

2017 ACCESSORIES & EQUIPMENT

Vehicle Access - Impala

SPECIFICATIONS

FASTENER SPECIFICATIONS

Reusable Threaded Fastener Tightening Specifications

NOTE:

All fasteners listed in this table can be reused after removal.

Application	Specification
	Metric (English)
Front Side Door Latch Bolt	10 N.m (89 lb in)
Front Side Door Lock Striker Bolt	22 N.m (16 lb ft)
Front Side Door Outside Bracket Screw	5 N.m (44 lb in)
Front Side Door Outside Handle Lock Cylinder Bezel Screw	10 N.m (89 lb in)
Rear Compartment Lid Latch Bolt	9 N.m (80 lb in)
Rear Compartment Lid Latch Striker Bolt	9 N.m (80 lb in)
Rear Side Door Latch Bolt	10 N.m (89 lb in)
Rear Side Door Lock Striker Bolt	22 N.m (16 lb ft)
Rear Side Door Outside Bracket Screw	5 N.m (44 lb in)
Rear Side Door Outside Handle Lock Cylinder Opening Cover Screw	4.7 N.m (42 lb in)

SCHEMATIC WIRING DIAGRAMS

DOOR LOCK/INDICATOR WIRING SCHEMATICS

Controls

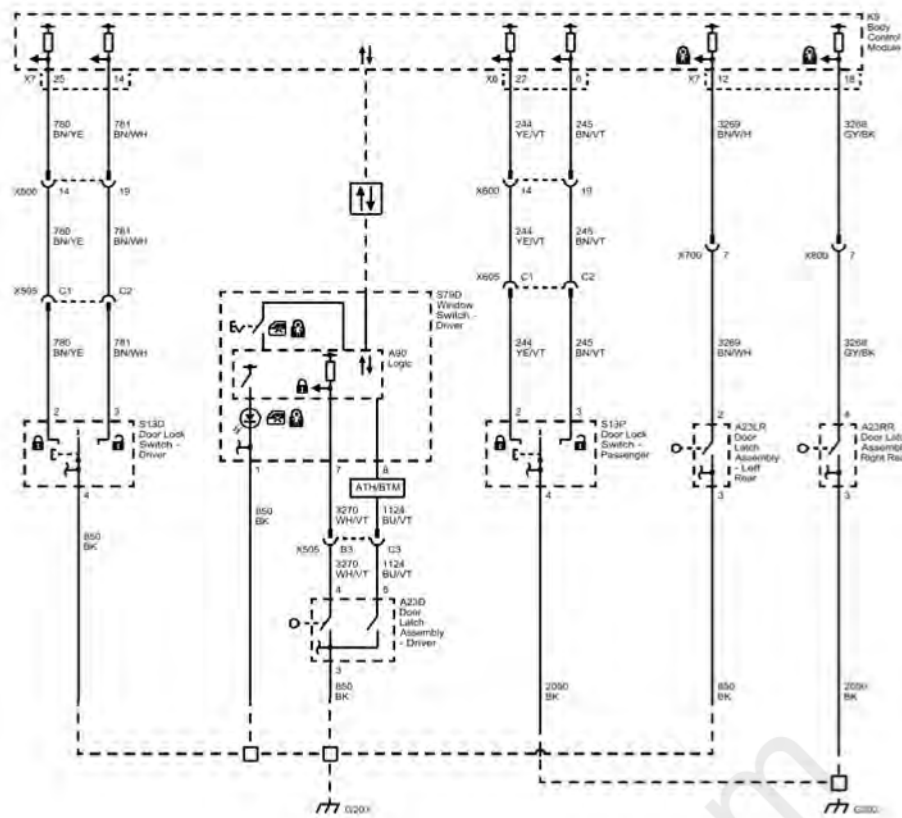


Fig. 1: Controls

Courtesy of GENERAL MOTORS COMPANY

Indicators

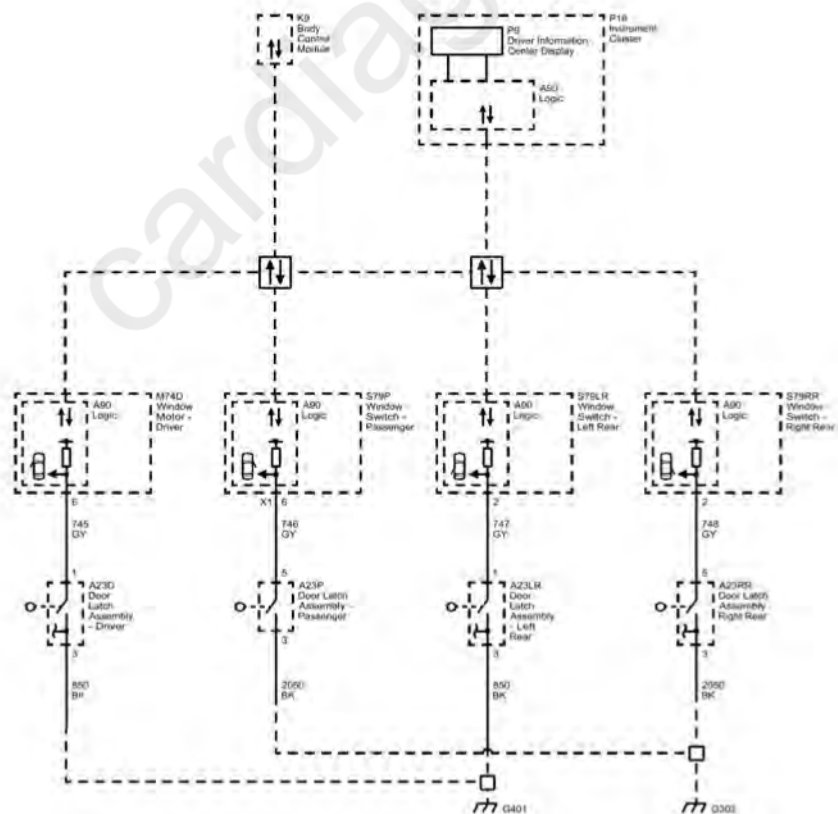


Fig. 2: Indicators

Courtesy of GENERAL MOTORS COMPANY

Actuators

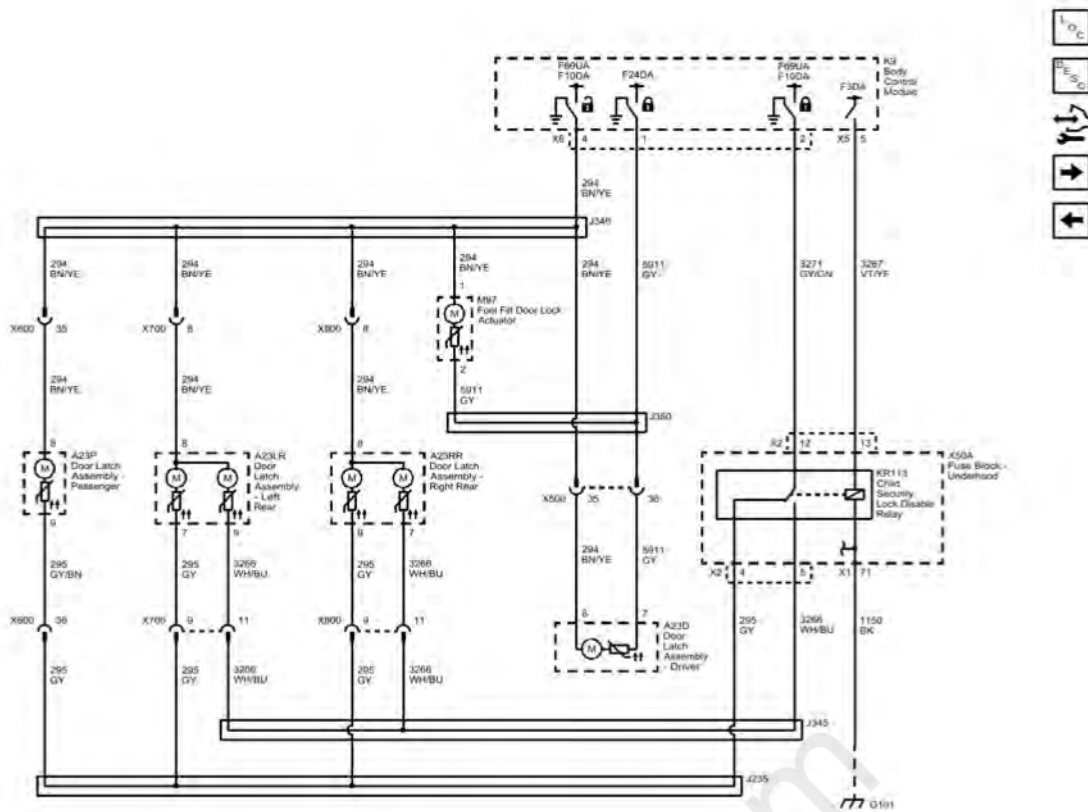


Fig. 3: Actuators

Courtesy of GENERAL MOTORS COMPANY

Handle Switches (ATH)

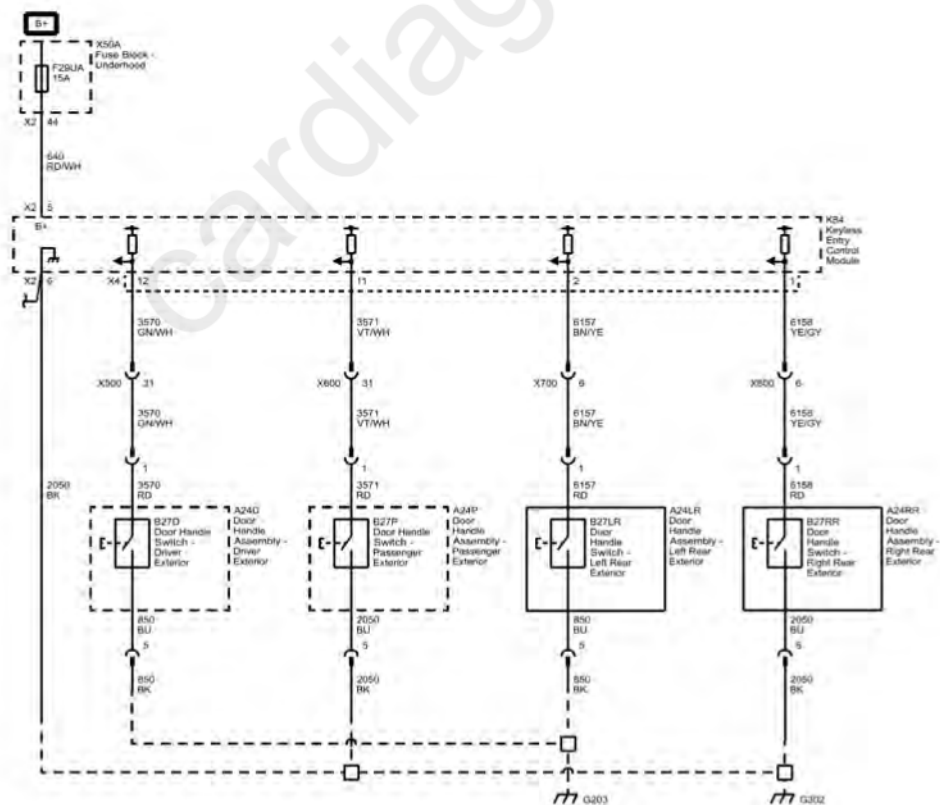


Fig. 4: Handle Switches (ATH)

Courtesy of GENERAL MOTORS COMPANY

RELEASE SYSTEMS WIRING SCHEMATICS

Rear Compartment

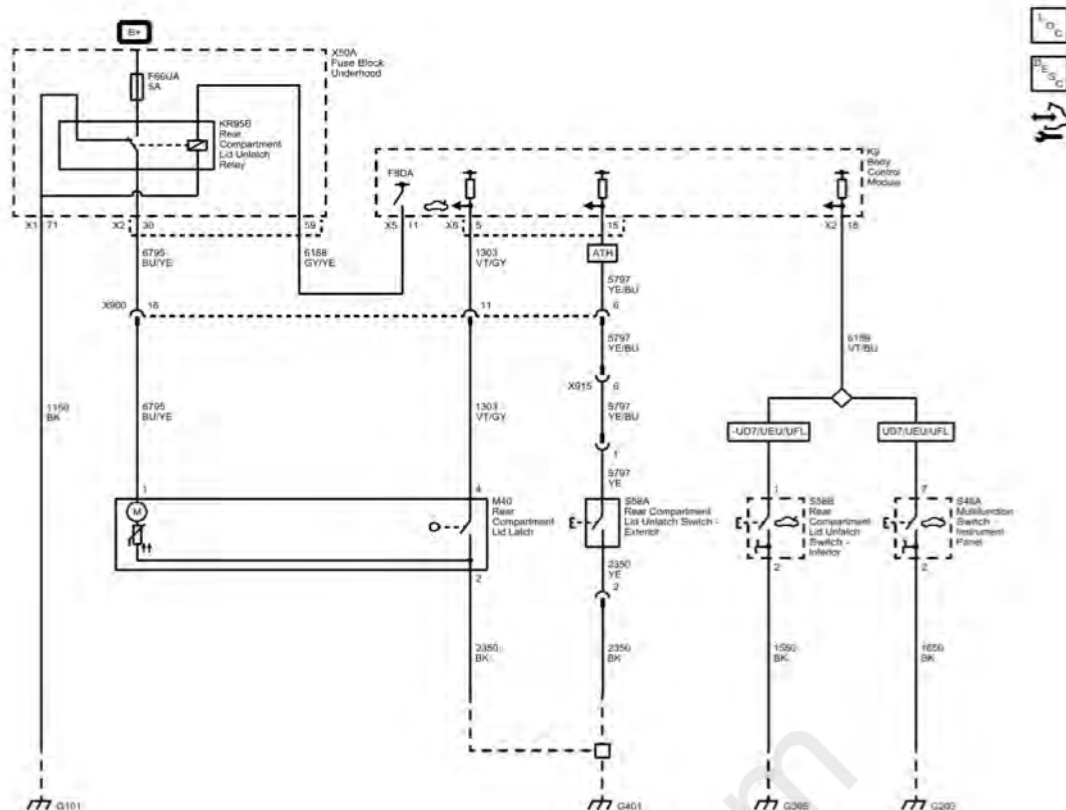


Fig. 5: Rear Compartment

Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

DTC B1474 OR B3849: PASSENGER/DRIVER EXTERIOR DOOR HANDLE SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B1474

Passenger Exterior Door Handle Switch Circuit

DTC B3849

Driver Exterior Door Handle Switch Circuit

Symptom Byte Information: [Symptom Byte List](#)

Diagnostic Fault Information

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

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ground - A24D Door Handle Assembly - Driver Exterior	-	1	-	-
Ground - A24P Door Handle Assembly - Passenger Exterior	-	2	-	-
1. B27D Door Handle Switch - Driver Exterior = Disabled 2. B27P Door Handle Switch - Passenger Exterior = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
B27D Door Handle Switch - Driver Exterior	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
B27P Door Handle Switch - Passenger Exterior	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K84 Keyless Entry Control Module	The control module also reads various switches and sensors and makes their values available via serial data.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

B1474 02

Passenger Door Handle Switch Signal = Short to Ground - For greater than 60 s

B3849 02

Driver Door Handle Switch Signal = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

B1474 02

B27P Door Handle Switch - Passenger Exterior = Disabled

B3849 02

B27D Door Handle Switch - Driver Exterior = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Door Component Views

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 / Vehicle - In Service Mode
2. B27D Door Handle Switch - Driver Exterior - Not Pressed

Verify the scan tool parameter: Exterior Driver Door Handle Switch = Inactive

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

3. B27P Door Handle Switch - Passenger Exterior - Not Pressed

Verify the scan tool parameter: Exterior Passenger Door Handle Switch = Inactive

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. Operate the component: B27D Door Handle Switch - Driver Exterior - Pressed

Verify the scan tool parameter: Exterior Driver Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

5. Operate the component: B27P Door Handle Switch - Passenger Exterior - Pressed

Verify the scan tool parameter: Exterior Passenger Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

6. All OK.

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector: A24D Door Handle Assembly - Driver Exterior or A24P Door Handle Assembly - Passenger Exterior
3. Test for less than 10 ohms between the test points: Ground circuit terminal 5 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 5 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: K84 Keyless Entry Control Module
 3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K84 Keyless Entry Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 5
7. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K84 Keyless Entry Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points:
 - Signal circuit terminal 1 @ B27D Door Handle Switch - Driver Exterior & Terminal 12 X4 @ Control module harness
 - Signal circuit terminal 1 @ B27P Door Handle Switch - Passenger Exterior & Terminal 11 X4 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K84 Keyless Entry Control Module
 - **If the specified state**
8. Test or replace the component: B27 Door Handle Switch

Component Testing

1. Ignition/Vehicle - Off

2. Disconnect the appropriate electrical connector: B27D Door Handle Switch - Driver Exterior or B27P Door Handle Switch - Passenger Exterior
3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 5 - Not Pressed

- **If less than infinite resistance**

Replace the component: B27 Door Handle Switch

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 5 - Pressed

- **If 3 ohms or greater**

Replace the component: B27 Door Handle Switch

- **If less than 3 ohms**

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Side Door Outside Handle Replacement \(with Passive Entry Passive Start\)](#)[Front Side Door Outside Handle Replacement \(without Passive Entry Passive Start\)](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B1534 OR B1535: LEFT/RIGHT REAR DOOR HANDLE SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B1534

Left Rear Door Handle Switch Circuit

DTC B1535

Right Rear Door Handle Switch Circuit

Symptom Byte Information: [Symptom Byte List](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal - Exterior Left Rear Door Handle Switch	B1534 02	1	1	-
Signal - Exterior Right Rear Door Handle Switch	B1535 02	2	2	-
Ground - A24LR Door Handle Assembly - Left Rear Exterior	-	1	-	-
Ground - A24RR Door Handle Assembly - Right Rear Exterior	-	2	-	-

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
1. B27LR Door Handle Switch - Left Rear Exterior = Disabled 2. B27RR Door Handle Switch - Right Rear Exterior = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
B27LR Door Handle Switch - Left Rear Exterior	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
B27RR Door Handle Switch - Right Rear Exterior	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K84 Keyless Entry Control Module	The control module also reads various switches and sensors and makes their values available via serial data.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

B1534 02

Left Rear Door Handle Switch Signal = Short to Ground - For greater than 60 s

B1535 02

Right Rear Door Handle Switch Signal = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

B1534 02

B27LR Door Handle Switch - Left Rear Exterior = Disabled

B1535 02

B27RR Door Handle Switch - Right Rear Exterior = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

[Door Lock/Indicator Schematics](#)

Connector End View Reference

Component View Reference

Door Component Views

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 / Vehicle - In Service Mode
2. Verify the scan tool parameter: Exterior Left Rear Door Handle Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing
 - **If the specified state**
3. Verify the scan tool parameter: Exterior Right Rear Door Handle Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing
 - **If the specified state**
4. Operate the component: B27LR Door Handle Switch - Left Rear Exterior - Pressed
Verify the scan tool parameter: Exterior Left Rear Door Handle Switch = Active
 - **If not the specified state**
Refer to: Circuit/System Testing
 - **If the specified state**
5. Operate the component: B27RR Door Handle Switch - Right Rear Exterior - Pressed
Verify the scan tool parameter: Exterior Right Rear Door Handle Switch = Active
 - **If not the specified state**
Refer to: Circuit/System Testing
 - **If the specified state**
6. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector: A24LR Door Handle Assembly - Left Rear Exterior or A24RR Door Handle Assembly - Right Rear Exterior

3. Test for less than 10 ohms between the test points: Ground circuit terminal 5 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection

2. Test for less than 2 ohms between the test points: Ground circuit terminal 5 @ Component harness & Ground Connection

- 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**

4. Ignition - On / Vehicle - In Service Mode

5. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Inactive

- **If not the specified state**

1. Ignition/Vehicle - Off

2. Disconnect the electrical connector: X4 @ K84 Keyless Entry Control Module

3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground

- If less than infinite resistance - Repair the short to ground on the circuit.
- If infinite resistance - Replace the component: K84 Keyless Entry Control Module

- **If the specified state**

6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 5

7. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Active

- **If not the specified state**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)

2. Disconnect the electrical connector: X4 @ K84 Keyless Entry Control Module

3. Ignition On/Vehicle in Service Mode.

4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground

- If 1 V or greater - Repair the short to voltage on the circuit.
- If less than 1 V

5. Ignition/Vehicle - Off

6. Test for less than 2 ohms between the test points:

- Signal circuit terminal 1 @ B27LR Door Handle Switch - Left Rear Exterior & Terminal 2 X4 @ Control module harness
- Signal circuit terminal 1 @ B27RR Door Handle Switch - Right Rear Exterior & Terminal 1 X4 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- If less than 2 ohms - Replace the component: K84 Keyless Entry Control Module

- **If the specified state**

8. Test or replace the component: A24 Door Handle Assembly

Component Testing

1. Ignition/Vehicle - Off

2. Disconnect the appropriate electrical connector: A24LR Door Handle Assembly - Left Rear Exterior or A24RR Door Handle Assembly - Right Rear Exterior

3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 5 - Not Pressed

- **If less than infinite resistance**

Replace the component: A24 Door Handle Assembly

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 5 - Pressed

- **If 3 ohms or greater**

Replace the component: A24 Door Handle Assembly

- **If less than 3 ohms**

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Rear Side Door Outside Handle Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B2494: LIFTGATE HANDLE SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B2494 00

Liftgate Handle Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B2494 00	1	1	-
Ground	-	1	-	-
1. S58A Rear Compartment Lid Unlatch Switch - Exterior = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Luggage Compartment Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
S58A Rear Compartment Lid Unlatch Switch - Exterior	• The switch has a normally open contact. • When the switch is activated, the signal circuit to the control module is grounded.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

Signal circuit = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

S58A Rear Compartment Lid Unlatch Switch - Exterior = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Luggage Compartment/Rear of Vehicle Component Views

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 / Vehicle - In Service Mode
2. S58A Rear Compartment Lid Unlatch Switch - Exterior - Not Pressed

Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

3. Operate the component: S58A Rear Compartment Lid Unlatch Switch - Exterior - Pressed

Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. All OK.

Circuit/System Testing

NOTE:

It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior
3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 2
7. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 1 @ Component harness & Terminal 15 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
8. Test or replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior
3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 2 - Not Pressed
 - **If less than infinite resistance**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 2 - Pressed

- **If 3 ohms or greater**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

- **If less than 3 ohms**

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Rear Compartment Lid Release Switch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B2730: INTERIOR TRUNK LID UNLATCH SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B2730 00

Interior Trunk Lid Unlatch Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B2730 00	1	1	-
Ground	-	1	-	-
1. S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Luggage Compartment Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
S58B Rear Compartment Lid Unlatch Switch - Interior	• The switch has a normally open contact. • When the switch is activated, the signal circuit to the control module is grounded.

Component	Description
S48A Multifunction Switch - Instrument Panel	- The switch has a normally open contact. - When the switch is activated, the signal circuit to the control module is grounded.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

Signal circuit = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Instrument Panel/Center Console Component Views

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

- Ignition - On / Vehicle - In Service Mode
- Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Inactive
 - If not the specified state**
Refer to: Circuit/System Testing
 - If the specified state**

3. Operate the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel - Pressed

Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector:
 - S58B Rear Compartment Lid Unlatch Switch - Interior
 - S48A Multifunction Switch - Instrument Panel
3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X2 K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - S58B Rear Compartment Lid Unlatch Switch - Interior: Signal circuit terminal 1 @ Component harness & Ground
 - S48A Multifunction Switch - Instrument Panel: Signal circuit terminal 7 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points:
 - S58B Rear Compartment Lid Unlatch Switch - Interior: Signal circuit terminal 1 & Ground circuit terminal 2
 - S48A Multifunction Switch - Instrument Panel: Signal circuit terminal 7 & Ground circuit terminal 2
7. Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X2 K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points:

- S58B Rear Compartment Lid Unlatch Switch - Interior: Signal circuit terminal 1 @ Component harness & Ground
 - S48A Multifunction Switch - Instrument Panel: Signal circuit terminal 7 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for less than 2 ohms between the test points:
- S58B Rear Compartment Lid Unlatch Switch - Interior: Signal circuit terminal 1 @ Component harness & Terminal 18 X2 @ Control module harness
 - S48A Multifunction Switch - Instrument Panel: Signal circuit terminal 7 @ Component harness & Terminal 18 X2 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
- **If the specified state**
8. Test or replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the appropriate electrical connector:
 - S58B Rear Compartment Lid Unlatch Switch - Interior
 - S48A Multifunction Switch - Instrument Panel
3. Test for infinite resistance between the test points:
 - S58B Rear Compartment Lid Unlatch Switch - Interior: Signal terminal 1 & Ground terminal 2 - The switch is in the open position.
 - S48A Multifunction Switch - Instrument Panel: Signal terminal 7 & Ground terminal 2 - The switch is in the open position.
 - **If less than infinite resistance**

Replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points:
 - S58B Rear Compartment Lid Unlatch Switch - Interior: Signal terminal 1 & Ground terminal 2 - The switch is in the closed position.
 - S48A Multifunction Switch - Instrument Panel: Signal terminal 7 & Ground terminal 2 - The switch is in the closed position.
 - **If 3 ohms or greater**

Replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel
 - **If less than 3 ohms**
5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Instrument Panel Multifunction Switch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B297B OR B297C: DRIVER DOOR OPEN SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B297B

Driver Door Open Switch Circuit

Symptom Byte Information: [Symptom Byte List](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B297B 5A	B297B 5A	B297B 5A	-
Ground	-	1	-	-
1. Door Ajar Indicator - Driver Door = Always Off				

Typical Scan Tool Data

Body Control Module - Driver Door Ajar Switch

Circuit	Short to Ground	Open	Short to Voltage
Operating Conditions: Ignition - On / Vehicle - In Service Mode Parameter Normal Range: • Inactive - Driver Door - Closed • Active - Driver Door - Open			
Signal	Active	Inactive	Inactive
Ground	-	Inactive	-

Keyless Entry Control Module - Driver Door Ajar Switch

Circuit	Short to Ground	Open	Short to Voltage
Operating Conditions: Ignition - On / Vehicle - In Service Mode Parameter Normal Range: • Inactive - Driver Door - Closed • Active - Driver Door - Open			
Signal	Active	Inactive	Inactive
Ground	-	Inactive	-

Circuit/System Description

For an overview of the component/system, refer to: [Keyless Entry System Description and Operation \(without BTM\)](#) [Keyless Entry System Description and Operation \(with BTM\)](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description

Component	Description
A23D Door Latch Assembly - Driver	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K84 Keyless Entry Control Module	The control module also reads various switches and sensors and makes their values available via serial data.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

DTC B297B 5A may set when there is a condition with the component circuits:

- Driver Door Open Switch Circuit = Open/High Resistance & Left Front Door Ajar Circuit = Normal
- Driver Door Open Switch Circuit = Short to Ground & Left Front Door Ajar Circuit = Normal
- Left Front Door Ajar Circuit = Open/High Resistance & Driver Door Open Switch Circuit = Normal
- Left Front Door Ajar Circuit = Short to Ground & Driver Door Open Switch Circuit = Normal

Actions Taken When the DTC Sets

- Driver Information Display = Service Driver Door Switch
- Audible Reminders = Continuously

Conditions for Clearing the DTC

- The conditions for setting the DTC no longer exist.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

- [Door Lock/Indicator Schematics](#)
- [Remote Function Schematics](#)

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Door Component Views

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 / Vehicle - In Service Mode
2. Operate the component: Driver Door - Open

Verify the scan tool parameter: Body Control Module - Driver Door Ajar Switch = Active

- **If not the specified state**

Refer to: [Door Ajar Indicator Malfunction](#)

- **If the specified state**

3. Verify the scan tool parameter: Keyless Entry Control Module - Driver Door Ajar Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. Operate the component: Driver Door - Closed

Verify the scan tool parameter: Body Control Module - Driver Door Ajar Switch = Inactive

- **If not the specified state**

Refer to: [Door Ajar Indicator Malfunction](#)

- **If the specified state**

5. Verify the scan tool parameter: Keyless Entry Control Module - Driver Door Ajar Switch = Inactive

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

6. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver

3. Test for less than 10 ohms between the test points: Ground circuit terminal 8 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection

2. Test for less than 2 ohms between the test points: Ground circuit terminal 8 @ Component harness & Ground Connection

- 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**

4. Ignition - On / Vehicle - In Service Mode

5. Verify the scan tool parameter: Driver Door Ajar Switch = Inactive

- **If not the specified state**

1. Ignition/Vehicle - Off

2. Disconnect the electrical connector: K84 Keyless Entry Control Module

3. Test for infinite resistance between the test points: Signal circuit terminal 7 @ Component harness & Ground

- If less than infinite resistance - Repair the short to ground on the circuit.
- If infinite resistance - Replace the component: K84 Keyless Entry Control Module

- **If the specified state**

6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 7 & Ground circuit terminal 8
7. Verify the scan tool parameter: Driver Door Ajar Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K84 Keyless Entry Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 7 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 7 @ & Signal circuit terminal 9 X1 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K84 Keyless Entry Control Module
 - **If the specified state**
8. Test or replace the component: A23D Door Latch Assembly - Driver

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver
3. Test for infinite resistance between the test points: Signal terminal 7 & Ground terminal 8 - The switch is in the open position.
 - **If less than infinite resistance**

Replace the component: A23D Door Latch Assembly - Driver
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 2 & Ground terminal 8 - The switch is in the closed position.
 - **If 3 ohms or greater**

Replace the component: A23D Door Latch Assembly - Driver
 - **If less than 3 ohms**
5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Side Door Latch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

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

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B3125

Driver Door Only Unlock Circuit

DTC B3130

All Doors Unlock Circuit

DTC B3135

All Doors Lock Circuit

Symptom Byte Information:**Symptom Byte List****Diagnostic Fault Information**

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Short to Voltage
B+ - Body Control Module	B3125 02, B3130 02, B3135 02	B3125 02, B3130 02, B3135 02	-	-
Ground - Body Control Module	-	1, 2, 3, 4	-	-
Control - A23D Door Latch Assembly - Driver	B3125 02, B3130 02, B3135 02	1	B3125 01, B3130 01, B3135 01	-
Control - A23P Door Latch Assembly - Passenger	B3125 02, B3130 02, B3135 02	2	B3125 01, B3130 01, B3135 01	-
Control - A23LR Door Latch Assembly - Left Rear	B3125 02, B3130 02, B3135 02	3	B3125 01, B3130 01, B3135 01	-
Control - A23RR Door Latch Assembly - Right Rear	B3125 02, B3130 02, B3135 02	4	B3125 01, B3130 01, B3135 01	-
1. A23D Door Latch Assembly - Driver = Inoperative 2. A23P Door Latch Assembly - Passenger = Inoperative 3. A23LR Door Latch Assembly - Left Rear = Inoperative 4. A23RR Door Latch Assembly - Right Rear = Inoperative				

Circuit/System DescriptionFor an overview of the component/system, refer to: [**Power Door Locks Description and Operation**](#)

Circuit	Description
B+ - Body Control Module	Supplied from a fuse.
Ground - Body Control Module	Chassis Ground
Control Driver Door Unlock	The output circuit is switched from ground to 12 V to activate the component.
Control All Doors Lock	The output circuit is switched from ground to 12 V to activate the component.
Control Passenger Door Unlock	The output circuit is switched from ground to 12 V to activate the component.

Component	Description

Component	Description
A23D Door Latch Assembly - Driver	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23P Door Latch Assembly - Passenger	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23LR Door Latch Assembly - Left Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23RR Door Latch Assembly - Right Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc. The control module also reads various switches and sensors and makes their values available via serial data.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

- B3125 01, B3130 01, B3135 01 - Control Circuit = Short to Voltage
- B3125 02, B3130 02, B3135 02 - Control Circuit = Short to Ground
- B3125 02, B3130 02, B3135 02 - B+ circuit @ K9 Body Control Module = Short to Ground/Open/High Resistance

Actions Taken When the DTC Sets

All Doors Lock Command & All Doors Unlock Command = Inoperative

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

- [Door Lock/Indicator Schematics](#)
- [Body Control System Schematics](#)

Connector End View Reference

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- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)
- [Relay Replacement \(Attached to Wire Harness\)](#) [Relay Replacement \(Within an Electrical Center\)](#)

Control Module References

Circuit/System Verification

1. Ignition - On / Vehicle - In Service Mode
2. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock

Verify the scan tool parameter: Driver Door Lock Switch = Inactive & Lock & Unlock

- **If not the specified state**

Refer to: [Power Door Locks Malfunction](#)

- **If the specified state**

3. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock

Verify the component works as specified:

- A23D Door Latch Assembly - Driver = Lock & Unlock
- A23LR Door Latch Assembly - Left Rear = Lock & Unlock
- A23P Door Latch Assembly - Passenger = Lock & Unlock
- A23RR Door Latch Assembly - Right Rear = Lock & Unlock
- **If the component does not activate - A23D Door Latch Assembly - Driver**

Refer to: Circuit/System Testing - Test 1

- **If the component does not activate - A23LR Door Latch Assembly - Left Rear**

Refer to: Circuit/System Testing - Test 2

- **If the component does not activate - A23P Door Latch Assembly - Passenger**

Refer to: Circuit/System Testing - Test 2

- **If the component does not activate - A23RR Door Latch Assembly - Right Rear**

Refer to: Circuit/System Testing - Test 2

- **If none of the components operate**

Refer to: Circuit/System Testing - Test 3

- **If all functions work properly**

4. All OK.

Circuit/System Testing

Test 1

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver
3. Connect a test lamp between the test points: Control circuit terminal 7 & Control circuit terminal 8
4. Ignition - On / Vehicle - In Service Mode
5. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock
6. Verify the test lamp does not turn On and Off.

- **If the test lamp turns On and Off**

Test or replace the component: A23D Door Latch Assembly - Driver

- **If the test lamp does not turn On and Off**

7. Ignition/Vehicle - Off

8. Disconnect the electrical connector: X6 K9 Body Control Module

9. Test for less than 2 ohms between the test points:

- Control circuit terminal 8 @ A23D Door Latch Assembly - Driver & Terminal 4 X6 @ Control module harness
- Control circuit terminal 7 @ A23D Door Latch Assembly - Driver & Terminal 1 X6 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- **If less than 2 ohms**

10. Test or replace the component: K9 Body Control Module

Test 2

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the appropriate electrical connector:

- A23LR Door Latch Assembly - Left Rear
- A23P Door Latch Assembly - Passenger
- A23RR Door Latch Assembly - Right Rear

3. Connect a test lamp between the test points:

- A23P Door Latch Assembly - Passenger Control circuit terminal 9 & Control circuit terminal 8
- A23LR Door Latch Assembly - Left Rear Control circuit terminal 7 & Control circuit terminal 8
- A23RR Door Latch Assembly - Right Rear Control circuit terminal 9 & Control circuit terminal 8

4. Ignition - On / Vehicle - In Service Mode

5. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock

6. Verify the test lamp does not turn On and Off.

- **If the test lamp turns On and Off**

Test or replace the component: A23 Door Latch Assembly

- **If the test lamp does not turn On and Off**

7. Ignition/Vehicle - Off

8. Disconnect the electrical connector: X6 K9 Body Control Module

9. Ignition - On / Vehicle - In Service Mode

10. Test for less than 2 ohms between the test points:

- Control circuit terminal 9 @ A23P Door Latch Assembly - Passenger & Terminal 2 X6 @ Control module harness
- Control circuit terminal 8 @ A23P Door Latch Assembly - Passenger & Terminal 4 X6 @ Control module harness
- Control circuit terminal 7 @ A23LR Door Latch Assembly - Left Rear & Terminal 2 X6 @ Control module harness
- Control circuit terminal 8 @ A23LR Door Latch Assembly - Left Rear & Terminal 4 X6 @ Control module harness
- Control circuit terminal 9 @ A23RR Door Latch Assembly - Right Rear & Terminal 2 X6 @ Control module harness
- Control circuit terminal 8 @ A23RR Door Latch Assembly - Right Rear & Terminal 4 X6 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- **If less than 2 ohms**

11. Test or replace the component: K9 Body Control Module

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: X2 & X6 K9 Body Control Module
3. Test for less than 10 ohms between the test points: Ground circuit terminal 3 X6 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 3 X6 & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify a test lamp turns On between the test points: B+ circuit terminal 4 X2 & Ground
 - **If the test lamp does not turn On and the circuit fuse is OK**
 1. Ignition/Vehicle - Off & Remove - Test lamp
 2. Test for less than 2 ohms between the test points: B+ circuit terminal 4 X2 & Output terminal @ Fuse
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Verify the fuse is OK and there is voltage at the fuse.
 - **If the test lamp does not turn On and the circuit fuse is open**
 1. Ignition/Vehicle - Off & Remove - Test lamp
 2. Disconnect the electrical connector:
 - A23D Door Latch Assembly - Driver
 - A23LR Door Latch Assembly - Left Rear
 - A23P Door Latch Assembly - Passenger
 - A23RR Door Latch Assembly - Right Rear
 3. Test for infinite resistance between the test points:
 - Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 4 X6 @ K9 Body Control Module & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: A23 Door Latch Assembly
 - **If the test lamp turns On**
6. Ignition/Vehicle - Off
7. Connect the electrical connector: X2 K9 Body Control Module
8. Ignition - On / Vehicle - In Service Mode
9. Test for less than 1 V between the test points:
 - Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 2 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 4 X6 @ K9 Body Control Module & Ground
 - **If greater than 1 V**

Repair the short to voltage on the circuit.
 - **If 1 V or less**
10. Ignition/Vehicle - Off
11. Disconnect the electrical connector: X2 X50A Fuse Block - Underhood

12. Test for infinite resistance between the test points:

- Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
- Control circuit terminal 4 X6 @ K9 Body Control Module & Ground
- Control circuit terminal 4 X2 @ X50A Fuse Block - Underhood & Ground
- Control circuit terminal 5 X2 @ X50A Fuse Block - Underhood & Ground
- **If less than infinite resistance**

Repair the short to ground on the circuit.

- **If infinite resistance**

13. Connect the electrical connector: X2 X50A Fuse Block - Underhood

14. Test for infinite resistance between the test points: Control circuit terminal 2 X6 @ K9 Body Control Module & Ground

- **If less than infinite resistance**

1. Ignition/Vehicle - Off

2. Disconnect the electrical connector: X2 X50A Fuse Block - Underhood

3. Test for infinite resistance between the test points: Control circuit terminal 2 X6 @ K9 Body Control Module & Ground

- If less than infinite resistance - Repair the short to ground on the circuit.
- If infinite resistance - Replace the component: X50A Fuse Block - Underhood

- **If infinite resistance**

15. Replace the component: K9 Body Control Module

Component Testing

1. Ignition/Vehicle - Off

2. Disconnect the appropriate electrical connector:

- A23D Door Latch Assembly - Driver
- A23P Door Latch Assembly - Passenger
- A23LR Door Latch Assembly - Left Rear
- A23RR Door Latch Assembly - Right Rear

3. Connect a 25 A fused jumper wire between the test points:

- A23D Door Latch Assembly - Driver Control terminal 7 & B+
- A23P Door Latch Assembly - Passenger Control terminal 9 & B+
- A23LR Door Latch Assembly - Left Rear Control terminal 7 & B+
- A23RR Door Latch Assembly - Right Rear Control terminal 9 & B+

CAUTION: Complete the testing as quickly as possible in order to prevent overheating and damaging the component.

4. Momentarily connect a jumper wire between the test points: Control terminal 8 & Ground

5. Reverse the jumper wires 2 times between the terminals.

Verify the component works as specified: A23 Door Latch Assembly = Lock & Unlock

- **If not the specified state**

Replace the component: A23 Door Latch Assembly

- **If not the specified state**

6. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [**Diagnostic Repair Verification**](#)

- Refer to [Front Side Door Latch Replacement](#)
- Refer to [Rear Side Door Latch Replacement](#)
- Refer to [Front Compartment Fuse Block Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

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

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

NOTE: This procedure may also diagnose malfunctions that are not detected by a DTC.

DTC B3140 00

Driver Door Unlock Switch Circuit

DTC B3145 00

Passenger Door Unlock Switch Circuit

DTC B3150 00

Driver Door Lock Switch Circuit

DTC B3155 00

Passenger Door Lock Switch Circuit

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal terminal 2 @ S13D Door Lock Switch - Driver	B3150 00	2	2	-
Signal terminal 3 @ S13D Door Lock Switch - Driver	B3140 00	3	3	-
Signal terminal 2 @ S13P Door Lock Switch - Passenger	B3155 00	4	4	-
Signal terminal 3 @ S13P Door Lock Switch - Passenger	B3145 00	5	5	-
S13D Door Lock Switch - Driver - Ground	-	1	-	-
S13P Door Lock Switch - Passenger - Ground	-	6	-	-

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
1. S13D Door Lock Switch - Driver = Inoperative 2. Driver Door Lock Switch = Inoperative 3. Driver Door Unlock Switch = Inoperative 4. Passenger Door Lock Switch = Inoperative 5. Passenger Door Unlock Switch = Inoperative 6. S13P Door Lock Switch - Passenger = Inoperative				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
S13D Door Lock Switch - Driver	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
S13P Door Lock Switch - Passenger	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

Vehicle On

Conditions for Setting the DTC

B3140 00 - Driver Door Lock Switch Circuit = Short to Ground - For greater than 60 s

B3145 00 - Passenger Door Unlock Switch Circuit = Short to Ground - For greater than 60 s

B3150 00 - Driver Door Unlock Switch Circuit = Short to Ground - For greater than 60 s

B3155 00 - Passenger Door Lock Switch Circuit = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

B3140 00 - Driver Door Lock Switch = Disabled

B3145 00 - Passenger Door Unlock Switch = Disabled

B3150 00 - Driver Door Unlock Switch = Disabled

B3155 00 - Passenger Door Lock Switch = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

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Door Component Views

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 / Vehicle - In Service Mode
2. Verify the scan tool parameter: Driver Door Lock Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
3. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock
Verify the scan tool parameter: Driver Door Lock Switch = Lock & Unlock
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
4. Verify the scan tool parameter: Passenger Door Lock Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 2
 - **If the specified state**
5. Operate the component: S13P Door Lock Switch - Passenger - Lock & Unlock
Verify the scan tool parameter: Passenger Door Lock Switch = Lock & Unlock
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 2
 - **If the specified state**
6. All OK.

Circuit/System Testing

Test 1

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: S13D Door Lock Switch - Driver
3. Test for less than 10 ohms between the test points: Ground circuit terminal 4 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 4 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Driver Door Lock Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X7 K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - Signal circuit terminal 2 @ Component harness & Ground
 - Signal circuit terminal 3 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 2 & Ground circuit terminal 4
7. Verify the scan tool parameter: Driver Door Lock Switch = Lock
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X7 K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 2 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 2 @ Component harness & Terminal 25 X7 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
8. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 3 & Ground circuit terminal 4
9. Verify the scan tool parameter: Driver Door Lock Switch = Unlock
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X7 K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 3 @ Component harness & Ground

- If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 3 @ Component harness & Terminal 14 X7 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
 10. Test or replace the component: S13D Door Lock Switch - Driver

Test 2

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: S13P Door Lock Switch - Passenger
3. Test for less than 10 ohms between the test points: Ground circuit terminal 4 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 4 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Passenger Door Lock Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X6 K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - Signal circuit terminal 2 @ Component harness & Ground
 - Signal circuit terminal 3 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 2 & Ground circuit terminal 4
7. Verify the scan tool parameter: Passenger Door Lock Switch = Lock
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X6 K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 2 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for less than 2 ohms between the test points: Signal circuit terminal 2 @ Component harness & Terminal 22 X6 @ Control module harness

- If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
8. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 3 & Ground circuit terminal 4
 9. Verify the scan tool parameter: Passenger Door Lock Switch = Unlock
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X6 K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 3 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 3 @ Component harness & Terminal 6 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
 10. Test or replace the component: S13P Door Lock Switch - Passenger

Component Testing

S13 Door Lock Switch - Test

1. Ignition/Vehicle - Off
2. Disconnect the appropriate electrical connector: S13 Door Lock Switch
3. Test for infinite resistance between the test points:
 - Signal terminal 2 & Ground terminal 4 - Switch - Not Pressed
 - Signal terminal 3 & Ground terminal 4 - Switch - Not Pressed
 - **If less than infinite resistance**
Replace the component: S13 Door Lock Switch
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 2 & Ground terminal 4 - Lock Switch - Pressed
 - **If 3 ohms or greater**
Replace the component: S13 Door Lock Switch
 - **If less than 3 ohms**
5. Test for less than 3 ohms between the test points: Signal terminal 3 & Ground terminal 4 - Unlock Switch - Pressed
 - **If 3 ohms or greater**
Replace the component: S13 Door Lock Switch
 - **If less than 3 ohms**
6. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Door Lock Switch Replacement - Driver Side](#)
- Refer to [Door Lock Switch Replacement - Passenger Front](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B3265: TRUNK LID UNLATCH OUTPUT CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B3265

Trunk Lid Unlatch Output Circuit

Symptom Byte Information: [Symptom Byte List](#)

Diagnostic Fault Information

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

Circuit/System Description

For an overview of the component/system, refer to: [Luggage Compartment Description and Operation](#)

Circuit	Description
Control - Relay Coil	The output circuit is switched to 12 V to activate the component.
Ground - Relay Coil	Chassis Ground

Component	Description
X50A Fuse Block - Underhood	The fuse block houses various fuses and relays.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

KR95B Rear Compartment Lid Unlatch Relay - The component is commanded On.

Conditions for Setting the DTC

- B3265 01 - Control Circuit = Short to Battery
- B3265 02 - Control Circuit = Short to Ground
- B3265 04 - Control Circuit = Open

Actions Taken When the DTC Sets

M40 Rear Compartment Lid Latch = Inoperative

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Front of Vehicle/Engine Compartment Component Views

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 / Vehicle - In Service Mode
2. Perform the scan tool control function: Trunk Lid Unlatch - Unlatch

Verify the component produces a clicking sound: M40 Rear Compartment Lid Latch

- **If the component does not produce a sound**

Refer to: Circuit/System Testing

- **If the component produces a sound**

3. All OK.

Circuit/System Verification

1. Ignition - On / Vehicle - In Service Mode
2. Perform the scan tool control function: Trunk Lid Unlatch - Unlatch

Verify the component produces a clicking sound: M40 Rear Compartment Lid Latch

- **If the component does not produce a sound**

Refer to: Circuit/System Testing

- **If the component produces a sound**

3. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: X1 X50A Fuse Block - Underhood
3. Test for less than 10 ohms between the test points: Ground circuit terminal 71 X1 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection
2. Test for less than 2 ohms between the test points: Ground circuit terminal 71 X1 & Ground Connection
 - 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**

4. Connect the electrical connector: X1 X50A Fuse Block - Underhood
5. Disconnect the electrical connector: X5 K9 Body Control Module
6. Ignition - On / Vehicle - In Service Mode
7. Momentarily connect a 3 A fused jumper wire between the test points: Control circuit terminal 11 X5 & B+

Verify the component turns On and Off when connecting and disconnecting the jumper wire: M40 Rear Compartment Lid Latch

- **If the component does not turn On and Off**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: X2 X50A Fuse Block - Underhood
3. Ignition - On / Vehicle - In Service Mode
4. Test for less than 1 V between the test points: Control circuit terminal 11 X5 @ Control module harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for infinite resistance between the test points: Control circuit terminal 11 X5 @ Control module harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
7. Test for less than 2 ohms between the test points: Control circuit terminal 11 X5 @ Control module harness & Terminal 59 X2 @ Fuse Block Harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Test or replace the component: X50A Fuse Block - Underhood

- **If the component turns On and Off**

8. Replace the component: K9 Body Control Module

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Compartment Fuse Block Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B3618: EXTERIOR LIFTGATE WINDOW UNLATCH SWITCH CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

NOTE: This procedure may also diagnose malfunctions that are not detected by a DTC.

Exterior Liftgate Window Unlatch Switch Circuit

Diagnostic Fault Information

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

Circuit/System Description

For an overview of the component/system, refer to: [Luggage Compartment Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
S58A Rear Compartment Lid Unlatch Switch - Exterior	- The switch has a normally open contact. - When the switch is activated, the signal circuit to the control module is grounded.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

Ignition - On / Vehicle - In Service Mode

Conditions for Setting the DTC

Signal circuit = Short to Ground - For greater than 60 s

Actions Taken When the DTC Sets

S58A Rear Compartment Lid Unlatch Switch - Exterior = Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Luggage Compartment/Rear of Vehicle Component Views

- [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 / Vehicle - In Service Mode
2. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive
 - **If not the specified state**

Refer to: Circuit/System Testing
 - **If the specified state**
3. Operate the component: S58A Rear Compartment Lid Unlatch Switch - Exterior - Pressed

Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active
 - **If not the specified state**

Refer to: Circuit/System Testing
 - **If the specified state**
4. All OK.

[Circuit/System Testing](#)

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior
3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**

6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 2
7. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 1 @ Component harness & Terminal 15 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
8. Test or replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior
3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 2 - The switch is in the open position.
 - **If less than infinite resistance**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 2 - The switch is in the closed position.
 - **If 3 ohms or greater**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior
 - **If less than 3 ohms**
5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Rear Compartment Lid Release Switch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

DTC B3930: CHILD SECURITY LOCK MOTORS CIRCUIT

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

DTC Descriptor

DTC B3930

Symptom Byte Information: [Symptom Byte List](#)**Diagnostic Fault Information**

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control - Relay Coil	B3930 02	B3930 04	B3930 01	-
Ground - Relay Coil	-	B3930 04	-	-

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Control - Relay Coil	The output circuit is switched to 12 V to activate the component.

Component	Description
X50A Fuse Block - Underhood	The fuse block houses various fuses and relays.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Conditions for Running the DTC

KR113 Child Security Lock Disable Relay - The component is commanded On.

Conditions for Setting the DTC**B3930 01**

Child Security Lock Relay Control = Short to Battery

B3930 02

Child Security Lock Relay Control = Short to Ground

B3930 04

Child Security Lock Relay Control = Open/High Resistance

Actions Taken When the DTC Sets

- Child Security Lock Indicator - LED flashes.
- Child Security Lock/Window Lockout - Disabled

Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Electrical Information Reference

- [Circuit Testing](#)
- [Connector Repairs](#)
- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)
- [Relay Replacement \(Attached to Wire Harness\)](#) [Relay Replacement \(Within an Electrical Center\)](#)

Scan Tool Reference

Control Module References

Circuit/System Verification

1. Ignition - On / Vehicle - In Service Mode
2. Perform the scan tool control function: Child Security Lock Motors - On

Verify the correct operation:

- Interior Door Handle @ Left Rear Door - Disabled
- Interior Door Handle @ Right Rear Door - Disabled
- **If none of the components work properly**

Refer to: Circuit/System Testing

- **If the component works as specified**

3. Perform the scan tool control function: Child Security Lock Motors - Off

Verify the correct operation:

- Interior Door Handle @ Left Rear Door - Enabled
- Interior Door Handle @ Right Rear Door - Enabled
- **If none of the components work properly**

Refer to: Circuit/System Testing

- **If the component works as specified**

4. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: X1 @ X50A Fuse Block - Underhood
3. Test for less than 10 ohms between the test points: Ground circuit terminal 71 X1 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 71 X1 & Ground Connection
 - 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**

4. Connect the electrical connector: X1 @ X50A Fuse Block - Underhood
5. Disconnect the electrical connector: X5 @ K9 Body Control Module
6. Ignition - On / Vehicle - In Service Mode
7. Momentarily connect a 3 A fused jumper wire between the test points: Control circuit terminal 5 X5 & B+

Verify the component produces a clicking sound: KR113 Child Security Lock Disable Relay

- **If the component does not produce a sound**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: X2 @ X50A Fuse Block - Underhood
3. Ignition - On / Vehicle - In Service Mode
4. Test for less than 1 V between the test points: Control circuit terminal 5 X5 @ Control module harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for infinite resistance between the test points: Control circuit terminal 5 X5 @ Control module harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
7. Test for less than 2 ohms between the test points: Control circuit terminal 5 X5 @ Control module harness & Control circuit terminal 13 X2 @ Fuse Block Harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Test or replace the component: X50A Fuse Block - Underhood

- **If the component turns On and Off**

8. Replace the component: K9 Body Control Module

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Compartment Fuse Block Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

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](#)
 - [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:

- [Exterior Door Handle Switch Malfunction](#)
- [Power Door Child Lock Malfunction](#)
- [Door Ajar Indicator Malfunction](#)
- [Power Door Locks Malfunction](#)
- [Trunk Release Malfunction](#)
- [Trunk Ajar Indicator Malfunction](#)

EXTERIOR DOOR HANDLE SWITCH MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Driver Door Handle Switch Signal	B3849 02	1	1	-
Passenger Door Handle Switch Signal	B1474 02	2	2	-
Left Rear Door Handle Switch Circuit	B1534 02	3	3	-
Right Rear Door Handle Switch Circuit	B1535 02	4	4	-
Ground - A24D Door Handle Assembly - Driver Exterior	-	1	-	-
Ground - A24P Door Handle Assembly - Passenger Exterior	-	2	-	-
Ground - B27LR Door Handle Switch - Left Rear Exterior	-	3	-	-
Ground - B27RR Door Handle Switch - Right Rear Exterior	-	4	-	-
1. B27D Door Handle Switch - Driver Exterior = Disabled 2. B27P Door Handle Switch - Passenger Exterior = Disabled 3. B27LR Door Handle Switch - Left Rear Exterior = Disabled 4. B27RR Door Handle Switch - Right Rear Exterior = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
B27 Door Handle Switch	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K84 Keyless Entry Control Module	The control module also reads various switches and sensors and makes their values available via serial data.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Door Component Views

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 / Vehicle - In Service Mode

2. Verify the scan tool parameter:

- Exterior Driver Door Handle Switch = Inactive
- Exterior Passenger Door Handle Switch = Inactive
- Exterior Left Rear Door Handle Switch = Inactive
- Exterior Right Rear Door Handle Switch = Inactive
- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

3. Operate the component: B27D Door Handle Switch - Driver Exterior - Pressed

Verify the scan tool parameter: Exterior Driver Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. Operate the component: B27P Door Handle Switch - Passenger Exterior - Pressed

Verify the scan tool parameter: Exterior Passenger Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

5. Operate the component: B27LR Door Handle Switch - Left Rear Exterior - Pressed

Verify the scan tool parameter: Exterior Left Rear Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

6. Operate the component: B27RR Door Handle Switch - Right Rear Exterior - Pressed

Verify the scan tool parameter: Exterior Right Rear Door Handle Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

7. All OK.

Circuit/System Testing

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the appropriate electrical connector: A24 Door Handle Assembly

3. Test for less than 10 ohms between the test points: Ground circuit terminal 5 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection

2. Test for less than 2 ohms between the test points: Ground circuit terminal 5 @ Component harness & Ground Connection

- 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**

4. Ignition On/Vehicle in Service Mode.

5. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Inactive

- **If not the specified state**

1. Ignition/Vehicle Off.

2. Disconnect the electrical connector: X4 @ K84 Keyless Entry Control Module

3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground

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

- If infinite resistance - Replace the component: K84 Keyless Entry Control Module

- **If the specified state**

6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 5

7. Verify the scan tool parameter: Exterior Door Handle Switch Circuit = Active

- **If not the specified state**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: X4 @ K84 Keyless Entry Control Module
3. Ignition On/Vehicle in Service Mode.
4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle Off.
6. Test for less than 2 ohms between the test points:
 - Signal circuit terminal 1 @ B27D Door Handle Switch - Driver Exterior & Terminal 12 X4 @ Control module harness
 - Signal circuit terminal 1 @ B27P Door Handle Switch - Passenger Exterior & Terminal 11 X4 @ Control module harness
 - Signal circuit terminal 1 @ B27LR Door Handle Switch - Left Rear Exterior & Terminal 2 X4 @ Control module harness
 - Signal circuit terminal 1 @ B27RR Door Handle Switch - Right Rear Exterior & Terminal 1 X4 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K84 Keyless Entry Control Module
- **If the specified state**
8. Test or replace the component: A24 Door Handle Assembly

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the appropriate electrical connector: A24 Door Handle Assembly
3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 5 - Not Pressed
 - **If less than infinite resistance**
Replace the component: A24 Door Handle Assembly
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 5 - Pressed
 - **If 3 ohms or greater**
Replace the component: A24 Door Handle Assembly
 - **If less than 3 ohms**
5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Side Door Outside Handle Replacement \(with Passive Entry Passive Start\)](#)[Front Side Door Outside Handle Replacement \(without Passive Entry Passive Start\)](#)
- Refer to [Rear Side Door Outside Handle Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

FUEL FILLER DOOR RELEASE MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)

- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

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 Circuit - Terminal 2	B3125 02, B3130 02, B3135 02	1	B3125 01, B3130 01, B3135 01	-
1. M97 Fuel Fill Door Lock Actuator = Inoperative				

Circuit/System Description

For an overview of the component/system, refer to: [Fuel Fill Door Description and Operation](#)

Circuit	Description
Control - Terminal 1	The output circuit is switched from ground to 12 V to activate the component.
Control - Terminal 2	The output circuit is switched from ground to 12 V to activate the component.

Component	Description
M97 Fuel Fill Door Lock Actuator	The fuel fill door lock actuator is a bidirectional DC motor that locks/unlocks the door.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Luggage Compartment/Rear of Vehicle Component Views

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 / Vehicle - In Service Mode
2. Operate the component: S13D Door Lock Switch - Driver - Lock

Verify the component works as specified: M97 Fuel Fill Door Lock Actuator = Locked

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

3. Operate the component: S13D Door Lock Switch - Driver - Unlock

Verify the component works as specified: M97 Fuel Fill Door Lock Actuator = Unlocked

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. All OK.

Circuit/System Testing

1. Ignition/Vehicle - Off

2. Disconnect the electrical connector: M97 Fuel Fill Door Lock Actuator

3. Connect a test lamp between the test points: Control circuit terminal 1 & Control circuit terminal 2

4. Ignition - On / Vehicle - In Service Mode

5. Perform the scan tool control function: All Doors Lock/Unlock - Driver Door Unlock/Passenger Door(s) Unlock

Verify the test lamp state:

Driver Door Unlock - Unlocked = Test lamp On

Passenger Door(s) Unlock - Locked = Test lamp On

- **If not the specified state**

1. Ignition/Vehicle - Off & Remove - Test lamp

2. Disconnect the electrical connector: X6 @ K9 Body Control Module

3. Ignition - On / Vehicle - In Service Mode

4. Test for less than 1 V between the test points:

- Control circuit terminal 1 @ Component harness & Ground
- Control circuit terminal 2 @ Component harness & Ground
- If 1 V or greater - Repair the short to voltage on the circuit.
- If less than 1 V

5. Ignition/Vehicle - Off

6. Test for infinite resistance between the test points:

- Control circuit terminal 1 @ Component harness & Ground
- Control circuit terminal 2 @ Component harness & Ground
- If less than infinite resistance - Repair the short to ground on the circuit.
- If infinite resistance

7. Test for less than 2 ohms between the test points:

- Control circuit terminal 1 @ Component harness & Terminal 1 @ Control module harness
- Control circuit terminal 2 @ Component harness & Terminal 4 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
- Refer to: **Power Door Locks Malfunction**

- **If the specified state**

6. Test or replace the component: M97 Fuel Fill Door Lock Actuator

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: M97 Fuel Fill Door Lock Actuator
3. Connect a 20 A fused jumper wire between the test points: Control terminal 1 & 12 V

CAUTION: Complete the testing as quickly as possible in order to prevent overheating and damaging the component.

4. Momentarily connect a jumper wire between the test points: Control terminal 2 & Ground

Reverse the jumper wires 2 times between the terminals.

Verify the component works as specified: M97 Fuel Fill Door Lock Actuator = Lock/Unlock

- If not the specified state

Replace the component: M97 Fuel Fill Door Lock Actuator

- If not the specified state

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

Refer to [Fuel Tank Filler Door Lock Actuator Replacement](#)

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.
- Refer to [Diagnostic Procedure Instructions](#) to provide 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	-
Left Rear Door Ajar Switch Signal	1	4	4	-
Passenger Door Ajar Switch Signal	1	3	3	-
Right Rear Door Ajar Switch Signal	1	5	5	-
Driver Door Latch Ground	-	2	-	-
Passenger Door Latch Ground	-	3	-	-
Left Rear Door Latch Ground	-	4	-	-
Right Rear Door Latch Ground	-	5	-	-

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
1. Ajar Indicator Always Illuminated 2. Ajar Indicator Inoperative When Driver Door Is Open 3. Ajar Indicator Inoperative When Passenger Door Is Open 4. Ajar Indicator Inoperative When Left Rear Door Is Open 5. Ajar Indicator Inoperative When Right Rear Door Is Open				

Circuit/System Description

The window motors or the window switches each provide a voltage signal to 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 and the voltage within the signal circuit drops. The window motor or the window switches will detect the voltage drop and will send a serial data message to the body control module which will then send a message to the instrument panel cluster to command the 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 appropriate scan tool Door Ajar Switch parameter changes between Inactive and Active when opening and closing the driver door, the passenger door, the left rear door and right rear door.
 - **If any parameter does not change**
Refer to Circuit/System Testing
 - **If all the parameters change**
3. 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 Ω between the ground circuit terminal 3 and ground.
 - **If 10 Ω or greater**

1. Ignition OFF.
2. Test for less than 2 Ω in the ground circuit end to end.
 - If 2 Ω or greater, repair the open/high resistance in the circuit.
 - If less than 2 Ω , repair the open/high resistance in the ground connection.
- **If less than 10 Ω**
3. Ignition ON.
4. Verify the scan tool Door Ajar Switch parameter is Inactive.
 - **If not Inactive**
 1. Ignition OFF, disconnect the harness connector at the appropriate component listed below:
 - M74D Window Motor - Driver
 - S146 Window/Outside Rearview Mirror Switch - Driver
 - S79D Window Switch - Driver
 - M74P Window Motor - Passenger
 - S79P Window Switch - Passenger
 - M74LR Window Motor - Left Rear
 - S79LR Window Switch - Left Rear
 - M74RR Window Motor - Right Rear
 - S79RR Window Switch - Right Rear
 2. Test for infinite resistance between the signal circuit terminal listed below and ground.
 - A23D Door Latch Assembly-Driver - signal circuit terminal 1
 - A23P Door Latch Assembly-Passenger - signal circuit terminal 5
 - A23LR Door Latch Assembly-Left Rear - signal circuit terminal 1
 - A23RR Door Latch Assembly-Right Rear - signal circuit terminal 5
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the component.
 - **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 1
 - A23P Door Latch Assembly-Passenger - signal circuit terminal 5
 - A23LR Door Latch Assembly-Left Rear - signal circuit terminal 1
 - A23RR Door Latch Assembly-Right Rear - signal circuit terminal 5
6. Verify the scan tool Door Ajar Switch parameter is Active.
 - **If not Active**
 1. Ignition OFF, disconnect the harness connector at the component listed below, ignition ON.
 - M74D Window Motor - Driver
 - S146 Window/Outside Rearview Mirror Switch - Driver
 - S79D Window Switch - Driver
 - M74P Window Motor - Passenger
 - S79P Window Switch - Passenger
 - M74LR Window Motor - Left Rear
 - S79LR Window Switch - Left Rear
 - M74RR Window Motor - Right Rear
 - S79RR Window Switch - Right Rear
 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 Ω in the signal circuit end to end.
 - If 2 Ω or greater, repair the open/high resistance in the circuit.
 - If less than 2 Ω , replace the component.

- **If Active**

7. Test or replace the A23 Door Latch Assembly.

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 1 and ground terminal 3
- A23LR Door Latch Assembly - Left Rear signal terminal 1 and ground terminal 3
- A23RR Door Latch Assembly - Right Rear signal terminal 5 and ground terminal 3
- A23P Door Latch Assembly - Passenger signal terminal 5 and ground terminal 3
- **If less than infinite resistance**

Replace the A23 Door Latch Assembly.

- **If infinite resistance**

3. Test for less than 5 Ω between the terminals listed below with the switch in the closed position.

- A23D Door Latch Assembly - Driver signal terminal 1 and ground terminal 3
- A23LR Door Latch Assembly - Left Rear signal terminal 1 and ground terminal 3
- A23RR Door Latch Assembly - Right Rear signal terminal 5 and ground terminal 3
- A23P Door Latch Assembly - Passenger signal terminal 5 and ground terminal 3
- **If 5 Ω or greater**

Replace the A23 Door Latch Assembly.

- **If less than 5 Ω**

4. All OK

Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the repair.

- Refer to [Front Side Door Latch Replacement](#)
- Refer to [Rear Side Door Latch Replacement](#)
- Refer to [Front Side Door Window Regulator Motor Replacement](#)
- Refer to [Rear Side Door Window Regulator Motor Replacement](#)
- Refer to [Front Side Door Window Switch Replacement \(Passenger\)](#)
- Refer to [Rear Side Door Window Switch Replacement](#)

POWER DOOR CHILD LOCK MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control - Relay Coil	B3930 02	1	1	-
Child Security Lock Motor Status Signal Left Rear	-	2, 3	2, 3	-
Child Security Lock Motor Status Signal Right Rear	-	2, 3	2, 3	-

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control - A23LR Door Latch Assembly - Left Rear	B3125 02, B3130 02, B3135 02	1	B3125 01, B3130 01, B3135 01	-
Control - A23RR Door Latch Assembly - Right Rear	B3125 02, B3130 02, B3135 02	1	B3125 01, B3130 01, B3135 01	-
Ground - A23LR Door Latch Assembly - Left Rear	-	2, 3	-	-
Ground - Relay Coil	-	1	-	-
Ground - A23RR Door Latch Assembly - Right Rear	-	2, 3	-	-
1. Child Security Lock Motors - Malfunction 2. S79LR Window Switch - Left Rear - Child Security Lock/Window Lockout - Malfunction 3. S79RR Window Switch - Right Rear - Child Security Lock/Window Lockout - Malfunction				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Control - Relay Coil	The output circuit is switched to 12 V to activate the component.
Control All Doors Lock	The output circuit is switched from ground to 12 V to activate the component.
Control Passenger Door Unlock	The output circuit is switched from ground to 12 V to activate the component.

Component	Description
S79D Window Switch - Driver	The switch has a normally open contact.
S79LR Window Switch - Left Rear	The switch has a normally open contact.
S79RR Window Switch - Right Rear	The switch has a normally open contact.
A23LR Door Latch Assembly - Left Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23RR Door Latch Assembly - Right Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
X50A Fuse Block - Underhood	The fuse block houses various fuses and relays.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc. The control module also reads various switches and sensors and makes their values available via serial data.

Diagnostic Aids

Child Security Lock/Window Lockout Switch Indicator - LED flashes.

- Child Security Lock Motor Status Signal Left Rear - Open/High Resistance
- Child Security Lock Motor Status Signal Right Rear - Open/High Resistance
- Interior Door Handle @ Left Rear Door - Enabled
- Interior Door Handle @ Right Rear Door - Enabled
- KR113 Child Security Lock Disable Relay - Malfunction

- Child Security Lock Motors Circuit - Open/High Resistance

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

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Component View Reference

Door Component Views

Electrical Information Reference

- **Circuit Testing**
- **Connector Repairs**
- **Testing for Intermittent Conditions and Poor Connections**
- **Wiring Repairs**
- **Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)**

Scan Tool Reference

Control Module References

Circuit/System Verification

1. Ignition - On / Vehicle - In Service Mode
2. Perform the scan tool control function: Child Security Lock Motors - On

Verify the correct operation:

- Interior Door Handle @ Left Rear Door - Disabled
- Interior Door Handle @ Right Rear Door - Disabled
- **If the component does not work as specified**

Refer to: Circuit/System Testing - Test 1

- **If none of the components work properly**

Refer to: Circuit/System Testing - Test 2

- **If the component works as specified**

3. Perform the scan tool control function: Child Security Lock Motors - Off

Verify the correct operation:

- Interior Door Handle @ Left Rear Door - Enabled
- Interior Door Handle @ Right Rear Door - Enabled
- **If the component does not work as specified**

Refer to: Circuit/System Testing - Test 1

- **If none of the components work properly**

Refer to: Circuit/System Testing - Test 2

- **If the component works as specified**

4. Perform the scan tool control function: Child Security Lock Motors - On

Verify the correct operation:

- S79LR Window Switch - Left Rear - Disabled
- S79RR Window Switch - Right Rear - Disabled
- **If the component does not work as specified**

Refer to: Circuit/System Testing - Test 3

- **If the component works as specified**

5. Operate the component: S79D Window Switch - Driver - Pressed

Verify the scan tool parameter: Child Security Lock/Window Lockout Switch = On and Off

- **If the parameter state does not change**

Replace the component: S79D Window Switch - Driver

- **If the parameter state changes**

6. All OK.

Circuit/System Testing

Test 1

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the appropriate electrical connector:

- A23LR Door Latch Assembly - Left Rear
- A23RR Door Latch Assembly - Right Rear

3. Connect a test lamp between the test points:

- A23LR Door Latch Assembly - Left Rear: Control circuit terminal 8 & Control circuit terminal 9
- A23RR Door Latch Assembly - Right Rear: Control circuit terminal 8 & Control circuit terminal 7

4. Ignition - On / Vehicle - In Service Mode

5. Perform the scan tool control function: Child Security Lock Motors - On & Off

6. Verify the test lamp does not turn On and Off.

- **If the test lamp turns On and Off**

Test or replace the component: A23 Door Latch Assembly

- **If the test lamp does not turn On and Off**

7. Ignition/Vehicle - Off

8. Disconnect the electrical connector: X2 @ X50A Fuse Block - Underhood

9. Test for less than 2 ohms between the test points:

- Control circuit terminal 9 @ A23LR Door Latch Assembly - Left Rear & Terminal 5 X2 @ Fuse Block Harness
- Control circuit terminal 7 @ A23RR Door Latch Assembly - Right Rear & Terminal 5 X2 @ Fuse Block Harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- **If less than 2 ohms**

10. Test or replace the component: X50A Fuse Block - Underhood

Test 2

NOTE: It may take up to 2 min for all vehicle systems to power down before

an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: X1 @ X50A Fuse Block - Underhood
3. Test for less than 10 ohms between the test points: Ground circuit terminal 71 X1 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 71 X1 & Ground Connection
 - 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**
4. Connect the electrical connector: X1 @ X50A Fuse Block - Underhood
5. Disconnect the electrical connector: X5 @ K9 Body Control Module
6. Ignition - On / Vehicle - In Service Mode
7. Momentarily connect a 3 A fused jumper wire between the test points: Control circuit terminal 5 X5 & B+

Verify the component produces a clicking sound: KR113 Child Security Lock Disable Relay

- **If the component does not produce a sound**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X2 @ X50A Fuse Block - Underhood
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Control circuit terminal 5 X5 @ Control module harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for infinite resistance between the test points: Control circuit terminal 5 X5 Control module harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
 7. Test for less than 2 ohms between the test points: Control circuit terminal 5 X5 @ Control module harness & Control circuit terminal 13 X2 @ Fuse Block Harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Test or replace the component: X50A Fuse Block - Underhood
 - **If the component turns On and Off**
8. Replace the component: K9 Body Control Module

Test 3

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector:
 - A23LR Door Latch Assembly - Left Rear
 - A23RR Door Latch Assembly - Right Rear
3. Test for less than 10 ohms between the test points: Ground circuit terminal 3 & Ground
 - **If 10 ohms or greater**

1. Disconnect Ground Connection
2. Test for less than 2 ohms between the test points: Ground circuit terminal 3 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter:
 - Left Rear Child Security Lock Switch = Inactive
 - Right Rear Child Security Lock Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - Signal circuit terminal 2 @ A23LR Door Latch Assembly - Left Rear & Ground
 - Signal circuit terminal 4 @ A23RR Door Latch Assembly - Right Rear & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points:
 - A23LR Door Latch Assembly - Left Rear: Signal circuit terminal 2 & Ground circuit terminal 3
 - A23RR Door Latch Assembly - Right Rear: Signal circuit terminal 4 & Ground circuit terminal 3
7. Verify the scan tool parameter:
 - Left Rear Child Security Lock Switch = Active
 - Right Rear Child Security Lock Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points:
 - Signal circuit terminal 2 @ A23LR Door Latch Assembly - Left Rear & Ground
 - Signal circuit terminal 4 @ A23RR Door Latch Assembly - Right Rear & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points:
 - Signal circuit terminal 2 @ A23LR Door Latch Assembly - Left Rear & Terminal 12 X7 @ Control module harness
 - Signal circuit terminal 4 @ A23RR Door Latch Assembly - Right Rear & Terminal 18 X7 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
8. Test or replace the component: A23LR Door Latch Assembly - Left Rear/A23RR Door Latch Assembly - Right Rear

Component Testing

1. Ignition/Vehicle - Off

2. Disconnect the appropriate electrical connector:
 - A23LR Door Latch Assembly - Left Rear
 - A23RR Door Latch Assembly - Right Rear
3. Connect a 25 A fused jumper wire between the test points:
 - A23LR Door Latch Assembly - Left Rear Control terminal 9 & B+
 - A23RR Door Latch Assembly - Right Rear Control terminal 7 & B+

CAUTION: Complete the testing as quickly as possible in order to prevent overheating and damaging the component.

4. Momentarily connect a jumper wire between the test points: Control terminal 8 & Ground
5. Reverse the jumper wires 2 times between the terminals.

Verify the component works as specified: A23 Door Latch Assembly = Lock & Unlock

- **If not the specified state**

Replace the component: A23 Door Latch Assembly

- **If not the specified state**

6. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Rear Side Door Latch Replacement](#)
- Refer to [Front Compartment Fuse Block Replacement](#)
- Refer to [Front Side Door Window and Multifunction Switch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

POWER DOOR LOCK KEY CYLINDER SWITCHES MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	1	1	1	-
Ground	-	1	-	-
1. B29D Door Lock Key Cylinder Switch - Driver = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
A23 Door Latch Assembly	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside). The assembly also contains a normally open door ajar switch that closes as soon as the door is not fully closed.
S79D Window Switch - Driver	The assembly on the driver side has one switch for the driver window and one switch for the passenger window. Each switch has 2 outputs, one for window down and one for window up. The motors contain electronics that interpret the up/down signals and actuate the motors accordingly. The circuits for the motor in the driver door are directly wired to the motor. The circuits for the window in the passenger door first go to the passenger window switch and then to the motor. In the inactive position the switch on the passenger side passes on the two control signals as they are. When actuated, it switches one of the control circuits to 12 V.

Reference Information

Schematic Reference

Door Lock/Indicator Schematics

Connector End View Reference

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- [Wiring Repairs](#)
- [Relay Replacement \(Attached to Wire Harness\) Relay Replacement \(Within an Electrical Center\)](#)

Scan Tool Reference

Control Module References

Circuit/System Verification

1. Operate the component: S13D Door Lock Switch - Driver - Unlock
2. Operate the component: B29D Door Lock Key Cylinder Switch - Driver - Lock
3. Verify the component activates: A23LR Door Latch Assembly - Left Rear/A23P Door Latch Assembly - Passenger/A23RR Door Latch Assembly - Right Rear

- **If the component does not work as specified**

Refer to: Circuit/System Testing

- **If all functions work properly**

4. All OK.

Circuit/System Testing

NOTE:

It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver
3. Test for less than 10 ohms between the test points: Ground circuit terminal 8 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 8 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Test for greater than 10 V between the test points: Signal circuit terminal 4 & Ground circuit terminal 8
 - **If 10 V or less**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: S79D Window Switch - Driver
 3. Test for infinite resistance between the test points: Signal circuit terminal 4 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
 4. Test for less than 2 ohms between the test points: Signal circuit terminal 4 @ Component harness & Signal circuit terminal 7 @ S79D Window Switch - Driver
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: S79D Window Switch - Driver
 - **If greater than 10 V**
6. Test or replace the component: A23D Door Latch Assembly - Driver

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver
3. Test for infinite resistance between the test points: Signal terminal 4 & Ground terminal 8 - The switch is in the open position.
 - **If less than infinite resistance**

Replace the component: A23D Door Latch Assembly - Driver
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 4 & Ground terminal 8 - The switch is in the closed position.
 - **If 3 ohms or greater**

Replace the component: A23D Door Latch Assembly - Driver
 - **If less than 3 ohms**
5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [**Diagnostic Repair Verification**](#)

- Refer to [Front Side Door Window and Multifunction Switch Replacement](#)
- Refer to [Front Side Door Latch Replacement](#)

POWER DOOR LOCKS MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Short to Voltage
B+ - Body Control Module	B3125 02, B3130 02, B3135 02	B3125 02, B3130 02, B3135 02	-	-
Signal terminal 2 @ S13D Door Lock Switch - Driver	B3150 00	2	2	-
Signal terminal 3 @ S13D Door Lock Switch - Driver	B3140 00	3	3	-
Signal terminal 2 @ S13P Door Lock Switch - Passenger	B3155 00	4	4	-
Signal terminal 3 @ S13P Door Lock Switch - Passenger	B3145 00	5	5	-
Control - A23D Door Latch Assembly - Driver	B3125 02, B3130 02, B3135 02	7	B3125 01, B3130 01, B3135 01	-
Control - A23P Door Latch Assembly - Passenger	B3125 02, B3130 02, B3135 02	8	B3125 01, B3130 01, B3135 01	-
Control - A23LR Door Latch Assembly - Left Rear	B3125 02, B3130 02, B3135 02	9	B3125 01, B3130 01, B3135 01	-
Control - A23RR Door Latch Assembly - Right Rear	B3125 02, B3130 02, B3135 02	10	B3125 01, B3130 01, B3135 01	-
S13P Door Lock Switch - Passenger - Ground	-	6	-	-
Ground - S13D Door Lock Switch - Driver	-	1	-	-
Ground - Body Control Module	-	7, 8, 9, 10	-	-

1. S13D Door Lock Switch - Driver = Inoperative
2. Driver Door Lock Switch = Inoperative
3. Driver Door Unlock Switch = Inoperative
4. Passenger Door Lock Switch = Inoperative
5. Passenger Door Unlock Switch = Inoperative
6. S13P Door Lock Switch - Passenger = Inoperative
7. A23D Door Latch Assembly - Driver = Inoperative
8. A23P Door Latch Assembly - Passenger = Inoperative
9. A23LR Door Latch Assembly - Left Rear = Inoperative
10. A23RR Door Latch Assembly - Right Rear = Inoperative

Circuit/System Description

For an overview of the component/system, refer to: [Power Door Locks Description and Operation](#)

Circuit	Description
B+ - Body Control Module	Supplied from a fuse.
Signal	The control module input circuit has an internal resistance connected to 12 V.
Control Driver Door Unlock	The output circuit is switched from ground to 12 V to activate the component.
Control All Doors Lock	The output circuit is switched from ground to 12 V to activate the component.
Control Passenger Door Unlock	The output circuit is switched from ground to 12 V to activate the component.
Ground - S13D Door Lock Switch - Driver	Chassis Ground
Ground - S13P Door Lock Switch - Passenger	Chassis Ground
Ground - Body Control Module	Chassis Ground

Component	Description
A23D Door Latch Assembly - Driver	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23P Door Latch Assembly - Passenger	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23LR Door Latch Assembly - Left Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
A23RR Door Latch Assembly - Right Rear	The door locks are actuated by a bidirectional DC motor that locks/unlocks the door so that it can not be opened from outside the vehicle (but still from inside).
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.
S13P Door Lock Switch - Passenger	- The switch has a normally open contact. - When the switch is activated, the signal circuit to the control module is grounded.
S13D Door Lock Switch - Driver	- The switch has a normally open contact. - When the switch is activated, the signal circuit to the control module is grounded.

Reference Information

Schematic Reference

- [Door Lock/Indicator Schematics](#)
- [Body Control System Schematics](#)

Connector End View Reference

[COMPONENT CONNECTOR END VIEWS - INDEX](#)

Component View Reference

[Door Component Views](#)

- [Circuit Testing](#)
- [Connector Repairs](#)
- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)
- [Relay Replacement \(Attached to Wire Harness\)](#) [Relay Replacement \(Within an Electrical Center\)](#)

Scan Tool Reference

[Control Module References](#)

[Circuit/System Verification](#)

1. Ignition - On / Vehicle - In Service Mode
2. Verify the scan tool parameter: Driver Door Lock Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
3. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock
Verify the scan tool parameter: Driver Door Lock Switch = Lock & Unlock
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
4. Verify the scan tool parameter: Passenger Door Lock Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
5. Operate the component: S13P Door Lock Switch - Passenger - Lock & Unlock
Verify the scan tool parameter: Passenger Door Lock Switch = Lock & Unlock
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
6. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock
Verify the component works as specified:
 - A23D Door Latch Assembly - Driver = Lock & Unlock
 - A23LR Door Latch Assembly - Left Rear = Lock & Unlock
 - A23P Door Latch Assembly - Passenger = Lock & Unlock
 - A23RR Door Latch Assembly - Right Rear = Lock & Unlock
 - **If the component does not activate - A23D Door Latch Assembly - Driver**
Refer to: Circuit/System Testing - Test 2
 - **If the component does not activate - A23LR Door Latch Assembly - Left Rear**

Refer to: Circuit/System Testing - Test 3

- **If the component does not activate - A23P Door Latch Assembly - Passenger**

Refer to: Circuit/System Testing - Test 3

- **If the component does not activate - A23RR Door Latch Assembly - Right Rear**

Refer to: Circuit/System Testing - Test 3

- **If none of the components operate**

Refer to: Circuit/System Testing - Test 4

- **If all functions work properly**

7. All OK.

Circuit/System Testing

Test 1

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector: S13D Door Lock Switch - Driver/S13P Door Lock Switch - Passenger
3. Test for less than 10 ohms between the test points: Ground circuit terminal 4 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 4 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Driver Door Lock Switch or Passenger Door Lock Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X6/X7 @ K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - Signal circuit terminal 2 @ Component harness & Ground
 - Signal circuit terminal 3 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 2 & Ground circuit terminal 4
7. Verify the scan tool parameter: Driver Door Lock Switch or Passenger Door Lock Switch = Lock
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X6 or X7 @ K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode

4. Test for less than 1 V between the test points: Signal circuit terminal 2 @ Component harness & Ground

- If 1 V or greater - Repair the short to voltage on the circuit.
- If less than 1 V

5. Ignition/Vehicle - Off

6. Test for less than 2 ohms between the test points:

- Signal circuit terminal 2 @ S13D Door Lock Switch - Driver & Terminal 25 X7 @ Control module harness
- Signal circuit terminal 2 @ S13P Door Lock Switch - Passenger & Terminal 22 X6 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- If less than 2 ohms - Replace the component: K9 Body Control Module

• **If the specified state**

8. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 3 & Ground circuit terminal 4

9. Verify the scan tool parameter: Driver Door Lock Switch or Passenger Door Lock Switch = Unlock

• **If not the specified state**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)

2. Disconnect the electrical connector: X6 or X7 @ K9 Body Control Module

3. Ignition - On / Vehicle - In Service Mode

4. Test for less than 1 V between the test points: Signal circuit terminal 3 @ Component harness & Ground

- If 1 V or greater - Repair the short to voltage on the circuit.
- If less than 1 V

5. Ignition/Vehicle - Off

6. Test for less than 2 ohms between the test points:

- Signal circuit terminal 3 @ S13D Door Lock Switch - Driver & Terminal 14 X7 @ Control module harness
- Signal circuit terminal 3 @ S13P Door Lock Switch - Passenger & Terminal 6 X6 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- If less than 2 ohms - Replace the component: K9 Body Control Module

• **If the specified state**

10. Test or replace the component: S13D Door Lock Switch - Driver/S13P Door Lock Switch - Passenger

Test 2

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the electrical connector: A23D Door Latch Assembly - Driver

3. Connect a test lamp between the test points: Control circuit terminal 7 & Control circuit terminal 8

4. Ignition - On / Vehicle - In Service Mode

5. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock

6. Verify the test lamp does not turn On and Off.

• **If the test lamp turns On and Off**

Test or replace the component: A23D Door Latch Assembly - Driver

• **If the test lamp does not turn On and Off**

7. Ignition/Vehicle - Off

8. Disconnect the electrical connector: X6 @ K9 Body Control Module

9. Test for less than 2 ohms between the test points:

- Control circuit terminal 8 @ Component harness & Terminal 4 X6 @ Control module harness
- Control circuit terminal 7 @ Component harness & Terminal 1 X6 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- **If less than 2 ohms**

10. Test or replace the component: K9 Body Control Module

Test 3

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector:
 - A23LR Door Latch Assembly - Left Rear
 - A23P Door Latch Assembly - Passenger
 - A23RR Door Latch Assembly - Right Rear
3. Connect a test lamp between the test points:
 - A23P Door Latch Assembly - Passenger Control circuit terminal 9 & Control circuit terminal 8
 - A23LR Door Latch Assembly - Left Rear Control circuit terminal 7 & Control circuit terminal 8
 - A23RR Door Latch Assembly - Right Rear Control circuit terminal 9 & Control circuit terminal 8
4. Ignition - On / Vehicle - In Service Mode
5. Operate the component: S13D Door Lock Switch - Driver - Lock & Unlock
6. Verify the test lamp does not turn On and Off.
 - **If the test lamp turns On and Off**
 Test or replace the component: A23 Door Latch Assembly
 - **If the test lamp does not turn On and Off**
7. Ignition/Vehicle - Off
8. Disconnect the electrical connector: X6 @ K9 Body Control Module
9. Ignition - On / Vehicle - In Service Mode
10. Test for less than 2 ohms between the test points:
 - Control circuit terminal 9 @ A23P Door Latch Assembly - Passenger & Terminal 2 X6 @ Control module harness
 - Control circuit terminal 8 @ A23P Door Latch Assembly - Passenger & Terminal 4 X6 @ Control module harness
 - Control circuit terminal 7 @ A23LR Door Latch Assembly - Left Rear & Terminal 2 X6 @ Control module harness
 - Control circuit terminal 8 @ A23LR Door Latch Assembly - Left Rear & Terminal 4 X6 @ Control module harness
 - Control circuit terminal 9 @ A23RR Door Latch Assembly - Right Rear & Terminal 2 X6 @ Control module harness
 - Control circuit terminal 8 @ A23RR Door Latch Assembly - Right Rear & Terminal 4 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - **If less than 2 ohms**
11. Test or replace the component: K9 Body Control Module

Test 4

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be

performed.

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: X2 & X6 @ K9 Body Control Module
3. Test for less than 10 ohms between the test points: Ground circuit terminal 3 X6 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 3 X6 & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify a test lamp turns On between the test points: B+ circuit terminal 4 X2 & Ground
 - **If the test lamp does not turn On and the circuit fuse is OK**
 1. Ignition/Vehicle - Off & Remove - Test lamp
 2. Test for less than 2 ohms between the test points: B+ circuit terminal 4 X2 & Output terminal @ Fuse
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Verify the fuse is OK and there is voltage at the fuse.
 - **If the test lamp does not turn On and the circuit fuse is open**
 1. Ignition/Vehicle - Off & Remove - Test lamp
 2. Disconnect the electrical connector:
 - A23D Door Latch Assembly - Driver
 - A23LR Door Latch Assembly - Left Rear
 - A23P Door Latch Assembly - Passenger
 - A23RR Door Latch Assembly - Right Rear
 3. Test for infinite resistance between the test points:
 - Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 4 X6 @ K9 Body Control Module & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: A23 Door Latch Assembly
 - **If the test lamp turns On**
6. Ignition/Vehicle - Off
7. Connect the electrical connector: X2 @ K9 Body Control Module
8. Ignition - On / Vehicle - In Service Mode
9. Test for less than 1 V between the test points:
 - Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 2 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 4 X6 @ K9 Body Control Module & Ground
 - **If greater than 1 V**

Repair the short to voltage on the circuit.
 - **If 1 V or less**
10. Ignition/Vehicle - Off
11. Disconnect the electrical connector: X2 @ X50A Fuse Block - Underhood
12. Test for infinite resistance between the test points:
 - Control circuit terminal 1 X6 @ K9 Body Control Module & Ground
 - Control circuit terminal 4 X6 @ K9 Body Control Module & Ground

- Control circuit terminal 4 X2 @ X50A Fuse Block - Underhood & Ground
- Control circuit terminal 5 X2 @ X50A Fuse Block - Underhood & Ground
- **If less than infinite resistance**

Repair the short to ground on the circuit.

- **If infinite resistance**

13. Connect the electrical connector: X2 @ X50A Fuse Block - Underhood

14. Test for infinite resistance between the test points: Control circuit terminal 2 X6 @ K9 Body Control Module & Ground

- **If less than infinite resistance**

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: X2 @ X50A Fuse Block - Underhood
3. Test for infinite resistance between the test points: Control circuit terminal 2 X6 @ K9 Body Control Module & Ground

- If less than infinite resistance - Repair the short to ground on the circuit.
- If infinite resistance - Replace the component: X50A Fuse Block - Underhood

- **If infinite resistance**

15. Replace the component: K9 Body Control Module

Component Testing

S13 Door Lock Switch - Test

1. Ignition/Vehicle - Off
2. Disconnect the appropriate electrical connector: S13 Door Lock Switch
3. Test for infinite resistance between the test points:
 - Signal terminal 2 & Ground terminal 4 - Switch - Not Pressed
 - Signal terminal 3 & Ground terminal 4 - Switch - Not Pressed
 - **If less than infinite resistance**

Replace the component: S13 Door Lock Switch

 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 2 & Ground terminal 4 - Lock Switch - Pressed
 - **If 3 ohms or greater**

Replace the component: S13 Door Lock Switch

 - **If less than 3 ohms**
5. Test for less than 3 ohms between the test points: Signal terminal 3 & Ground terminal 4 - Unlock Switch - Pressed
 - **If 3 ohms or greater**

Replace the component: S13 Door Lock Switch

 - **If less than 3 ohms**
6. All OK.

A23 Door Latch Assembly

1. Ignition/Vehicle - Off
2. Disconnect the appropriate electrical connector:
 - A23D Door Latch Assembly - Driver
 - A23P Door Latch Assembly - Passenger

- A23LR Door Latch Assembly - Left Rear
- A23RR Door Latch Assembly - Right Rear

3. Connect a 25 A fused jumper wire between the test points:

- A23D Door Latch Assembly - Driver Control terminal 7 & B+
- A23P Door Latch Assembly - Passenger Control terminal 9 & B+
- A23LR Door Latch Assembly - Left Rear Control terminal 7 & B+
- A23RR Door Latch Assembly - Right Rear Control terminal 9 & B+

CAUTION: Complete the testing as quickly as possible in order to prevent overheating and damaging the component.

4. Momentarily connect a jumper wire between the test points:

- A23D Door Latch Assembly - Driver Control terminal 8 & Ground
- A23P Door Latch Assembly - Passenger Control terminal 8 & Ground
- A23LR Door Latch Assembly - Left Rear Control terminal 8 & Ground
- A23RR Door Latch Assembly - Right Rear Control terminal 8 & Ground

5. Reverse the jumper wires 2 times between the terminals.

Verify the component works as specified: A23 Door Latch Assembly = Lock & Unlock

- **If not the specified state**

Replace the component: A23 Door Latch Assembly

- **If not the specified state**

6. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Door Lock Switch Replacement - Driver Side](#)
- Refer to [Door Lock Switch Replacement - Passenger Front](#)
- Refer to [Front Side Door Latch Replacement](#)
- Refer to [Rear Side Door Latch Replacement](#)
- Refer to [Front Compartment Fuse Block Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

TRUNK RELEASE MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Short to Ground	Short to Voltage	Signal Performance
B+ - Relay Switch	3	3	-	-
Signal - S58A Rear Compartment Lid Unlatch Switch - Exterior	B3618 00	1	1	-
Signal - S58B Rear Compartment Lid Unlatch Switch - Interior	B2730 00	2	2	-

Circuit	Short to Ground	Short to Ground	Short to Voltage	Signal Performance
Signal - S48A Multifunction Switch - Instrument Panel	B2730 00	2	2	-
Control - Relay Coil	B3265 02	B3265 04	B3265 01	-
Control - M40 Rear Compartment Lid Latch	2	3	2	-
Ground - S58A Rear Compartment Lid Unlatch Switch - Exterior	-	1	-	-
Ground - S58B Rear Compartment Lid Unlatch Switch - Interior	-	2	-	-
Ground - S48A Multifunction Switch - Instrument Panel	-	2	-	-
Ground - Relay Coil	-	B3265 04	-	-
Ground - M40 Rear Compartment Lid Latch	-	3	-	-
1. S58A Rear Compartment Lid Unlatch Switch - Exterior - Disabled 2. S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel - Disabled 3. M40 Rear Compartment Lid Latch - Inoperative				

Circuit/System Description

For an overview of the component/system, refer to: [Luggage Compartment Description and Operation](#)

Circuit	Description
B+ - Relay Switch	Supplied from a fuse.
Signal	The control module input circuit has an internal resistance connected to 12 V.
Control - Component	The output circuit is switched to 12 V to activate the component.
Control - Relay Coil	The output circuit is switched to 12 V to activate the component.
Ground - Component	Chassis Ground
Ground - Relay Coil	Chassis Ground

Component	Description
S58A Rear Compartment Lid Unlatch Switch - Exterior	When the switch is activated, the signal circuit to the control module is grounded.
S48A Multifunction Switch - Instrument Panel	When the switch is activated, the signal circuit to the control module is grounded.
S58B Rear Compartment Lid Unlatch Switch - Interior	When the switch is activated, the signal circuit to the control module is grounded.
M40 Rear Compartment Lid Latch	The DC motor unlatches the rear compartment lid. Once the lid is unlatched, a switch in the latch will close, grounding the signal circuit to the control module K9.
X50A Fuse Block - Underhood	The fuse block houses various fuses and relays.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Reference Information

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Luggage Compartment/Rear of Vehicle Component Views

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References

Circuit/System Verification

1. Ignition - On / Vehicle - In Service Mode
2. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
3. Operate the component: S58A Rear Compartment Lid Unlatch Switch - Exterior - Pressed
Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 1
 - **If the specified state**
4. Verify the scan tool parameter: Interior Liftgate/Liftgate Window Unlatch Switch = Inactive
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 2
 - **If the specified state**
5. Operate the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel - Pressed
Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Active
 - **If not the specified state**
Refer to: Circuit/System Testing - Test 2
 - **If the specified state**
6. Perform the scan tool control function: Trunk Lid Unlatch Command - Unlatch

Verify a click can be heard or felt at the component when it is turned On and Off: M40 Rear Compartment Lid Latch

- **If a click cannot be heard or felt**

Refer to: Circuit/System Testing - Test 3

- **If a click can be heard or felt**

7. All OK.

Circuit/System Testing

Test 1

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior
3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X6 @ K9 Body Control Module
 3. Test for infinite resistance between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 1 & Ground circuit terminal 2
7. Verify the scan tool parameter: Trunk Lid/Liftgate Window Exterior Unlatch Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X6 @ K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 1 @ Component harness & Terminal 15 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module

- **If the specified state**

8. Test or replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

Test 2

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off
2. Disconnect the appropriate electrical connector:
 - {Without UD7/UEU/UFL} S58B Rear Compartment Lid Unlatch Switch - Interior
 - {With UD7/UEU/UFL} S48A Multifunction Switch - Instrument Panel
3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground
 - **If 10 ohms or greater**
 1. Disconnect Ground Connection
 2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 @ Component harness & Ground Connection
 - 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**
4. Ignition - On / Vehicle - In Service Mode
5. Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: X2 @ K9 Body Control Module
 3. Test for infinite resistance between the test points:
 - {Without UD7/UEU/UFL} Signal circuit terminal 1 @ S58B Rear Compartment Lid Unlatch Switch - Interior & Ground
 - {With UD7/UEU/UFL} Signal circuit terminal 7 @ S48A Multifunction Switch - Instrument Panel & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
6. Connect a 3 A fused jumper wire between the test points:
 - {Without UD7/UEU/UFL} S58B Rear Compartment Lid Unlatch Switch - Interior: Signal circuit terminal 1 & Ground circuit terminal 2
 - {With UD7/UEU/UFL} S48A Multifunction Switch - Instrument Panel: Signal circuit terminal 7 & Ground circuit terminal 2
7. Verify the scan tool parameter: Interior Trunk Lid/Liftgate Window Unlatch Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: X2 @ K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points:
 - {Without UD7/UEU/UFL} Signal circuit terminal 1 @ S58B Rear Compartment Lid Unlatch Switch - Interior & Ground
 - {With UD7/UEU/UFL} Signal circuit terminal 7 @ S48A Multifunction Switch - Instrument Panel & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 - **If the specified state**
5. Ignition/Vehicle - Off

6. Test for less than 2 ohms between the test points:

- {Without UD7/UEU/UFL} Signal circuit terminal 1 @ S58B Rear Compartment Lid Unlatch Switch - Interior & Terminal 18 X2 @ Control module harness
- {With UD7/UEU/UFL} Signal circuit terminal 7 @ S48A Multifunction Switch - Instrument Panel & Terminal 18 X2 @ Control module harness
- If 2 ohms or greater - Repair the open/high resistance in the circuit.
- If less than 2 ohms - Replace the component: K9 Body Control Module

- **If the specified state**

8. Test or replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior/S48A Multifunction Switch - Instrument Panel

Test 3

NOTE: It may take up to 2 min for all vehicle systems to power down before an accurate ground or low reference circuit continuity test can be performed.

1. Ignition/Vehicle & All vehicle systems - Off

2. Disconnect the electrical connector: M40 Rear Compartment Lid Latch

3. Test for less than 10 ohms between the test points: Ground circuit terminal 2 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection

2. Test for less than 2 ohms between the test points: Ground circuit terminal 2 & Ground Connection

- 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**

4. Verify the fuse is not open: F66UA Fuse

- **If the fuse is open**

1. Replace the component: F66UA Fuse

2. Verify the fuse does not open.

- If the fuse opens - Test or replace the component: X50A Fuse Block - Underhood
- If the fuse does not open, go to the next step.

- **If the fuse is not open**

5. Connect a test lamp between the test points: Control circuit terminal 1 & Ground circuit terminal 2

6. Ignition - On / Vehicle - In Service Mode

7. Perform the scan tool control function: Trunk Lid Unlatch Command - Unlatch

Verify the test lamp does not turn On and Off.

- **If the test lamp turns On and Off**

Test or replace the component: M40 Rear Compartment Lid Latch

- **If the test lamp does not turn On and Off**

8. Ignition/Vehicle - Off

9. Connect the electrical connector: M40 Rear Compartment Lid Latch

10. Disconnect the electrical connector: X1 & X2 @ X50A Fuse Block - Underhood

11. Ignition - On / Vehicle - In Service Mode

12. Momentarily connect a 5 A fused jumper wire between the test points: Control circuit terminal 30 X2 & B+

Verify the component turns On and Off when connecting and disconnecting the jumper wire: M40 Rear Compartment Lid Latch

- **If the component does not turn On and Off**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: M40 Rear Compartment Lid Latch
3. Ignition - On / Vehicle - In Service Mode
4. Test for less than 1 V between the test points: Control circuit terminal 1 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off
6. Test for infinite resistance between the test points: Control circuit terminal 1 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
7. Test for less than 2 ohms between the test points: Control circuit terminal 1 @ Component harness & Control circuit terminal 30 X2 @ Fuse Block Harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Test or replace the component: M40 Rear Compartment Lid Latch

- **If the component turns On and Off**

13. Ignition/Vehicle & All vehicle systems - Off

14. Verify the fuse is not open: F66UA Fuse

- **If the fuse is open**

Test or replace the component: X50A Fuse Block - Underhood

- **If the fuse is not open**

15. Test for less than 10 ohms between the test points: Ground circuit terminal 71 X1 & Ground

- **If 10 ohms or greater**

1. Disconnect Ground Connection
2. Test for less than 2 ohms between the test points: Ground circuit terminal 71 X1 & Ground Connection
 - 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**

16. Connect the electrical connector: X1 & X2 @ X50A Fuse Block - Underhood

17. Disconnect the electrical connector: X5 @ K9 Body Control Module

18. Ignition - On / Vehicle - In Service Mode

19. Momentarily connect a 3 A fused jumper wire between the test points: Control circuit terminal 11 X5 & B+

Verify the component turns On and Off when connecting and disconnecting the jumper wire: M40 Rear Compartment Lid Latch

- **If the component does not turn On and Off**

1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
2. Disconnect the electrical connector: X1 @ X50A Fuse Block - Underhood
3. Ignition - On / Vehicle - In Service Mode
4. Test for less than 1 V between the test points: Control circuit terminal 11 X5 @ Control module harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
5. Ignition/Vehicle - Off

6. Test for infinite resistance between the test points: Control circuit terminal 11 X5 @ Control module harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance
7. Test for less than 2 ohms between the test points: Control circuit terminal 11 X5 @ Control module harness & Control circuit terminal 59 X1 @ Fuse Block Harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Test or replace the component: X50A Fuse Block - Underhood
- **If the component turns On and Off**

20. Replace the component: K9 Body Control Module

Component Testing

M40 Rear Compartment Lid Latch-Dynamic Test

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: M40 Rear Compartment Lid Latch
3. Connect a jumper wire between the test points: Ground terminal 2 & Ground
4. Momentarily connect a 5 A fused jumper wire between the test points: Control terminal 1 & 12 V

Verify the component turns On and Off when connecting and disconnecting the jumper wire: M40 Rear Compartment Lid Latch

- **If the component does not turn On and Off**

Replace the component: M40 Rear Compartment Lid Latch

- **If the component turns On and Off**

5. All OK.

S58B Rear Compartment Lid Unlatch Switch - Interior

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: S58B Rear Compartment Lid Unlatch Switch - Interior
3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 2 - Not Pressed

- **If less than infinite resistance**

Replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 2 - Pressed

- **If 3 ohms or greater**

Replace the component: S58B Rear Compartment Lid Unlatch Switch - Interior

- **If less than 3 ohms**

5. All OK.

S48A Multifunction Switch - Instrument Panel

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: S48A Multifunction Switch - Instrument Panel
3. Test for infinite resistance between the test points: Signal terminal 7 & Ground terminal 2 - Not Pressed

- **If less than infinite resistance**

Replace the component: S48A Multifunction Switch - Instrument Panel

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 7 & Ground terminal 2 - Pressed

- **If 3 ohms or greater**

Replace the component: S48A Multifunction Switch - Instrument Panel

- **If less than 3 ohms**

5. All OK.

S58A Rear Compartment Lid Unlatch Switch - Exterior

1. Ignition/Vehicle - Off

2. Disconnect the electrical connector: S58A Rear Compartment Lid Unlatch Switch - Exterior

3. Test for infinite resistance between the test points: Signal terminal 1 & Ground terminal 2 - Not Pressed

- **If less than infinite resistance**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

- **If infinite resistance**

4. Test for less than 3 ohms between the test points: Signal terminal 1 & Ground terminal 2 - Pressed

- **If 3 ohms or greater**

Replace the component: S58A Rear Compartment Lid Unlatch Switch - Exterior

- **If less than 3 ohms**

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Front Compartment Fuse Block Replacement](#)
- Refer to [Instrument Panel Multifunction Switch Replacement](#)
- Refer to [Rear Compartment Lid Release Switch Replacement](#)
- Refer to [Rear Compartment Lid Latch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

TRUNK AJAR INDICATOR MALFUNCTION

Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: [Diagnostic System Check - Vehicle](#)
- Review the description of Strategy Based Diagnosis: [Strategy Based Diagnosis](#)
- An overview of each diagnostic category can be found here: [Diagnostic Procedure Instructions](#)

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	1	2	2	-
Ground	-	3	-	-
1. Trunk Open Display Message = Always On 2. Trunk Open Display Message = Disabled 3. Rear Compartment Lid Latch = Disabled				

Circuit/System Description

For an overview of the component/system, refer to: **Luggage Compartment Description and Operation**

Circuit	Description
Signal	The control module input circuit has an internal resistance connected to 12 V.
Ground	Chassis Ground

Component	Description
M40 Rear Compartment Lid Latch	The switch has a normally open contact. When the switch is activated, the signal circuit to the control module is grounded.
K9 Body Control Module	The module controls various vehicle functions like lighting, central door locking, power windows, etc.

Reference Information

Schematic Reference

Release Systems Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Component View Reference

Luggage Compartment/Rear of Vehicle Component Views

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 / Vehicle - In Service Mode
2. Operate the component: Trunk Lid - Closed

Verify the scan tool parameter: Rear Closure Ajar Switch = Inactive

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

3. Operate the component: Trunk Lid - Ajar

Verify the scan tool parameter: Rear Closure Ajar Switch = Active

- **If not the specified state**

Refer to: Circuit/System Testing

- **If the specified state**

4. All OK.

Circuit/System Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: M40 Rear Compartment Lid Latch
3. Ignition - On / Vehicle - In Service Mode
4. Verify the scan tool parameter: Rear Closure Ajar Switch = Inactive
 - **If not the specified state**
 1. Ignition/Vehicle - Off
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Test for infinite resistance between the test points: Signal circuit terminal 4 @ Component harness & Ground
 - If less than infinite resistance - Repair the short to ground on the circuit.
 - If infinite resistance - Replace the component: K9 Body Control Module
 - **If the specified state**
5. Connect a 3 A fused jumper wire between the test points: Signal circuit terminal 4 & Ground circuit terminal 2
6. Verify the scan tool parameter: Rear Closure Ajar Switch = Active
 - **If not the specified state**
 1. Ignition/Vehicle - Off & Remove - Jumper wire(s)
 2. Disconnect the electrical connector: K9 Body Control Module
 3. Ignition - On / Vehicle - In Service Mode
 4. Test for less than 1 V between the test points: Signal circuit terminal 4 @ Component harness & Ground
 - If 1 V or greater - Repair the short to voltage on the circuit.
 - If less than 1 V
 5. Ignition/Vehicle - Off
 6. Test for less than 2 ohms between the test points: Signal circuit terminal 4 @ Component harness & Terminal 5 X6 @ Control module harness
 - If 2 ohms or greater - Repair the open/high resistance in the circuit.
 - If less than 2 ohms - Replace the component: K9 Body Control Module
 - **If the specified state**
7. Test or replace the component: M40 Rear Compartment Lid Latch

Component Testing

1. Ignition/Vehicle - Off
2. Disconnect the electrical connector: M40 Rear Compartment Lid Latch
3. Test for infinite resistance between the test points: Signal terminal 4 & Ground terminal 2 - The switch is in the open position.
 - **If less than infinite resistance**
Replace the component: M40 Rear Compartment Lid Latch
 - **If infinite resistance**
4. Test for less than 3 ohms between the test points: Signal terminal 4 & Ground terminal 2 - The switch is in the closed position.
 - **If 3 ohms or greater**
Replace the component: M40 Rear Compartment Lid Latch
 - **If less than 3 ohms**

5. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: [Diagnostic Repair Verification](#)

- Refer to [Rear Compartment Lid Latch Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

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 Diagnostic System Check - Vehicle
2	Were you sent here from a Vehicle Access Symptom Table?	Go to Step 3	Go to Symptoms - Vehicle Access
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

Step	Action	Yes	No
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

Step	Action	Yes	No
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 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

Step	Action	Yes	No
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

Step	Action	Yes	No
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 appropriate Door Lock Striker Adjustment procedure.
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

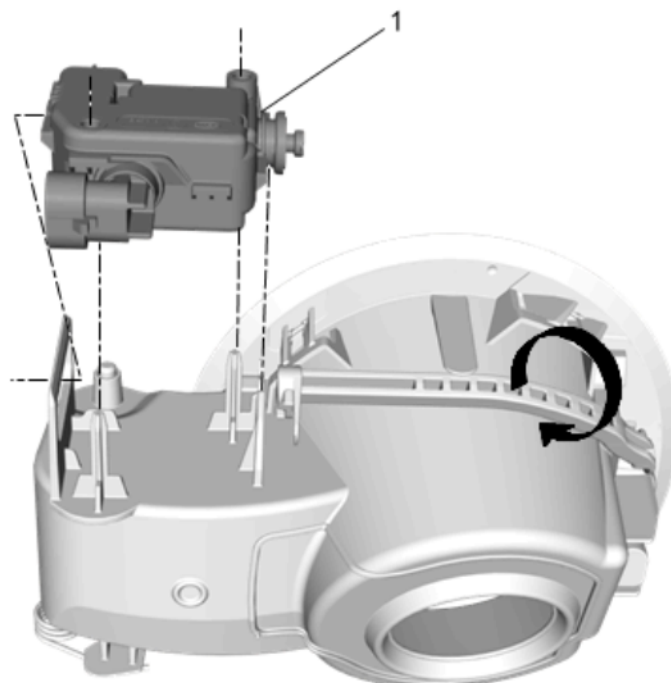


Fig. 6: Fuel Tank Filler Door Lock Actuator
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure	
Remove Fuel Tank Filler Pipe Housing. Refer to Fuel Tank Filler Pipe Housing Replacement .	
	Fuel Tank Filler Door Lock Actuator
1	Procedure 1. Disconnect the electrical connector. 2. Release the retainer while using light outward pressure on the retainer tab. 3. Remove the actuator rod from the actuator shaft, with light pressure, pressing sideways on the rod at the shafts end, and rotating the rod outward from the housing.

FRONT SIDE DOOR INSIDE HANDLE CABLE REPLACEMENT

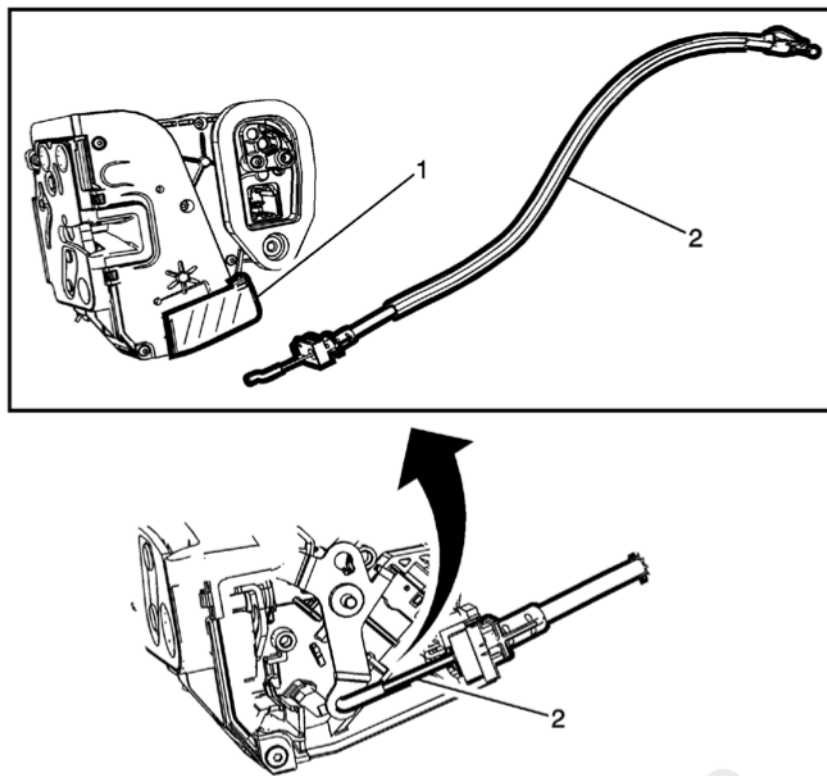


Fig. 7: Front Side Door Inside Handle Cable & Access Cover
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door latch and handle bracket assembly from the door. Refer to Front Side Door Latch Replacement .	
1	Front Side Door Inside Handle Cable Access Cover Procedure 1. Use a suitable tool, open the access cover to view the cable end. 2. Release the cable end from the latch assembly.
2	Front Side Door Inside Handle Cable NOTE: Ensure that the door lock system operates properly before installing the trim.

REAR SIDE DOOR INSIDE HANDLE CABLE REPLACEMENT

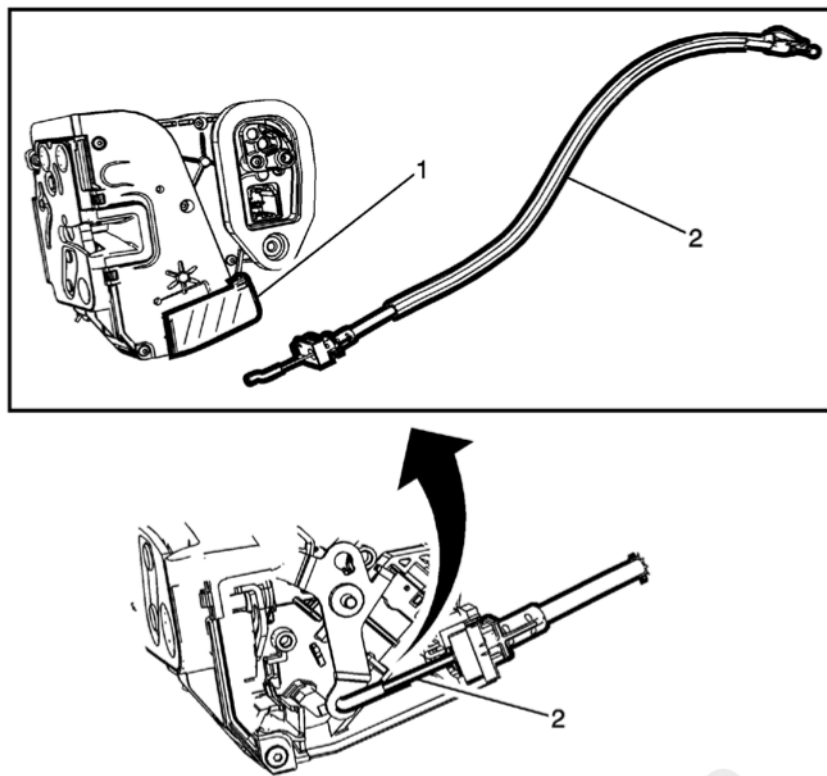


Fig. 8: Rear Side Door Inside Handle Cable & Access Cover
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear side door latch and handle bracket assembly from the door. Refer to Rear Side Door Latch Replacement .	
1	Rear Side Door Inside Handle Cable Cover Procedure 1. Use a suitable tool, open the access cover to view the cable end. 2. Release the cable end from the latch assembly.
2	Rear Side Door Inside Handle Cable NOTE: Ensure that the door lock system operates properly before installing the trim.

FRONT SIDE DOOR LOCK CYLINDER REPLACEMENT

Removal Procedure

1. Remove Front Side Door Outside Handle Bracket. Refer to [Front Side Door Outside Handle Bracket Replacement \(Driver Side\)](#)[Front Side Door Outside Handle Bracket Replacement \(Passenger Side\)](#).

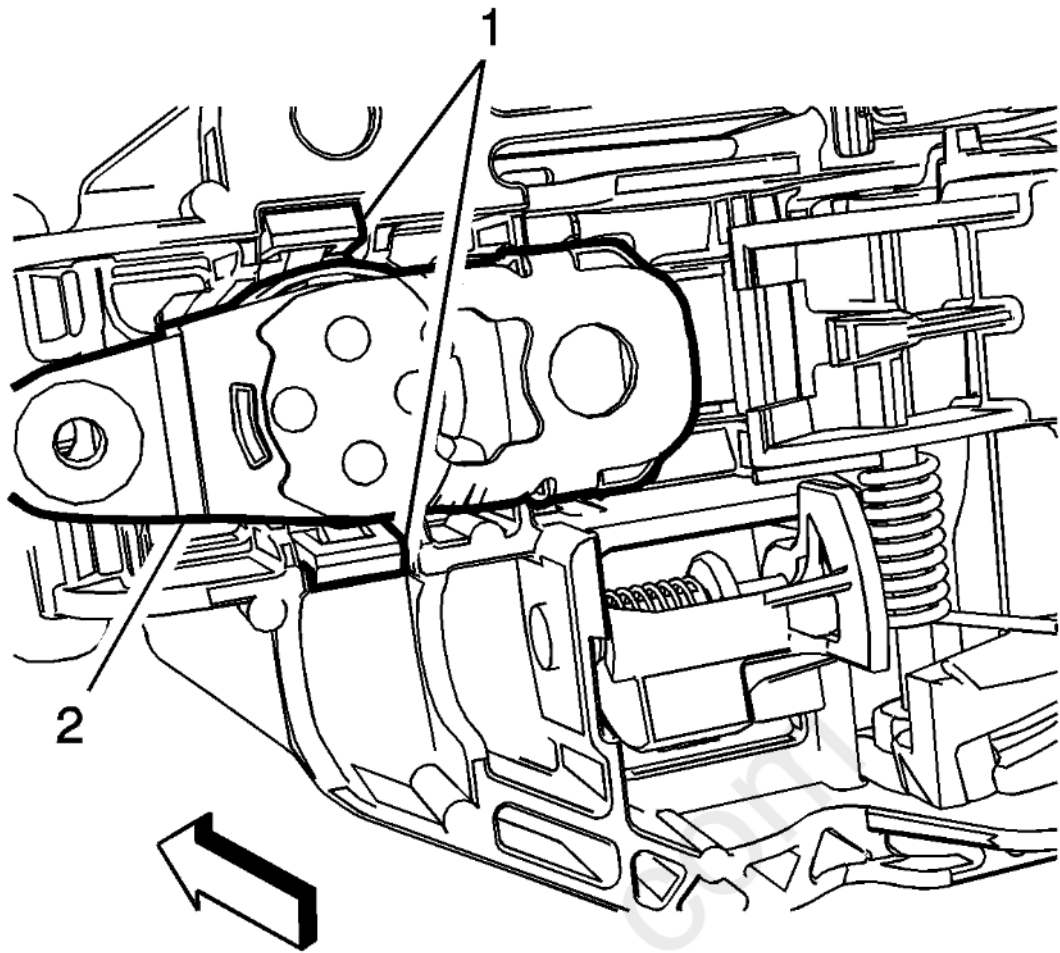


Fig. 9: Lock Cylinder Retainers

Courtesy of GENERAL MOTORS COMPANY

2. From the back side of the outside handle bracket, use a suitable tool, push up and down on the lock cylinder retainers (1) releasing the retainer from the cylinder.

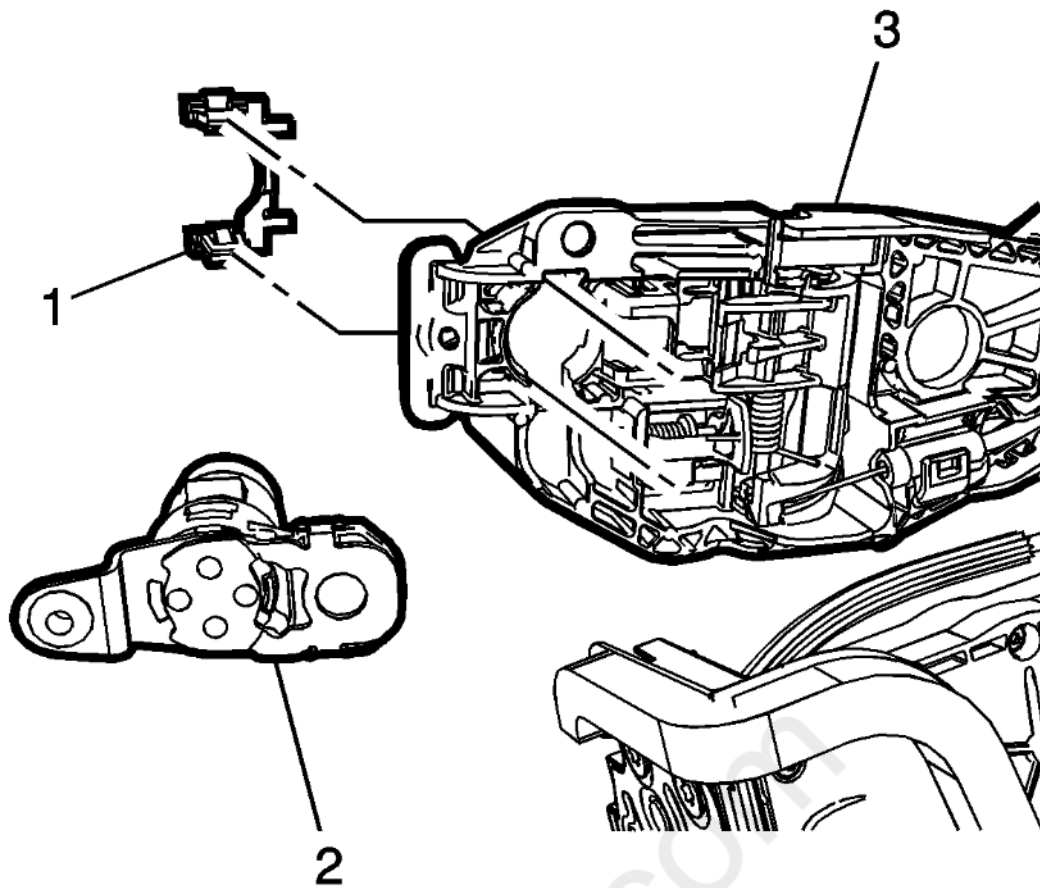


Fig. 10: Front Side Door Lock Cylinder & Mounting Components

Courtesy of GENERAL MOTORS COMPANY

3. With the lock cylinder retainer (1) removed pull the lock cylinder (2) rearward releasing it from the handle bracket (3).

Installation Procedure

1. Perform Front Side Door Lock Cylinder Coding. Refer to **Front Side Door Lock Cylinder Coding (Free Wheeling)** **Front Side Door Lock Cylinder Coding (Non Free Wheeling)** .

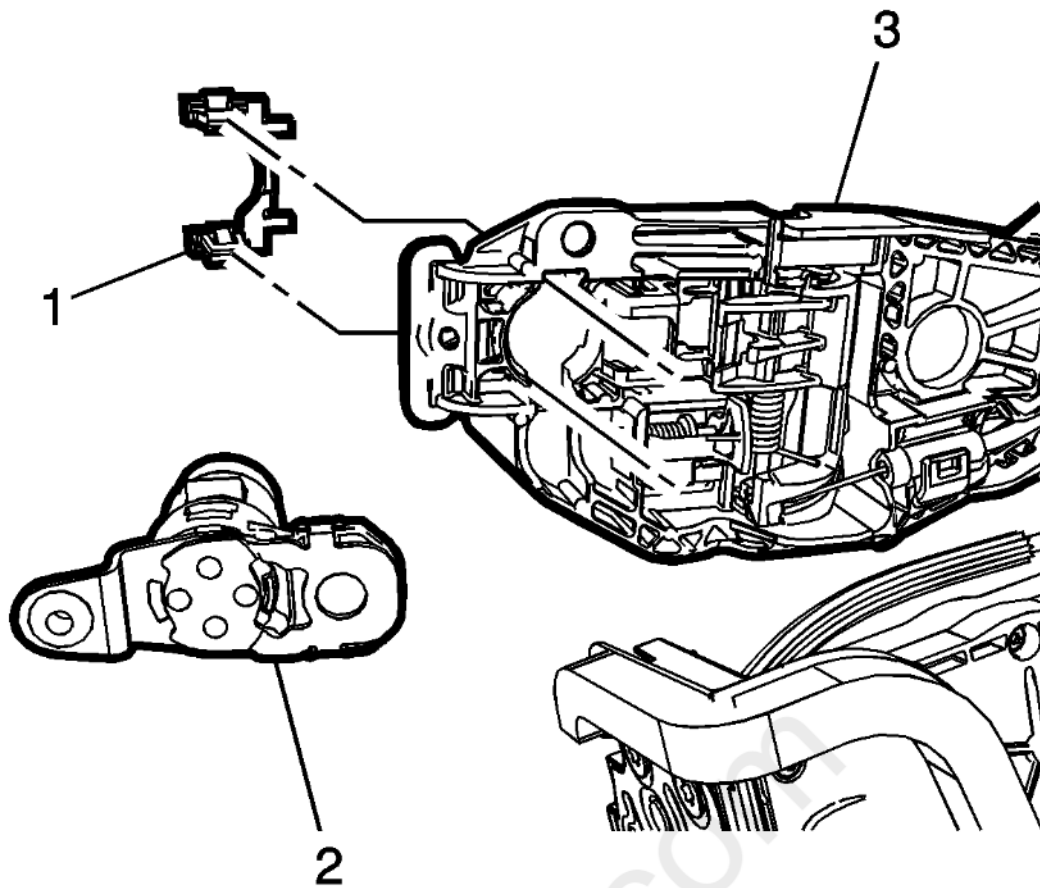


Fig. 11: Front Side Door Lock Cylinder & Mounting Components

Courtesy of GENERAL MOTORS COMPANY

NOTE: Ensure that the door lock cylinder is engage all the way into the side door handle locator tabs. Insert the key into the door lock cylinder, turn left to right checking for binding before install the assembly to the vehicle.

2. Install the lock cylinder retainer (1) to the front side door outside handle bracket assembly (3).
3. Install the door lock cylinder (2) in the front side door outside handle bracket, push forward locking the lock cylinder (2) into the lock locator.
4. Install Front Side Door Outside Handle Bracket. Refer to [Front Side Door Outside Handle Bracket Replacement \(Driver Side\)](#)[Front Side Door Outside Handle Bracket Replacement \(Passenger Side\)](#).
5. Ensure that the door lock system operates properly before installing the trim.

SIDE DOOR HANDLE BRACKET LOCATOR REPLACEMENT

Removal Procedure

NOTE: To perform this procedure the latch and bracket assembly Must be out of the vehicle to replace the side door lock cylinder assembly.

1. Remove the front side door latch and side door outside handle bracket assembly as one. Refer to [Front Side Door Latch Replacement](#).

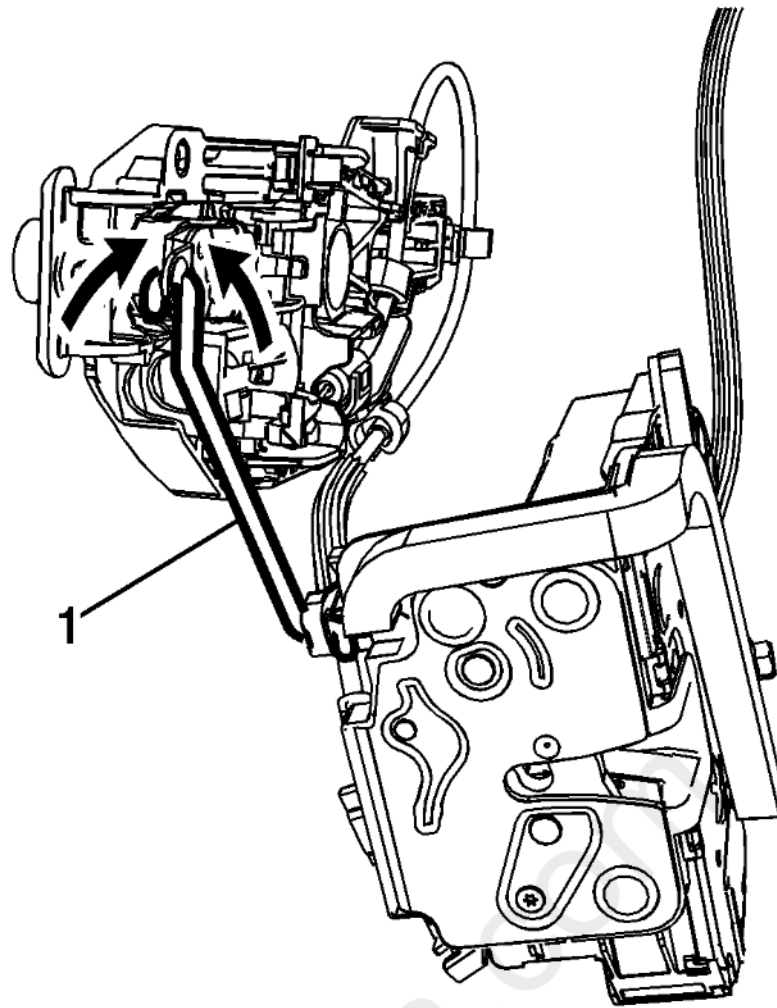


Fig. 12: Front Side Door Lock Cylinder Rod

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not disconnect the inside or outside handle cable to replace the side door lock cylinder.

2. Disconnect the front side door lock cylinder rod (1) from the cylinder.

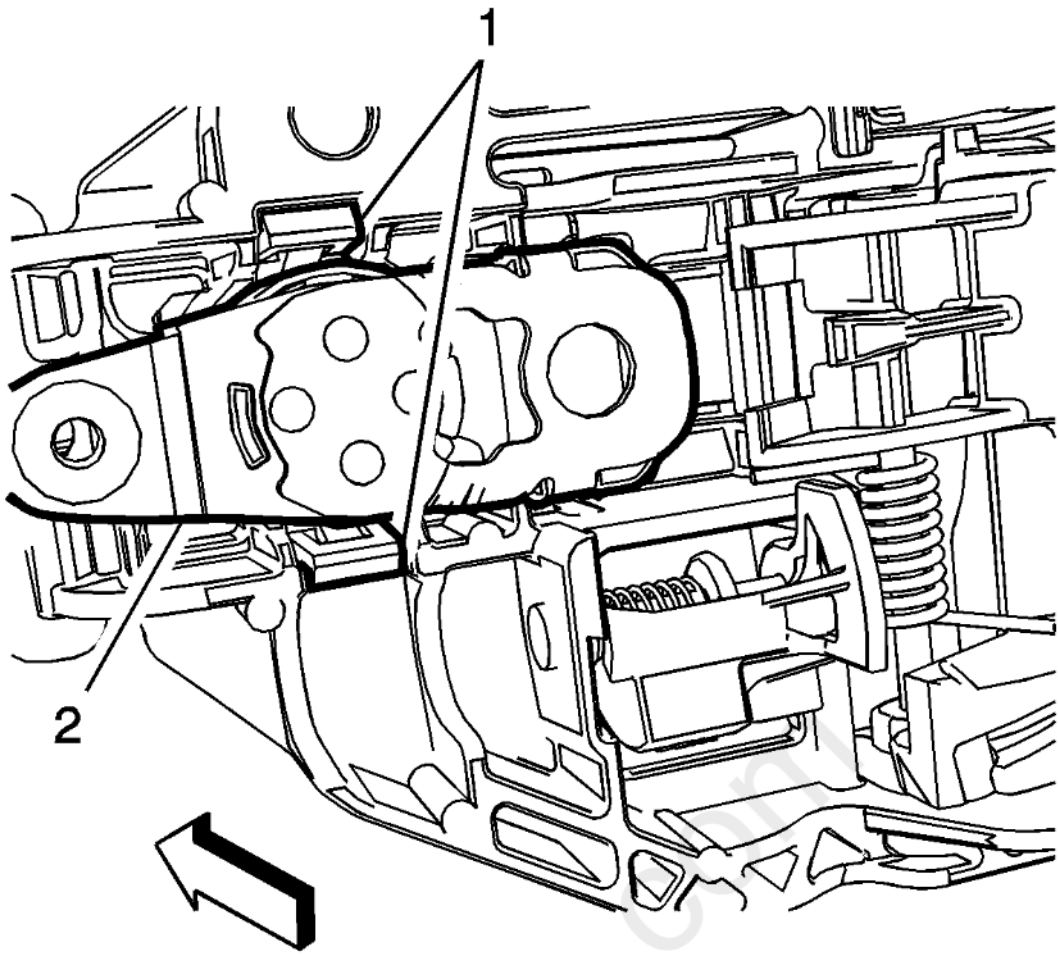


Fig. 13: Lock Cylinder Retainers

Courtesy of GENERAL MOTORS COMPANY

3. Use a suitable tool, release the lock cylinder (2) from the side door handle bracket locator (1) by pulling upward on the tabs.

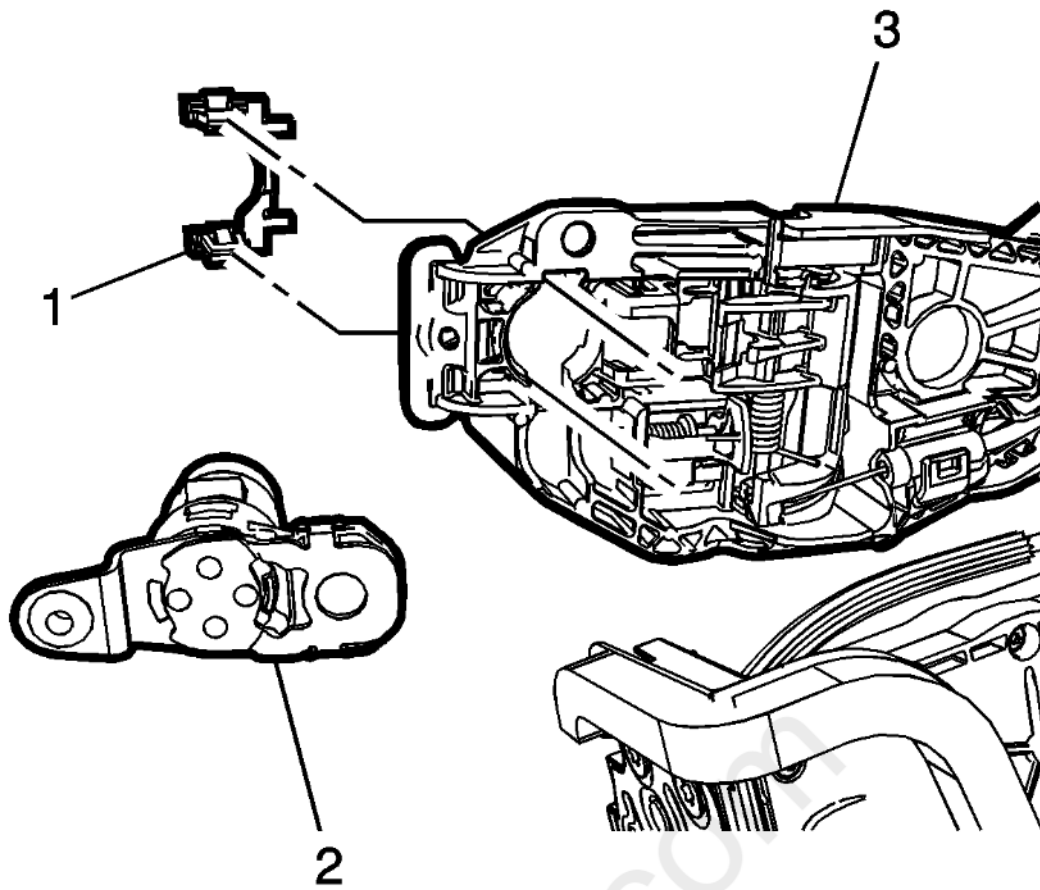


Fig. 14: Front Side Door Lock Cylinder & Mounting Components

Courtesy of GENERAL MOTORS COMPANY

4. Remove the side door handle bracket locator (1) from the front side door lock cylinder (2) and the front door outside handle bracket assembly (3).
5. Remove the door lock cylinder from the front side door outside handle bracket assembly.

Installation Procedure

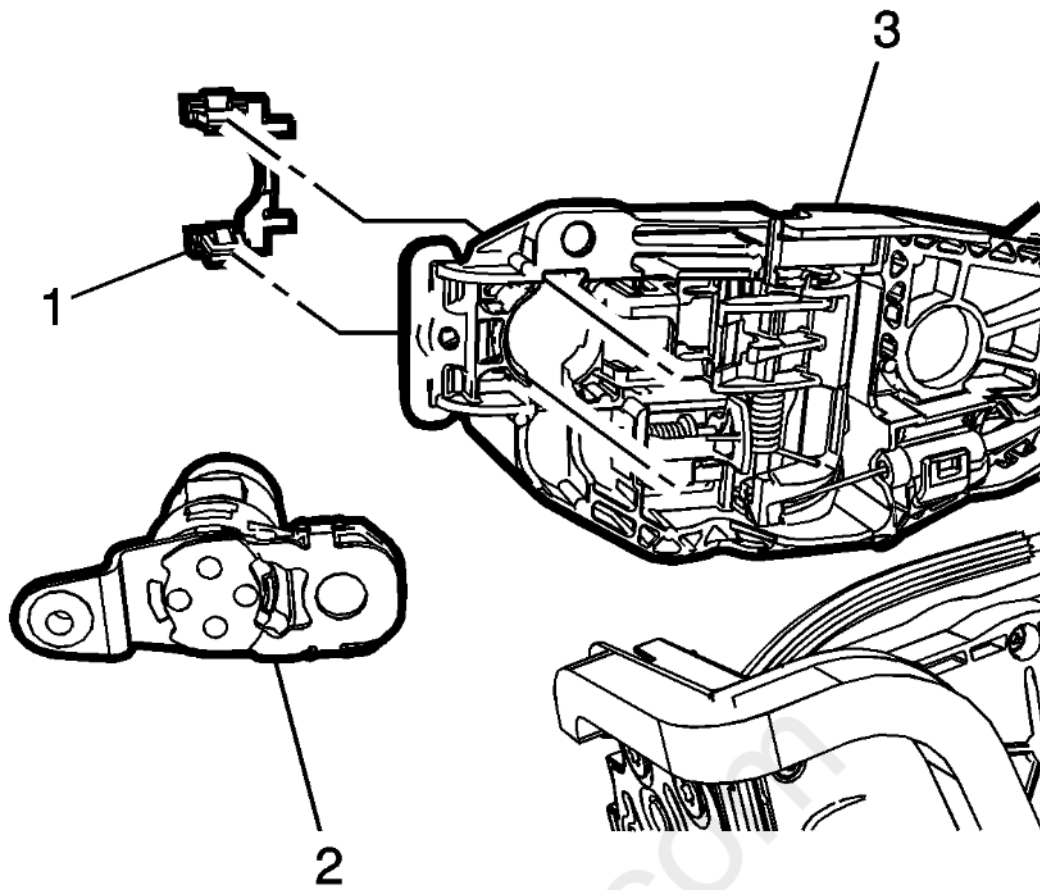


Fig. 15: Front Side Door Lock Cylinder & Mounting Components

Courtesy of GENERAL MOTORS COMPANY

1. Install the front side door lock cylinder (2) into the front side door outside handle bracket assembly (3).

Insert the side door handle bracket locator (1) to the lock cylinder locking it into the front side door outside handle bracket assembly.

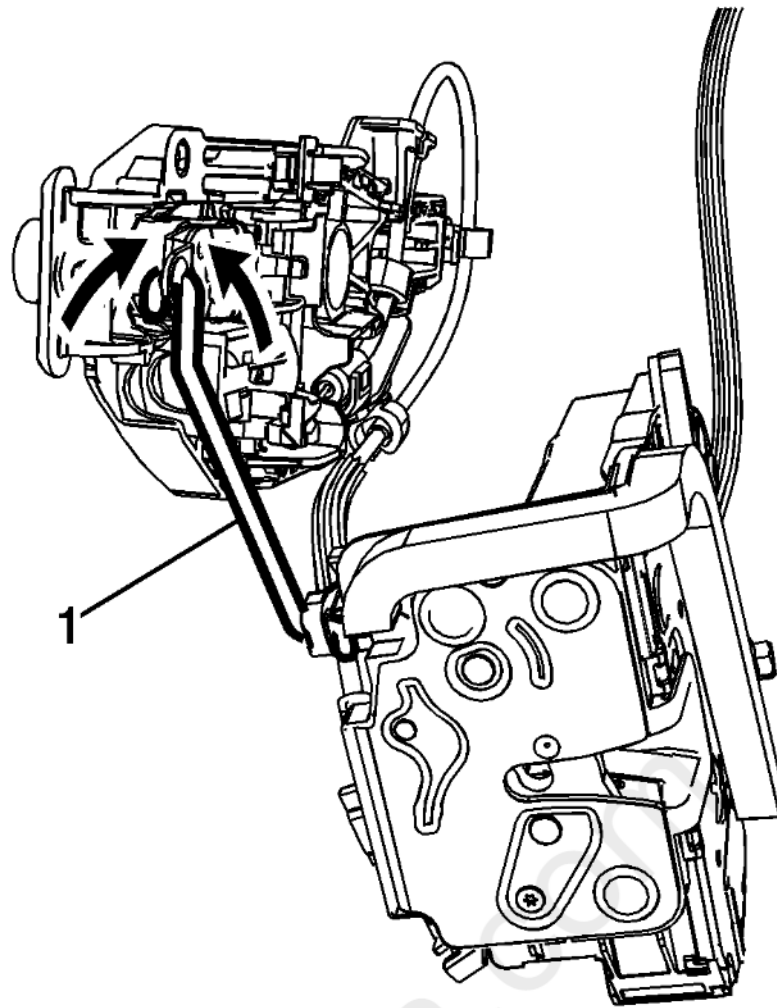


Fig. 16: Front Side Door Lock Cylinder Rod
Courtesy of GENERAL MOTORS COMPANY

2. Connect the side door lock cylinder rod (1) to the cylinder.

NOTE: Ensure that the door lock cylinder is engage all the way into the locator tabs and the outside handle bracket. Insert the door key into the side door lock cylinder, turn the key to the left and right checking for binding before install the assembly in the vehicle.

3. Install the front side door latch and side door outside handle bracket assembly as one into the vehicle. Refer to [Front Side Door Latch Replacement](#).
4. Ensure that the door lock system operates properly before installing the trim.

FRONT SIDE DOOR OUTSIDE HANDLE REPLACEMENT (WITH PASSIVE ENTRY PASSIVE START)

Removal Procedure

1. Remove the front side door trim. Refer to [Front Side Door Trim Replacement](#).
2. Remove the front side door water deflector.

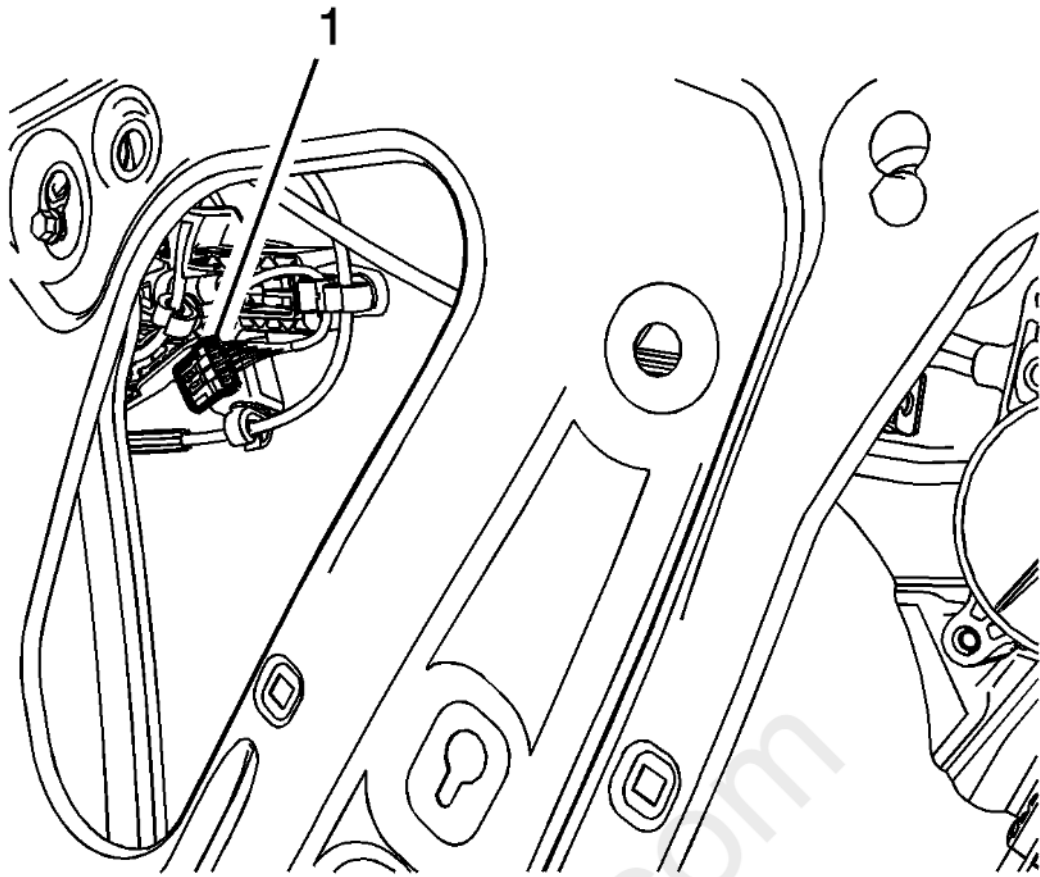


Fig. 17: Luminous Reflecting Light Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

3. Disconnect the electrical connector (1) from the front side door outside handle bracket for the luminous reflecting light, if equipped

NOTE: When removing the door lock cylinder screw Do Not go past the hard stop.

4. Loosen the screw for the lock cylinder bezel. Refer to [Front Side Door Lock Cylinder Bezel Replacement](#).

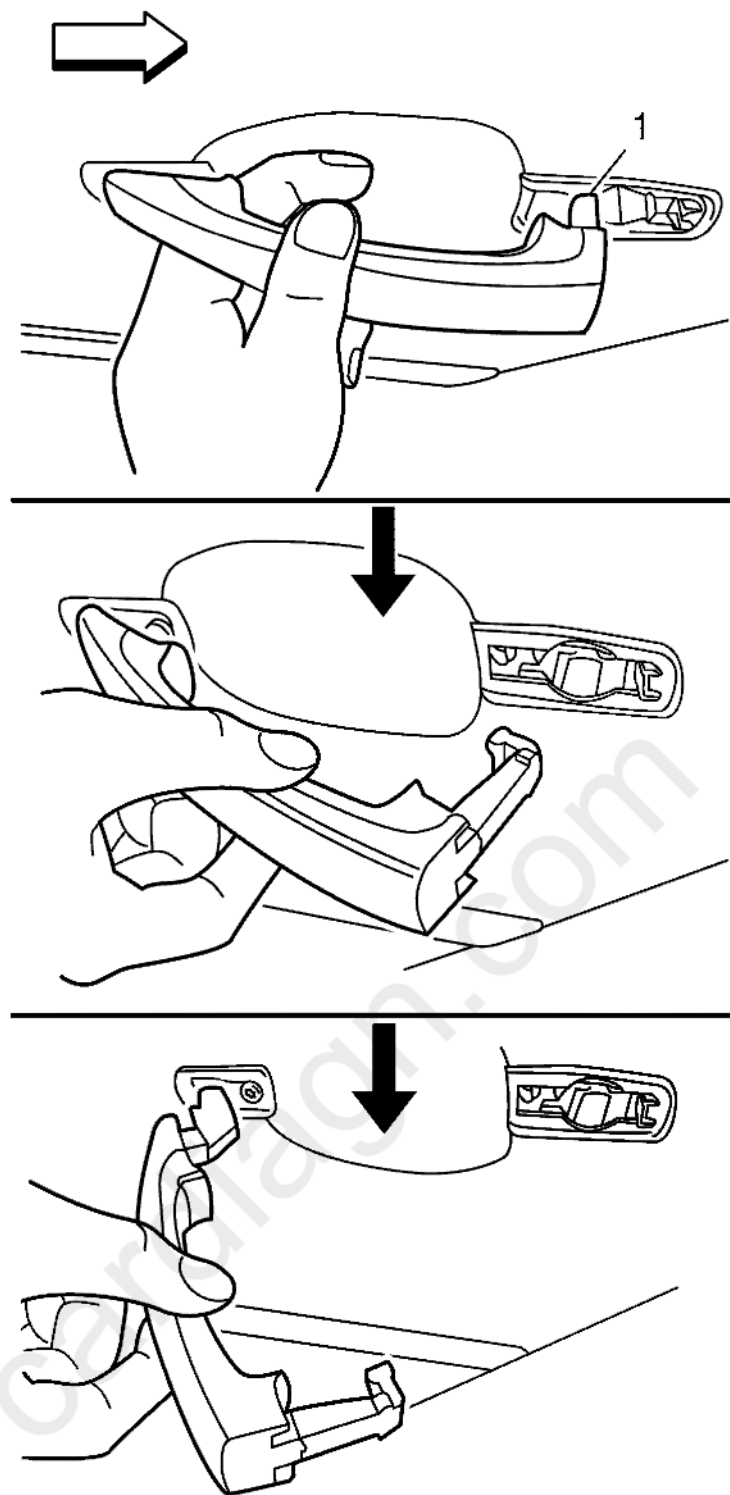


Fig. 18: Side Door Outside Handle Removal Procedure

Courtesy of GENERAL MOTORS COMPANY

5. Remove the front side door outside handle (1) from the door as follows:
 1. Open the door handle fully.
 2. Slide the door handle rearward releasing the handle from the door handle bracket.
 3. Remove the front side door outside handle and connector from the door.

Installation Procedure

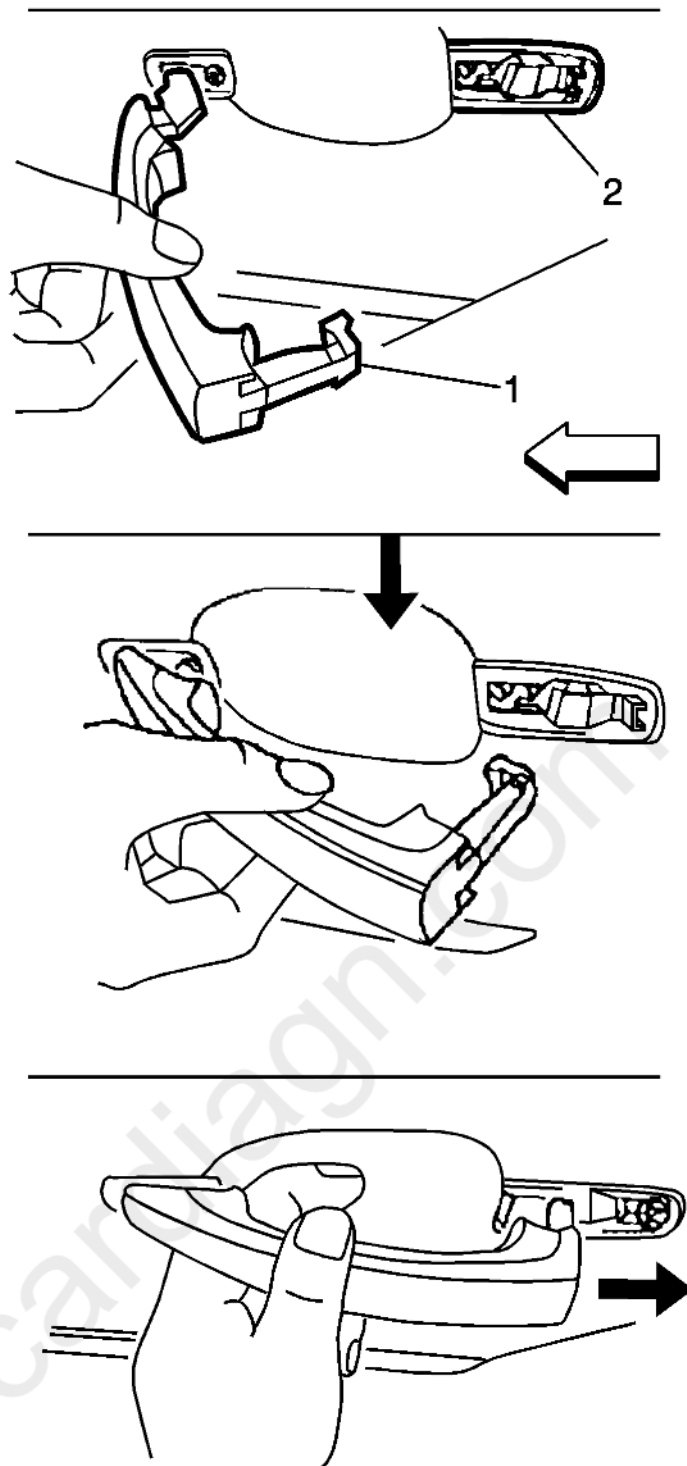


Fig. 19: Side Door Outside Handle Installation Procedure

Courtesy of GENERAL MOTORS COMPANY

NOTE: The front side door outside handle can Not be install until the counter balance (1) and handle is reset.

1. Install the front side door outside handle (1) to the door (2).
2. Insert the front side door handle into the door handle pocket.
3. Slide the front side door handle forward securing it into the door handle bracket.

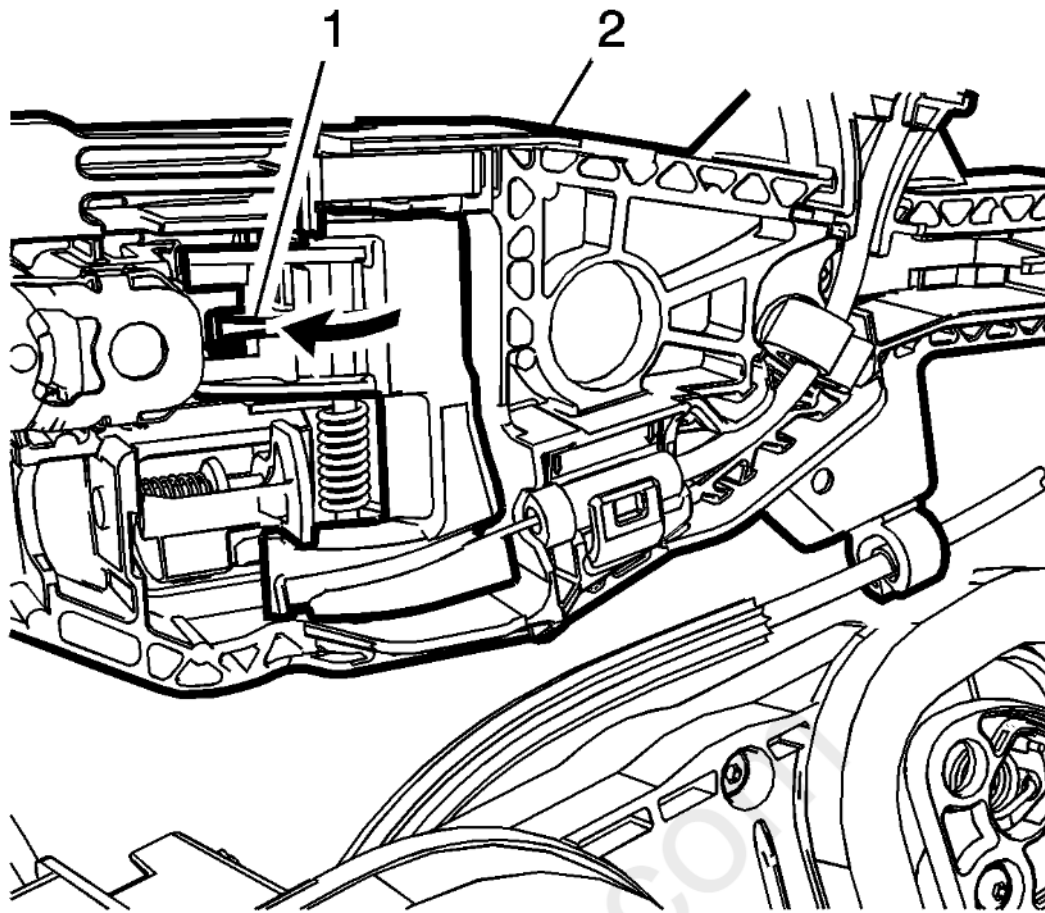


Fig. 20: Door Handle Bracket Housing Counterbalance Lever

Courtesy of GENERAL MOTORS COMPANY

4. From inside the door, push outward on the door handle bracket housing counterbalance lever (1) at the same time. Slide the outside door handle toward the lock cylinder then forward engaging the handle to the housing counterbalance.
5. Install the screw to the lock cylinder bezel. Refer to **Front Side Door Lock Cylinder Bezel Replacement**.

Hold the lock cylinder bezel flush to the door sheet and turn the lock cylinder screw to a mechanical hard stop.

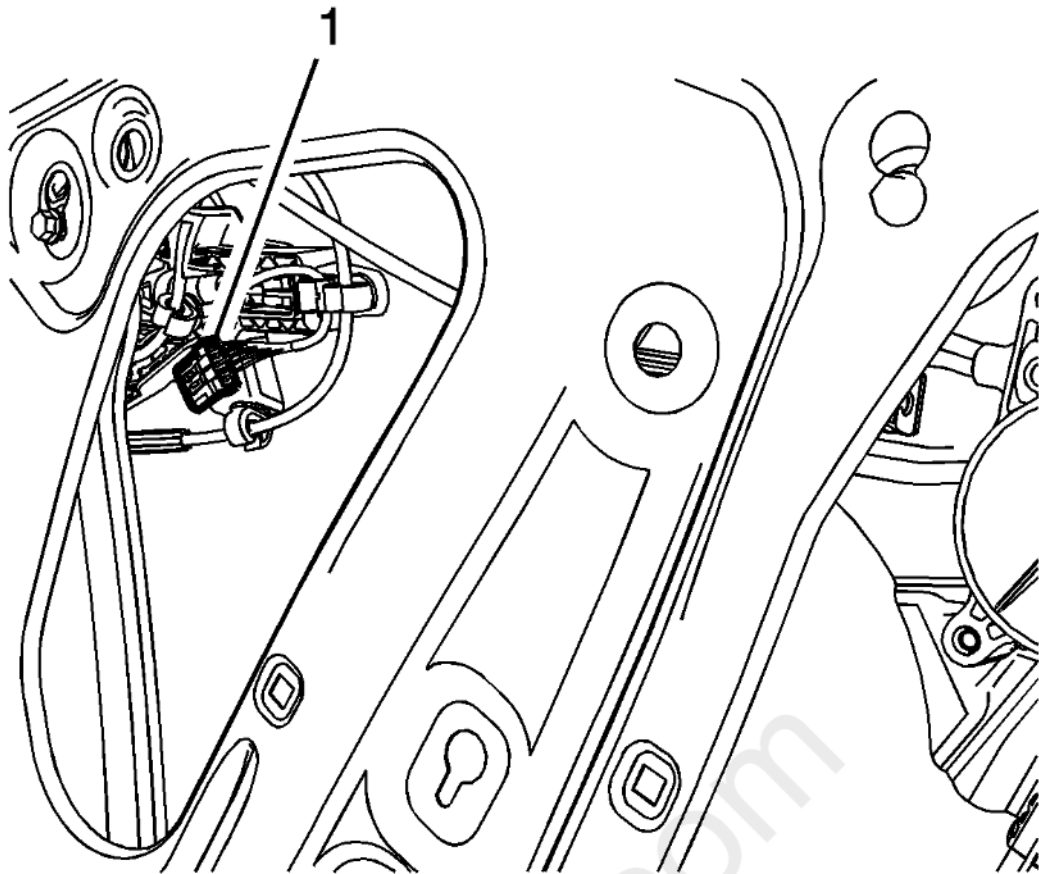


Fig. 21: Luminous Reflecting Light Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

6. Connect the electrical connector (1) to the front side door outside handle bracket for the luminous reflecting light, if equipped.
7. Ensure that the door lock system operates properly before installing the trim.
8. Install the front side door water deflector.
9. Install the front side door trim. Refer to [Front Side Door Trim Replacement](#) .

FRONT SIDE DOOR OUTSIDE HANDLE REPLACEMENT (WITHOUT PASSIVE ENTRY PASSIVE START)

Special Tools

BO 51363 Door Handle Spring Retainer

For equivalent regional tools, refer to [Special Tools](#) .

Removal Procedure

NOTE: When removing the door lock cylinder screw Do Not go past the hard stop.

1. Loosen screw for lock cylinder bezel. Refer to [Front Side Door Lock Cylinder Bezel Replacement](#).

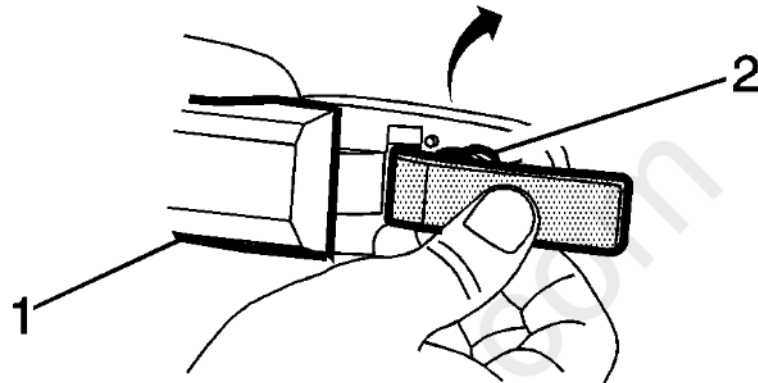
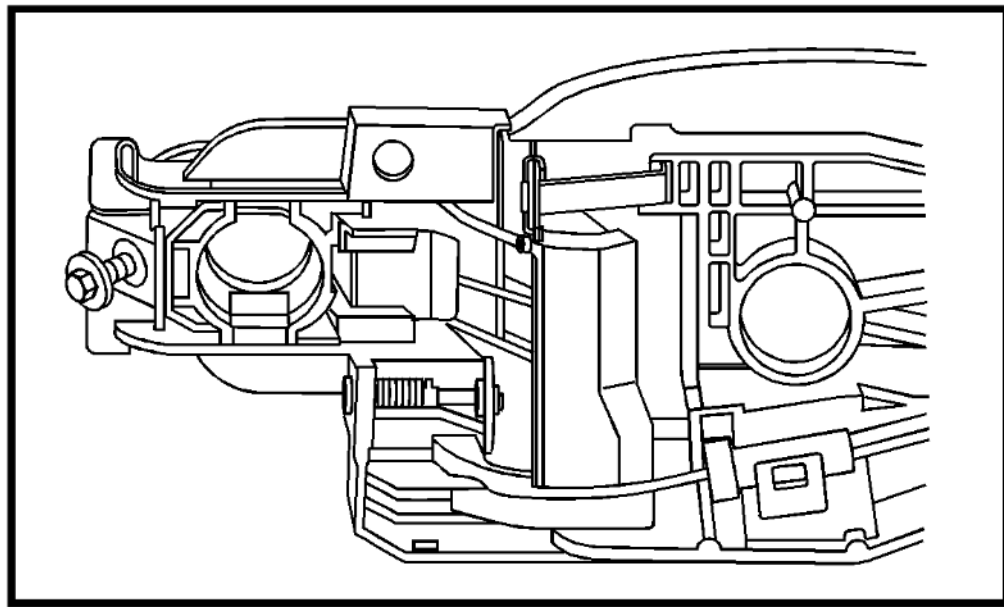


Fig. 22: Front Side Door Outside Handle And Door Handle Spring Retainer
Courtesy of GENERAL MOTORS COMPANY

2. Pull front side door outside handle (1) outward and insert **BO-51363** Door Handle Spring Retainer over the lock cylinder (2) and under door handle (1).
3. Press rear part of **BO-51363** Door Handle Spring Retainer towards the door (3). The front side door outside handle (1) should now be held in the extended position.
4. Release pressure on **BO-51363** Door Handle Spring Retainer which allows front side door outside handle (1) to slightly retract.

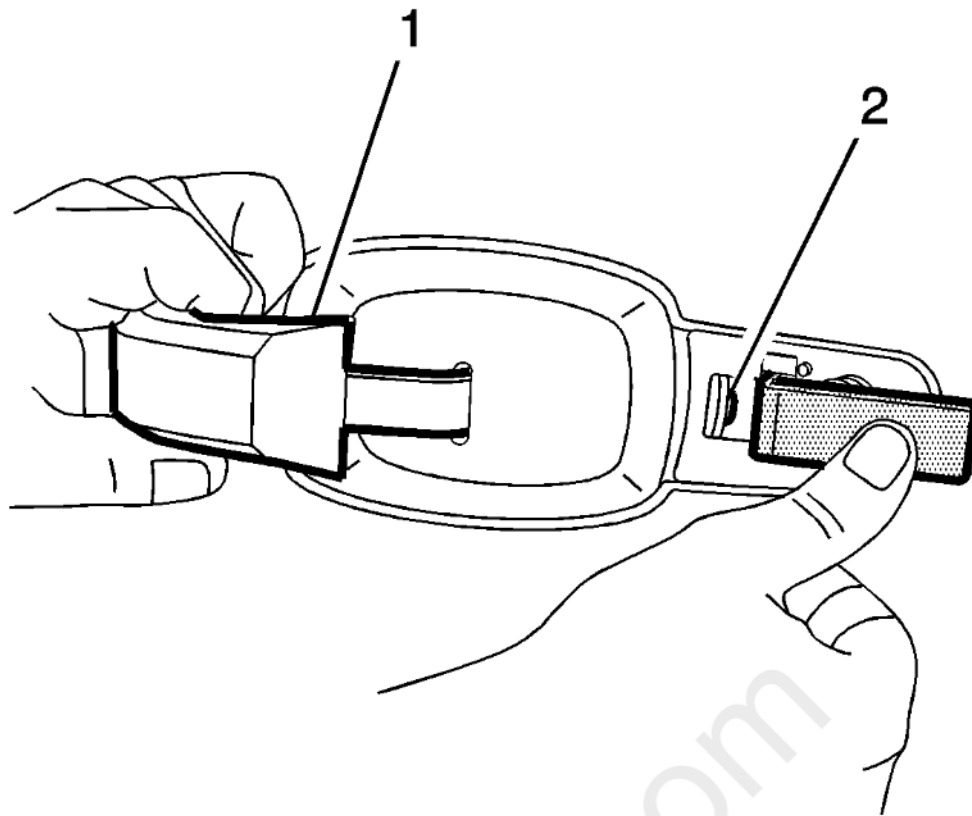


Fig. 23: Front Side Door Outside Handle & Mechanism

Courtesy of GENERAL MOTORS COMPANY

5. Slide front side door outside handle (1) rearward and then pull outward releasing outside door handle from front side door handle mechanism (2).

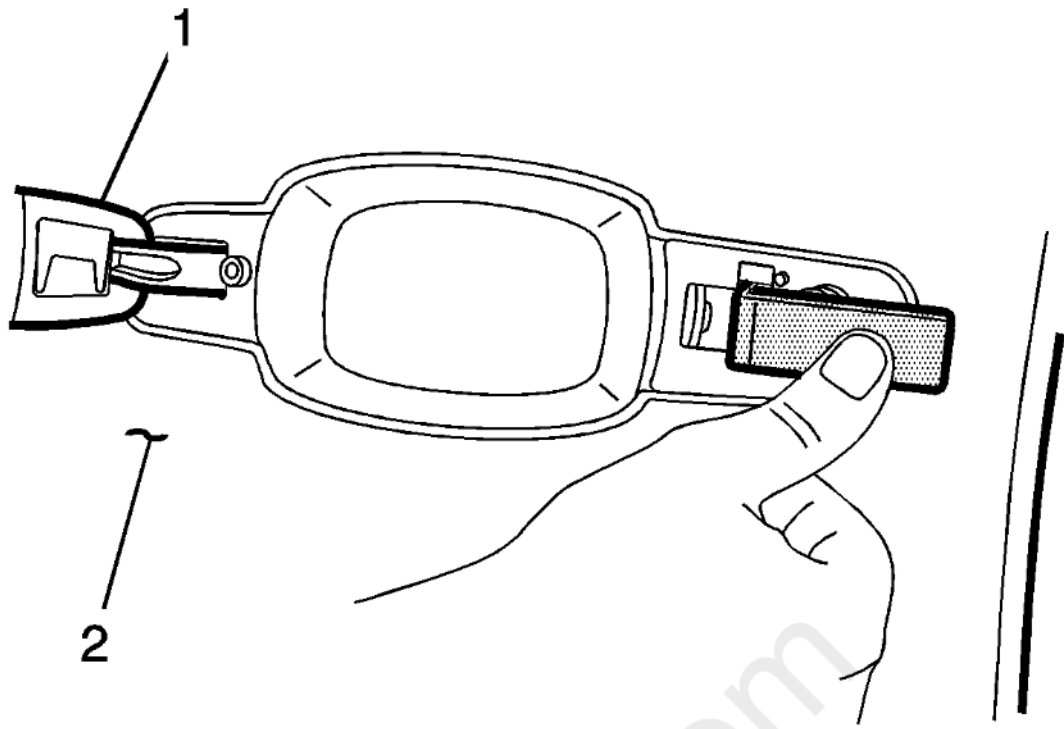


Fig. 24: Front Side Door Outside Handle At 90 Degrees

Courtesy of GENERAL MOTORS COMPANY

6. Pull front side door outside handle (1) forward until door handle is approximately at a 90 degree angle to door (2).

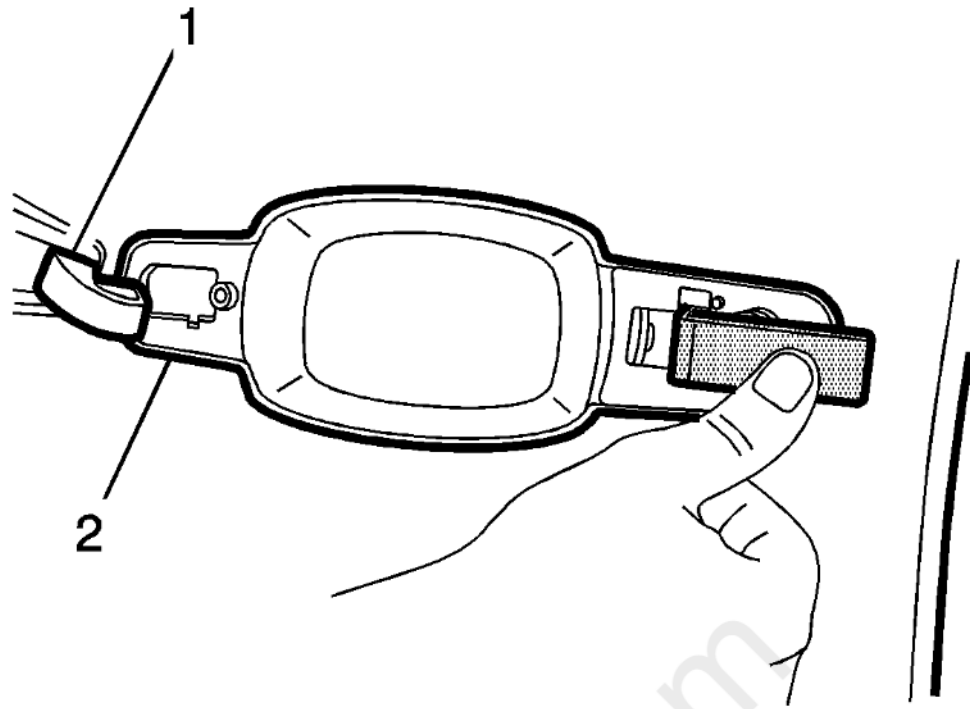


Fig. 25: Removing Front Side Door Outside Handle

Courtesy of GENERAL MOTORS COMPANY

7. Gentle pull front side door outside handle (1) outward and remove from door (2).

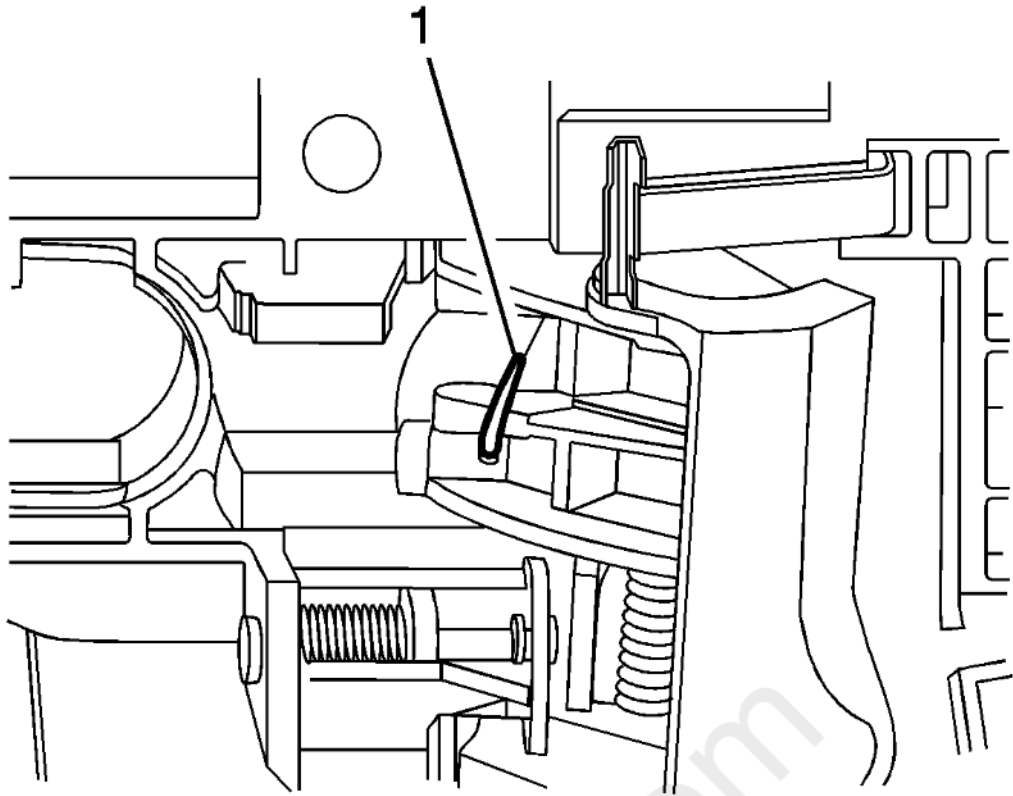


Fig. 26: Hooked Pick Tool And Door Handle Mechanism

Courtesy of GENERAL MOTORS COMPANY

NOTE:

- It is **NOT** necessary to remove the door panel if the **BO-51363** Door Handle Spring Retainer slips off of the door handle mechanism.
- **DO NOT** hook the outer parts of the door handle mechanism. The hooked pick tool or equivalent tool could slip off and damage the front door.

8. If **BO-51363** Door Handle Spring Retainer slips off of door handle mechanism (1) during repair, use a hooked pick tool or equivalent to access the handle mechanism.

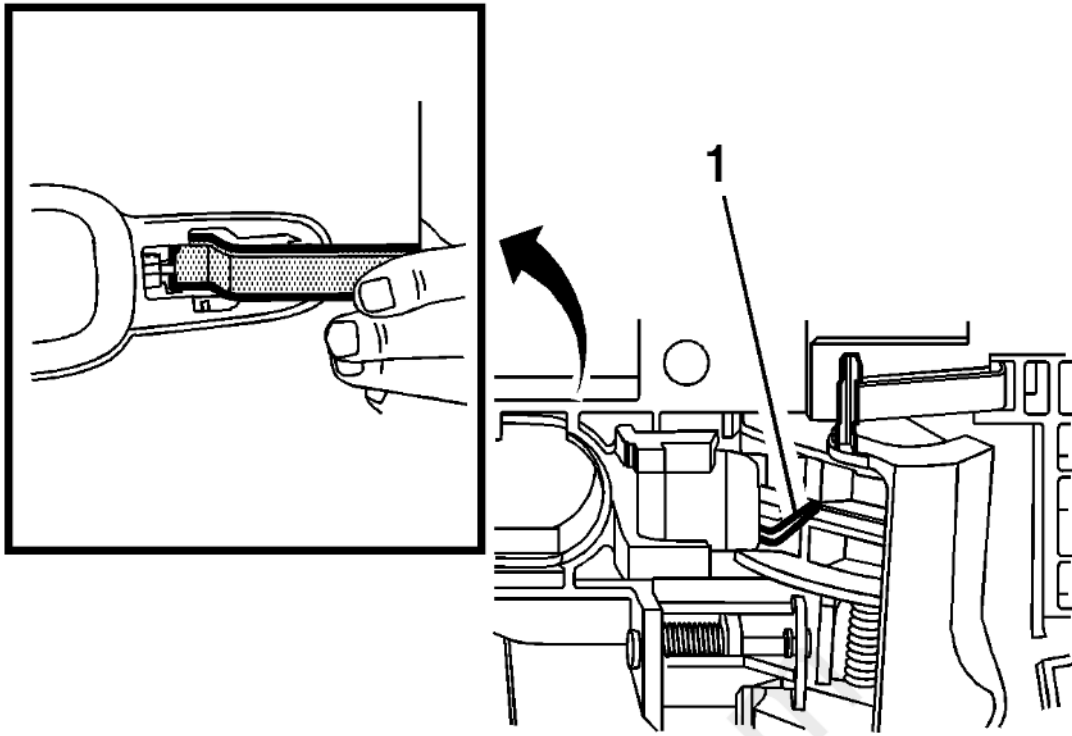


Fig. 27: Door Handle Spring Retainer And Hooked Pick Tool

Courtesy of GENERAL MOTORS COMPANY

9. Pull door handle mechanism (1) outward to the open position and reinstall **BO-51363** Door Handle Spring Retainer into door handle mechanism (1). The hooked pick tool or equivalent tool can then be removed.

Installation Procedure

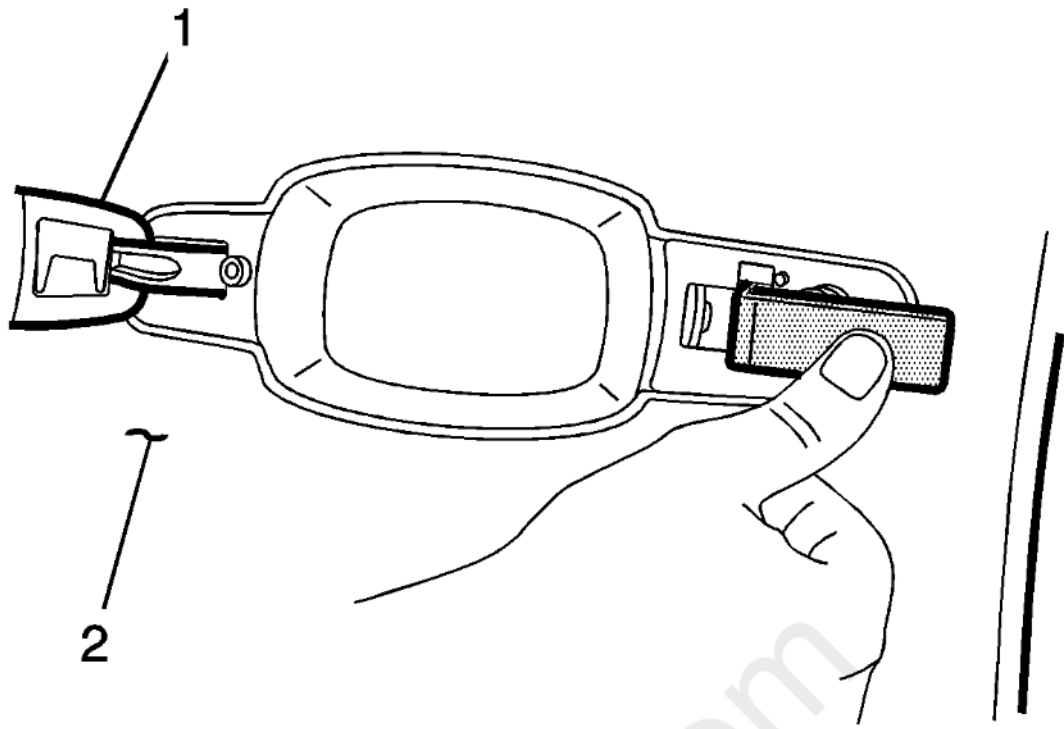


Fig. 28: Front Side Door Outside Handle At 90 Degrees

Courtesy of GENERAL MOTORS COMPANY

1. While holding **BO-51363** Door Handle Spring Retainer in place, install front side door outside handle (1) into door (2) at approximately a 90 degree angle to door.

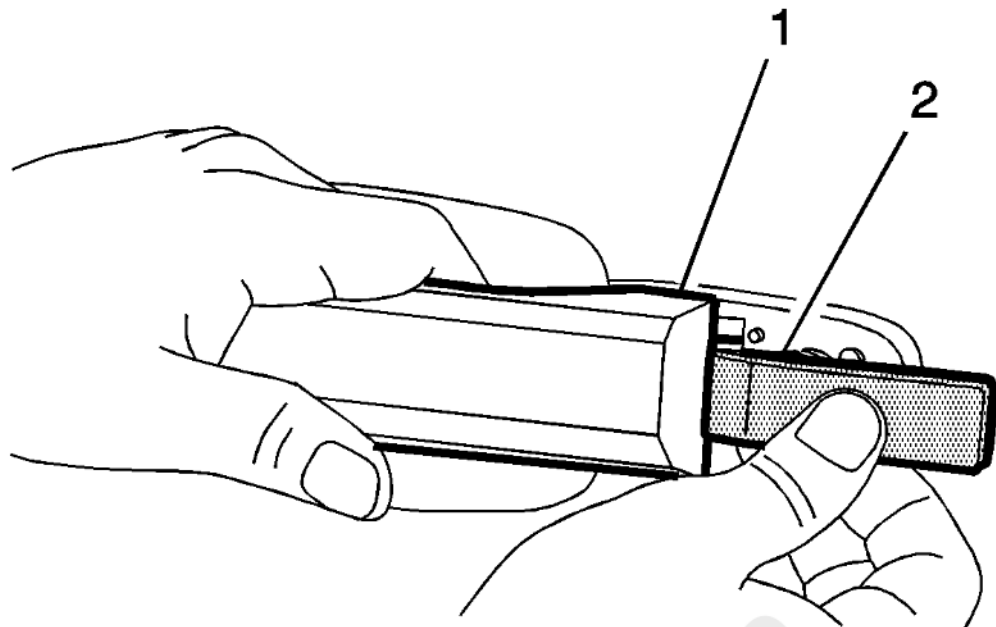


Fig. 29: Front Side Door Outside Handle & Mechanism

Courtesy of GENERAL MOTORS COMPANY

2. Rotate front side door outside handle (1) rearward into front side door handle mechanism (2).

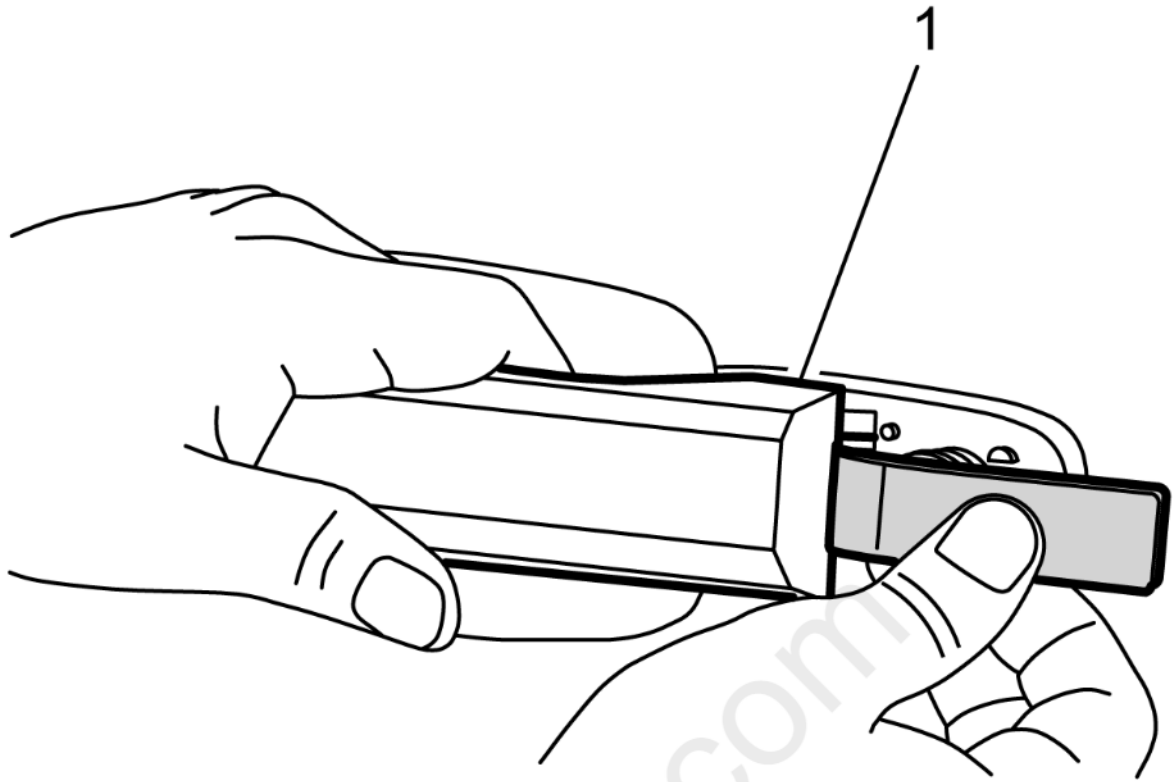


Fig. 30: Front Side Door Outside Handle

Courtesy of GENERAL MOTORS COMPANY

3. Slide front side door outside handle (1) forward to lock into position.

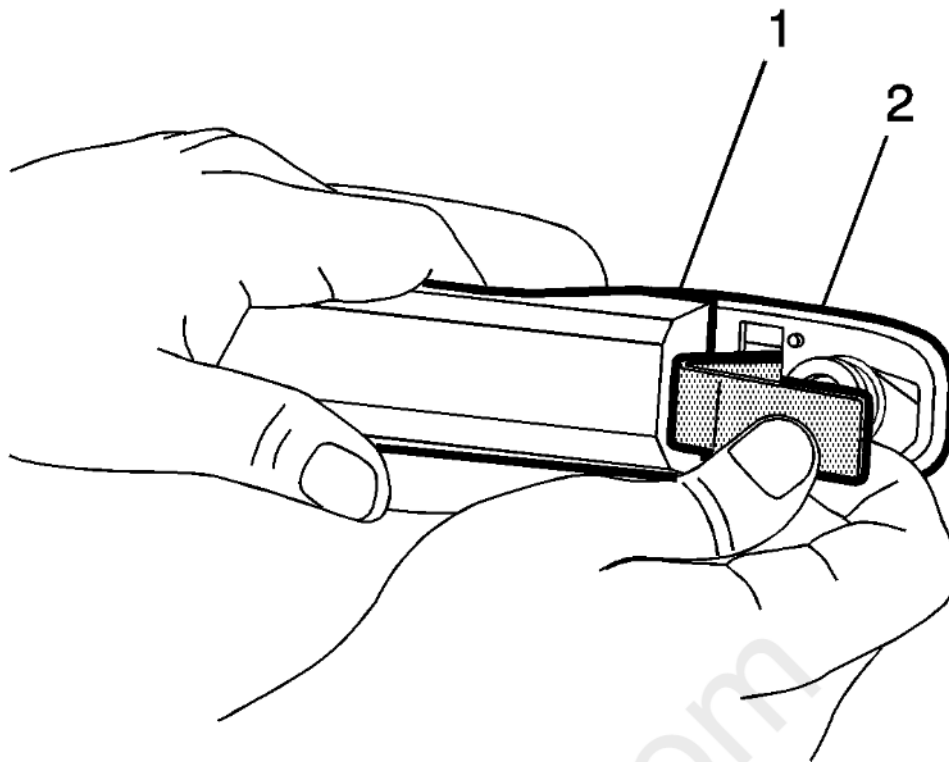


Fig. 31: Front Side Door Outside Handle & Spring Retainer

Courtesy of GENERAL MOTORS COMPANY

4. Release pressure on **BO-51363** Door Handle Spring Retainer. Pull front side door outside handle (1) outward and remove **BO-51363** Door Handle Spring Retainer from door (2).

NOTE: When installing the door lock cylinder screw Do Not go past the hard stop.

5. Tighten screw for lock cylinder bezel. Refer to **Front Side Door Lock Cylinder Bezel Replacement**.
6. Ensure that the door lock system operates properly.

FRONT SIDE DOOR OUTSIDE HANDLE BRACKET REPLACEMENT (DRIVER SIDE)

Removal Procedure

1. Remove Front Side Door Window Rear Channel. Refer to **Front Side Door Window Rear Channel Replacement**
2. Remove Front Side Door Outside Handle. Refer to **Front Side Door Outside Handle Replacement (with Passive Entry Passive Start)****Front Side Door Outside Handle Replacement (without Passive Entry Passive Start)**

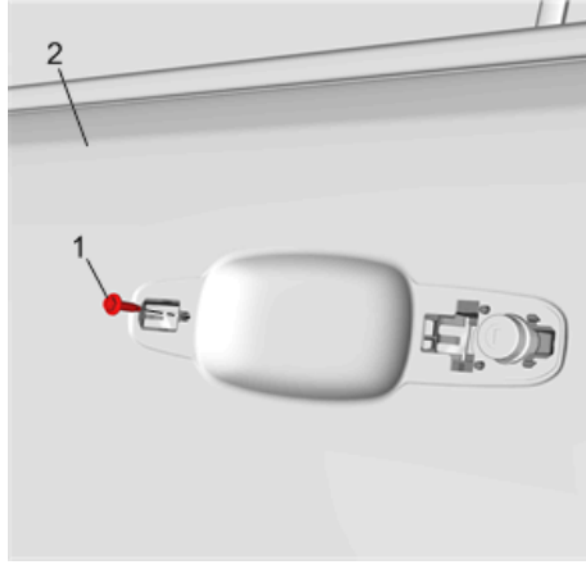


Fig. 32: Front Side Door Outside Handle Bracket Fastener
 Courtesy of GENERAL MOTORS COMPANY

3. Remove the screw (1) that retains the front side door outside bracket to the door (2).

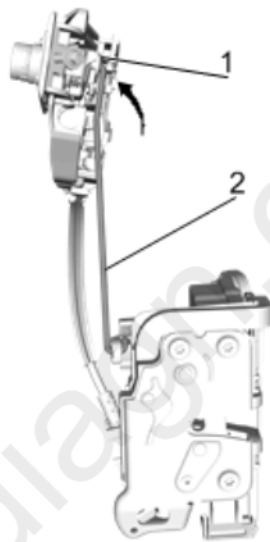


Fig. 33: Front Side Door Lock Rod And Cylinder
 Courtesy of GENERAL MOTORS COMPANY

4. Remove the front side door lock rod (2) from the front side door lock cylinder (1).

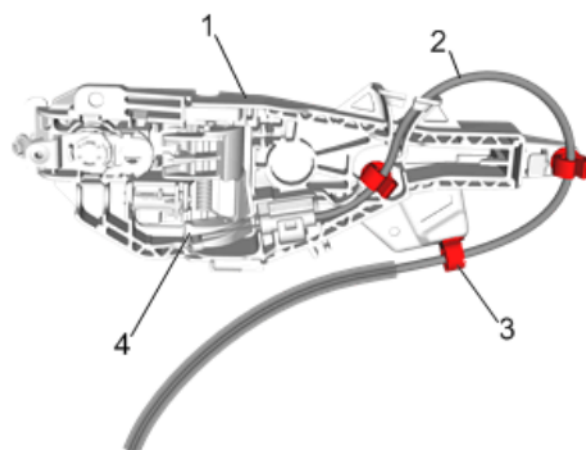


Fig. 34: Front Side Door Outside Handle Bracket, Cable, Retainers And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

5. Pull the front side door outside handle bracket (1) down to the inside door opening.
6. Remove the cable (2) from the front side door outside handle bracket retainers (3) and counter balance (4).
7. Remove Front Side Door Lock Cylinder. Refer to [Front Side Door Lock Cylinder Replacement](#)

Installation Procedure

NOTE: It may be necessary to transfer the wire harness retainers from the old handle bracket.

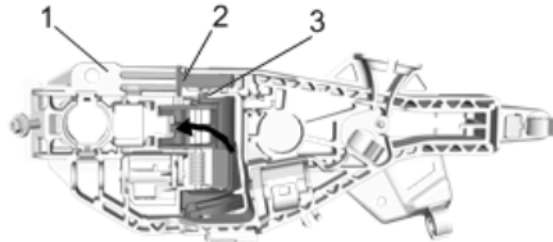


Fig. 35: Front Side Door Outside Handle Bracket, Bracket Clip And Counter Balance
Courtesy of GENERAL MOTORS COMPANY

1. Reset the front side door outside handle bracket counter balance as follows:
 1. The outside door handle Can Not be install until the counter balance (3) is reset.
 2. Grasp the front side door outside handle bracket (1) with one hand.
 3. From the back side of the counter balance (3) push forward on the counter balance until it can be held in place using the bracket clip (2).
2. Install Front Side Door Lock Cylinder. Refer to [Front Side Door Lock Cylinder Replacement](#)

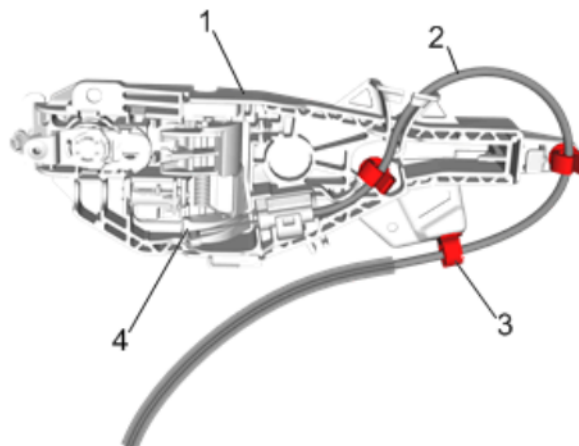


Fig. 36: Front Side Door Outside Handle Bracket, Cable, Retainers And Counter Balance
Courtesy of GENERAL MOTORS COMPANY

3. Install the front side door outside handle bracket cable (2) to the counter balance (4).
4. Install the front side door outside handle bracket cable (2) in the retainers (3) of bracket (1).

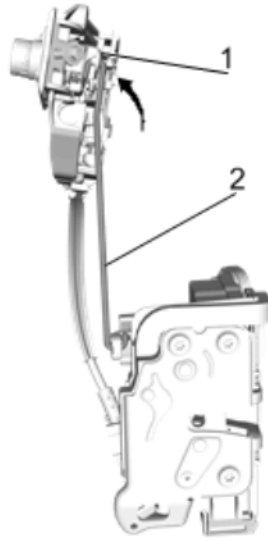


Fig. 37: Front Side Door Lock Rod And Cylinder
Courtesy of GENERAL MOTORS COMPANY

5. Install the front side door lock rod (2) to the front side door lock cylinder (1).

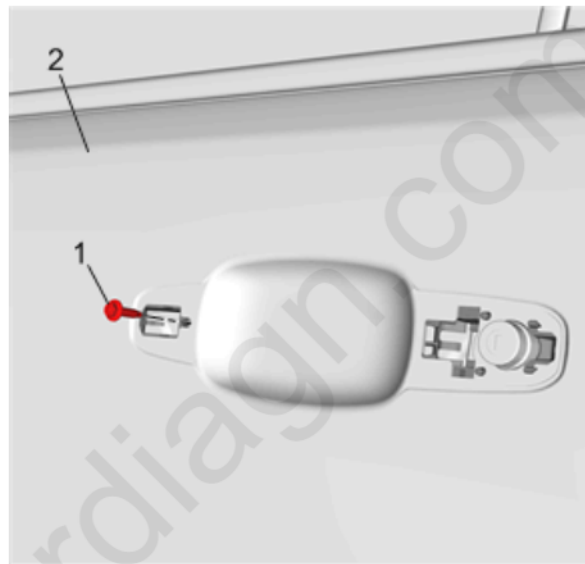


Fig. 38: Front Side Door Outside Handle Bracket Fastener
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

NOTE:

- Ensure that the counter balance is reset and locked in the detent of the handle bracket. The counter balance Can Not be reset after the latch and handle bracket has been reinstalled in the door.
- Bracket should be slid full rearward prior to tightening bracket screw.

6. Install the front side door outside bracket screw (1) to the door (2) and tighten to 5 N.m (44 lb in)
7. Install Front Side Door Outside Handle. Refer to [Front Side Door Outside Handle Replacement \(with Passive Entry Passive Start\)](#)[Front Side Door Outside Handle Replacement \(without Passive Entry Passive Start\)](#)
8. Install Front Side Door Window Rear Channel. Refer to [Front Side Door Window Rear Channel Replacement](#)
9. Ensure the door system operates properly.

FRONT SIDE DOOR OUTSIDE HANDLE BRACKET REPLACEMENT (PASSENGER SIDE)

Removal Procedure

1. Remove Front Side Door Window Rear Channel. Refer to [Front Side Door Window Rear Channel Replacement](#)
2. Remove Front Side Door Outside Handle. Refer to [Front Side Door Outside Handle Replacement \(with Passive Entry Passive Start\)](#)[Front Side Door Outside Handle Replacement \(without Passive Entry Passive Start\)](#)

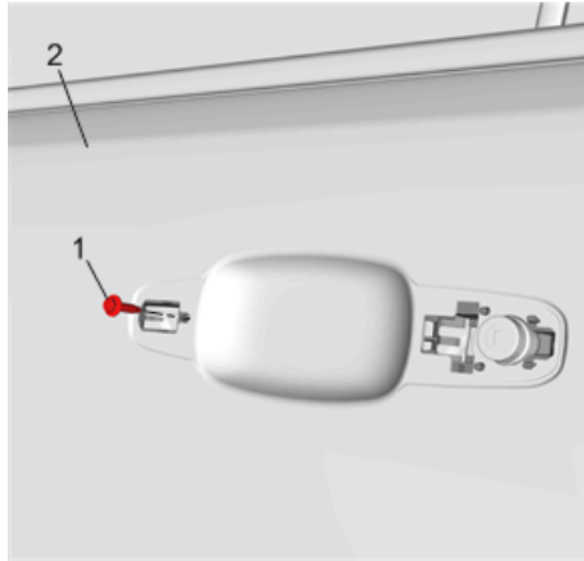


Fig. 39: Front Side Door Outside Handle Bracket Fastener
Courtesy of GENERAL MOTORS COMPANY

3. Remove the screw (1) that retains the front side door outside bracket to the door (2).

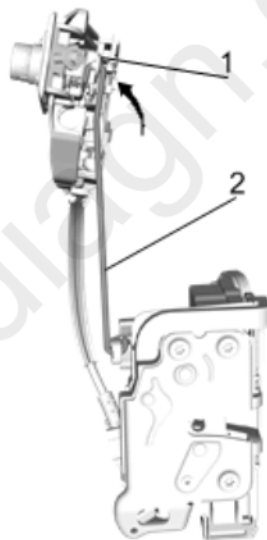


Fig. 40: Front Side Door Lock Rod And Cylinder
Courtesy of GENERAL MOTORS COMPANY

4. Remove the front side door lock rod (2) from the front side door lock cylinder (1).

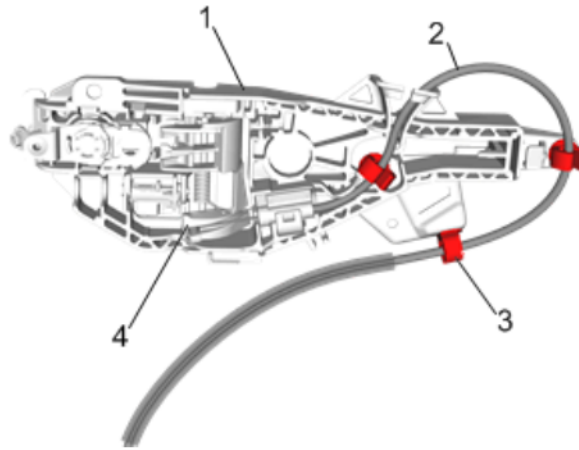


Fig. 41: Front Side Door Outside Handle Bracket, Cable, Retainers And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

5. Pull the front side door outside handle bracket (1) down to the inside door opening.
6. Remove the cable (2) from the front side door outside handle bracket retainers (3) and counter balance (4).

Installation Procedure

NOTE: It may be necessary to transfer the wire harness retainers from the old handle bracket.

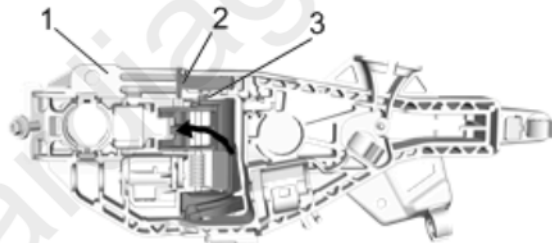


Fig. 42: Front Side Door Outside Handle Bracket, Bracket Clip And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

1. Reset the front side door outside handle bracket counter balance as follows:
 1. The outside door handle Can Not be install until the counter balance (3) is reset.
 2. Grasp the front side door outside handle bracket (1) with one hand.
 3. From the back side of the counter balance (3) push forward on the counter balance until it can be held in place using the bracket clip (2).

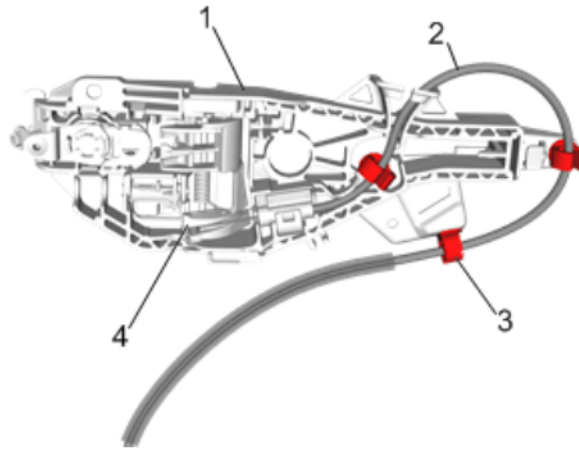


Fig. 43: Front Side Door Outside Handle Bracket, Cable, Retainers And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

2. Install the front side door outside handle bracket cable (2) to the counter balance (4).
3. Install the front side door outside handle bracket cable (2) in the retainers (3) of bracket (1).

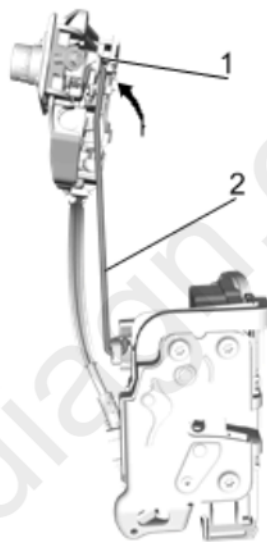


Fig. 44: Front Side Door Lock Rod And Cylinder
 Courtesy of GENERAL MOTORS COMPANY

4. Install the front side door lock rod (2) to the front side door lock cylinder (1).

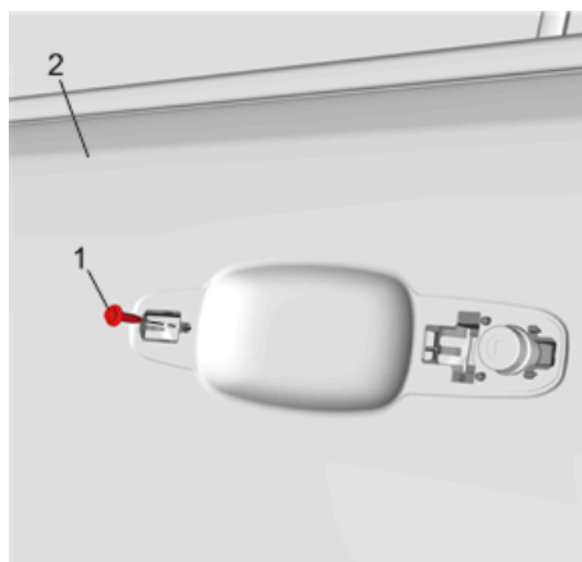


Fig. 45: Front Side Door Outside Handle Bracket Fastener
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Side Door Outside Handle Cable Procedure 1. Remove the front side door outside handle cable from the retainers. - Do not remove the inside door handle cable from the latch. 2. Release the cable from the back of the latch assembly. 3. Unhook the cable from the handle bracket. NOTE: Ensure that the door lock system operates properly before installing the trim.

REAR SIDE DOOR OUTSIDE HANDLE BRACKET REPLACEMENT

Removal Procedure

1. Remove Rear Side Door Window Rear Channel. Refer to [Rear Side Door Window Rear Channel Replacement](#)
2. Remove Rear Side Door Outside Handle. Refer to [Rear Side Door Outside Handle Replacement](#)

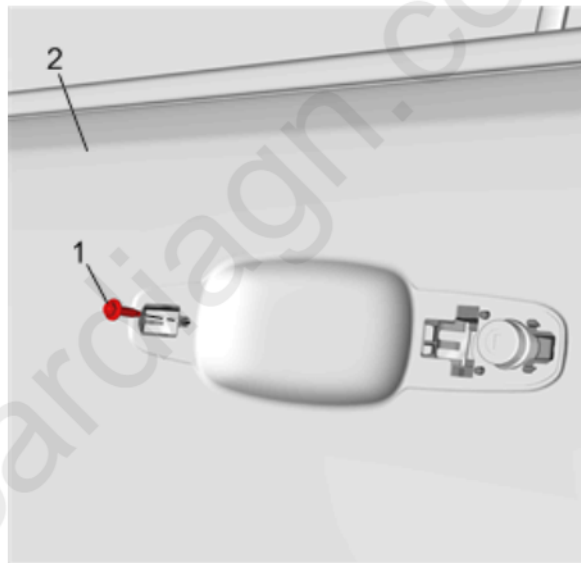


Fig. 47: Rear Side Door Outside Handle Bracket Fastener
Courtesy of GENERAL MOTORS COMPANY

3. Remove the screw (1) that retains the rear side door outside bracket to the door (2).

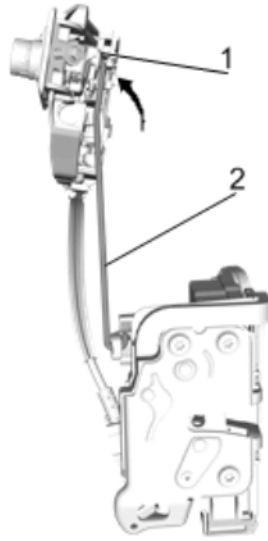


Fig. 48: Rear Side Door Lock Rod And Cylinder
 Courtesy of GENERAL MOTORS COMPANY

4. Remove the rear side door lock rod (2) from the rear side door lock cylinder (1).

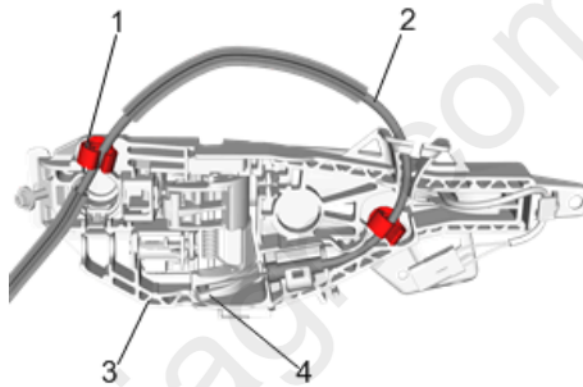


Fig. 49: Rear Side Door Outside Handle Bracket, Retainers, Cable And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

5. Pull the rear side door outside handle bracket (3) down to the inside door opening.
6. Remove the cable (2) from the rear side door outside handle bracket retainers (1) and counter balance (4).
7. Remove the rear side door outside handle bracket.

Installation Procedure

NOTE: It may be necessary to transfer the wire harness retainers (2) to the new bracket.

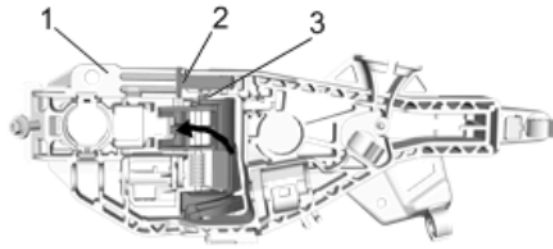


Fig. 50: Rear Side Door Outside Handle Bracket, Bracket Clip And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

1. Set the rear side door outside handle bracket counter balance (3) as follows:
 1. The outside door handle Can Not be install until the counter balance (3) is reset.
 2. Grasp the front side door outside handle bracket (1) with one hand.
 3. From the back side of the counter balance (3) push forward on the counter balance until it can be held in place using the bracket clip (2).

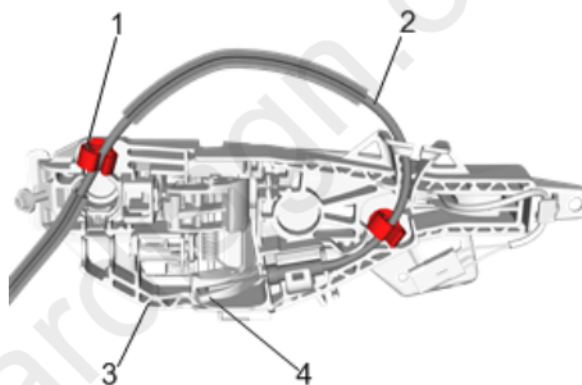


Fig. 51: Rear Side Door Outside Handle Bracket, Retainers, Cable And Counter Balance
 Courtesy of GENERAL MOTORS COMPANY

2. Install the rear side door outside handle bracket cable (2) to the counter balance (4).
3. Install the rear side door outside handle bracket cable (2) in the retainers (1) of bracket (3).

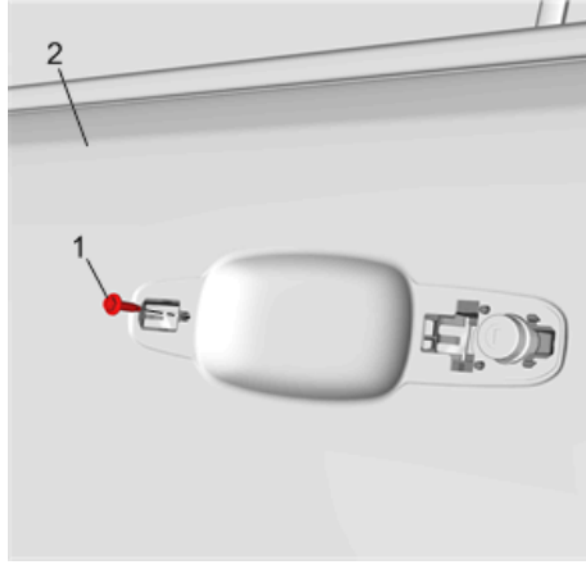


Fig. 52: Rear Side Door Outside Handle Bracket Fastener
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

NOTE:

- Ensure that the counter balance is reset and locked in the detent of the handle bracket. The counter balance can't Not be reset after the latch and handle bracket has been reinstalled in the door.
- Bracket should be slid full rearward prior to tightening bracket screw.

4. Install the rear side door outside bracket screw (1) to the door (2) and tighten to 5 N.m (44 lb in).
5. Install Rear Side Door Outside Handle. Refer to [Rear Side Door Outside Handle Replacement](#)
6. Install Rear Side Door Window Rear Channel. Refer to [Rear Side Door Window Rear Channel Replacement](#)
7. Ensure that the door system operates properly before installing the trim.

REAR COMPARTMENT LID LATCH RELEASE CABLE HANDLE REPLACEMENT

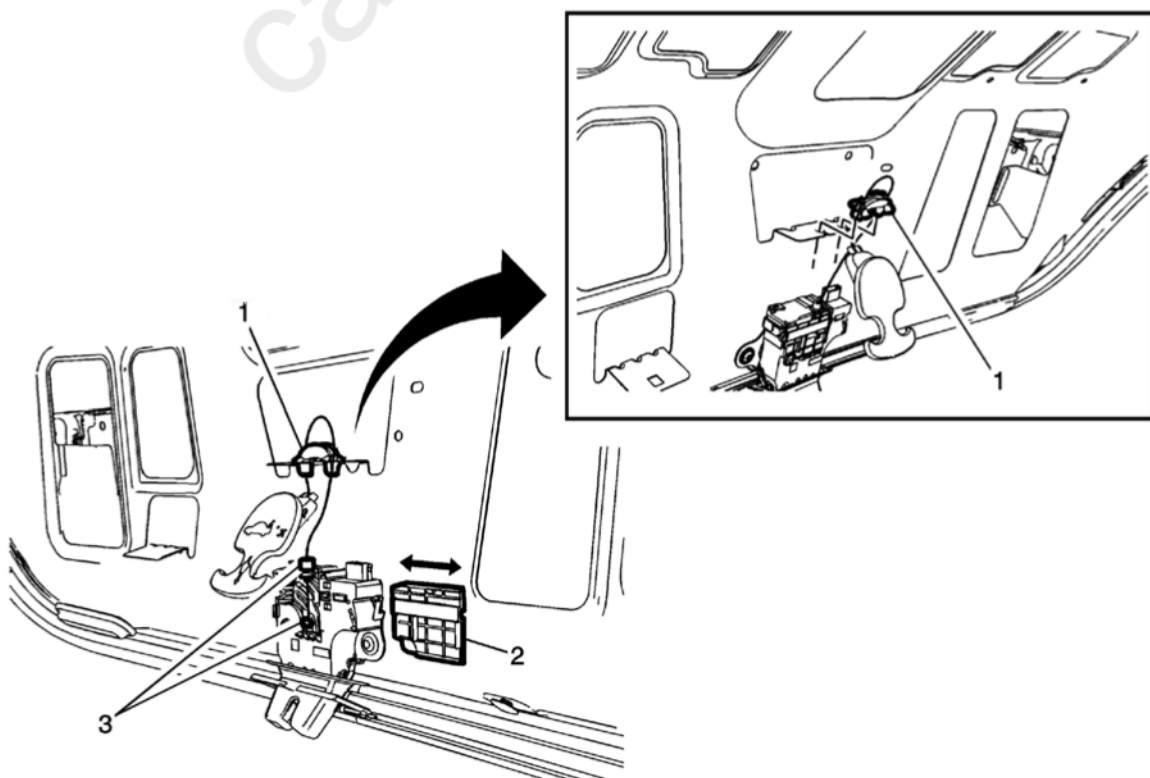


Fig. 53: Rear Compartment Lid Inside Handle Components
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear compartment lid inner panel trim. Refer to Rear Compartment Lid Inner Panel Trim Replacement .	
1	Rear Compartment Lid Latch Inside Handle Pivot Procedure Disconnect the rear compartment lid latch inside handle pivot from the inner rear compartment lid.
2	Rear Compartment Lid Latch Access Cover Procedure Depress the retainers and slide the rear compartment lid latch access cover to the right to access the cable.
3	Rear Compartment Lid Latch Inside Handle Procedure Disconnect the rear compartment lid inside handle cable from the latch.

REAR SIDE DOOR OUTSIDE HANDLE REPLACEMENT

Removal Procedure

1. Remove Rear Side Door Trim. Refer to [Rear Side Door Trim Replacement](#) .

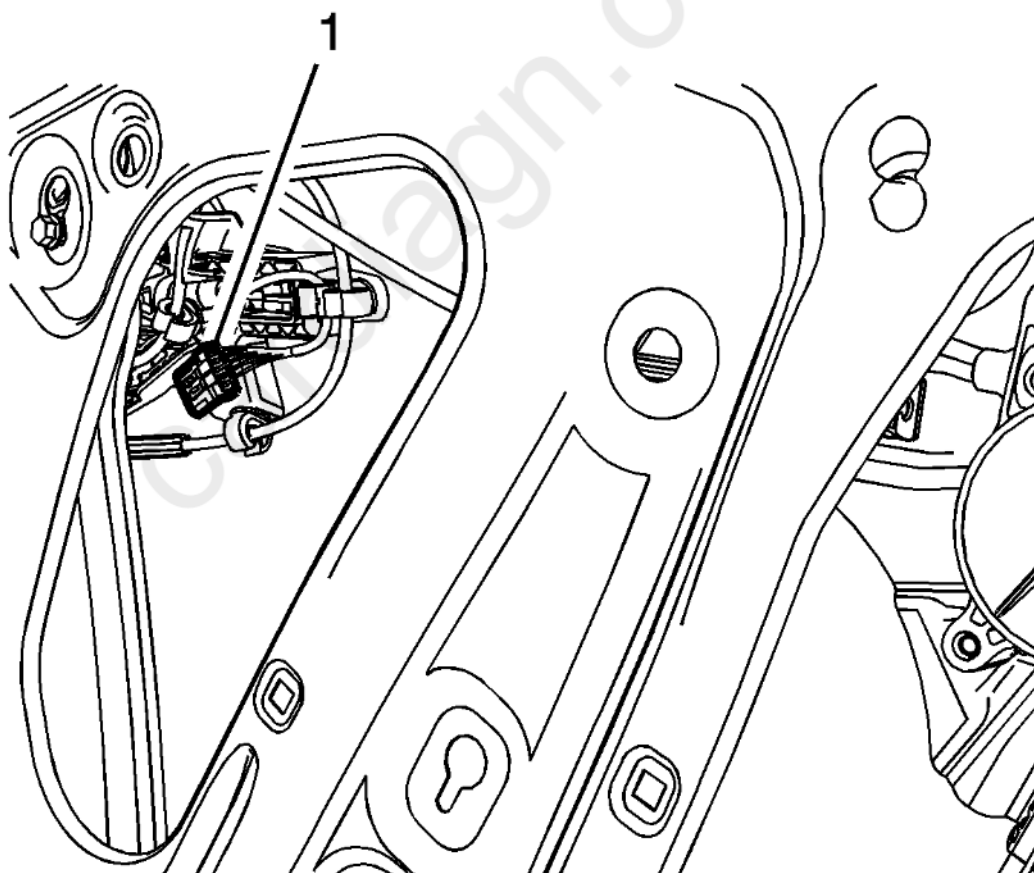


Fig. 54: Luminous Reflecting Light Electrical Connector
 Courtesy of GENERAL MOTORS COMPANY

2. Disconnect the electrical connector (1) from the rear side door outside handle bracket for the luminous reflecting light, if equipped

3. Loosen the screw for the rear side door lock cylinder cover. Refer to [Rear Side Door Lock Cylinder Opening Cover Replacement](#).

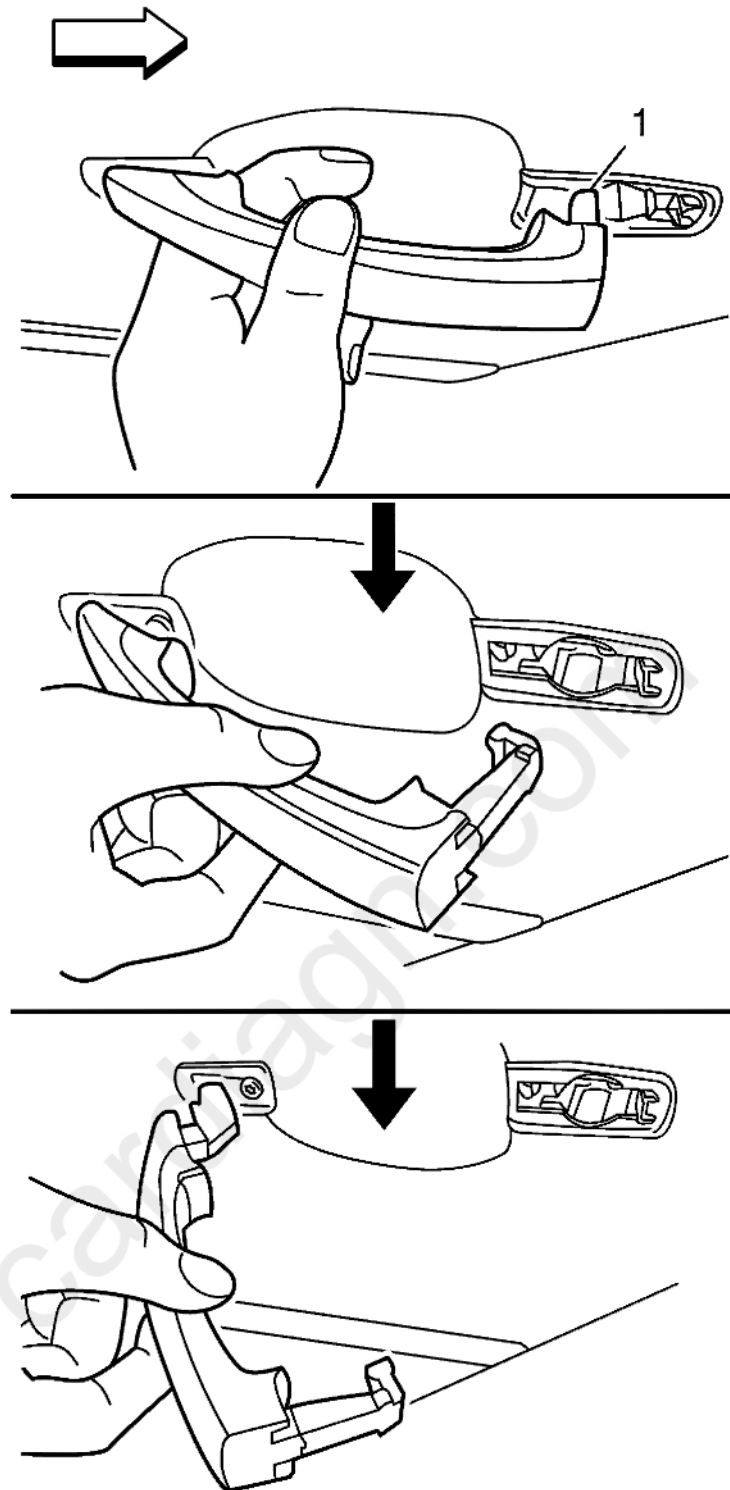


Fig. 55: Side Door Outside Handle Removal Procedure
Courtesy of GENERAL MOTORS COMPANY

4. Remove the rear side door outside handle (1) from the door as follows:
1. Open the door handle fully.
 2. Slide the door handle rearward releasing the handle from the door handle bracket.
 3. Remove the rear side door outside handle and connector from the door.

Installation Procedure

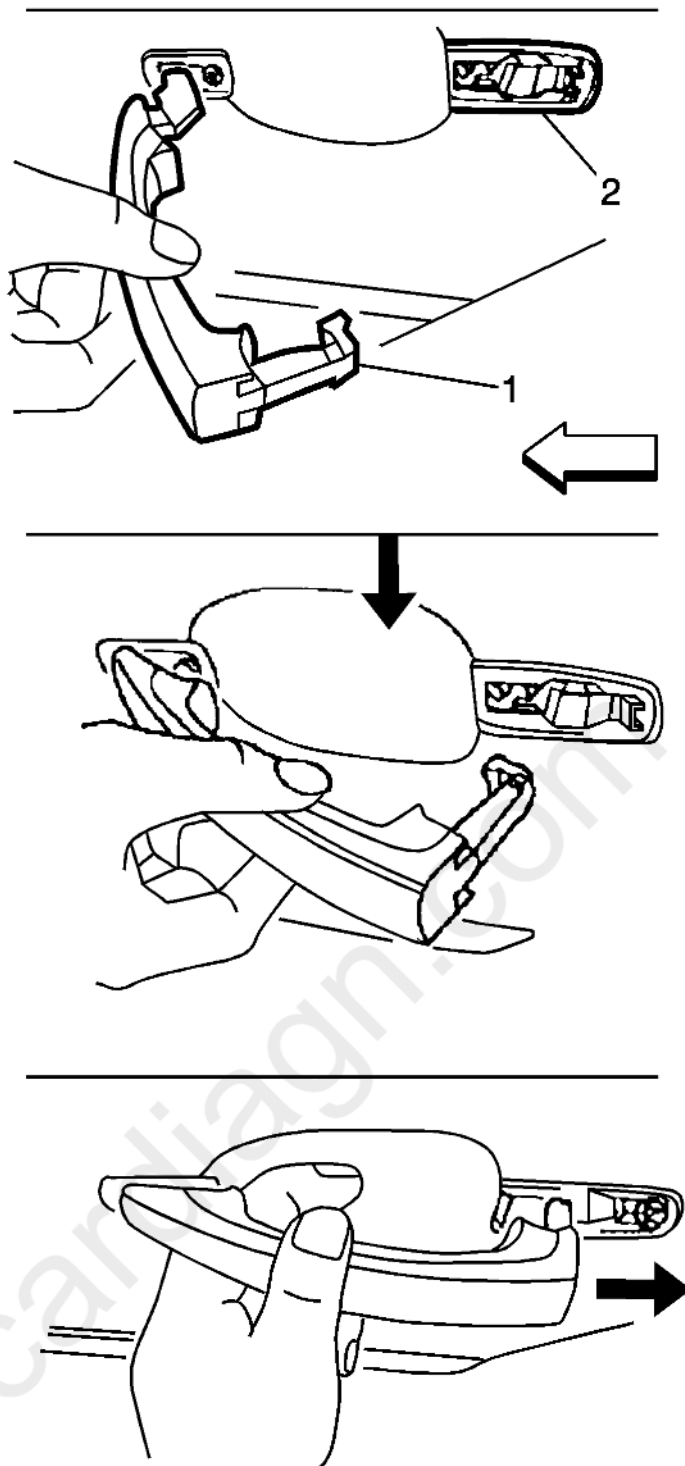


Fig. 56: Side Door Outside Handle Installation Procedure

Courtesy of GENERAL MOTORS COMPANY

NOTE: The rear side door outside handle cannot be installed until the counter balance and handle is reset.

1. Install the rear side door outside handle (1) to the door (2).
2. Insert the rear side door handle into the door handle pocket.
3. Slide the rear side door handle forward securing it into the door handle bracket.

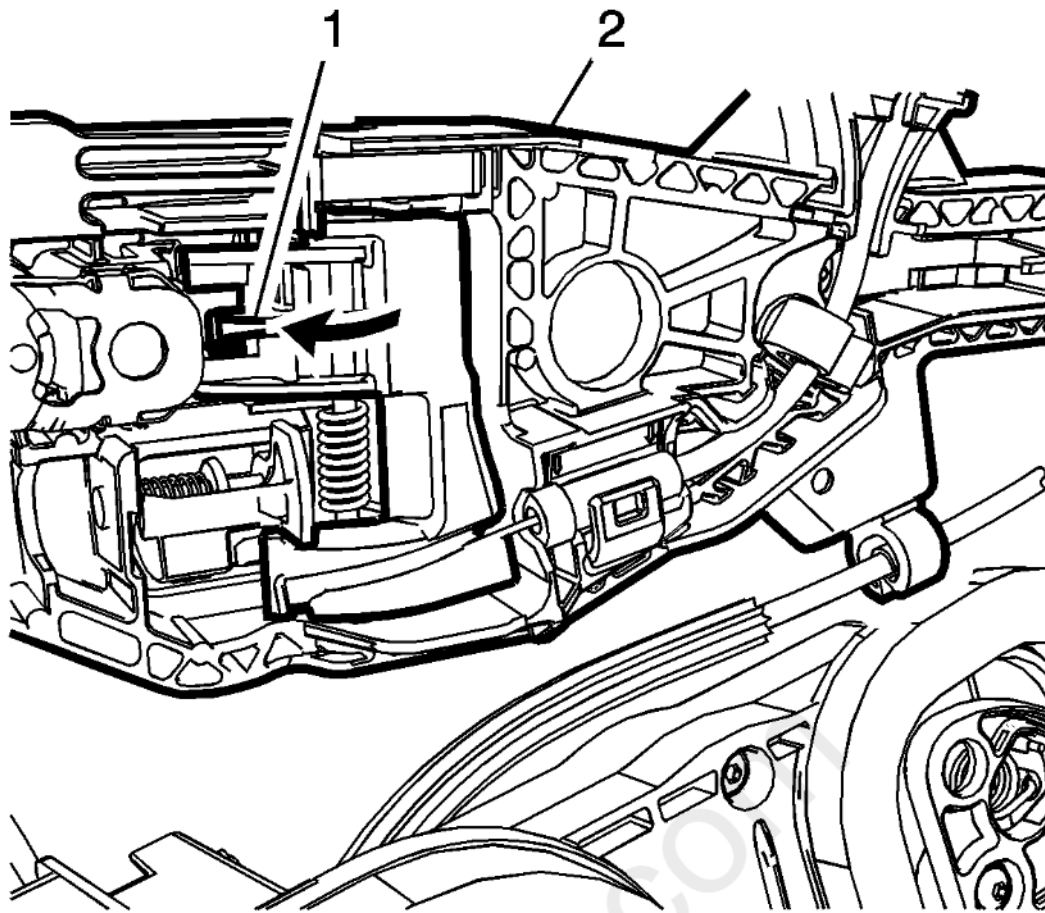


Fig. 57: Door Handle Bracket Housing Counterbalance Lever

Courtesy of GENERAL MOTORS COMPANY

4. From inside the door, push outward on the door handle bracket housing counterbalance lever (1) at the same time. Slide the outside door handle toward the lock cylinder then forward engaging the handle to the housing counterbalance.
5. Install the screw to the rear side door lock cylinder cover. Refer to [**Rear Side Door Lock Cylinder Opening Cover Replacement**](#).

Hold the lock cylinder bezel flush to the door sheet and turn the lock cylinder screw to a mechanical hard stop.

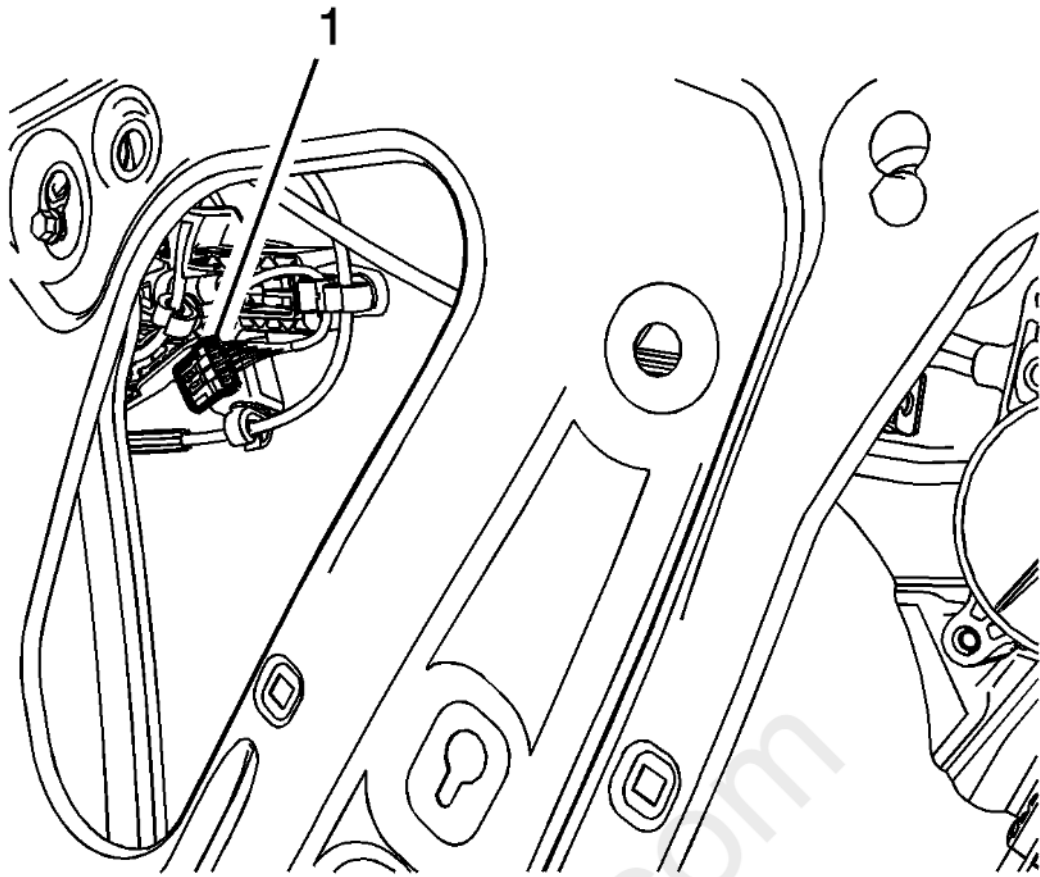


Fig. 58: Luminous Reflecting Light Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

6. Connect the electrical connector (1) to the rear side door outside handle bracket for the luminous reflecting light, if equipped.
7. Ensure that the door lock system operates properly before installing the trim.
8. Install the rear side door water deflector.
9. Install the rear side door trim, if removed. Refer to [Rear Side Door Trim Replacement](#) .

REAR SIDE DOOR OUTSIDE HANDLE CABLE REPLACEMENT

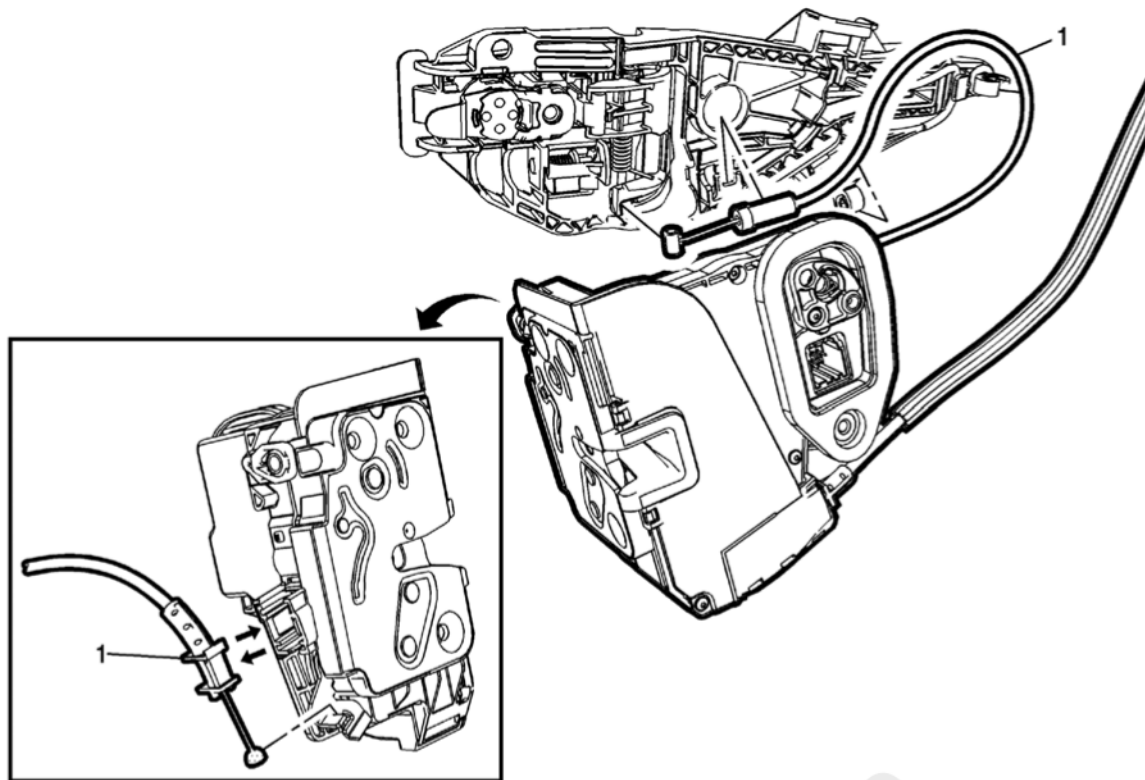


Fig. 59: Rear Side Door Outside Handle Cable
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear side door latch and handle bracket assembly from the door. Refer to Rear Side Door Latch Replacement .	
1	Rear Side Door Outside Handle Cable Procedure 1. Remove the rear side door outside handle cable from the retainers. Do not remove the inside door handle cable from the latch. 2. Release the cable from the back of the latch assembly. 3. Unhook the cable from the handle bracket. NOTE: Ensure that the door lock system operates properly before installing the trim.

FRONT SIDE DOOR LATCH REPLACEMENT

Removal Procedure

1. Remove the front side door trim. Refer to [Front Side Door Trim Replacement](#).
2. Remove the front side door water deflector.

NOTE: Disconnect the window from the window regulator, place the window in the full up position, use masking tape to tape the window to the upper door frame.

3. Position the front side door window regulator rear rail to access and remove the door latch and handle bracket assembly. Refer to [Front Side Door Window Regulator Replacement](#).
4. Remove the front side door window rear channel. Refer to [Front Side Door Window Rear Channel Replacement](#).

5. Remove the front side door locking rod. Refer to [Front Side Door Locking Rod Replacement](#).
6. Disconnect the electrical connector from the front side door outside handle bracket for the luminous reflecting light, if equipped.
7. Remove the front side door outside handle bracket screw. Refer to [Front Side Door Outside Handle Bracket Replacement \(Driver Side\)](#)[Front Side Door Outside Handle Bracket Replacement \(Passenger Side\)](#).
8. Disconnect the front side door latch electrical connector.

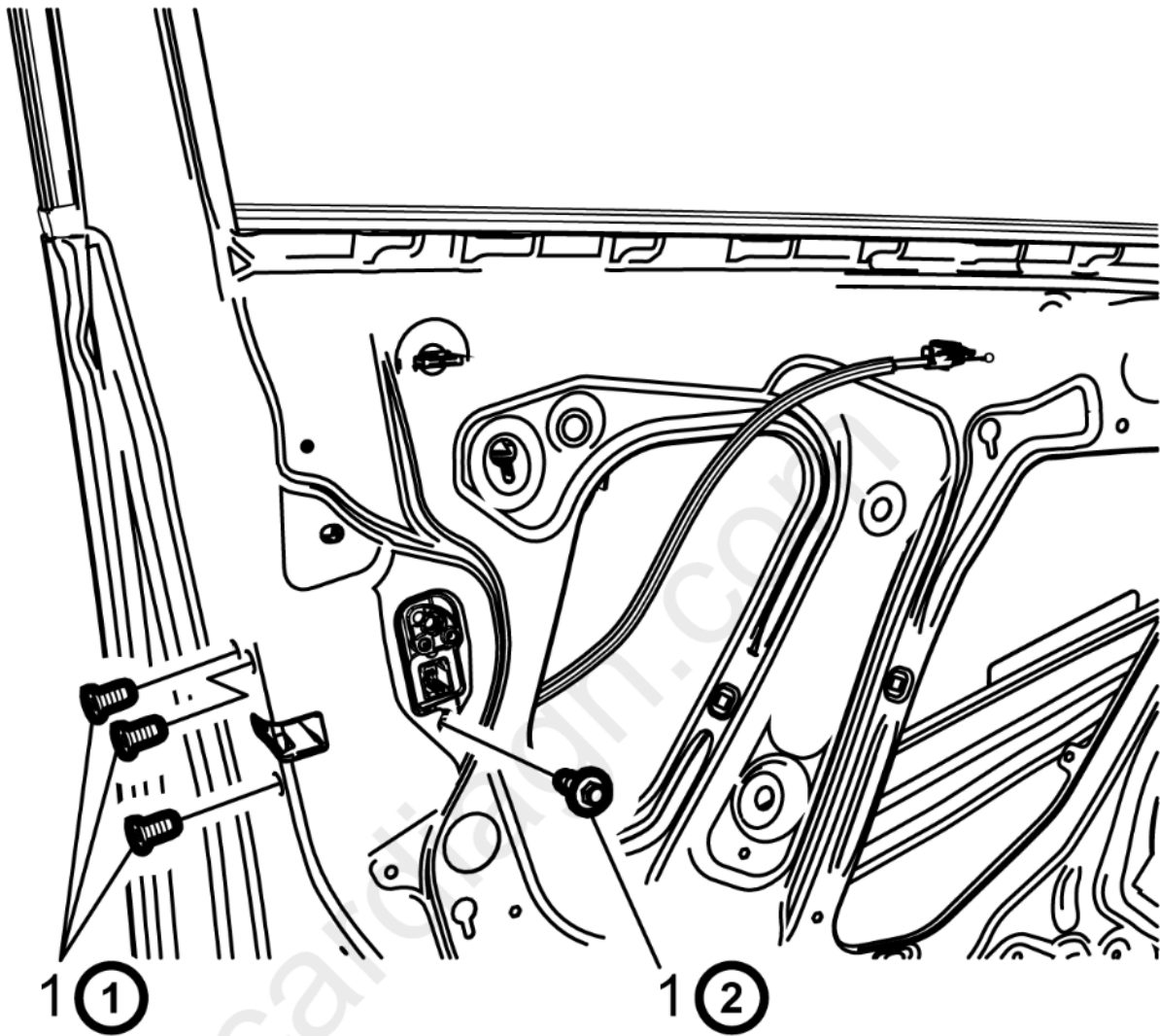


Fig. 60: Side Door Latch & Bolts

Courtesy of GENERAL MOTORS COMPANY

9. Remove the four bolts (1) from the front side door latch.

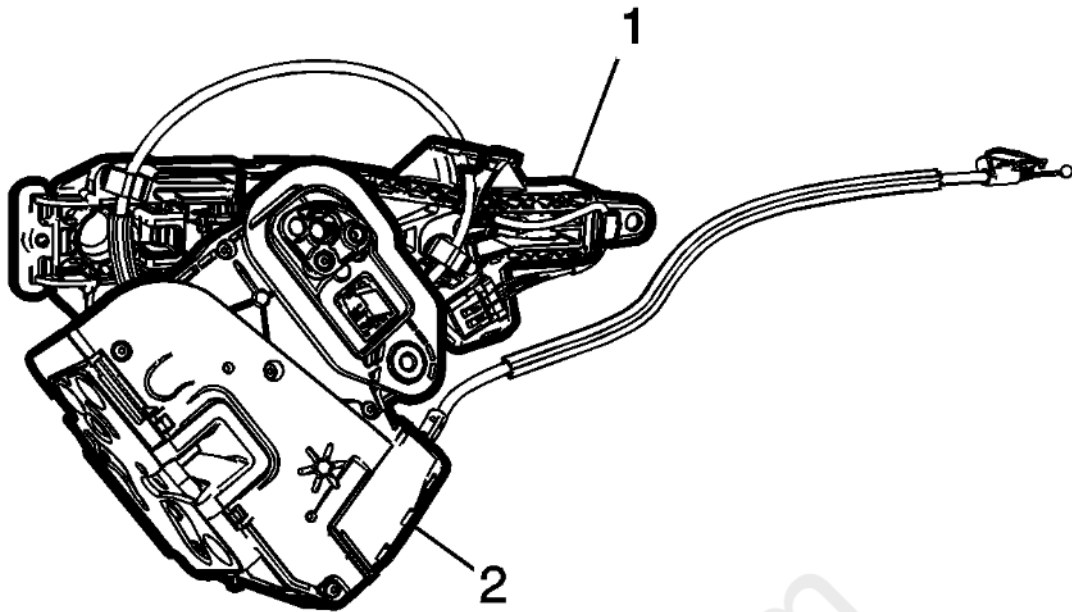


Fig. 61: Door Outside Handle Bracket & Latch
Courtesy of GENERAL MOTORS COMPANY

10. Remove the outside handle bracket (1) and the front side door latch (2) as assembly from the vehicle.

Installation Procedure

1. Transfer the front side door inside handle cable. Refer to **Front Side Door Inside Handle Cable Replacement**.
2. Transfer the front side door outside handle cable. Refer to **Front Side Door Outside Handle Cable Replacement**.
3. Transfer the front side door lock cylinder rod.

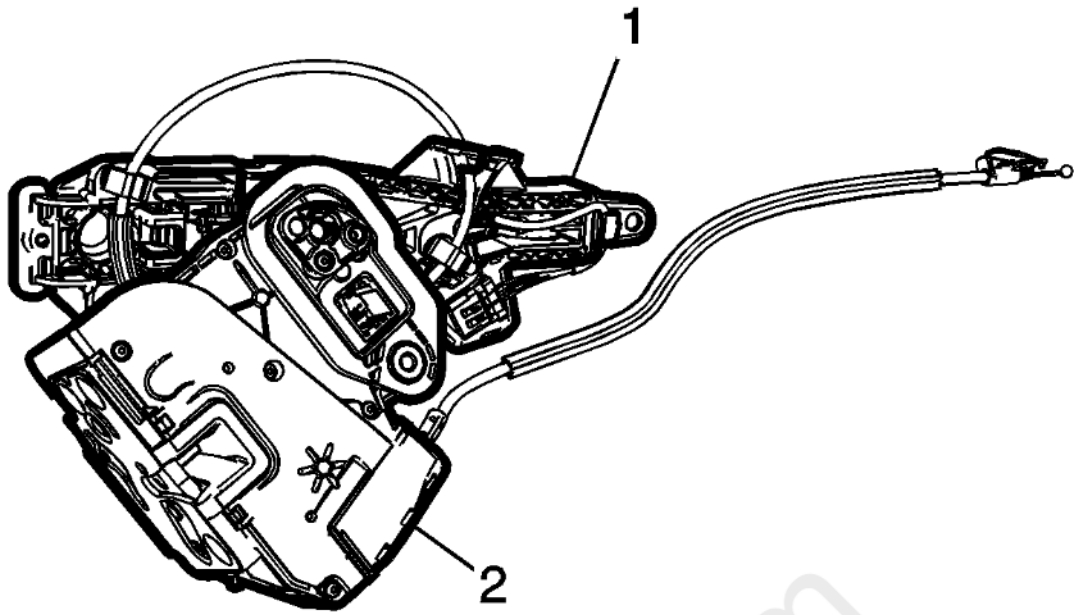


Fig. 62: Door Outside Handle Bracket & Latch

Courtesy of GENERAL MOTORS COMPANY

4. Install the outside handle bracket (1) and the front side door latch (2) assembly to the vehicle.

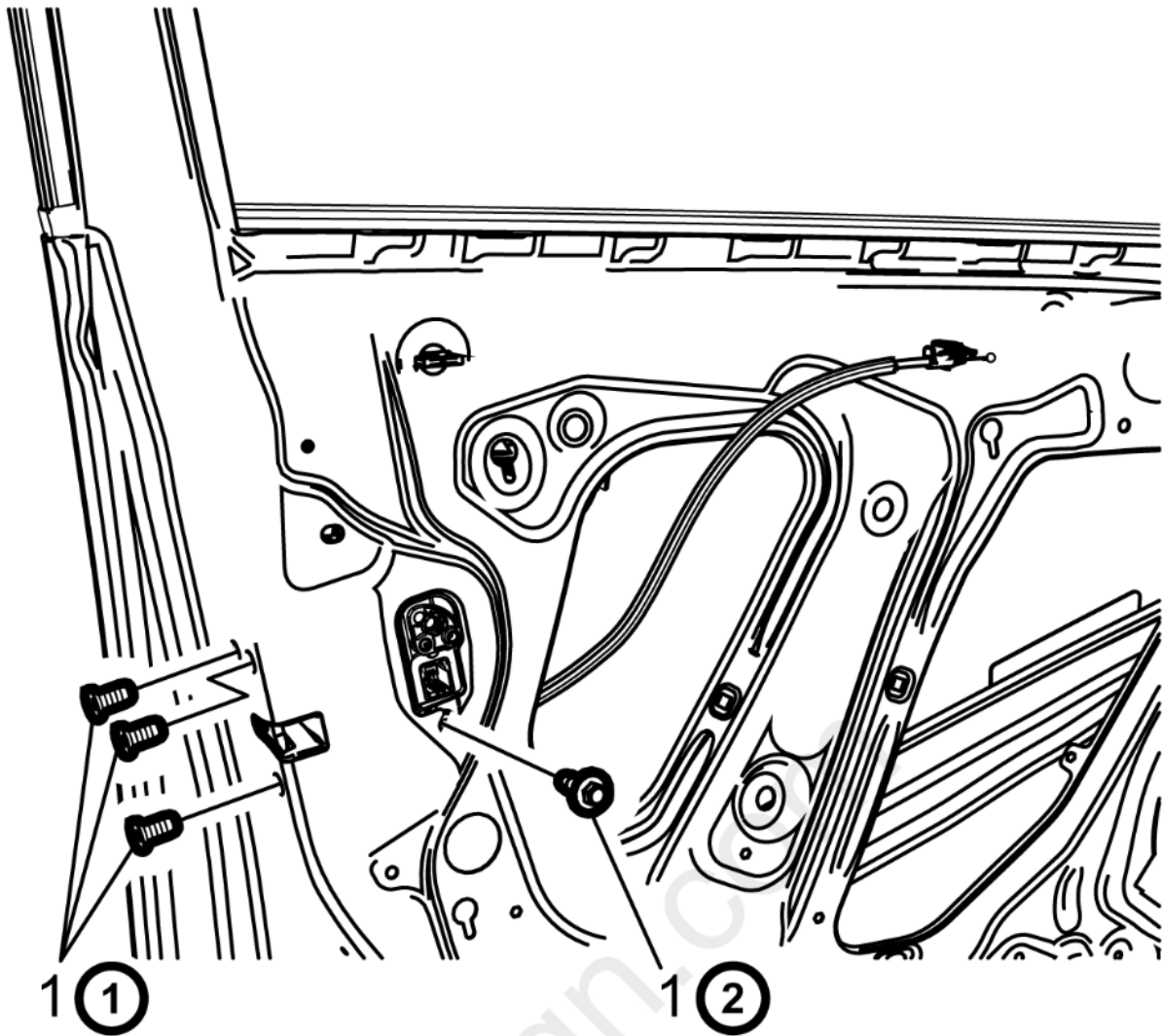


Fig. 63: Side Door Latch & Bolts

Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

NOTE: Install and torque the four latch bolts in proper sequence to prevent damage to the latch mechanism.

5. Install the four bolts (1) to the front side door latch and tighten to 10 N.m (89 lb in).
6. Install the front side door outside handle bracket screw. Refer to [Front Side Door Outside Handle Bracket Replacement \(Driver Side\)](#)[Front Side Door Outside Handle Bracket Replacement \(Passenger Side\)](#).

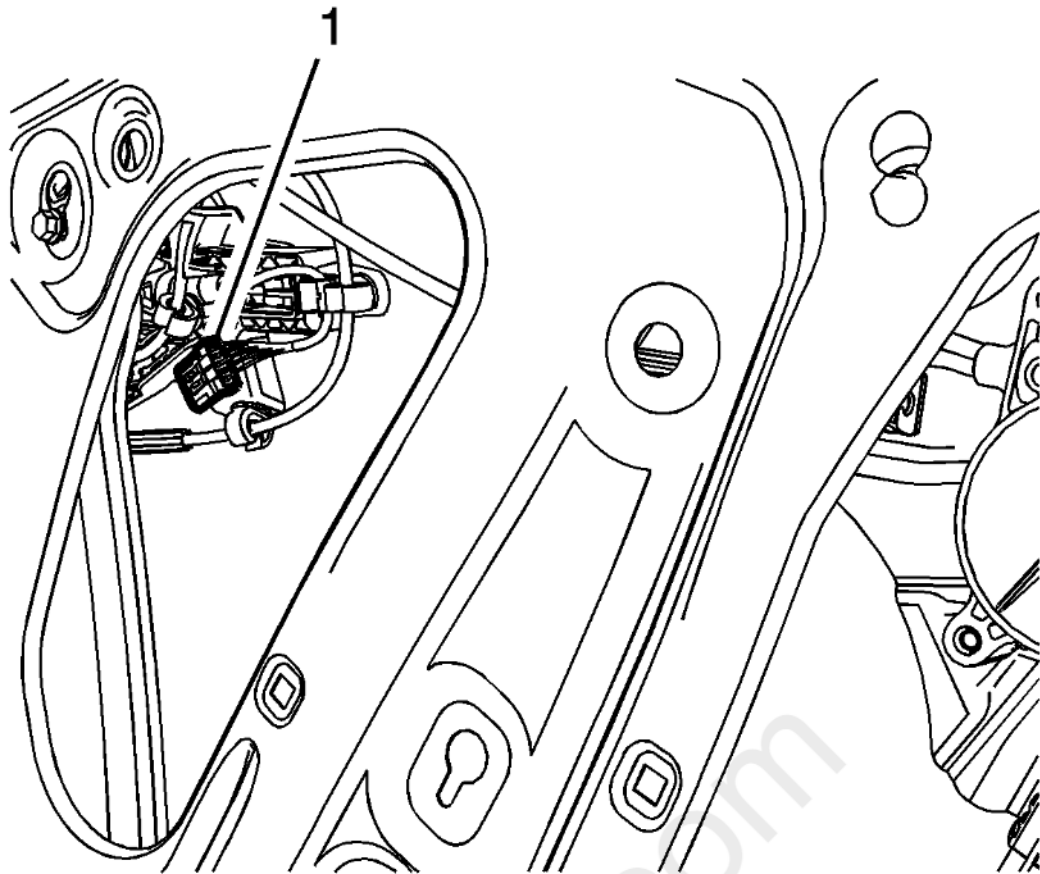


Fig. 64: Luminous Reflecting Light Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

7. Connect the electrical connector to the front side door outside handle bracket for the luminous reflecting light, if equipped.
8. Install the front side door locking rod. Refer to [**Front Side Door Locking Rod Replacement**](#).
9. Install the front side door window rear channel. Refer to [**Front Side Door Window Rear Channel Replacement**](#).
10. Connect the electrical connector to the latch.
11. Position the window to the window regulator and reinstall the rear rail to the door. Refer to [**Front Side Door Window Regulator Replacement**](#).
12. Remove the tape from the front side door window and frame.
13. Inspect the door latch and outside handle for proper operation before install the door trim.
14. Install the front side door water deflector.
15. Install the front side door trim. Refer to [**Front Side Door Trim Replacement**](#).

REAR COMPARTMENT LID LATCH REPLACEMENT

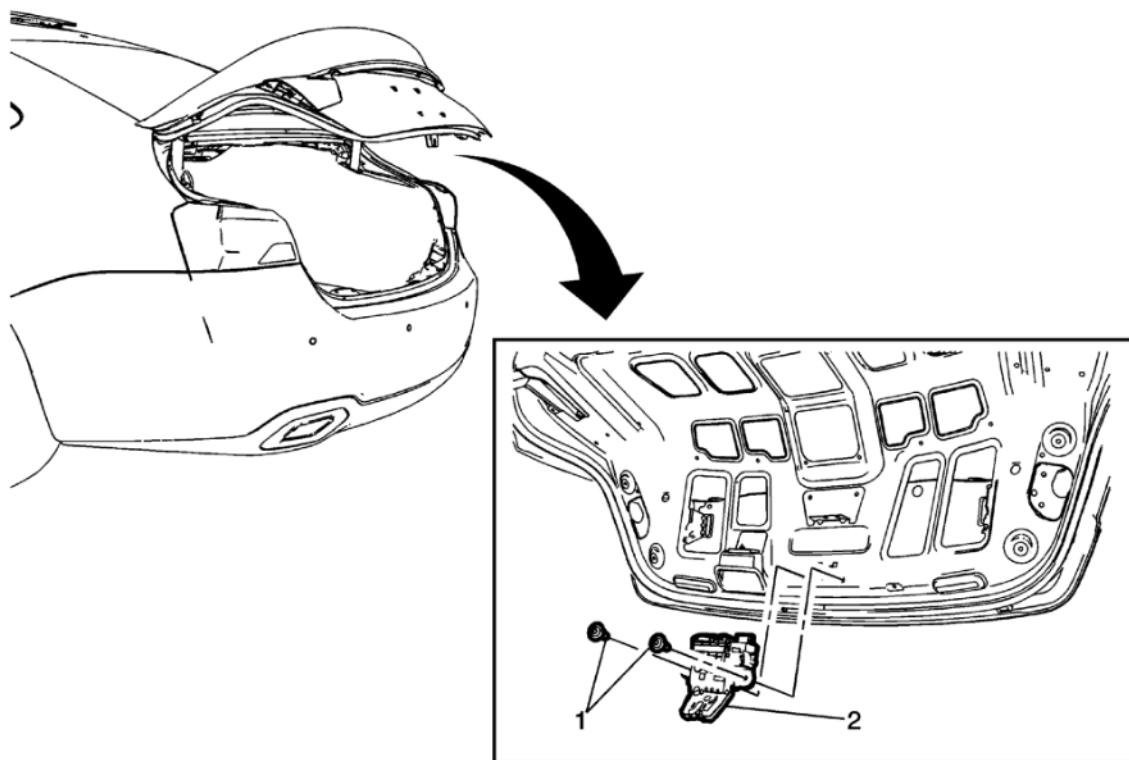


Fig. 65: Rear Compartment Lid Latch
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure 1. Remove the rear compartment lid inner panel trim. Refer to Rear Compartment Lid Inner Panel Trim Replacement. 2. Remove the rear compartment lid latch release cable handle. Refer to Rear Compartment Lid Latch Release Cable Handle Replacement	
1	Rear Compartment Lid Latch Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Rear Compartment Lid Latch Procedure 1. Disconnect the electrical connector. 2. Slide the rear compartment lid latch to the left side and then remove.

REAR SIDE DOOR LATCH REPLACEMENT

Removal Procedure

1. Remove the rear side door trim. Refer to [Rear Side Door Trim Replacement](#) .
2. Remove the water deflector.
3. Remove the rear side door window rear channel. Refer to [Rear Side Door Window Rear Channel Replacement](#) .
4. Remove the rear side door locking rod. Refer to [Rear Side Door Locking Rod Replacement](#).

5. Disconnect the electrical connector from the rear side door outside handle bracket for the luminous reflecting light, if equipped.
6. Remove the rear side door outside handle. Refer to [Rear Side Door Outside Handle Replacement](#).
7. Remove the rear side door outside handle bracket screw. Refer to [Rear Side Door Outside Handle Bracket Replacement](#).
8. Disconnect the rear side door latch electrical connector.

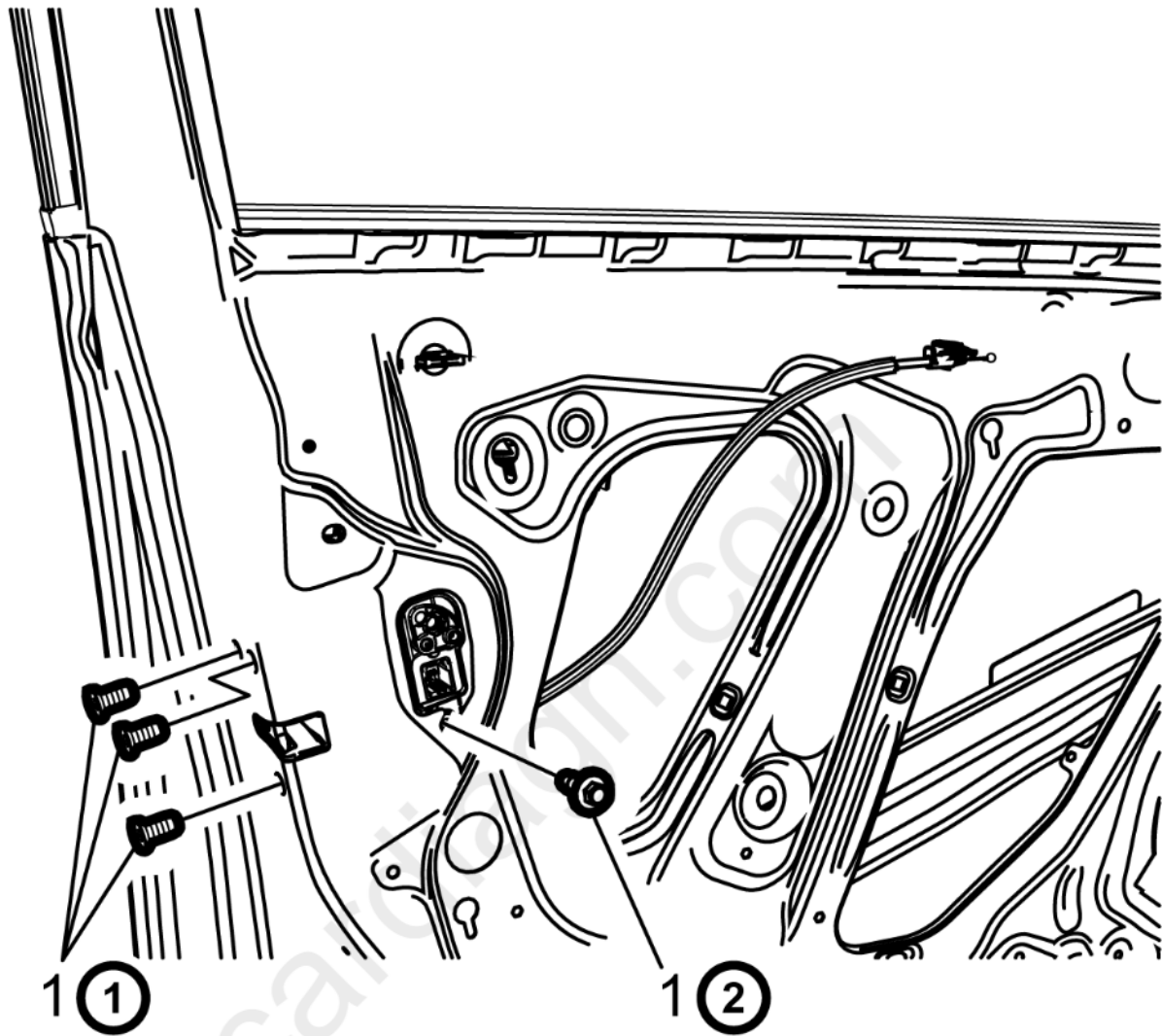


Fig. 66: Side Door Latch & Bolts

Courtesy of GENERAL MOTORS COMPANY

9. Remove the four bolts (1) from the rear side door latch.

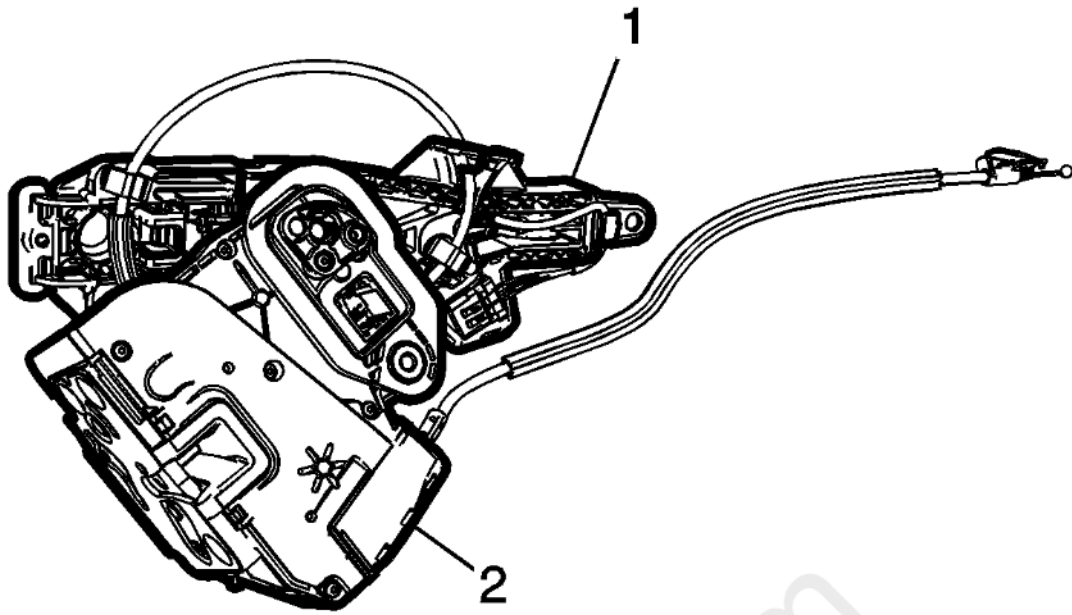


Fig. 67: Door Outside Handle Bracket & Latch
Courtesy of GENERAL MOTORS COMPANY

10. Remove the outside handle bracket (1) and the rear side door latch (2) assembly from the vehicle.

Installation Procedure

1. Transfer the rear side door inside handle cable. Refer to **Rear Side Door Inside Handle Cable Replacement**.
2. Transfer the front side door outside handle cable. Refer to **Front Side Door Outside Handle Cable Replacement**.

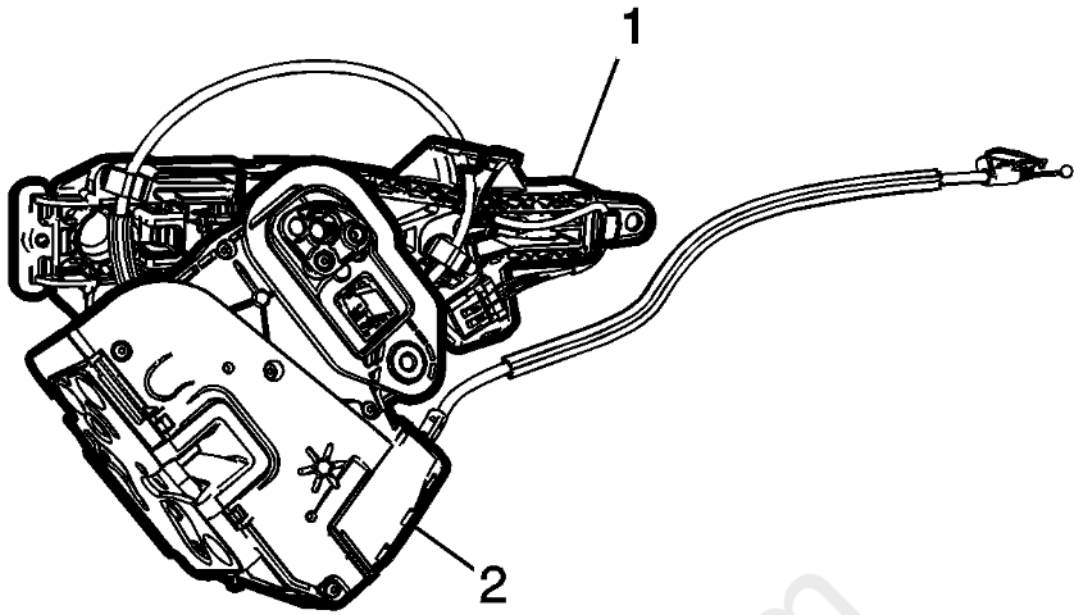


Fig. 68: Door Outside Handle Bracket & Latch

Courtesy of GENERAL MOTORS COMPANY

3. Install the outside handle bracket (1) and the rear side door latch (2) assembly to the vehicle.

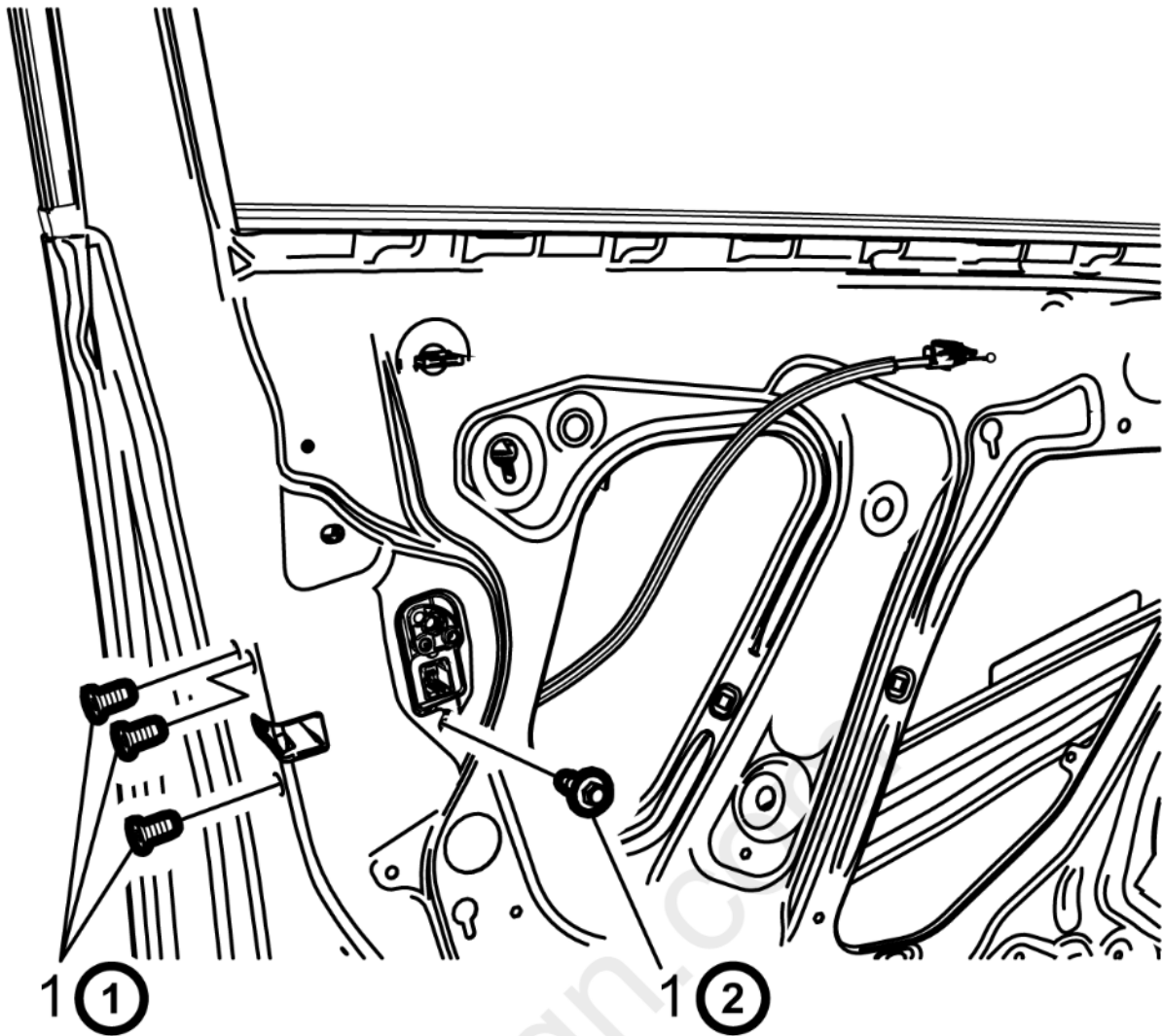


Fig. 69: Side Door Latch & Bolts

Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to [Fastener Caution](#) .

NOTE: Install and torque the four latch bolts in proper sequence to prevent damage to the latch mechanism.

4. Install the four bolts (1) to the rear side door latch and tighten to 10 N.m (89 lb in).
5. Install the rear side door outside handle bracket screw. Refer to [Rear Side Door Outside Handle Bracket Replacement](#).
6. Install the rear side door outside handle. Refer to [Rear Side Door Outside Handle Replacement](#).

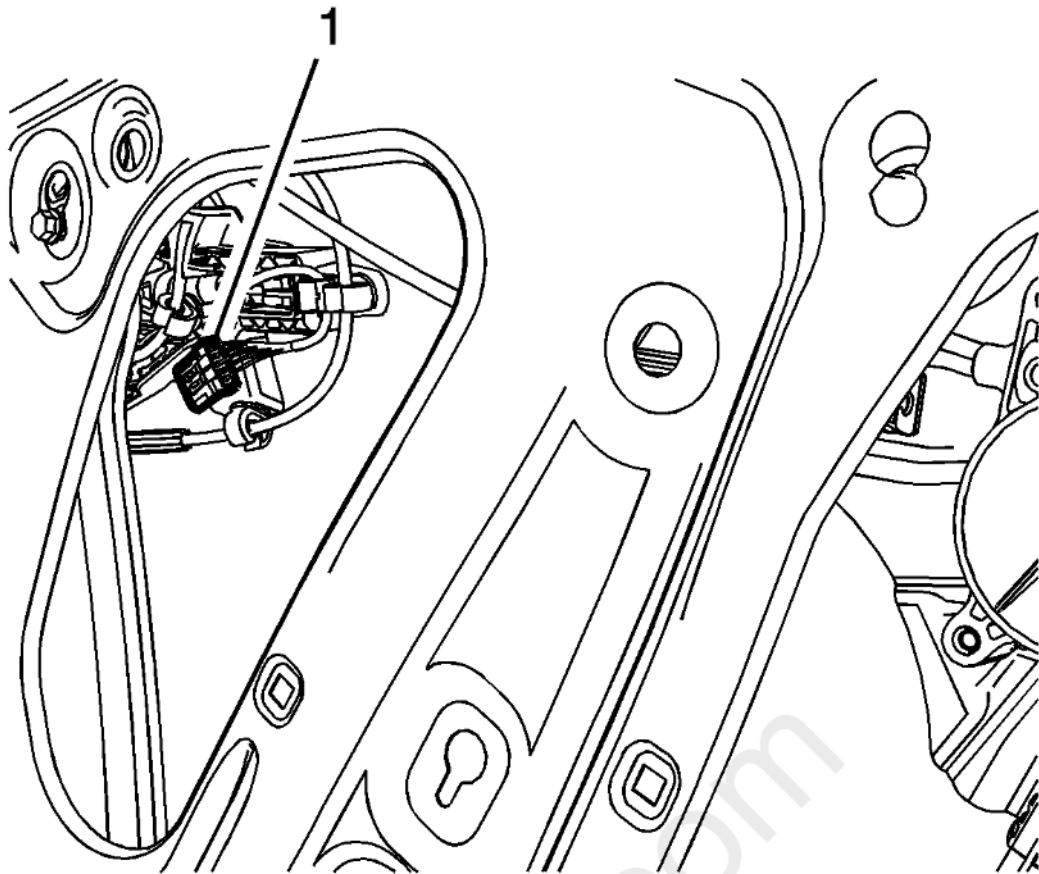


Fig. 70: Luminous Reflecting Light Electrical Connector

Courtesy of GENERAL MOTORS COMPANY

7. Connect the electrical connector to the rear side door outside handle bracket for the luminous reflecting light, if equipped.
8. Install the rear side door locking rod. Refer to [Rear Side Door Locking Rod Replacement](#).
9. Install the rear side door window rear channel. Refer to [Rear Side Door Window Rear Channel Replacement](#).
10. Position the window to the window regulator and reinstall the rear rail to the door. Refer to [Rear Side Door Window Regulator Replacement](#).
11. Connect the rear side door latch electrical connector.
12. Remove the tape from the rear side door window and frame.
13. Inspect the door latch and for proper operation before install the door trim.
14. Install the water deflector.
15. Install the rear side door trim. Refer to [Rear Side Door Trim Replacement](#).

REAR SIDE DOOR LOCK CYLINDER OPENING COVER REPLACEMENT

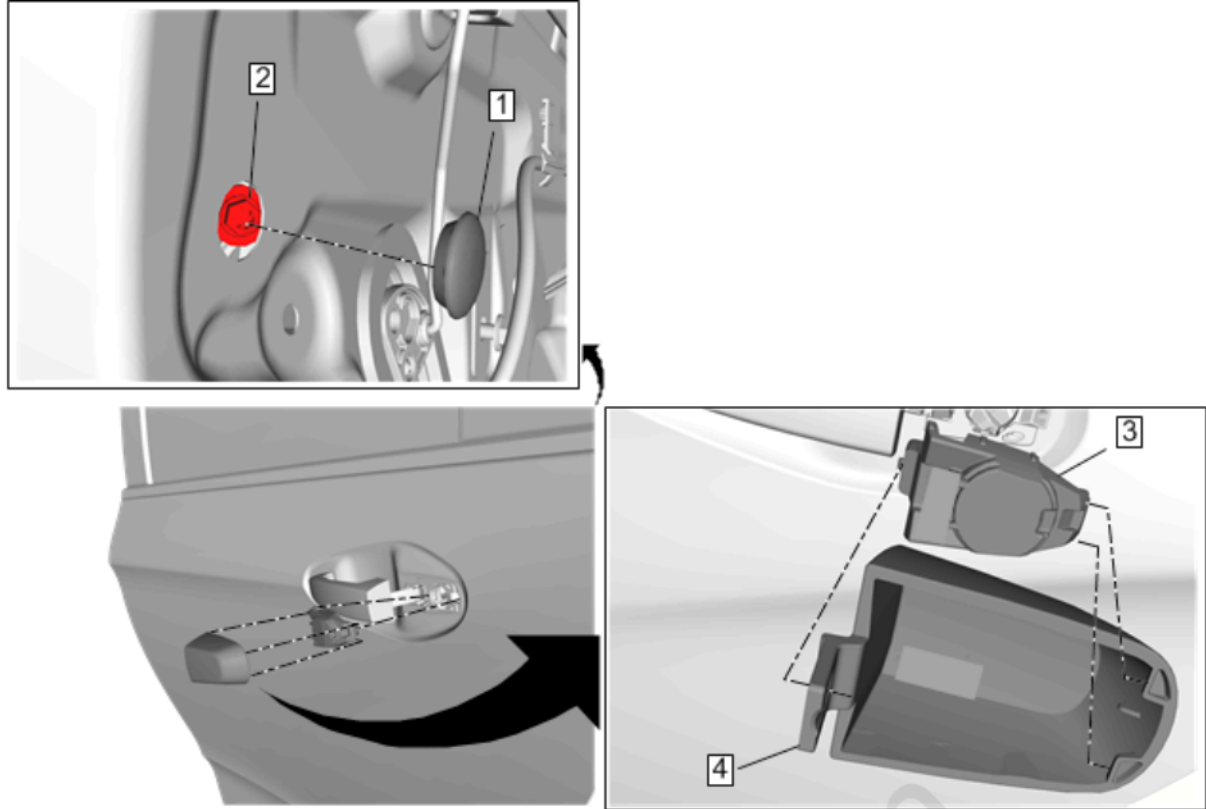


Fig. 71: Rear Side Door Lock Cylinder Opening Cover
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear side door garnish molding. Refer to Rear Side Door Garnish Molding Replacement .	
1	Rear Side Door Outside Handle Cap Procedure Using the appropriate tool, remove the cap that conceals the screw from the inside of the door opening.
2	Rear Side Door Outside Handle Lock Cylinder Opening Cover Screw CAUTION: Refer to Fastener Caution . NOTE: • USE HAND TOOL ONLY. Using a battery operated gun or power tool can BREAK the component. • Around 7 rotations is enough to allow the Bezel to be removed. Tighten 4.7 N.m (42 lb in)
3	Rear Side Door Lock Cylinder Opening Cover Retainer Procedure Using the appropriate tool, remove the insulator from the door opening.

Callout	Component Name
4	Rear Side Door Lock Cylinder Opening Cover Procedure 1. Pull the door handle out to the open position. 2. Insert the appropriate tool into the bottom front of the bezel and pry outward. 3. Slide the bezel rearward to remove from the retainer. 4. Slide the 2 tabs on the back side of bezel into the slots on the retainer. 5. Slide the bezel forward and downward to snap into place. 6. Release the door handle. NOTE: The door handle should remain in the open position while removing and installing the bezel.

FRONT SIDE DOOR LOCK CYLINDER BEZEL REPLACEMENT

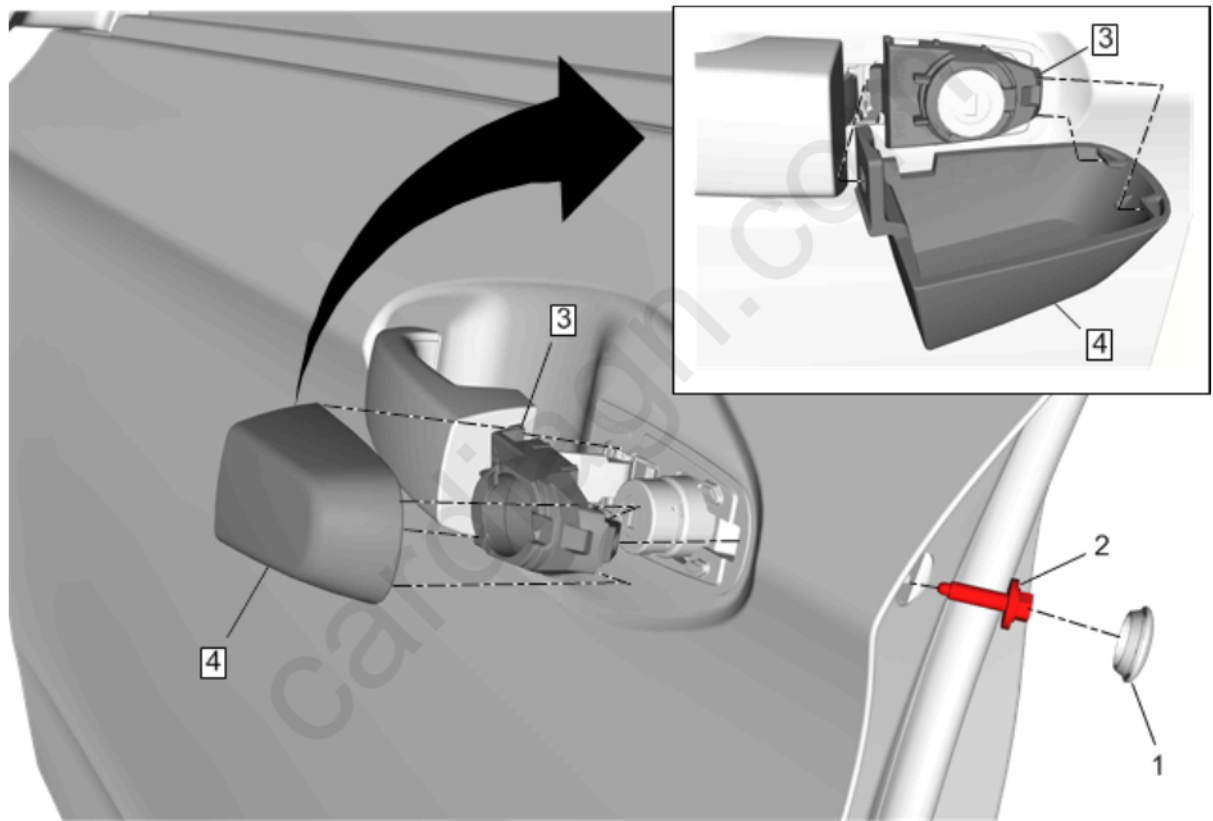


Fig. 72: Front Side Door Lock Cylinder Bezel
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Side Door Access Hole Plug Procedure Using the appropriate tool, remove the cap that conceals the screw from the inside of the door opening.

Callout	Component Name
2	Front Side Door Outside Handle Lock Cylinder Bezel Screw CAUTION: Refer to Fastener Caution . NOTE: • USE HAND TOOL ONLY. Using a battery operated gun or power tool can BREAK the component. • Around 7 rotations is enough to allow the Bezel to be removed. Tighten 10 N.m (89 lb in)
3	Front Side Door Lock Cylinder Bezel Insulator Procedure Using the appropriate tool, remove the insulator from the door opening.
4	Front Side Door Lock Cylinder Bezel Procedure 1. Pull the door handle out to the open position. 2. Insert the appropriate tool into the slot on the bottom of the bezel and pry outward. 3. Slide the bezel rearward to remove from the retainer. 4. Slide the 2 tabs on the back side of bezel into the slots on the retainer. 5. Slide the bezel forward and downward to snap into place. 6. Release the door handle. NOTE: The door handle should remain in the open position while removing and installing the bezel.

FRONT SIDE DOOR LOCKING ROD REPLACEMENT

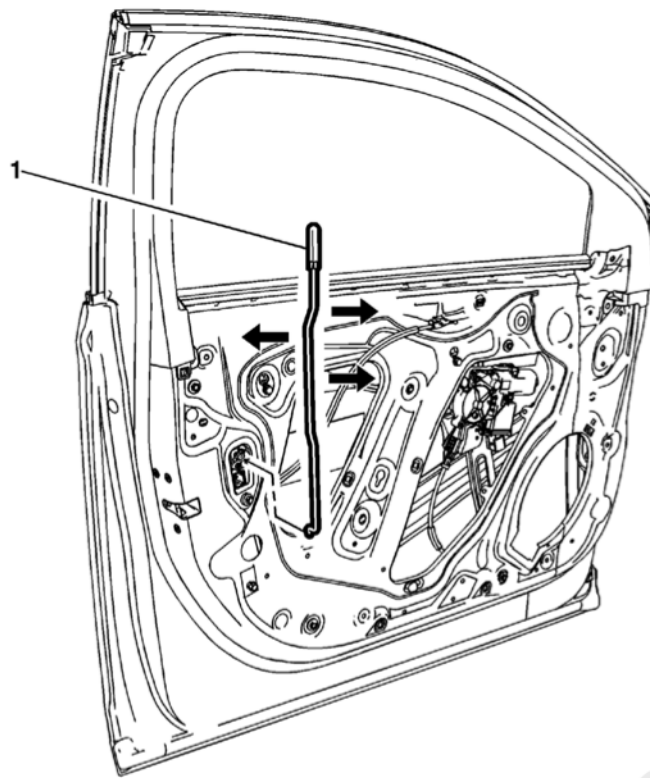


Fig. 73: Front Side Door Locking Rod
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door trim. Refer to Front Side Door Trim Replacement .	
1	Front Side Door Locking Rod Procedure 1. Release the locking rod from the retainer. 2. Turn the locking rod down, pull upward and turn releasing it from the latch. NOTE: Ensure that the door lock system operates properly before installing the trim.

FRONT SIDE DOOR LOCK CYLINDER ROD REPLACEMENT

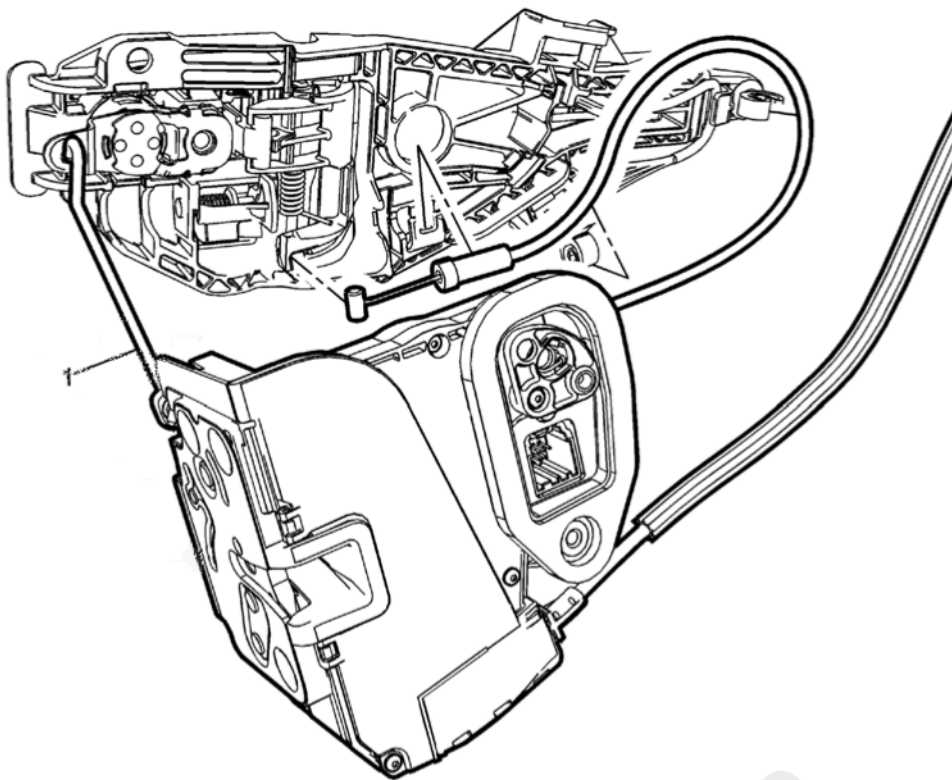


Fig. 74: Front Side Door Lock Cylinder Rod
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door latch and handle bracket assembly from the door. Refer to <u>Front Side Door Latch Replacement</u> .	
1	Front Side Door Lock Cylinder Rod to Latch Procedure 1. Remove the front side door lock cylinder rod from the latch by turn the housing bracket clockwise. 2. Release the lock cylinder rod from the latch only, do not remove the handle cables from the latch. NOTE: Ensure that the door lock system operates properly before installing the trim.

REAR SIDE DOOR LOCKING ROD REPLACEMENT

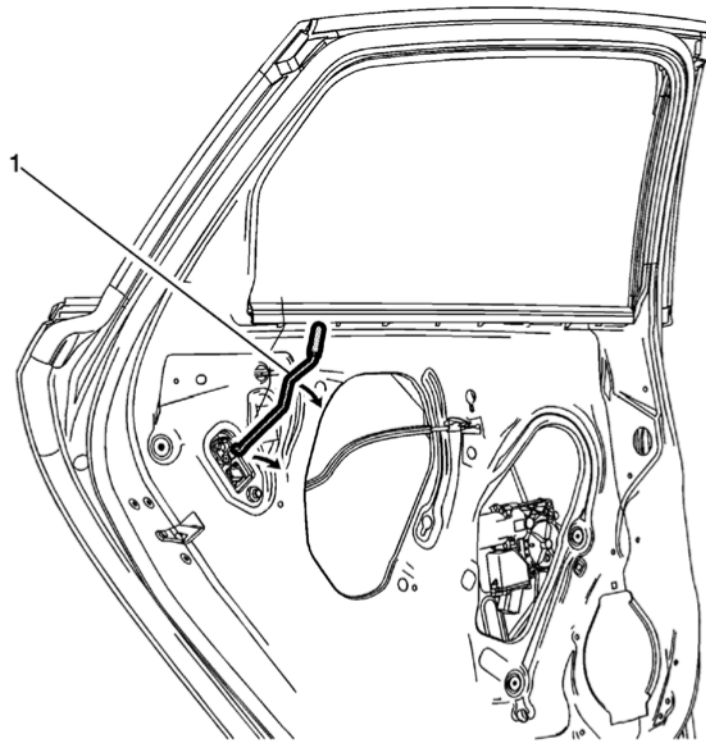


Fig. 75: Rear Side Door Locking Rod
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear side door trim. Refer to Rear Side Door Trim Replacement .	
1	Rear Side Door Locking Rod Procedure 1. Release the locking rod from the retainer. 2. Turn the locking rod down, pull upward and turn releasing it from the latch. NOTE: Ensure that the door lock system operates properly before installing the trim.

FRONT SIDE DOOR LOCK STRIKER ADJUSTMENT

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

1. Remove the front side door lock striker cover, if equipped. Refer to [Front Side Door Lock Striker Replacement](#).

WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS.

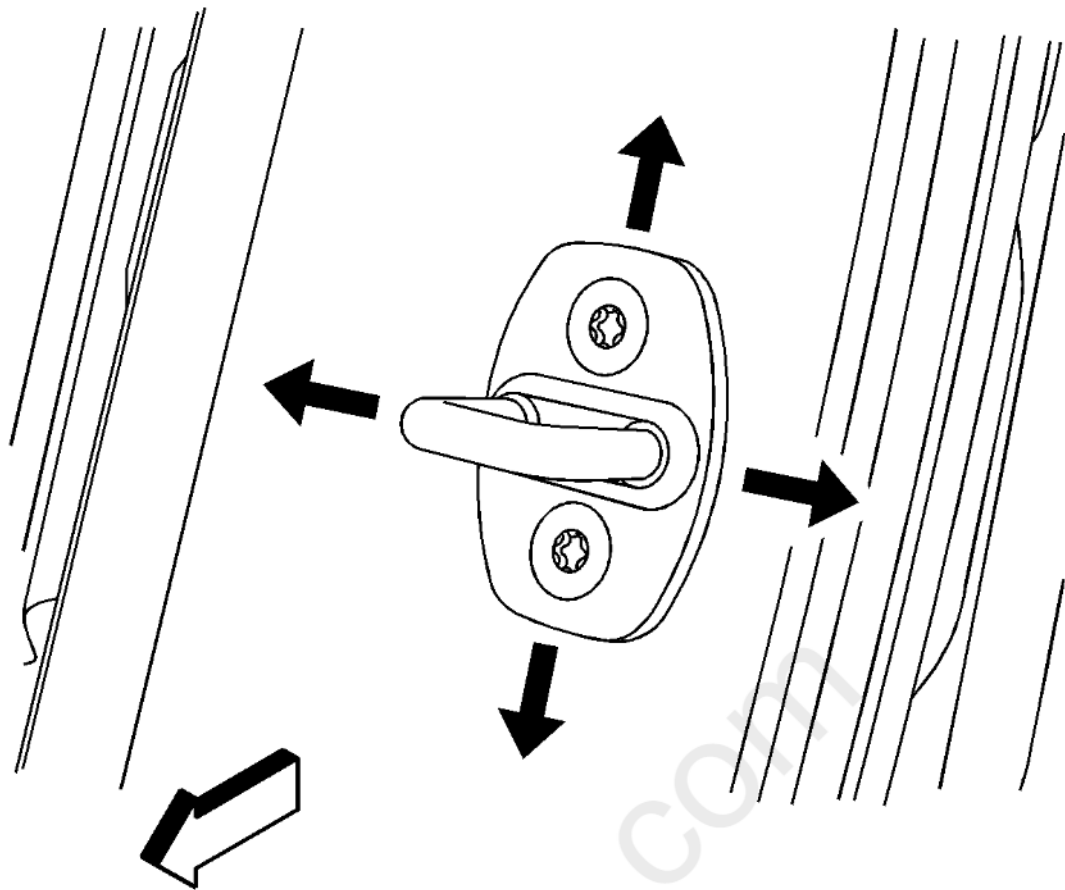


Fig. 76: Striker Adjustment

Courtesy of GENERAL MOTORS COMPANY

2. Ensure the door is properly aligned within the door opening before proceeding with the striker adjustment.
3. 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.
4. Using a grease pencil, mark around the striker for reference of the original position. Loosen the striker.
5. Move the striker to eliminate drag on the striker and door latch and to achieve the proper door position within the door opening. Start with the up/down position, then position the striker to achieve proper alignment to the door opening. Set the in/out adjustment for the proper door seal engagement making sure the door closing efforts are correct.

CAUTION: Refer to **Fastener Caution** .

6. Tighten the striker bolts. Tighten the door striker bolts to 22 N.m (16 lb ft).

FRONT SIDE DOOR LOCK STRIKER REPLACEMENT

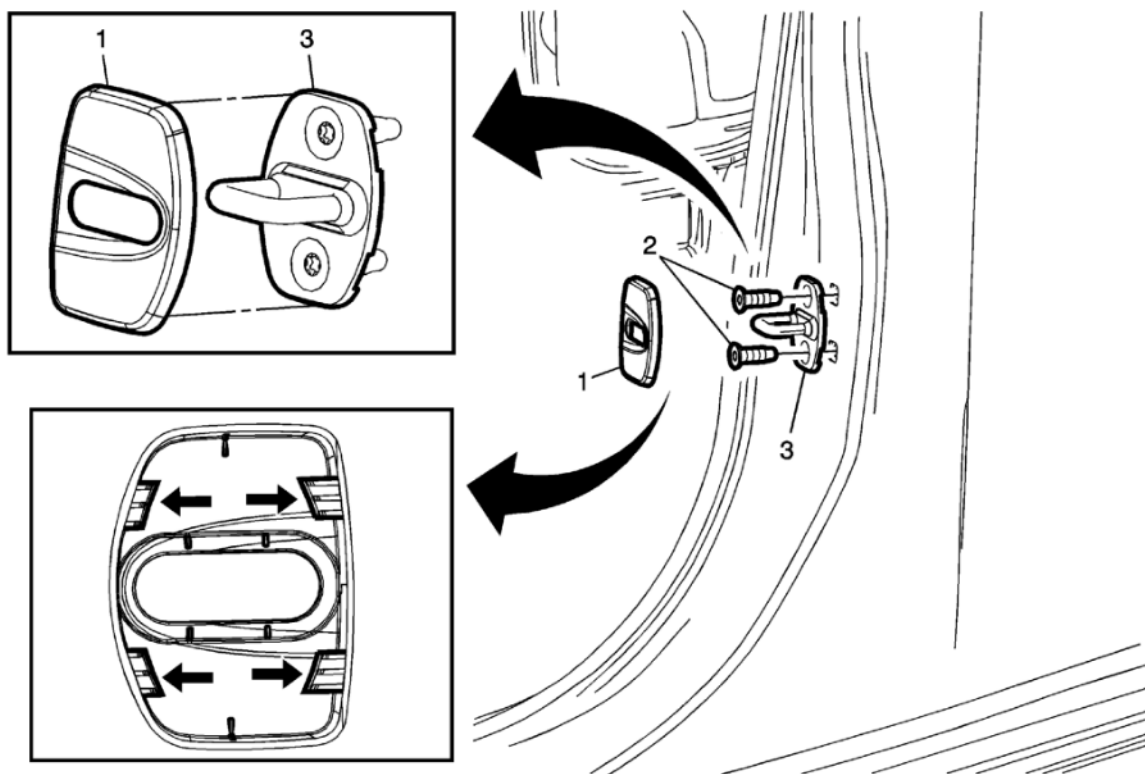


Fig. 77: Front Side Door Lock Striker Components

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Side Door Lock Striker Cover WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS. NOTE: If equipped with a striker cover, use a suitable tool, place the tool between the cover and the striker in a counter clockwise motion turn it releasing the cover from the striker.
2	Front Side Door Lock Striker Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 22 N.m (16 lb ft)
3	Front Side Door Lock Striker Procedure Install the front side door lock striker spacer, if equipped NOTE: Ensure proper alignment after installation. Refer to Front Side Door Lock Striker Adjustment.

REAR COMPARTMENT LID LATCH STRIKER REPLACEMENT

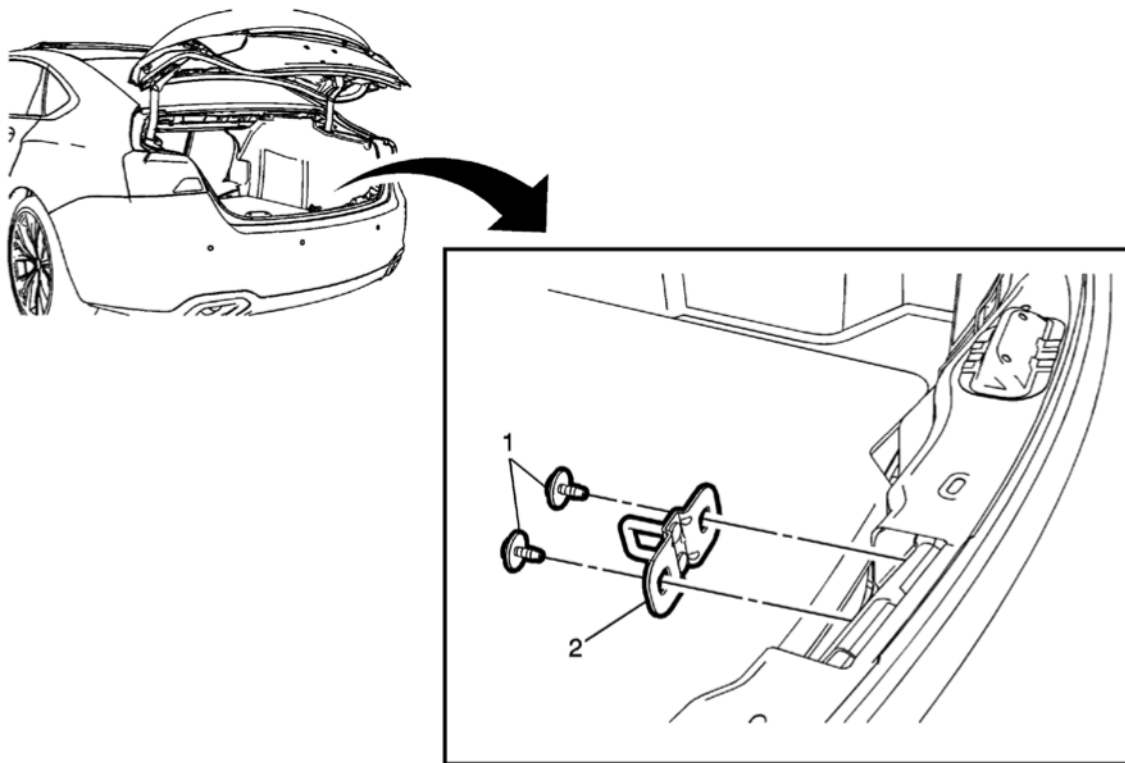


Fig. 78: Rear Compartment Lid Latch Striker
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear end trim finish panel. Refer to Rear End Trim Finish Panel Replacement .	
1	Rear Compartment Lid Latch Striker Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Procedure Use a grease pencil to outline the rear compartment lid latch striker before removing the fasteners. Tighten 9 N.m (80 lb in)
2	Rear Compartment Lid Latch Striker Procedure Adjust the rear compartment lid latch striker after replacing, if needed.

REAR SIDE DOOR LOCK STRIKER ADJUSTMENT

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

1. Remove the rear side door lock striker cover, if equipped. Refer to [Rear Side Door Lock Striker Replacement](#).

WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS.

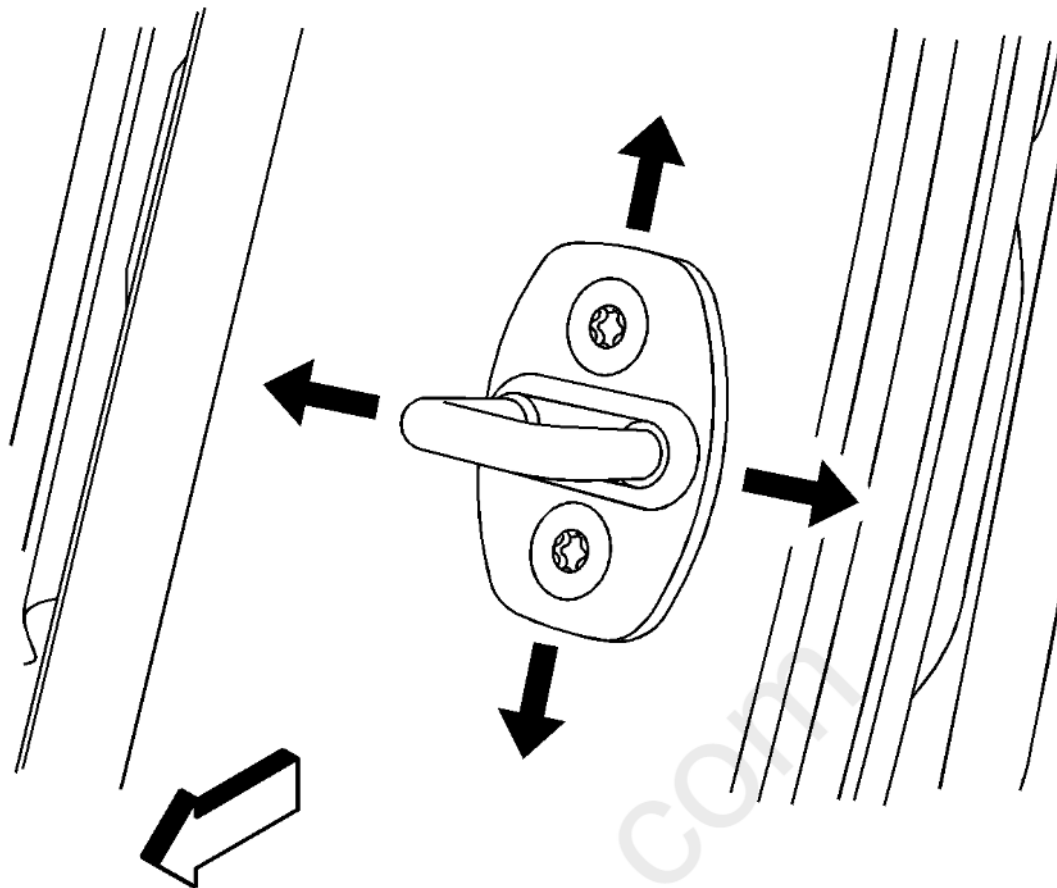


Fig. 79: Striker Adjustment

Courtesy of GENERAL MOTORS COMPANY

2. Ensure the door is properly aligned within the door opening before proceeding with the striker adjustment.
3. 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.
4. Using a grease pencil, mark around the striker for reference of the original position. Loosen the striker.
5. Move the striker to eliminate drag on the striker and door latch and to achieve the proper door position within the door opening. Start with the up/down position, then position the striker to achieve proper alignment to the door opening. Set the in/out adjustment for the proper door seal engagement making sure the door closing efforts are correct.

CAUTION: Refer to **Fastener Caution** .

6. Tighten the striker bolts. Tighten the door striker bolts to 22 N.m (16 lb ft).

REAR SIDE DOOR LOCK STRIKER REPLACEMENT

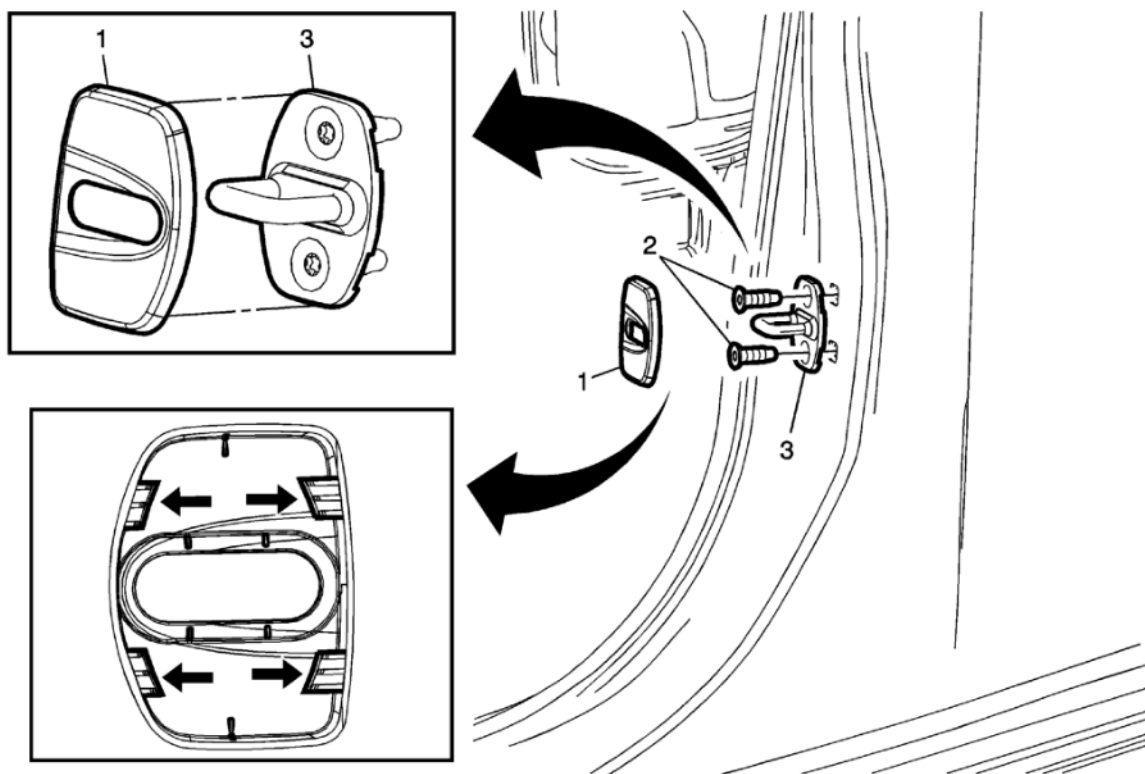


Fig. 80: Rear Side Door Lock Striker Components

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Rear Side Door Lock Striker Cover, if equipped WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS. NOTE: Using a suitable tool, place the tool between the cover and the striker in a counter clockwise motion turn it releasing the cover from the striker.
2	Rear Side Door Lock Striker Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 22 N.m (16 lb ft)
3	Rear Side Door Lock Striker Procedure Install the rear side door lock striker spacer, if equipped NOTE: Ensure proper alignment after installation. Refer to Rear Side Door Lock Striker Adjustment.

DOOR LOCK SWITCH REPLACEMENT - DRIVER SIDE

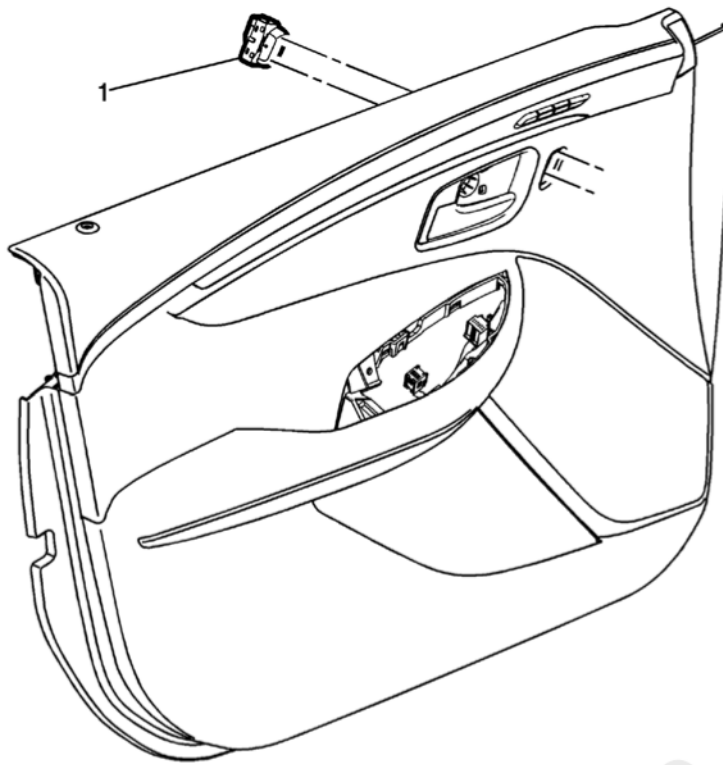


Fig. 81: Door Lock Switch - Driver Side
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door trim. Refer to Front Side Door Trim Replacement .	
1	Door Lock Switch 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

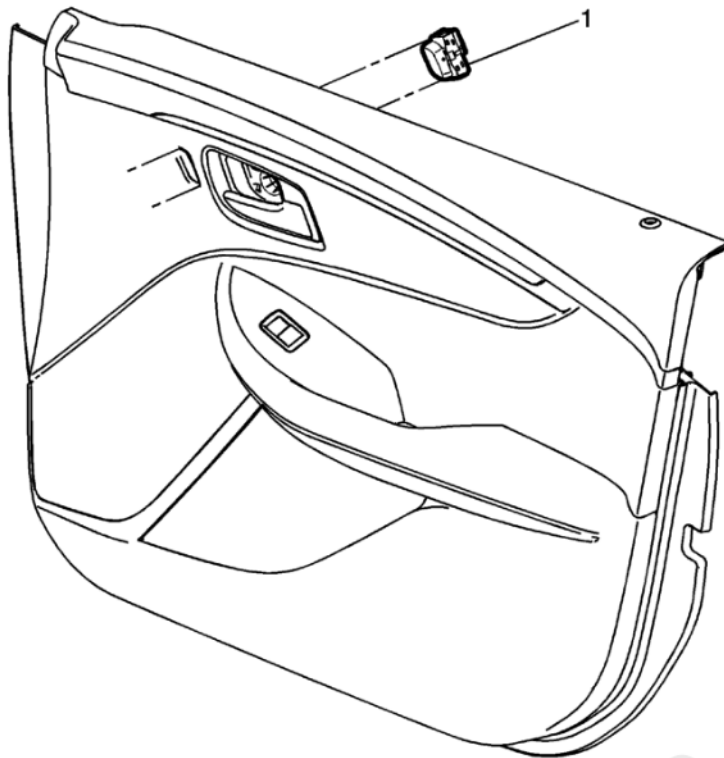


Fig. 82: Door Lock Switch - Passenger Front
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door trim. Refer to Front Side Door Trim Replacement .	
1	Door Lock Switch Passenger Front 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.

REAR COMPARTMENT LID RELEASE SWITCH REPLACEMENT

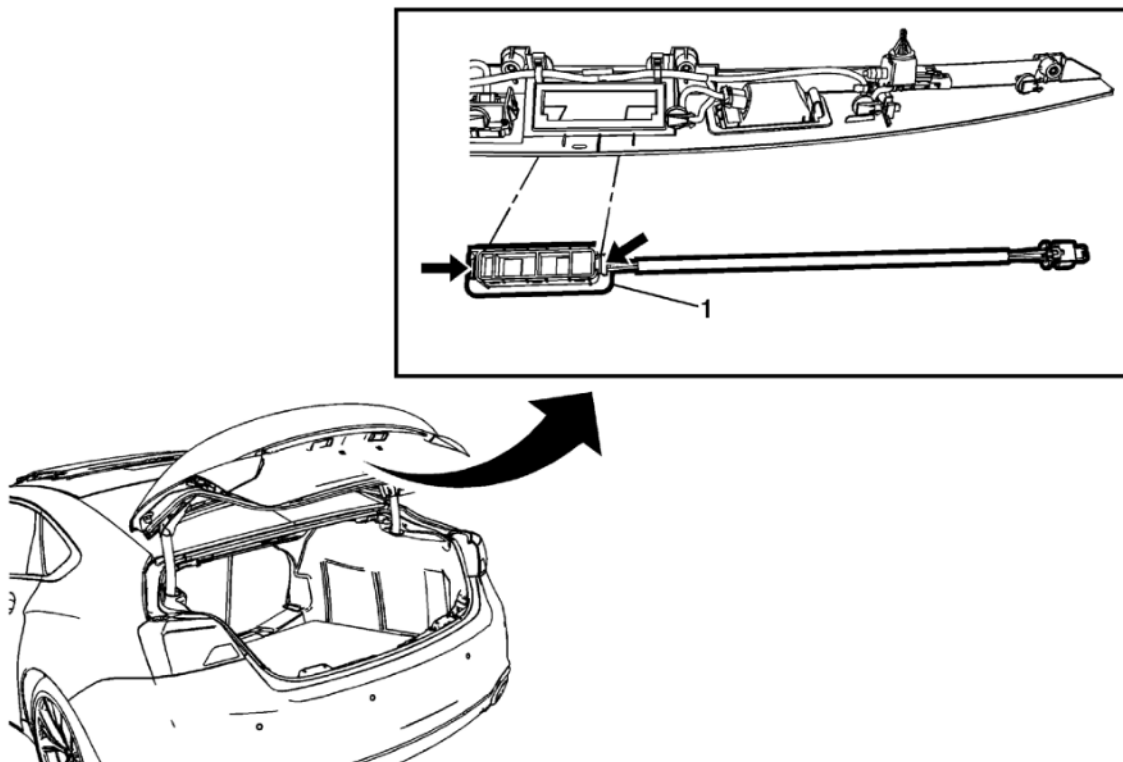


Fig. 83: Rear Compartment Lid Release Switch
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear closure center applique carrier. Refer to Rear Closure Center Applique Carrier Replacement . Disconnect the rear compartment lid release switch electrical connector	
1	Rear Compartment Lid Release Switch Procedure Press in the retainers on the sides of the switch (arrows) and press the rear compartment lid release switch out from the rear closure fixed handle applique.

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
- Left rear door latch
- Right rear door latch
- Driver window motor
- Passenger window switch
- Left rear window switch
- Right rear window switch

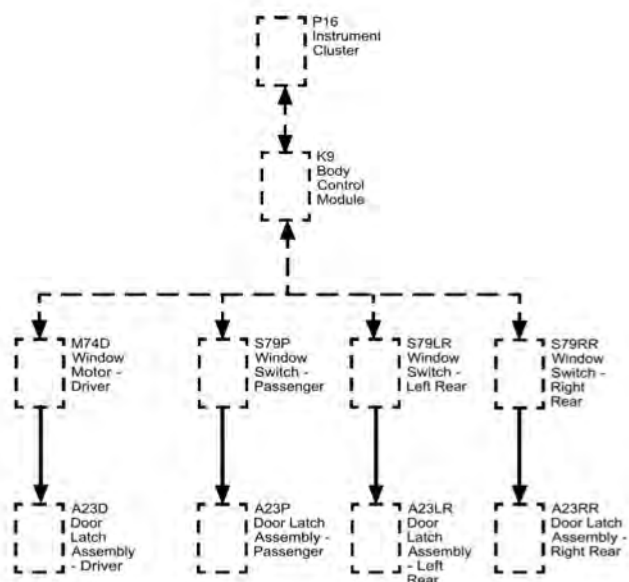


Fig. 84: Door Ajar Indicator With AXG/AED/AEQ Block Diagram
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
P16	P16 Instrument Cluster
M74D	M74D Window Motor - Driver
S79P	S79P Window Switch - Passenger
S79LR	S79LR Window Switch - Left Rear
S79RR	S79RR Window Switch - Right Rear
A23D	A23D Door Latch Assembly - Driver
A23P	A23P Door Latch Assembly - Passenger
A23LR	A23LR Door Latch Assembly - Left Rear
A23RR	A23RR Door Latch Assembly - Right Rear
K9	K9 Body Control Module

Driver Door Ajar

The driver window motor provides a 12V signal to the driver door ajar switch signal circuit. The driver door ajar switch is integral to the driver door latch assembly. When the driver 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 and the voltage within the signal circuit drops. The driver window motor will detect the voltage drop and will send a serial data message to the body control module which will then send a message to the instrument panel cluster to command the door ajar message.

Passenger Door Ajar

The passenger window switches each provide a 12 V signal to 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 and the voltage within the signal circuit drops. The window switches will detect the voltage drop and will send a serial data message to the body control module which will then send a message to the instrument panel cluster to command the door ajar message.

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 unlatch switch
- Interior rear compartment lid unlatch switch
- Rear compartment lid latch
- Trunk ajar switch (Part of the rear compartment lid latch)
- Rear compartment lid release relay

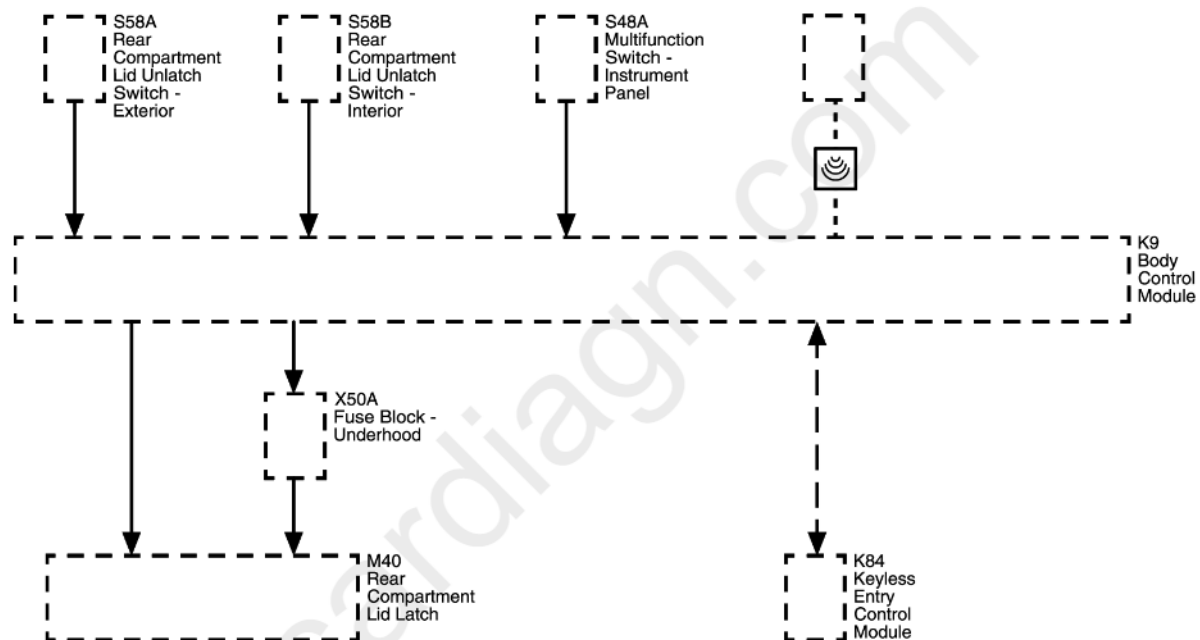


Fig. 85: Trunk Release Block Diagram

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
S58A	S58A Rear Compartment Lid Unlatch Switch - Exterior
S58B	S58B Rear Compartment Lid Unlatch Switch - Interior
S48A	S48A Multifunction Switch - Instrument Panel
K9	K9 Body Control Module
K84	K84 Keyless Entry Control Module
M40	M40 Rear Compartment Lid Latch
X50A	X50A Fuse Block - Underhood

Rear Compartment Lid Release Operation

Rear Compartment Lid Release Switch

The BCM monitors a voltage signal to the interior and exterior rear compartment lid unlatch 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 unlatch 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.

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 cluster. The instrument cluster will then display the Trunk Open message.

POWER DOOR LOCKS DESCRIPTION AND OPERATION

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Rear window/door lockout switch, located on the driver window switch
- Body control module (BCM)
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Door lock security PCB relay
- Exterior door handle switches
- Keyless entry control module

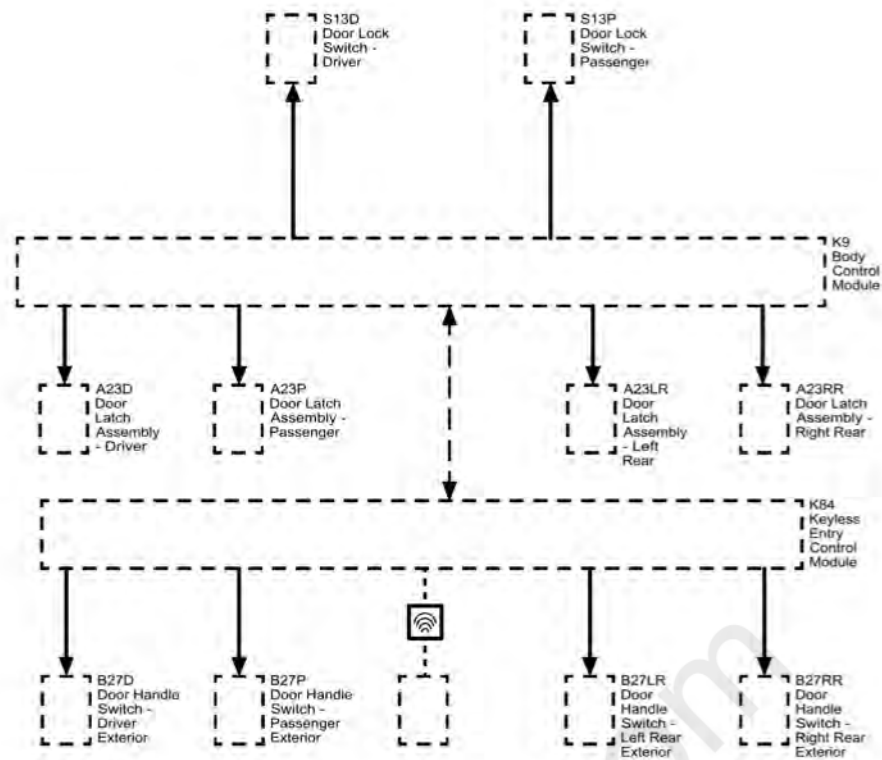


Fig. 86: Power Door Locks System Block Diagram
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
S13D	S13D Door Lock Switch - Driver
S13P	S13P Door Lock Switch - Passenger
K9	K9 Body Control Module
A23RR	A23RR Door Latch Assembly - Right Rear
A23LR	A23LR Door Latch Assembly - Left Rear
A23P	A23P Door Latch Assembly - Passenger
A23D	A23D Door Latch Assembly - Driver
K84	K84 Keyless Entry Control Module
B27RR	B27RR Door Handle Switch - Right Rear Exterior
B27LR	B27LR Door Handle Switch - Left Rear Exterior
B27P	B27P Door Handle Switch - Passenger Exterior
B27D	B27D Door Handle Switch - Driver Exterior

Door Lock and Unlock Operation

When a door lock switch is activated in the lock or unlock position, the BCM will receive a ground signal on either the door lock switch lock or unlock signal circuits.

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 doors will then lock or unlock as commanded.

The following three circuits are used to operate the lock:

- Driver door unlock

- Passenger door unlock
- All door lock

The driver door lock actuator is isolated so it can be unlocked by itself using the keyless entry transmitter.

Passive Door Lock/Unlock Operation

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door lock or a door unlock request. The keyless entry control module provides a 12 V signal to each exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signal within the signal circuit is pulled to ground. The keyless entry control module will detect the voltage drop and a low frequency antenna will transmit a challenge to the keyless entry transmitter. If the challenge is met, the keyless entry transmitter will respond, and the keyless entry control module will send a serial data message to the body control module to command the door(s) to be locked or unlocked.

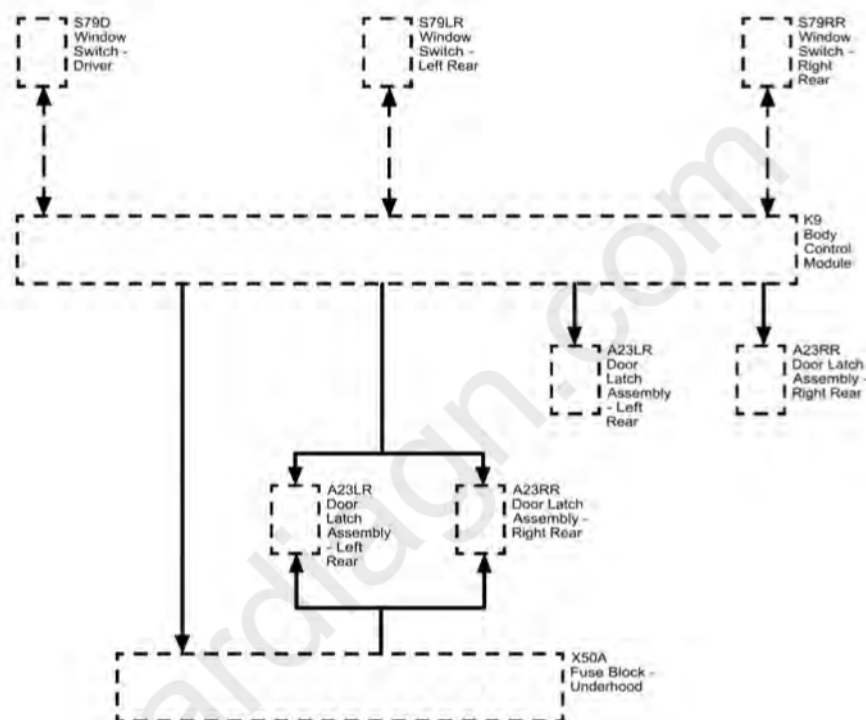


Fig. 87: Power Door Child Lock Block Diagram

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
S79LR	S79LR Window Switch - Left Rear
S79D	S79D Window Switch - Driver
S79RR	S79RR Window Switch - Right Rear
K9	K9 Body Control Module
A23RR	A23RR Door Latch Assembly - Right Rear
A23LR	A23LR Door Latch Assembly - Left Rear
A23RR	A23RR Door Latch Assembly - Right Rear
A23LR	A23LR Door Latch Assembly - Left Rear
X50A	X50A Fuse Block - Underhood

Rear Window and Rear Door Lockout Operation

The operator has the option to disable the interior rear door handles to prevent the unauthorized opening of the rear door doors while still retaining normal driver and passenger door handle functions. The driver door window switch has a lockout switch that will disable the interior rear door handles and the local

rear window switches. When the lockout switch is pressed, the BCM will command the child lockout latches and will also send a disable command to the local rear window switches. The driver and passenger doors will still function normally by pressing a door lock switch which will unlock the doors but the child lockout latches will continue to disable the interior rear door handles.

Pressing the lockout switch again will signal a command to the BCM to unlatch the rear doors, restore normal interior rear door handle functions and restore normal function of the rear window switches

The body control module monitors the voltage level of the child security motor status signal circuit, when the child locks have been activated, the contacts of the child security motor status switch (internal to the rear door latch) will close providing a ground path for the signal circuit pulling the voltage low. It is in this manner that the body control module is able to determine if the rear door latch has been successfully been locked out and will then send a disable command to the local rear window switches

The body control module monitors the status of the child security lockout system, when the body control module detects a fault in the system, it will command the child lockout indicator to flash ON and OFF for 30 seconds to alert the driver that the child security lockout system may not be functioning properly.

The body control module will command the child lockout indicator to flash ON and OFF for the following reasons:

- An open/high resistance in either child security motor status signal circuit
 - The body control module detects that one or both rear door latches have not activated and are not locked out
 - The body control module detects a short to ground or an open/high resistance in the child security lock disable relay control circuit
 - A malfunctioning child security lock disable relay
 - An open/high resistance in the child security lock motor control circuit
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