

2017 ACCESSORIES & EQUIPMENT

Bolted Exterior Body Panels and Closures - 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)
Dash Panel Brace Fastener	9 N.m (80 lb in)
Front End Upper Tie Bar Bolt	20 N.m (15 lb ft)
Front Fender Bolt	9 N.m (80 lb in)
Front Fender Nut	9 N.m (80 lb in)
Front Side Door Check Link to Body Bolt	22 N.m (16 lb ft)
Front Side Door Check Link Nut	10 N.m (89 lb in)
Front Side Door Lower Hinge to Body Bolt	25 N.m (18 lb ft)
Front Side Door Lower Hinge to Door Bolt	25 N.m (18 lb ft)
Front Side Door Upper Hinge to Body Bolt	25 N.m (18 lb ft)
Front Side Door Upper Hinge to Door Bolt	25 N.m (18 lb ft)
Hood Hinge Bolt	22 N.m (16 lb ft)
Hood Hinge Nut	22 N.m (16 lb ft)
Hood Primary and Secondary Latch Bolt	22 N.m (16 lb ft)
Rear Compartment Lid Bolt	22 N.m (16 lb ft)
Rear Compartment Lid Hinge Bolt	22 N.m (16 lb ft)
Rear Side Door Check Link Body Side Bolt	22 N.m (16 lb ft)
Rear Side Door Lower Hinge to Body Bolt	25 N.m (18 lb ft)
Rear Side Door Lower Hinge to Door Bolt	25 N.m (18 lb ft)
Rear Side Door Upper Hinge to Body Bolt	25 N.m (18 lb ft)
Rear Side Door Upper Hinge to Door Bolt	25 N.m (18 lb ft)

SCHEMATIC WIRING DIAGRAMS

HOOD LATCH WIRING SCHEMATICS

Hood Ajar Switch

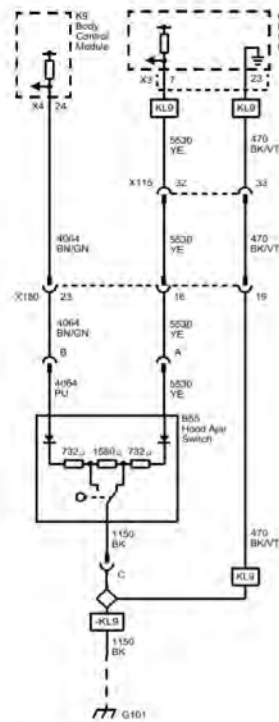


Fig. 1: Hood Ajar Switch

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

Hood Ajar Circuit

For symptom byte information, refer to [Symptom Byte List](#).

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal - Terminal B	B3006 02	B3006 04	B3006 01	-
Signal - Terminal A*	P257E	P257F	P257F	P257D
Ground	-	B3006 04	-	-
*with HP6				

Circuit/System Description

The Body Control Module 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 body control module continuously monitors for this DTC

Conditions for Setting the DTC

B3006 01

The body control module detects that the hood ajar switch signal circuit is shorted to battery.

B3006 02

The body control module detects that the hood ajar switch signal circuit is shorted to ground.

B3006 04

The body control module 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

Hood Latch Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Keyless Entry System Description and Operation (without BTM) Keyless Entry System Description and Operation (with BTM)

Electrical Information Reference

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Body Control Module Hood Ajar Switch parameter is Open with the hood open and Closed with the hood 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 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. 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 B 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 harness connector at the K9 Body Control Module, ignition ON.
6. Test for less than 1 V between the signal circuit terminal B 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 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 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
Signal - Terminal B	B3006 02	B3006 04	B3006 01	-
Signal - Terminal A	P257E	P257F	P257F	P257D
Ground	-	B3006 04, P257F	-	-

Circuit/System Description

The Starter/Generator Control Module 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 Starter/Generator Control Module 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 2 voltage as measured by the Starter/Generator Control Module is not within a valid voltage range.

P257E

The hybrid powertrain control module 2 detects a short to ground in the hood ajar signal input to the Starter/Generator Control Module.

P257F

The hybrid powertrain control module 2 detects a short to voltage or an open/high resistance in the hood ajar signal input to the Starter/Generator Control Module.

Action Taken When the DTC Sets

The engine will start and run whenever the vehicle ignition is on 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

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.

2. Verify the scan tool Hybrid Powertrain Control Module 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. Ignition 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. 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 DTC P257F is set as current

- **If DTC P257F is not set as current**

1. Ignition OFF, disconnect the harness connector at the K59 Starter/Generator 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, replace the K59 Starter/Generator Control Module.

- **If DTC P257F is set as current**

5. Install a 5 A fused jumper wire between the signal circuit terminal A and ground. Ignition ON

6. Verify DTC P257E is set as current.

- **If DTC P257E is not set as current**

1. Ignition OFF, disconnect the harness connector at the K59 Starter/Generator Control Module.

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 K59 Starter/Generator Control Module.

- **If DTC P257E is set as current**

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 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 Starter/Generator Control Module or Body Control Module 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

Hood Ajar Circuit

For symptom byte information, refer to [Symptom Byte List](#) .

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal - Terminal B	B3006 02	B3006 04	B3006 01	-
Signal - Terminal A*	P257E	P257F	P257F	P257D
Ground	-	B3006 04	-	-
*with HP6				

Circuit/System Description

The Body Control Module 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 body control module continuously monitors for this DTC

Conditions for Setting the DTC

B3006 01

The body control module detects that the hood ajar switch signal circuit is shorted to battery.

B3006 02

The body control module detects that the hood ajar switch signal circuit is shorted to ground.

B3006 04

The body control module 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

Hood Latch Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

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- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Body Control Module Hood Ajar Switch parameter is Open with the hood open and Closed with the hood 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 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. 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 B 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 harness connector at the K9 Body Control Module, ignition ON.
6. Test for less than 1 V between the signal circuit terminal B 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 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 replacement, programming, and setup.

REPAIR INSTRUCTIONS

FRONT END UPPER TIE BAR REPLACEMENT

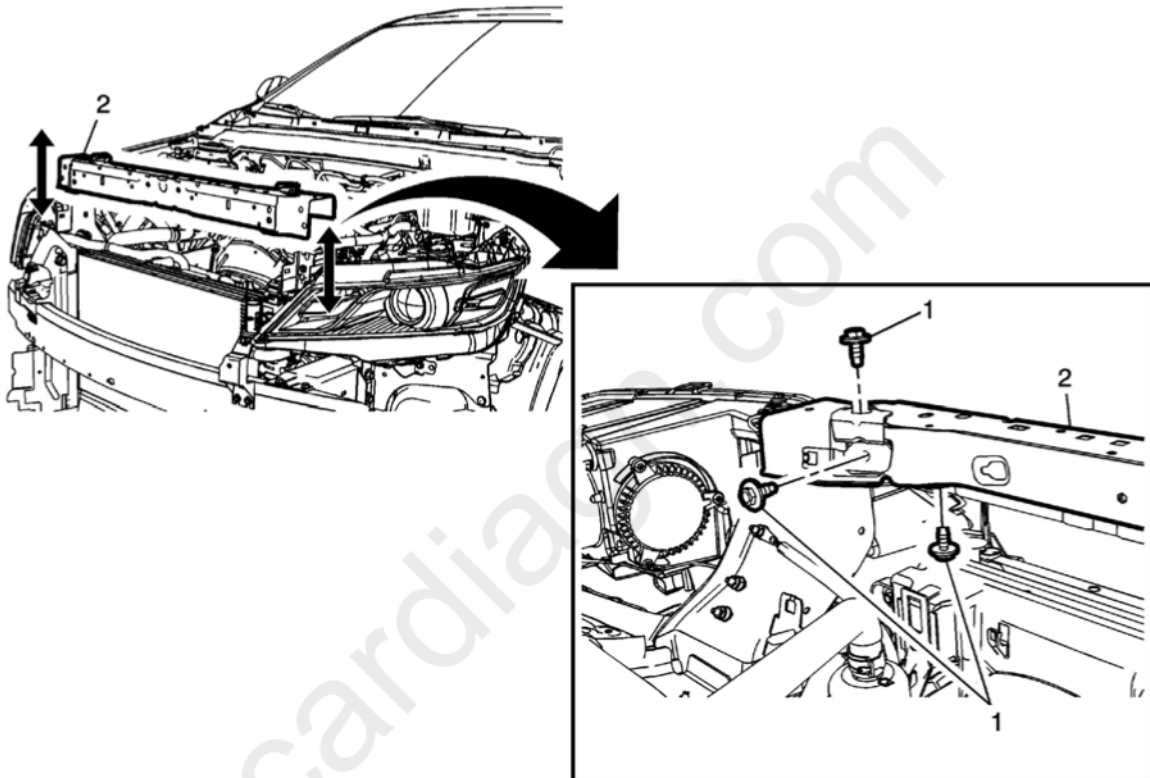


Fig. 2: Front End Upper Tie Bar

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1.	Remove the front bumper fascia center support. Refer to Front Bumper Fascia Center Support Replacement .
2.	Remove the hood primary and secondary latch. Refer to Hood Primary and Secondary Latch Replacement .
3.	Remove the upper radiator bracket bolts only. Refer to Radiator Upper Bracket Replacement
4.	Reposition the hood latch cable from the front end upper tie bar.
5.	Disconnect and unclip the wiring harness from the tie bar.
6.	Remove the front end inflatable restraint discriminating sensors. Refer to Airbag Front End Discriminating Sensor Replacement

Callout	Component Name
1	Front End Upper Tie Bar Bolt (Qty: 6) CAUTION: Refer to Fastener Caution . Tighten 20 N.m (15 lb ft)
2	Front End Upper Tie Bar Procedure Transfer parts as necessary.

DASH PANEL BRACE REPLACEMENT

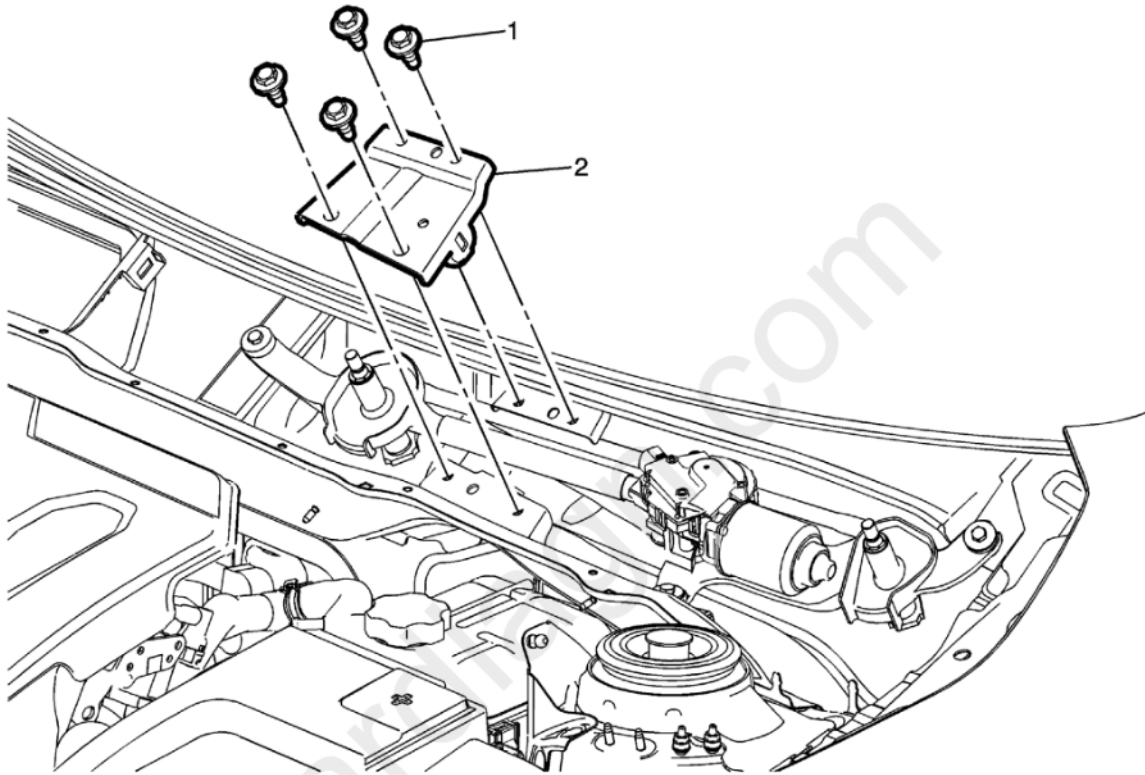


Fig. 3: Dash Panel Brace

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the air inlet grille panel. Refer to Air Inlet Grille Panel Replacement .	
1	Dash Panel Brace Fastener (Qty: 4) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Dash Panel Brace

HOOD PRIMARY LATCH RELEASE CABLE REPLACEMENT

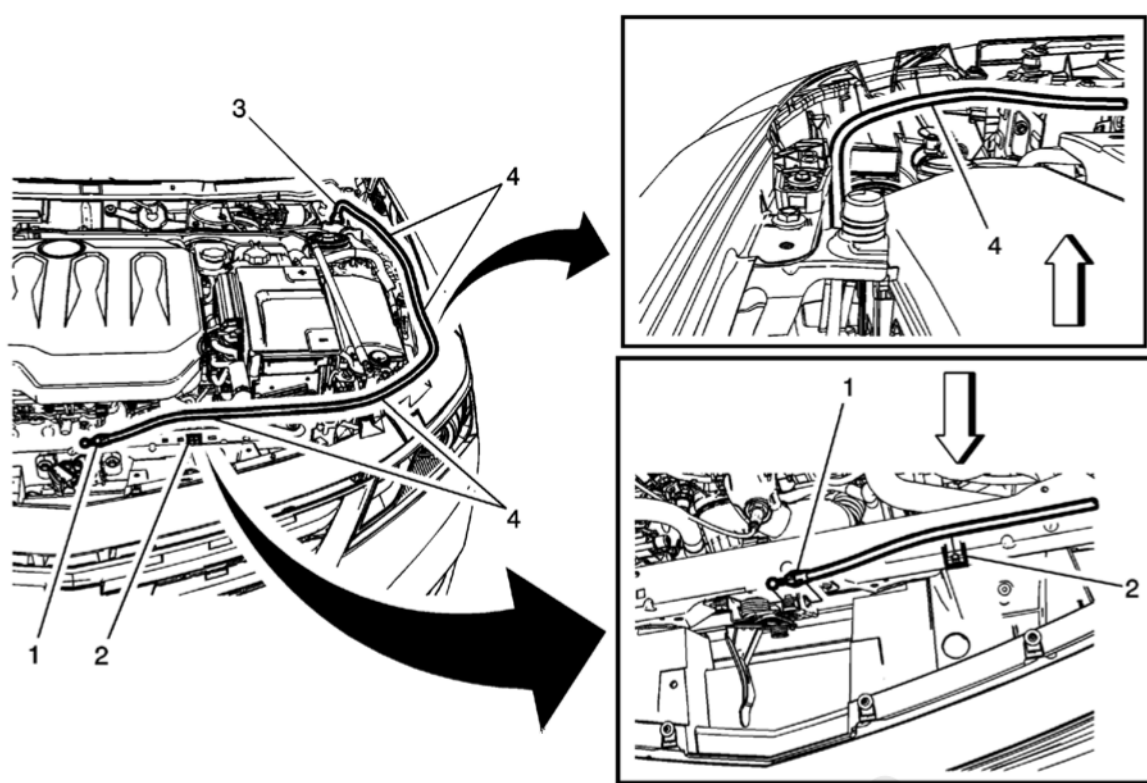


Fig. 4: Hood Primary Latch Release Cable
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1, 2	1, 2
Preliminary Procedure 1. Remove the front compartment front sight shield. Refer to Front Compartment Front Sight Shield Replacement 2. Remove the air inlet grille panel. Refer to Air Inlet Grille Panel Replacement 3. Remove the instrument panel insulator-left side. Refer to Instrument Panel Insulator Replacement - Left Side	
1	Hood Primary Latch Cable Procedure Disconnect the hood primary latch release cable from the primary hood latch.
2	Hood Primary Latch Release Cable Retainer Procedure Disconnect the hood primary latch release cable from the hood primary latch release cable retainer.
3	Hood Primary Latch Release Cable Grommet
4	Hood Primary Latch Release Cable Procedure Disconnect the hood primary latch release cable handle from the instrument panel tie bar.

FRONT SIDE DOOR ADJUSTMENT

Removal Procedure

Up/Down or In/Out Adjustment

1. Remove the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
2. Remove the front fender insulator as needed.
3. Open the door.

CAUTION: Refer to [Paint Damage Caution](#) .

NOTE: The door side upper and lower hinge bolts must remain tight enough to retain door adjusted position.

4. Apply masking tape to the fender and the door edges.

Loosen the door side hinge bolts.

Do not remove the bolts from the door.

5. Adjust the door up or down by repositioning the door as needed.
6. Adjust the door in or out by repositioning the door as needed.

Installation Procedure

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

1. Install the door side hinge bolts.

Tighten

Tighten the bolts to 25 N.m (18 lb ft).

2. Install the front fender insulator.
3. Install the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
4. Inspect the door for proper operation and alignment.
5. Remove the masking tape.

Removal Procedure

Fore/Aft Adjustment

1. Remove the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
2. Remove the front fender insulator as needed.

CAUTION: Refer to [Paint Damage Caution](#) .

NOTE: The door side upper and lower hinge bolts must remain tight enough to retain door adjusted position.

3. Apply masking tape to the fender and door edges.

Loosen the bodyside hinge bolts.

Do not remove the bolts from the door.

4. Adjust the door fore and aft by repositioning the door as needed.

Installation Procedure

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

1. Install the bodyside hinges bolts.

Tighten

Tighten the bolts to 25 N.m (18 lb ft).

2. Inspect the door for proper operation and alignment.
3. Install the front fender insulator.
4. Install the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
5. Remove the masking tape.

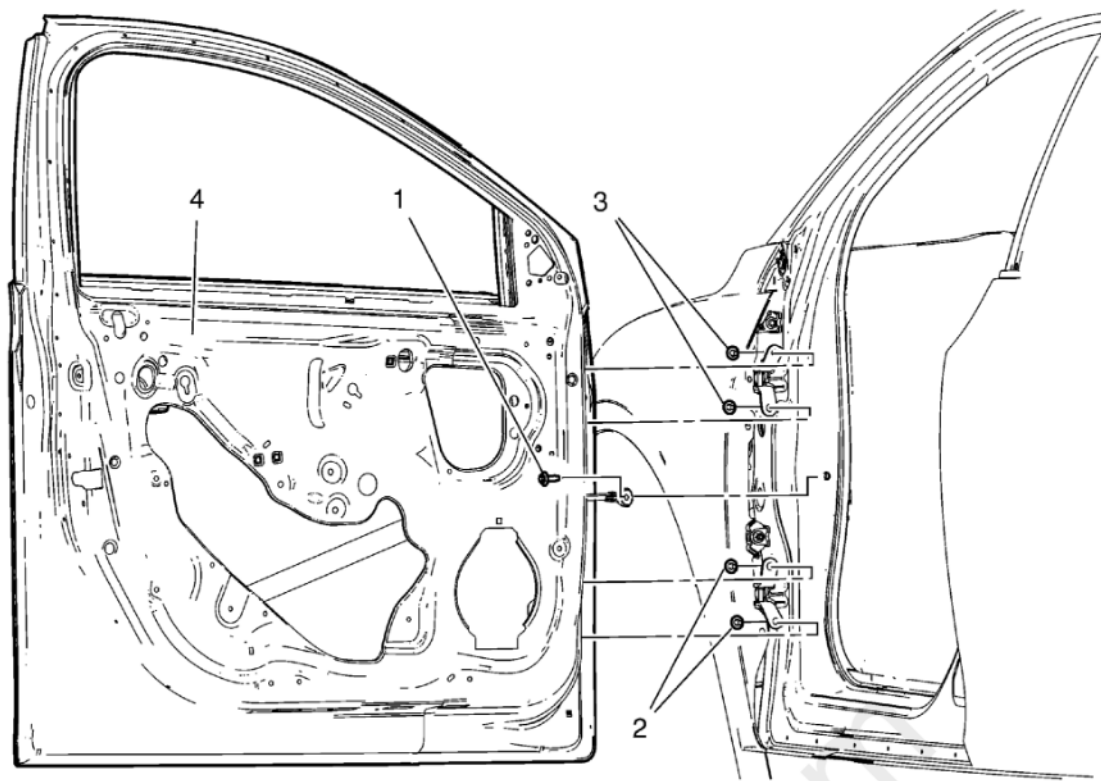


Fig. 5: Front Side Door Mounting Hardware
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Remove the front side door trim panel. Refer to Front Side Door Trim Replacement .	
1	Front Side Door Check Link to Body Bolt CAUTION: Refer to Fastener Caution . Procedure 1. Remove the water deflector. 2. Disconnect the door electrical connector. 3. Support the door before removing the hinge bolts. 4. With an assistant, remove the door. Tighten 22 N.m (16 lb ft)
2	Front Side Door Lower Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Front Side Door Upper Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
4	Front Side Door Procedure 1. Transfer all of the internal components. 2. Adjust the front side door as needed. Refer to Front Side Door Adjustment.

REAR SIDE DOOR ADJUSTMENT

Removal Procedure

Up/Down or In/Out Adjustment

1. Open the door.

CAUTION: Refer to [Paint Damage Caution](#) .

NOTE: The door side upper and lower hinge bolts must remain tight enough to retain door adjusted position.

2. Apply masking tape to the fender and the door edges.

Loosen the door side hinge bolts.

Do not remove the bolts from the door.

3. Adjust the door up or down by repositioning the door as needed.
4. Adjust the door in or out by repositioning the door as needed.

Installation Procedure

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

1. Install the door side hinge bolts.

Tighten

Tighten the bolts to 25 N.m (18 lb ft).

2. Inspect the door for proper operation and alignment.
3. Remove the masking tape.

Removal Procedure

Fore/Aft Adjustment

CAUTION: Refer to [Paint Damage Caution](#) .

NOTE: The door side upper and lower hinge bolts must remain tight enough to retain door adjusted position.

1. Apply masking tape to the fender and door edges.

Loosen the bodyside hinge bolts.

Do not remove the bolts from the door.

2. Adjust the door fore and aft by repositioning the door as needed.

Installation Procedure

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

1. Install the bodyside hinges bolts.

Tighten

Tighten the bolts to 25 N.m (18 lb ft).

2. Inspect the door for proper operation and alignment.

3. Remove the masking tape.

REAR SIDE DOOR REPLACEMENT

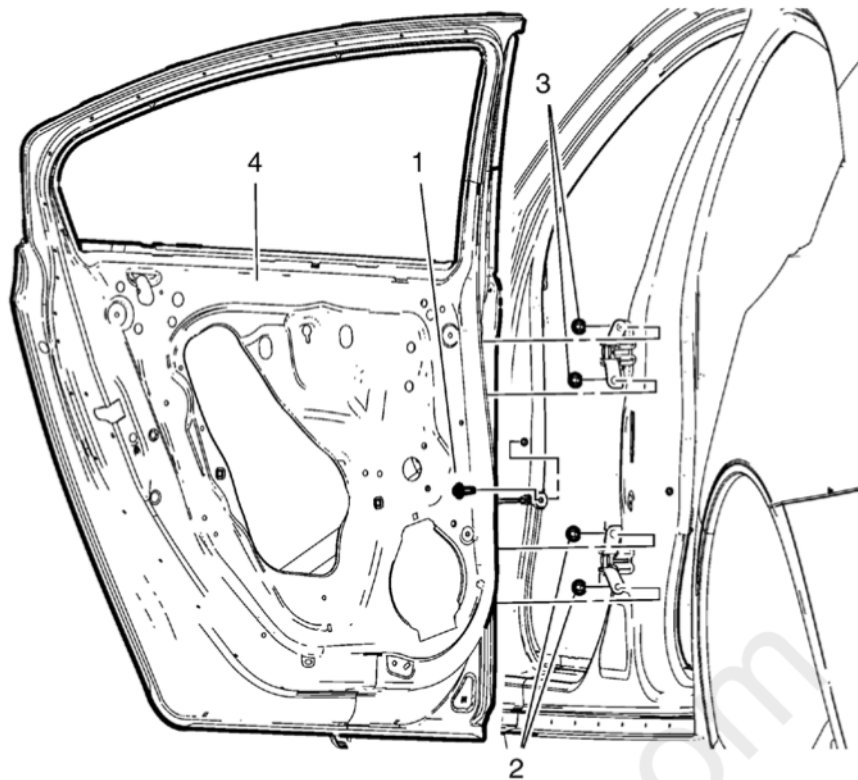


Fig. 6: Rear Side Door Mounting Hardware
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Remove the rear side door trim panel. Refer to Rear Side Door Trim Replacement .	
1	Rear Side Door Check Link to Body Bolt CAUTION: Refer to Fastener Caution . Procedure 1. Remove the water deflector. 2. Disconnect the door electrical connector. 3. Support the door before removing the hinge bolts. 4. With an assistant, remove the door. Tighten 22 N.m (16 lb ft)
2	Rear Side Door Lower Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Rear Side Door Upper Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)

Callout	Component Name
4	Rear Side Door Procedure 1. Transfer all of the internal components. 2. Adjust the rear side door as needed. Refer to Rear Side Door Adjustment.

FRONT FENDER REPLACEMENT

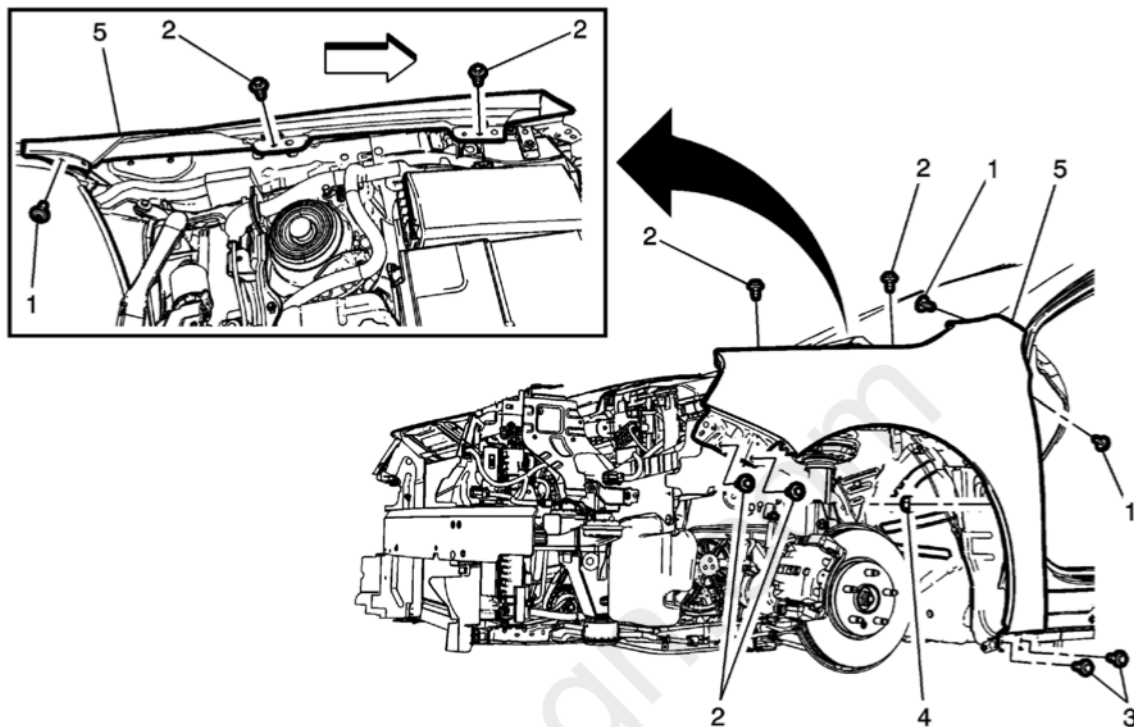


Fig. 7: Front Fender & Mounting Components
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the front bumper fascia. Refer to Front Bumper Fascia Replacement . 2. Remove the headlamp. Refer to Headlamp Replacement . 3. Remove the rocker panel. Refer to Rocker Panel Molding Replacement . 4. Remove the body hinge pillar sound insulator. Refer to Body Hinge Pillar Sound Insulator Replacement 5. Remove the air inlet grille extension panel. Refer to Air Inlet Grille Panel Extension Replacement .	
1	Front Fender Rear Bolt (Qty 2) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Front Fender Bolt (Qty 4) Tighten 9 N.m (80 lb in)

Callout	Component Name
3	Front Fender Lower Bolts (Qty 2) Tighten 9 N.m (80 lb in)
4	Front Fender Nut Tighten 9 N.m (80 lb in)
5	Front Fender

FRONT SIDE DOOR WIRING HARNESS REPLACEMENT

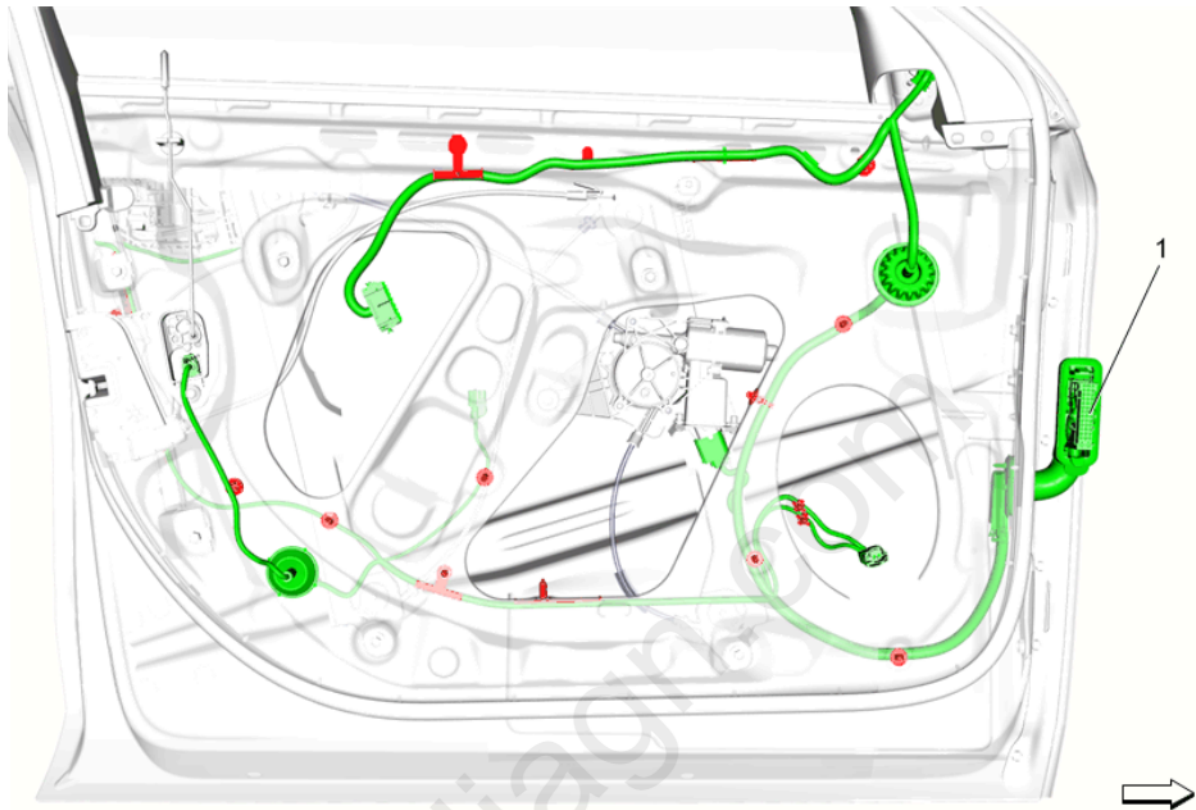


Fig. 8: Front Side Door Wiring Harness
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Radio Front Side Door Speaker Replacement - Remove the water deflector.	
1	Front Side Door Wiring Harness Procedure Disconnect all electrical connectors.

REAR SIDE DOOR WIRING HARNESS REPLACEMENT

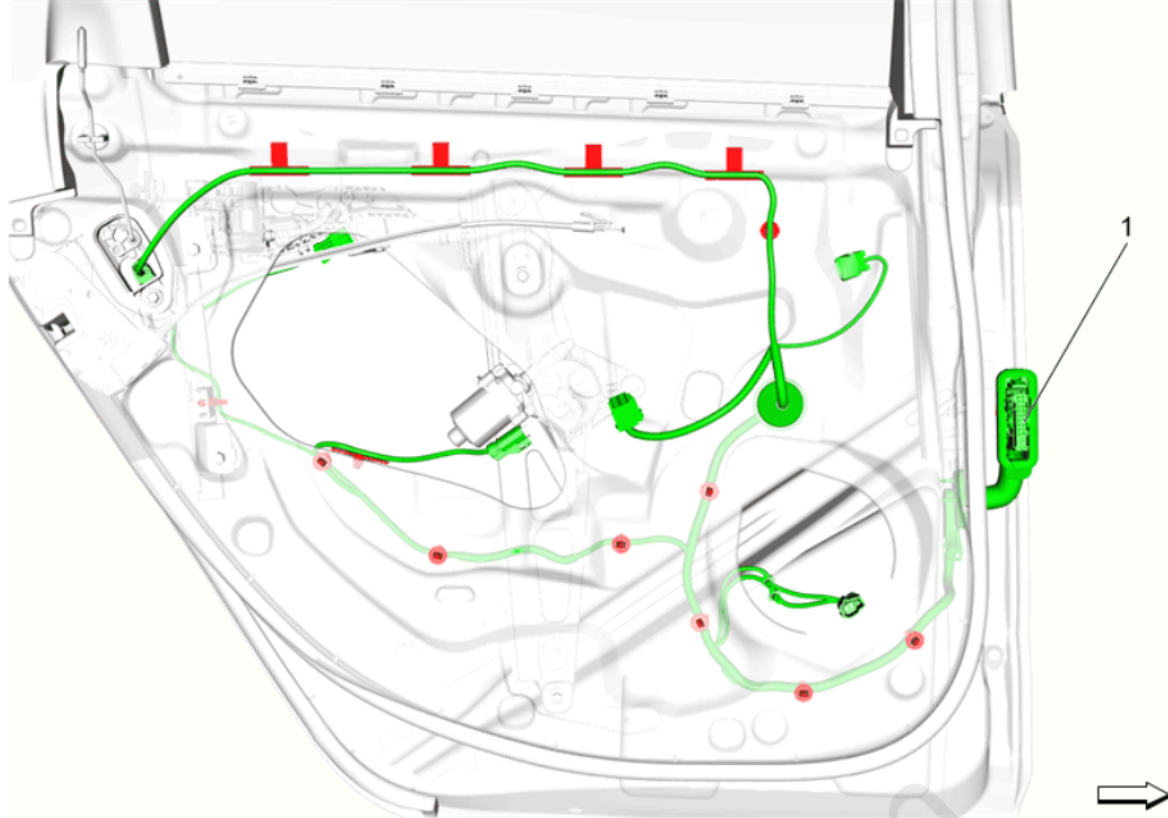


Fig. 9: Rear Side Door Wiring Harness

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Radio Rear Side Door Speaker Replacement 2. Remove the water deflector.	
1	Rear Side Door Wiring Harness Procedure Disconnect all electrical connectors.

BODY HINGE PILLAR SOUND INSULATOR REPLACEMENT

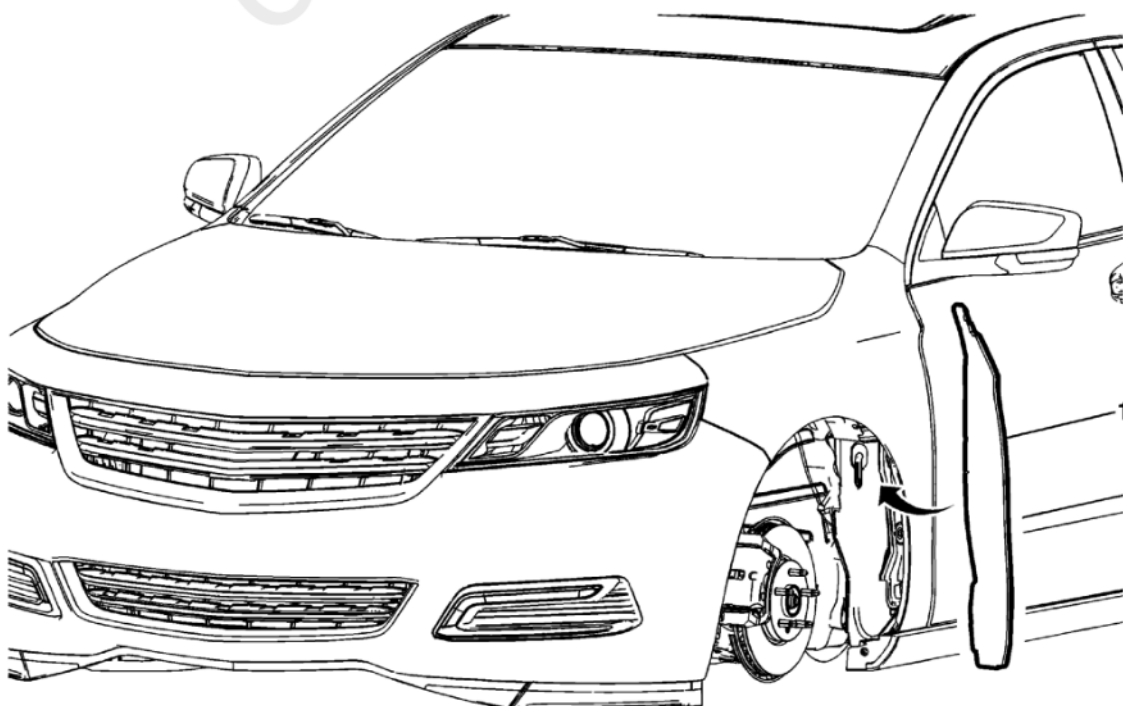


Fig. 10: Body Hinge Pillar Sound Insulator
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement .	
1	Body Hinge Pillar Sound Insulator Procedure 1. Grasp the body hinge pillar sound insulator and pull from the rear of the fender. 2. Firmly press the body hinge pillar sound insulator into the rear of the fender until fully seated.

FRONT SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT

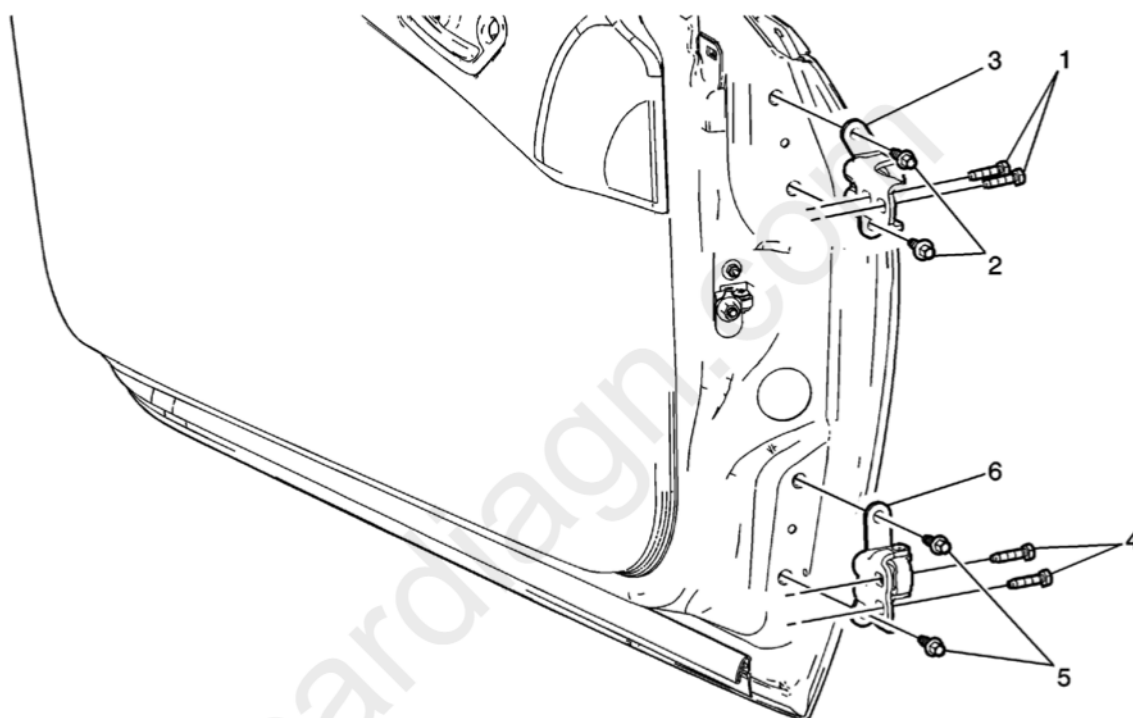


Fig. 11: View Of Front Side Door Hinges
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement .	
1	Front Side Door Upper Hinge to Body Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Procedure 1. Remove the front fender insulator as needed. 2. Remove only one hinge at a time. 3. Mark the location of the hinge before removing the bolts with a grease pencil. Tighten 25 N.m (18 lb ft)

Callout	Component Name
2	Front Side Door Upper Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Front Side Door Upper Hinge
4	Front Side Door Lower Hinge to Body Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
5	Front Side Door Lower Hinge to Door Bolt (Qty: 2) Tighten 25 N.m (18 lb ft)
6	Front Side Door Lower Hinge Procedure Check the door for proper alignment, adjust as necessary. Refer to Front Side Door Adjustment .

HOOD HINGE REPLACEMENT

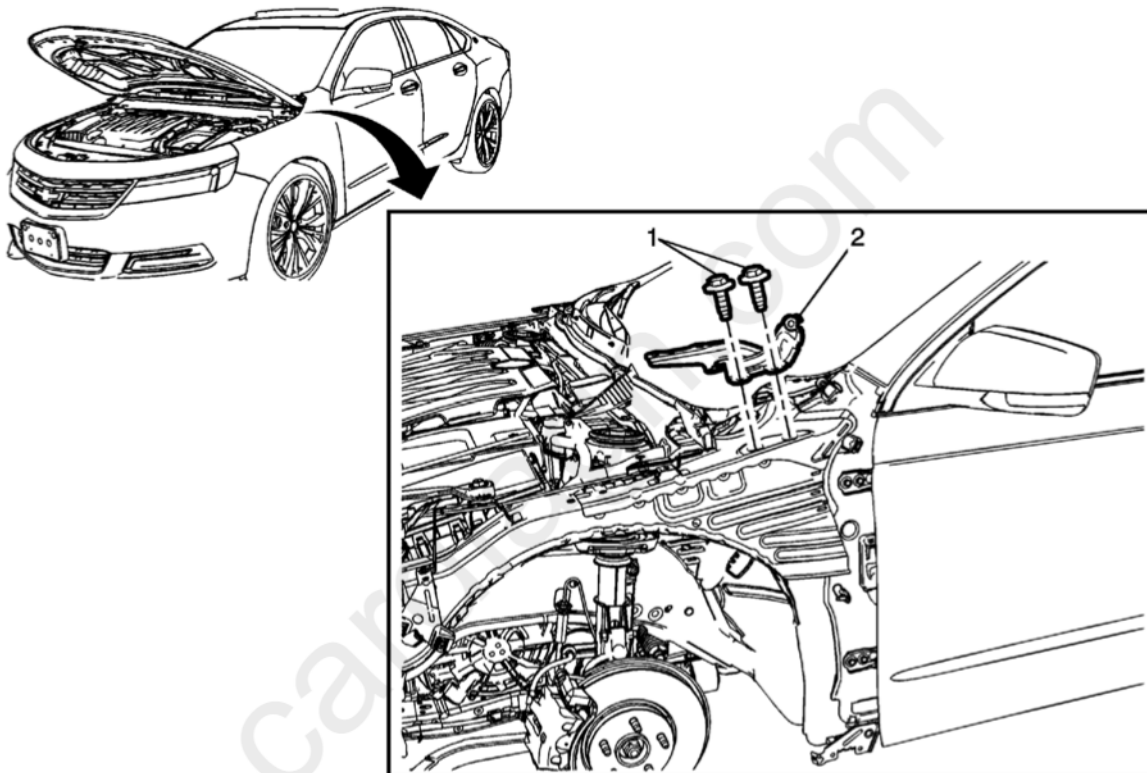


Fig. 12: Hood Hinge & Bolts

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures	
1. Remove the hood. Refer to Hood Replacement .	
1	Hood Hinge Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 22 N.m (16 lb ft)

Callout	Component Name
2	Hood Hinge Procedure Adjust the hood and hinge if needed. Refer to Hood Adjustment. NOTE: Fender removed for visual reference only, this procedure does not require fender removal.

REAR COMPARTMENT LID HINGE REPLACEMENT

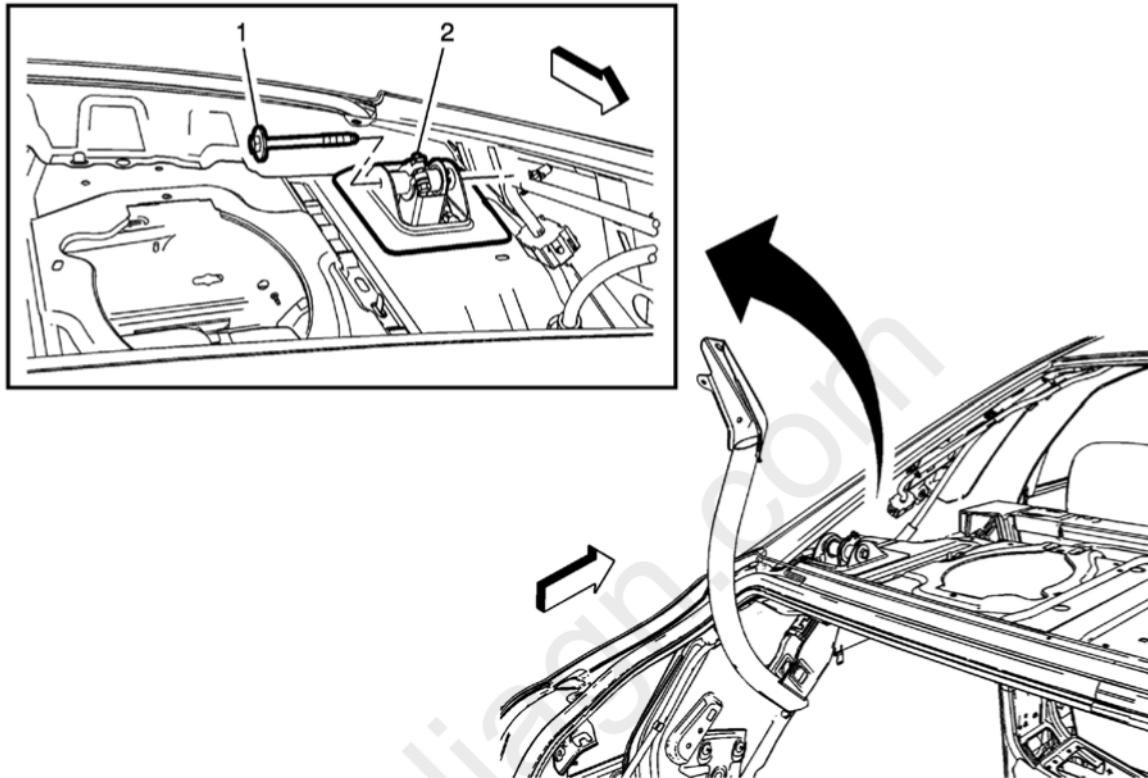


Fig. 13: Rear Compartment Lid Hinge
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the rear compartment lid. Refer to Rear Compartment Lid Replacement. 2. Remove the rear window panel trim. Refer to Rear Window Panel Trim Replacement. 3. If equipped reposition the rear window panel trim insulator. 4. Remove the rear compartment lid hinge spring. Refer to Rear Compartment Lid Hinge Spring Replacement. 5. Remove the rear compartment lid strut if servicing the right hinge. Refer to Rear Compartment Lid Strut Replacement.	
1	Rear Compartment Lid Hinge Fastener CAUTION: Refer to Fastener Caution. Tighten 22 N.m (16 lb ft)

Callout	Component Name
2	Rear Compartment Lid Hinge Procedure Adjust the rear compartment lid if needed. Refer to Rear Compartment Lid Adjustment .

REAR COMPARTMENT LID HINGE BUMPER REPLACEMENT

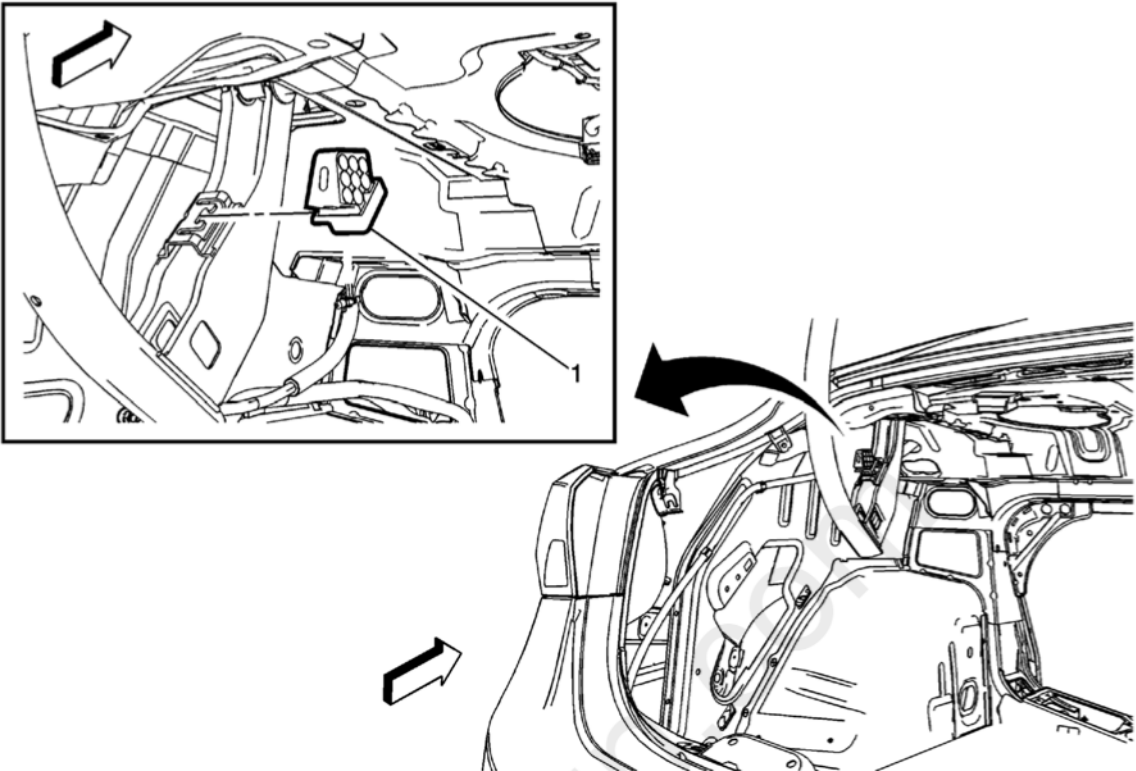


Fig. 14: Rear Compartment Lid Hinge Bumper
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Reposition the left side rear compartment side trim panel enough to gain access to the left side bumper. Refer to Rear Compartment Side Trim Replacement - Left Side . 2. Reposition the right side rear compartment side trim panel enough to gain access to the right side bumper. Refer to Rear Compartment Side Trim Replacement - Right Side .	
1	Rear Compartment Lid Hinge Bumper Procedure 1. Using a suitable tool, remove the rear compartment lid hinge bumper from the rear compartment lid bumper hinge bumper bracket.

REAR COMPARTMENT LID HINGE SPRING REPLACEMENT

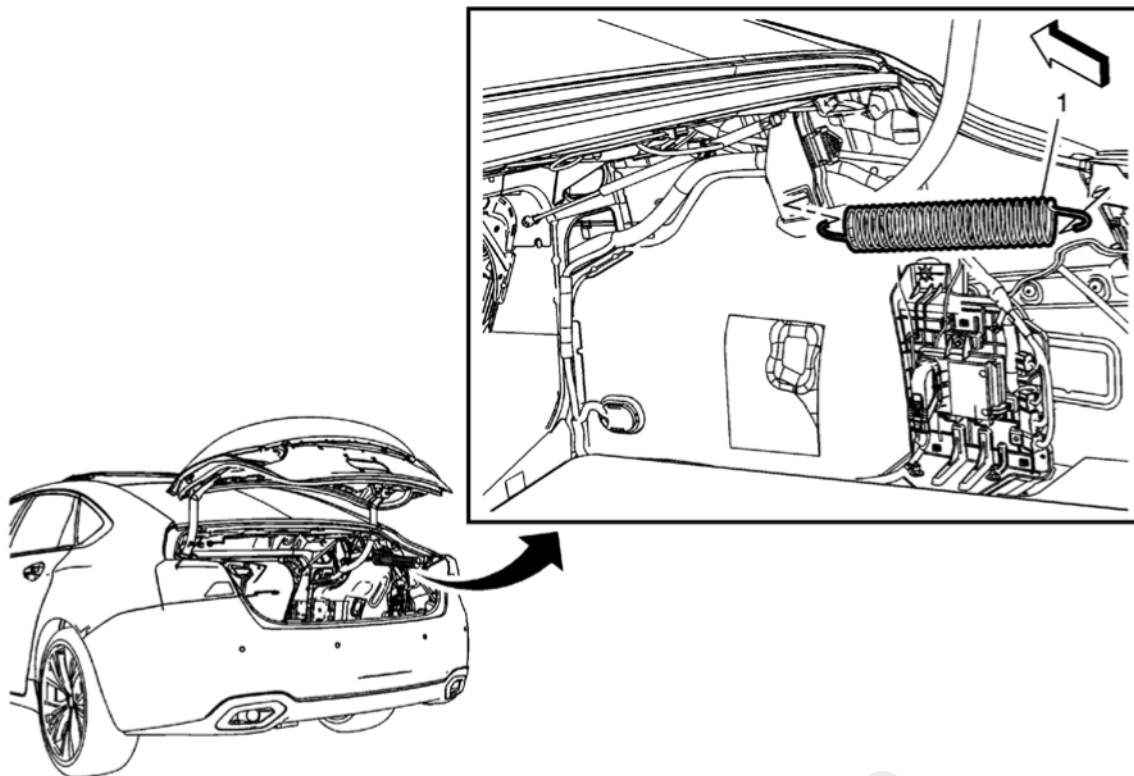


Fig. 15: Rear Compartment Lid Hinge Spring
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
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. WARNING: Refer to Eye Protection Warning . Preliminary Procedures 1. Reposition the left side rear compartment side trim panel enough to gain access to the left side spring. Refer to Rear Compartment Side Trim Replacement - Left Side . 2. Reposition the right side rear compartment side trim panel enough to gain access the right side spring. Refer to Rear Compartment Side Trim Replacement - Right Side .	
1	Rear Compartment Lid Hinge Spring Procedure 1. Pull the rear compartment lid spring backwards and unhook the rear compartment lid spring from the rear compartment lid hinge spring bracket. NOTE: There are two possible tension settings for the spring that will affect the speed the compartment lid will open. The factory installed tension is the slot toward the front of the vehicle. To increase the opening speed, place the springs in the slot most rearward.

REAR SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT

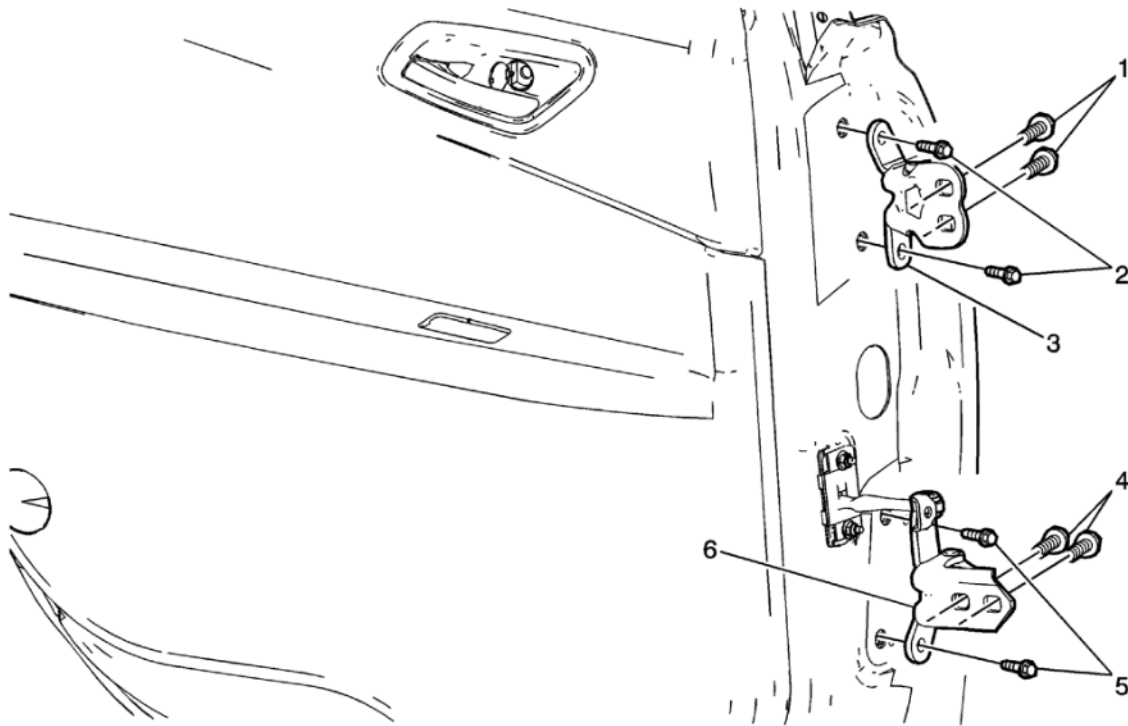


Fig. 16: View Of Rear Side Door Hinge
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Rear Side Door Upper Hinge to Body Bolts (Qty: 2) CAUTION: Refer to Fastener Caution . Procedure Mark the location of the hinge before removing the bolts with a grease pencil. Tighten 25 N.m (18 lb ft)
2	Rear Side Door Upper Hinge to Door Bolts (Qty: 2) Tighten 25 N.m (18 lb ft)
3	Rear Side Door Upper Hinge Assembly Procedure Check the door for proper alignment, adjust as necessary.
4	Rear Side Door Lower Hinge to Body Bolts (Qty: 2) Tighten 25 N.m (18 lb ft)
5	Rear Side Door Lower Hinge to Door Bolts (Qty: 2) Tighten 25 N.m (18 lb ft)
6	Rear Side Door Lower Hinge Assembly Procedure Check the door for proper alignment, adjust as necessary. Refer to Rear Side Door Adjustment.

HOOD ADJUSTMENT

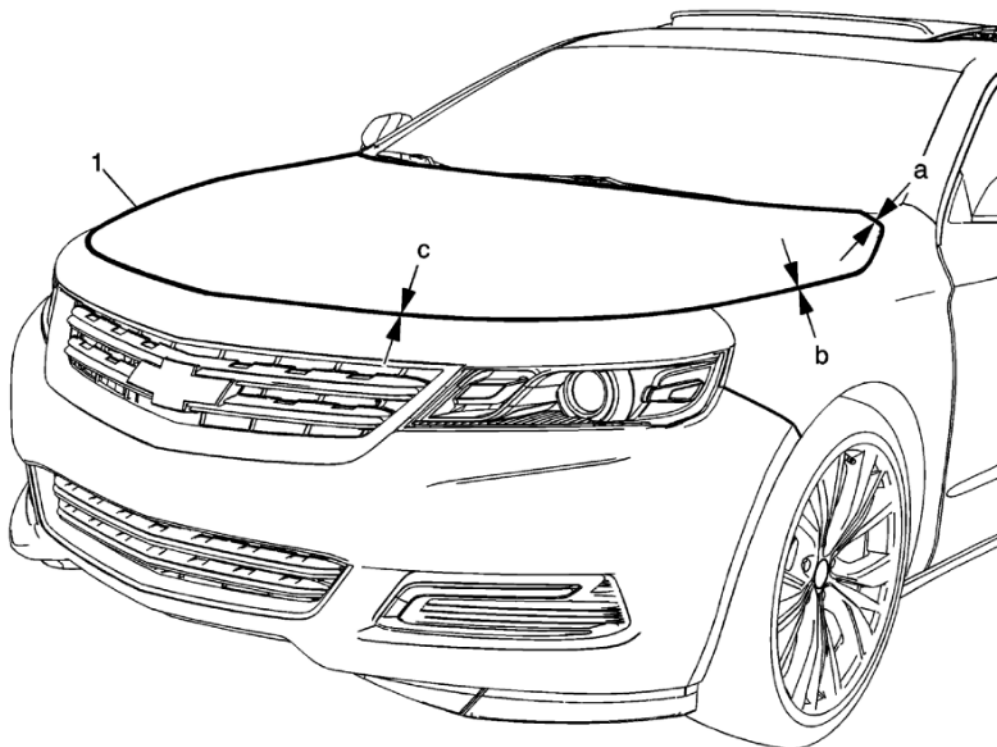


Fig. 17: Hood Adjustment Points

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the 4 hood hinge bolts. 2. Adjust the hood in order to obtain an even gap on both sides between the hood and the fenders and the front bumper fascia. Also confirm that the hood is flush with both fenders on the front edge, and the front bumper fascia. 3. Loosen and adjust the hood primary and secondary latch and the hood bumpers as necessary to obtain the adjustment. Adjustment: • Hood to front fender (a) 3.0 mm $\tilde{A}, \hat{A} \pm 0.75$ mm (0.12 in $\tilde{A}, \hat{A} \pm 0.03$ in) • Hood to front fender (b) 3.0 mm $\tilde{A}, \hat{A} \pm .75$ mm (0.12 in $\tilde{A}, \hat{A} \pm 0.03$ in) • Hood to front fascia (c) 3.0 mm $\tilde{A}, \hat{A} \pm 1.5$ mm (0.12 in $\tilde{A}, \hat{A} \pm 0.05$ in) Tighten 22 N.m (16 lb ft)

HOOD REPLACEMENT

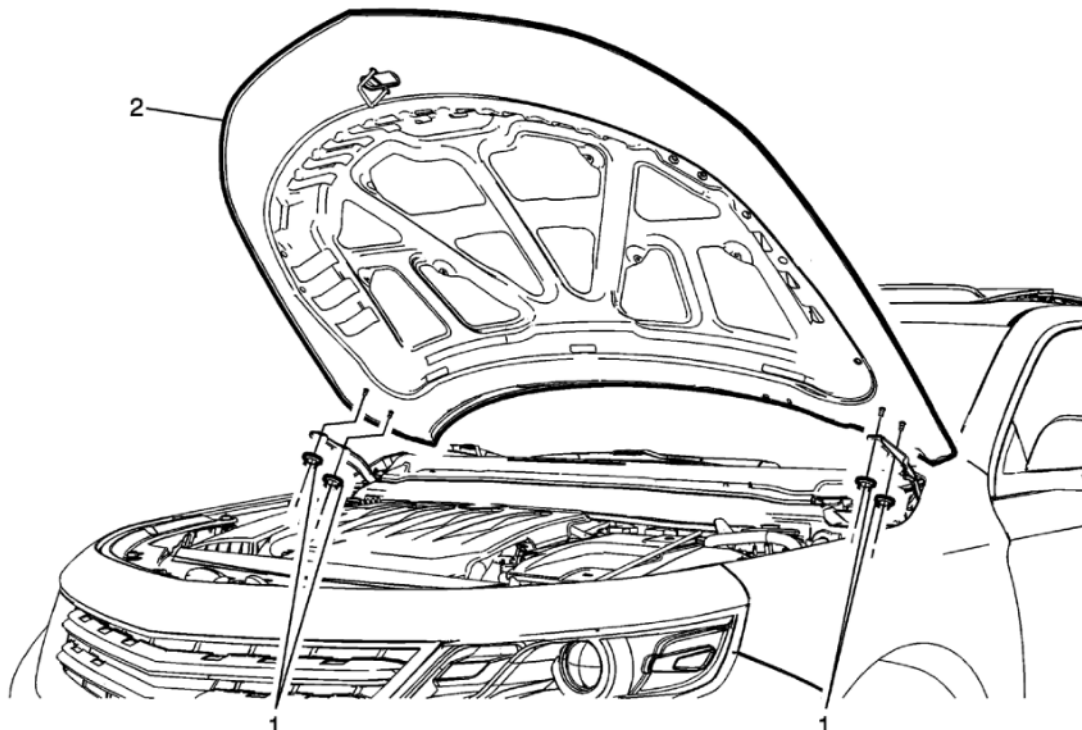


Fig. 18: Hood & Mounting Nuts

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Disconnect the hood strut. Refer to Hood Strut Replacement .	
1	Hood Hinge Nut (Qty: 4) CAUTION: Refer to Fastener Caution . Procedure Mark the hood or hinge position in order to aid in hood reinstallation. Tighten 22 N.m (16 lb ft)
2	Hood Procedure 1. With the aid of an assistant remove the hood. 2. Transfer parts as needed. 3. Adjust the hood if needed. Refer to Hood Adjustment.

HOOD INSULATOR REPLACEMENT

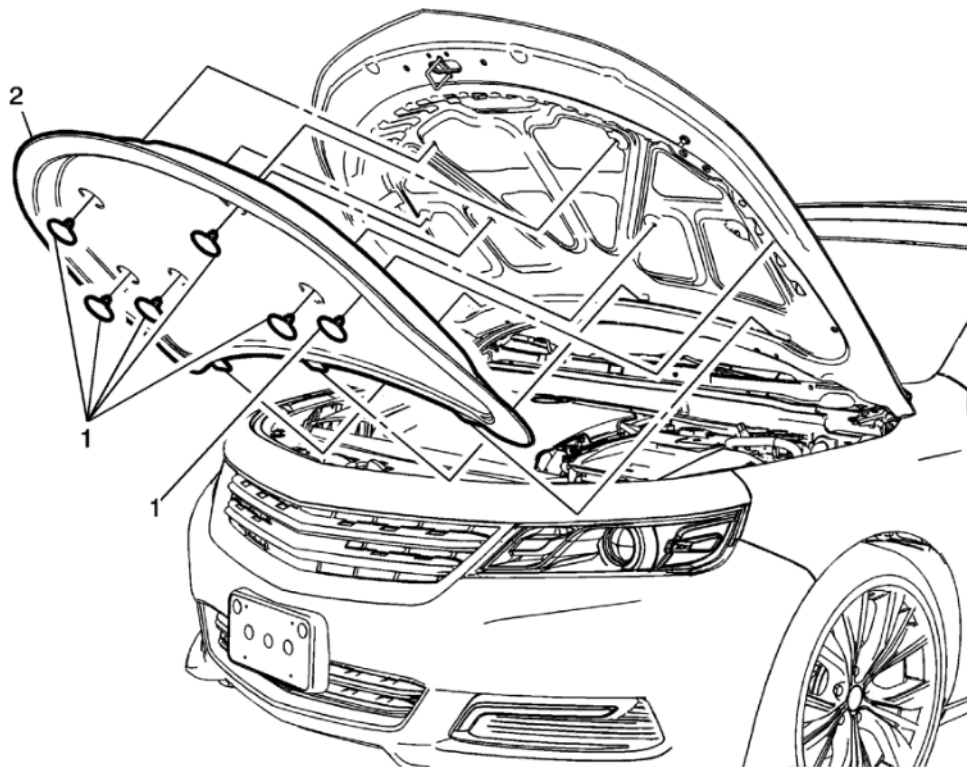


Fig. 19: Hood Insulator & Retainers
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Insulator Plastic Retainer (Qty: 6)
2	Hood Insulator Procedure Ensure the three lower integral tabs are secure to the hood.

HOOD PRIMARY AND SECONDARY LATCH REPLACEMENT

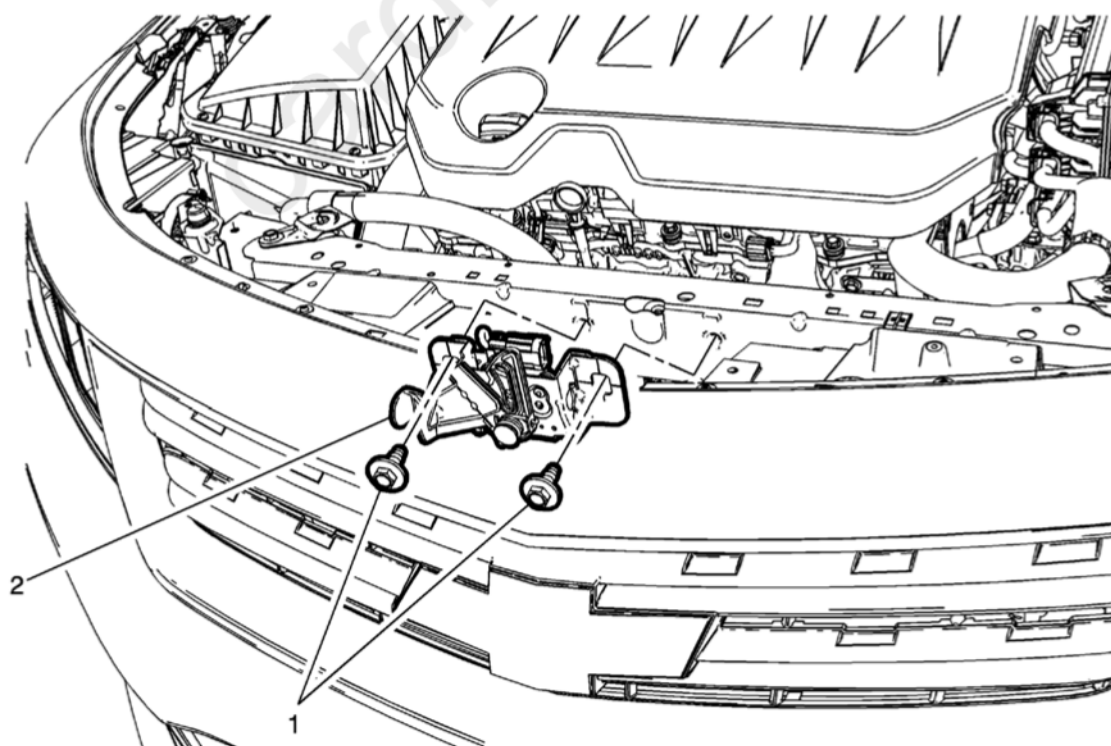


Fig. 20: Hood Primary & Secondary Latch
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front compartment front sight shield. Refer to Front Compartment Front Sight Shield Replacement .	
1	Hood Primary and Secondary Latch Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 22 N.m (16 lb ft) NOTE: Mark the location of the original hood latch for before removing the bolts for reference.
2	Hood Primary and Secondary Latch Procedure 1. Disconnect the release cable from the hood primary latch. 2. Disconnect the electrical connector. 3. Adjust the hood if necessary. Refer to Hood Adjustment

REAR COMPARTMENT LID ADJUSTMENT

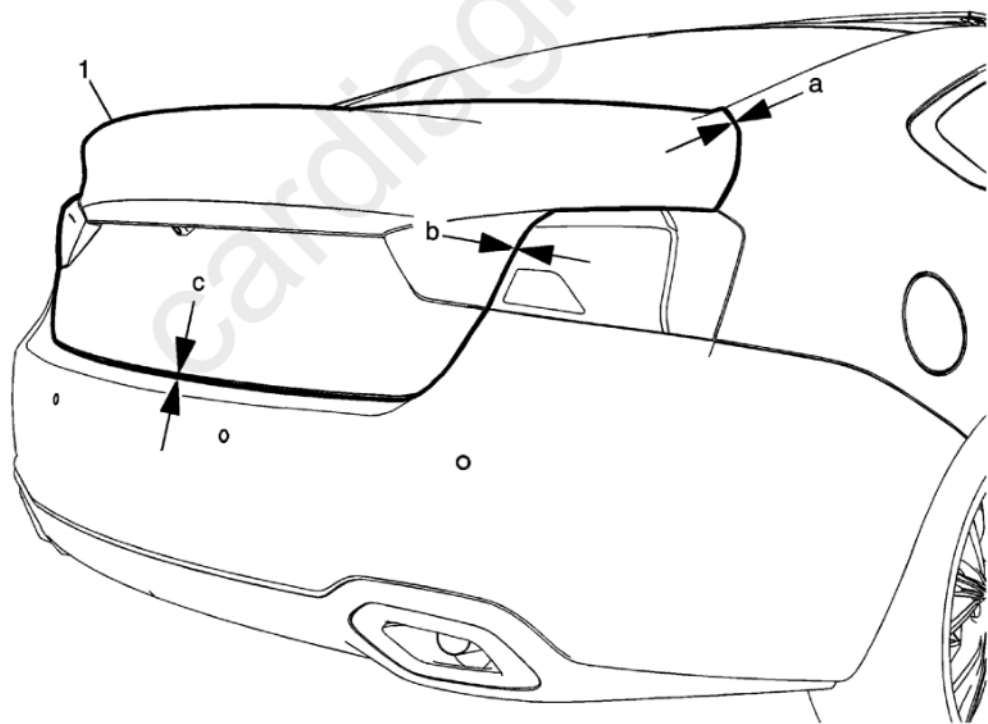


Fig. 21: Rear Compartment Lid
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Rear Compartment Lid CAUTION: Refer to Fastener Caution . Procedure 1. Loosen the rear compartment lid hinge bolt (Qty: 4) to adjust the rear compartment lid. 2. Loosen the rear compartment lid striker bolts (Qty: 2) to adjust the rear compartment lid. 3. Adjust the rear compartment lid in order to obtain an even gap between the rear compartment lid and the quarter outer panel, the rear lamp and the rear bumper fascia and so that the rear compartment lid is flush with the quarter outer panel, the rear lamp and the rear bumper fascia. Adjustment • Rear compartment lid to quarter outer panel (a) 3.5 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 0.75$ mm (0.13 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.03$ in) • Rear compartment lid lamp to tail lamp (b) 4.0 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.5$ mm (0.16 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.06$ in) • Rear compartment lid to rear bumper fascia (c) 5.5 mm $\tilde{\Delta}$, $\hat{\Delta} \pm 1.5$ mm (0.22 in $\tilde{\Delta}$, $\hat{\Delta} \pm 0.06$ in) Tighten 9 N.m (80 lb in)

REAR COMPARTMENT LID REPLACEMENT

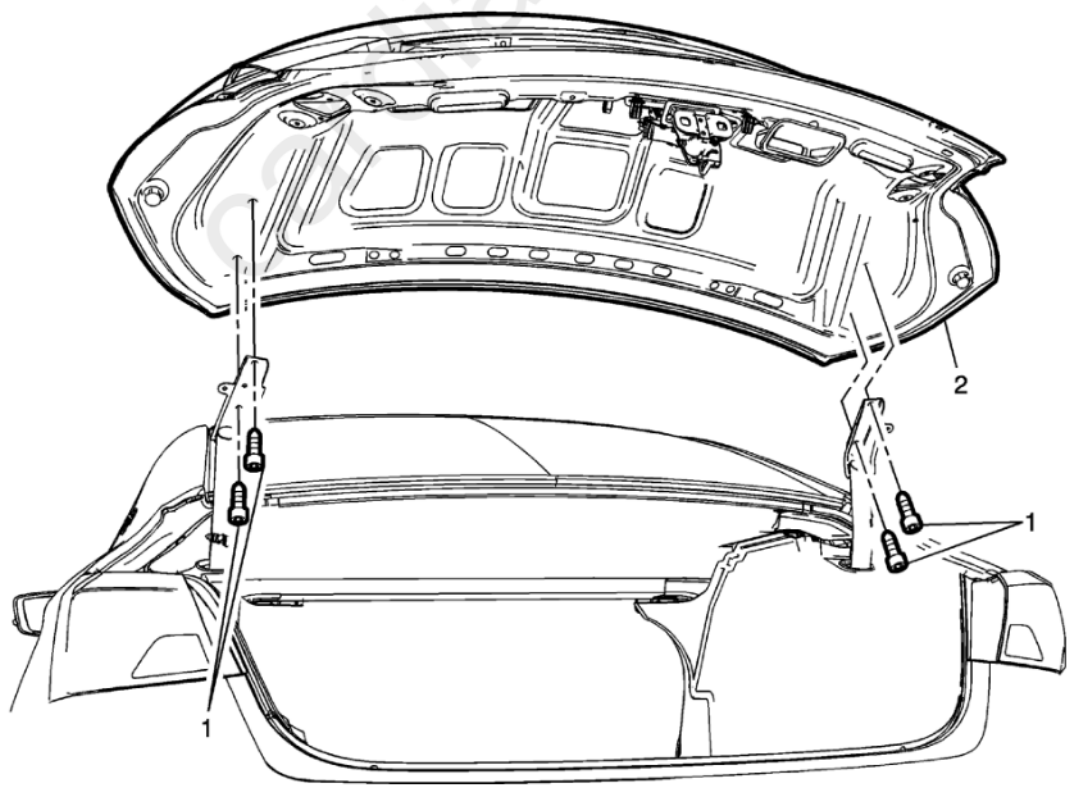


Fig. 22: Rear Compartment Lid
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

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 Bolt (Qty: 4) CAUTION: Refer to Fastener Caution . Tighten 22 N.m (16 lb ft)
2	Rear Compartment Lid Procedure 1. Disconnect the electrical connector. 2. Remove the rear compartment lid with the aid of an assistant. 3. Transfer components as necessary. 4. Adjust the rear compartment lid if needed. Refer to Rear Compartment Lid Adjustment

FRONT SIDE DOOR CHECK LINK REPLACEMENT

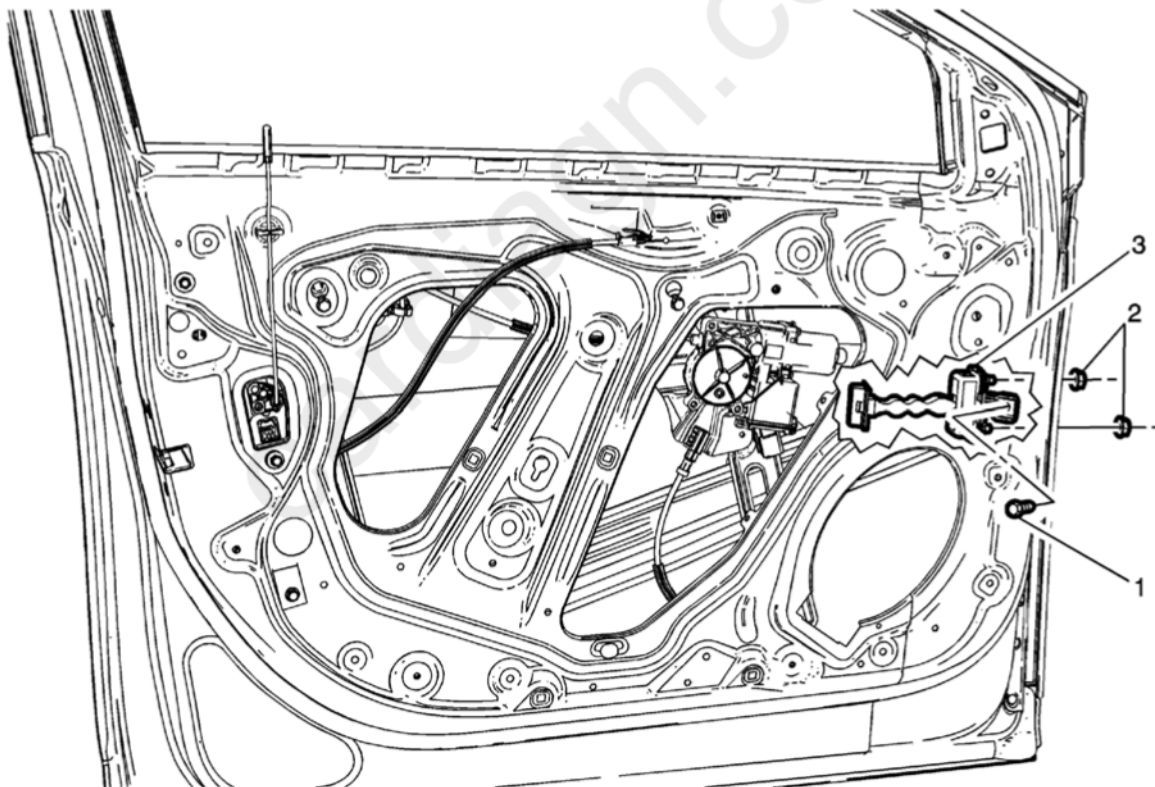


Fig. 23: Front Side Door Check Link (Sedan)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the front side door trim. Refer to Front Side Door Trim Replacement 2. Remove the front side door speaker. Refer to Radio Front Side Door Speaker Replacement .	

Callout	Component Name
1	Front Side Door Check Link to Body Bolt CAUTION: Refer to Fastener Caution . NOTE: Place the door in the full open position. Tighten 22 N.m (16 lb ft)
2	Front Side Door Check Link to Door Nuts (Qty: 2) Tighten 10 N.m (89 lb in)
3	Front Side Door Check Link

REAR SIDE DOOR CHECK LINK REPLACEMENT

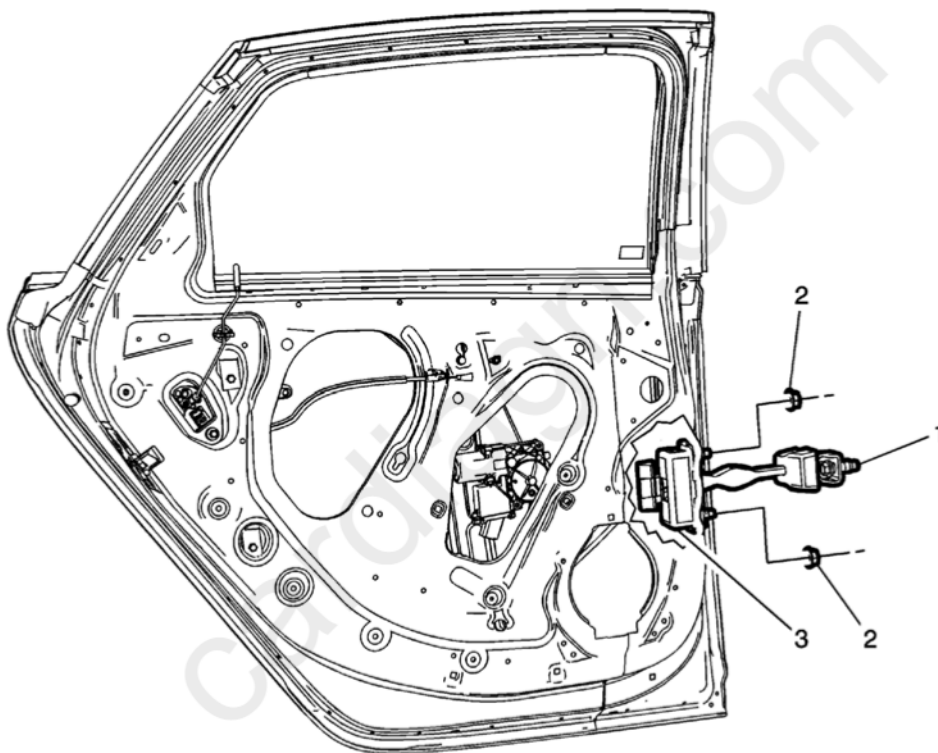


Fig. 24: Rear Side Door Check Link & Mounting Components
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the rear side door speaker. Refer to Radio Rear Side Door Speaker Replacement .	
1	Rear Side Door Check Link to Body Bolt CAUTION: Refer to Fastener Caution . NOTE: Place the door in the full open position. Tighten 22 N.m (16 lb ft)

Callout	Component Name
2	Rear Side Door Check Link to Door Nuts (Qty: 2) Procedure Remove the water deflector. Tighten 10 N.m (89 lb in)
3	Rear Side Door Check Link

FUEL TANK FILLER DOOR REPLACEMENT

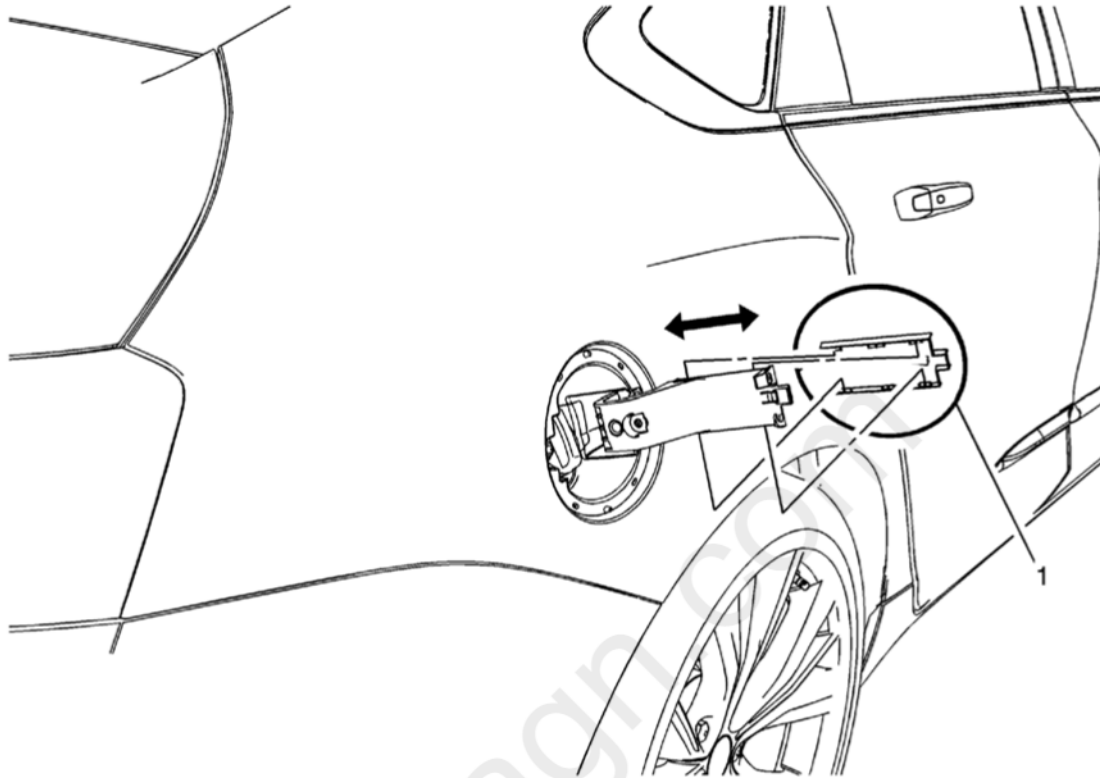


Fig. 25: Fuel Tank Filler Door

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Fuel Tank Filler Door Procedure Position the fuel tank filler door to the full open position. Using light outward sliding pressure on the filler door, release the retainer on the fuel tank filler door from the hinge.

FUEL TANK FILLER PIPE HOUSING REPLACEMENT

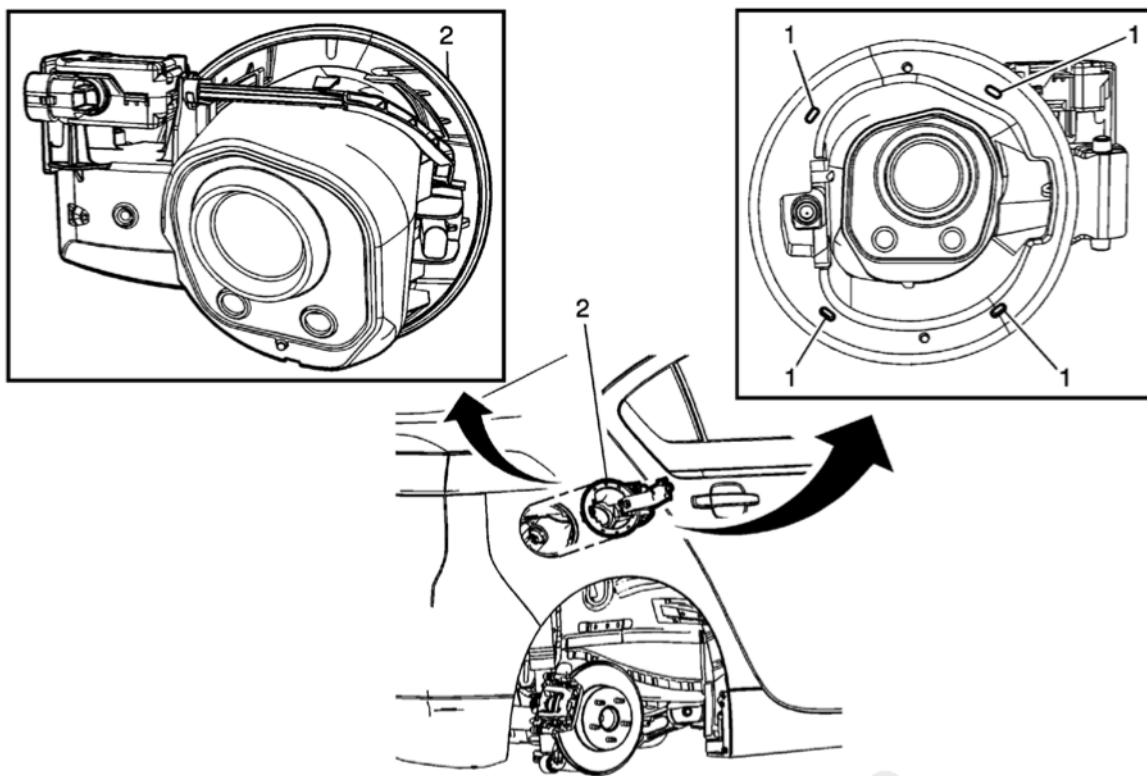


Fig. 26: Fuel Tank Filler Valve Housing
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures <u>Fuel Tank Filler Door Replacement</u> - Loosen the lower filler pipe bolt and remove the upper filler pipe bolt. <u>Fuel Tank Filler Pipe Replacement (LFX)</u>	
1	Fuel Tank Filler Pipe Housing Retainer (Qty: 4) Procedure Using a flat-bladed tool, release the fuel tank filler pipe housing retainers through the wheelhouse opening.
2	Fuel Tank Filler Pipe Housing Procedure - Disconnect the data link connector. - Ensure the fuel filler door locking rod is in the lock position while removing the housing.

HOOD STRUT REPLACEMENT

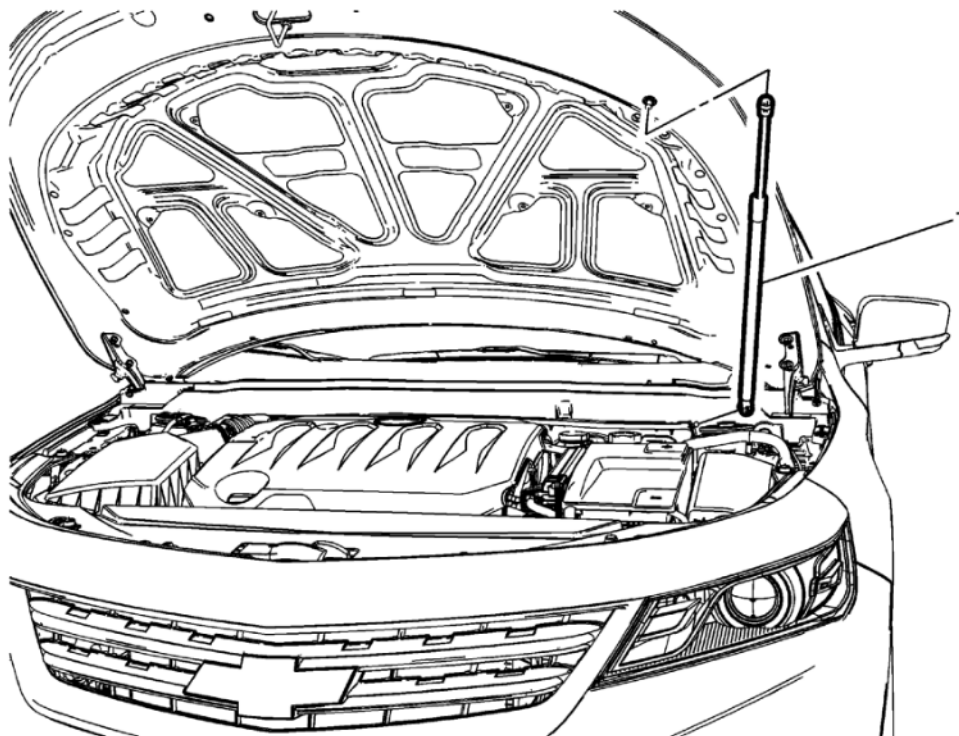


Fig. 27: Hood Strut

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Strut 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. 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 Remove the metal clip at the ends of the hood strut, then pull the hood strut away from the stud.

HOOD REAR WEATHERSTRIP REPLACEMENT

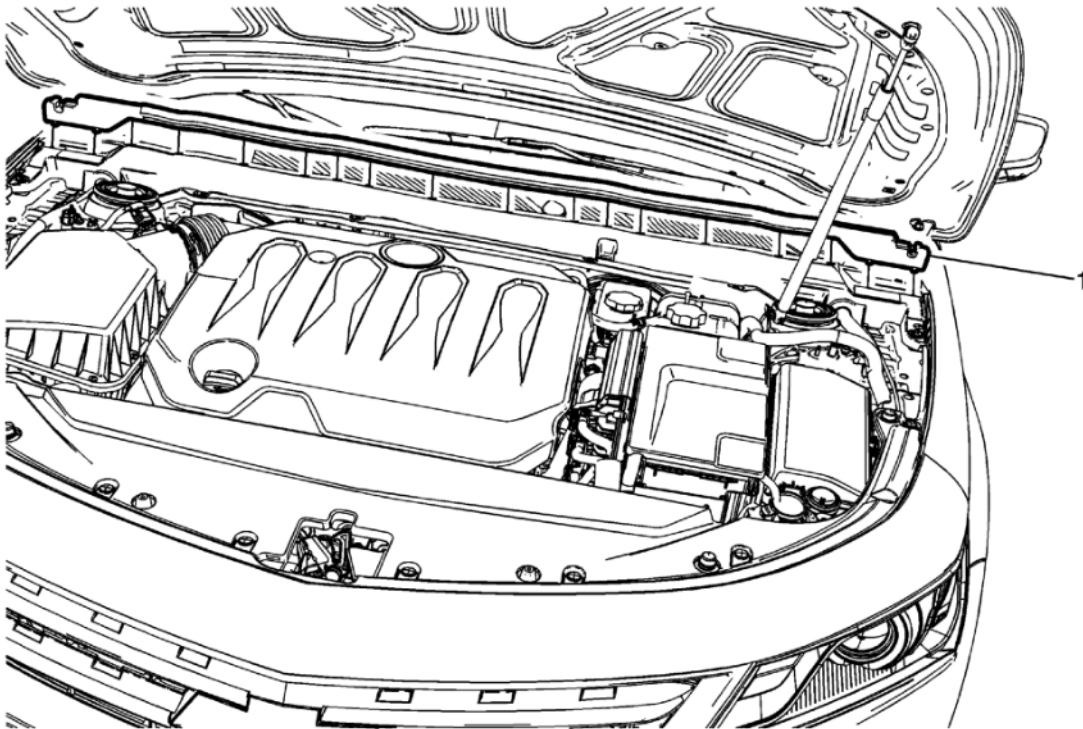


Fig. 28: Hood Rear Weatherstrip

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Hood Rear Weatherstrip Procedure 1. Use a suitable tool to release the push-in retainers at each end of the weatherstrip. 2. The hood rear weather-strip is held in place with 14 plastic retainers that are part of the air inlet grille. Carefully pull the hood rear weatherstrip to the right/left to release the weatherstrip from the retainers on the air inlet grille.

FRONT COMPARTMENT FRONT SIGHT SHIELD REPLACEMENT

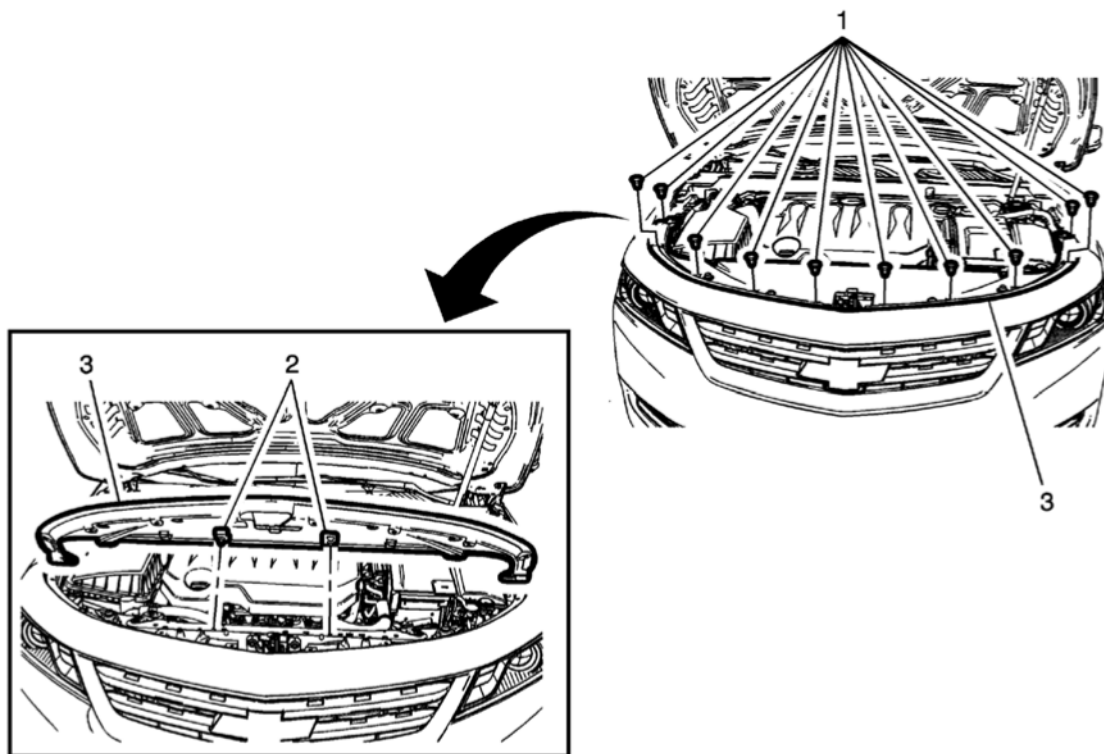


Fig. 29: Front Compartment Front Sight Shield
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Compartment Front Sight Shield Push-In Retainer (Qty: 10)
2	Front Compartment Front Sight Shield Retainer (Qty 2)
3	Front Compartment Front Sight Shield

Procedure

Using a suitable tool, disengage the two hidden retainers from the upper tie bar.

REAR COMPARTMENT LID STRUT REPLACEMENT

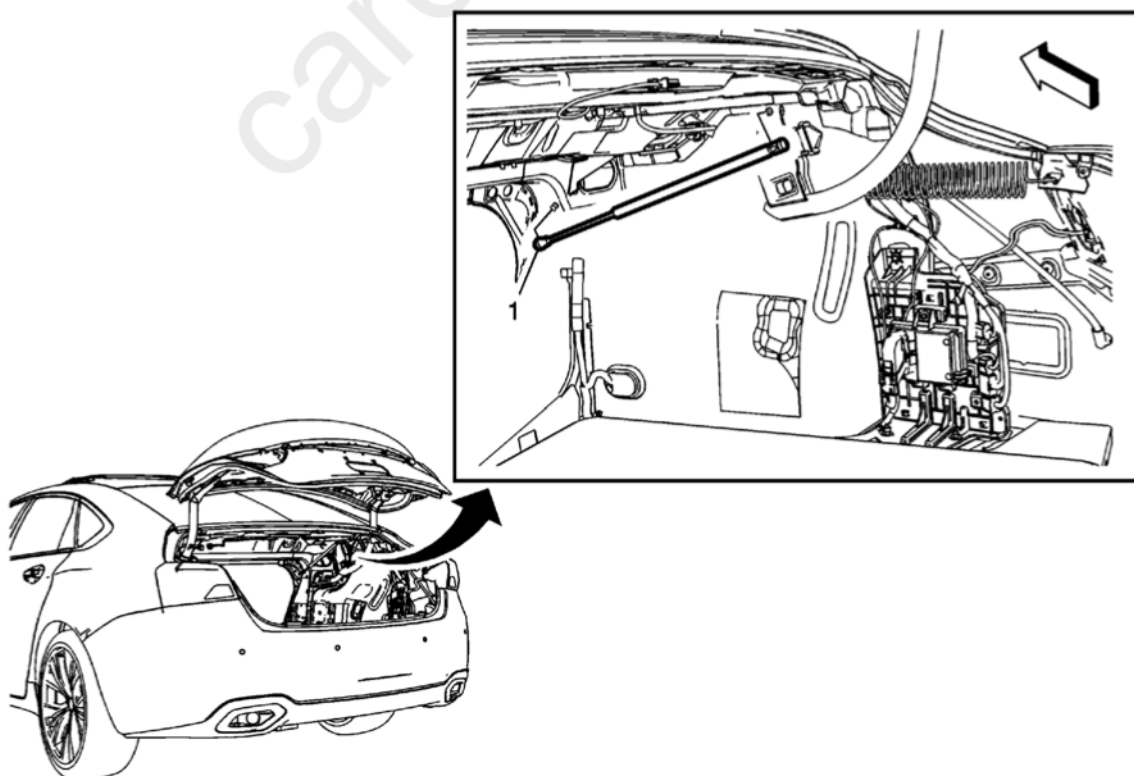


Fig. 30: Rear Compartment Lid Strut
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
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. 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. Preliminary Procedure Remove the right side rear compartment side trim panel. Refer to Rear Compartment Side Trim Replacement - Right Side.	
	Rear Compartment Lid Strut
1	Procedure 1. Release the locking tabs on the strut. 2. Ensure the clip is fully seated when the rod is reinstalled. If the clip cannot be fully seated, a new rod should be installed.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE

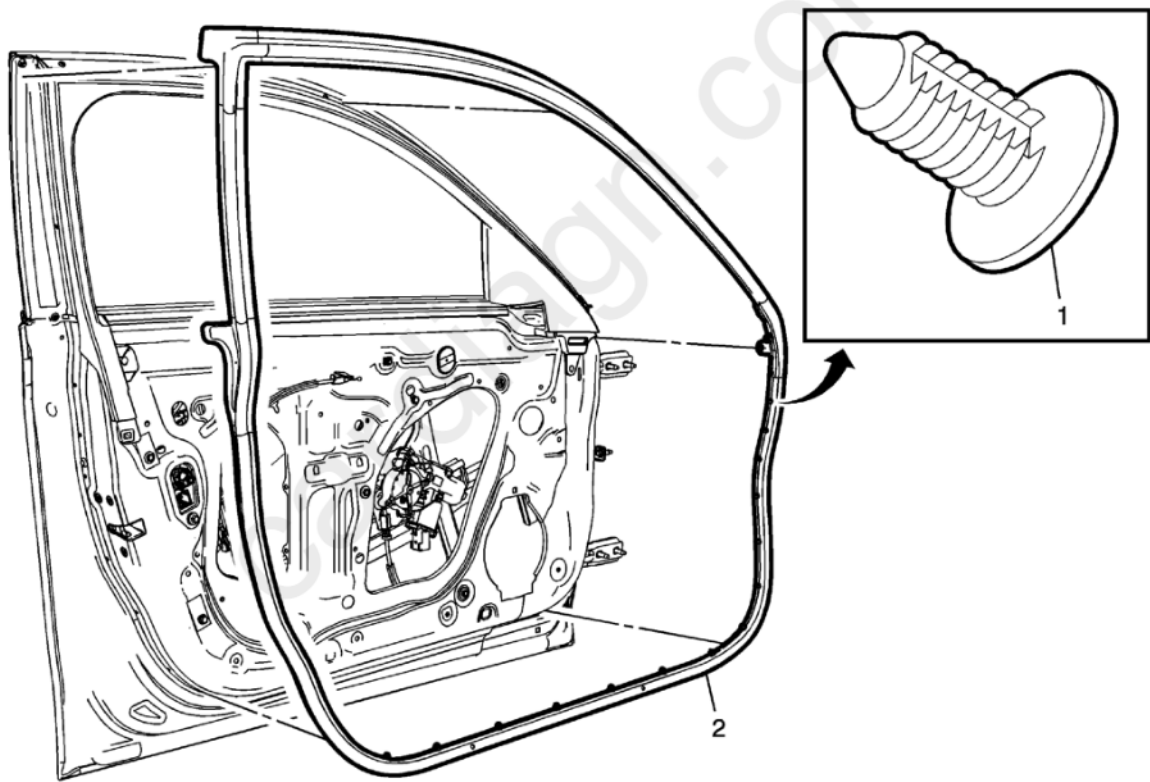


Fig. 31: Front Side Door Weatherstrip - Door Side (Sedan)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Front Side Door Weatherstrip Retainer (Qty: 34) Procedure 1. Open the front side door fully. 2. Remove the checklink bolt to the pillar. Refer to Front Side Door Check Link Replacement. 3. Using a suitable tool, remove the retainers from around the door. 4. After removing the weatherstrip and retainers, clean the inside door edge surface with a 50/50 mixture of isopropyl alcohol and clean water by volume on a dampened lint free cloth.
2	Front Side Door Weatherstrip NOTE: Inspect the door to ensure a proper seal after the weatherstrip has been replaced.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE

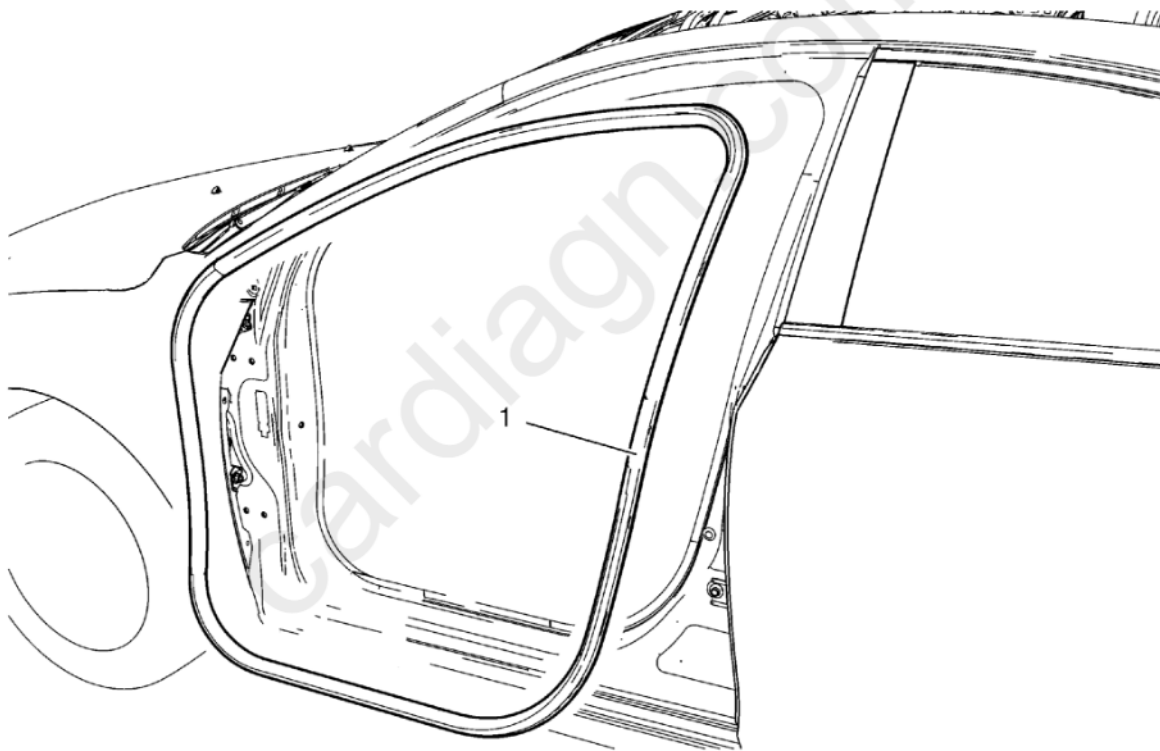


Fig. 32: Front Side Door Weatherstrip - Body Side

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the front side door garnish molding. Refer to Front Side Door Sill Garnish Molding Replacement .	

Callout	Component Name
1	Front Side Door Weatherstrip to Body Side Procedure 1. Start at the rear upper corner of the door opening and pull the weatherstrip away from the door opening flange. 2. Position the weatherstrip in the upper corner of the center pillar. 3. Working downward along the front edge, install the weatherstrip on the door opening flange ensuring that the carrier is fully seated in the corners. 4. Ensure that the weatherstrip is seated on the entire door opening flange. NOTE: Inspect the door to ensure a proper seal after the weatherstrip has been replaced.

REAR COMPARTMENT LID WEATHERSTRIP REPLACEMENT

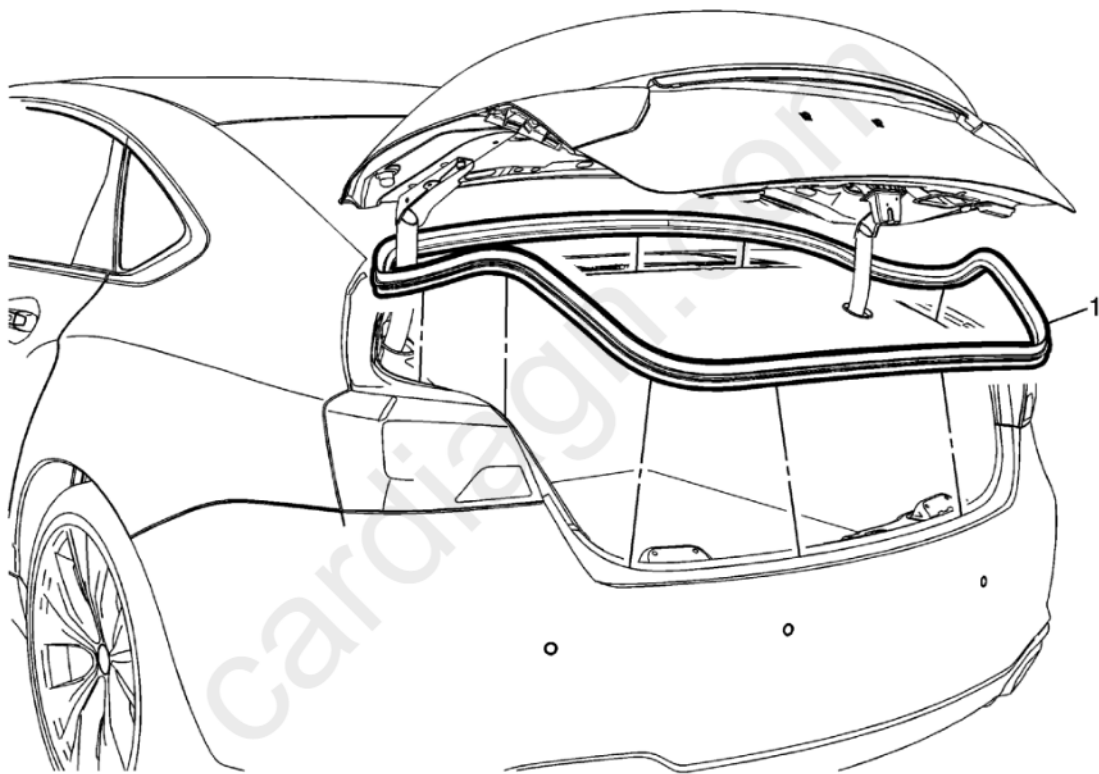


Fig. 33: Rear Compartment Lid Weatherstrip
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Compartment Lid Weatherstrip Procedure Clean the mounting surface using a mixture of 50 percent isopropyl alcohol and 50 percent water by volume, or high-flash naphtha.

REAR SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE

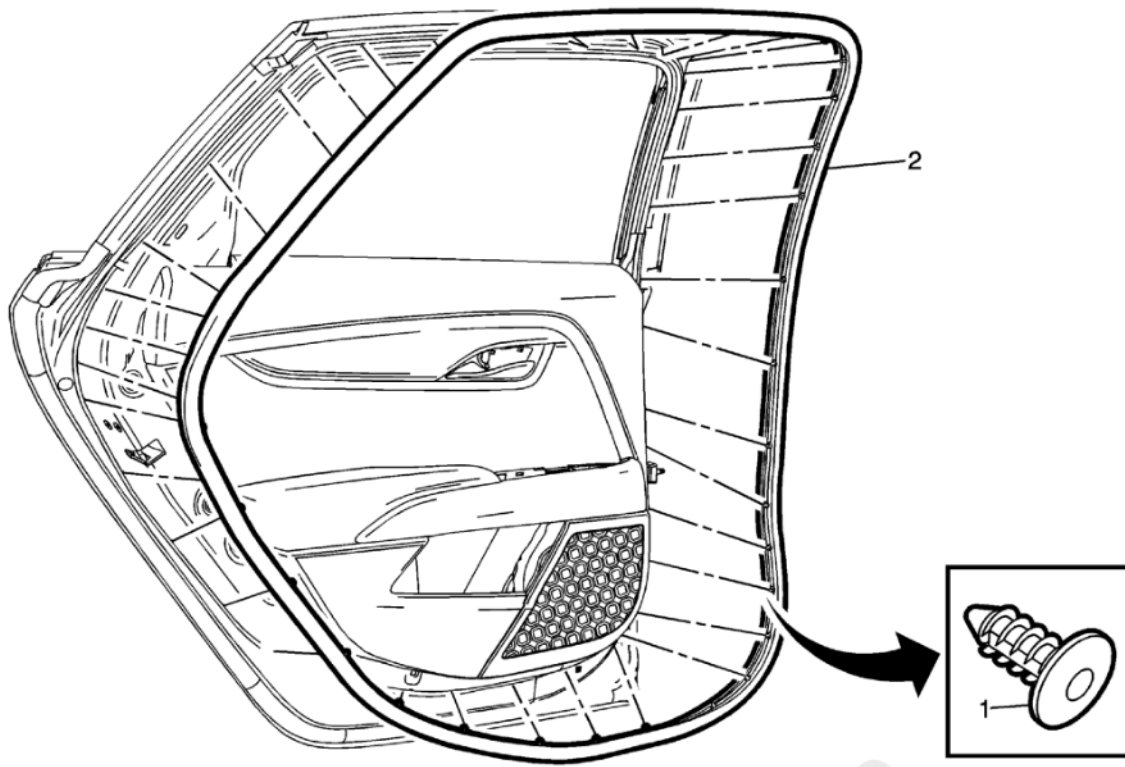


Fig. 34: Rear Side Door Weatherstrip & Retainers - Door Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Rear Side Door Weatherstrip Retainer (Qty: 34) Procedure 1. Open the rear side door fully. 2. Remove the rear side door checklink bolt to the pillar. Refer to Rear Side Door Check Link Replacement. 3. Using a suitable tool, remove the retainers from around the door. 4. After removing the weatherstrip and retainers, clean the inside door edge surface with a 50/50 mixture of isopropyl alcohol and clean water by volume on a dampened lint free cloth.
2	Rear Side Door Weatherstrip Procedure Use a suitable tool, fit the door weatherstrip into the door top retainer. NOTE: Inspect the door to ensure a proper seal after the weatherstrip has been replace.

REAR SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE

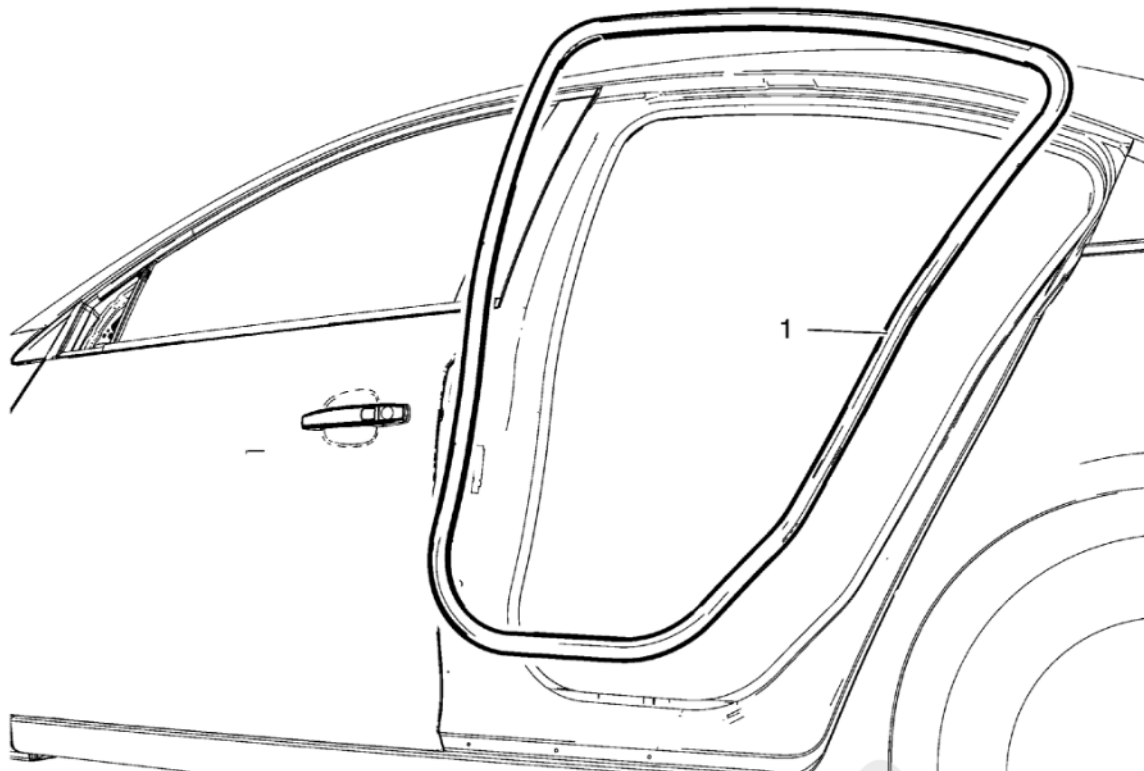


Fig. 35: Rear Side Door Weatherstrip - Body Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the center pillar lower trim panel. Refer to Center Pillar Lower Trim Panel Replacement .	
1	Rear Side Door Weatherstrip to Body Side Procedure 1. Start at the front upper corner of the door opening and pull the weatherstrip away from the door opening flange. 2. Position the weatherstrip in the upper corner of the center pillar. 3. Working downward along the front edge, install the weatherstrip on the door opening flange ensuring that the carrier is fully seated in the corners. 4. Ensure that the weatherstrip is seated on the entire door opening flange. NOTE: Inspect the door to ensure a proper seal after the weatherstrip has been replaced.

DESCRIPTION AND OPERATION

HOOD AJAR INDICATOR DESCRIPTION AND OPERATION

Hood Ajar Indicator System Components

- Body Control Module (BCM)
- Starter/Generator Control Module (with RPO HP6)
- Driver information center
- Hood ajar switch, part of the hood latch assembly

Hood Ajar Operation - Body Control Module

The BCM applies B+ to the hood ajar signal 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 BCM by pulling down the applied voltage based on the position of the switch.

Hood Ajar Operation - Starter/Generator Control Module (with RPO HP6)

The starter/generator control module applies B+ to the hood ajar signal 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 starter/generator control module by pulling down the applied voltage based on the position of the switch.

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