

2017 ACCESSORIES AND EQUIPMENT

Bolted Exterior Body Panels and Closures - Bolt EV

SPECIFICATIONS

FASTENER SPECIFICATIONS

Reusable Threaded Fastener Tightening Specifications

Application	Specification
	Metric (English)
NOTE: <i>All fasteners listed in this table can be reused after removal.</i>	
Front Compartment Front Sight Shield Bolt	2.5 N.m (22 lb in)
Front Fender Bolt	9 N.m (80 lb in)
Front Side Door Check Link Bolt	22 N.m (16 lb ft)
Front Side Door Check Link Nut	9 N.m (80 lb in)
Front Side Door Hinge Bolt - Body Side	32 N.m (24 lb ft)
Front Side Door Lower Hinge Bolt	25 N.m (18 lb ft)
Front Side Door Upper Hinge Bolt	25 N.m (18 lb ft)
Headlamp Screw	2.5 N.m (22 lb in)
Hood Hinge Bolt	22 N.m (16 lb ft)
Hood Hinge Bracket Bolt	9 N.m (80 lb in)
Hood Hinge Nut	22 N.m (16 lb ft)
Hood Primary and Secondary Latch Bolt	9 N.m (80 lb in)
Hood Primary Latch Release Cable Handle Screw	2 N.m (18 lb in)
Liftgate Hinge Bolt	22 N.m (16 lb ft)
Liftgate Hinge Nut	43 N.m (32 lb ft)
Rear Side Door Check Link Bolt	22 N.m (16 lb ft)
Rear Side Door Check Link Nut	9 N.m (80 lb in)
Rear Side Door Hinge Bolt - Body Side	32 N.m (24 lb ft)
Rear Side Door Lower Hinge Bolt	25 N.m (18 lb ft)
Rear Side Door Upper Hinge Bolt	25 N.m (18 lb ft)

SCHEMATIC WIRING DIAGRAMS

HOOD LATCH WIRING SCHEMATICS

Hood Ajar Switch

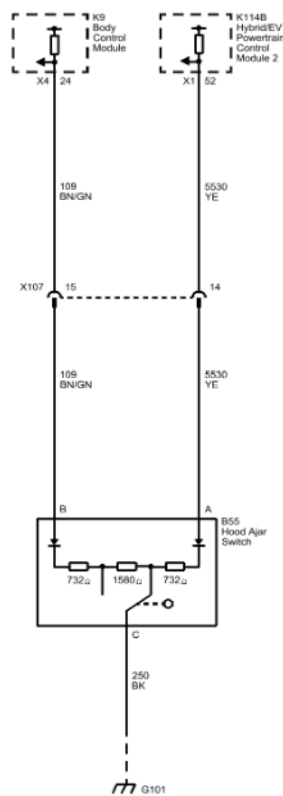


Fig. 1: Hood Ajar Switch

Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

DTC B3006: HOOD AJAR CIRCUIT

Diagnostic Instructions

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

DTC Descriptors

DTC B3006 01

Hood Ajar Circuit Short to Battery

DTC B3006 02

Hood Ajar Circuit Short to Ground

DTC B3006 04

Hood Ajar Circuit Open

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B3006 02	B3006 04	B3006 01	-
Ground	-	B3006 04	-	-

The body control module (BCM) applies B+ to the hood ajar signal circuit and monitors the voltage to determine the position of the hood. When the hood is closed, the switch is open and voltage remains high. When the hood is open, the switch is closed and the voltage is pulled low.

Conditions for Running the DTC

The BCM continuously monitors for this DTC

Conditions for Setting the DTC

B3006 01

The BCM detects that the hood ajar switch signal circuit is shorted to battery.

B3006 02

The BCM detects that the hood ajar switch signal circuit is shorted to ground.

B3006 04

The BCM detects that the hood ajar switch signal circuit is open.

Action Taken When the DTC Sets

- The hood ajar switch input will be ignored as a content theft deterrent trigger.
- Remote vehicle start will be disabled.

Conditions for Clearing the DTC

- A current DTC will clear when the conditions for setting the DTC are no longer present.
- A history DTC will clear after 40 malfunction free ignition cycles.

Reference Information

Schematic Reference

Immobilizer Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Keyless Entry System Description and Operation

Electrical Information Reference

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Hood Ajar Switch parameter is Open when the hood is open and Closed when the hood is closed.

- **If the parameter does not change**

- **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the B55 Hood Ajar Switch. 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. Test for greater than 11.5 V between the signal circuit terminal 1 and ground.

- **If 11.5 V or less**

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

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

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

3. Test for less than 2 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 K9 Body Control Module.

- **If greater than 11.5 V**

5. Ignition OFF, disconnect the X4 and X7 harness connector at the K9 Body Control Module.
Ignition ON.

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

- **If 1 V or greater**

Repair the short to voltage on the circuit.

- **If less than 1 V**

7. Test or replace the B55 Hood Ajar Switch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the B55 Hood Ajar Switch.

2. Test for 2738 - 3350 Ω between the signal terminal 1 and the signal terminal 2 with the hood latch in the CLOSED position.

- **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2738 - 3350 Ω**

3. Test for 658 - 806 Ω between the signal terminal 2 and the ground terminal 3 with the hood latch in the CLOSED position.

- **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 658 - 806 Ω**

4. Test for 2080 - 2545 Ω between the signal terminal 1 and the ground terminal 3 with the hood latch in the CLOSED position.

- **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2080 - 2545 Ω**

5. Test for 2738 - 3350 Ω between the signal terminal 1 and the signal terminal 2 with the hood latch in the OPEN position.

- **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2738 - 3350 Ω**

6. Test for 2080 - 2545 Ω between the signal terminal 2 and the ground terminal 3 with the hood latch in the OPEN position.

- **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2080 - 2545 Ω**

7. Test for 658 - 806 Ω between the signal terminal 1 and the ground terminal 3 with the hood latch in the OPEN position.

- **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 658 - 806 Ω**

8. All OK.

Repair Instructions

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

- [Hood Primary and Secondary Latch Replacement](#)
- [Control Module References](#) for Body Control Module replacement, programming, and setup

DTC P257D-P257F: ENGINE HOOD SWITCH

Diagnostic Instructions

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

DTC Descriptors

DTC P257D

Engine Hood Switch Performance

DTC P257E

Engine Hood Switch Circuit Low Voltage

DTC P257F

Engine Hood Switch Circuit High Voltage

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Hood Ajar Switch Signal 1	B3006 02	B3006 04	B3006 01	-

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Hood Ajar Switch Signal 2	P257E	P257F	P257F	P257D
Ground	-	B3006 04, P257F	-	-

Circuit/System Description

The Hybrid/EV Powertrain Control Module 2 applies B+ to the hood ajar signal 2 circuit and monitors the voltage to determine the position of the hood. The hood ajar switch contains a multiplexed resistor. This resistor will vary the voltage seen by the Hybrid/EV Powertrain Control Module 2 by pulling down the applied voltage based on the position of the switch.

Conditions for Running the DTC

Propulsion system is active.

Conditions for Setting the DTC

P257D

The hood ajar switch signal voltage as measured by the Hybrid/EV Powertrain Control Module 2 is not within a valid voltage range.

P257E

The Hybrid/EV Powertrain Control Module 2 detects a short to ground in the hood ajar switch signal.

P257F

The Hybrid/EV Powertrain Control Module 2 detects a short to voltage or an open/high resistance in the hood ajar switch signal.

Action Taken When the DTC Sets

The engine will start and run whenever the vehicle is in Service Mode or the vehicle speed is less than 5 kph (3 mph).

Conditions for Clearing the DTC

DTCs P257D, P257E, and P257F are Type B DTCs.

Reference Information

Schematic Reference

Immobilizer Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Hood Ajar Indicator Description and Operation

Electrical Information Reference

- [Circuit Testing](#)
- [Connector Repairs](#)
- [Testing for Intermittent Conditions and Poor Connections](#)
- [Wiring Repairs](#)

Scan Tool Reference

Circuit/System Verification

1. Vehicle in Service Mode.
2. Verify the scan tool Hybrid/EV Powertrain Control Module 2 Hood Position parameter is Open when the hood is OPEN and Closed when the hood is CLOSED..
 - **If the parameter does not change**

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

Circuit/System Testing

1. Vehicle OFF and all vehicle systems OFF, disconnect the harness connector at the B55 Hood Ajar Switch. It may take up to two minutes for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal C and ground.
 - **If 10 Ω or greater**
 1. Vehicle 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. Vehicle in Service Mode.
4. Verify DTC P257F is set as current
 - **If DTC P257F is not set as current**
 1. Vehicle OFF, disconnect the harness connector at the K114B Hybrid/EV Powertrain Control Module 2.
 2. Test for infinite resistance between the signal circuit terminal A and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K114B Hybrid/EV Powertrain Control Module 2.
 - **If DTC P257F is set as current**
5. Install a 5 A fused jumper wire between the signal circuit terminal A and ground. Vehicle in Service Mode.
6. Verify DTC P257E is set as current.
 - **If DTC P257E is not set as current**
 1. Vehicle OFF, disconnect the harness connector at the K114B Hybrid/EV Powertrain Control Module 2.
 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 K114B Hybrid/EV Powertrain Control Module 2.
 - **If DTC P257E is set as current**
7. Test or replace the B55 Hood Ajar Switch.

Component Testing

1. Vehicle OFF, disconnect the harness connector at the B55 Hood Ajar Switch.
2. Test for 2738 - 3350 Ω between the signal terminal A and the signal terminal B with the hood latch in the CLOSED position.

- **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2738 - 3350 Ω**

3. Test for 658 - 806 Ω between the signal terminal A and the ground terminal C with the hood latch in the CLOSED position.

- **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 658 - 806 Ω**

4. Test for 2080 - 2545 Ω between the signal terminal B and the ground terminal C with the hood latch in the CLOSED position.

- **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2080 - 2545 Ω**

5. Test for 2738 - 3350 Ω between the signal terminal A and the signal terminal B with the hood latch in the OPEN position.

- **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2738 - 3350 Ω**

6. Test for 2080 - 2545 Ω between the signal terminal A and the ground terminal C with the hood latch in the OPEN position.

- **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2080 - 2545 Ω**

7. Test for 658 - 806 Ω between the signal terminal B and the ground terminal C with the hood latch in the OPEN position.

- **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 658 - 806 Ω**

8. All OK.

Repair Instructions

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

- [Hood Primary and Secondary Latch Replacement](#)
- [Control Module References](#) for Hybrid/EV Powertrain Control Module 2 replacement, programming, and setup

SYMPTOMS - BOLTED EXTERIOR BODY PANELS AND CLOSURES

IMPORTANT: 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 links.

2. Review the system operation in order to familiarize yourself with the system functions. Refer to [Hood Ajar Indicator Description and Operation](#).

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the systems. Refer to [Checking Aftermarket Accessories](#).
- Inspect the easily accessible or visible system components for obvious damage or conditions which could 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 [Hood Ajar Indicator/Message Malfunction](#) in order to diagnose the symptom.

HOOD AJAR INDICATOR/MESSAGE MALFUNCTION

Diagnostic Instructions

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

DTC Descriptors

DTC B3006 01

Hood Ajar Circuit Short to Battery

DTC B3006 02

Hood Ajar Circuit Short to Ground

DTC B3006 04

Hood Ajar Circuit Open

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	B3006 02	B3006 04	B3006 01	-
Ground	-	B3006 04	-	-

Circuit/System Description

The body control module (BCM) applies B+ to the hood ajar signal circuit and monitors the voltage to determine the position of the hood. When the hood is closed, the switch is open and voltage remains high. When the hood is open, the switch is closed and the voltage is pulled low.

Conditions for Running the DTC

The BCM continuously monitors for this DTC

Conditions for Setting the DTC

B3006 01

The BCM detects that the hood ajar switch signal circuit is shorted to battery.

B3006 02

The BCM detects that the hood ajar switch signal circuit is shorted to ground.

B3006 04

The BCM detects that the hood ajar switch signal circuit is open.

Action Taken When the DTC Sets

- The hood ajar switch input will be ignored as a content theft deterrent trigger.
- Remote vehicle start will be disabled.

Conditions for Clearing the DTC

- A current DTC will clear when the conditions for setting the DTC are no longer present.
- A history DTC will clear after 40 malfunction free ignition cycles.

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- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Hood Ajar Switch parameter is Open when the hood is open and Closed when the hood is closed.
 - **If the parameter does not change**

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

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the B55 Hood Ajar Switch. 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. Test for greater than 11.5 V between the signal circuit terminal 1 and ground.
 - **If 11.5 V or less**
 1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If Infinite resistance.
 3. Test for less than 2 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 K9 Body Control Module.
 - **If greater than 11.5 V**
5. Ignition OFF, disconnect the X4 and X7 harness connector at the K9 Body Control Module.
Ignition ON.
6. Test for less than 1 V between the signal circuit terminal 1 and ground.
 - **If 1 V or greater**

Repair the short to voltage on the circuit.
 - **If less than 1 V**
7. Test or replace the B55 Hood Ajar Switch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the B55 Hood Ajar Switch.
2. Test for 2738 - 3350 Ω between the signal terminal 1 and the signal terminal 2 with the hood latch in the CLOSED position.
 - **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.
 - **If between 2738 - 3350 Ω**
3. Test for 658 - 806 Ω between the signal terminal 2 and the ground terminal 3 with the hood latch in the CLOSED position.
 - **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.
 - **If between 658 - 806 Ω**
4. Test for 2080 - 2545 Ω between the signal terminal 1 and the ground terminal 3 with the hood latch in the CLOSED position.
 - **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.
 - **If between 2080 - 2545 Ω**
5. Test for 2738 - 3350 Ω between the signal terminal 1 and the signal terminal 2 with the hood latch in the OPEN position.
 - **If not between 2738 - 3350 Ω**

Replace the B55 Hood Ajar Switch.
 - **If between 2738 - 3350 Ω**

6. Test for 2080 - 2545 Ω between the signal terminal 2 and the ground terminal 3 with the hood latch in the OPEN position.

- **If not between 2080 - 2545 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 2080 - 2545 Ω**

7. Test for 658 - 806 Ω between the signal terminal 1 and the ground terminal 3 with the hood latch in the OPEN position.

- **If not between 658 - 806 Ω**

Replace the B55 Hood Ajar Switch.

- **If between 658 - 806 Ω**

8. All OK.

Repair Instructions

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

- [Hood Primary and Secondary Latch Replacement](#)
- [Control Module References](#) for Body Control Module replacement, programming, and setup

REPAIR INSTRUCTIONS

HOOD PRIMARY LATCH RELEASE CABLE REPLACEMENT

Removal Procedure

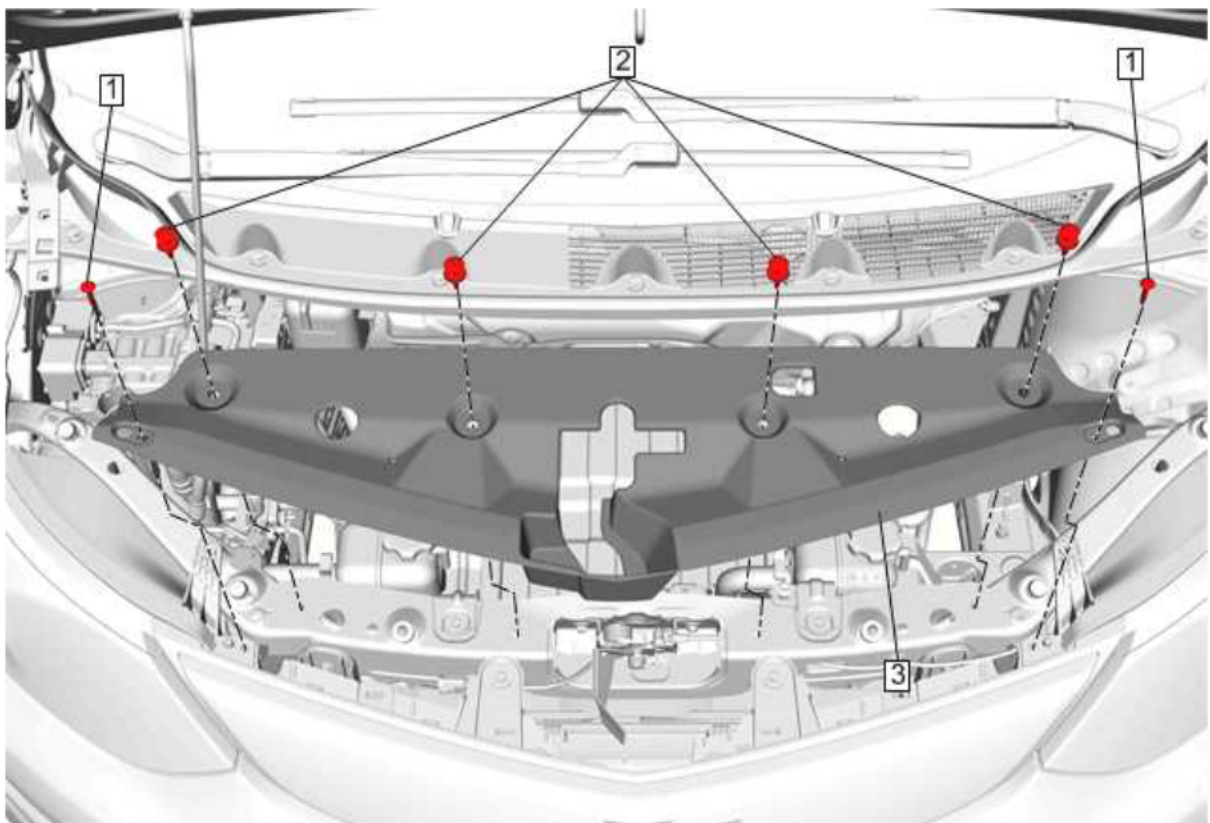


Fig. 2: Front Compartment Front Sight Shield

Courtesy of GENERAL MOTORS COMPANY

1. Front Compartment Front Sight Shield - Remove - [Front Compartment Front Sight Shield Replacement](#).

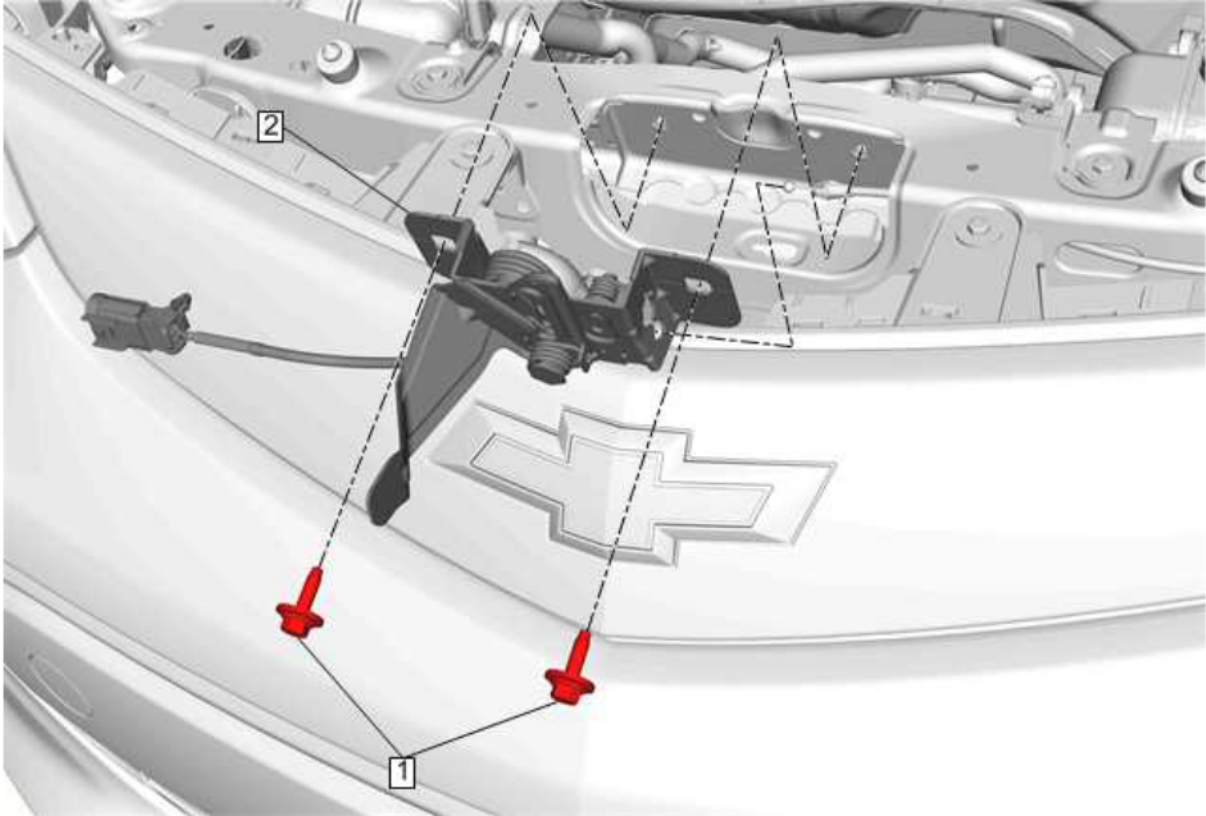


Fig. 3: Hood Primary and Secondary Latch

Courtesy of GENERAL MOTORS COMPANY

2. Hood Primary and Secondary Latch - Remove - **Hood Primary and Secondary Latch Replacement**

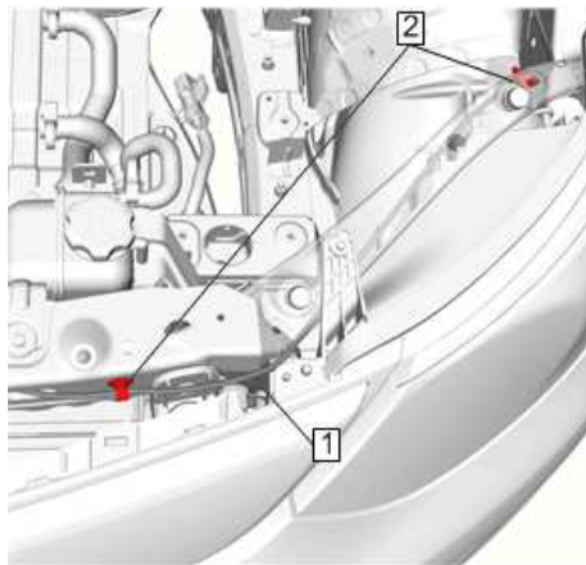


Fig. 4: Hood Primary Latch Release Cable

Courtesy of GENERAL MOTORS COMPANY

3. Disconnect the hood primary latch release cable (1) from the hood release cable retainers (2).

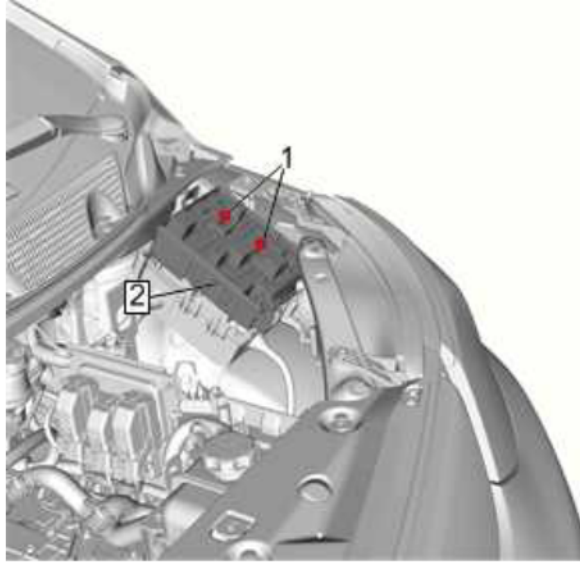


Fig. 5: Engine Wiring Harness Junction Block
 Courtesy of GENERAL MOTORS COMPANY

4. Engine Wiring Harness Junction Block - Remove - **Engine Wiring Harness Junction Block Replacement**

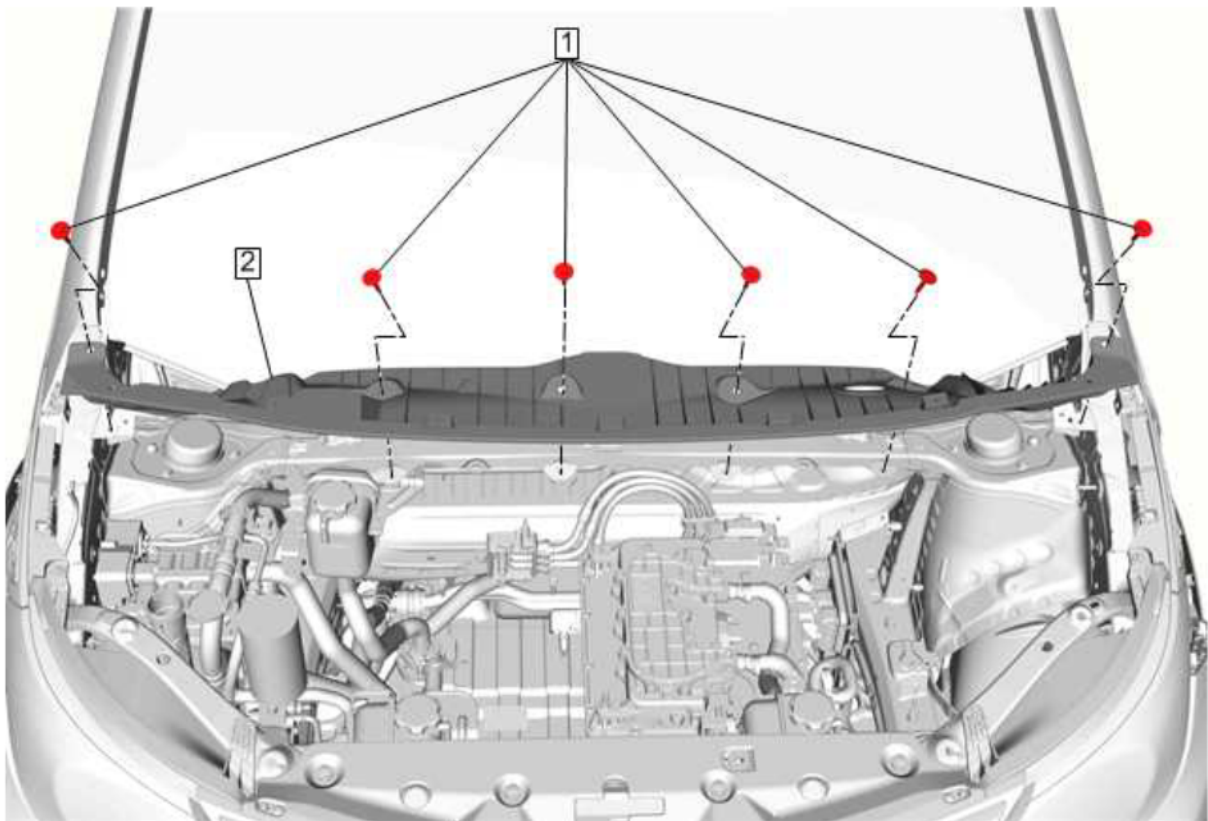


Fig. 6: Dash Panel Upper Extension Panel Extension
 Courtesy of GENERAL MOTORS COMPANY

5. Dash Panel Upper Extension Panel Extension - Remove - **Dash Panel Upper Extension Panel Extension Replacement**

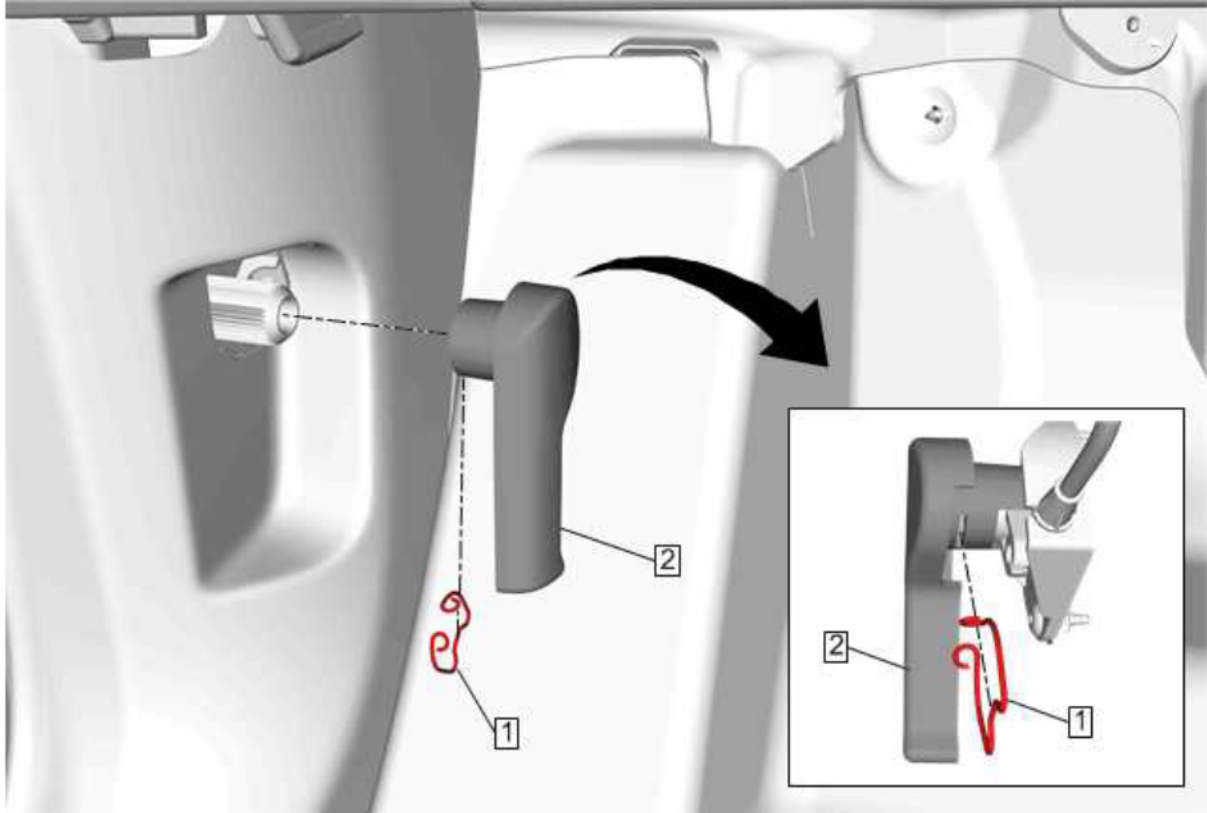


Fig. 7: Hood Primary Latch Release Cable Handle

Courtesy of GENERAL MOTORS COMPANY

6. Hood Primary Latch Release Cable Handle - Remove - **Hood Primary Latch Release Cable Handle Replacement**

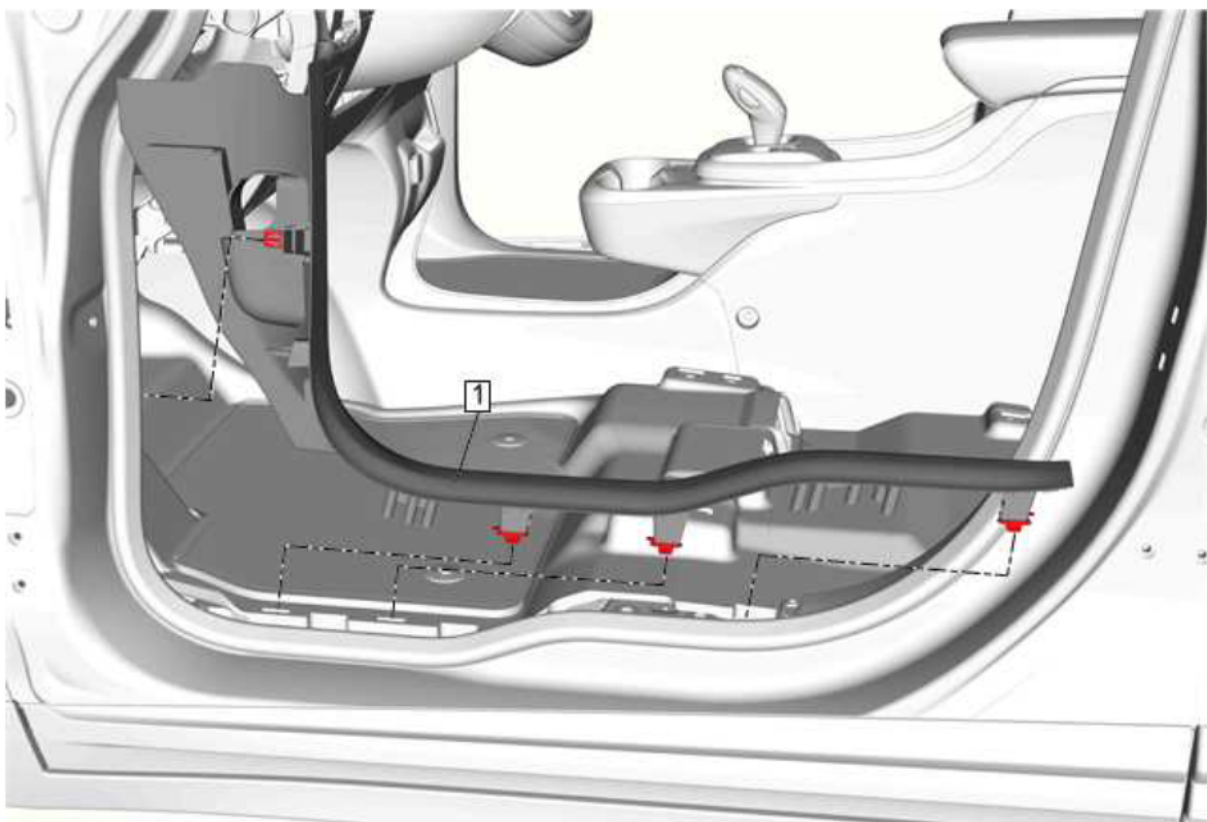


Fig. 8: Front Side Door Sill Garnish Molding

Courtesy of GENERAL MOTORS COMPANY

7. Front Side Door Sill Garnish Molding - Remove - **Front Side Door Sill Garnish Molding Replacement**

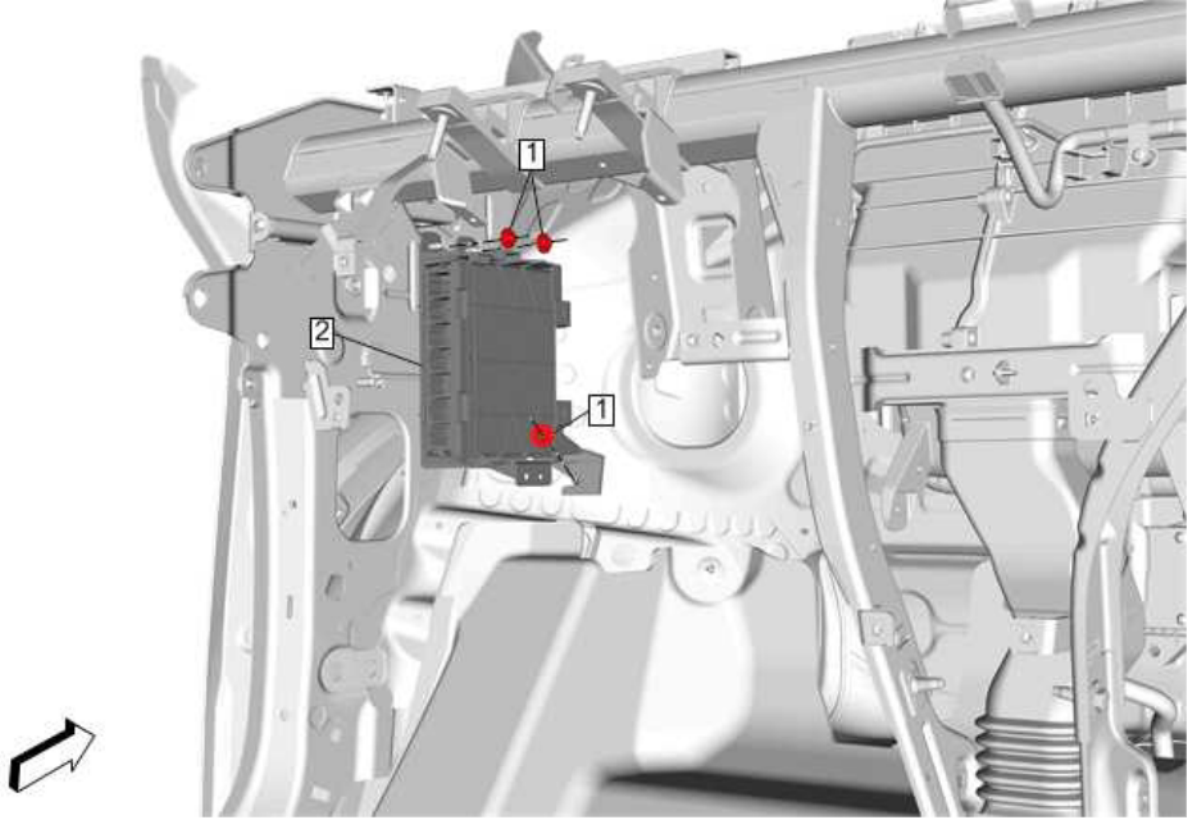


Fig. 9: Body Control Module Bracket

Courtesy of GENERAL MOTORS COMPANY

8. Body Control Module Bracket - Remove - **Body Control Module Bracket Replacement**

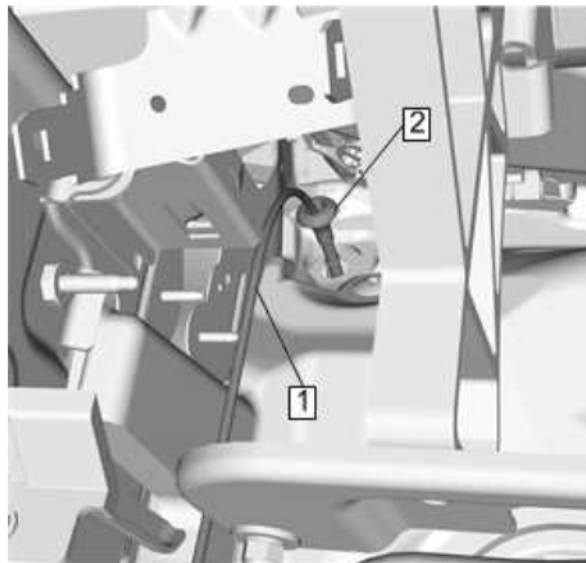


Fig. 10: Hood Primary Latch Release Cable Grommet

Courtesy of GENERAL MOTORS COMPANY

9. Remove hood primary latch release cable grommet (2) from the dash panel.

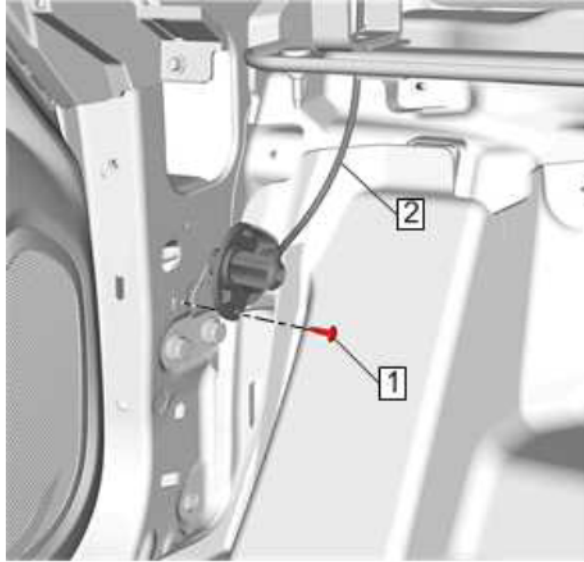


Fig. 11: Hood Primary Latch Release Cable Handle Screw
 Courtesy of GENERAL MOTORS COMPANY

10. Remove the hood primary latch release cable handle screw (1) and remove the hood primary latch release cable (2) from the hinge pillar inner panel

Installation Procedure

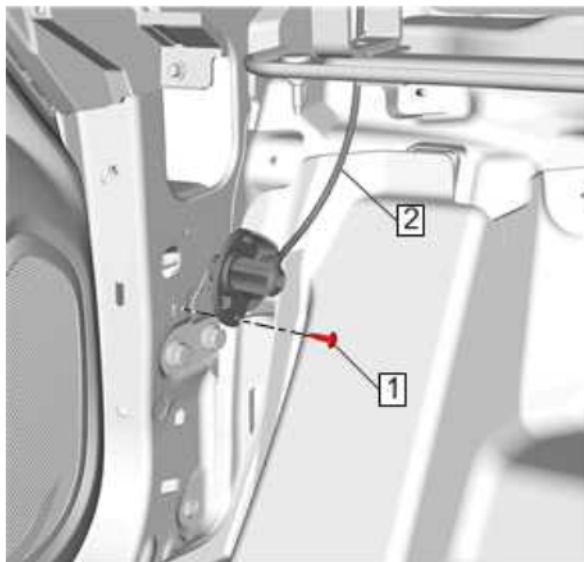


Fig. 12: Hood Primary Latch Release Cable Handle Screw
 Courtesy of GENERAL MOTORS COMPANY

1. Position the hood primary latch release cable (2) to the hinge pillar inner panel. Install the hood primary latch release cable handle screw (1) and tighten to 2 N.m (18 lb in).

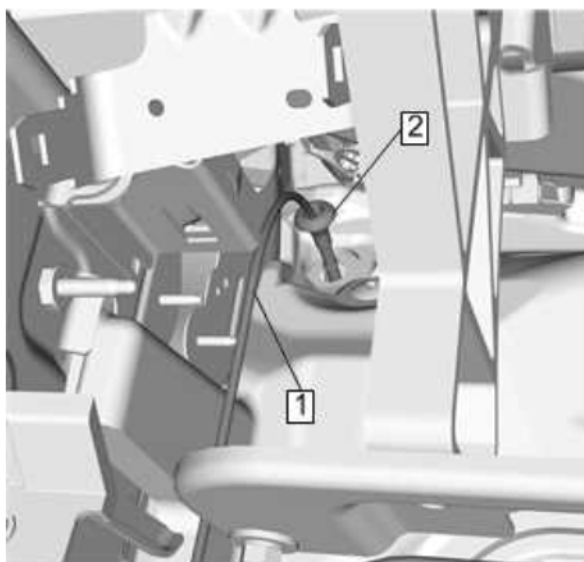


Fig. 13: Hood Primary Latch Release Cable Grommet
Courtesy of GENERAL MOTORS COMPANY

2. Install the hood primary latch release cable grommet to the dash.

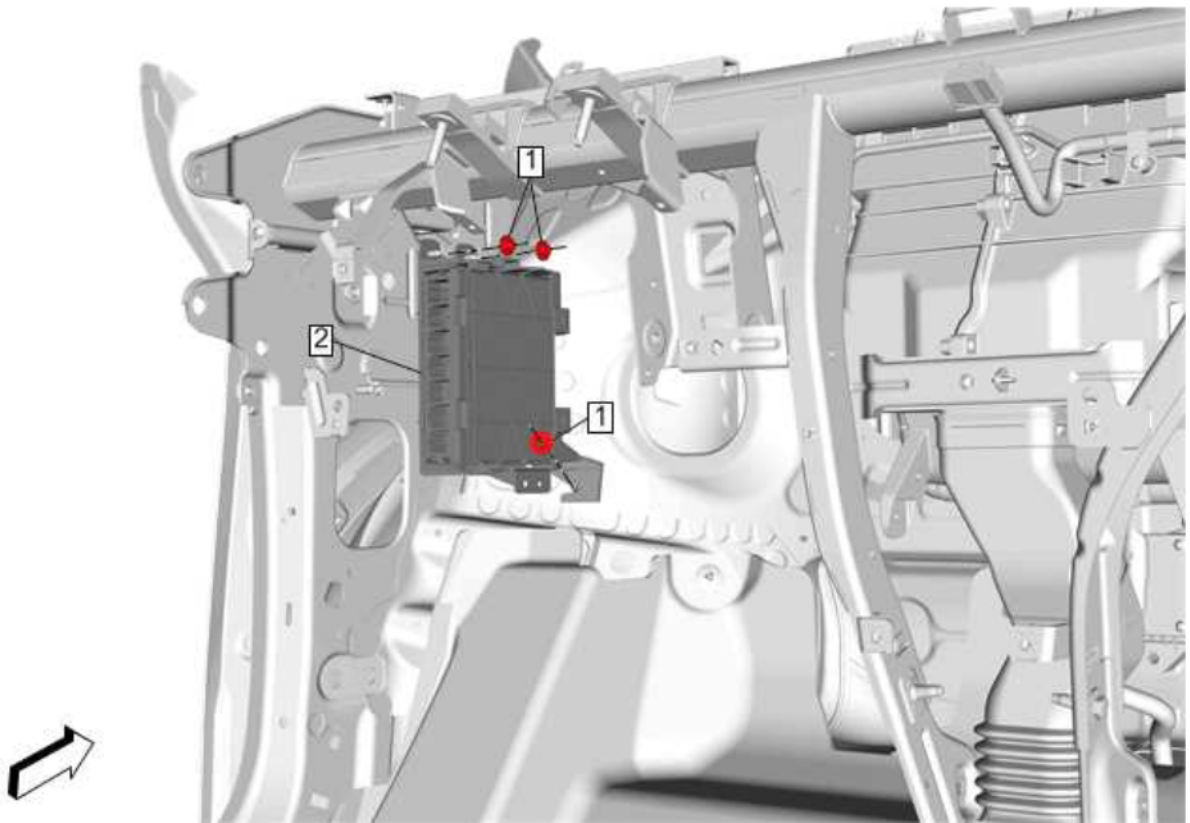


Fig. 14: Body Control Module Bracket
Courtesy of GENERAL MOTORS COMPANY

3. Body Control Module Bracket - Install - **Body Control Module Bracket Replacement**

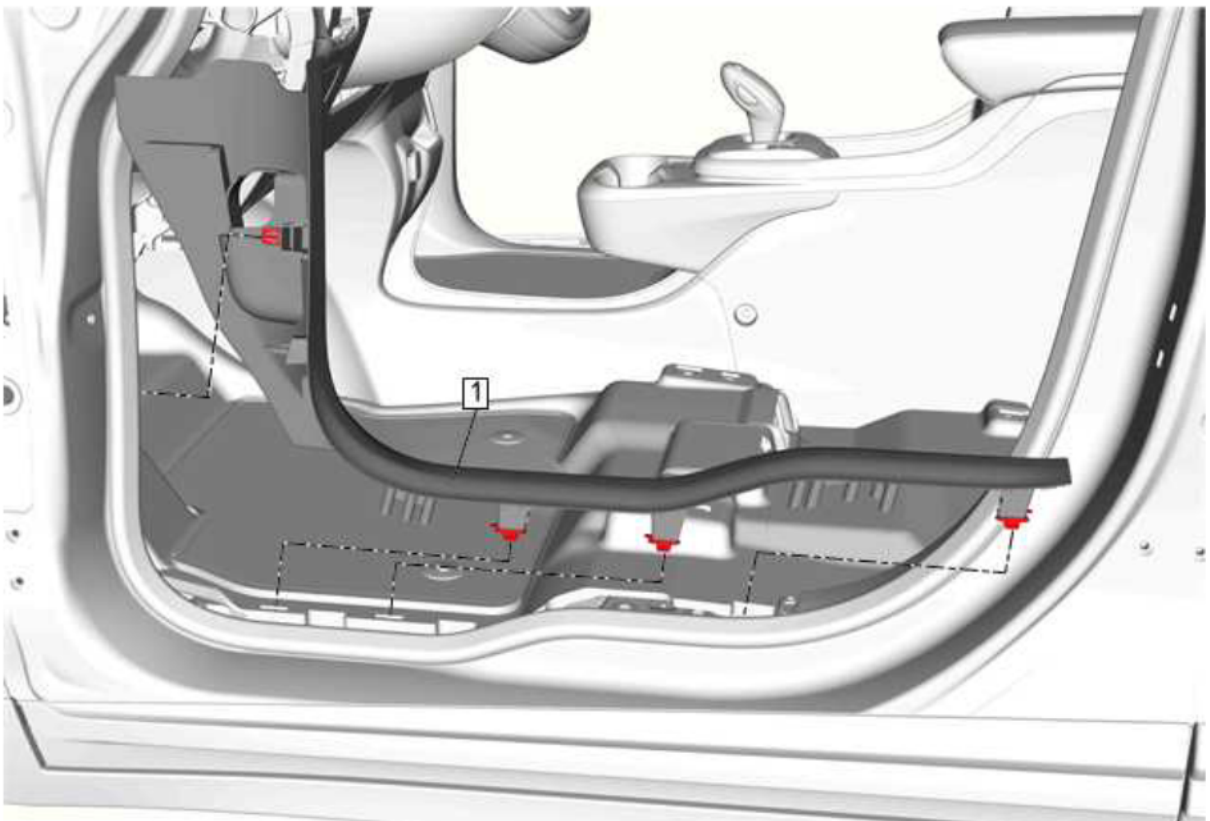


Fig. 15: Front Side Door Sill Garnish Molding
Courtesy of GENERAL MOTORS COMPANY

4. Front Side Door Sill Garnish Molding - Install - **Front Side Door Sill Garnish Molding Replacement**

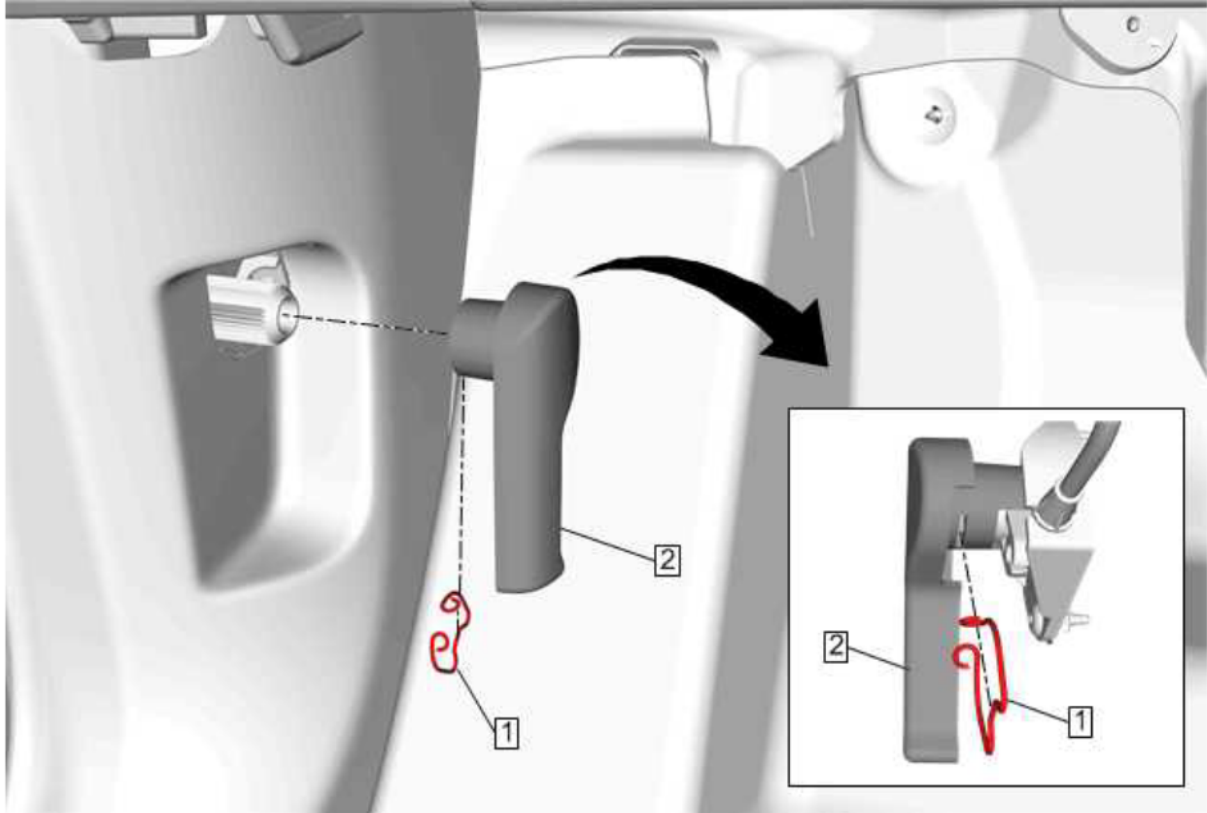


Fig. 16: Hood Primary Latch Release Cable Handle

Courtesy of GENERAL MOTORS COMPANY

5. Hood Primary Latch Release Cable Handle - Install - **Hood Primary Latch Release Cable Handle Replacement**

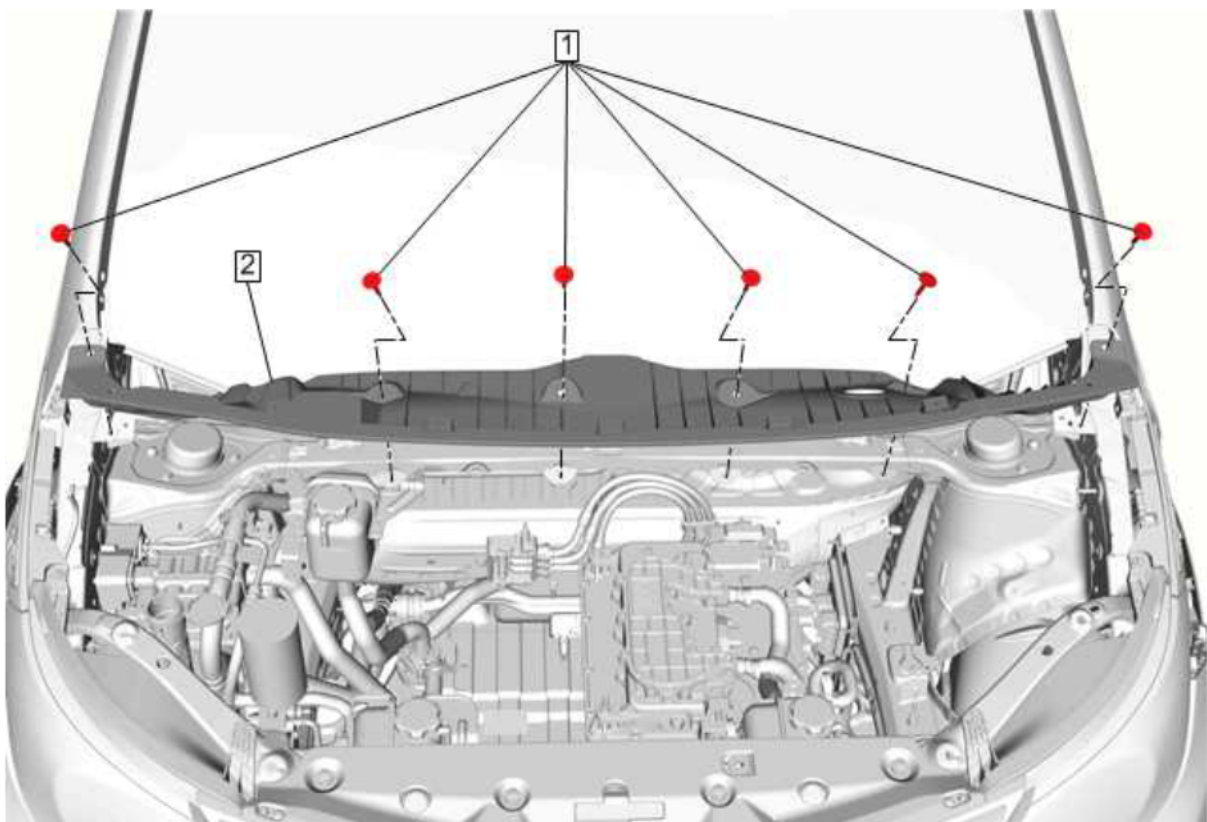


Fig. 17: Dash Panel Upper Extension Panel Extension

Courtesy of GENERAL MOTORS COMPANY

6. Dash Panel Upper Extension Panel Extension - Install - **Dash Panel Upper Extension Panel Extension Replacement**

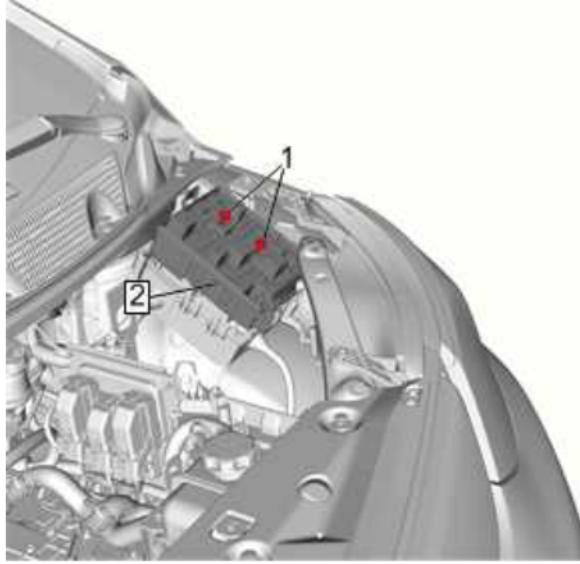


Fig. 18: Engine Wiring Harness Junction Block
 Courtesy of GENERAL MOTORS COMPANY

7. Engine Wiring Harness Junction Block - Install - **Engine Wiring Harness Junction Block Replacement**

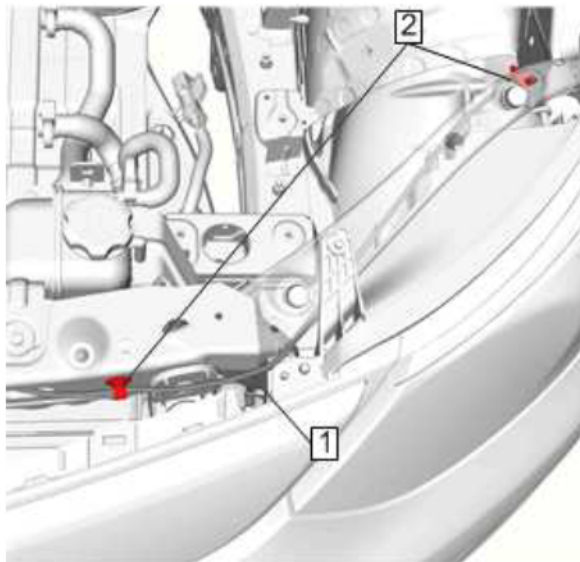


Fig. 19: Hood Primary Latch Release Cable
 Courtesy of GENERAL MOTORS COMPANY

8. Install the hood primary latch release cable (1) to the hood release cable retainers (2).

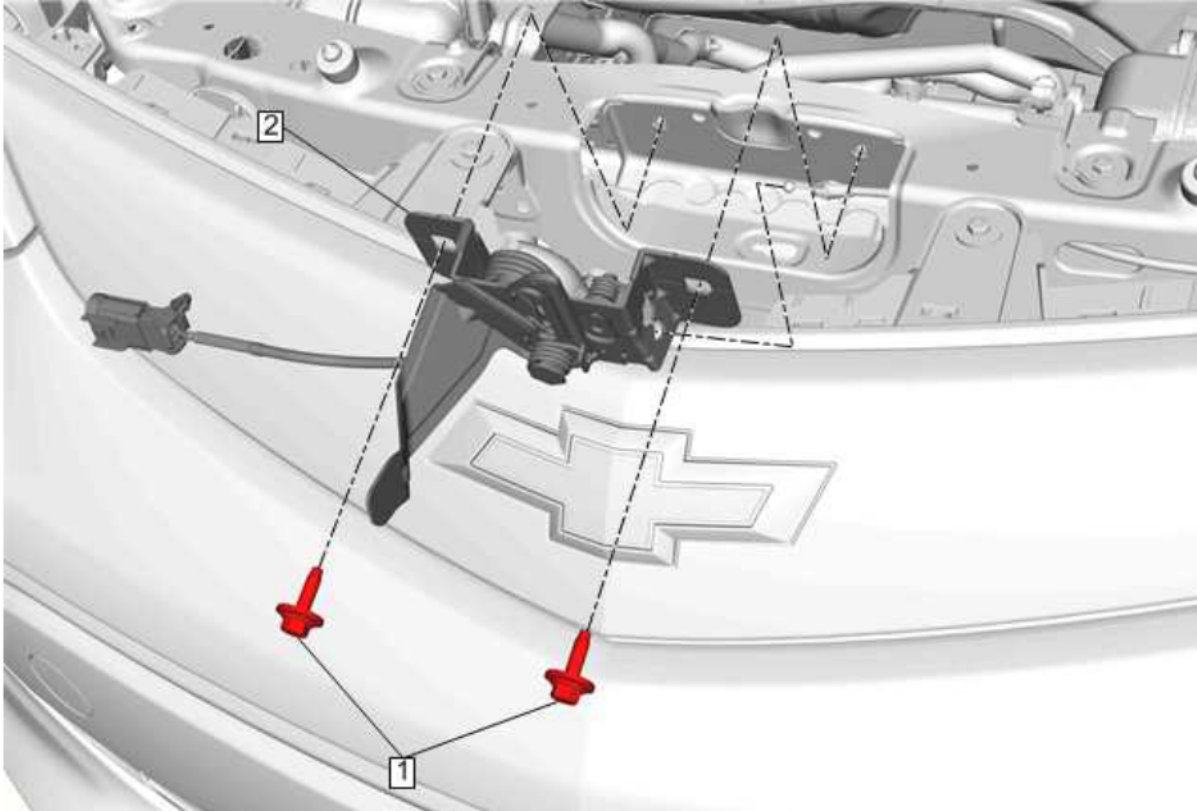


Fig. 20: Hood Primary and Secondary Latch
 Courtesy of GENERAL MOTORS COMPANY

9. Hood Primary and Secondary Latch - Install - **Hood Primary and Secondary Latch Replacement**

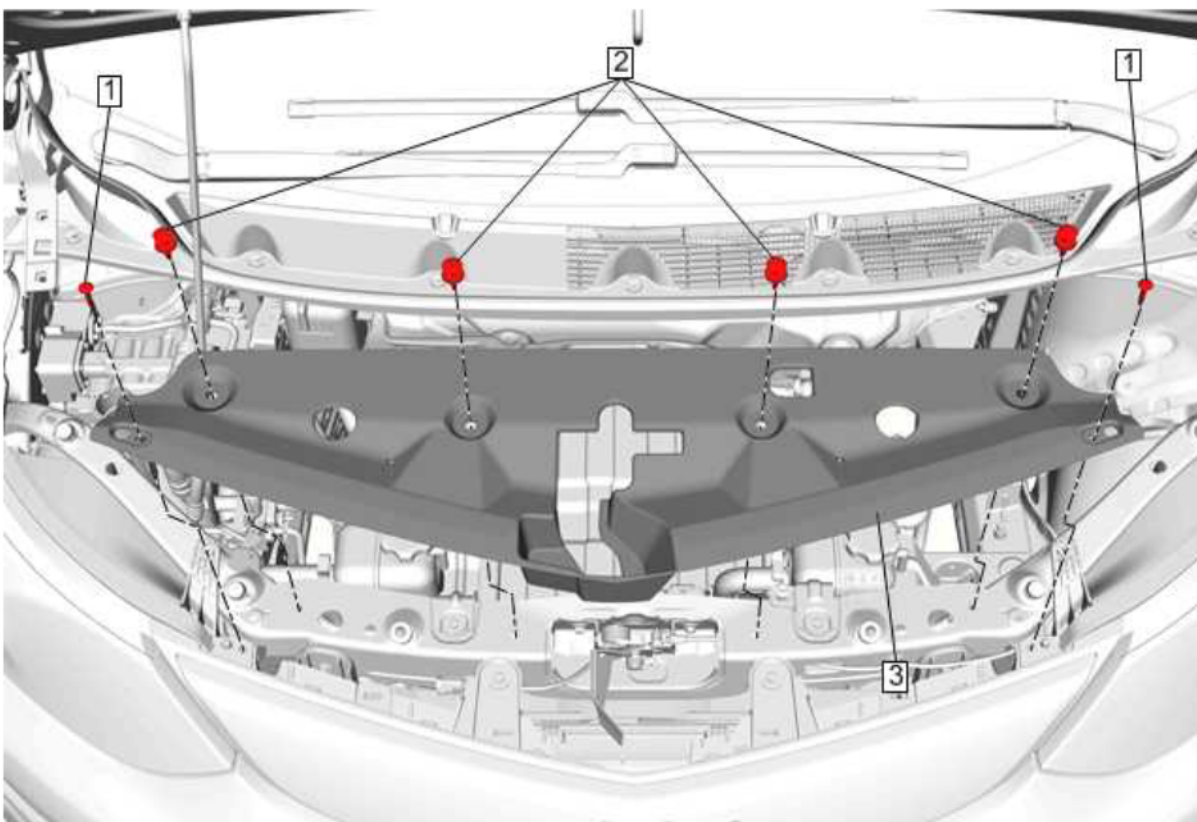


Fig. 21: Front Compartment Front Sight Shield (North America)
 Courtesy of GENERAL MOTORS COMPANY

10. Front Compartment Front Sight Shield - Install - **Front Compartment Front Sight Shield Replacement**

FRONT SIDE DOOR ADJUSTMENT

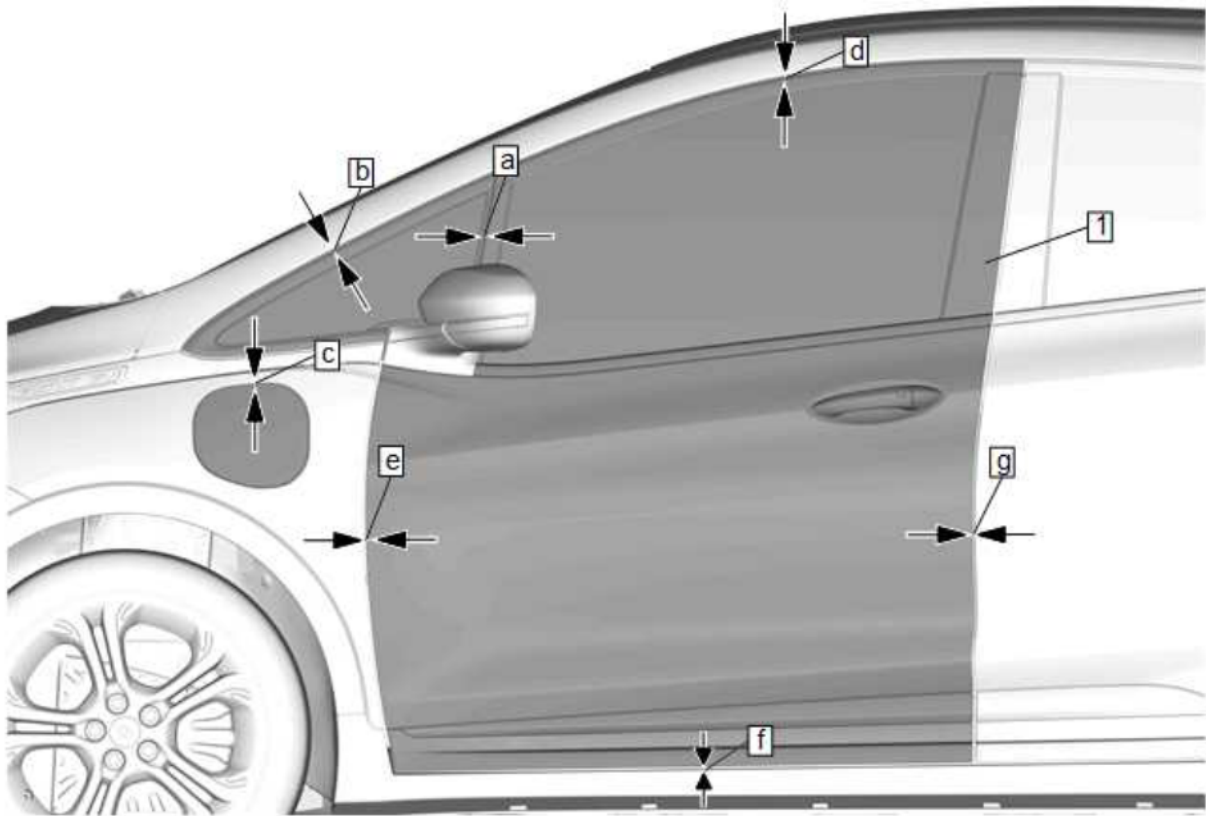


Fig. 22: Adjusting Front Side Door

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
Front Wheelhouse Liner Replacement - Remove the front fender insulator.	

Callout	Component Name
	Front Side Door CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the 4 front side door hinge bolts to adjust the front side door. 2. Adjust the front side door in order to obtain an even gap between the front side door and the body side, the rear door, the rocker panel, the fixed glass and the front fender. Adjustment: 1 • Front side door to fixed glass molding (a) 5.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.25$ mm (0.19 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.05$ in) • Fixed glass to body side (b) 5.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.0$ mm (0.19 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.04$ in) • Fuel filler door to fender (c) 2.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 0.5$ mm (0.08 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.02$ in) • Front side door to bodyside (d) 5.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.0$ mm (0.19 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.04$ in) • Front side door to fender (e) 4.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 0.75$ mm (0.16 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.03$ in) • Front side door to rocker panel (f) 5.5 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.5$ mm (0.21 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.06$ in) • Front side door to rear side door (g) 4.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 0.75$ mm (0.16 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.03$ in) Tighten 32 N.m (24 lb ft)

FRONT SIDE DOOR REPLACEMENT

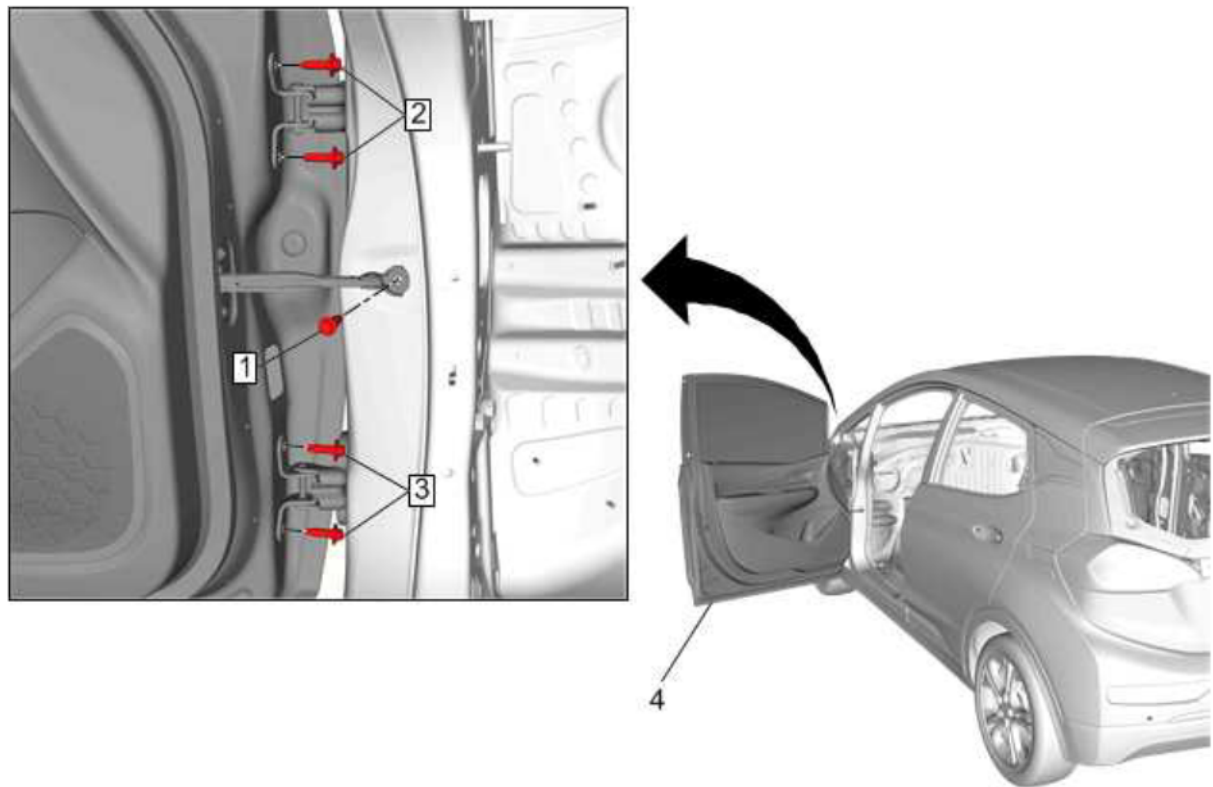


Fig. 23: Front Side Door
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Front Side Door Check Link Bolt CAUTION: <u>Fastener Caution</u> Tighten 22 N.m (16 lb ft)
2	Front Side Door Upper Hinge Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Front Side Door Lower Hinge Bolt (Qty: 2) Tighten 25 N.m (18 lb ft) Procedure 1. Apply tape to the fender and door edges to protect the surfaces. 2. Support the door before removing the hinge bolts. 3. Disconnect the electrical connector. 4. Reposition the door away from the vehicle to gain access to the connector.
4	Front Side Door Procedure 1. Transfer all of the internal components. 2. Adjust the front side door as needed. <u>Front Side Door Adjustment.</u>

REAR SIDE DOOR ADJUSTMENT

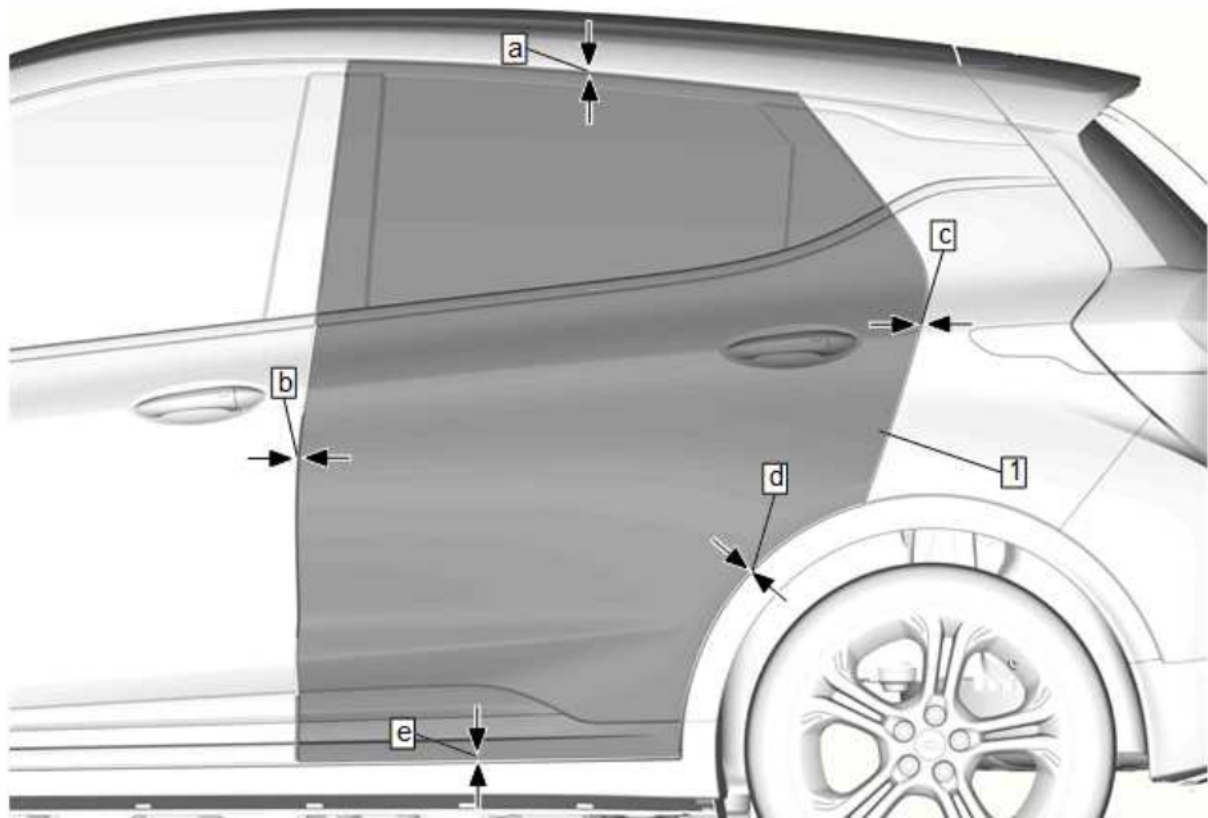


Fig. 24: Adjusting Rear Side Door

Courtesy of GENERAL MOTORS COMPANY

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Callout	Component Name
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Callout	Component Name
	Rear Side Door CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the 4 rear door hinge bolts to adjust the rear door. 2. Adjust the rear door in order to obtain an even gap between the rear door and the body side, the quarter outer panel, the wheelhouse molding, the rocker panel and the front side door. 1 Adjustment • Rear side door to bodyside (a) 5.0 mm $\tilde{A}, \hat{A} \pm 1.0$ mm (0.19 in $\tilde{A}, \hat{A} \pm 0.04$ in) • Rear side door to front side door (b) 4.0 mm $\tilde{A}, \hat{A} \pm 0.75$ mm (0.16 in $\tilde{A}, \hat{A} \pm 0.03$ in) • Rear side door to quarter outer panel (c) 4.0 mm $\tilde{A}, \hat{A} \pm 0.75$ mm (0.16 in $\tilde{A}, \hat{A} \pm 0.03$ in) • Rear side door to wheelhouse molding (d) 4.5 mm $\tilde{A}, \hat{A} \pm 1.0$ mm (0.18 in $\tilde{A}, \hat{A} \pm 0.04$ in) • Rear side door to rocker panel (e) 5.5 mm $\tilde{A}, \hat{A} \pm 1.5$ mm (0.21 in $\tilde{A}, \hat{A} \pm 0.06$ in) Tighten 32 N.m (24 lb ft)

REAR SIDE DOOR REPLACEMENT

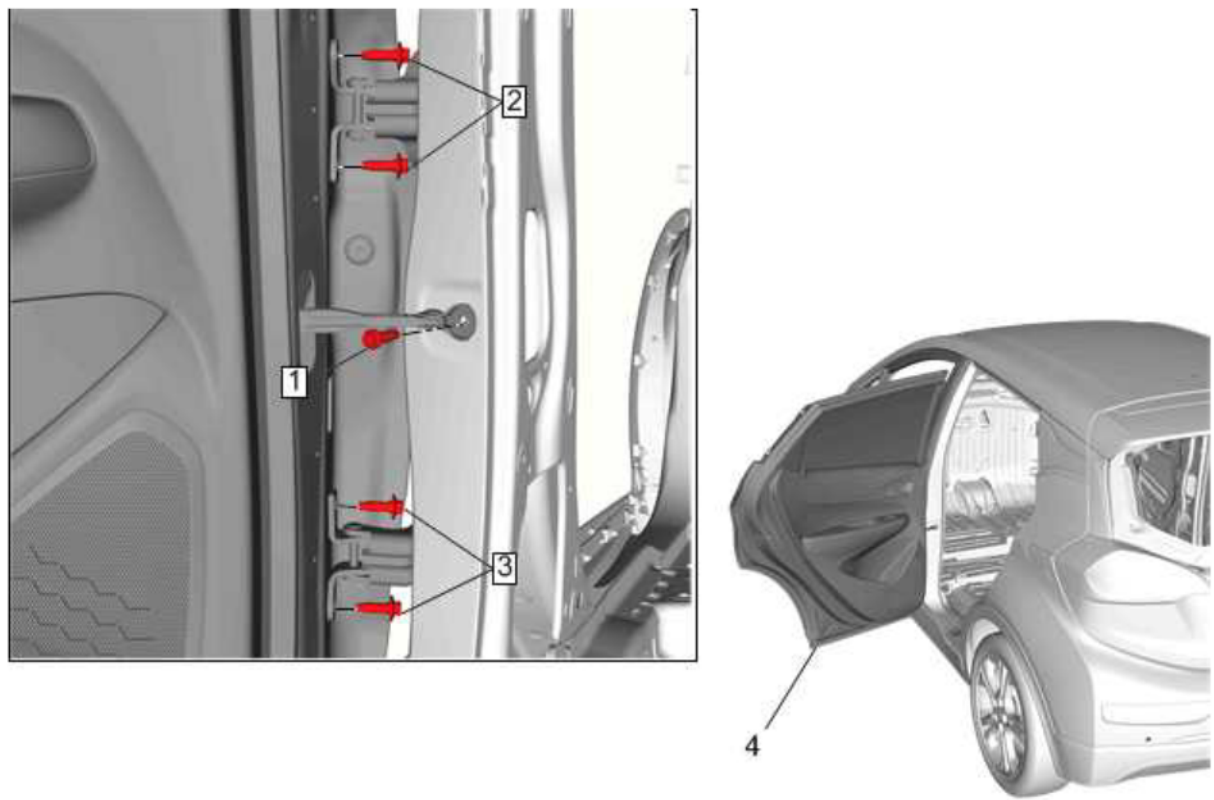


Fig. 25: Rear Side Door
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Rear Side Door Check Link Bolt CAUTION: <u>Fastener Caution</u> Tighten 22 N.m (16 lb ft)
2	Rear Side Door Upper Hinge Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Rear Side Door Lower Hinge Bolt (Qty: 2) Tighten 25 N.m (18 lb ft) Procedure 1. Disconnect the electrical connector. 2. Support the door before removing the hinge bolts.
4	Rear Side Door Procedure 1. Transfer all of the internal components. 2. Adjust the rear side door as needed. <u>Rear Side Door Adjustment</u>

FRONT FENDER REPLACEMENT - LEFT SIDE

Removal Procedure

WARNING: Always perform the High Voltage Disabling procedure prior to servicing any High Voltage component or connection. Personal Protection Equipment (PPE) and proper procedures must be followed.

The High Voltage Disabling procedure includes the following steps:

- Identify how to disable high voltage.
- Identify how to test for the presence of high voltage.
- Identify condition under which high voltage is always present and personal protection equipment (PPE) and proper procedures must be followed.

Before working on any high voltage system, be sure to wear the following Personal Protection Equipment:

- Safety glasses with appropriate side shields when within 15 meters (50 feet) of the vehicle, either indoors or outdoors.
- Certified and up-to-date Class "0" Insulation gloves rated at 1000V with leather protectors.
 - Visually and functionally inspect the gloves before use.
 - Wear the Insulation gloves with leather protectors at all times when working with the high voltage battery assembly, whether the system is energized or not.

Failure to follow the procedures may result in serious injury or death.

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CAUTION: When removing body panels, apply tape to corners of panel and adjacent

surfaces to help prevent paint damage.

1. Disable the high voltage system. [High Voltage Disabling](#)

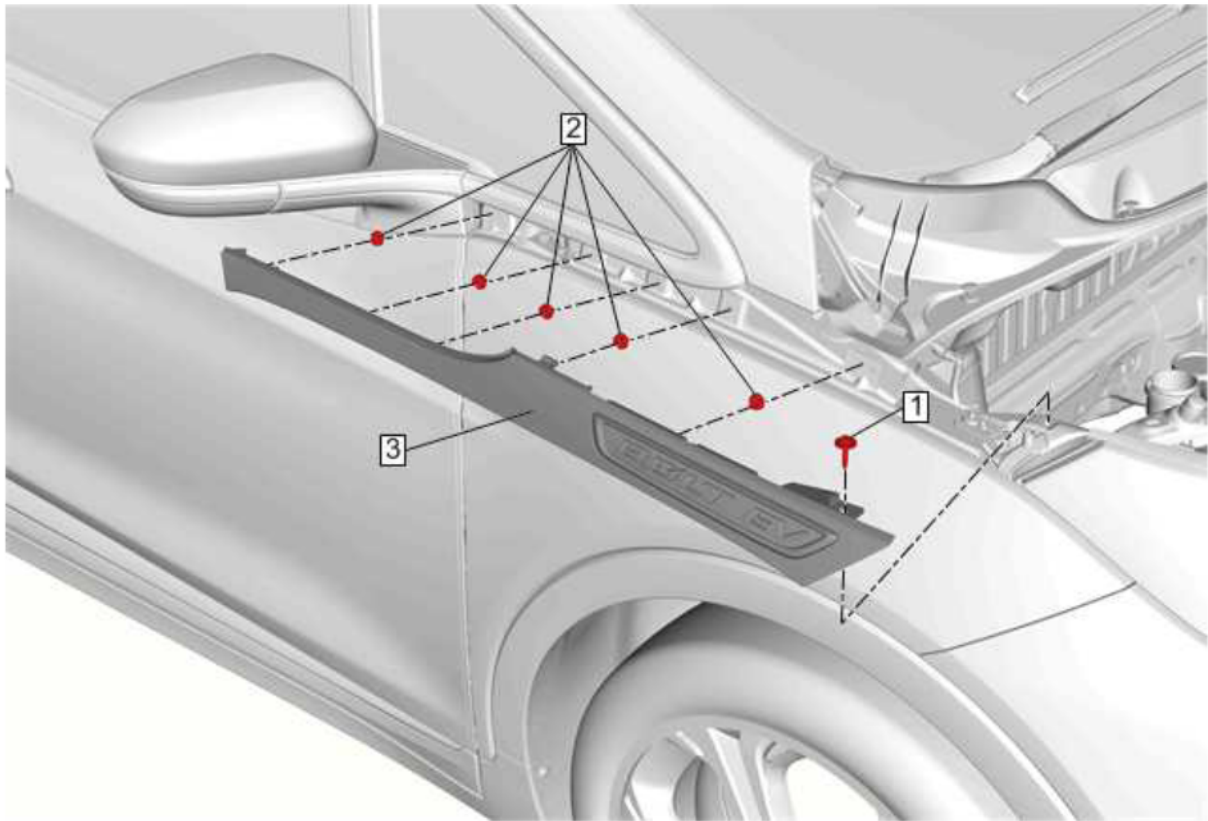


Fig. 26: Front Fender Upper Rear Molding

Courtesy of GENERAL MOTORS COMPANY

2. Front Fender Upper Rear Molding - Remove - [Front Fender Upper Rear Molding Replacement](#)

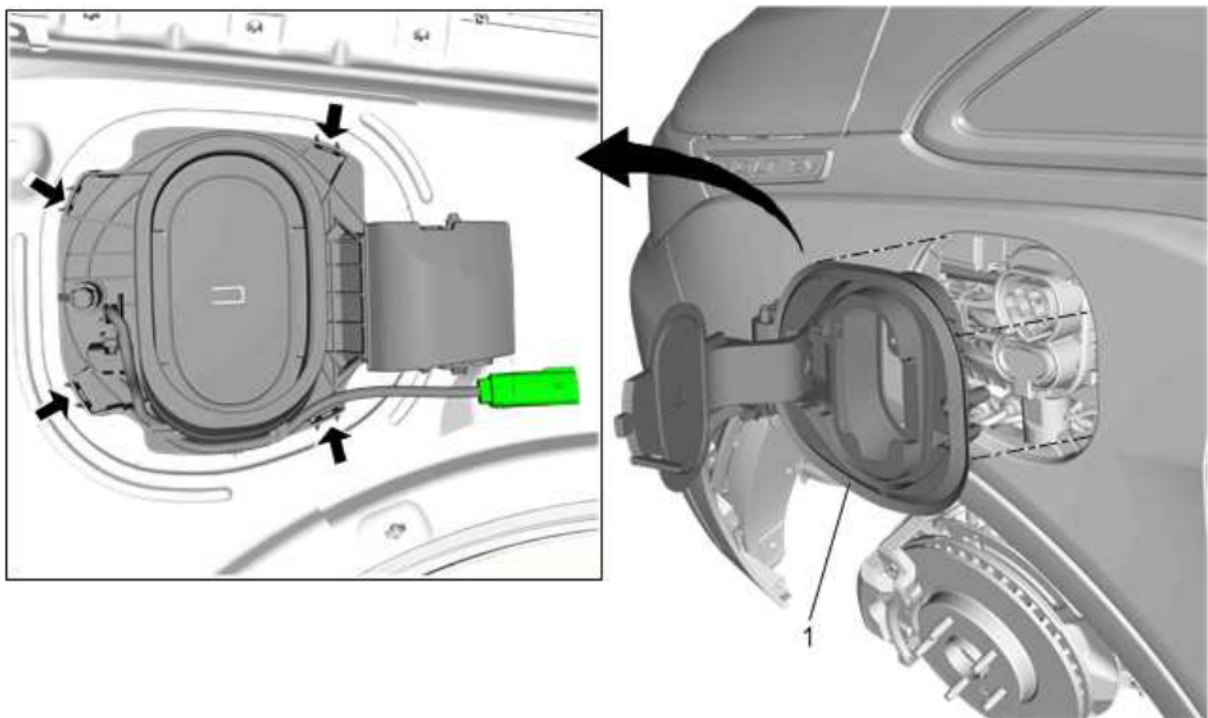


Fig. 27: Charge Port Housing

Courtesy of GENERAL MOTORS COMPANY

3. Charge Port Housing - Remove - [Charge Port Housing Replacement \(Except Dubai\)](#) [Charge Port Housing Replacement \(Dubai\)](#)

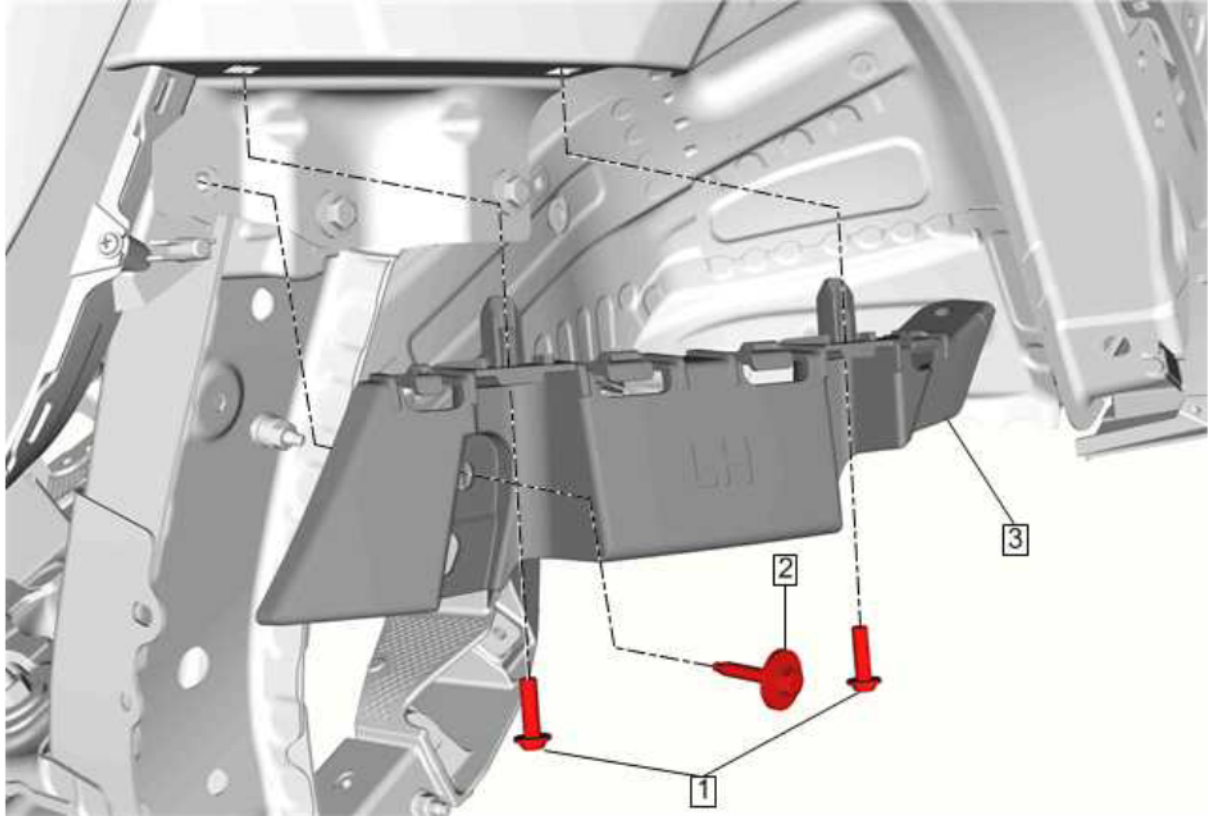


Fig. 28: Front Bumper Fascia Guide

Courtesy of GENERAL MOTORS COMPANY

4. Front Bumper Fascia Guide - Remove - **Front Bumper Fascia Guide Replacement**

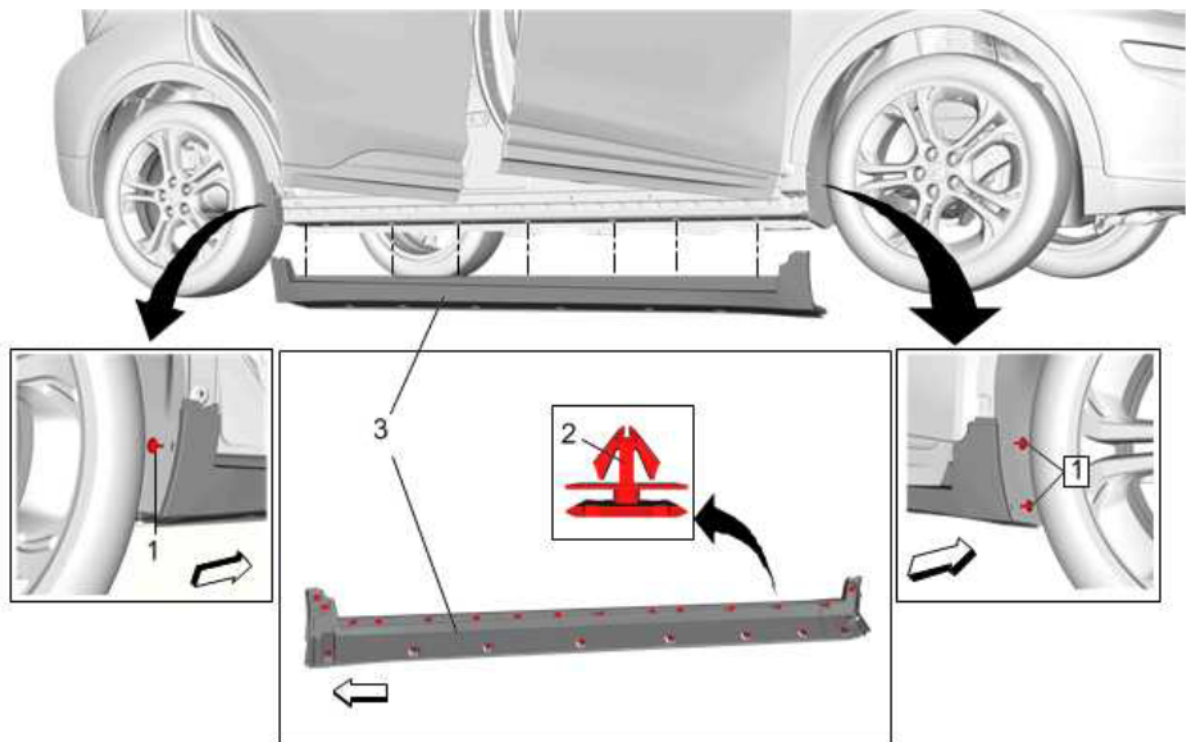


Fig. 29: Wheelhouse Liner Screw

Courtesy of GENERAL MOTORS COMPANY

5. Rocker Panel Molding - Remove - **Rocker Panel Molding Replacement**

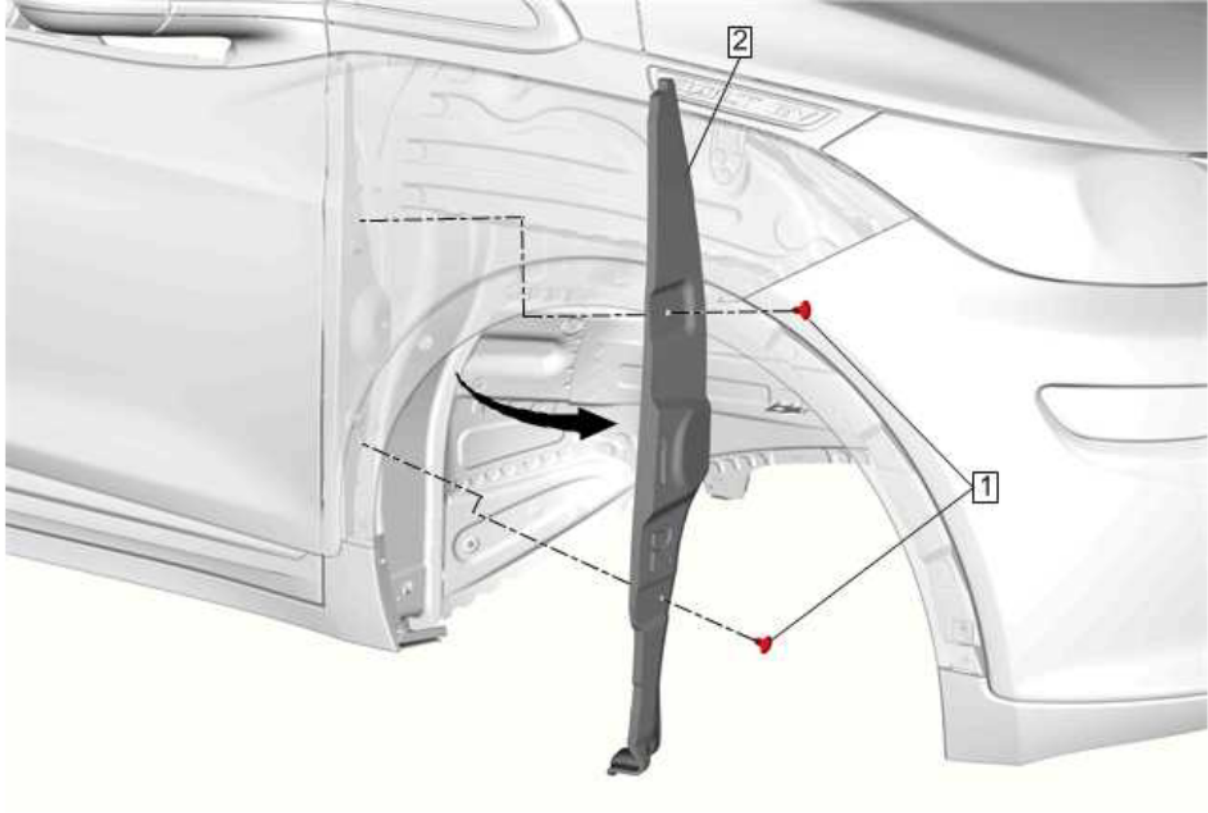


Fig. 30: Front Fender Insulator

Courtesy of GENERAL MOTORS COMPANY

6. Front Fender Insulator - Remove - **Front Fender Insulator Replacement**

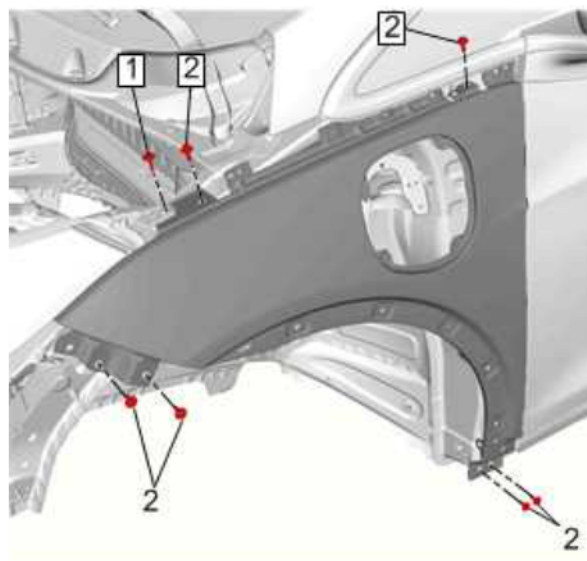


Fig. 31: Headlamp Screw

Courtesy of GENERAL MOTORS COMPANY

7. Headlamp Screw - Remove
8. Front Fender Bolt - Remove

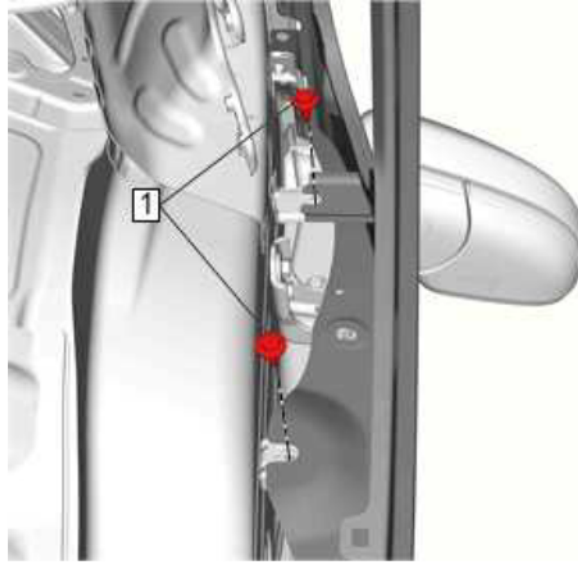


Fig. 32: Front Fender Bolt

Courtesy of GENERAL MOTORS COMPANY

9. Front Fender Bolt - Remove

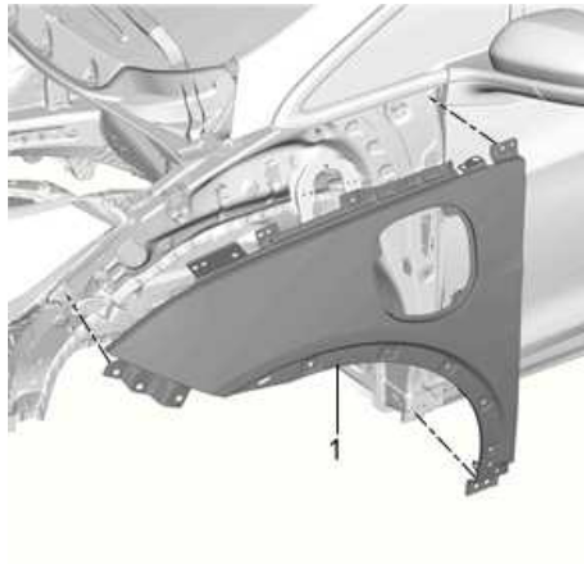


Fig. 33: Front Fender

Courtesy of GENERAL MOTORS COMPANY

10. Front Fender - Remove

Installation Procedure

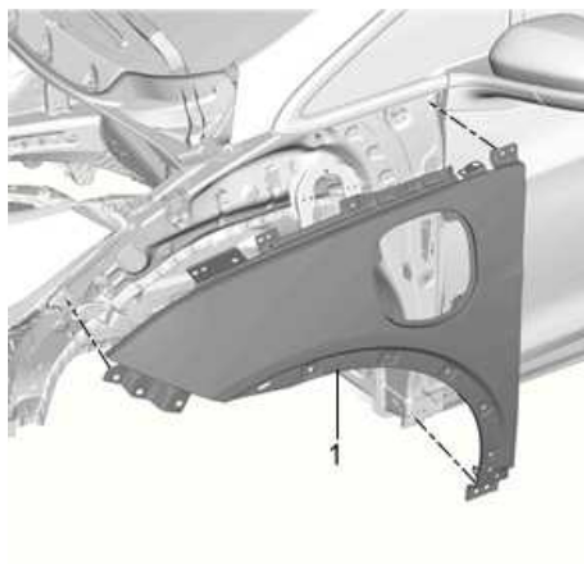


Fig. 34: Front Fender
Courtesy of GENERAL MOTORS COMPANY

1. Front Fender - Install

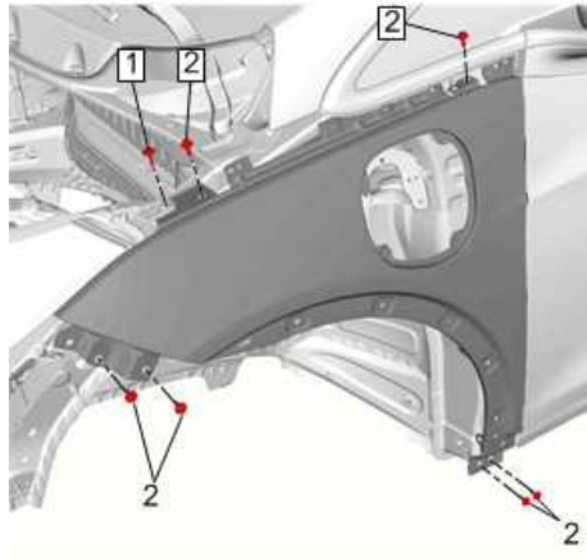


Fig. 35: Headlamp Screw
Courtesy of GENERAL MOTORS COMPANY

- 2. Headlamp Screw (1) - Install to 2.5 N.m (22 lb in)
- 3. Front Fender Bolt (2) Qty: 6) - Install to 9 N.m (80 lb in)

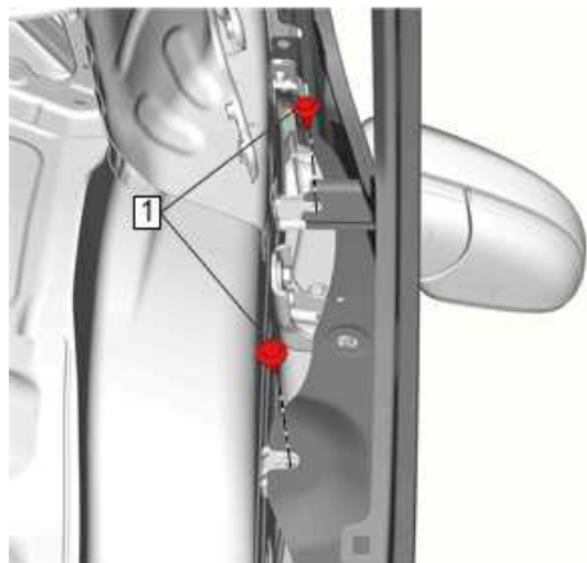


Fig. 36: Front Fender Bolt
Courtesy of GENERAL MOTORS COMPANY

- 4. Front Fender Bolt (1) Qty: 2) - Install to 9 N.m (80 lb in)

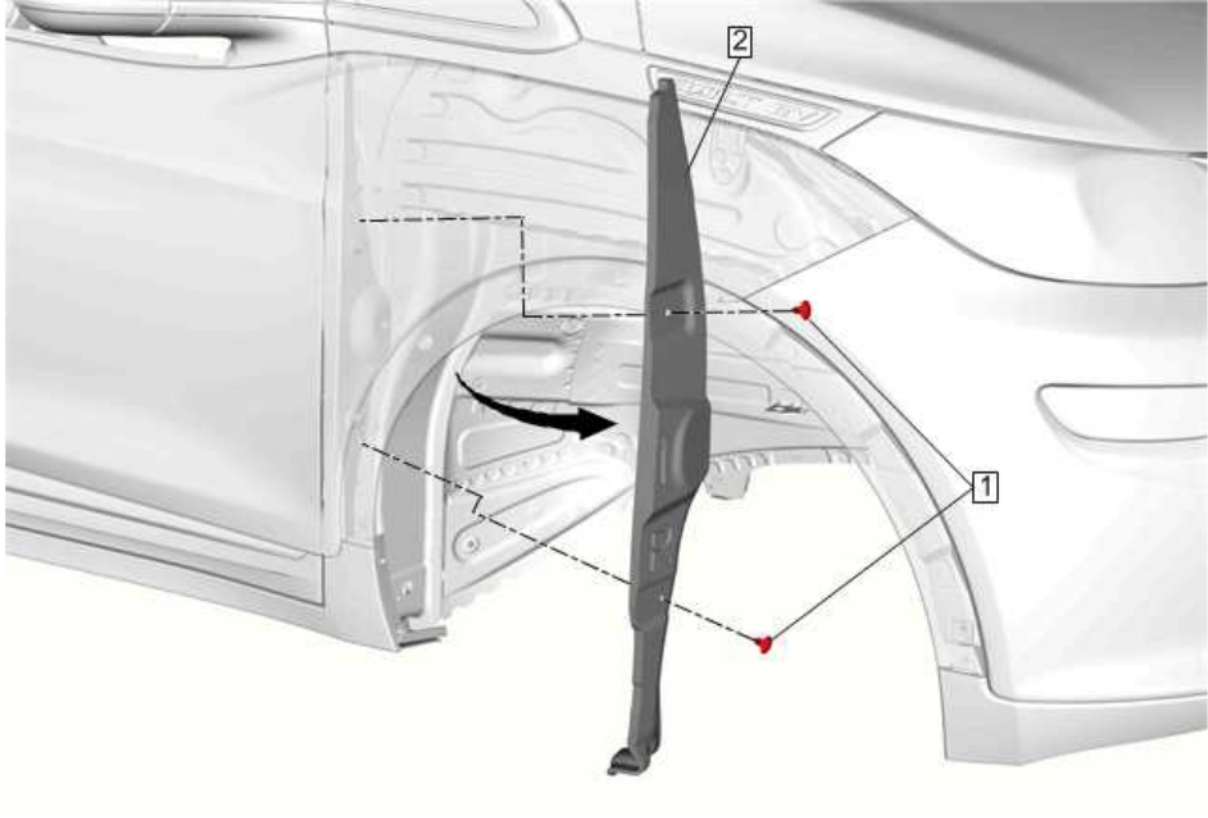


Fig. 37: Front Fender Insulator

Courtesy of GENERAL MOTORS COMPANY

5. Front Fender Insulator - Install - **Front Fender Insulator Replacement**

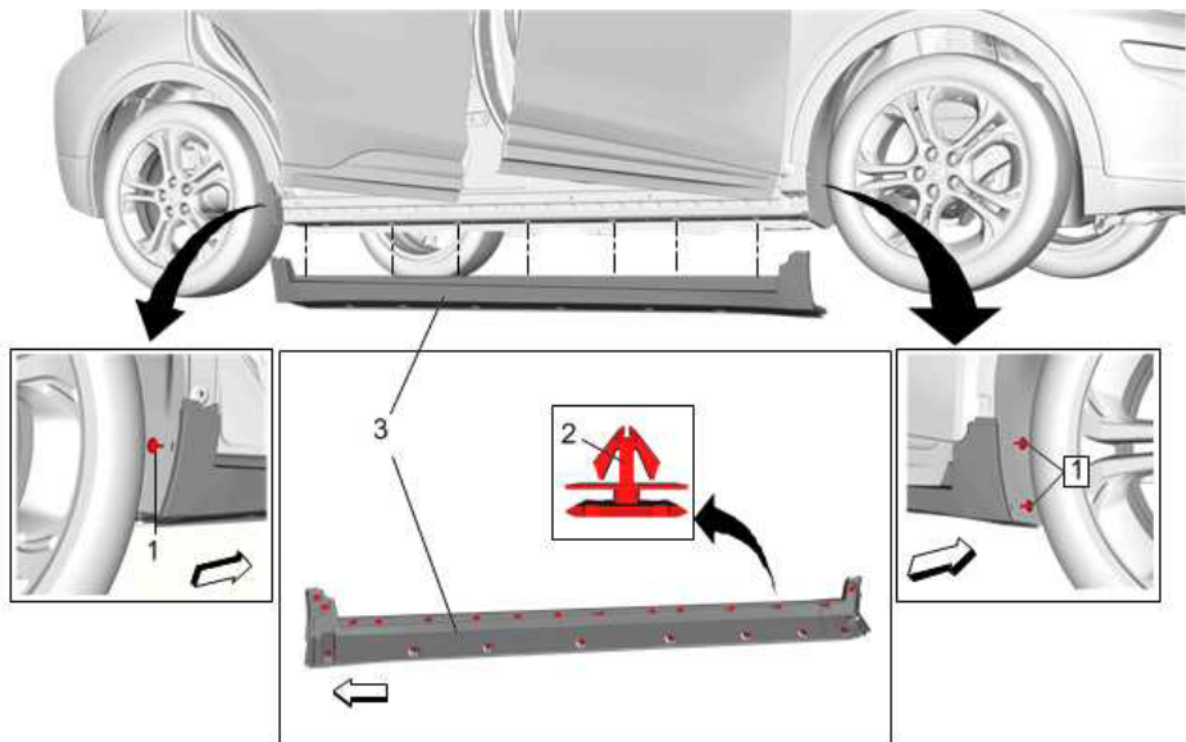


Fig. 38: Wheelhouse Liner Screw

Courtesy of GENERAL MOTORS COMPANY

6. Rocker Panel Molding - Install - **Rocker Panel Molding Replacement**

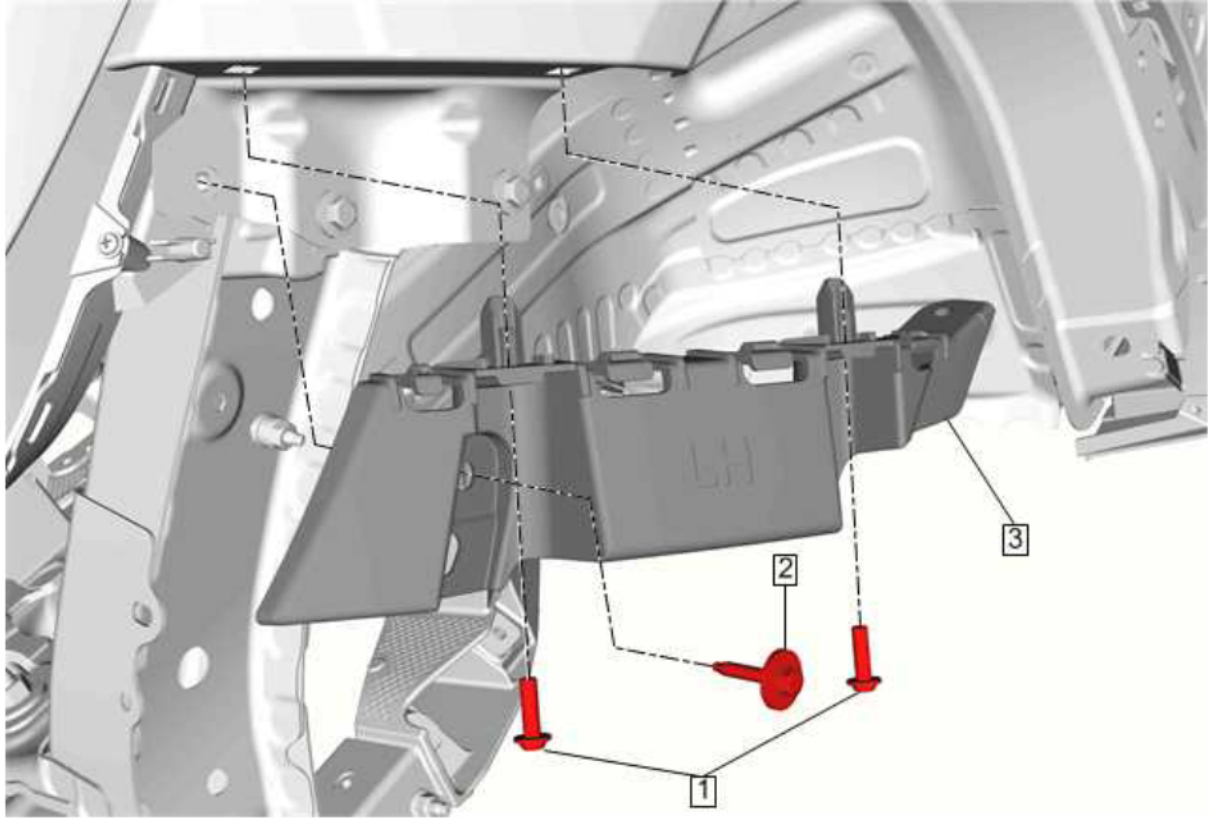


Fig. 39: Front Bumper Fascia Guide

Courtesy of GENERAL MOTORS COMPANY

7. Front Bumper Fascia Guide - Install - [**Front Bumper Fascia Guide Replacement**](#)

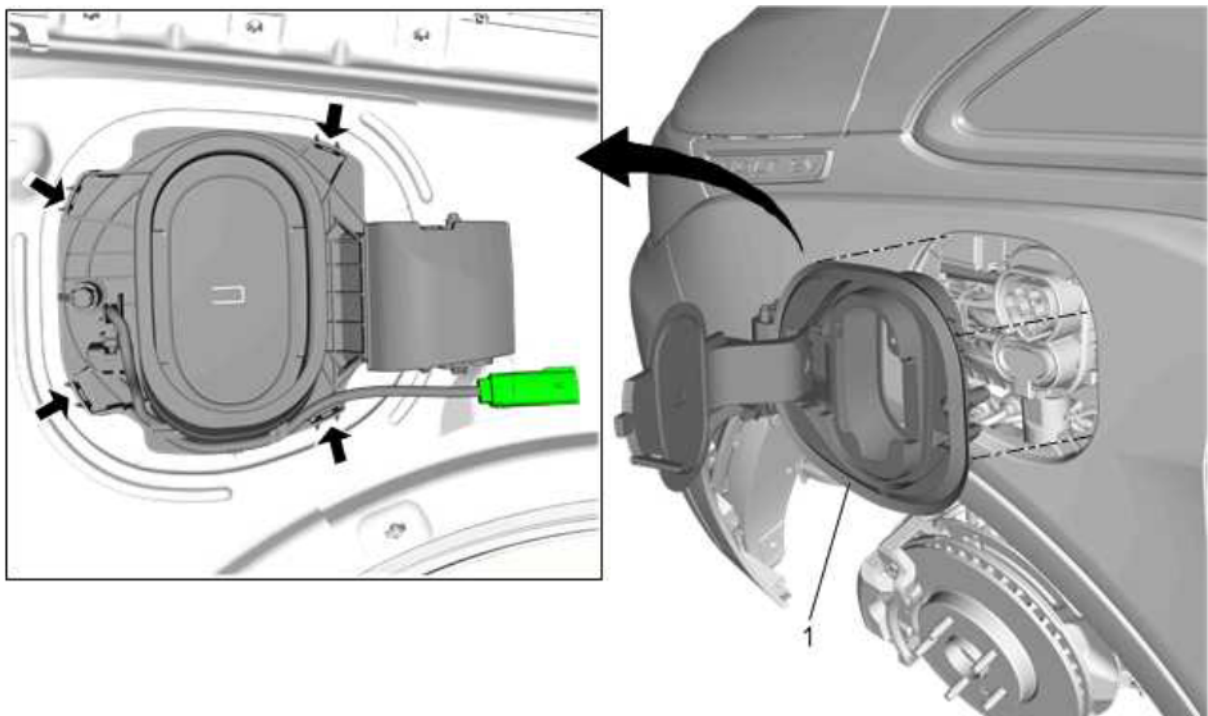


Fig. 40: Charge Port Housing

Courtesy of GENERAL MOTORS COMPANY

8. Charge Port Housing - Install - [**Charge Port Housing Replacement \(Except Dubai\)**](#) [**Charge Port Housing Replacement \(Dubai\)**](#)

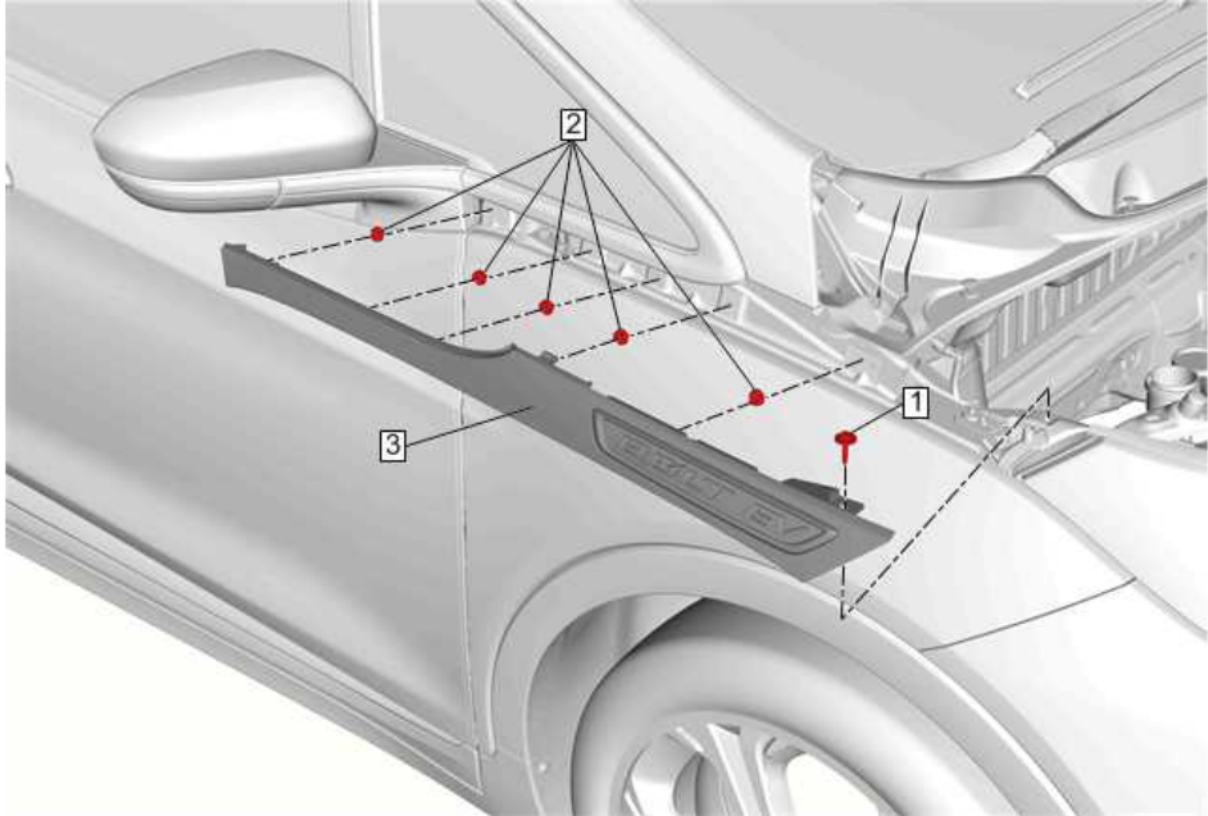


Fig. 41: Front Fender Upper Rear Molding

Courtesy of GENERAL MOTORS COMPANY

9. Front Fender Upper Rear Molding - Install - [Front Fender Upper Rear Molding Replacement](#)
10. Enable the high voltage system. [High Voltage Enabling](#)

FRONT FENDER REPLACEMENT - RIGHT SIDE

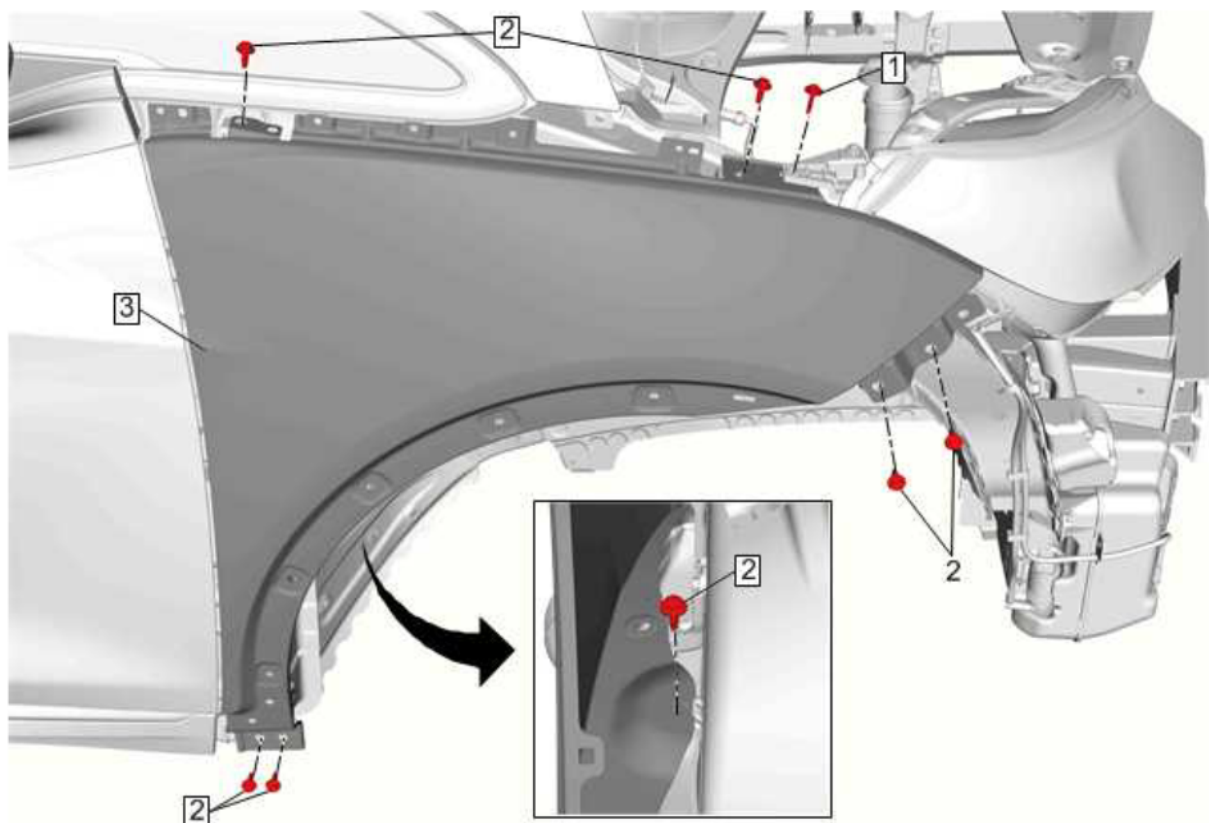


Fig. 42: Front Fender - Right Side

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
CAUTION: When removing body panels, apply tape to corners of panel and adjacent surfaces to help prevent paint damage.	
Preliminary Procedures Front Fender Upper Rear Molding Replacement Front Bumper Fascia Guide Replacement Rocker Panel Molding Replacement Front Fender Insulator Replacement	
1	Headlamp Screw CAUTION: Fastener Caution Tighten 2.5 N.m (22 lb in)
2	Front Fender Bolt (Qty: 7) Tighten 9 N.m (80 lb in)
3	Front Fender

LIFTGATE ADJUSTMENT

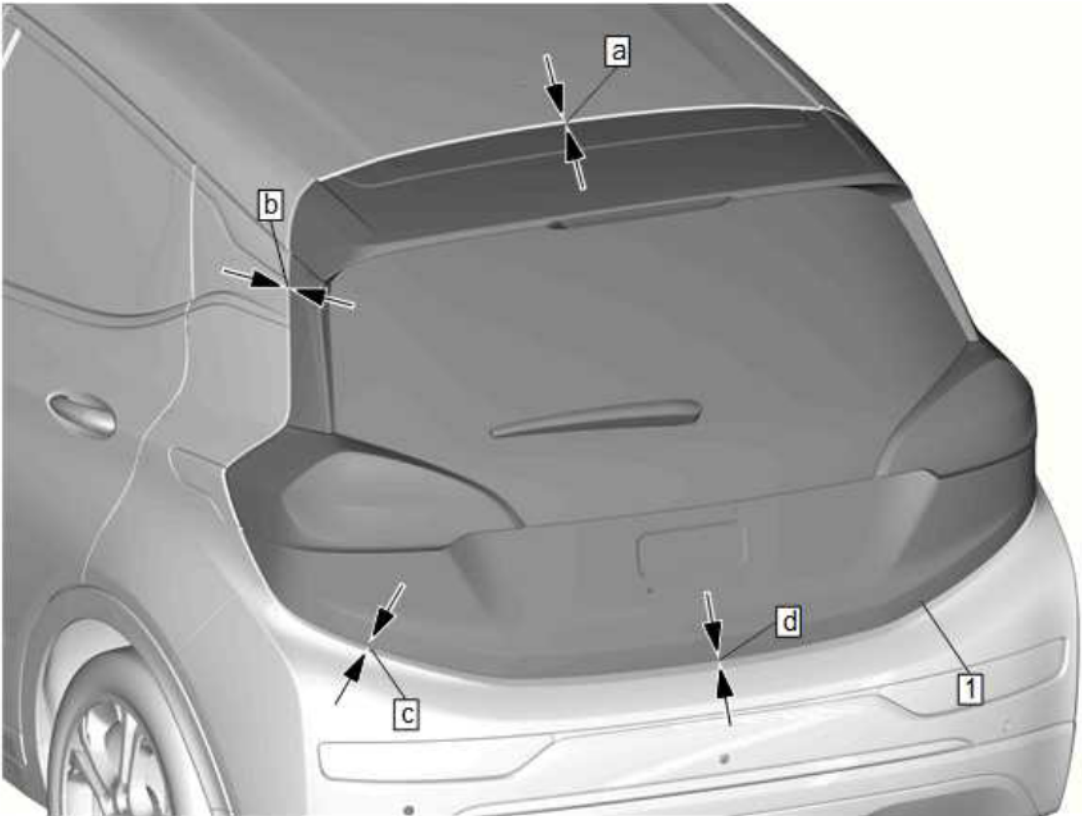


Fig. 43: Adjusting Liftgate
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
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Callout	Component Name
1	Liftgate CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the four liftgate hinge bolts to adjust the liftgate. 2. Adjust the liftgate in order to obtain an even gap between the liftgate and the roof, the quarter applique and the rear bumper fascia. Adjustment • Liftgate to roof (a) 5.5 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.0 \text{ mm}$ (0.22 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.04 \text{ in}$) • Quarter applique to body side (b) 4.5 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.2 \text{ mm}$ (0.18 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.05 \text{ in}$) • Liftgate to rear bumper fascia (c) 5.0 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.25 \text{ mm}$ (0.19 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.05 \text{ in}$) • Liftgate to rear bumper fascia (d) 5.5 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.25 \text{ mm}$ (0.20 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.05 \text{ in}$) Tighten 22 N.m (16 lb ft)

LIFTGATE REPLACEMENT



Fig. 44: Liftgate
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
WARNING: When a lift gate hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.	
Preliminary Procedure Liftgate Upper Center Trim Finish Panel Replacement - Release the liftgate strut from the liftgate. Liftgate Strut Replacement	
1	Liftgate Hinge Bolt CAUTION: Refer to Fastener Caution . Procedure - Disconnect the electrical connector. - Pull the liftgate wiring grommet, the connectors, and the rear washer hose out of the body. - Mark the location of the liftgate hinges to the body with a grease pencil. Tighten 22 N.m (16 lb ft)
2	Liftgate Procedure - With the aid of an assistant, remove the liftgate. - Transfer components as necessary. - Adjust liftgate as needed. Liftgate Adjustment

FRONT SIDE DOOR WIRING HARNESS REPLACEMENT

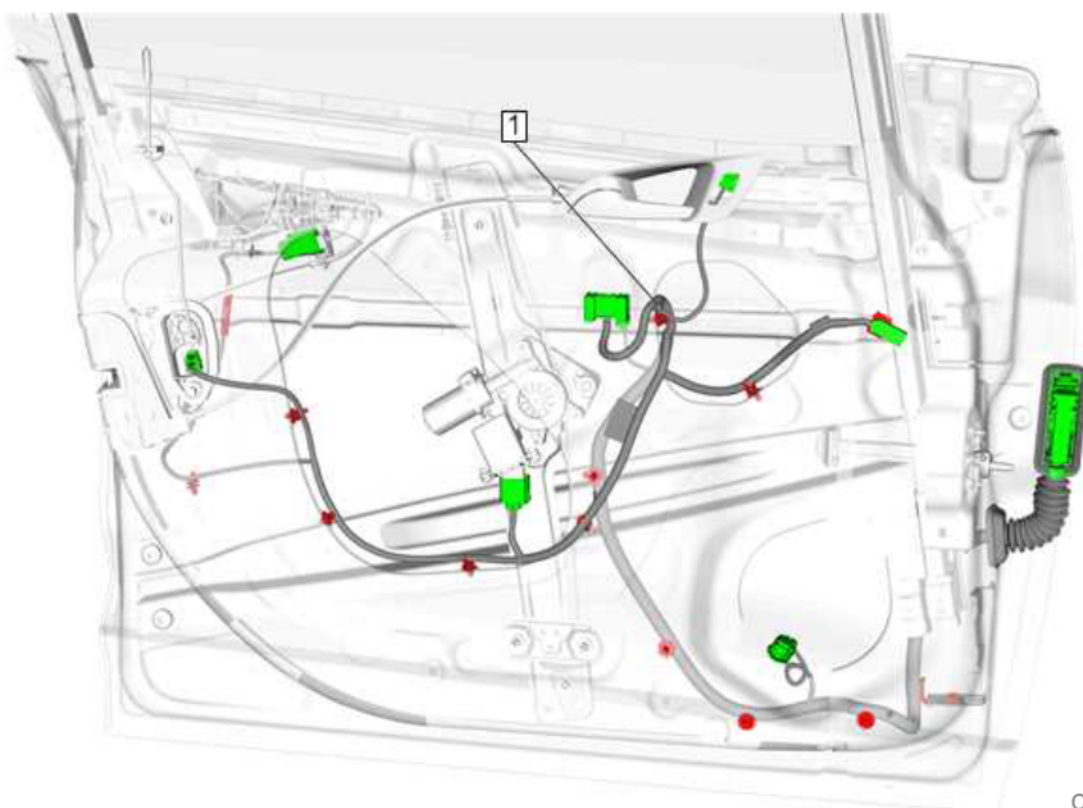


Fig. 45: Front Side Door Wiring Harness
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Front Side Door Replacement 2. Front Side Door Trim Replacement 3. Front Side Door Water Deflector Replacement 4. Radio Front Side Door Speaker Replacement	
1	Front Side Door Wiring Harness Procedure Disconnect all electrical connectors and unclip harness.

LIFTGATE WIRING HARNESS REPLACEMENT

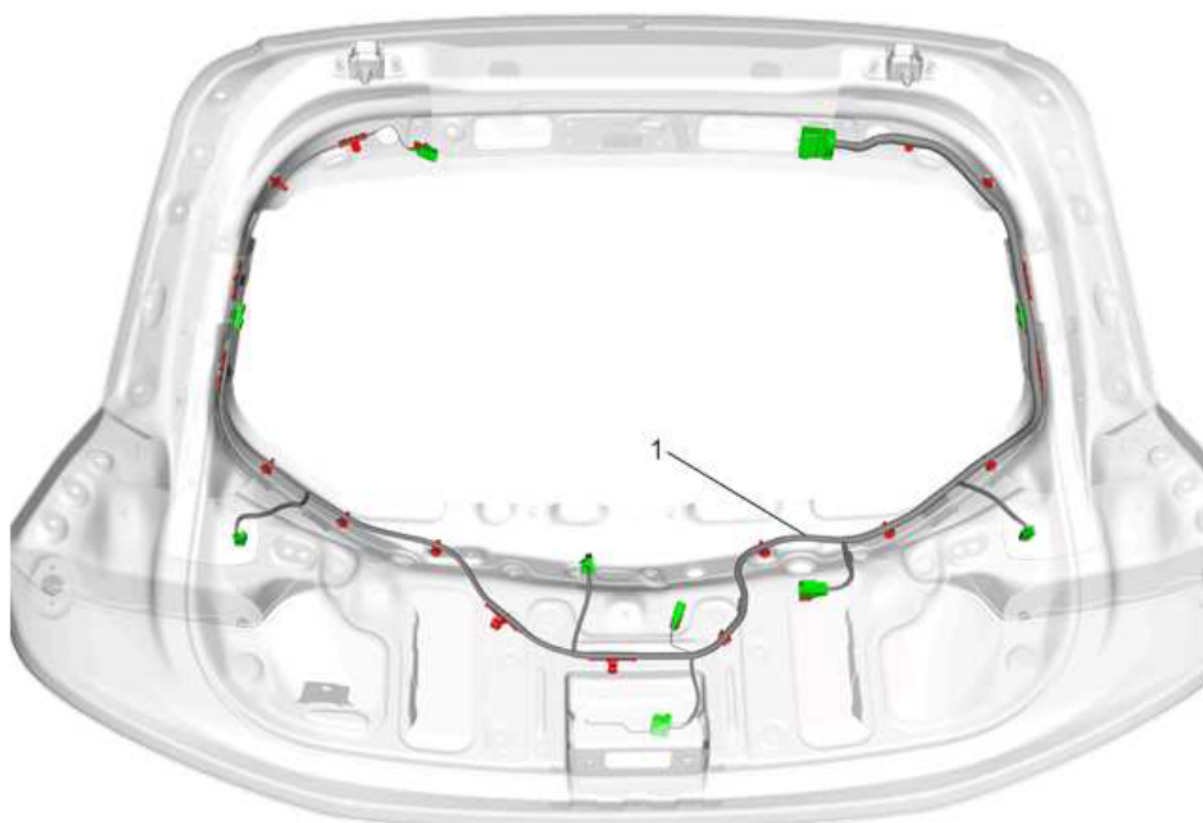


Fig. 46: Liftgate Wiring Harness
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Liftgate Upper Side Trim Finish Panel Replacement 2. Liftgate Upper Center Trim Finish Panel Replacement 3. Liftgate Lower Trim Finish Panel Replacement	
1	Liftgate Wiring Harness Procedure Disconnect all electrical connectors.

LIFTGATE JUMPER WIRING HARNESS REPLACEMENT

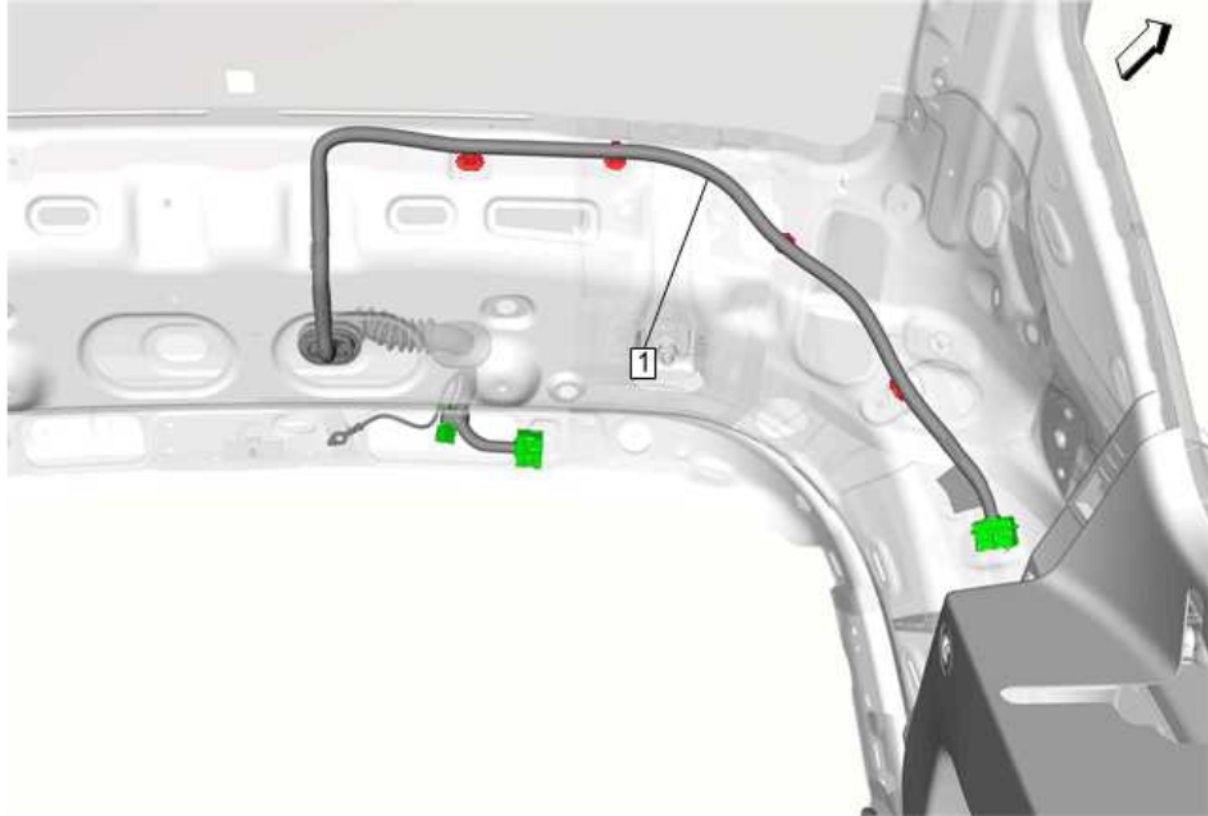


Fig. 47: Liftgate Jumper Wiring Harness
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Liftgate Upper Center Trim Finish Panel Replacement	
2. Lower the rear portion of headlining trim to gain access. Do not need to completely remove the headlining trim. Headlining Trim Panel Replacement	
1	Liftgate Jumper Wiring Harness Procedure Disconnect all electrical connectors.

REAR SIDE DOOR WIRING HARNESS REPLACEMENT

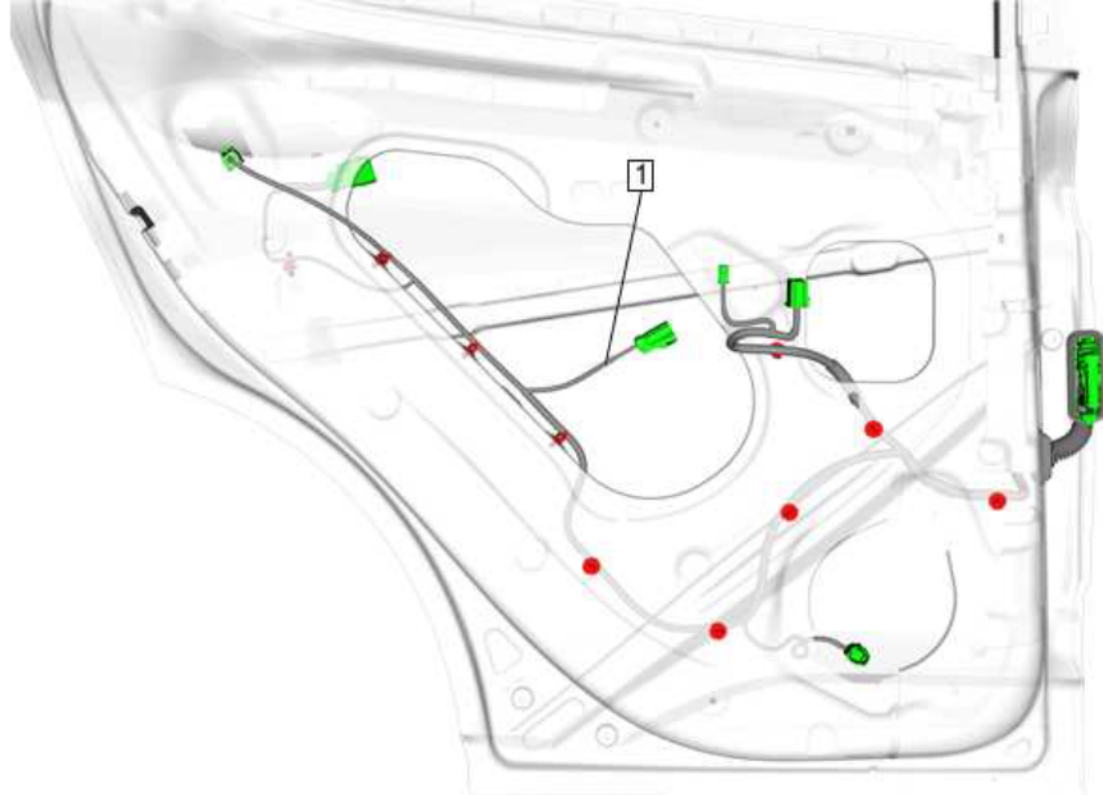


Fig. 48: Rear Side Door Wiring Harness
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Rear Side Door Trim Replacement 2. Rear Side Door Water Deflector Replacement 3. Radio Rear Side Door Speaker Replacement	
1	Rear Side Door Wiring Harness Procedure Disconnect all electrical connectors and unclip harness.

HOOD PRIMARY LATCH RELEASE CABLE HANDLE REPLACEMENT

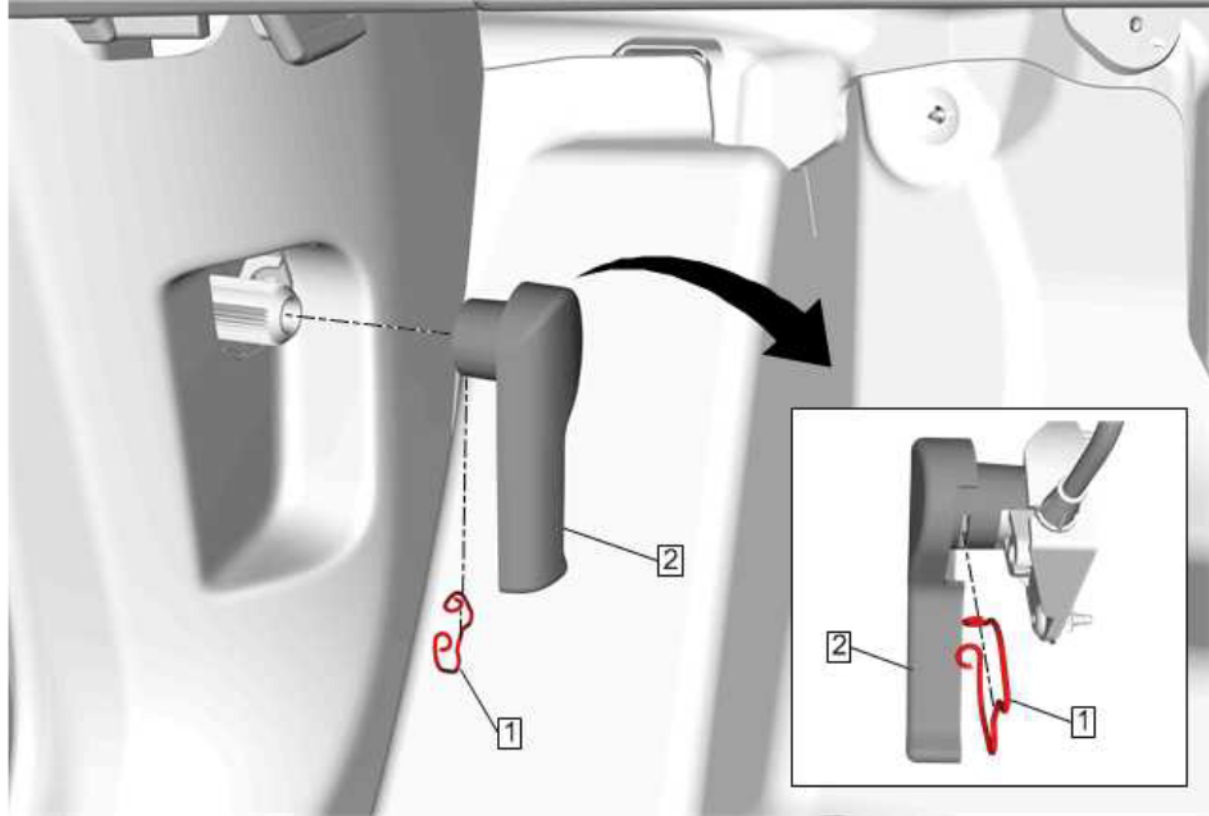


Fig. 49: Hood Primary Latch Release Cable Handle

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Primary Latch Release Cable Handle Clip Procedure Pull down to remove the clip from the hood primary latch release cable handle.
2	Hood Primary Latch Release Cable Handle

FRONT SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT

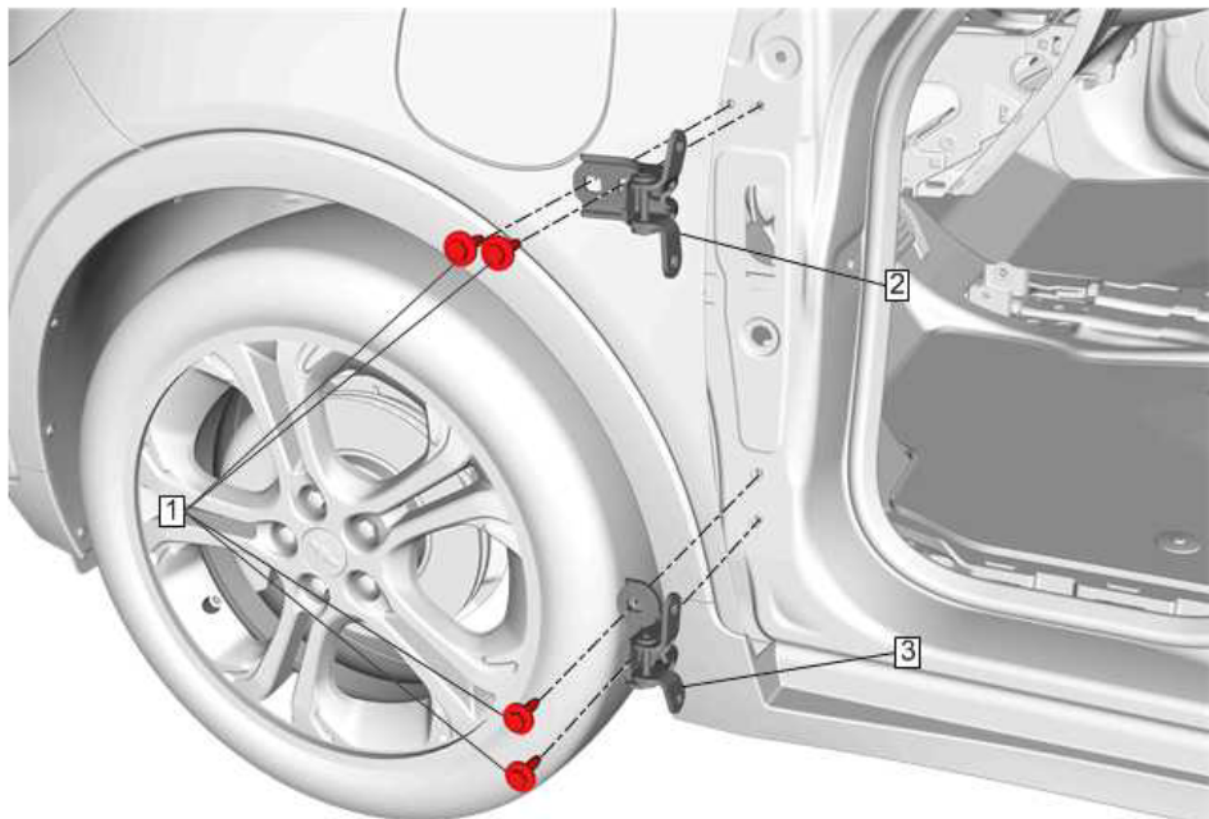


Fig. 50: Front Side Door Upper Hinge and Lower Hinge

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Front Side Door Replacement - Mark the location of the old hinges.	
1	Front Side Door Hinge Bolt (Qty: 4) CAUTION: Fastener Caution Tighten 32 N.m (24 lb ft)
2	Front Side Door Upper Hinge
3	Front Side Door Lower Hinge Procedure Adjust the front side door as needed. Front Side Door Adjustment

HOOD HINGE REPLACEMENT

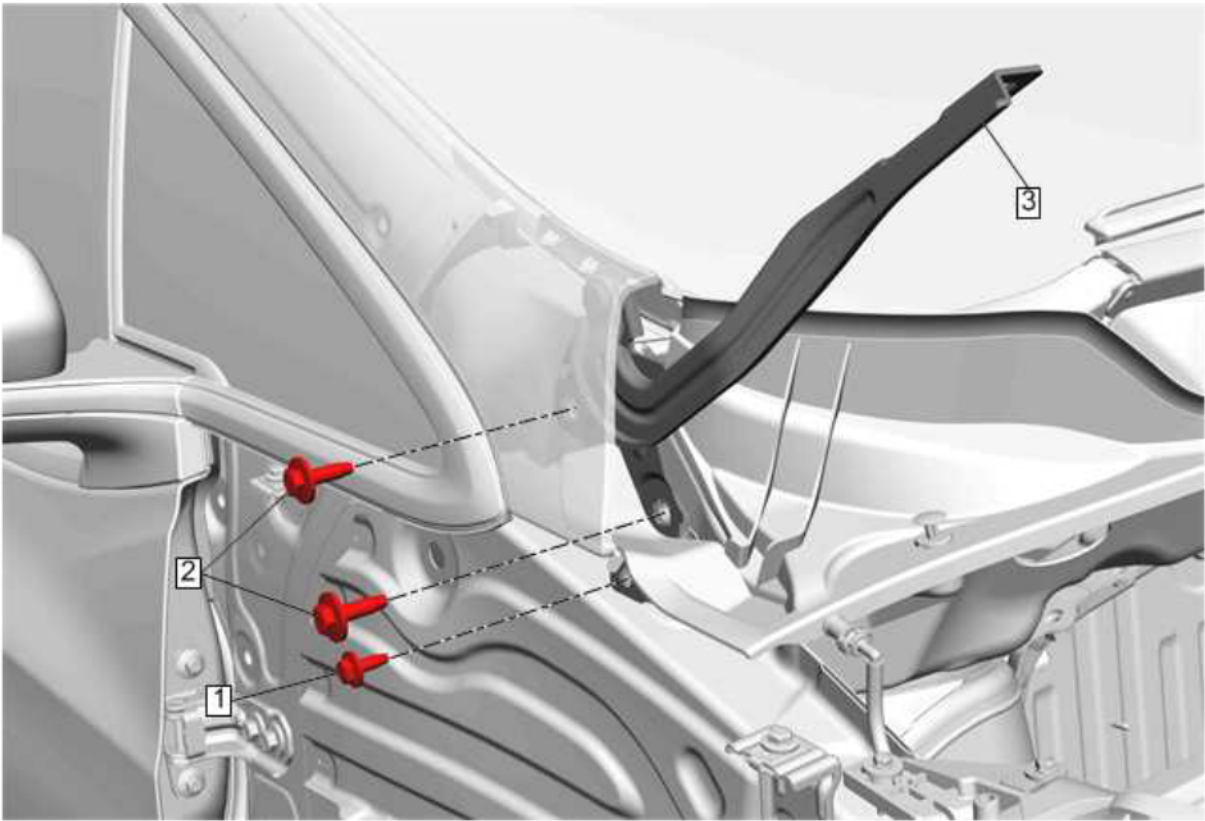


Fig. 51: Hood Hinge
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Hood Replacement Front Fender Replacement - Left Side Front Fender Replacement - Right Side	
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Callout	Component Name
1	Hood Hinge Bracket Bolt CAUTION: <u>Fastener Caution</u> Tighten 9 N.m (80 lb in)
2	Hood Hinge Bolt (Qty: 2) Tighten 22 N.m (16 lb ft)
3	Hood Hinge Procedure Adjust the hood and hinge if needed. <u>Hood Adjustment</u>

LIFTGATE HINGE REPLACEMENT

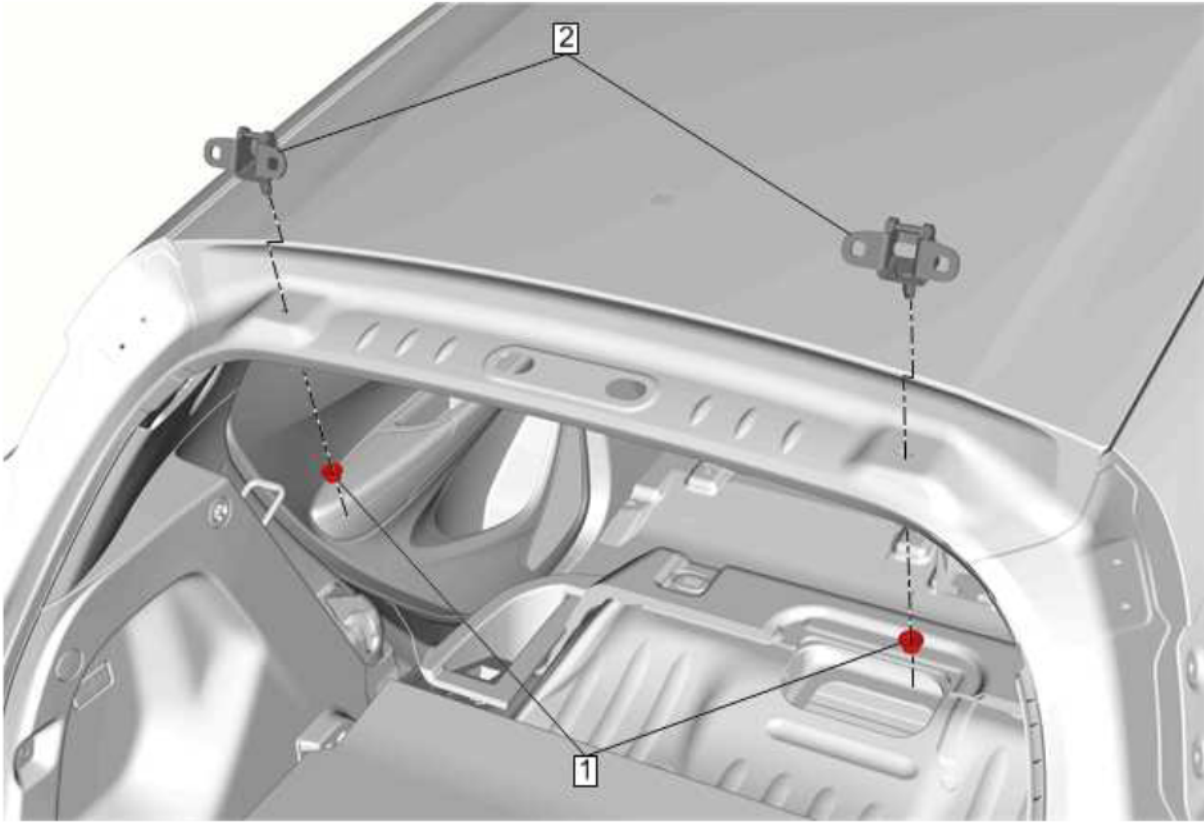


Fig. 52: Liftgate Hinge
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Liftgate Replacement</u> - Lower the rear headliner enough to access the liftgate hinge nuts. <u>Headlining Trim Panel Replacement</u> . - Use a grease pencil to mark the liftgate hinge position to the body prior to removal.	
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Callout	Component Name
1	Liftgate Hinge Nut (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 43 N.m (32 lb ft)
2	Liftgate Hinge

REAR SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT

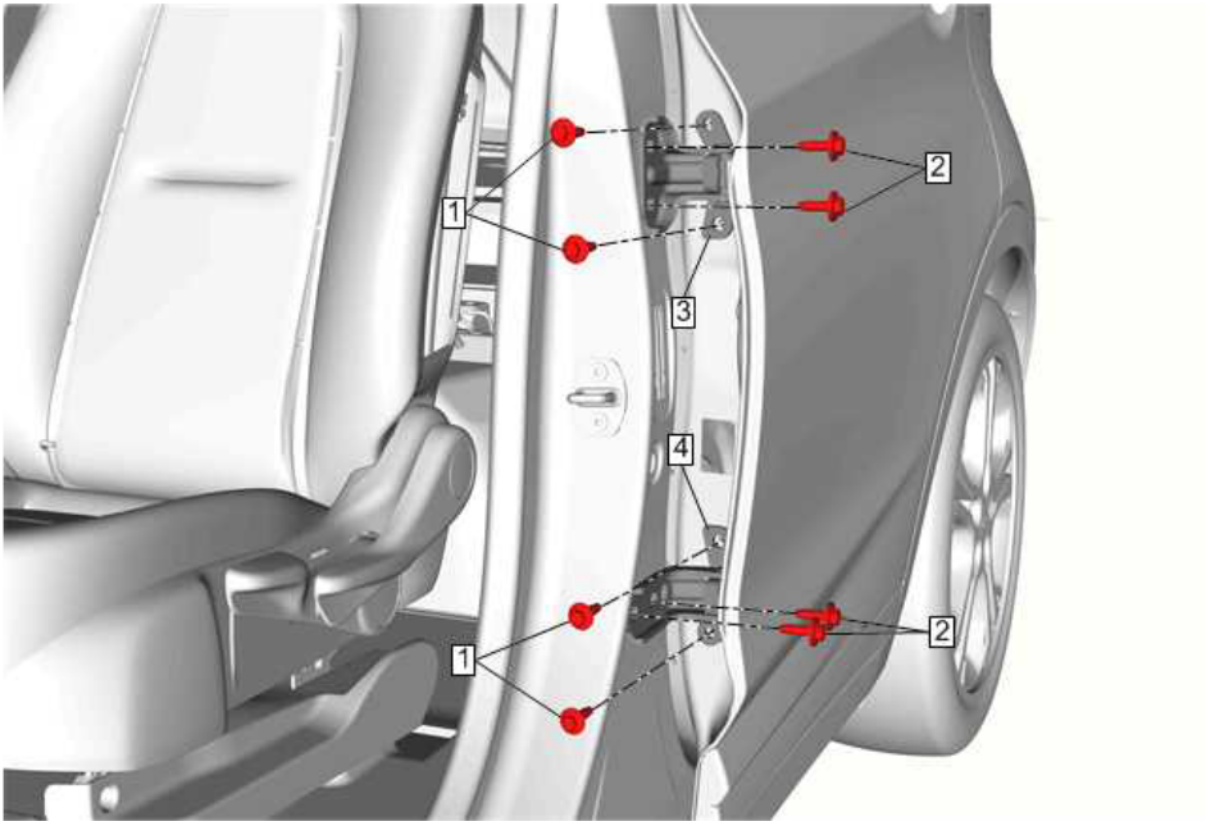


Fig. 53: Rear Side Door Upper Hinge and Lower Hinge
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Mark the location of the old hinges.	
1	Rear Side Door Hinge Bolt-Door Side (Qty: 4) CAUTION: Fastener Caution Tighten 25 N.m (18 lb ft)
2	Rear Side Door Hinge Bolt-Body Side (Qty: 4) Tighten 32 N.m (24 lb ft)
3	Rear Side Door Upper Hinge

Callout	Component Name
1	Hood CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the four hood hinge bolt. 2. Adjust the hood in order to obtain an even gap on both sides between the hood and the A-pillar, the fender applique, the headlamp and the grille. Adjustment • Hood to A-pillar (a) 3.0 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.0 \text{ mm}$ (0.12 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.04 \text{ in}$) • Hood to fender applique (b) 3.0 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 0.75 \text{ mm}$ (0.12 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.03 \text{ in}$) • Hood to headlamp (c) 3.0 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 0.9 \text{ mm}$ (0.12 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.035 \text{ in}$) • Hood to grille (d) 6.0 mm $\tilde{\text{A}}, \hat{\text{A}} \pm 1.0 \text{ mm}$ (0.24 in $\tilde{\text{A}}, \hat{\text{A}} \pm 0.04 \text{ in}$) Tighten 22 N.m (16 lb ft)

HOOD REPLACEMENT

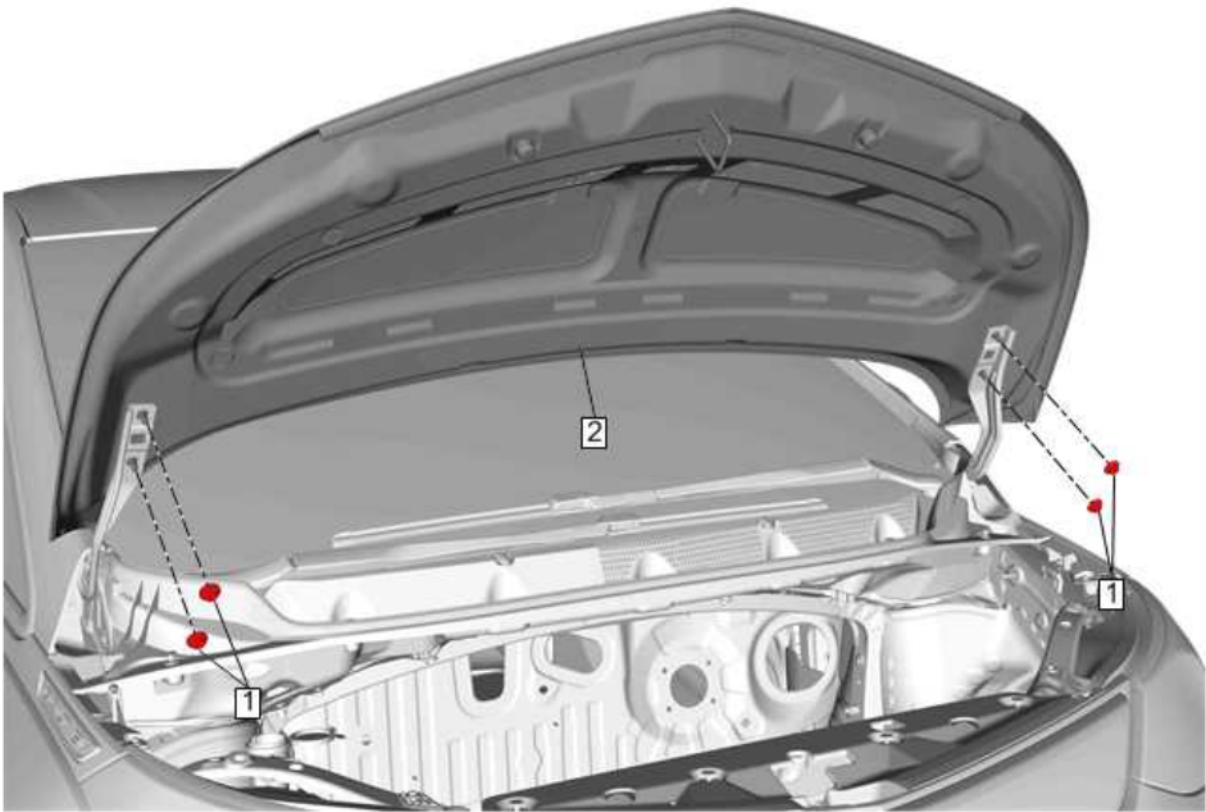


Fig. 55: Hood
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Hood Hinge Nut (Qty: 4) CAUTION: Refer to Fastener Caution . Procedure Mark the hinge to hood position with grease pencil. Tighten 22 N.m (16 lb ft)
2	Hood WARNING: When a hood hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury. Procedure 1. Remove the hood with the aid of an assistant. 2. Transfer components as necessary. 3. Adjust hood as needed. Hood Adjustment

FRONT FENDER INSULATOR REPLACEMENT

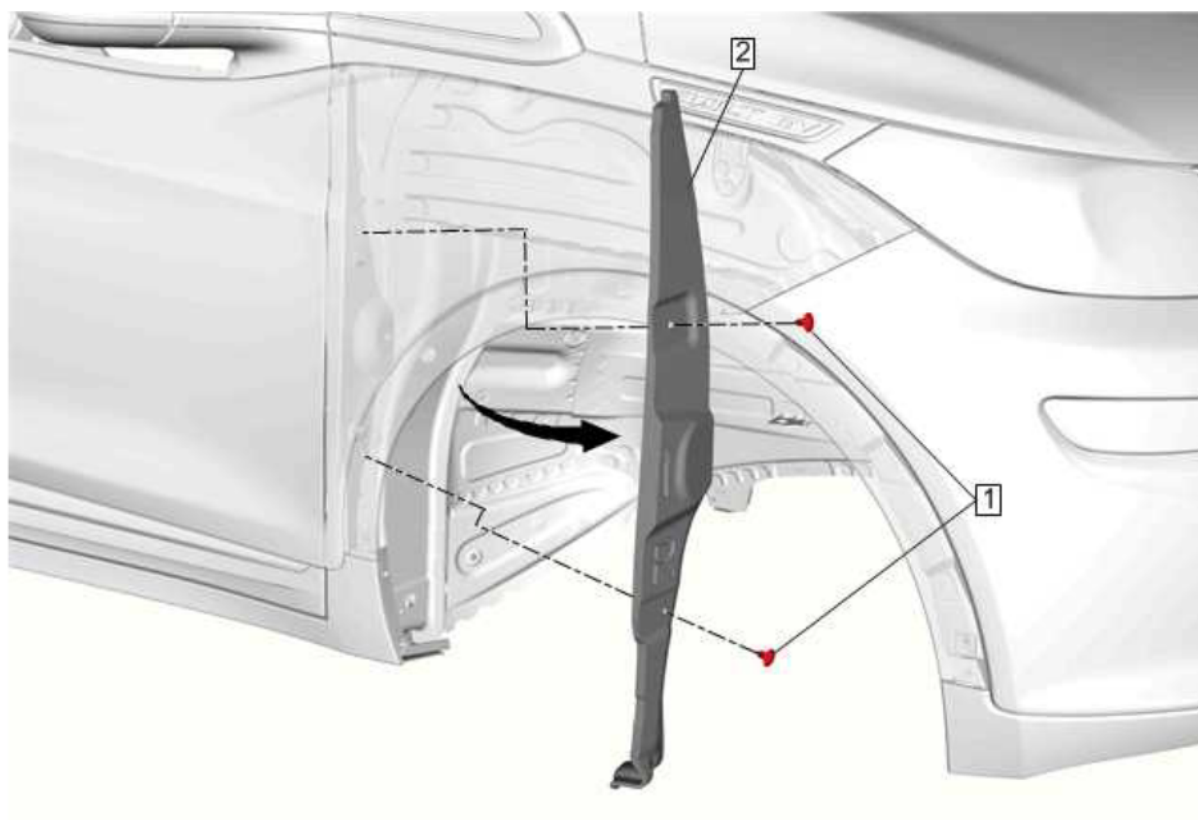


Fig. 56: Front Fender Insulator

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Front Wheelhouse Liner Replacement	
1	Front Fender Insulator Retainer (Qty: 2)
2	Front Fender Insulator

HOOD INSULATOR REPLACEMENT

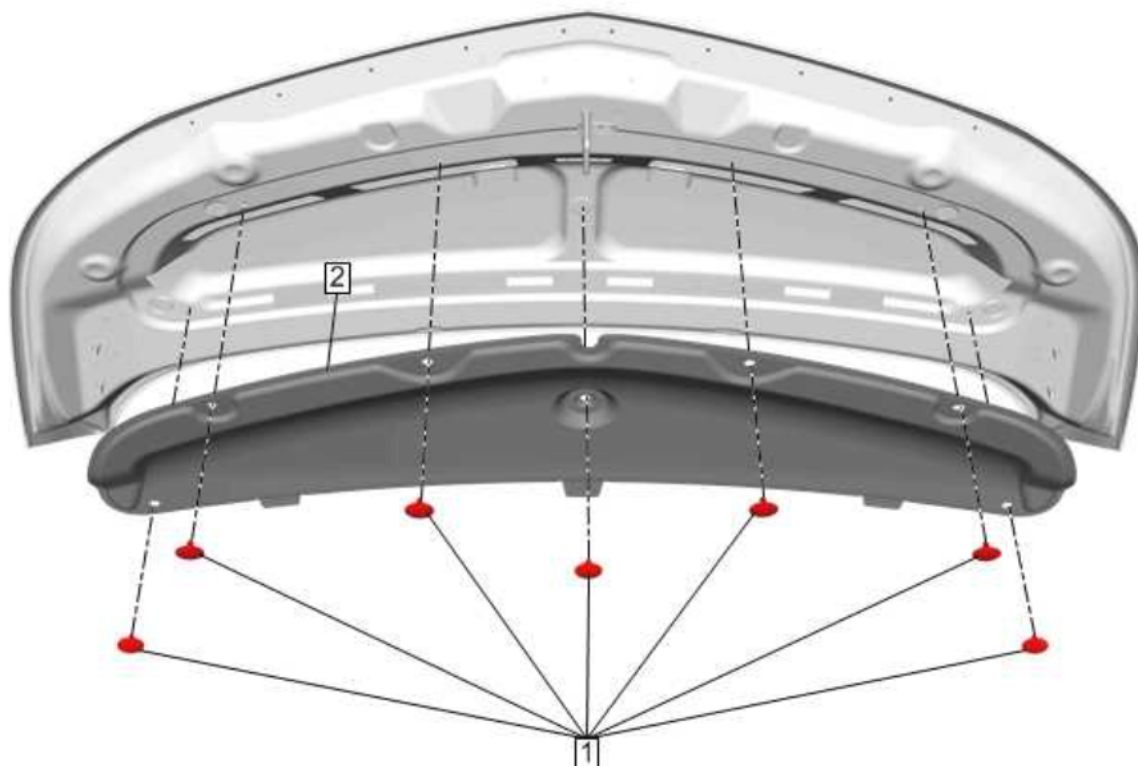


Fig. 57: Hood Insulator

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Open the hood.	
1	Hood Insulator Retainer (Qty: 7) Procedure Using a suitable flat-bladed tool, remove the hood insulator retainers.
2	Hood Insulator

HOOD PRIMARY AND SECONDARY LATCH REPLACEMENT

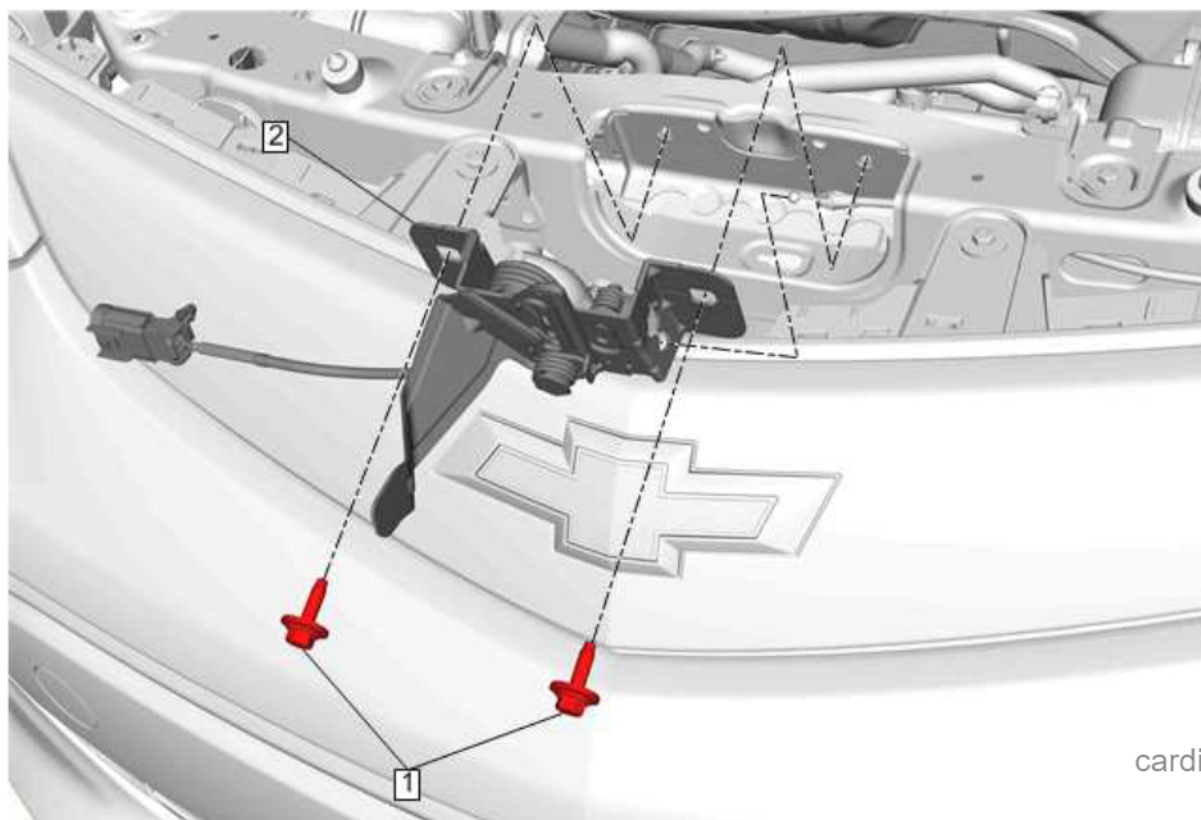


Fig. 58: Hood Primary and Secondary Latch
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
<u>Front Compartment Front Sight Shield Replacement</u>	
1	Hood Primary and Secondary Latch Bolt (Qty: 2) CAUTION: <u>Fastener Caution</u> Tighten 9 N.m (80 lb in)
2	Hood Primary and Secondary Latch Procedure 1. Disconnect the release cable from the hood primary latch. 2. Unclip and disconnect the electrical connector.

FRONT SIDE DOOR CHECK LINK REPLACEMENT

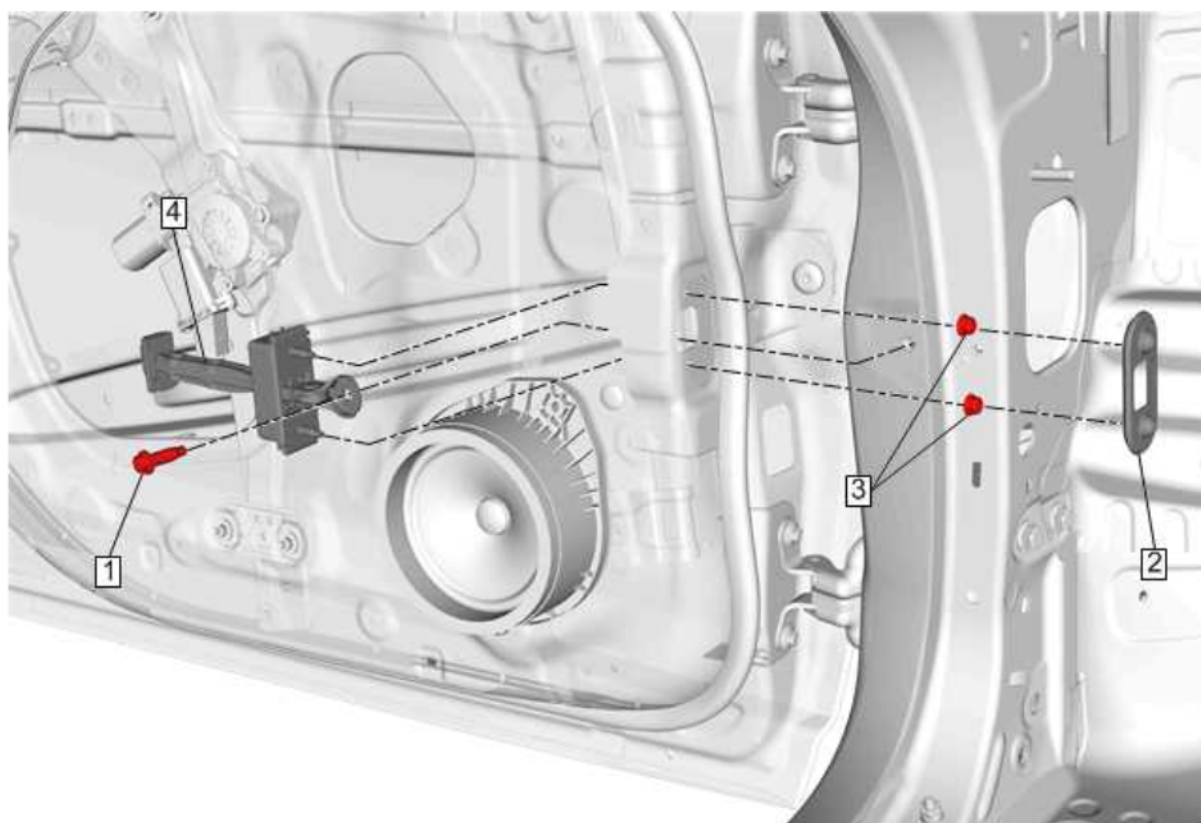


Fig. 59: Front Side Door Check Link
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Place the window in the full up position. 2. <u>Front Side Door Trim Replacement</u> 3. <u>Front Side Door Water Deflector Replacement</u>	
cardiagn.com	

Callout	Component Name
1	Front Side Door Check Link Bolt CAUTION: Fastener Caution Tighten 22 N.m (16 lb ft)
2	Front Side Door Check Link Grommet
3	Front Side Door Check Link Nut (Qty: 2) Tighten 9 N.m (80 lb in)
4	Front Side Door Check Link

REAR SIDE DOOR CHECK LINK REPLACEMENT

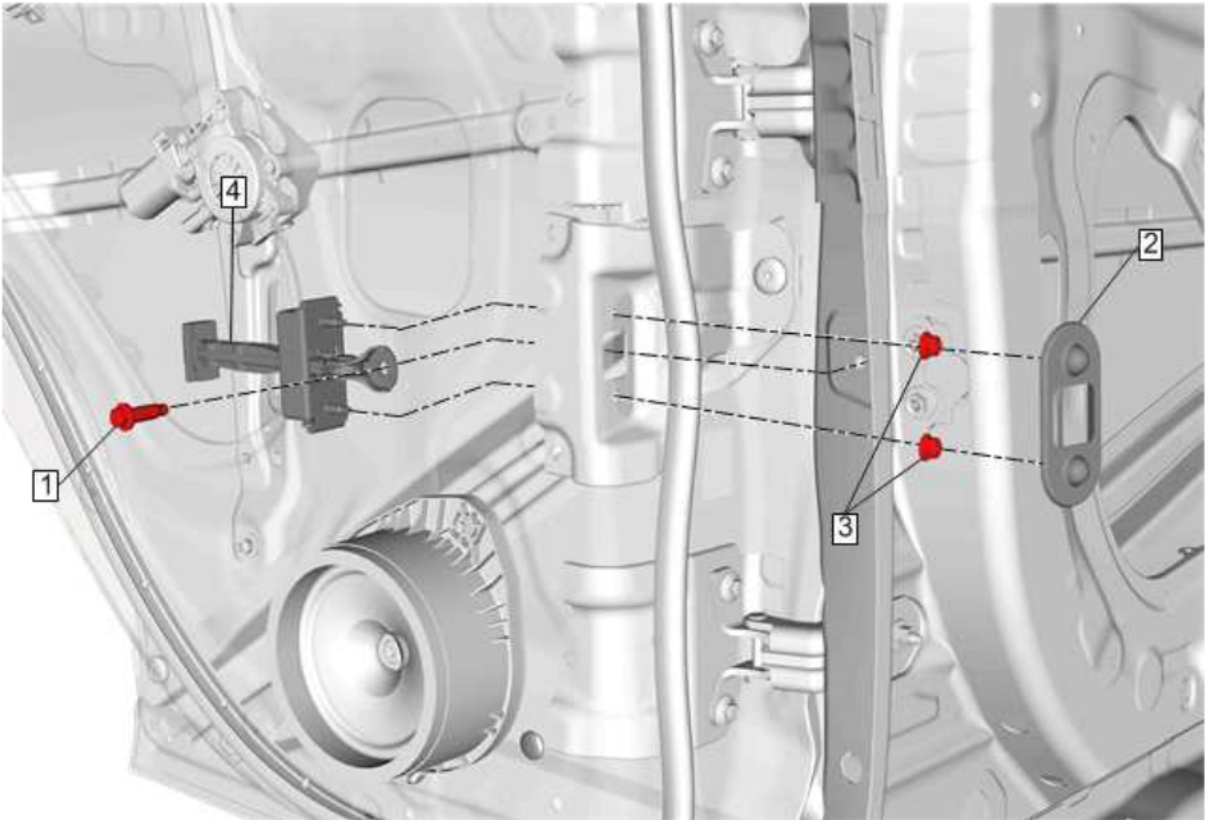


Fig. 60: Rear Side Door Check Link
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures - Place the window in the full up position. Rear Side Door Trim Replacement Rear Side Door Water Deflector Replacement	
1	Rear Side Door Check Link Bolt CAUTION: Fastener Caution Tighten 22 N.m (16 lb ft)
2	Rear Side Door Check Link Grommet

Callout	Component Name
3	Rear Side Door Check Link Nut (Qty: 2) Tighten 9 N.m (80 lb in)
4	Rear Side Door Check Link

HOOD HOLD-OPEN ROD REPLACEMENT

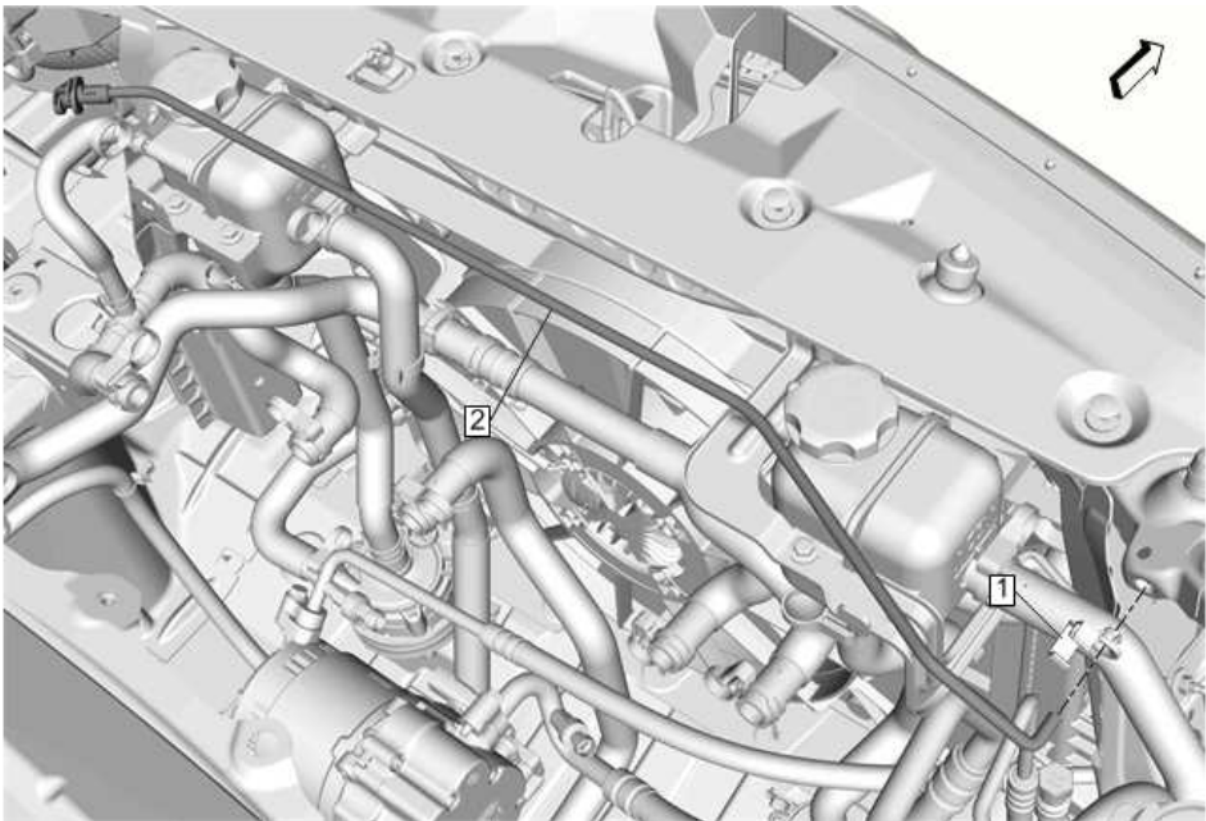


Fig. 61: Hood Hold-Open Rod
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Hold-Open Rod Pivot WARNING: When a hood hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury. Procedure 1. Install an alternative hood support. 2. Release the retaining feature on the rod pivot.
2	Hood Hold-Open Rod Procedure Remove the rod from the vehicle.

HOOD HOLD-OPEN ROD PIVOT REPLACEMENT

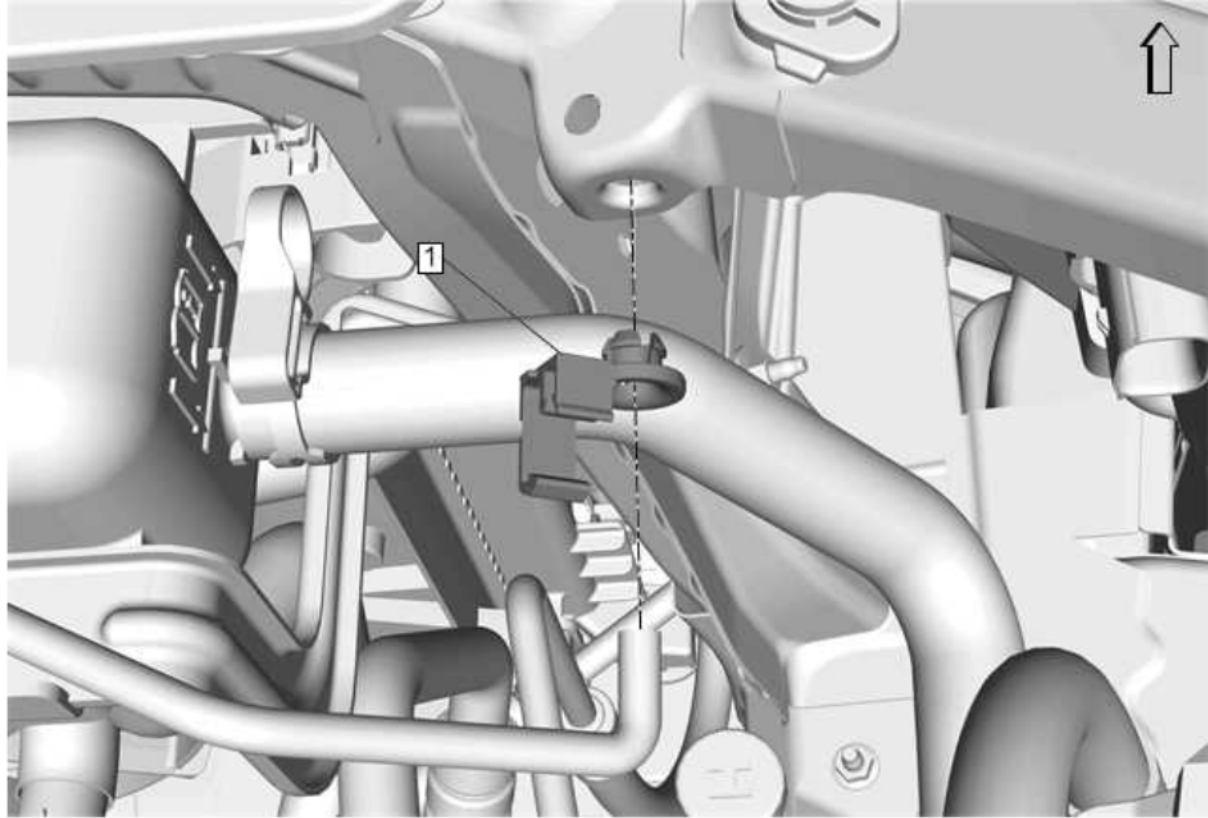


Fig. 62: Hood Hold-Open Rod Pivot
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Hood Hold-Open Rod Replacement	
1	Hood Hold-Open Rod Pivot WARNING: When a hood hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury.

HOOD FRONT WEATHERSTRIP REPLACEMENT

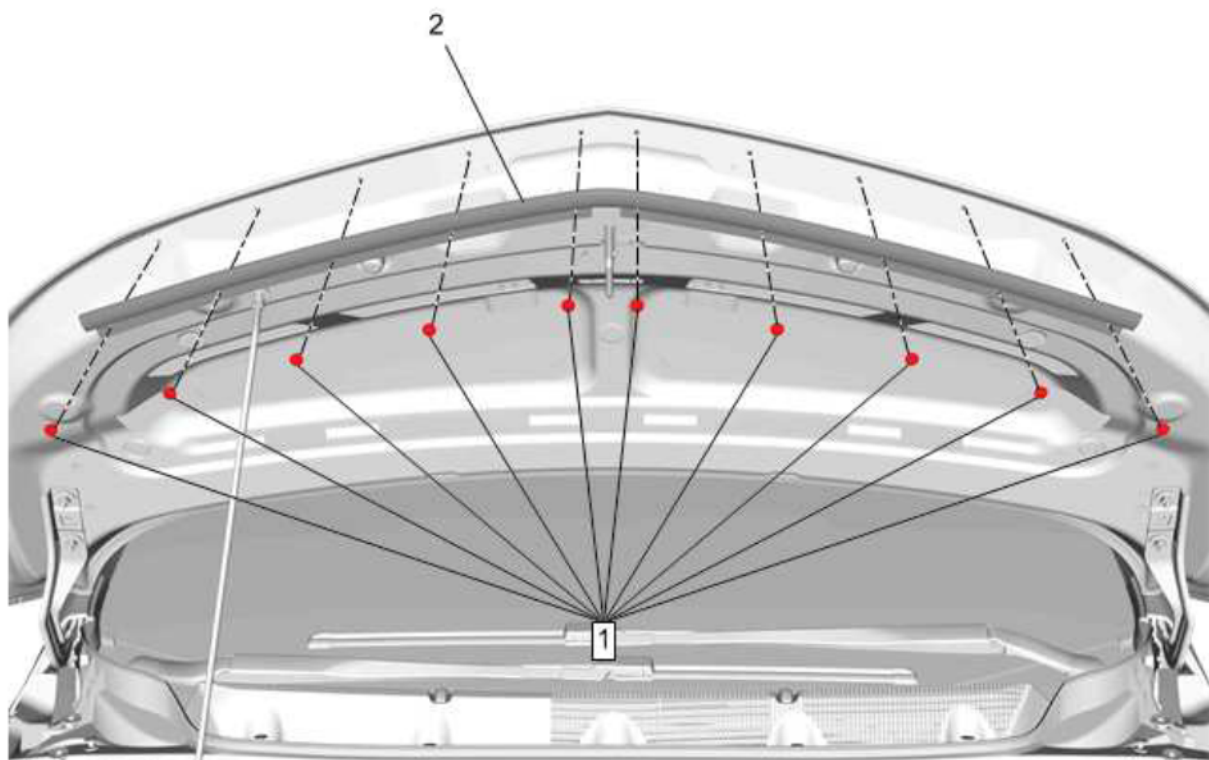


Fig. 63: Hood Front Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Front Weatherstrip Retainer
2	Hood Front Weatherstrip

FRONT COMPARTMENT FRONT SIGHT SHIELD REPLACEMENT

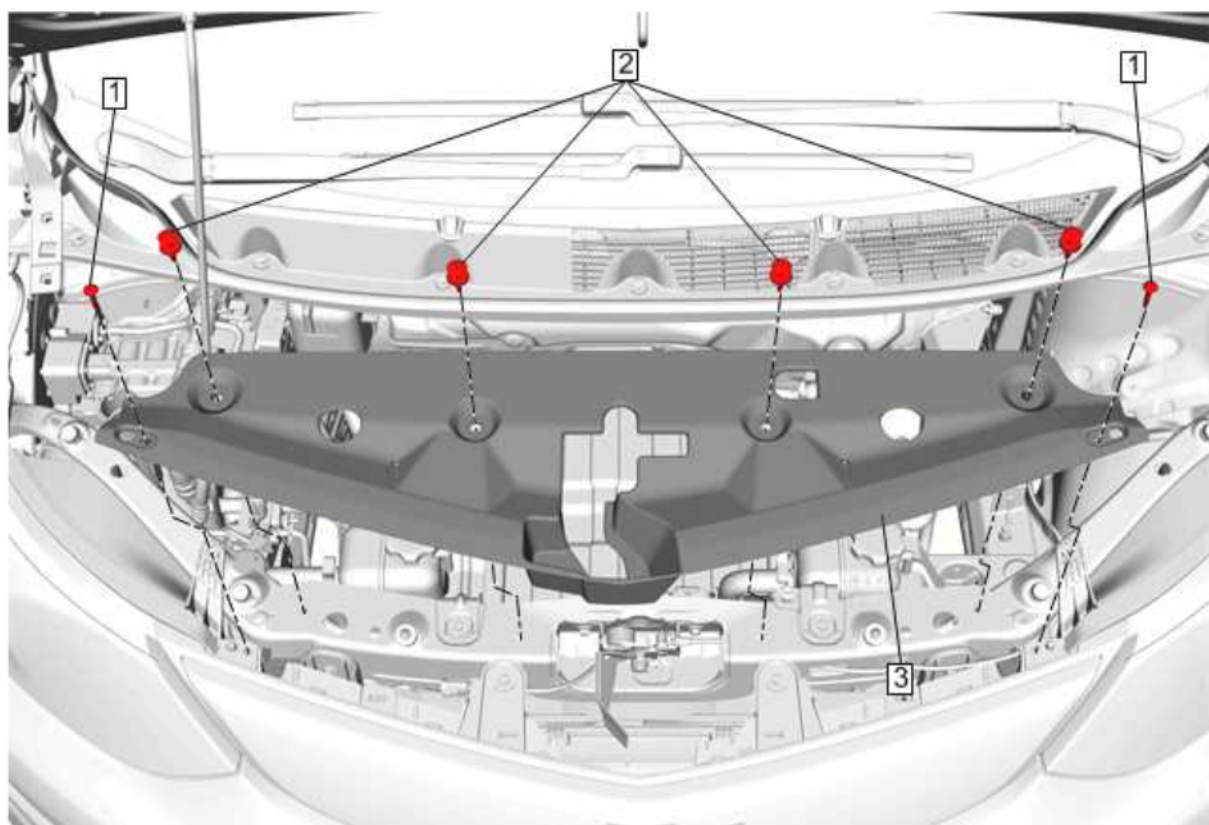


Fig. 64: Front Compartment Front Sight Shield
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Liftgate Strut WARNING: When a lift gate hold open device is being removed or installed, provide alternate support to avoid the possibility of damage to the vehicle or personal injury. CAUTION: Apply pressure only at the end of the liftgate/hood assist rod that you are removing or attaching. Do NOT apply pressure to the middle of the rod because damage or bending will result. Procedure 1. Release the locking tabs on the strut. 2. Ensure the clip is fully seated when the strut is reinstalled. If the clip cannot be fully seated, a new strut should be installed. 3. Ensure the strut shaft is pointing toward the roof structure.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE

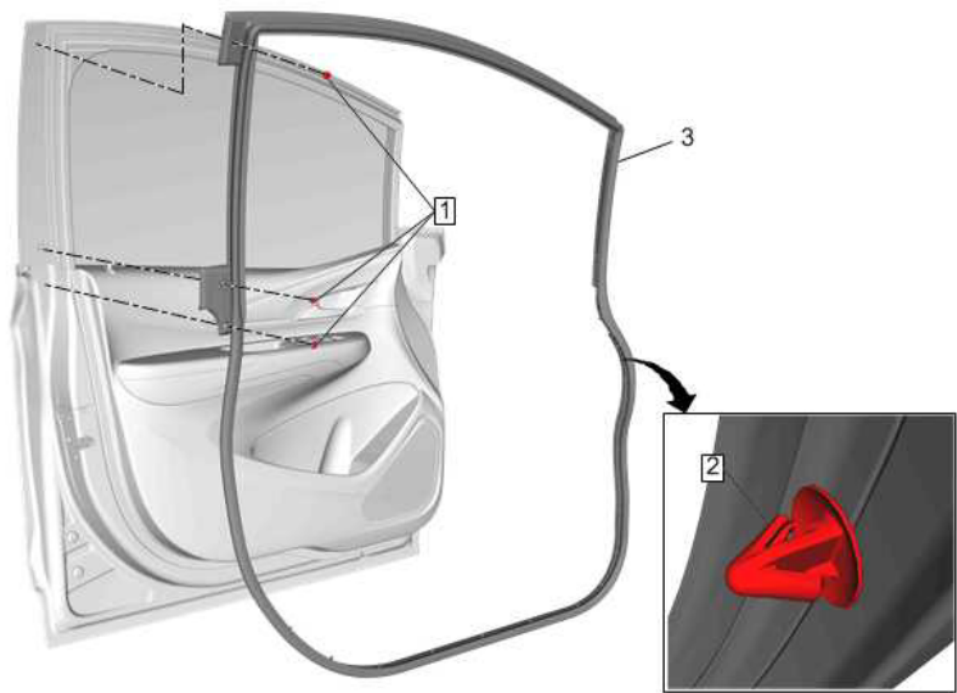


Fig. 66: Front Side Door Weatherstrip - Door Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Open the rear side door to the fully open position. 2. Remove the front side door check link bolt from the body side only. Front Side Door Check Link Replacement	
1	Front Side Door Weatherstrip Upper Retainer
2	Front Side Door Weatherstrip Retainer

Callout	Component Name
3	Front Side Door Weatherstrip - Door Side Procedure 1. Ensure that the weatherstrip is fully seated in the door frame retainer. 2. Verify proper door operation. NOTE: Water test the door area after replacing the door weatherstrip to ensure no leaks.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE

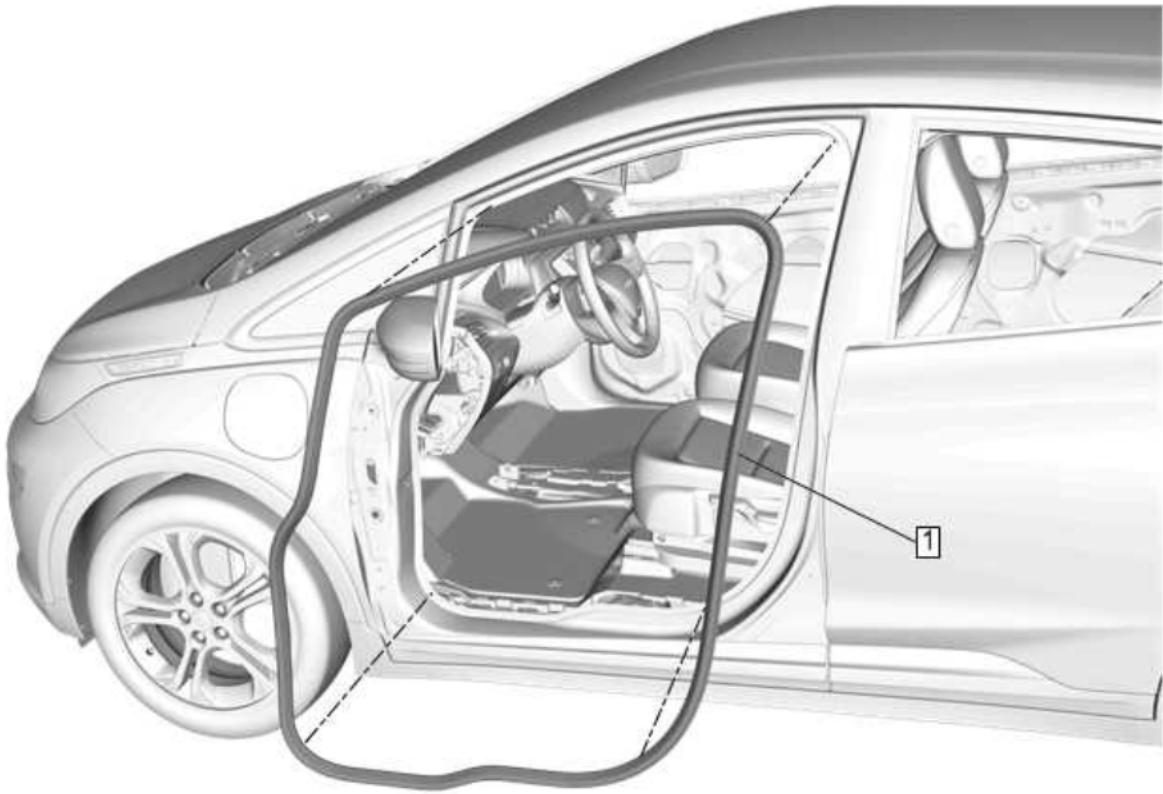


Fig. 67: Front Side Door Weatherstrip - Body Side
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Side Door Weatherstrip - Body Side Procedure 1. Ensure that the weatherstrip is fully seated on the flange. 2. Ensure that the weatherstrip is properly installed around the trim panel. 3. Verify proper door operation. NOTE: Water test the door area after replacing the door weatherstrip to ensure no leaks.

LIFTGATE WEATHERSTRIP REPLACEMENT



Fig. 68: Liftgate Weatherstrip

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Liftgate Window Weatherstrip Procedure 1. Start at the upper corner of the liftgate opening and pull the weatherstrip away from the liftgate opening flange. 2. Position the weatherstrip in the upper corner of the liftgate opening. 3. Working downward along the edge, install the weatherstrip on the liftgate opening flange ensuring that the carrier is fully seated in the corners. 4. Using a rubber mallet, ensure that the weatherstrip is seated on the entire liftgate opening flange.

REAR SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE

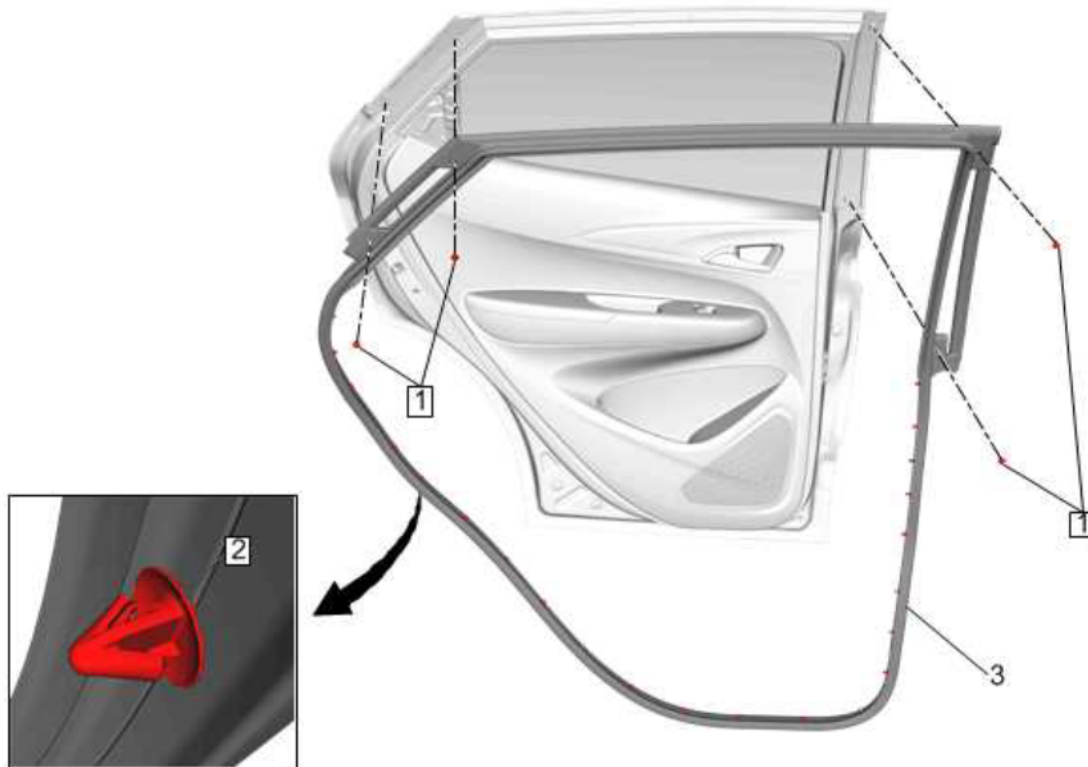


Fig. 69: Rear Side Door Weatherstrip - Door Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Open the rear side door to the fully open position. 2. Remove the rear side door check link bolt from the body side only. Rear Side Door Check Link Replacement	
1	Rear Side Door Weatherstrip Upper Retainer
2	Rear Side Door Weatherstrip Retainer
3	Rear Side Door Weatherstrip - Door Side Procedure 1. Ensure that the weatherstrip is fully seated in the door frame retainer. 2. Verify proper door operation. NOTE: Water test the door area after replacing the door weatherstrip to ensure no leaks.

REAR SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE

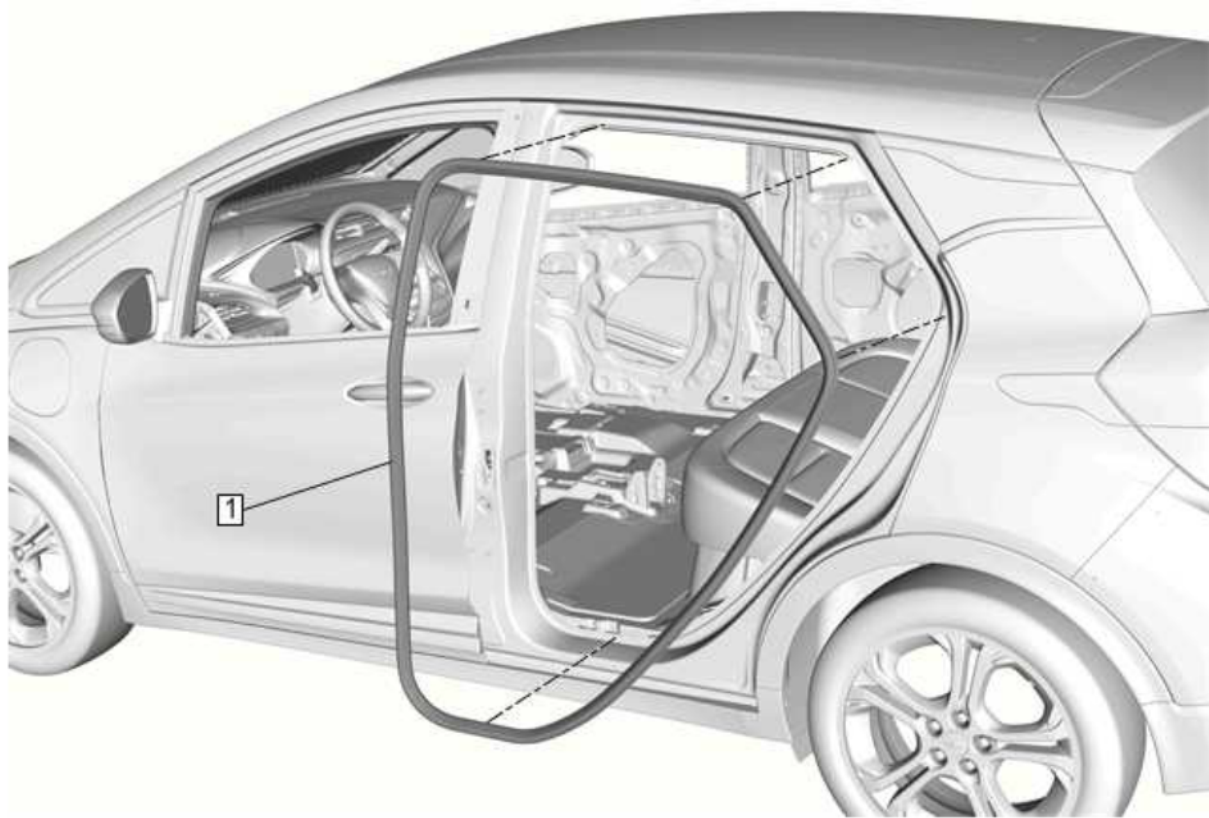


Fig. 70: Rear Side Door Weatherstrip - Body Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Rear Side Door Weatherstrip - Body Side Procedure 1. Ensure that the weatherstrip is fully seated on the flange. 2. Ensure that the weatherstrip is properly installed around the trim panel. 3. Verify proper door operation. NOTE: Water test the door area after replacing the door weatherstrip to ensure no leaks.

DESCRIPTION AND OPERATION

HOOD AJAR INDICATOR DESCRIPTION AND OPERATION

Hood Ajar Switch

The body control module (BCM) applies B+ to the hood ajar signal circuit and monitors the voltage to determine the position of the hood. When the hood is closed, the switch is open and voltage remains high. When the hood is open, the switch is closed and the voltage is pulled low.

The BCM uses the hood ajar switch as a content theft deterrent alarm trigger.