuit/System Description

When the ignition is ON, the body control module (BCM) supplies a 12 V signal to the rear compartment lid unlatch switch through the trunk release switch signal circuit. When the exterior rear compartment lid release switch is pressed, the voltage within the signal circuit is pulled low and in response, the BCM will energize the trunk release relay.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

The BCM detects a short to ground in the rear compartment lid release switch signal circuit for greater than 60 seconds

Action Taken When the DTC Sets

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Luggage Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the S58A Rear Compartment Lid Unlatch Switch-Exterior.
 - **If the parameter does not change**

Refer to Circuit/System Testing.
 - **If the parameter changes**
3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 2 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 1 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Active**
7. Test or replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

- **If infinite resistance**

3. Test for less than 3 ohms between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

- **If 3 ohms or greater**

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

- **If less than 3 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Rear Compartment Lid Release Switch Replacement**
- **Control Module References** for BCM replacement, programming and setup

DTC B250B: DRIVER DOOR UNLATCH LOW CONTROL CIRCUIT

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B250B 01

Driver Door Unlatch Low Control Circuit Short to Battery

DTC B250B 02

Driver Door Unlatch Low Control Circuit Short to Ground

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Unlatch High Control	B250B 02	B251B 04	B250B 01	-
Driver Door Unlatch Low Control	B250B 02	B251B 04	B250B 01	-

Circuit/System Description

When any exterior door handle switch is pressed, switched ground signals are sent to the keyless entry control module through the door handle switch signal circuits. Upon receipt of these inputs, the keyless entry control module will check the door lock status of the following inputs:

- Driver door handle is still pulled
- An unlatch enable signal from the body control module has been received

Once the enable criteria has been met, the keyless entry control module will supply power and ground to door unlatch motor control circuits and the door will release.

Diagnostic Aids

If both DTC B250B 02 and DTC B1330 are set, correct any faults causing B1330 to set first prior to performing diagnostics for B250B.

Conditions for Running the DTC

Unlatch motor is not active and engine is not cranking

Conditions for Setting the DTC

B250B 01

The keyless entry control module detects a short to battery in the driver door unlatch motor unlatch control low side circuit or the driver door unlatch motor unlatch control high side circuit.

B250B 02

The keyless entry control module detects a short to ground in the driver door unlatch motor unlatch control low side circuit or the driver door unlatch motor unlatch control high side circuit

Action Taken When the DTC Sets

The passive entry feature will be inoperative for the driver door and the driver door will not open unless the door is first unlocked by pressing the appropriate button on the keyless entry transmitter.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 40 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

NOTE: **The keyless entry transmitter must be within 1 meter (3 feet) of the door handle**

1. Verify the driver door unlatches and opens with a single press of the B27D Door Handle Switch-Driver Exterior.
 - **If the driver door does not unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior**

Refer to Circuit/System Testing
 - **If the driver door does unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior**
2. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the A23D Door Latch Assembly-Driver. Ignition ON.
2. Connect a test lamp between the control circuit terminal 3 and control circuit terminal 4.
3. Verify the test lamp turns ON when commanding the UNLATCH with the B27D Door Handle Switch-Driver Exterior

○

1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
3. Test for less than 2 ohms in the control circuits end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.
 - **If the test lamp is always ON**
1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K84 Keyless Entry Control Module.
 - **If the test lamp turns ON and OFF**
4. Test or replace the A23D Door Latch Assembly-Driver.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Front Side Door Latch Replacement**
- **Control Module References** for keyless entry control module replacement, setup and programming

DTC B251A-B251F: DOOR UNLATCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B251A

All Door Unlatch Circuit

DTC B251B

Driver Door Unlatch High Control Circuit

DTC B251C

Passenger Door Unlatch High Control Circuit

For symptom byte information refer to: **Symptom Byte List**

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Release Signal	B251B 02	1	1	-
Passenger Door Release Signal	B251A 02	2	2	-
Driver Door Unlatch High Control	B251B 02	B251B 04	1	-
Passenger Door Unlatch High Control	B251C 02	B251C 04	2	-
Passenger Door Unlatch Low Control	2	B251A 01	-	-
1. Driver Door Unlatch Malfunction 2. Passenger Door Unlatch Malfunction				

Circuit/System Description

The system is designed so that when the operator approaches a locked vehicle with the keyless entry transmitter, the keyless entry control module will detect the keyless entry transmitter and when an exterior door handle is pulled the keyless entry control module will command all doors to unlock and the door to unlatch allowing the door to be pulled open.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

B251A 01

The keyless entry control module detects a short to voltage on the passenger door latch motor unlatch low control circuit.

B251A 02

The keyless entry control module detects a short to ground on the passenger door latch motor unlatch low control circuit.

B251A 02

The body control module detects a short to ground on the passenger door unlatch signal circuit.

B251B 02

The Keyless Entry Control Module detects an open in the driver door latch motor unlatch high control circuit.

B251B 02

The body control module detects a short to ground on the driver door unlatch signal circuit

B251B 04

The keyless entry control module detects an open/high resistance in the driver door latch motor unlatch control circuit

B251C 02

The keyless entry control module detects an open/high resistance on the passenger door latch motor unlatch high control circuit.

B251C 04

The keyless entry control module detects an open/high resistance on the passenger door latch motor unlatch control circuit.

Action Taken When the DTC Sets

The affected door will require a pull of the exterior door handle to unlock the door and a second pull of the exterior door handle to open the door.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present
- When the fault is no longer present, the DTC will be a history DTC
- A history DTC will clear after 40 ignition cycles

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.

NOTE: The keyless entry transmitter must be within 1 meter (3 feet) of the door handle

2. Verify the scan tool Exterior Driver Door Handle Switch and the scan tool Exterior Passenger Door Handle Switch parameters changes between Active and Inactive when pressing and releasing the appropriate B27 Door Handle Switch-Exterior.

- If the parameter does not change

Refer to Power Door Locks Malfunction

- If the parameter changes

3. Verify the driver door unlatches and opens with a single press of the B27D Door Handle Switch-Driver Exterior.

- If the driver door does not unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior

Refer to Circuit/System Testing - Driver Door Latch Malfunction

- If the driver door does unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior

4. Verify the passenger door unlatches and opens with a single press of the B27P Door Handle Switch-Passenger Exterior.

- If the passenger door does not unlatch and open with a single press of the B27P Door Handle Switch-Passenger Exterior

- **If the passenger door does unlatch and open with a single press of the B27P Door Handle Switch-Passenger Exterior**

5. All OK.

Circuit/System Testing

Driver Door Latch Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between the signal circuit terminal 3 and ground.
 - **If less than infinite resistance**
 1. Ignition OFF, disconnect the X7 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the K84 Keyless Entry Control Module signal circuit terminal 3 X4 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - **If infinite resistance, replace the K9 Body Control Module**
3. Ignition OFF, connect the X4 harness connector at the K84 Keyless Entry Control Module and disconnect the harness connector at the A23D Door Latch Assembly-Driver. Ignition ON.
4. Connect a test lamp between the control circuit terminal 3 and control circuit terminal 4.
5. Verify the test lamp turns ON when commanding the UNLATCH with the B27D Door Handle Switch-Driver Exterior
 - **If the test lamp remains OFF during the command**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
 2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuits end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
 2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K84 Keyless Entry Control Module.
 - **If the test lamp turns ON and OFF**
6. Test or replace the A23D Door Latch Assembly-Driver.

Passenger Door Latch Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between the signal circuit terminal 14 and ground.
 - **If less than infinite resistance**
 1. Ignition OFF, disconnect the X7 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the K84 Keyless Entry Control Module signal circuit terminal 14 X4 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - **If infinite resistance, replace the K9 Body Control Module**
3. Ignition OFF, connect the X4 harness connector at the K84 Keyless Entry Control Module and disconnect the harness connector at the A23P Door Latch Assembly-Passenger. Ignition ON.
4. Connect a test lamp between the control circuit terminal 8 and control circuit terminal 9.
5. Verify the test lamp turns ON when commanding the UNLATCH with the B27P Door Handle Switch-Passenger Exterior
 - **If the test lamp remains OFF during the command**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
 2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuits end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
 2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K84 Keyless Entry Control Module.
 - **If the test lamp turns ON and OFF**
6. Test or replace the A23P Door Latch Assembly-Passenger.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Front Side Door Latch Replacement**
- **Control Module References** for body control module or keyless entry control module replacement, setup and programming

DTC B252A OR B252B: DOOR UNLATCH ENABLE

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B252A 01

Driver Door Unlatch Enable Circuit Short to Battery

DTC B252B 01

Passenger Door Unlatch Enable Circuit Short to Battery

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Lock Actuator Unlock Control	B251B 02	1	B252A 01	-
Door Lock Control	B251A 02	2	B252B 01	-
1. Driver Door Latch Malfunction 2. Passenger Door Latch Malfunction				

Circuit/System Description

The keyless entry control module will detect the keyless entry transmitter when an exterior door handle is pulled and the transmitter is within 1 meter (3 feet) of the door handle, the body control module will unlock the doors and send the unlatch enable signal to keyless entry control module.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

B252A 02

The keyless entry control module detects a short to voltage for greater than 3 seconds on the driver door lock actuator unlock control circuit.

B252B 02

The keyless entry control module detects a short to voltage for longer than 3 seconds on the door

lock control circuit.

Action Taken When the DTC Sets

B252A 02

The driver door will require two pulls of the exterior door handle to unlock the door and then to unlatch the door.

B252B 02

The passenger door will require two pulls of the exterior door handle to unlock the door and then to unlatch the door.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present
- When the fault is no longer present, the DTC will be a history DTC
- A history DTC will clear after 40 ignition cycles

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON

NOTE: The keyless entry transmitter must be within 1 meter (3 feet) of the door handle

2. With the driver door locked, verify the function of the A23D Door Latch Assembly-Driver unlocks and unlatches the driver door while pulling the exterior driver door handle.
 - **If the A23D Door Latch Assembly-Driver requires 2 pulls of the exterior driver door handle to unlock and unlatch the driver door**

Refer to Circuit/System Testing - Driver Door Release Command Malfunction.

- **If the A23D Door Latch Assembly-Driver unlocks and unlatches**

3. With the passenger door locked, verify the function of the A23P Door Latch Assembly-Passenger unlocks and unlatches the passenger door while pulling the exterior passenger door handle.

- **If the A23P Door Latch Assembly-Passenger requires 2 pulls of the exterior passenger door handle to unlock and unlatch the passenger door**

Refer to Circuit/System Testing - Passenger Door Release Command Malfunction.

- **If the A23P Door Latch Assembly-Passenger unlocks and unlatches**

4. All OK.

Circuit/System Testing

Driver Door Release Command Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module. Ignition ON.
2. Verify that a test lamp does not illuminate between the signal circuit terminal 3 and ground.
 - **If the test lamp illuminates**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, Ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp does not illuminate**
3. Replace the K84 Keyless Entry Control Module.

Passenger Door Release Command Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module.

2. Verify that a test lamp does not illuminate between the signal circuit terminal 14 and ground.
 - **If the test lamp illuminates**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, Ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp does not illuminate**
 - 3. Replace the K84 Keyless Entry Control Module.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

Control Module References for body control module or keyless entry control module replacement, setup and programming

DTC B2730: INTERIOR TRUNK LID UNLATCH SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptor

DTC B2730 00

Interior Trunk Lid Unlatch Switch Circuit Malfunction

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B2730 00	1	1	-
Ground	-	1	-	-
1. Interior Rear Compartment Lid Release Switch Inoperative				

Circuit/System Description

When the ignition is ON, the body control module supplies a 12 V signal to the rear compartment lid unlatch switch through the trunk release switch signal circuit. When the interior rear compartment lid release switch is pressed, the voltage within the signal circuit is pulled low and in response, the body

control module will energize the trunk release relay.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

The body control module detects a short to ground in the interior rear compartment lid release switch signal circuit for greater than 60 seconds

Action Taken When the DTC Sets

The body control module ignores the input from the interior rear compartment lid unlatch switch.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Luggage Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter changes between Inactive and Active when pressing the S58B Rear Compartment Lid Unlatch Switch-Interior.

- **If the parameter does not change**

Refer to Circuit/System Testing.

- **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58B Rear Compartment Lid Unlatch Switch-Interior. It may take up to 2 minutes for all vehicle systems to power down.

2. Test for less than 10 ohms between the ground circuit terminal 5 and ground.

- **If 10 ohms or greater**

1. Ignition OFF.

2. Test for less than 2 ohms in the ground circuit end to end.

- If 2 ohms or greater, repair the open/high resistance in the circuit.

- If less than 2 ohms, repair the open/high resistance in the ground connection.

- **If less than 10 ohms**

3. Ignition ON.

4. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter is Inactive.

- **If not Inactive**

1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

2. Test for infinite resistance between the signal circuit terminal 1 and ground.

- If less than infinite resistance, repair the short to ground on the circuit.

- If infinite resistance, replace the K9 Body Control Module.

- **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 5.

6. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter is Active.

- **If not Active**

1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.

2. Test for less than 1 V between the signal circuit and ground.

- If 1 V or greater, repair the short to voltage on the circuit.

- If less than 1 V
- 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.

- **If Active**

7. Test or replace the S58B Rear Compartment Lid Unlatch Switch-Interior.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S58B Rear Compartment Lid Unlatch Switch-Interior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 5 with the switch in the open position.

- **If less than infinite resistance**

Replace the S58B Rear Compartment Lid Unlatch Switch-Interior.

- **If infinite resistance**

3. Test for less than 3 ohms between the signal terminal 1 and the ground terminal 5 with the switch in the closed position.

- **If 3 ohms or greater**

Replace the S58B Rear Compartment Lid Unlatch Switch-Interior.

- **If less than 3 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Instrument Panel Accessory Switch Trim Panel Replacement**
- **Control Module References** for body control module replacement, programming and setup

DTC B297B OR B297C: DOOR OPEN SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B297B 5A

Driver Door Open Switch Circuit Not Plausible

DTC B297C 5A

Passenger Door Open Switch Circuit Not Plausible

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Open Switch Signal	B297B 5A	B297B 5A	B297B 5A	-
Passenger Door Open Switch Signal	B297C 5A	B297C 5A	B297C 5A	-
Driver Door Latch Ground	-	1	-	-
Passenger Door Latch Ground	-	1	-	-
1. Ajar Indicator Inoperative				

Circuit/System Description

The keyless entry control module provides a 12 V signal to the driver and passenger door open switch signal circuits. The driver window motor provides a 12 V signal to the driver door ajar switch signal circuit. The passenger window switch provides a 12V signal to the passenger door ajar switch signal circuit. The door open switches and the door ajar switches are integral to each door latch assembly.

The door open switch and the door ajar switch contacts will be open with the door is fully closed, the door switches within the door latch are designed so that the when the door is ajar, the contact in the door ajar switch closes, the voltage is pulled low and the window motor will then send a serial data message to the body control module indicating that the door is ajar. When the door is opened further, the contact in the door open switch will then close providing a ground for the door open signal circuit, the keyless entry control module will then detect that the door is open.

Conditions for Running the DTC

Battery voltage is between 9-16 V.

Conditions for Setting the DTC

B297B 5A

- The keyless entry control module detects the driver door open switch is Active while receiving a serial data message from the Body Control Module that the driver door ajar switch is Inactive.

- The condition must be present for greater than 30 seconds

B297C 5A

- The keyless entry control module detects the passenger door open switch is Active while receiving a serial data message from the Body Control Module that the passenger door ajar switch is Inactive.
- The condition must be present for greater than 30 seconds.

Action Taken When the DTC Sets

B297B 5A or B297C 5A

The driver information center will display the message: Service Steering Column Lock.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the keyless entry control module receives a serial data message from the BCM that the door is ajar before the keyless entry control module detects the door open switch is active, then the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Column Lock Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Steering Wheel and Column Description and Operation (N38)

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Body Control Module Driver Door Ajar Switch parameter changes between Inactive and Active when opening and closing the driver door.
 - **If the parameter does not change**

Refer to **Door Ajar Indicator Malfunction**

- **If the parameter changes**
3. Verify the scan tool Keyless Entry Control Module Driver Door Open Switch parameter changes between Inactive and Active when opening and closing the driver door.
 - **If the parameter does not change**

Refer to Circuit/System Testing

- **If the parameter changes**
4. Verify the scan tool Body Control Module Passenger Door Ajar Switch parameter changes between Inactive and Active when opening and closing the passenger door.
 - **If the parameter does not change**

Refer to **Door Ajar Indicator Malfunction**

- **If the parameter changes**
5. Verify the scan tool Keyless Entry Control Module Passenger Door Open Switch parameter changes between Inactive and Active when opening and closing the passenger door.
 - **If the parameter does not change**

Refer to Circuit/System Testing

- **If the parameter changes**
6. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal listed below and ground:
 - A23D Door Latch Assembly-Driver - ground circuit terminal 8
 - A23P Door Latch Assembly-Passenger - ground circuit terminal 3
 - **If 10 ohms or greater**

2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Door Open Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K84 Keyless Entry Control Module.
 2. Test for infinite resistance between the signal circuit terminal listed below and ground:
 - A23D Door Latch Assembly-Driver - signal circuit terminal 7
 - A23P Door Latch Assembly-Passenger - signal circuit terminal 2
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K84 Keyless Entry Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal listed below and ground:
 - A23D Door Latch Assembly-Driver - signal circuit terminal 7
 - A23P Door Latch Assembly-Passenger - signal circuit terminal 2
6. Verify the scan tool Door Open Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.
 - **If Active**
7. Test or replace the A23 Door Latch Assembly.

Component Testing

Static Test

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. With the door in the closed position, test for infinite resistance between the signal terminal and the ground terminal listed below:
 - A23D Door Latch Assembly-Driver - signal circuit 7 and ground terminal 8
 - A23P Door Latch Assembly-Passenger - signal circuit 2 and ground terminal 3

- If not the specified value, replace the A23 Door Latch Assembly.
- 3. With the door in the open position, test for less than 5 ohms between the signal terminal and the ground terminal listed below:
 - A23D Door Latch Assembly-Driver - signal circuit 7 and ground terminal 8
 - A23P Door Latch Assembly-Passenger - signal circuit 2 and ground terminal 3
 - If greater than the specified range, replace the A23 Door Latch Assembly.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Front Side Door Latch Replacement**
- **Control Module References** for Keyless Entry Control Module replacement, programming and setup

DTC B3125, B3130 OR B3135: DRIVER DOOR ONLY UNLOCK/ALL DOORS LOCK/UNLOCK

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B3125

Driver Door Only Unlock Circuit

DTC B3130

All Doors Unlock Circuit

DTC B3135

All Doors Lock Circuit

For symptom byte information refer to: **Symptom Byte List**

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B3125 02,	B3125 02,	-	-

	B3135 02	B3135 02		
Driver Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	B3125 04, B3130 04, B3135 04	B3125 01, B3130 01, B3135 01	-
Driver Door Dead Lock Control	B3125 02, B3130 02, B3135 02	B3125 04, B3130 04, B3135 04	B3125 01, B3130 01, B3135 01	-
Passenger Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	B3125 04, B3130 04, B3135 04	B3125 01, B3130 01, B3135 01	-
Passenger Door Dead Lock Control	B3125 02, B3130 02, B3135 02	B3125 04, B3130 04, B3135 04	B3125 01, B3130 01, B3135 01	-

Circuit/System Description

Door latch assemblies each contain a reversible dead lock motor, each dead lock motor is controlled by 2 circuits; the dead lock control circuit and the dead lock unlock control circuit. To dead lock a door, the body control module (BCM) locks the door by momentarily energizing the door lock security relay. To complete the dead locking, the BCM momentarily applies voltage to the dead lock control circuit and ground to the door dead lock relay control circuit and the door latches will then dead lock.

To restore the interior door handle functions, the BCM uses the same circuit as the normal door unlocking system and the dead locks will unlatch with the rest of the door locks.

Conditions for Running the DTC

Ignition ON.

Conditions for Setting the DTC

B3125 01, B3130 01, B3135 01

The BCM detects a short to battery on a door latch control circuit

B3125 02, B3130 02 and B3135 02

- A short to ground or an open/high resistance in the BCM B+ circuit.
- The BCM detects a short to ground on a door latch control circuit.

B3125 04, B3130 04, B3135 04

The BCM detects an open/high resistance on all door latch control circuits

Action Taken When the DTC Sets

All the power door deadlocks will be inoperative.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the interior door handles do not open the doors when commanding the Door Dead Lock to Lock with a scan tool.
 - **If both interior door handles open the doors**

Refer to Circuit/System Testing.
 - **If both interior door handles do not open the doors**
3. Verify the interior door handles will open the doors when commanding the Door Dead Lock to Unlock with a scan tool.

- **If both interior door handles do not open the doors**

Refer to Circuit/System Testing.

- **If both interior door handles open the doors**

4. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.
 - **If the test lamp does not illuminate and the circuit fuse is good**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the B+ circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, verify the fuse is not open and there is voltage at the fuse.
 - **If the test lamp does not illuminate and the circuit fuse is open**
 1. Ignition OFF.
 2. Test for infinite resistance between the B+ circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Disconnect the harness connector at each A23 Door Latch Assembly and the M97 Fuel Door Lock Actuator.
 4. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the appropriate A23 Door Latch Assembly or M97 Fuel Door Lock Actuator.
 - **If the test lamp illuminates**
3. Ignition OFF, connect the X2 harness connector at the K9 Body Control Module. Disconnect the harness connector at the M97 Fuel Door Lock Actuator, ignition ON.

NOTE: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

4. Test for greater than 7 V between the control circuit terminal 2 and ground.
 - **If 7 V or less**
 1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.

- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance
- 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance on the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If greater than 7 V**

NOTE: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the door lock switch to restore the voltage for testing.

5. Test for greater than 7 V between the control circuit terminal 1 and ground.
 - **If 7 V or less**
 1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay and disconnect the X6 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit terminals listed below and ground:
 - KR114 Door Dead Lock Relay. - control circuit terminal 30
 - KR114 Door Dead Lock Relay. - control circuit terminal 87A
 - K9 Body Control Module - control circuit terminal 1 X6
 - K9 Body Control Module - control circuit terminal 4 X6
 - If less than infinite resistance, repair the short to ground on the circuit.
 3. Connect the KR114 Door Dead Lock Relay.
 4. Test for infinite resistance between the K9 Body Control Module control circuit terminal 1 X6 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, test or replace the KR114 Door Dead Lock Relay.
 - **If greater than 7 V**
6. Replace the K9 Body Control Module.

Component Testing

Door Latch Test

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the A23 Door Latch Assembly should perform the LOCK and UNLOCK function.
 - **If the actuator does not perform the LOCK and UNLOCK function**

Replace the A23 Door Latch Assembly.

- **If the actuator performs the LOCK and UNLOCK function**

3. All OK

Relay Test

1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay.
2. Test for 60-180 ohms between terminals 85 and 86.

- **If less than 60 ohms or greater than 180 ohms**

Replace the KR114 Door Dead Lock Relay.

- **If between 60-180 ohms**

3. Test for infinite resistance between the terminals listed below:

- 30 and 86
- 30 and 87
- 30 and 85
- 85 and 87

- **If less than infinite resistance**

Replace the KR114 Door Dead Lock Relay.

- **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 85 and 12 V. Install a jumper wire between relay terminal 86 and ground.
5. Test for less than 2 ohms between terminals 30 and 87.

- **If 2 ohms or greater**

Replace the KR114 Door Dead Lock Relay.

- **If less than 2 ohms**

6. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Fuel Tank Filler Door Lock Actuator Replacement**
- **Front Side Door Latch Replacement**
- **Relay Replacement (Within an Electrical Center) , Relay Replacement (Attached to Wire Harness)**
- **Control Module References** for BCM replacement. programming and setup

DTC B313A OR B313B: DOOR LOCK STATUS INDICATOR

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category

DTC Descriptors

DTC B313A

Driver Door Lock Status Indicator Control Circuit

DTC B313B

Passenger Door Lock Status Indicator Control Circuit

For symptom byte information refer to: **Symptom Byte List**

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
LED Indicator Dimming Control	1, 2	1, 2	-	-
Driver Door Lock Indicator Low Reference	B313A 02	B313A 04	B313A 01	-
Passenger Door Lock Indicator Low Reference	B313B 02	B313B 04	B313B 01	-
1. Driver Door Lock Indicator Always OFF 2. Passenger Door Lock Indicator Always OFF				

Circuit/System Description

The body control module monitors the status of the door lock system, when the body control module detects that the doors have been commanded to lock, it will provide 12V to the door lock indicators which are part of the driver and passenger door lock switches and when the doors have been commanded to unlock, the body control module will remove the voltage to the door lock indicators

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

B313A 01 or B313B 01

The BCM detects short to battery in the door lock indicator circuit for greater than 30 seconds.

B313A 02 or B313B 02

The BCM detects a short to ground in the door lock indicator circuit for greater than 30 seconds.

B313A 04 or B313B 04

The BCM detects an open in the door lock indicator circuit for greater than 30 seconds.

Action Taken When the DTC Sets

B313A 01 or B313B 01

The door lock indicators will always be ON

B313A 02, B313A 04, B313B 02 or B313B 04

The door lock indicators will always be OFF

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**

- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the door lock indicator turns ON and OFF when commanding the All Doors Lock/Unlock with a scan tool.
 - **If the door lock indicator is always ON or always OFF**

Refer to Circuit/System Testing

- **If the door lock indicator turns ON and OFF**
3. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the S13D Door Lock Switch-Driver and the S13P Door Lock Switch-Passenger. Ignition ON
2. Connect a test lamp between the control circuit terminal 5 and ground.
3. Verify the test lamp turns ON when using the S36 Instrument Panel Dimmer Switch to it's maximum setting.
 - **If the test lamp is OFF**
 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is ON**
4. Connect a test lamp between the control circuit terminal 6 and B+.
5. Verify the test lamp turns ON and OFF when commanding the All Doors Lock/Unlock with a scan tool.
 - **If the test lamp is always OFF**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

2. Test for less than 2 ohms in the control circuit end to end.

- If 2 ohms or greater, repair the open/high resistance in the circuit.
- If less than 2 ohms, replace the K9 Body Control Module.

○ **If the test lamp is always ON**

1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module

○ **If the test lamp turns ON and OFF**

6. Test or replace the S13 Door Lock Switch

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Door Lock Switch Replacement - Driver Side**
- **Door Lock Switch Replacement - Passenger Front**
- **Control Module References** for body control module replacement, setup and programming

DTC B3140, B3145, B3150 OR B3155: DOOR LOCK/UNLOCK SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptors

DTC B3140 00

Driver Door Unlock Switch Circuit

DTC B3145 00

Passenger Door Unlock Switch Circuit

DTC B3150 00

Driver Front Door Lock Switch Circuit

DTC B3155 00

Passenger Front Door Lock Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Lock Switch Lock Signal	B3150 00	2	2	-
Driver Door Lock Switch Unlock Signal	B3140 00	3	3	-
Driver Door Lock Switch Ground	-	1	-	-
Passenger Door Lock Switch Lock Signal	B3155 00	4	4	-
Passenger Door Lock Switch Unlock Signal	B3145 00	5	5	-
Passenger Door Lock Switch Ground	-	6	-	-
1. Driver Door Lock Switch Inoperative 2. Driver Door Lock Switch Lock Inoperative 3. Driver Door Lock Switch Unlock Inoperative 4. Passenger Door Lock Switch Lock Inoperative 5. Passenger Door Lock Switch Unlock Inoperative 6. Passenger Door Lock Switch Inoperative				

Circuit/System Description

The body control module (BCM) monitors the voltage level of the door lock and door unlock signal circuits. When the driver door lock switch is in the open position, the voltage level in the signal circuit will be near 12 V. When the driver door lock switch is pressed to the lock or unlock position, the voltage level in the appropriate signal circuit will drop to 0 V and the BCM will detect the voltage drop and command the door latches to perform the requested lock or unlock command.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

B3140 00

The BCM detects short to ground in the driver lock signal circuit for greater than 60 seconds.

B3145 00

The BCM detects short to ground in the passenger unlock signal circuit for greater than 60 seconds.

B3150 00

The BCM detects a short to ground in the driver lock signal circuit for greater than 60 seconds.

B3155 00

The BCM detects a short to ground in the passenger lock signal circuit for greater than 60 seconds.

Action Taken When the DTC Sets

B3140 00

The BCM will ignore the unlock signal and the doors will not unlock when using the driver door unlock switch.

B3145 00

The BCM will ignore the unlock signal and the doors will not unlock when using the passenger door unlock switch.

B3150 00

The BCM will ignore the lock signal and the doors will not lock when using the driver door lock switch.

B3155 00

The BCM will ignore the lock signal and the doors will not lock when using the passenger door lock switch.

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Driver Door Lock Switch parameter changes from Inactive to Lock and Unlock when pressing the S13D Door Lock Switch-Driver.
 - **If the parameter does not change**

Refer to Circuit/System Testing.
 - **If the parameter changes**
3. Verify the scan tool Passenger Door Lock Switch parameter changes from Inactive to Lock and Unlock when pressing the S13P Door Lock Switch-Passenger.
 - **If the parameter does not change**

Refer to Circuit/System Testing.
 - **If the parameter changes**
4. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate S13 Door Lock Switch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 4 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**

3. Ignition ON.
4. Verify the scan tool Door Lock Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 3 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 3. Test for infinite resistance between the signal circuit terminal 2 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 3 and the ground circuit terminal 4.
6. Verify the scan tool Door Lock Switch parameter is Unlock.
 - **If not Unlock**
 1. Ignition OFF, remove the fused jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Unlock**
7. Install a 3 A fused jumper wire between the signal circuit terminal 2 and the ground circuit terminal 4.
8. Verify the scan tool Door Lock Switch parameter is Lock.
 - **If not Lock**
 1. Ignition OFF, remove the fused jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Lock**
9. Test or replace the S13 Door Lock Switch.

Door Lock Switch

1. Ignition OFF, disconnect the harness connector at the appropriate S13 Door Lock Switch.
2. Test for infinite resistance between the signal terminal 2 and the ground terminal 4 with the switch in the open position.

- **If less than infinite resistance**

Replace the S13 Door Lock Switch.

- **If infinite resistance**

3. Test for infinite resistance between the signal terminal 3 and the ground terminal 4 with the switch in the open position.

- **If less than infinite resistance**

Replace the S13 Door Lock Switch

- **If infinite resistance**

4. Test for less than 2 ohms between the signal terminal 2 and the ground terminal 4 with the switch in the Lock position.

- **If 2 ohms or greater**

Replace the S13 Door Lock Switch.

- **If less than 2 ohms**

5. Test for less than 2 ohms between the signal terminal 3 and the ground terminal 4 with the switch in the Unlock position.

- **If 2 ohms or greater**

Replace the S13 Door Lock Switch.

- **If less than 2 ohms**

6. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Door Lock Switch Replacement - Driver Side**
- **Door Lock Switch Replacement - Passenger Front**
- **Control Module References** for BCM replacement, programming and setup

DTC B3265: TRUNK LID UNLATCH

Diagnostic Instructions

- Perform the prior to **Diagnostic System Check - Vehicle** using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptor

DTC B3265

Trunk Lid Unlatch Output Circuit

For symptom byte information, refer to **Symptom Byte List** .

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B3265 02	B3265 04	B3265 01	-
Ground	-	B3265 04	-	-

Circuit/System Description

The body control module applies battery positive voltage to the rear compartment lid unlatch relay control circuit which energizes the coil side of the relay. The switch side of the relay then closes, supplying battery positive voltage to the control circuit of the rear compartment lid latch. The rear compartment lid latch then releases the rear compartment lid so that it may be manually raised to an open position.

Conditions for Running the DTC

When the rear compartment lid latch release is actively being requested by the body control module.

Conditions for Setting the DTC

B3265 01

The body control module detects a short to voltage on the rear compartment lid release relay control circuit.

B3265 02

The body control module detects a short to ground on the rear compartment lid release relay control circuit.

B3265 04

The body control module detects an open/high resistance on the rear compartment lid release relay

control circuit or an open/high resistance on the relay ground circuit.

Action Taken When the DTC Sets

The body control module will command the rear compartment lid unlatch relay, but the rear compartment latch will not operate.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Luggage Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the M40 Rear Compartment Lid Latch functions when commanding the Rear Body Unlatch with a scan tool.
 - **If the M40 Rear Compartment Lid Latch does not function**

- **If the M40 Rear Compartment Lid Latch does function**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the X1 harness connector at the X53A Fuse Block-Rear Body. It may take up to 2 minutes for all vehicle systems to power down
2. Test for less than 10 ohms between the ground circuit terminal 27 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition OFF, connect the X1 harness connector at the X53A Fuse Block-Rear Body. Disconnect the X5 harness connector at the K9 Body Control Module, ignition ON.
4. Verify the M40 Rear Compartment Lid Latch is not activated.
 - **If the M40 Rear Compartment Lid Latch is activated**
 1. Ignition OFF, disconnect the X2 harness connector at the X53A Fuse Block-Rear Body.
 2. Test for less than 1 V between the K9 Body Control Module control circuit terminal 11 X5 and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the X53A Fuse Block-Rear Body.
 - **If the M40 Rear Compartment Lid Latch is not activated**
5. Connect a 3 A fused jumper wire between the control circuit terminal 11 and B+.
6. Verify the M40 Rear Compartment Lid Latch activates.
 - **If the M40 Rear Compartment Lid Latch does not activate**
 1. Ignition OFF, remove the jumper wire, disconnect the X2 harness connector at the X53A Fuse Block-Rear Body, ignition ON.
 2. Test for infinite resistance between the K9 Body Control Module control circuit terminal 11 X5 and ground
 - If less than Infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the X53A Fuse Block-Rear Body.
 - **If the M40 Rear Compartment Lid Latch activates**
7. Replace the K9 Body Control Module.

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Rear Body Fuse Block Replacement**
- **Control Module References** for body control module replacement, programming and setup

DTC B3618: EXTERIOR LIFTGATE UNLATCH SWITCH

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptor

DTC B3618 00

Exterior Liftgate Unlatch Switch Circuit Malfunction

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B3618 00	1	1	-
Ground	-	1	-	-
1. Exterior Rear Compartment Lid Release Switch Inoperative				

Circuit/System Description

When the ignition is ON, the body control module (BCM) supplies a 12 V signal to the rear compartment lid unlatch switch through the trunk release switch signal circuit. When the exterior rear compartment lid release switch is pressed, the voltage within the signal circuit is pulled low and in response, the BCM will energize the trunk release relay.

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

The BCM detects a short to ground in the rear compartment lid release switch signal circuit for greater than 60 seconds

Action Taken When the DTC Sets

The BCM ignores the input from the rear compartment lid unlatch switch.

Conditions for Clearing the DTC

- This DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

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Description and Operation

Luggage Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the S58A Rear Compartment Lid Unlatch Switch-Exterior.
 - **If the parameter does not change**

Refer to Circuit/System Testing.
 - **If the parameter changes**
3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 2 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 1 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Active**
7. Test or replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

- **If infinite resistance**

3. Test for less than 3 ohms between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.

- **If 3 ohms or greater**

Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

- **If less than 3 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Rear Compartment Lid Release Switch Replacement**
- **Control Module References** for BCM replacement, programming and setup

DTC B3797: ALL DOOR DEAD LOCK CIRCUIT

Diagnostic Instructions

- Perform the prior to **Diagnostic System Check - Vehicle** using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

DTC Descriptor

DTC B3797 02

All Door Dead Lock Circuit Short to Ground

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B3797 02	1	1	-
Ground	-	1	-	-
1. Door Dead Lock Malfunction				

Circuit/System Description

Door latch assemblies each contain a reversible dead lock motor, each dead lock motor is controlled by 2 circuits; the dead lock control circuit and the dead lock unlock control circuit. To dead lock a

door, the Body Control Module (BCM) locks the door by momentarily energizing the door lock security relay. To complete the dead locking, the BCM momentarily applies voltage to the dead lock control circuit and ground to the door lock relay control circuit and the door latches will then dead lock.

To undead lock the door, the BCM uses the same circuit as the normal door unlocking system and the dead locks will unlatch with the rest of the door locks.

Conditions for Running the DTC

When the BCM commands the door dead lock.

Conditions for Setting the DTC

The BCM detects a short to ground in the door lock relay control circuit.

Action Taken When the DTC Sets

The interior door handles will always be active or always disabled depending upon the latch states when the fault occurred

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

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Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the interior door handles do not open the doors when commanding the Door Dead Lock to LOCK with a scan tool.
 - **If all interior door handles open the doors**

Refer to Circuit/System Testing

- **If all interior door handles do not open the doors**
3. Verify the interior door handles will open the doors when commanding the Door Dead Lock to UNLOCK with a scan tool.
 - **If all interior door handles do not open the doors**

Refer to Circuit/System Testing

- **If all interior door handles open the doors**
4. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the KR114 Door Dead Lock Relay. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 86 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Connect a test lamp between the control circuit terminal 85 and the ground circuit terminal 86.
4. Verify the test lamp turns ON and OFF when commanding the Door Dead Lock ON and OFF with a scan tool.
 - **If the test lamp is always OFF**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.

- If infinite resistance
- 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is always ON**
- 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, Ignition ON.
- 2. Test for less than 1 V between the control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp turns ON and OFF**
- 5. Test or replace the KR114 Door Dead Lock Relay.

Component Testing

Relay Test

1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay.
2. Test for 60-200 ohms between terminals 85 and 86.
 - **If less than 60 ohms or greater than 200 ohms**

Replace the KR114 Door Dead Lock Relay.

- **If between 60-200 ohms**

3. Test for infinite resistance between the terminals listed below:
 - 30 and 86
 - 30 and 87
 - 30 and 85
 - 85 and 87
 - **If less than infinite resistance**

Replace the KR114 Door Dead Lock Relay.

- **If infinite resistance**

4. Test for less than 3 ohms between terminals 30 and 87A.
 - **If 3 ohms or greater**

Replace the KR114 Door Dead Lock Relay.

- **If less than 3 ohms**

5. Install a 3 A fused jumper wire between relay terminal 85 and 12 V. Install a jumper wire

between relay terminal 86 and ground.

6. Test for less than 5 ohms between terminals 30 and 87.

- **If 5 ohms or greater**

Replace the KR114 Door Dead Lock Relay.

- **If less than 5 ohms**

7. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Relay Replacement (Within an Electrical Center)** , **Relay Replacement (Attached to Wire Harness)**
- **Control Module References** for BCM replacement, setup and programming

SYMPTOMS - VEHICLE ACCESS

NOTE: **The following steps must be completed before using the symptom tables.**

1. Perform the **Diagnostic System Check - Vehicle** , before using the Symptom Tables in order to verify that all of the following are true:
 - There are no DTCs set
 - The control modules can communicate via the serial data link
2. Review the system operation in order to familiarize yourself with the system functions. Refer to the following systems description:
 - **Door Ajar Indicator Description and Operation**
 - **Fuel Fill Door Description and Operation**
 - **Luggage Compartment Description and Operation**
 - **Power Door Locks Description and Operation**

Visual/Physical Inspection

- Inspect for aftermarket devices which may affect the operation of the system. Refer to **Checking Aftermarket Accessories** .
- Inspect the easily accessible or visible system components for obvious damage or conditions which may cause the symptom.

Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to **Testing for Intermittent Conditions and Poor Connections** .

Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- **Door Lock Indicator Malfunction**
- **Fuel Filler Door Release Malfunction (Without AF8), Fuel Filler Door Release Malfunction (With AF8)**
- **Door Ajar Indicator Malfunction**
- **Power Door Dead Lock Malfunction**
- **Power Door Locks Malfunction**
- **Trunk Release Malfunction**
- **Trunk Ajar Indicator Malfunction**

DOOR LOCK INDICATOR MALFUNCTION

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category

DTC Descriptors

DTC B313A

Driver Door Lock Status Indicator Control Circuit

DTC B313B

Passenger Door Lock Status Indicator Control Circuit

For symptom byte information refer to: **Symptom Byte List**

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
LED Indicator Dimming Control	1, 2	1, 2	-	-
Driver Door Lock Indicator Low Reference	B313A 02	B313A 04	B313A 01	-
Passenger Door Lock Indicator Low Reference	B313B 02	B313B 04	B313B 01	-
1. Driver Door Lock Indicator Always OFF				

Circuit/System Description

The body control module monitors the status of the door lock system, when the body control module detects that the doors have been commanded to lock, it will provide 12V to the door lock indicators which are part of the driver and passenger door lock switches and when the doors have been commanded to unlock, the body control module will remove the voltage to the door lock indicators

Conditions for Running the DTC

The system voltage is 9-16 V.

Conditions for Setting the DTC

B313A 01 or B313B 01

The BCM detects short to battery in the door lock indicator circuit for greater than 30 seconds.

B313A 02 or B313B 02

The BCM detects a short to ground in the door lock indicator circuit for greater than 30 seconds.

B313A 04 or B313B 04

The BCM detects an open in the door lock indicator circuit for greater than 30 seconds.

Action Taken When the DTC Sets

B313A 01 or B313B 01

The door lock indicators will always be ON

B313A 02, B313A 04, B313B 02 or B313B 04

The door lock indicators will always be OFF

Conditions for Clearing the DTC

- The DTC will be current for as long as the fault is present.
- When the fault is no longer present, the DTC will be a history DTC.
- A history DTC will clear after 50 ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the door lock indicator turns ON and OFF when commanding the All Doors Lock/Unlock with a scan tool.
 - **If the door lock indicator is always ON or always OFF**

Refer to Circuit/System Testing

- **If the door lock indicator turns ON and OFF**
3. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the S13D Door Lock Switch-Driver and the S13P Door Lock Switch-Passenger. Ignition ON
2. Connect a test lamp between the control circuit terminal 5 and ground.
3. Verify the test lamp turns ON when using the S36 Instrument Panel Dimmer Switch to it's maximum setting.
 - **If the test lamp is OFF**
 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance

3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is ON**
4. Connect a test lamp between the control circuit terminal 6 and B+.
5. Verify the test lamp turns ON and OFF when commanding the All Doors Lock/Unlock with a scan tool.
 - **If the test lamp is always OFF**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
 2. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module
 - **If the test lamp turns ON and OFF**
6. Test or replace the S13 Door Lock Switch

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Door Lock Switch Replacement - Driver Side**
- **Door Lock Switch Replacement - Passenger Front**
- **Control Module References** for body control module replacement, setup and programming

FUEL FILLER DOOR RELEASE MALFUNCTION (WITHOUT AF8)

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

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Circuit	Ground	Resistance	Voltage	Performance
Control Terminal 1	B3125 02. B3130 02, B3135 02	1	B3125 01. B3130 01, B3135 01	-
Control Terminal 2	B3125 02. B3130 02, B3135 02	1	B3125 01. B3130 01, B3135 01	-
1. Fuel Door Release Inoperative				

Circuit/System Description

The locking and unlocking of the fuel door is a function of the power door lock system. The fuel door lock actuator shares the circuit with the door latch unlock control circuit. The body control module (BCM), upon receipt of a lock switch lock or unlock signal, will switch the appropriate door latch, as well as a fuel filler door unlatch actuator control circuits to B+ voltage. The opposing side of the door latch and fuel filler door unlatch actuator is connected to ground provided by the BCM through the other the door latch control circuits, along with the fuel filler door unlatch actuator, will lock or unlock as commanded.

Diagnostic Aids

Vehicles equipped with the Passive Keyless Entry system will passively lock all doors and the fuel door 8 seconds after the customer exits and leaves the vehicle (as may occur for gasoline stations requiring prepayment before refueling). The customer returning to the vehicle may not be aware that this a normal function and will discover the fuel door is locked and cannot be opened.

Verify the customer has been instructed and fully understands the functions of the Passive Keyless Entry system.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Fuel Fill Door Description and Operation

Electrical Information Reference

- Circuit Testing

- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the M97 Fuel Door Lock Actuator does not release the fuel filler door when commanding the All Doors Lock/Unlock to Lock with a scan tool.
 - **If the M97 Fuel Door Lock Actuator releases the fuel filler door**

Refer to Circuit/System Testing.

- **If the M97 Fuel Door Lock Actuator does not release the fuel filler door**
3. Verify the M97 Fuel Door Lock Actuator releases the fuel filler door when commanding the All Doors Lock/Unlock to Unlock with a scan tool.
 - **If the M97 Fuel Door Lock Actuator does not release the fuel filler door**

Refer to Circuit/System Testing.

- **If the M97 Fuel Door Lock Actuator releases the fuel filler door**
4. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the M97 Fuel Door Lock Actuator.
2. Connect a test lamp between the control circuit terminal 1 and control circuit terminal 2, ignition ON.
3. Verify the test lamp turns ON when commanding the All Doors Lock/Unlock with a scan tool.
 - **If the test lamp remains OFF during either of the commands**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 3. Test for less than 2 ohms in each control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp turns ON during each of the commands**
4. Test or replace the M97 Fuel Door Lock Actuator.

Component Testing

Fuel Door Latch Assembly

1. Ignition OFF, disconnect the harness connector at the M97 Fuel Door Lock Actuator.
2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the M97 Fuel Door Lock Actuator should perform the LOCK and UNLOCK function.

- If the actuator does not perform the LOCK and UNLOCK function

Replace the M97 Fuel Door Lock Actuator.

- If the actuator performs the LOCK and UNLOCK function

3. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

Fuel Tank Filler Door Lock Actuator Replacement

FUEL FILLER DOOR RELEASE MALFUNCTION (WITH AF8)

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control Terminal 1	B3125 02. B3130 02, B3135 02	1	B3125 01. B3130 01, B3135 01	-
Control Terminal 2	B3125 02. B3130 02, B3135 02	1	B3125 01. B3130 01, B3135 01	-
1. Fuel Door Release Inoperative				

Circuit/System Description

The locking and unlocking of the fuel door is a function of the power door lock system. The fuel door

which is switched through the fuel door relay. The fuel door relay coil is controlled by the body control module (BCM). When the vehicles doors are unlocked, the BCM will respond by applying voltage to the fuel door relay coil control circuit. This energizes the coil causing the switch contacts to close. With the switch contacts closed, the driver door unlock circuit supplies voltage and ground to each control circuit of the fuel door release actuator, unlocking the fuel door.

Diagnostic Aids

Vehicles equipped with the Passive Keyless Entry system will passively lock all doors and the fuel door 8 seconds after the customer exits and leaves the vehicle (as may occur for gasoline stations requiring prepayment before refueling). The customer returning to the vehicle may not be aware that this a normal function and will discover the fuel door is locked and cannot be opened.

Verify the customer has been instructed and fully understands the functions of the Passive Keyless Entry system.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Fuel Fill Door Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the M97 Fuel Door Lock Actuator does not release the fuel filler door when commanding the All Doors Lock/Unlock to Lock with a scan tool.

- **If the M97 Fuel Door Lock Actuator releases the fuel filler door**

Refer to Circuit/System Testing.

- **If the M97 Fuel Door Lock Actuator does not release the fuel filler door**

3. Verify the M97 Fuel Door Lock Actuator releases the fuel filler door when commanding the All Doors Lock/Unlock to Unlock with a scan tool.

- **If the M97 Fuel Door Lock Actuator does not release the fuel filler door**

Refer to Circuit/System Testing.

- **If the M97 Fuel Door Lock Actuator releases the fuel filler door**

4. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay, ignition ON.

NOTE: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the central door lock switch to restore the voltage for testing.

2. Test for greater than 6 V between the control circuit terminal 30 and ground.

- **If 6 V or less**

1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.
2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance

3. Test for less than 2 ohms in the control circuit end to end.

- If 2 ohms or greater, repair the open/high resistance on the circuit.
- If less than 2 ohms, replace the K9 Body Control Module.

- **If greater than 6 V**

3. Ignition OFF, connect the KR114 Door Dead Lock Relay and disconnect the harness connector at the M97 Fuel Door Lock Actuator, ignition ON.

NOTE: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the central door lock switch to restore the voltage for testing.

4. Test for greater than 6 V between the control circuit terminal 1 and ground.
 - **If 6 V or less**
 1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance on the circuit.
 - If less than 2 ohms, test or replace the KR114 Door Dead Lock Relay.
 - **If greater than 6 V**

NOTE: Leaving the DMM connected between a control circuit and ground for greater than 20 seconds will cause the K9 Body Control Module to interpret the test as a system fault and will cause the voltage on the control circuit to drop to 0 V. If the voltage drops to 0 V, operate the door locks using the central door lock switch to restore the voltage for testing.

5. Test for greater than 6 V between the control circuit terminal 2 and ground.
 - **If 6 V or less**
 1. Ignition OFF, disconnect the X6 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance on the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If greater than 6 V**
6. Test or replace the M97 Fuel Door Lock Actuator.

Component Testing

1. Ignition OFF, disconnect the harness connector at the M97 Fuel Door Lock Actuator.
2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the M97 Fuel Door Lock Actuator should perform the LOCK and UNLOCK function.
 - **If the actuator does not perform the LOCK and UNLOCK function**

Replace the M97 Fuel Door Lock Actuator.
 - **If the actuator performs the LOCK and UNLOCK function**

3. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Relay Replacement (Within an Electrical Center)** , **Relay Replacement (Attached to Wire Harness)**
- **Fuel Tank Filler Door Lock Actuator Replacement**
- **Control Module References** for BCM replacement, programming and setup

DOOR AJAR INDICATOR MALFUNCTION

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Ajar Switch Signal	1	2	2	-
Right Front Door Ajar Switch Signal	1	3	3	-
Driver Door Latch Ground	-	2	-	-
Passenger Door Latch Ground	-	3	-	-
1. Ajar indicator always illuminated 2. Ajar indicator inoperative when driver door is open 3. Ajar indicator inoperative when passenger door is open				

Circuit/System Description

The driver and passenger window motor will supply a 12 V signal to the their respective door ajar switch signal circuits. The door ajar switches are integral to each door latch assembly. When a door is opened, the normally open door ajar switch closes. With the door ajar switch closed, ground is provided to the door ajar switch signal circuit. The window motor will detect the voltage drop and will communicate the door ajar via serial data with the instrument panel cluster which will display the appropriate door ajar message.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Door Ajar Indicator Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Driver Door Ajar Switch parameter changes between Inactive and Active when opening and closing the driver door.
 - **If the parameter does not change**

Refer to Circuit/System Testing - Driver Door Ajar Switch Malfunction.

- **If the parameter changes**
3. Verify the scan tool Passenger Door Ajar Switch parameter changes between Inactive and Active when opening and closing the passenger door.
 - **If the parameter does not change**

Refer to Circuit/System Testing - Passenger Door Ajar Switch Malfunction.

- **If the parameter changes**
4. All OK.

Circuit/System Testing

Driver Door Ajar Switch Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the A23D Door Latch Assembly - Driver. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 8 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Driver Door Ajar Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the M74D Window Motor - Driver.
 2. Test for infinite resistance between the signal circuit terminal 6 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the M74D Window Motor - Driver.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 6 and the ground circuit terminal 8.
6. Verify the scan tool Driver Door Ajar Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the 3 A fused jumper wire, disconnect the harness connector at the M74D Window Motor - Driver, Ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the M74D Window Motor - Driver.
 - **If Active**
7. Test or replace the A23D Door Latch Assembly - Driver.

Passenger Door Ajar Switch Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the A23P Door Latch Assembly - Passenger. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 3 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.

2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Passenger Door Ajar Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the M74P Window Motor - Passenger.
 2. Test for infinite resistance between the signal circuit terminal 1 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the M74P Window Motor - Passenger.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 3.
6. Verify the scan tool Passenger Door Ajar Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the 3 A fused jumper wire, disconnect the harness connector at the M74P Window Motor - Passenger, Ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the M74P Window Motor - Passenger.
 - **If Active**
7. Test or replace the A23P Door Latch Assembly - Passenger.

Component Testing

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. Test for infinite resistance between the terminals listed below with the switch in the open position.
 - A23D Door Latch Assembly - Driver signal terminal 6 and ground terminal 8
 - A23P Door Latch Assembly - Passenger signal terminal 1 and ground terminal 3
 - **If less than infinite resistance**

Replace the A23 Door Latch Assembly.
 - **If infinite resistance**

position.

- A23D Door Latch Assembly - Driver signal terminal 6 and ground terminal 8
- A23P Door Latch Assembly - Passenger signal terminal 1 and ground terminal 3
- **If 5 ohms or greater**

Replace the A23 Door Latch Assembly.

- **If less than 5 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Front Side Door Latch Replacement**
- **Front Side Door Window Regulator Motor Replacement**

POWER DOOR DEAD LOCK MALFUNCTION

Diagnostic Instructions

- Perform the prior to **Diagnostic System Check - Vehicle** using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	1	1	-
Driver Door Dead Lock Control	B3125 02, B3130 02, B3135 02	1	1	-
Door Lock Relay Control	B3797 02	1, 2	1, 2	-
Passenger Door Latch Unlock Control	B3125 02, B3130 02, B3135 02	2	2	-
Passenger Door Dead Lock Control	B3125 02, B3130 02, B3135 02	2	2	-
Door Lock Relay Ground	-	1, 2	-	-

2. Passenger Door Latch Dead Lock Malfunction

Circuit/System Description

Door latch assemblies each contain a reversible dead lock motor, each dead lock motor is controlled by 2 circuits; the dead lock control circuit and the dead lock unlock control circuit. To dead lock a door, the body control module (BCM) locks the door by momentarily energizing the door lock security relay. To complete the dead locking, the BCM momentarily applies voltage to the dead lock control circuit and ground to the door lock relay control circuit and the door latches will then dead lock.

To restore the interior door handle functions, the BCM uses the same circuit as the normal door unlocking system and the dead locks will unlatch with the rest of the door locks.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the interior door handles do not open the doors when commanding the Door Dead Lock to Lock with a scan tool.
 - **If both interior door handles open the doors**

- **If a single interior door handle opens the door**

Refer to Circuit/System Testing - Single Door Security Lockout Malfunction.

- **If both interior door handles do not open the doors**

3. Verify the interior door handles will open the doors when commanding the Door Dead Lock to Unlock with a scan tool.

- **If both interior door handles do not open the doors**

Refer to Circuit/System Testing - Security Lockout Inoperative.

- **If a single interior door handle does not open the door**

Refer to Circuit/System Testing - Single Door Security Lockout Malfunction.

- **If both interior door handles open the doors**

4. All OK.

Circuit/System Testing

Security Lockout Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the KR114 Door Dead Lock Relay. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 85 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Connect a test lamp between the control circuit terminal 86 and the ground circuit terminal 85. Ignition ON
4. Verify the test lamp turns ON and OFF when commanding the Door Dead Lock to Lock and Unlock with a scan tool.
 - **If the test lamp is always OFF**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.

- If less than 2 ohms, replace the K9 Body Control Module.
- **If the test lamp is always ON**
- 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, Ignition ON.
- 2. Test for less than 1 V between the control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
- **If the test lamp turns ON and OFF**
- 5. Test or replace the KR114 Door Dead Lock Relay.

Single Door Security Lockout Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
2. Connect a test lamp between control circuit terminals listed below, ignition ON.
 - A23D Door Latch Assembly-Driver - control circuit terminal 1 and control circuit terminal 2
 - A23P Door Latch Assembly-Passenger - control circuit terminal 6 and control circuit terminal 7
3. Verify the test lamp turns ON and OFF when commanding the Door Dead Lock to LOCK and UNLOCK with a scan tool.
 - **If the test lamp remains OFF during either of the commands**
 - 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 - 2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If the test lamp turns ON during each of the commands**
4. Test or replace the A23 Door Latch Assembly.

Component Testing

Door Latch Assembly

1. Ignition OFF, disconnect the harness connector at the appropriate A23 Door Latch Assembly.
 2. Install a 25 A fused jumper wire between one of the control terminals and 12 V. Momentarily install a jumper wire between the other control terminal and ground. Reverse the jumper wires at least two times, the A23 Door Latch Assembly should perform the LOCK and UNLOCK function.
 - **If the actuator does not perform the LOCK and UNLOCK function**
- Replace the A23 Door Latch Assembly.

3. All OK

Relay Test

1. Ignition OFF, disconnect the KR114 Door Dead Lock Relay.
2. Test for 60-200 ohms between terminals 85 and 86.

- **If less than 60 ohms or greater than 200 ohms**

Replace the KR114 Door Dead Lock Relay.

- **If between 60-200 ohms**

3. Test for infinite resistance between the terminals listed below:

- 30 and 86
- 30 and 87
- 30 and 85
- 85 and 87

- **If less than infinite resistance**

Replace the KR114 Door Dead Lock Relay.

- **If infinite resistance**

4. Test for less than 3 ohms between terminals 30 and 87A.

- **If 3 ohms or greater**

Replace the KR114 Door Dead Lock Relay.

- **If less than 3 ohms**

5. Install a 3 A fused jumper wire between relay terminal 85 and 12 V. Install a jumper wire between relay terminal 86 and ground.

6. Test for less than 5 ohms between terminals 30 and 87.

- **If 5 ohms or greater**

Replace the KR114 Door Dead Lock Relay.

- **If less than 5 ohms**

7. All OK

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement (Within an Electrical Center) , Relay Replacement (Attached to Wire Harness)

- **Front Side Door Latch Replacement**
- **Control Module References** for BCM replacement, programming and setup

POWER DOOR LOCKS MALFUNCTION

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Lock Switch Lock Signal	B3150 00	2	2	-
Driver Door Lock Switch Unlock Signal	B3140 00	3	3	-
Driver Door Lock Switch Ground	-	1	-	-
Passenger Door Lock Switch Lock Signal	B3155 00	4	4	-
Passenger Door Lock Switch Unlock Signal	B3145 00	5	5	-
Passenger Door Lock Switch Ground	-	6	-	-
Driver Door Handle Switch Signal	B3849 02	1	1	-
Driver Door Handle Lock Signal	B2516 00	1	1	-
Passenger Door Handle Switch Signal	B1474 02	1	1	-
Passenger Door Handle Lock Signal	B3155 00	1	1	-
Driver Door Latch Control	B250B 02, B251B 02	2	B250B 01	-
Passenger Door Latch Control	B251A 02, B251C 02	2	B251A 01	-
Driver Door Handle Switch Ground	-	1	-	-
Passenger Door Handle Switch Ground	-	1	-	-
1. Driver Door Lock Switch Inoperative 2. Driver Door Lock Switch Lock Inoperative 3. Driver Door Lock Switch Unlock Inoperative				

- | |
|---|
| 5. Passenger Door Lock Switch Unlock Inoperative
6. Passenger Door Lock Switch Inoperative |
|---|

Circuit/System Description

The system is designed so that when the operator approaches a locked vehicle with the keyless entry transmitter, the keyless entry control module will detect the keyless entry transmitter and when an exterior door handle is pulled the keyless entry control module will command all doors to unlock and the door to unlatch allowing the door to be pulled open.

The body control module (BCM) monitors the voltage level of the door lock and door unlock signal circuits. When the driver door lock switch is in the open position, the voltage level in the signal circuit will be near 12 V. When the driver door lock switch is pressed to the lock or unlock position, the voltage level in the appropriate signal circuit will drop to 0 V and the BCM will detect the voltage drop and command the door latches to perform the requested lock or unlock command.

Reference Information

Schematic Reference

- **Door Lock/Indicator Schematics**
- **Remote Function Schematics**

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Door Locks Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References

Circuit/System Verification

1. Ignition ON.

NOTE: **The keyless entry transmitter must be within 1 meter (3 feet) of the door handle**

2. Verify the scan tool Driver Door Handle Switch parameter changes between Inactive and Active when pressing the B27E Door Handle Switch-Driver Interior and the B27D Door Handle Switch-Driver Exterior.

- **If the parameter is always Inactive when pressing the B27E Door Handle Switch-Driver Interior**

Refer to Circuit/System Testing - Interior Door Handle Switch Inoperative.

- **If the parameter is always Inactive when pressing the B27D Door Handle Switch-Driver Exterior**

Refer to Circuit/System Testing - Exterior Door Handle Switch Inoperative.

- **If the parameter is always Active**

Refer to Circuit/System Testing - Door Handle Switches Malfunction.

- **If the parameter changes**

3. Verify the scan tool Passenger Door Handle Switch parameter changes between Inactive and Active when pressing the B27F Door Handle Switch-Passenger Interior and the B27P Door Handle Switch-Passenger Exterior.

- **If the parameter is always Inactive when pressing the B27F Door Handle Switch-Passenger Interior**

Refer to Circuit/System Testing - Interior Door Handle Switch Inoperative.

- **If the parameter is always Inactive when pressing the B27P Door Handle Switch-Passenger Exterior**

Refer to Circuit/System Testing - Exterior Door Handle Switch Inoperative.

- **If the parameter is always Active**

Refer to Circuit/System Testing - Door Handle Switches Malfunction.

- **If the parameter changes**

4. Verify the driver door unlatches and opens with a single press of the B27D Door Handle Switch-Driver Exterior.

- **If the driver door does not unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior**

Refer to Circuit/System Testing - Driver Door Latch Malfunction

- **If the driver door does unlatch and open with a single press of the B27D Door Handle Switch-Driver Exterior**

5. Verify the passenger door unlatches and opens with a single press of the B27P Door Handle Switch-Passenger Exterior.

- **If the passenger door does not unlatch and open with a single press of the B27P Door Handle Switch-Passenger Exterior**

Refer to Circuit/System Testing - Passenger Door Latch Malfunction

- **If the passenger door does unlatch and open with a single press of the B27P Door Handle Switch-Passenger Exterior**

6. Verify the scan tool Driver Door Lock Switch parameter changes from Inactive to Lock and Unlock when pressing the S13D Door Lock Switch-Driver.

- **If the parameter does not change**

Refer to Circuit/System Testing - Door Lock Switch Malfunction

- **If the parameter changes**

7. Verify the scan tool Passenger Door Lock Switch parameter changes from Inactive to Lock and Unlock when pressing the S13P Door Lock Switch-Passenger.

- **If the parameter does not change**

Refer to Circuit/System Testing - Door Lock Switch Malfunction

- **If the parameter changes**

8. All OK.

Circuit/System Testing

Interior Door Handle Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Interior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal A and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.

terminal A.

5. Verify the scan tool Door Handle Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
 2. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, test or replace the B27 Door Handle Switch-Interior.
 - **If Active**
6. Test or replace the B27 Door Handle Switch-Interior.

Exterior Door Handle Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal C and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Install a 3 A fused jumper wire between the signal circuit terminal A and the ground circuit terminal C.
5. Verify the scan tool Door Handle Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
 2. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, test or replace the B27 Door Handle Switch-Exterior.
 - **If Active**
6. Test or replace the B27 Door Handle Switch-Exterior.

Door Handle Switch Malfunction

1. Ignition OFF, disconnect the harness connector at the B27 Door Handle Switch-Exterior and the B27 Door Handle Switch-Interior. Ignition ON.

2. Verify the scan tool Door Handle Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connectors at the K84 Keyless Entry Control Module.
 2. Test for infinite resistance between the signal circuit terminal listed below and ground.
 - B27 Door Handle Switch-Exterior - signal circuit terminal A
 - B27 Door Handle Switch-Interior - signal circuit terminal B
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K84 Keyless Entry Control Module
 - **If Inactive**
3. Connect the harness connector at the B27 Door Handle Switch-Exterior.
4. Verify the scan tool Door Handle Switch parameter changes from Inactive to Active when pressing the B27 Door Handle Switch-Exterior.
 - **If the parameter does not change**

Test or replace the B27 Door Handle Switch-Exterior.
 - **If the parameter changes**
5. Connect the harness connector at the B27 Door Handle Switch-Interior
6. Verify the scan tool Door Handle Switch parameter changes from Inactive to Active when pressing the B27 Door Handle Switch-Interior.
 - **If the parameter does not change**

Test or replace the B27 Door Handle Switch-Interior.
 - **If the parameter changes**
7. All OK.

Driver Door Latch Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between the signal circuit terminal 3 and ground.
 - **If less than infinite resistance**
 1. Ignition OFF, disconnect the X7 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the K84 Keyless Entry Control Module signal circuit terminal 3 X4 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - **If infinite resistance, replace the K9 Body Control Module**
3. Verify that a test lamp does not illuminate between the signal circuit terminal 3 and ground.
 - **If the test lamp illuminates**

ON.

2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp does not illuminate**
4. Ignition OFF, connect the X4 harness connector at the K84 Keyless Entry Control Module and disconnect the harness connector at the A23D Door Latch Assembly-Driver. Ignition ON.
5. Connect a test lamp between the control circuit terminal 5 and control circuit terminal 10.
6. Verify the test lamp turns ON when commanding the UNLATCH with the B27D Door Handle Switch-Driver Exterior
 - **If the test lamp remains OFF during the command**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
 2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuits end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
 2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K84 Keyless Entry Control Module.
 - **If the test lamp turns ON and OFF**
7. Test or replace the A23D Door Latch Assembly-Driver.

Passenger Door Latch Malfunction

1. Ignition OFF, disconnect the X4 harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between the signal circuit terminal 14 and ground.
 - **If less than infinite resistance**
 1. Ignition OFF, disconnect the X7 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the K84 Keyless Entry Control Module signal circuit terminal 14 X4 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - **If infinite resistance, replace the K9 Body Control Module**
3. Verify that a test lamp does not illuminate between the signal circuit terminal 14 and ground.

- **If the test lamp illuminates**

1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, Ignition ON.
2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.

- **If the test lamp does not illuminate**

4. Ignition OFF, connect the X4 harness connector at the K84 Keyless Entry Control Module and disconnect the harness connector at the A23P Door Latch Assembly-Passenger. Ignition ON.
5. Connect a test lamp between the control circuit terminal 5 and control circuit terminal 10.
6. Verify the test lamp turns ON when commanding the UNLATCH with the B27P Door Handle Switch-Passenger Exterior

- **If the test lamp remains OFF during the command**

1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
2. Test for infinite resistance between each control circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
3. Test for less than 2 ohms in the control circuits end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K84 Keyless Entry Control Module.

- **If the test lamp is always ON**

1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, Ignition ON.
2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K84 Keyless Entry Control Module.

- **If the test lamp turns ON and OFF**

7. Test or replace the A23P Door Latch Assembly-Passenger.

Door Lock Switch Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the appropriate S13 Door Lock Switch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 4 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.

- If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
- 3. Ignition ON.
- 4. Verify the scan tool Door Lock Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 3 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 3. Test for infinite resistance between the signal circuit terminal 2 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
- 5. Install a 3 A fused jumper wire between the signal circuit terminal 3 and the ground circuit terminal 4.
- 6. Verify the scan tool Door Lock Switch parameter is Unlock.
 - **If not Unlock**
 1. Ignition OFF, remove the fused jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Unlock**
- 7. Install a 3 A fused jumper wire between the signal circuit terminal 2 and the ground circuit terminal 4.
- 8. Verify the scan tool Door Lock Switch parameter is Lock.
 - **If not Lock**
 1. Ignition OFF, remove the fused jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Lock**

9. Test or replace the S13 Door Lock Switch.

Component Testing

Exterior Door Handle Switch

1. Ignition OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Exterior.
2. Test for infinite resistance between the signal terminal A and the ground terminal C with the switch in the open position.

- **If less than infinite resistance**

Replace the B27 Door Handle Switch-Exterior.

- **If infinite resistance**

3. Test for less than 5 ohms between the signal terminal A and the ground terminal C with the switch in the closed position.

- **If 5 ohms or greater**

Replace the B27 Door Handle Switch-Exterior.

- **If less than 5 ohms**

4. All OK

Interior Door Handle Switch

1. Ignition OFF, disconnect the harness connector at the appropriate B27 Door Handle Switch-Interior.
2. Test for infinite resistance between the signal terminal B and the ground terminal A with the switch in the open position.

- **If less than infinite resistance**

Replace the B27 Door Handle Switch-Interior.

- **If infinite resistance**

3. Test for less than 5 ohms between the signal terminal B and the ground terminal A with the switch in the closed position.

- **If 5 ohms or greater**

Replace the B27 Door Handle Switch-Interior.

- **If less than 5 ohms**

4. All OK

Door Lock Switch

1. Ignition OFF, disconnect the harness connector at the appropriate S13 Door Lock Switch.
2. Test for infinite resistance between the signal terminal 2 and the ground terminal 4 with the switch in the open position.

- **If less than infinite resistance**

Replace the S13 Door Lock Switch.

- **If infinite resistance**

3. Test for infinite resistance between the signal terminal 3 and the ground terminal 4 with the switch in the open position.

- **If less than infinite resistance**

Replace the S13 Door Lock Switch

- **If infinite resistance**

4. Test for less than 2 ohms between the signal terminal 2 and the ground terminal 4 with the switch in the Lock position.

- **If 2 ohms or greater**

Replace the S13 Door Lock Switch.

- **If less than 2 ohms**

5. Test for less than 2 ohms between the signal terminal 3 and the ground terminal 4 with the switch in the Unlock position.

- **If 2 ohms or greater**

Replace the S13 Door Lock Switch.

- **If less than 2 ohms**

6. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Front Side Door Latch Replacement**
- **Door Latch Release Switch Replacement - Driver Side**
- **Door Latch Release Switch Replacement - Passenger Side**
- **Front Side Door Handle Switch Replacement**
- **Door Lock Switch Replacement - Driver Side**
- **Door Lock Switch Replacement - Passenger Front**

- **Control Module References** for body control module and the keyless entry control module replacement, setup and programming

TRUNK RELEASE MALFUNCTION

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Rear Body Fuse Block B+	3	3	-	-
Rear Compartment Lid Unlatch Relay Control	B3265 02	B3265 04	B3265 01	-
Rear Body Fuse Block Ground	-	B3265 04	-	-
Exterior Rear Compartment Lid Unlatch Switch Signal	B3618 00	1	1	-
Interior Rear Compartment Lid Unlatch Switch Ground	-	1	-	-
Interior Rear Compartment Lid Unlatch Switch Signal	B2730 00	2	2	-
Exterior Rear Compartment Lid Unlatch Switch Ground	-	2	-	-
Rear Compartment Lid Latch Control	2	3	2	-
Rear Compartment Lid Latch Ground	-	3	-	-
1. Exterior Rear Compartment Lid Release Switch Inoperative 2. Interior Rear Compartment Lid Release Switch Inoperative 3. Rear Compartment Lid Release Inoperative				

Circuit/System Description

The body control module supplies a 12 V reference voltage to the rear compartment lid unlatch switch through the release switch signal circuit. When the rear compartment lid unlatch switch is pressed, the release switch signal circuit is grounded through the rear compartment lid unlatch switch ground circuit and the reference voltage is pulled low within the body control module. In response, the body control module applies battery positive voltage to the rear compartment lid release relay control circuit, which energizes the coil side of the relay. The switch side of the rear compartment lid release relay then closes, supplying battery positive voltage through the relay and the rear compartment lid

latch control circuit activating the latch so that the trunk lid may be manually raised to an open position.

Diagnostic Aids

A complaint by the customer of excessive effort to close the trunk may be caused by a malfunctioning body pressure relief valve, refer to **Body Pressure Relief Valve Malfunction**

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Luggage Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter changes between Active and Inactive when pressing and releasing the S58A Rear Compartment Lid Unlatch Switch-Exterior.
 - **If the parameter does not change**

Refer to Circuit/System Testing - Exterior Trunk Release Switch Inoperative
 - **If the parameter changes**
3. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter changes

- **If the parameter does not change**

Refer to Circuit/System Testing - Interior Trunk Release Switch Inoperative

- **If the parameter changes**

4. Verify the M40 Rear Compartment Lid Latch functions when commanding the Trunk Lid Unlatch with a scan tool.

- **If the M40 Rear Compartment Lid Latch does not function**

Refer to Circuit/System Testing - Release Actuator Inoperative

- **If the M40 Rear Compartment Lid Latch does function**

5. Verify the M40 Rear Compartment Lid Latch functions when inserting the key into the B85 Rear Compartment Lid Key Cylinder Switch and turning the key to the unlatch position.

- **If the M40 Rear Compartment Lid Latch does not function**

Refer to Circuit/System Testing - Key Cylinder Switch Malfunction.

- **If the M40 Rear Compartment Lid Latch does function**

6. All OK.

Circuit/System Testing

Exterior Trunk Release Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 2 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 1 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance. replace the K9 Body Control Module.

- **If Inactive**

5. Install a 3 A fused jumper wire between the signal circuit terminal 1 and the ground circuit terminal 2.
6. Verify the scan tool Trunk Lid/Liftgate Window Exterior Unlatch Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Active**
7. Test or replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.

Interior Trunk Release Switch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S48C Multifunction Switch 1-Instrument Panel. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 5 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal 2 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal 2 and the ground circuit terminal 5.
6. Verify the scan tool Interior Trunk Lid/Liftgate Window Unlatch Switch parameter is Active.

- **If not Active**

1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.

- **If Active**

7. Test or replace the S48C Multifunction Switch 1-Instrument Panel.

Release Actuator Inoperative

1. Ignition OFF and all vehicle systems OFF. Disconnect the harness connector at the M40 Rear Compartment Lid Latch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal listed below and ground:
 - Convertible - ground circuit terminal 2
 - Coupe - ground circuit terminal 1
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Connect a test lamp between the control circuit terminal listed below and ground, ignition ON.
 - Convertible - control terminal 4
 - Coupe - control terminal 2
4. Verify the test lamp does not turn ON and OFF when commanding the Trunk Lid Unlatch with a scan tool.
 - **If the test lamp turns ON and OFF**

Test or replace the M40 Rear Compartment Lid Latch.

○ **If the test lamp does not turn ON and OFF**
5. Ignition OFF, connect the harness connector at the M40 Rear Compartment Lid Latch. Disconnect the X1 and X2 harness connectors at the X53A Fuse Block-Rear Body. It may take up to 2 minutes for all vehicle systems to power down
6. Test for less than 10 ohms between the ground circuit terminal 27 X1 and ground.
 - **If 10 ohms or greater**

1. Ignition OFF.
2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
7. Ignition ON
8. Verify the M40 Rear Compartment Lid Latch is not activated.
 - **If the M40 Rear Compartment Lid Latch is activated**
 1. Ignition OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch, ignition ON.
 2. Test for less than 1 V between the control circuit terminal listed below and ground:
 - Convertible - control terminal 1
 - Coupe - control terminal 3
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, test or replace the M40 Rear Compartment Lid Latch.
 - **If the M40 Rear Compartment Lid Latch is not activated**
9. Connect a 10 A fused jumper wire between the control circuit terminal 8 X2 and B+.
10. Verify the M40 Rear Compartment Lid Latch activates.
 - **If the M40 Rear Compartment Lid Latch does not activate**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the M40 Rear Compartment Lid Latch, ignition ON.
 2. Test for infinite resistance between the control circuit and ground.
 - If less than Infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, test or replace the M40 Rear Compartment Lid Latch.
 - **If the M40 Rear Compartment Lid Latch activates**
11. Ignition OFF, connect the X1 and X2 harness connectors at the X53A Fuse Block-Rear Body. Disconnect the X5 harness connector at the K9 Body Control Module, ignition ON.
12. Verify the M40 Rear Compartment Lid Latch is not activated.
 - **If the M40 Rear Compartment Lid Latch is activated**
 1. Ignition OFF, disconnect the X2 harness connector at the X53A Fuse Block-Rear Body.
 2. Test for less than 1 V between the K9 Body Control Module control circuit terminal 11 X5 and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the X53A Fuse Block-Rear Body.
 - **If the M40 Rear Compartment Lid Latch is not activated**

13. Connect a 3 A fused jumper wire between the control circuit terminal 11 and B+.
14. Verify the M40 Rear Compartment Lid Latch activates.
 - **If the M40 Rear Compartment Lid Latch does not activate**
 1. Ignition OFF, remove the jumper wire, disconnect the X2 harness connector at the X53A Fuse Block-Rear Body, ignition ON.
 2. Test for infinite resistance between the K9 Body Control Module control circuit terminal 11 X5 and ground
 - If less than Infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the X53A Fuse Block-Rear Body.
 - **If the M40 Rear Compartment Lid Latch activates**
15. Replace the K9 Body Control Module.

Key Cylinder Switch Malfunction

1. Ignition OFF, disconnect the harness connector at the B85 Rear Compartment Lid Key Cylinder Switch. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal 2 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Test for greater than 10 V between the signal circuit terminal 1 and ground.
 - **If 10 V or less**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance on the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If greater than 10 V**
5. Test or replace the B85 Rear Compartment Lid Key Cylinder Switch.

Component Testing

Rear Compartment Lid Latch

1. Ignition OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch.
2. Install a 10 A fused jumper wire between the control terminal listed below and 12 V. Install a jumper wire between the ground terminal listed below and ground.
 - Convertible - control terminal 1 and ground terminal 2
 - Coupe - control terminal 3 ground terminal 1
3. Verify the M40 Rear Compartment Lid Latch activates.
 - **If the M40 Rear Compartment Lid Latch does not activate.**
Replace the M40 Rear Compartment Lid Latch.
 - **If the M40 Rear Compartment Lid Latch does activate.**
4. All OK

Exterior Trunk Release Switch

1. Ignition OFF, disconnect the harness connector at the S58A Rear Compartment Lid Unlatch Switch-Exterior.
2. Test for infinite resistance between the signal terminal 1 and the ground terminal 2 with the switch in the open position.
 - **If less than infinite resistance**
Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.
 - **If infinite resistance**
3. Test for less than 3 ohms between the signal terminal 1 and the ground terminal 2 with the switch in the closed position.
 - **If 3 ohms or greater**
Replace the S58A Rear Compartment Lid Unlatch Switch-Exterior.
 - **If less than 3 ohms**
4. All OK

Interior Trunk Release Switch

1. Ignition OFF, disconnect the harness connector at the S48C Multifunction Switch 1-Instrument Panel.
2. Test for infinite resistance between the signal terminal 2 and the ground terminal 5 with the switch in the open position.

Replace the S48C Multifunction Switch 1-Instrument Panel.

- **If infinite resistance**

3. Test for less than 3 ohms between the signal terminal 2 and the ground terminal 5 with the switch in the closed position.

- **If 3 ohms or greater**

Replace the S48C Multifunction Switch 1-Instrument Panel.

- **If less than 3 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Rear Body Fuse Block Replacement**
- **Rear Compartment Lid Release Switch Replacement**
- **Liftgate Latch Replacement**
- **Rear Compartment Lid Lock Cylinder Replacement**
- **Control Module References** for body control module replacement, programming and setup

TRUNK AJAR INDICATOR MALFUNCTION

Diagnostic Instructions

- Perform the **Diagnostic System Check - Vehicle** prior to using this diagnostic procedure.
- Review **Strategy Based Diagnosis** for an overview of the diagnostic approach.
- **Diagnostic Procedure Instructions** provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	1	2	2	-
Ground	-	3	3	-
1. Trunk Ajar Message Always Illuminated 2. Trunk Ajar Message Inoperative 3. Trunk Release Inoperative				

Circuit/System Description

The body control module (BCM) provides a 12 V signal to the rear compartment lid ajar switch signal circuit. When the rear compartment lid latch releases the rear compartment lid, the rear compartment

lid ajar switch, which is internal to the rear compartment lid latch, is supplied with ground which causes the trunk ajar switch signal circuit to be pulled low. The BCM interprets this and communicates via serial data to the driver information center which will display the Trunk Open message.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Door Ajar Indicator Description and Operation

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Rear Closure Ajar Switch parameter changes between Inactive and Active when opening and closing the trunk.
 - **If the parameter does not change**

Refer to Circuit/System Testing.
 - **If the parameter changes**
3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M40 Rear

2. Test for less than 10 ohms between the ground circuit terminal listed below and ground:
 - Convertible - ground circuit terminal 2
 - Coupe - ground circuit terminal 1
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify the scan tool Rear Closure Ajar Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit terminal listed below and ground:
 - Convertible - signal circuit terminal 4
 - Coupe - signal circuit terminal 2
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module.
 - **If Inactive**
5. Install a 3 A fused jumper wire between the signal circuit terminal listed below and ground:
 - Convertible - signal circuit terminal 4
 - Coupe - signal circuit terminal 2
6. Verify the scan tool Rear Closure Ajar Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the signal circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If Active**
7. Test or replace the M40 Rear Compartment Lid Latch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the M40 Rear Compartment Lid Latch.

2. Test for infinite resistance between the signal terminal and the ground terminal listed below with the switch in the open position:

- Convertible - signal terminal 4 and ground terminal 2
- Coupe - signal terminal 2 ground terminal 1
- **If less than infinite resistance**

Replace the M40 Rear Compartment Lid Latch.

- **If infinite resistance**

3. Test for less than 3 ohms between the signal terminal and the ground terminal listed below with the switch in the closed position.

- Convertible - signal terminal 4 and ground terminal 2
- Coupe - signal terminal 2 ground terminal 1
- **If 3 ohms or greater**

Replace the M40 Rear Compartment Lid Latch.

- **If less than 3 ohms**

4. All OK

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the repair.

- **Liftgate Latch Replacement**
- **Control Module References** for BCM replacement, setup and programming

DOOR WILL NOT OPEN/CLOSE, DOOR BINDING OR LOCKS, HANDLES OR CYLINDERS DO NOT FUNCTION

Door Will Not Open/Close, Door Binding or Locks, Handles or Cylinders Do Not Function

Step	Action	Yes	No
DEFINITION: This diagnostic table is designed to address the mechanical diagnosis of the door latching system, which could include the inside and outside handles, latch rods/cables, latches or latch cylinders.			
1	Did you perform the Diagnostic System Check - Vehicle?	Go to Step 2	Go to <u>Diagnostic System Check - Vehicle</u>
2	Were you sent here from a Vehicle Access Symptom Table?	Go to Step 3	Go to <u>Symptoms - Vehicle Access</u>
3	Does the door open with the outside handle?	Go to Step 4	Go to Step 10
4	Does the door open with the inside handle?	Go to Step 5	Go to Step 11
5	Does the manual latch knob latch and unlatch the		

	latch smoothly without binding?	Go to Step 6	Go to Step 12
6	Does the door latch switch and/or the keyless entry transmitter latch and unlatch the door latch or door latches?	Go to Step 7	Go to Step 14
7	Is the outside key cylinder loose or does it rattle or fall out? (if equipped)	Go to Step 15	Go to Step 8
8	Does the outside key cylinder latch and unlatch the latch and function smoothly without binding? (if equipped)	Go to Step 9	Go to Step 16
9	Does the door bind, does it take excessive effort to open or is it misaligned?	Go to Step 17	Go to Step 18
10	If the door will not open with the outside handle or the handle is obstructed or loose, check the following: • For cold weather freezing, thaw as necessary. • Check the handle for foreign material. Remove material as necessary. • Check the handle grab bar for looseness or damage. Repair as necessary. • Check the handle for full travel. If the issue is not resolved, remove the trim panel as necessary to gain access to door hardware and check the following: • Check the handle chassis for loose fasteners, broken chassis inserts, loose or missing spring or a loose, missing or bent rod lever. • Check for bent rod to the outside handle. • Check that the handle grab bar engages the rod lever properly. • Check for interference of rod and handle to other components in the door. • Check that handle rod is securely attached at both latch and handle. • Check if rod is positioned properly in the clip on the latch. At rest position, the handle should be fully against the down stop and the latch lever should be at the bottom of its travel. Correct by opening clip, repositioning rod in clip and closing clip till it snaps, as necessary.		

	Did you find and correct the condition?	Go to Step 18	Go to Step 11
11	Door will not open with the inside handle: • Check the inside handle for foreign material. Remove material as necessary. • Check that the handle is secure. Correct as necessary. • If rear door, verify child security is not engaged. • Remove the trim panel as necessary to and check the inside handle rod/cable attachments at both the latch and handle. If the cable is kinked or pinched, correct as necessary. Did you find and correct the condition?	Go to Step 18	Go to Step 12
12	The door will not or is difficult to unlatch with the inside manual latch knob: • For cold weather freezing, thaw as necessary • Check the latch knob for a loose condition. Repair or replace as necessary. Check the latch knob for binding or dragging using the following procedure: 1. Remove the latch knob. 2. If condition goes away, check for drag/interference of the latch knob against the inner belt seal or the trim panel. Correct as required. If further action is required, remove the trim panel and check the latch rod and latch knob for interference with the following: • Water deflector/paper • Side impact foam • Rod grommet in sheet metal • Glass run channel • Other rods or cables • Trim panel	Go to Step 18	Go to Step 12

	Did you find and correct the condition?	Go to Step 18	Go to Step 13
13	With a manual lock, if the latch will not function properly do the following: 1. Function the lock/unlatch lever on the latch to unlatch the latch. Check for high internal resistance. 2. With the door open, manually close the latch with a screwdriver. 3. Check the latch for internal binding by actuating the latch with the inside door handle lever. 4. Manually close the latch with a screwdriver again. 5. Check the latch for internal binding by actuating the latch with the outside door handle lever.		
	Did you find and correct the condition?	Go to Step 18	Go to Step 14
14	If power locks are included in vehicle options and do not function with either the keyless entry transmitter or switch: 1. For cold weather freezing, thaw as necessary. 2. Remove trim pad as required and check the following: • Verify door harness has appropriate power connectors for switches and latch. • Check harness connector pins for corrosion. • Assure wire harness connectors are seated and locked properly at latch and switch. Remove and re-seat if required. • Check door harness for cuts/chafing/corrosion. Correct/replace as required. • Check for 12V at latch and door switch. Correct/proceed accordingly. • Check BCM for trouble codes. Correct/proceed accordingly. 3. If power locks still do not function do the		

	following: 1. Remove latch from door cavity. 2. Connect latch to electrical connector outside the door. 3. Function power lock/unlatch switch in both latch and unlatch directions. Watch for lock/unlatch lever on latch to move completely from one position to the other. 4. If lever does not move, remove connector from old latch and attach to new latch outside of door cavity. 5. Verify new latch is functional, if so, attach rods and install new latch in door.		
	Did you find and correct the condition?	Go to Step 18	Go to Step 15
15	If the key cylinder is loose do the following: • Remove the trim if necessary. • Check that the retaining clip is properly seated. (if equipped) • Check that the fastener is properly torqued. (if equipped)		
	Did you find and correct the condition?	Go to Step 18	Go to Step 16
16	The outside key cylinder will not latch and unlatch the latch and function smoothly without binding: 1. For cold weather freezing, thaw as necessary 2. Remove trim if required. 3. Check that the key cylinder rod is securely attached both to the key cylinder pawl and the latch. 4. Check that key cylinder lever, rod and latch lever are free of interferences. Remove interferences as required. 5. Check that latch cylinder rod is routed properly. Re-route as required. 6. Remove rod from latch cylinder and actuate cylinder. Check for internal resistance. Lubricate latch cylinder as required 7. Verify Cylinder rotates with vehicle key. If not,		

	code and replace cylinder to match vehicle key. See latch cylinder coding and replacing.		
	Did you find and correct the condition?	Go to Step 18	Go to Step 17
17	The door is difficult to open: • Check for interference with the fender, adjacent door, body opening or door striker and adjust as necessary. • Check for binding door hinges. Lubricate or align/adjust as necessary. • Check the door check link for binding. Lubricate as necessary. • Adjust the door as necessary.		
	Did you find and correct the condition?	Go to Step 18	Go to Front Side Door Adjustment
18	Verify proper operation of the door closing system. • Outside handle • Inside handle • Manual lock/unlatch ◦ Outside key cylinder ◦ Inside latch knob ◦ Double pull handle • Power lock/unlatch ◦ Key fob ◦ Door switches • Door opening/closing effort		
	Is the condition still present?	Go to Step 1	System OK

REPAIR INSTRUCTIONS

FUEL TANK FILLER DOOR LOCK ACTUATOR REPLACEMENT

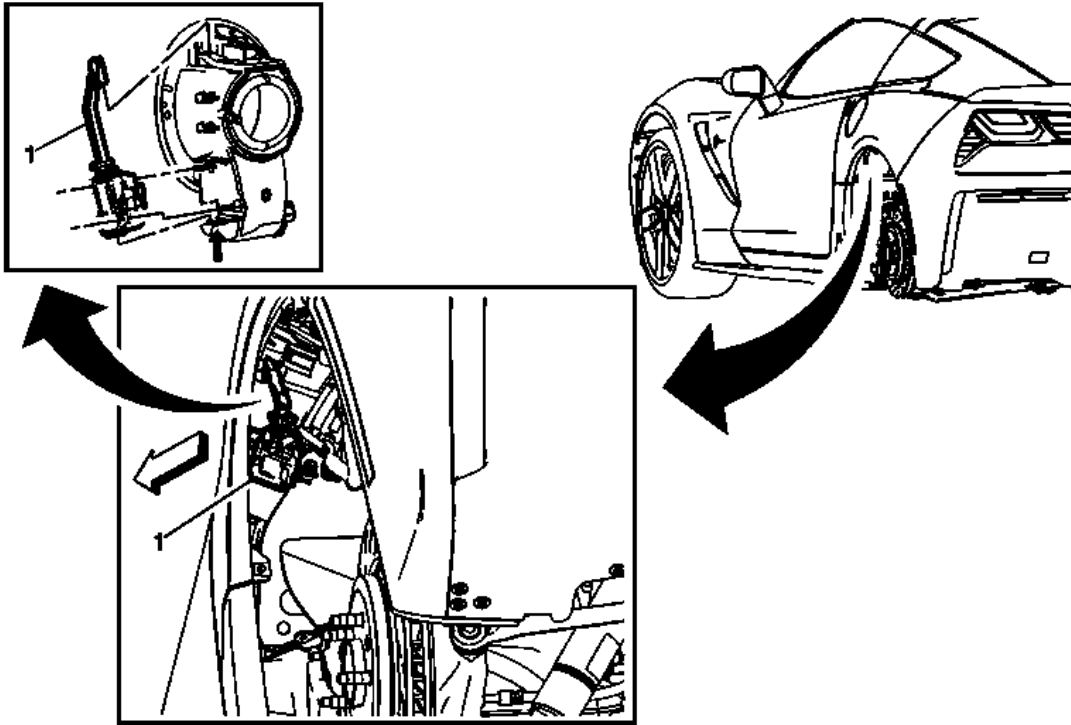


Fig. 8: Fuel Tank Filler Door Lock Actuator
 Courtesy of GENERAL MOTORS COMPANY

Fuel Tank Filler Door Lock Actuator Replacement

Callout	Component Name
Preliminary Procedure Remove the fuel tank filler pipe housing. Refer to Fuel Tank Filler Pipe Housing Replacement .	
1	Fuel Tank Filler Door Lock Actuator Procedure Release the retainer (arrow) and slide the fuel tank filler door actuator off the two studs.

FRONT SIDE DOOR INSIDE HANDLE CABLE REPLACEMENT

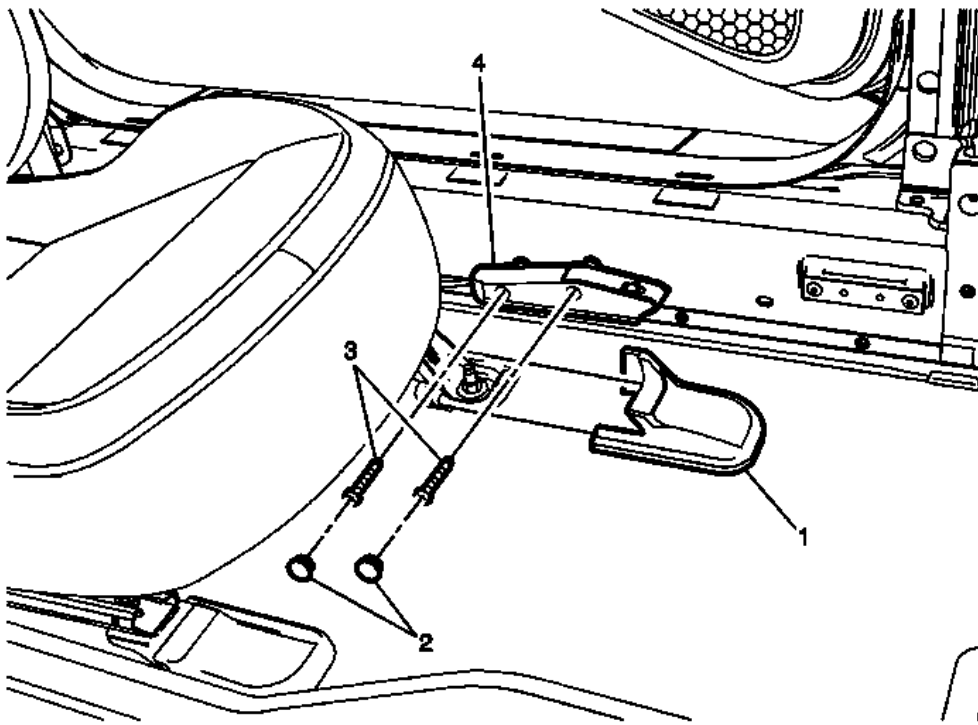


Fig. 9: Front Side Door Inside Handle Cable
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Inside Handle Cable Replacement

Preliminary Procedure	
Disconnect the handle cable from the front side door latch. Refer to Front Side Door Latch Replacement .	
1	Front Seat Riser Cover
2	Front Side Door Inside Handle Trim Plug (Qty: 2) Procedure Use a suitable tool to remove the trim plugs from the handle.
3	Front Side Door Inside Handle Screw (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 12 N.m (9 lb ft)
4	Front Side Door Inside Handle Cable NOTE: The handle and cable are replaced as one and should not be separated.

DRIVER DOOR AUXILIARY RELEASE CABLE REPLACEMENT

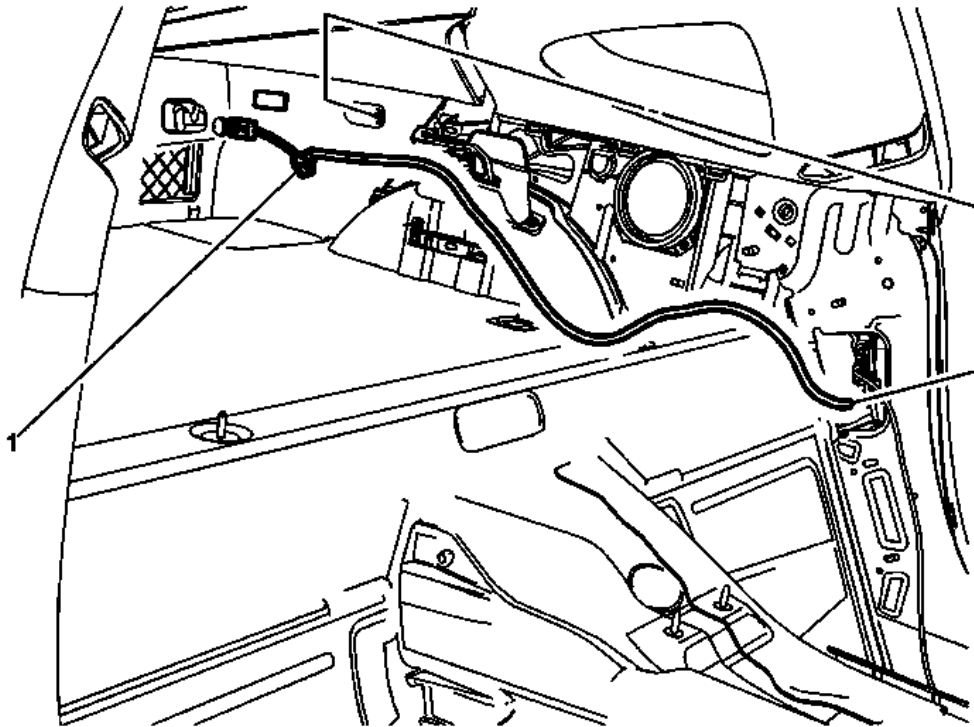


Fig. 10: Driver Door Auxiliary Release Cable
Courtesy of GENERAL MOTORS COMPANY

Driver Door Auxiliary Release Cable Replacement

Preliminary Procedures

1. Release the cable from the front side door latch. Refer to **Front Side Door Latch Replacement**.
2. Remove the rear compartment side trim panel. Refer to **Rear Compartment Side Trim Replacement - Left Side (Coupe)** , **Rear Compartment Side Trim Replacement - Left Side (Convertible)** .

1	Driver Door Auxiliary Release Cable Procedures 1. Release the retainer holding the cable in place. 2. Pull the cable rearward through the quarter lower rear trim panel. NOTE: Inspect for proper operation of the rear compartment lid.
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REAR COMPARTMENT LID LOCK CYLINDER REPLACEMENT

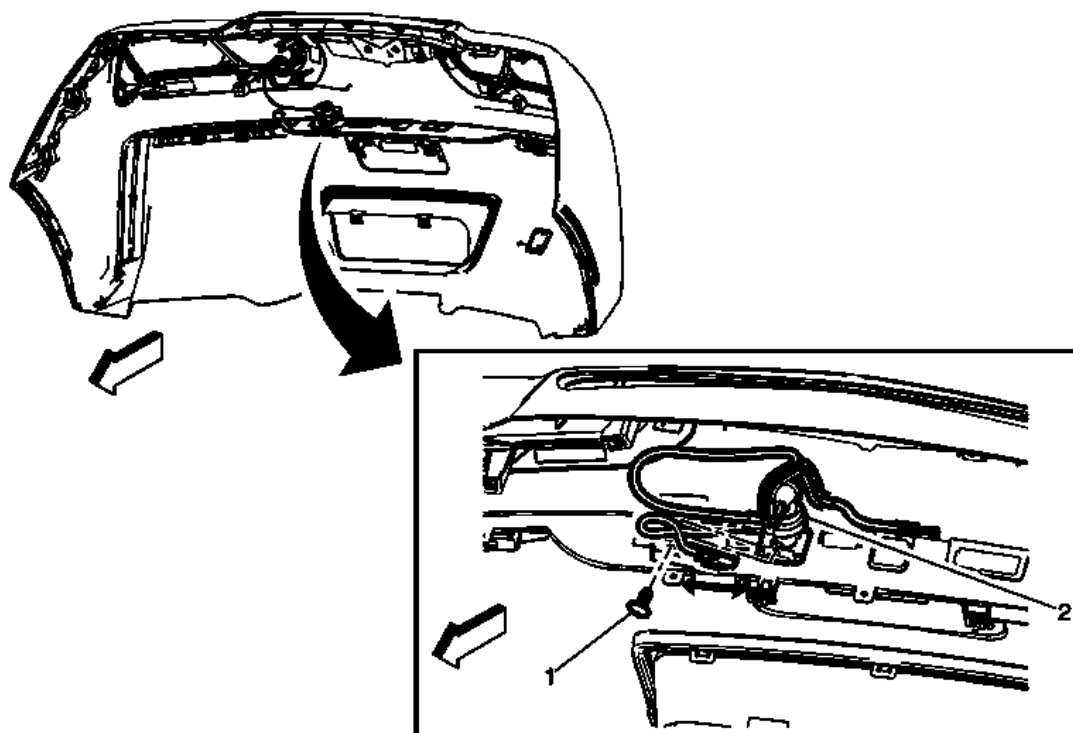


Fig. 11: Rear Compartment Lid Lock Cylinder
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Lock Cylinder Replacement

Callout	Component Name
Preliminary Procedure	
Remove the rear bumper fascia. Refer to Rear Bumper Fascia Replacement .	
1	Rear Compartment Lid Lock Cylinder Retainer
2	Rear Compartment Lid Lock Cylinder
Procedure	
1. Place the rear bumper fascia face down on a clean protected surface.	
2. Slide the rear compartment lid lock cylinder to the right to remove.	

LIFTGATE LATCH REPLACEMENT

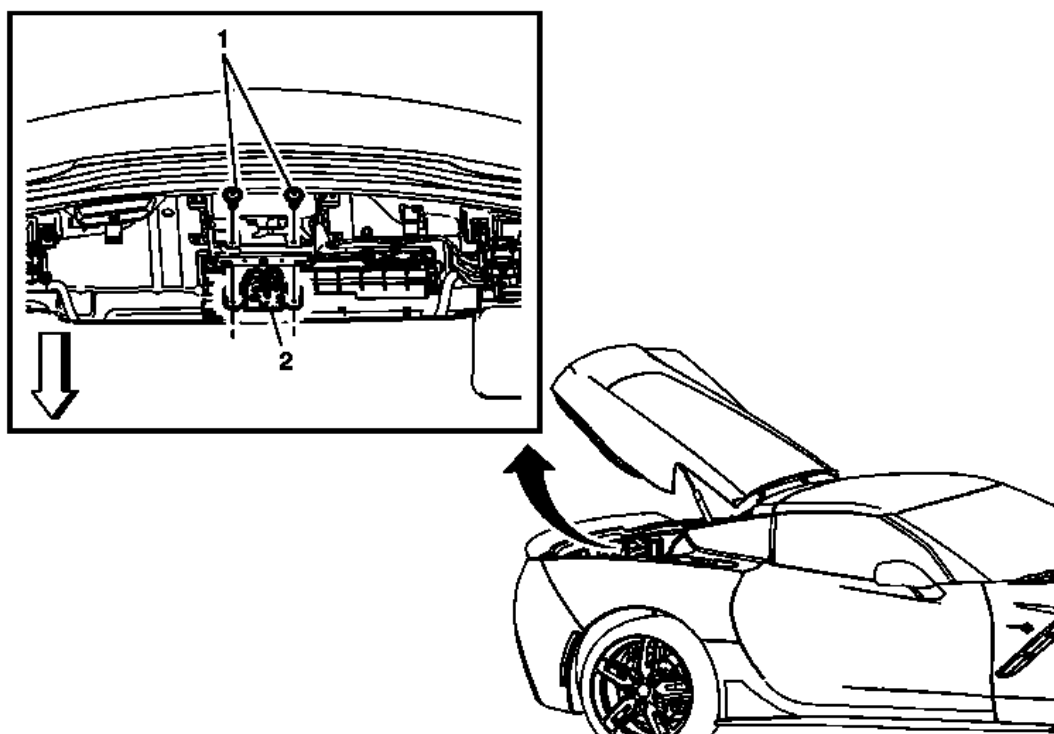


Fig. 12: Liftgate Latch
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Latch Replacement

Callout	Component Name
Preliminary Procedure Remove the rear end trim finish panel. Refer to Rear End Trim Finish Panel Replacement .	
1	Liftgate Latch Screw (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Liftgate Latch Assembly Procedure 1. Disconnect the electrical connector. 2. Disconnect the rear compartment lid lock cylinder cable. Refer to Rear Compartment Lid Lock Cylinder Replacement. 3. Adjust the liftgate if needed.

REAR COMPARTMENT LID LATCH RELEASE CABLE HANDLE REPLACEMENT

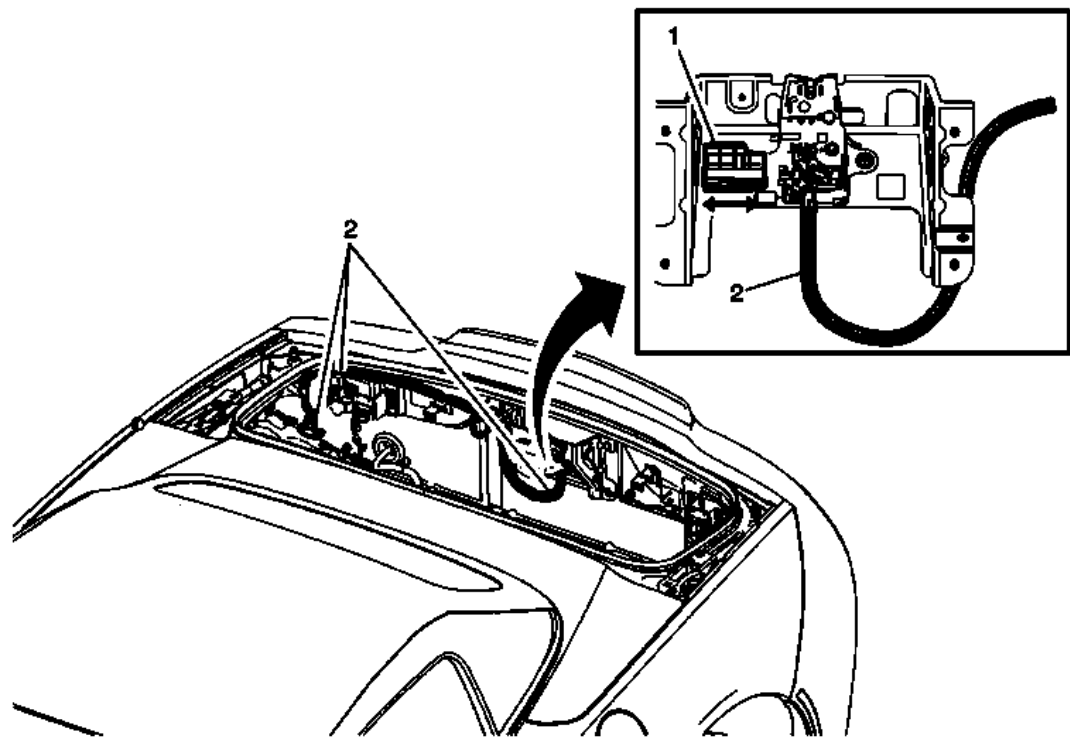


Fig. 13: Rear Compartment Lid Latch Release Cable Handle
Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Latch Release Cable Handle Replacement

Callout	Component Name
Preliminary Procedure Remove the rear end trim finish panel. Refer to <u>Rear End Trim Finish Panel Replacement</u> .	
1	Rear Compartment Lid Latch Release Cable Handle Access Cover Procedure Depress the retainers and slide the rear compartment lid latch access cover to the left to access the cable.
2	Rear Compartment Lid Latch Release Cable Handle Procedure Disconnect the rear compartment lid inside handle cable from the latch.

FRONT SIDE DOOR LATCH REPLACEMENT

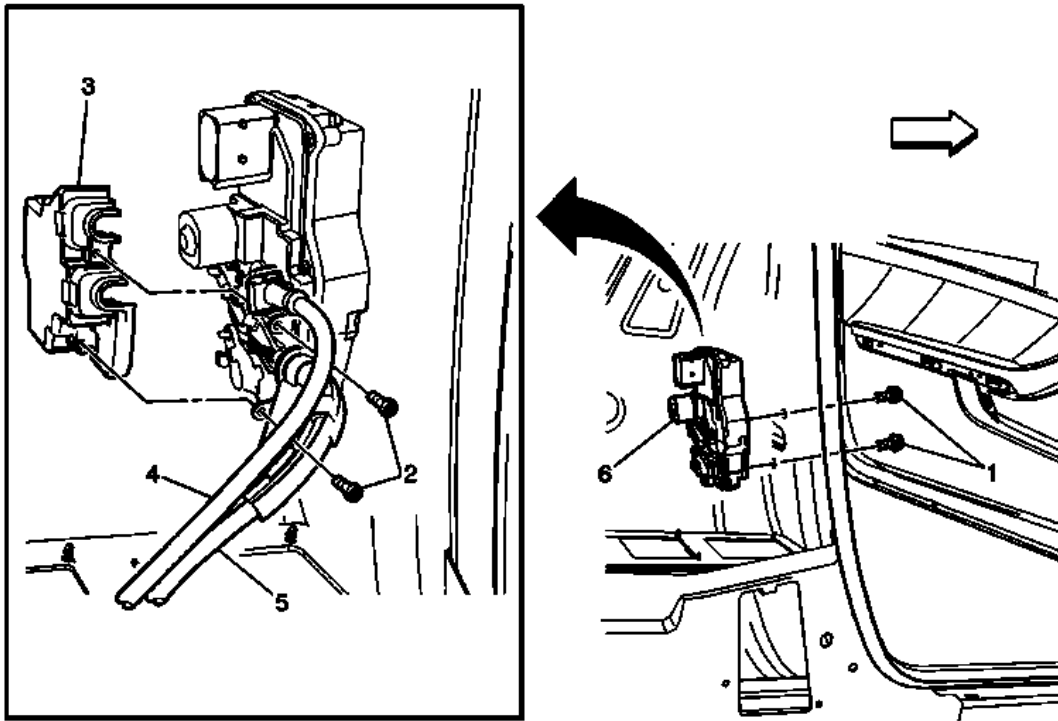


Fig. 14: Front Side Door Latch
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Latch Replacement

Preliminary Procedure

1. Remove the body side pillar trim panel. Refer to **Body Lock Pillar Trim Panel Replacement (Coupe)** , **Body Lock Pillar Trim Panel Replacement (Convertible)** .
2. Remove the front seat belt retractor. Refer to **Front Seat Belt Retractor Replacement** .
3. Remove the front side door lock cover. Refer to **Front Side Door Lock Cover Replacement**.

1	Front Side Door Latch Screw (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 10 N.m (89 lb in)
	Front Side Door Latch Cable Cover Screw (Qty: 2) Procedures

2	cables.
	2. Disconnect the electrical connector.
	Tighten 5 N.m (44 lb in)
3	Front Side Door Latch Cable Cover
4	Rear Compartment Lid Interior Release Latch Cable Procedure Disconnect the upper cable from the front side door lock release.
5	Front Side Door Inside Handle Cable Procedure Disconnect the lower cable from the front side door lock release.
6	Front Side Door Latch

REAR COMPARTMENT LID LATCH REPLACEMENT

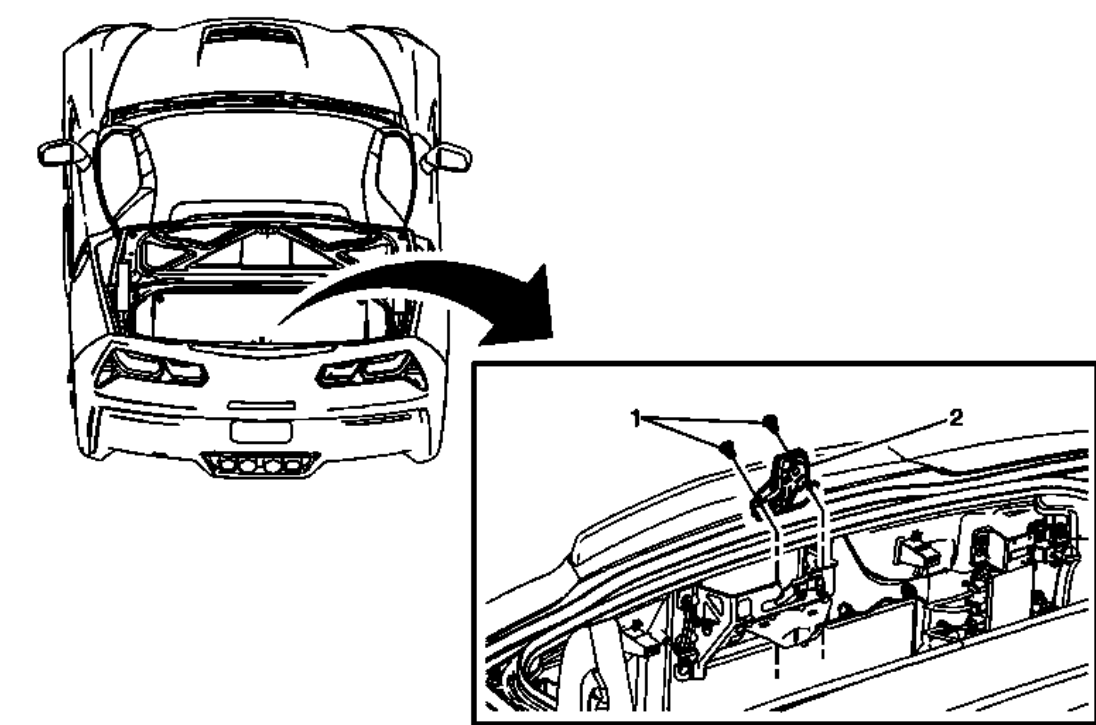


Fig. 15: Rear Compartment Lid Latch
Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Latch Replacement

Callout	Component Name
Preliminary Procedure Remove the rear end trim finish panel. Refer to <u>Rear End Trim Finish Panel Replacement</u> .	

1	Rear Compartment Lid Latch Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 9 (80 lb in)
2	Rear Compartment Lid Latch Procedure 1. Disconnect the rear compartment latch spring. 2. Disconnect the rear compartment lid latch release cable handle. Refer to <u>Rear Compartment Lid Latch Release Cable Handle Replacement</u> 3. Disconnect the rear compartment lid lock cylinder. Refer to <u>Rear Compartment Lid Lock Cylinder Replacement</u> 4. Disconnect the electrical connector.

FRONT SIDE DOOR LOCK COVER REPLACEMENT

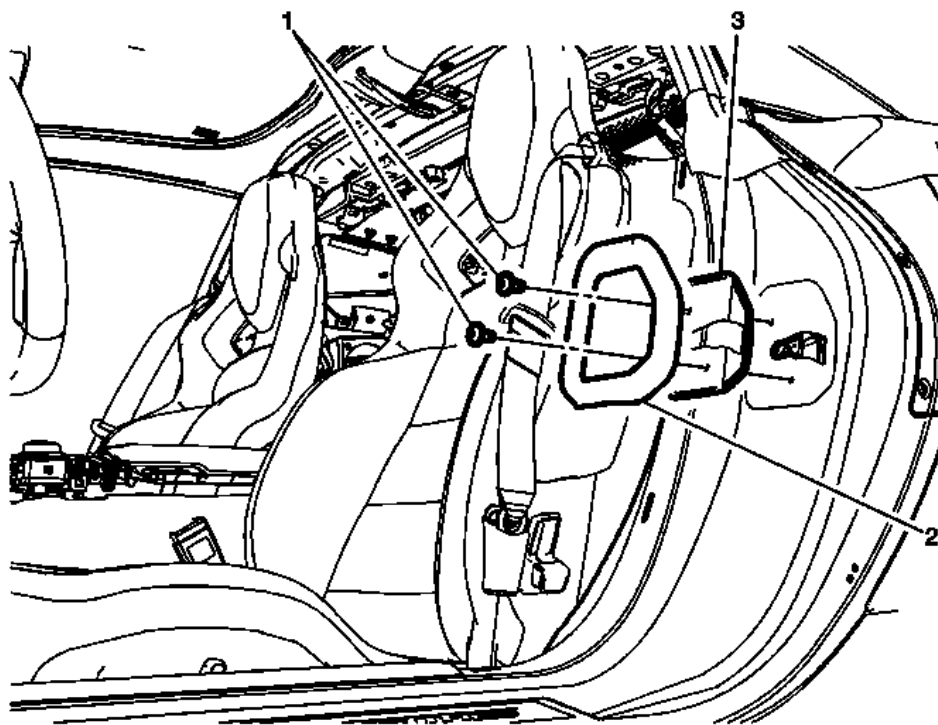


Fig. 16: Front Side Door Lock Cover
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Lock Cover Replacement

Callout	Component Name
Preliminary Procedure Remove the body lock pillar trim. Refer to <u>Body Lock Pillar Trim Panel Replacement (Coupe)</u> , <u>Body Lock Pillar Trim Panel Replacement (Convertible)</u> .	
1	Front Side Door Latch Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 9 N.m (80 lb in)
2	Front Side Door Latch Cover Molding
3	Front Side Door Latch Cover

FRONT SIDE DOOR HANDLE SWITCH REPLACEMENT

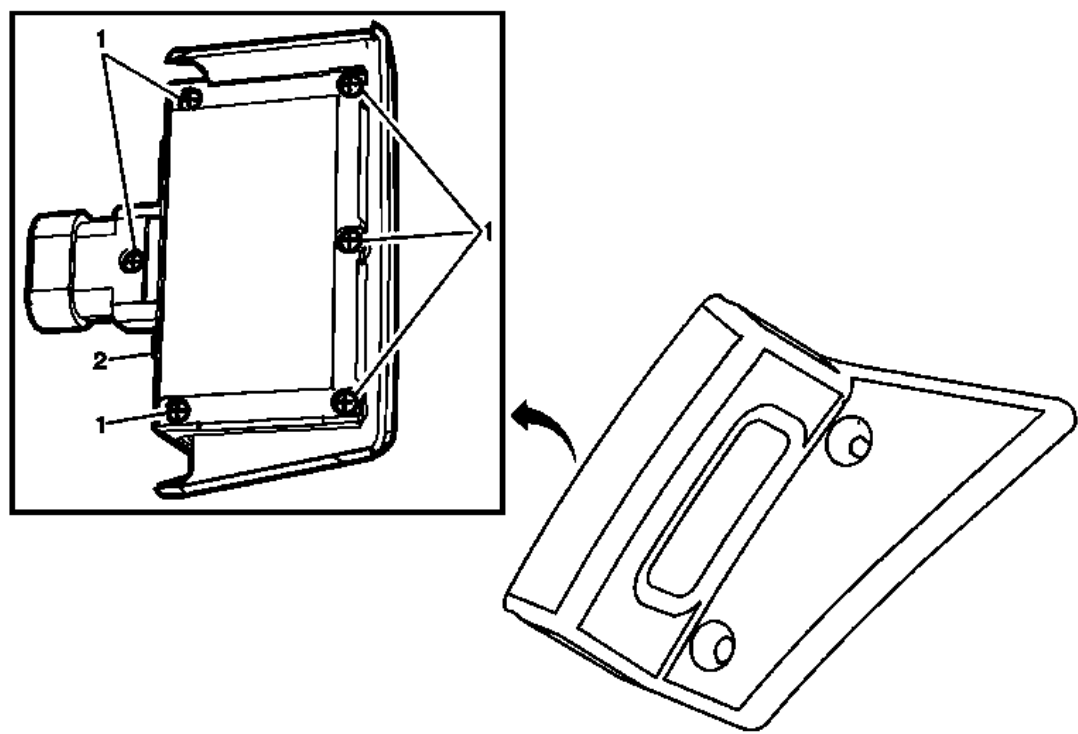


Fig. 17: Front Side Door Handle Switch
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Handle Switch Replacement

Callout	Component Name

Remove the door latch release switch outside bezel. Refer to **Door Latch Release Switch Outside Bezel Replacement**.

1	Front Side Door Handle Switch Screws (Qty: 6) CAUTION: Refer to <u>Fastener Caution</u> .
2	Front Side Door Handle Switch NOTE: Inspect the door for proper operation.

FRONT SIDE DOOR LOCK STRIKER ADJUSTMENT

To determine if striker adjustment is required, proceed as follows:

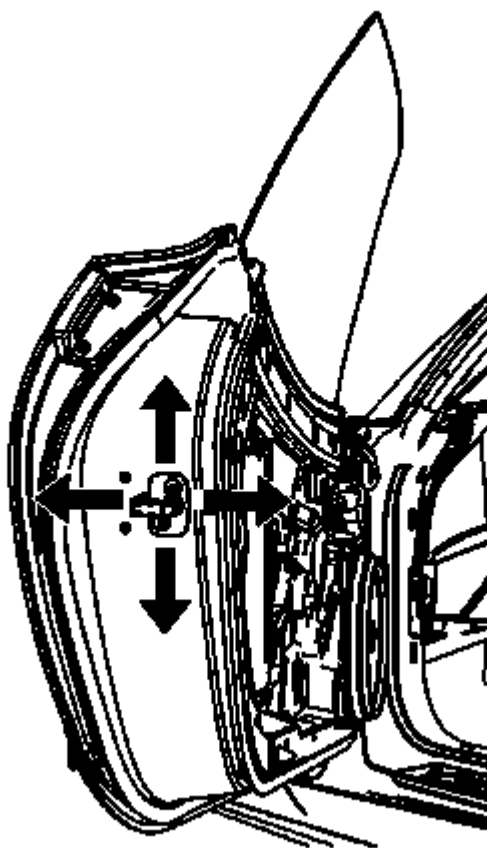


Fig. 18: Front Side Door Lock Striker
Courtesy of GENERAL MOTORS COMPANY

1. Ensure the door is properly aligned within the door opening before proceeding with the striker adjustment.

2. Close the door onto the striker and note if the door drags on the striker causing the door to move upward or downward upon contact with the striker. Also note the closing effort to fully engage the lock.
3. Using a grease pencil, mark around the striker for reference of the original position. Loosen the striker.
4. Align the striker to the previous marks. Tighten the nuts.
5. If you are unable to locate the previous striker marks, perform the following steps:
 1. With the striker installed and the nuts snug but still adjustable, have an assistant hold the outer door panel flush with the quarter panel.
 2. Tighten the striker nuts from the interior of the vehicle while the door is flush with the quarter panel.

CAUTION: Refer to Fastener Caution .

6. Tighten the front side door striker nuts to 24 N.m (18 lb ft).
7. Verify the fit of the door and the operation of the door latch by using the manual and electric door release.

FRONT SIDE DOOR LOCK STRIKER REPLACEMENT

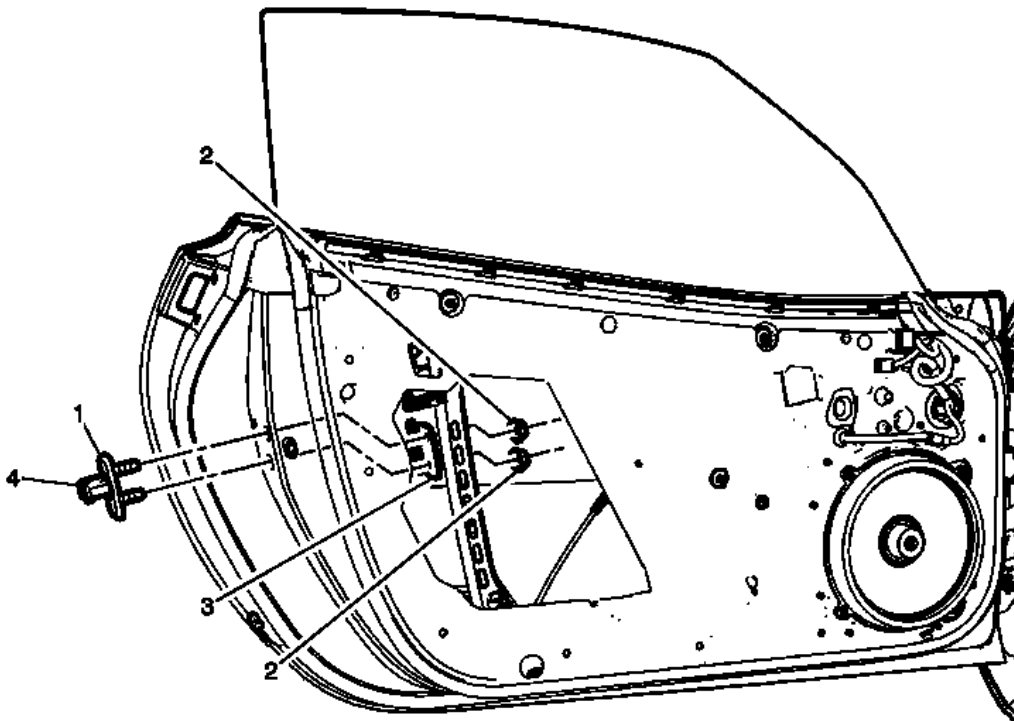


Fig. 19: Front Side Door Lock Striker
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Lock Striker Replacement

Callout	Component Name
Preliminary Procedures 1. Mark the location of the door striker using a suitable marker before removing the striker nuts. 2. Remove the front side door trim panel. Refer to <u>Front Side Door Trim Replacement (Driver Side)</u> , <u>Front Side Door Trim Replacement (Passenger Side)</u> . 3. Remove the water deflector.	
1	Front Side Door Lock Striker Cover
2	Front Side Door Lock Striker Nut (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 24 N.m (18 lb ft)
3	Front Side Door Lock Striker Spacer
4	Front Side Door Lock Striker Procedures Adjust the striker as needed. Refer to <u>Front Side Door Lock Striker Adjustment</u> . NOTE: Inspect the door for proper operation before installing the door trim panel.

LIFTGATE LATCH STRIKER REPLACEMENT

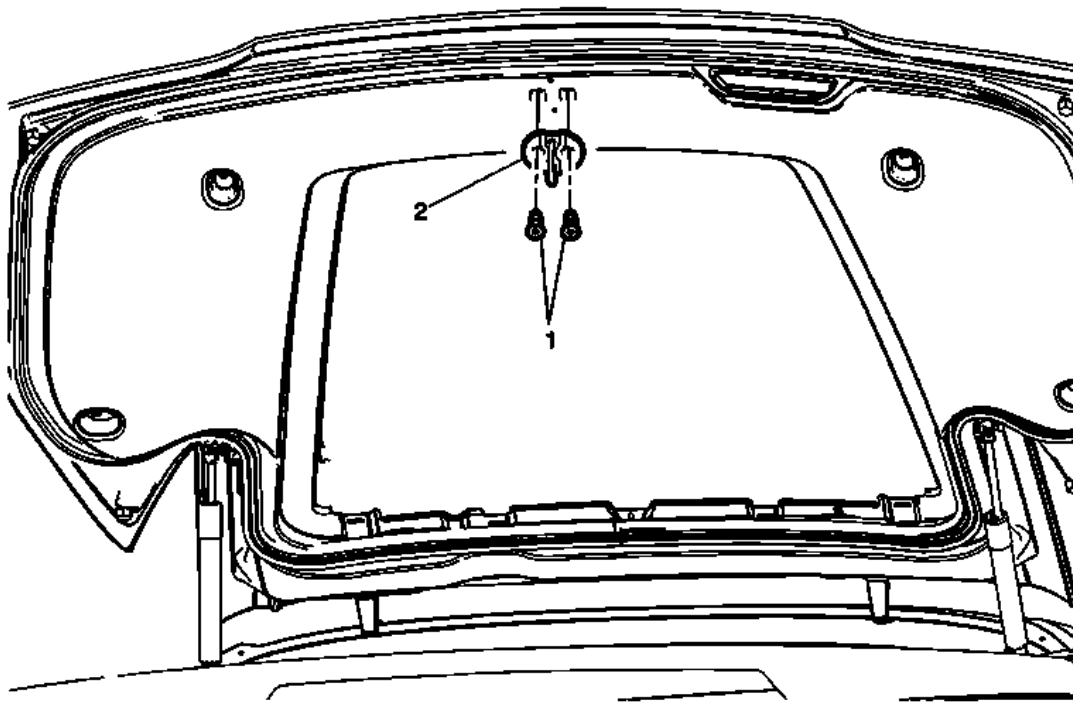


Fig. 20: Liftgate Latch Striker
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Latch Striker Replacement

Callout	Component Name
1	Liftgate Latch Striker Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 25 N.m (18 lb ft)
2	Liftgate Latch Striker Procedure 1. Mark the location of the striker with a grease pencil to ensure proper alignment during installation. 2. Adjust the liftgate if needed. Refer to <u>Liftgate Adjustment</u>

REAR COMPARTMENT LID LATCH STRIKER REPLACEMENT

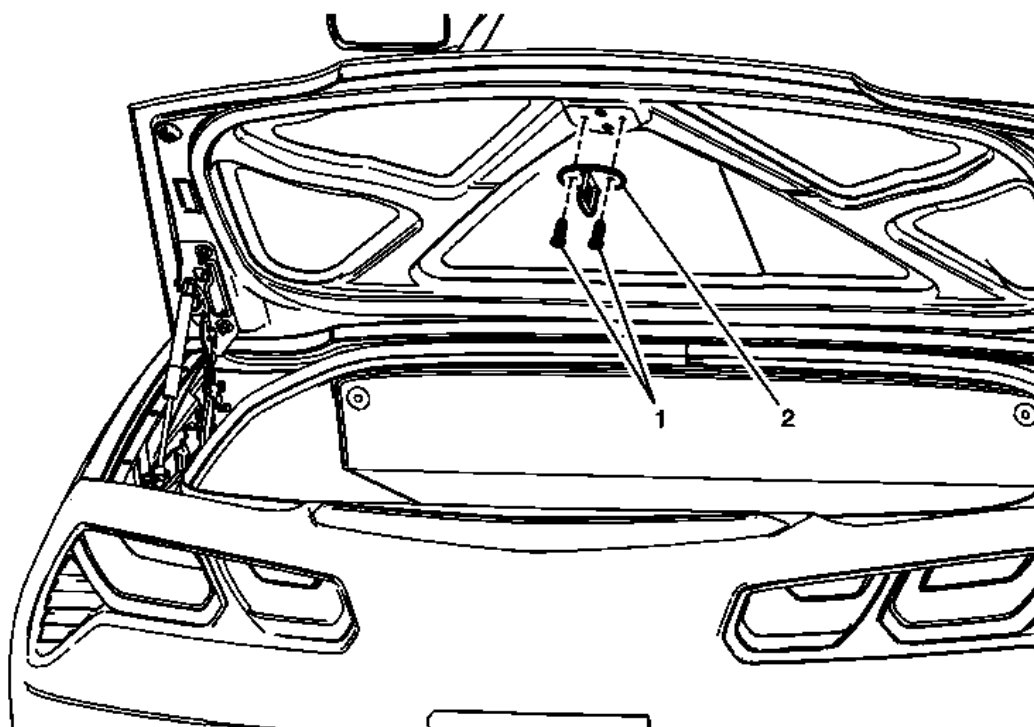


Fig. 21: Rear Compartment Lid Latch Striker
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Latch Striker Replacement

Callout	Component Name
1	Rear Compartment Lid Latch Striker Bolts (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 9 (80 lb in)
2	Rear Compartment Lid Latch Striker NOTE: Use a grease pencil to mark the location of the latch striker before removing it.

DOOR LATCH RELEASE SWITCH OUTSIDE BEZEL REPLACEMENT

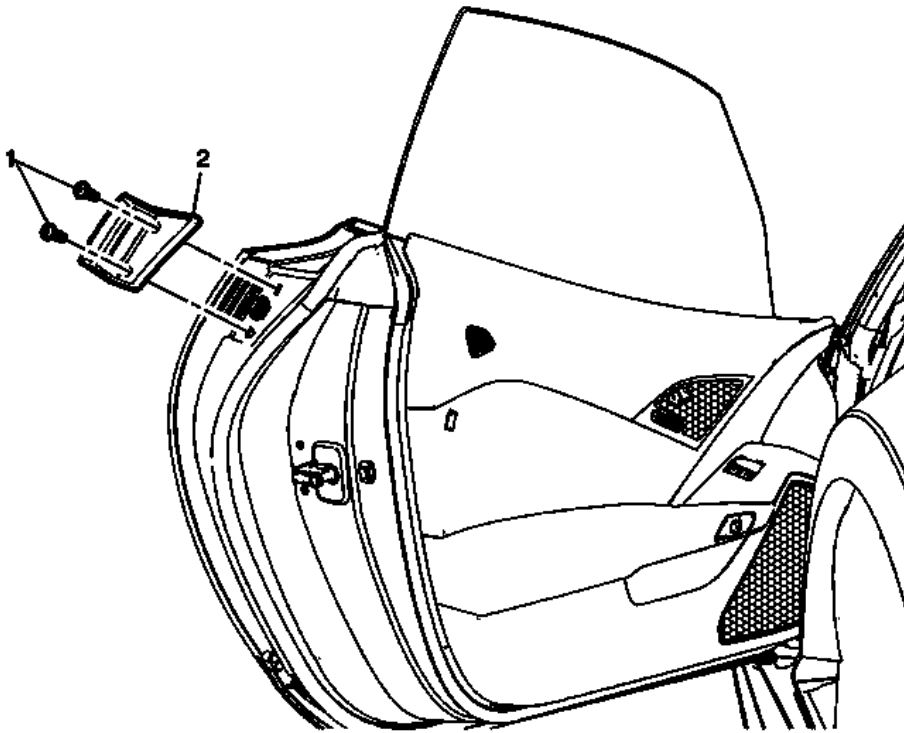


Fig. 22: Door Latch Release Switch Outside Bezel
 Courtesy of GENERAL MOTORS COMPANY

Door Latch Release Switch Outside Bezel Replacement

Callout	Component Name
1	Door Latch Release Switch Outside Bezel Screw (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 3 N.m (27 lb in)
2	Door Latch Release Switch Outside Bezel Procedure Disconnect the electrical connector. NOTE: Inspect the door for proper operation.

DOOR LATCH RELEASE SWITCH REPLACEMENT - DRIVER SIDE

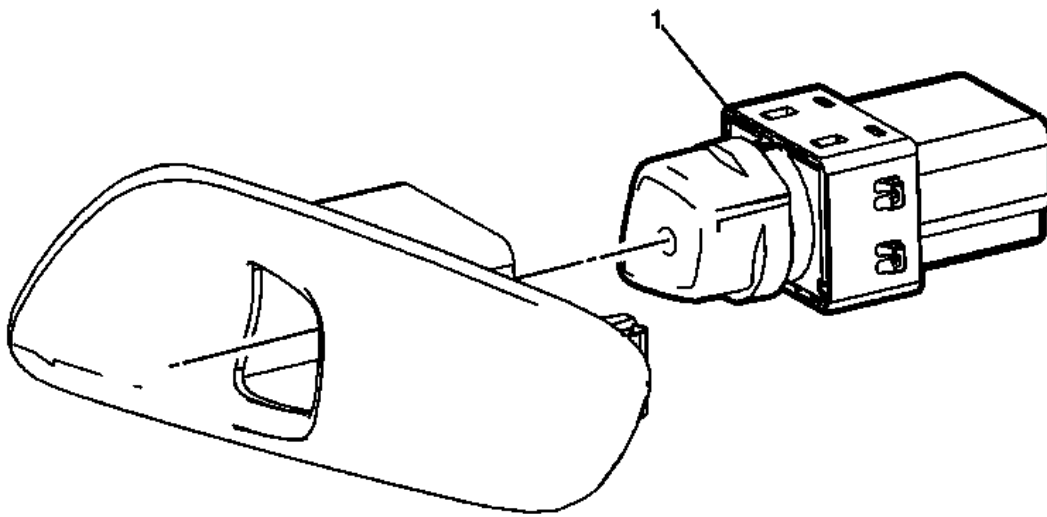


Fig. 23: Door Latch Release Switch - Driver Side
Courtesy of GENERAL MOTORS COMPANY

Door Latch Release Switch Replacement - Driver Side

Callout	Component Name
Preliminary Procedure Remove the door latch release switch bezel. Refer to <u>Door Latch Release Switch Bezel Replacement</u> .	
1	Door Latch Release Switch Assembly - Driver Side Procedure 1. Use the appropriate plastic trim tool to aid in the removal of the door latch release switch. 2. Disconnect the electrical connector.

LIFTGATE RELEASE SWITCH REPLACEMENT

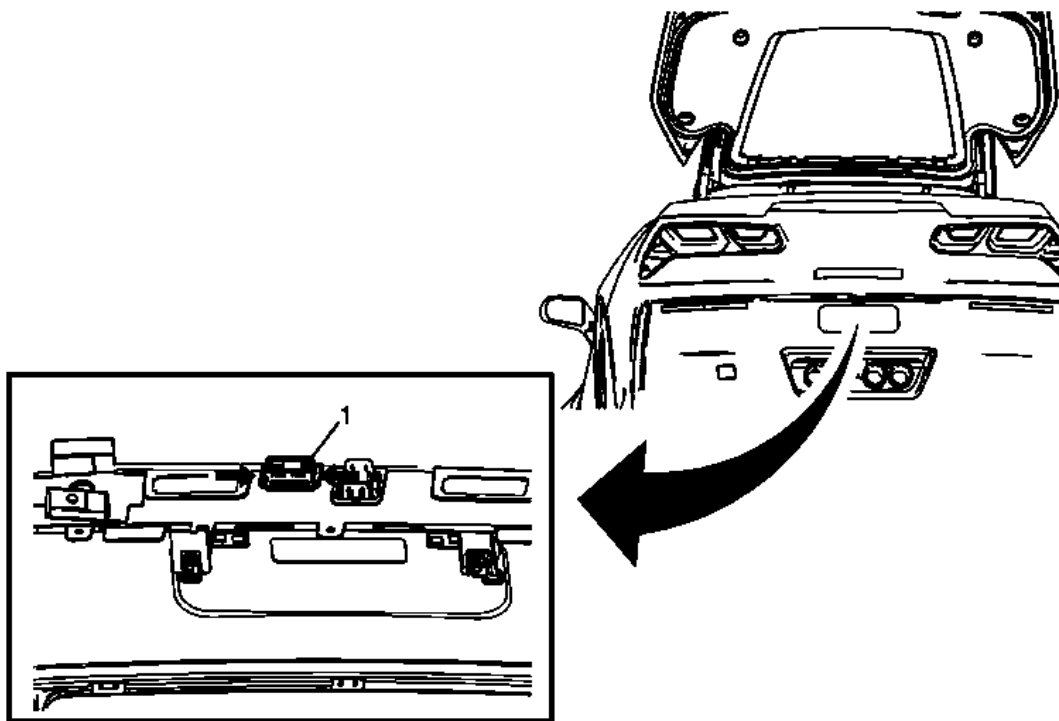


Fig. 24: Liftgate Release Switch
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Release Switch Replacement

Callout	Component Name
Preliminary Procedure Remove the rear bumper fascia. Refer to Rear Bumper Fascia Replacement . Place the rear bumper fascia face down on a clean protected surface.	
1	Liftgate Release Switch Procedure Depress the retainers (arrows) on the back side of the switch and push the switch out from the rear bumper fascia.

DOOR LATCH RELEASE SWITCH REPLACEMENT - PASSENGER SIDE

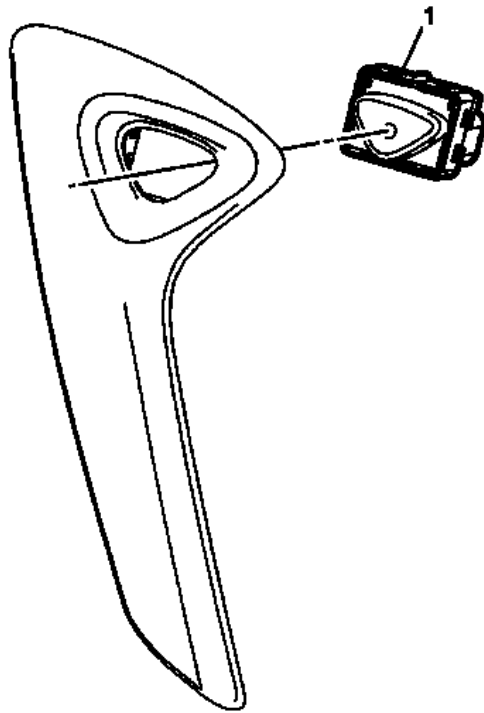


Fig. 25: Door Latch Release Switch - Passenger Side
 Courtesy of GENERAL MOTORS COMPANY

Door Latch Release Switch Replacement - Passenger Side

Callout	Component Name
Preliminary Procedure Remove the front side door pull handle cover. Refer to Front Side Door Pull Handle Cover Replacement .	
1	Door Latch Release Switch - Passenger Side Assembly Procedure 1. Using a plastic pry tool, gently pry on the sides to release the switch. 2. Disconnect the electrical connector. 3. Refer to Control Module References for programming and set up procedures.

DOOR LOCK SWITCH REPLACEMENT - DRIVER SIDE

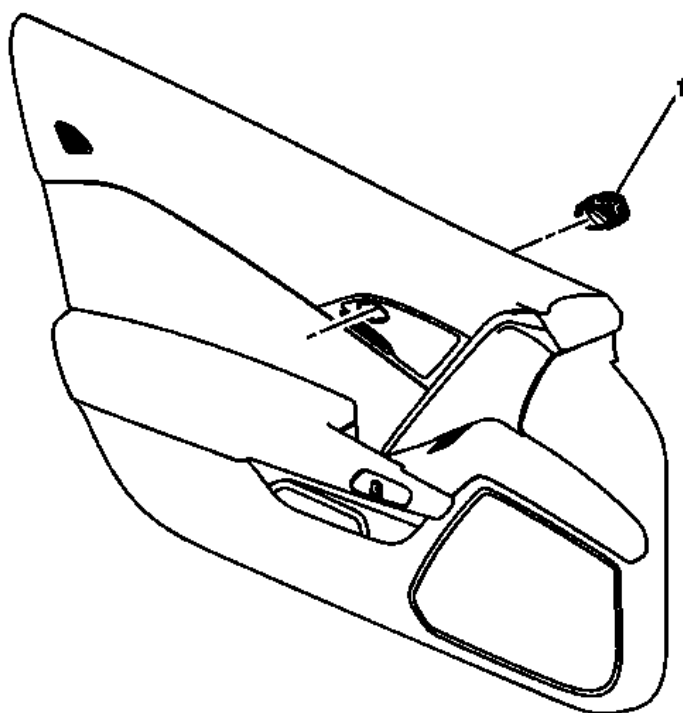


Fig. 26: Door Lock Switch - Driver Side
Courtesy of GENERAL MOTORS COMPANY

Door Lock Switch Replacement - Driver Side

Callout	Component Name
Preliminary Procedure	
Remove the front side door trim. Refer to Front Side Door Trim Replacement (Driver Side) .	
1	Door Lock Switch Driver Side Assembly
	Procedure 1. Using a plastic pry tool, gently pry on the sides to release the switch. 2. Disconnect the electrical connectors. 3. Refer to Control Module References for programming and set up procedures.

DOOR LOCK SWITCH REPLACEMENT - PASSENGER FRONT

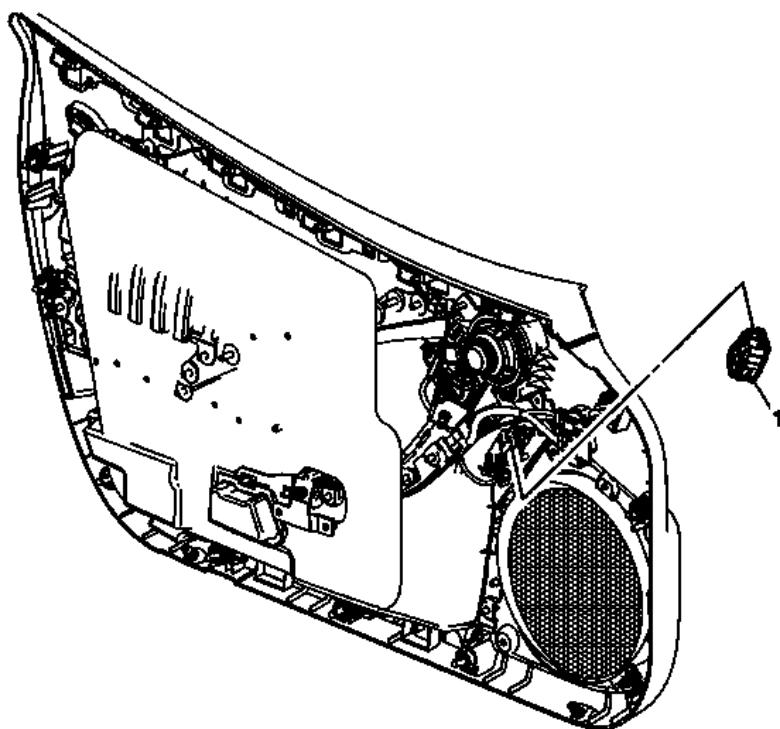


Fig. 27: Door Lock Switch - Passenger Front
 Courtesy of GENERAL MOTORS COMPANY

Door Lock Switch Replacement - Passenger Front

Callout	Component Name
Preliminary Procedure Remove the front side door trim panel. Refer to Front Side Door Trim Replacement (Passenger Side) .	
1	Door Lock Switch Assembly - Passenger Front Procedure 1. Using a plastic pry tool, gently pry on the sides to release the switch. 2. Disconnect the electrical connectors. 3. Refer to Control Module References for programming and set up procedures.

REAR COMPARTMENT LID RELEASE SWITCH REPLACEMENT

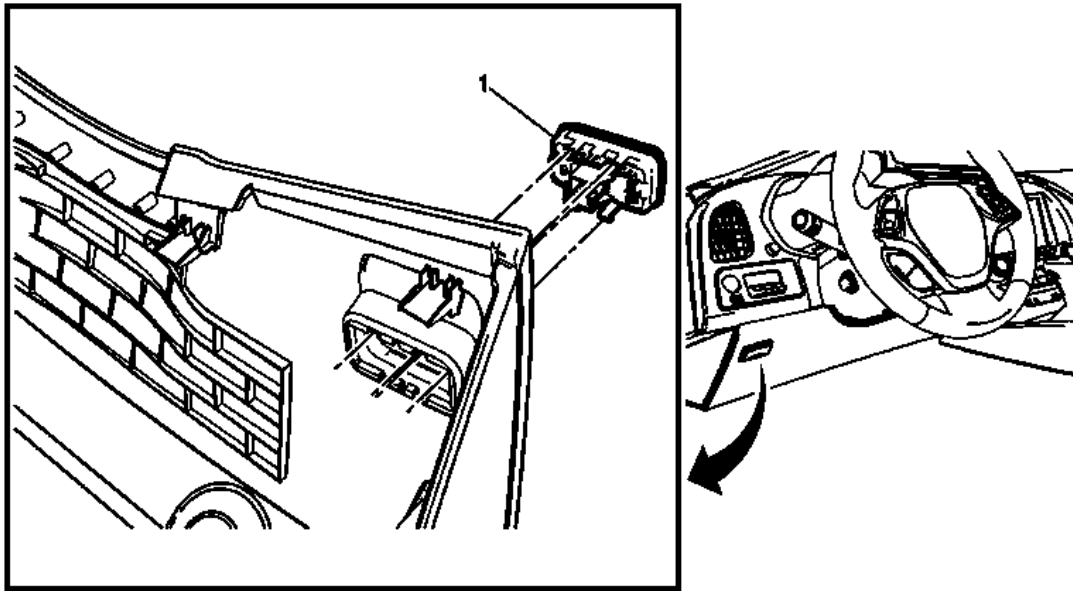


Fig. 28: Rear Compartment Lid Release Switch
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Release Switch Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel knee bolster. Refer to <u>Instrument Panel Knee Bolster Replacement</u> .	
1	Rear Compartment Lid Release Switch Procedure Using the appropriate tool, depress the tabs on the switch to remove.

DESCRIPTION AND OPERATION

DOOR AJAR INDICATOR DESCRIPTION AND OPERATION

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module (BCM)
- Instrument cluster
- Driver door latch
- Passenger door latch

- Driver window motor
- Passenger window motor

Door Ajar

The window motor supplies a 12 V signal to the door ajar switch within the door latch, when a door is open the door ajar switch closes pulling the 12 V signal low. When the window motor detects the drop in the 12 V signal circuit, it will then communicate this status to the BCM via local interconnect network (LIN) bus. The BCM communicates with the instrument cluster via serial data message. The instrument panel cluster, upon receipt of this serial data message, will illuminate the door ajar indicator and also send a serial data message to the radio to activate the door ajar audible warning when the vehicle speed is greater than 8 km/h (5 mph).

FUEL FILL DOOR DESCRIPTION AND OPERATION

Fuel Door Release System Components

- Body control module (BCM)
- Fuel door release actuator

The locking and unlocking of the fuel door is a function of the power door lock system. The fuel door release actuator is supplied by the door lock control circuit and the driver door unlock control circuit. The BCM, upon receipt of a lock switch lock or unlock signal, will supply battery voltage to the door lock actuator lock or unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the driver door latch assembly and the fuel door release actuator will then lock or unlock as commanded.

LUGGAGE COMPARTMENT DESCRIPTION AND OPERATION

Rear Compartment Lid Release System Components

- Body control module (BCM)
- Exterior rear compartment lid release switch
- Interior rear compartment lid release switch
- Rear compartment lid latch
- Body pressure relief valve
- Trunk ajar switch (Part of the rear compartment lid latch)
- Rear compartment lid release relay

Rear Compartment Lid Release Operation

Rear Compartment Lid Release Switch

The BCM monitors a voltage signal to the interior and exterior rear compartment lid release switch so that when either switch is pressed, the voltage within the signal circuit is pulled low and in response,

the BCM will detect the voltage drop and check the status of the door lock system. If the vehicle doors are locked, the BCM will ignore the switches, if the vehicle doors have been unlocked, the BCM will recognize the request and will provide voltage to the rear compartment lid relay.

Rear Compartment Lid Latch

When BCM receives a rear compartment lid release command from the exterior rear compartment lid release switch, the BCM applies brief pulse of voltage to the compartment lid release relay control circuit, which energizes the coil side of the relay. The switch side of the compartment lid release relay then momentarily closes, supplying a brief pulse of battery positive voltage to the rear compartment lid latch. The rear compartment lid latch is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the trunk lid so that the trunk lid may be manually raised to an open position.

Body Pressure Relief Valve

The body pressure relief valve is used to ease the closing effort of the trunk or liftglass by providing a release of trapped air in the luggage compartment. The body control module (BCM) provides a 12 V signal to the rear compartment lid ajar switch signal circuit. When the rear compartment lid latch releases the trunk or liftglass, the ajar switch, which is internal to the rear compartment lid latch, is supplied with ground which causes the trunk ajar switch signal circuit to be pulled low. The BCM will detect the voltage drop in the ajar signal circuit and will command the body pressure relief valve to open, when the trunk or liftglass is closed, the BCM will detect the rise of voltage in the ajar signal circuit and will command the body pressure relief valve to close

Keyless Entry Transmitter

The BCM may also get a rear compartment lid release command from the remote keyless entry module. When the trunk button is pressed on the keyless entry transmitter, a rear compartment lid release request is sent to the remote keyless entry module, the remote keyless entry module will then send a serial data message to the BCM to command the release of the rear compartment lid.

Trunk Open Message

The body control module (BCM) monitors the voltage level of the trunk ajar signal circuit which is normally at the system voltage when the trunk lid is closed. When the trunk lid is ajar or open, a switch within the latch assembly closes providing a path to ground for the trunk ajar signal circuit. The voltage within the signal circuit will then drop to 0 volts, the BCM will then detect the voltage drop and will send a serial data message to the instrument panel cluster (IPC). The IPC will then display the Trunk Open message.

POWER DOOR LOCKS DESCRIPTION AND OPERATION

Power Door Lock System Components

The power door lock system consists of the following components:

- Body control module (BCM)
- Door dead lock relay (AF8)
- Driver door lock switch
- Driver door latch
- Passenger door lock switch
- Passenger door latch
- Exterior door handle switches
- Interior door handle switches

Driver and Passenger Door Lock Switches

The body control module (BCM) monitors the voltage level of the door lock and door unlock signal circuits. When the driver or passenger door lock switch is in the open position, the voltage level in the signal circuit will be near 12 V. When the driver or passenger door lock switch is pressed to the lock, the voltage level in the lock signal circuit will drop to 0 V and the BCM will detect the voltage drop, illuminate the door lock indicators and will send a serial data message to the keyless entry control module to disable the functions of the driver and passenger door handle switches. When the driver or passenger door lock switch is pressed to the unlock, the voltage level in the unlock signal circuit will drop to 0 V and the BCM will detect the voltage drop and will send a serial data message to the keyless entry control module to restore the functions of the driver and passenger door handle switches.

Passive Keyless Entry System Description and Operation

Passive keyless entry allows entry to a locked vehicle without pressing any buttons on the keyless entry transmitter. You must only have the transmitter with you. The passive entry system use low frequency antennas in several different areas on the vehicle to determine the location of the transmitter. When passively opening a locked door or the rear compartment, you must have a programmed transmitter with you in your pocket, purse or briefcase.

When a door handle is pulled or the rear compartment touch pad is pressed, the low frequency antenna sends out a challenge to the keyless entry transmitter. Because of the low frequency, communication range is limited. The antenna will emit the challenge in a one meter range. The transmitter must be within this range to receive the challenge. The transmitter receives this challenge and emits it's response as an RF message, which is received by the remote control door lock receiver. If the response is correct, the door or rear compartment will unlock and open.

As a customer convenience feature, the keyless entry system will notify the driver if the transmitter has been left in the vehicle after exiting by chirping the vehicle horn three times. This may be turned off using vehicle personalization. Also, if the transmitter is left in the vehicle after a door lock switch has been used to lock the vehicle, the driver door will remain unlock after exiting the vehicle. This is intended to prevent locking the transmitter in the vehicle and being unable to access it.

- Passive door unlock/unlatch and lock
- Passive trunk or hatch release

- Illuminated interior lamps
- Vehicle starting
- Key In Vehicle Reminder

Unlock Driver Door Only

If enabled through personalization, approach the driver door with a valid keyless entry transmitter and pull the door handle to perform the following functions:

- Unlock and open only the driver door when door handle is operated
- Disarm the theft deterrent system
- Deactivate the theft deterrent system when in the alarm mode

Unlock All Doors

Approach the passenger door or if enabled through personalization, driver door with a valid keyless entry transmitter to perform the following functions:

- Unlock both vehicle doors when the approached door handle is operated
- Only opens door whose door handle is pulled
- Disarm the theft deterrent system
- Deactivate the theft deterrent system when in the alarm mode

Lock All Doors

Exit the vehicle (with ignition off) with the keyless entry transmitter to automatically perform the following functions, if equipped.

- Lock both vehicle doors after a delay
- Flash the exterior lights, if enabled through personalization
- Chirp horn, if enabled through personalization
- Arm the theft deterrent system

If more than one keyless entry transmitter is within a vehicle and the Keyless Entry System detects that one or more transmitters have been left in the vehicle after vehicle is locked, any transmitter left within the vehicle will be temporarily deactivated until:

- A button on the deactivated key fob is pressed (will only activate the fob whose button is pressed)
- A passive unlock of vehicle occurs
- Change in power mode occurs

Power Door Lock Deadlock Operation (AF8 Only)

Vehicles equipped with the deadlock feature include an additional reversible deadlock motor contained within each door latch assembly. Each deadlock motor is wired to the BCM through 2 control circuits; the door lock deadlock control circuit and the door lock actuator unlock control circuit. To deadlock a door, the door locks are activated by momentarily applying voltage to the door lock deadlock control circuits and ground to the door lock actuator unlock control circuits. Ground to the deadlock actuators is provided through the door lock actuator unlock control circuits. Once the doors are deadlocked, the mechanical lock/unlock linkage within the door lock actuator is physically disconnected so that when the doors have been manually unlocked, the interior door handles will not function. If the content theft feature is armed at the same time, the interior door lock switches will not operate the locks.

To restore the interior door handle functions, the BCM unlocks the doors by momentarily applying ground to the deadlock motor unlock control circuit. This energizes the rear door unlock relay coil causing voltage to flow through the switch contacts to the door lock and deadlock motors. Ground for both motors is supplied through the door lock motor lock circuit through the normally closed contacts of the lock relay to ground.

By performing the following actions, the interior door handle functions can be restored by using the keyless entry transmitter:

- Press the keyless entry transmitter lock button once to lock all doors, then press a second time within 3 s to deadlock all doors.
- Press the keyless entry transmitter unlock button once to unlock the driver door, then press a second time within 3 s to unlock all passenger doors.