

ACCESSORIES & EQUIPMENT

Bolted Exterior Body Panels and Closures - CTS Coupe And Wagon

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Assist Rod Ball Stud	9 N.m	80 lb in
Cross Vehicle Brace Bolts	112 N.m	83 lb ft
Fender Bolts	9 N.m	80 lb in
Front Door Check Link Bolt to Body	22 N.m	16 lb ft
Front Door Check Link Nuts to Door	9 N.m	80 lb in
Front Door Hinge Bolts to Body	33 N.m	24 lb ft
Front Door Hinge Bolts to Door	33 N.m	24 lb ft
Front Door Upper Auxiliary Weatherstrip Screws	2 N.m	18 lb in
Fuel Filler Door Bolts	9 N.m	80 lb in
Hood Latch Bolts	9 N.m	80 lb in
Hood Release Handle Bolts	2 N.m	18 lb in
Lower Hood Hinge Bolts	25 N.m	18 lb ft
Rear Compartment Lid Hinge Bolts	25 N.m	18 lb ft
Rear Side Door Auxiliary Weatherstrip	2 N.m	80 lb in
Rear Door Check Link Bolt to Body	22 N.m	16 lb ft
Rear Door Check Link Nuts to Door	9 N.m	80 lb in
Rear Door Hinge Bolts to Body	33 N.m	24 lb ft
Rear Door Hinge Bolts to Door	33 N.m	24 lb ft
Upper Hood Hinge Bolts	9 N.m	80 lb in

SCHEMATIC WIRING DIAGRAMS

HOOD LATCH WIRING SCHEMATICS

Hood Ajar Switch

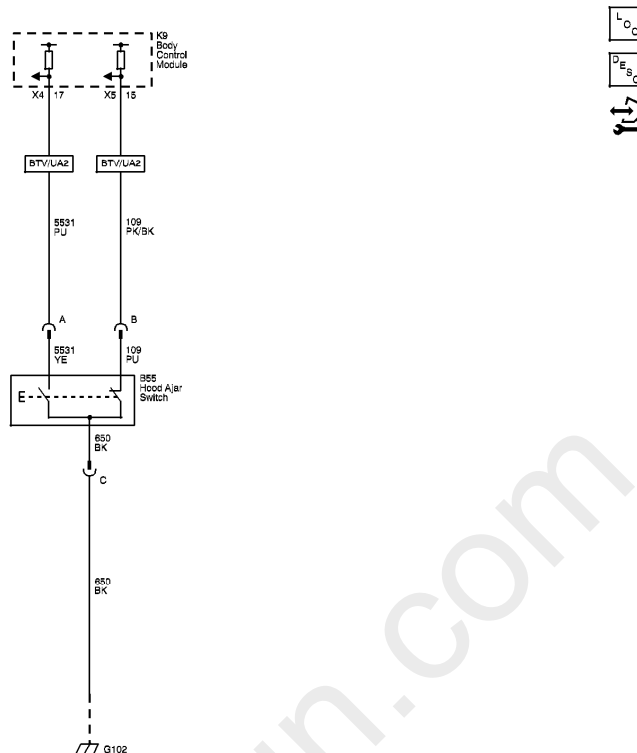


Fig. 1: Hood Ajar Switch

Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC CODE INDEX

DIAGNOSTIC CODE INDEX

DTC	Description
DTC B3006	DTC B3006 5A Hood Ajar Circuit Plausibility Failure

DTC B3006: HOOD AJAR CIRCUIT PLAUSIBILITY FAILURE

Diagnostic Instructions

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

DTC Descriptor

DTC B3006 5A

Hood Ajar Circuit Plausibility Failure

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Hood Ajar Switch Signal	B3006 5A	B3006 5A	B3006 5A	-
Hood Closed Switch Signal	B3006 5A	B3006 5A	B3006 5A	-
Ground	B3006 5A	B3006 5A	-	-

Circuit/System Description

The body control module (BCM) monitors the voltage input of the hood open switch signal circuit and the hood open closed switch signal circuit. With the hood open, the hood ajar portion of the switch is closed, grounding the hood ajar switch signal circuit from the BCM, and the hood closed portion of the switch is open. With the hood closed, the hood closed portion of the switch is closed, grounding the hood closed switch signal circuit from the BCM, and the hood ajar portion of the switch is open. During proper operation, the two separate voltage signals at the BCM should never be at the same voltage.

Conditions for Running the DTC

The BCM continuously monitors for this DTC

Conditions for Setting the DTC

Both the hood open switch signal circuit and the hood closed switch signal circuit are simultaneously in an active or inactive state.

Action Taken When the DTC Sets

- Remote start functions will be disabled.
- The hood ajar switch inputs will be ignored by content theft deterrent (CTD).

Conditions for Clearing the DTC

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

Reference Information

Schematic Reference

- Immobilizer Schematics
- Remote Function Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX - COUPE AND WAGON

Description and Operation

Keyless Entry System Description and Operation (without ATH) , Keyless Entry System Description and Operation (with ATH)

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

Ignition ON, observe the scan tool BCM Hood Open Switch and Hood Closed Switch parameters. With the hood open, the Hood Open Switch parameter should read Active and the Hood Closed Switch parameter should read Inactive. With the hood closed, the Hood Open Switch parameter should read Inactive and the Hood Closed Switch parameter should read Active.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the hood ajar switch.
2. Ignition OFF, test for less than 5 ohms between the ground circuit terminal C and ground.
 - If greater than the specified range, test the ground circuit for an open/high resistance.
3. Ignition ON, test for 11.5-12.0 volts between the signal circuit terminal A and ground.
 - If greater than the specified range, test the signal circuit for a short to voltage. If the circuit tests normal, replace the BCM.
 - If less than the specified range, test the signal circuit for a short to ground or an open/high resistance. If the circuit tests normal, replace the BCM.
4. Ignition ON, test for 11.5-12.0 volts between the signal circuit terminal B and ground.
 - If greater than the specified range, test the signal circuit for a short to voltage. If the circuit tests normal, replace the BCM.
 - If less than the specified range, test the signal circuit for a short to ground or an open/high resistance. If the circuit tests normal, replace the BCM.
5. If all circuits test normal, test or replace the hood ajar switch.

Component Testing

Hood Ajar Switch

1. Ignition OFF, disconnect the harness connector at the hood ajar switch.
2. With the switch in the hood closed position, test for infinite resistance between the ground terminal C and the signal terminal A.
 - If not infinite, replace the hood ajar switch.
3. Test for less than 2.0 ohms between the ground terminal C and the signal terminal B.
 - If greater than the specified range, replace the hood ajar switch.
4. With the switch in the hood open position, test for infinite resistance between the ground terminal C and the signal terminal B.
 - If not infinite, replace the hood ajar switch.
5. Test for less than 2.0 ohms between the ground terminal C and the signal terminal A.
 - If greater than the specified range, replace the hood ajar switch.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

- **Hood Primary and Secondary Latch Replacement**
- **Control Module References** for BCM 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.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Hood Ajar Switch Signal	1	1	1	-
Hood Closed Switch Signal	1	1	1	-
Ground	-	1	-	-
1. Hood ajar switch malfunction				

Circuit/System Description

The body control module (BCM) monitors the voltage input of the hood open switch signal circuit and the hood open closed switch signal circuit. With the hood open, the hood ajar portion of the switch is closed, grounding the hood ajar switch signal circuit from the BCM, and the hood closed portion of the switch is open. With the hood closed, the hood closed portion of the switch is closed, grounding the hood closed switch signal circuit from the BCM, and the hood ajar portion of the switch is open. During proper operation, the two separate voltage signals at the BCM should never be at the same voltage.

Reference Information

Schematic Reference

- **Immobilizer Schematics**
- **Remote Function Schematics**

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX - COUPE AND WAGON

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- **Circuit Testing**
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- **Wiring Repairs**

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

Ignition ON, observe the scan tool BCM Hood Open Switch and Hood Closed Switch parameters. With the hood open, the Hood Open Switch parameter should read Active and the Hood Closed Switch parameter should read Inactive. With the hood closed, the Hood Open Switch parameter should read Inactive and the Hood Closed Switch parameter should read Active.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the hood ajar switch.
2. Ignition OFF, test for less than 5 ohms between the ground circuit terminal C and ground.
 - If greater than the specified range, test the ground circuit for an open/high resistance.
3. Ignition ON, test for 11.5-12.0 volts between the signal circuit terminal A and ground.
 - If greater than the specified range, test the signal circuit for a short to voltage. If the circuit tests normal, replace the BCM.
 - If less than the specified range, test the signal circuit for a short to ground or an open/high resistance. If the circuit tests normal, replace the BCM.
4. Ignition ON, test for 11.5-12.0 volts between the signal circuit terminal B and ground.
 - If greater than the specified range, test the signal circuit for a short to voltage. If the circuit tests normal, replace the BCM.
 - If less than the specified range, test the signal circuit for a short to ground or an open/high resistance. If the circuit tests normal, replace the BCM.
5. If all circuits test normal, test or replace the hood ajar switch.

Component Testing

Hood Ajar Switch

1. Ignition OFF, disconnect the harness connector at the hood ajar switch.
2. With the switch in the hood closed position, test for infinite resistance between the ground terminal C and the signal terminal A.
 - If not infinite, replace the hood ajar switch.
3. Test for less than 2 ohms between the ground terminal C and the signal terminal B.
 - If greater than the specified range, replace the hood ajar switch.

4. With the switch in the hood open position, test for infinite resistance between the ground terminal C and the signal terminal B.
 - If not infinite, replace the hood ajar switch.
5. Test for less than 2 ohms between the ground terminal C and the signal terminal A.
 - If greater than the specified range, replace the hood ajar switch.

Repair Instructions

Perform the **Diagnostic Repair Verification** after completing the diagnostic procedure.

- **Hood Primary and Secondary Latch Replacement**
- **Control Module References** for BCM or instrument cluster replacement, programming and setup

REPAIR INSTRUCTIONS

CROSS VEHICLE BRACE REPLACEMENT

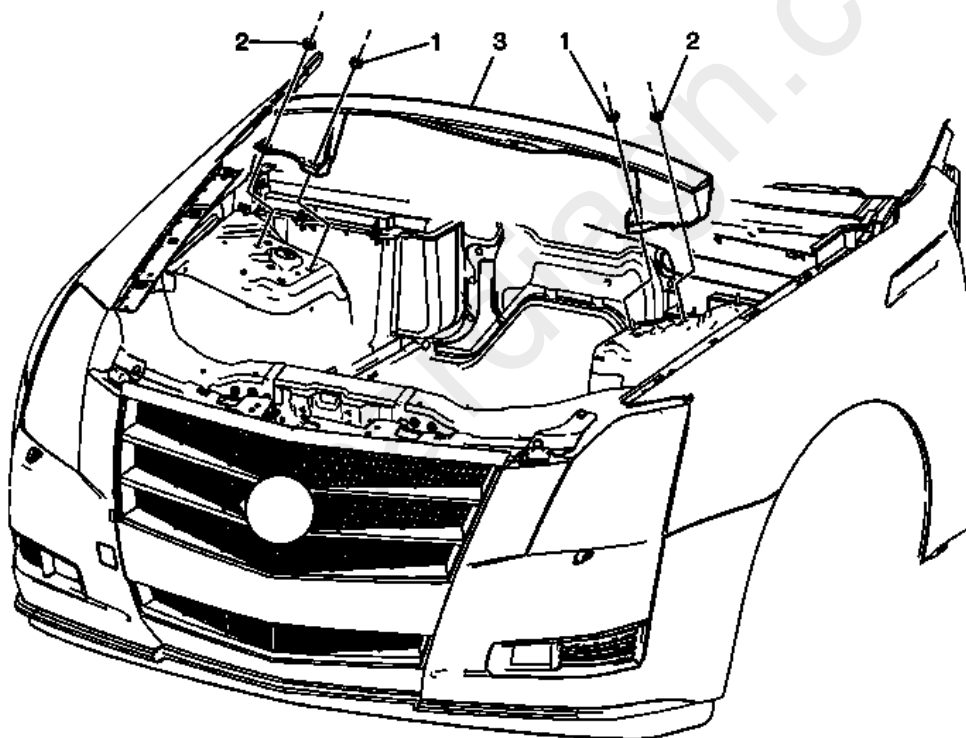


Fig. 2: Cross Vehicle Brace

Courtesy of GENERAL MOTORS COMPANY

Cross Vehicle Brace Replacement

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.

Preliminary Procedure Remove the front compartment side sight shield. Refer to **Front Compartment Side Sight Shield Replacement**.

1	Cross Vehicle Brace Nut (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Procedure Remove the side trim panels in order to access the cross brace. Tighten 80 N.m (59 lb ft)
2	Cross Vehicle Brace Bolt (Qty: 2) Tighten 112 N.m (83 lb ft)
3	Cross Vehicle Brace

DOOR ADJUSTMENT

1. If adjusting the front door, remove the front fender liner to access hinge bolts. Refer to **Front Wheelhouse Liner Replacement** .
2. If adjusting rear door, open the rear door fully to access hinge bolts.

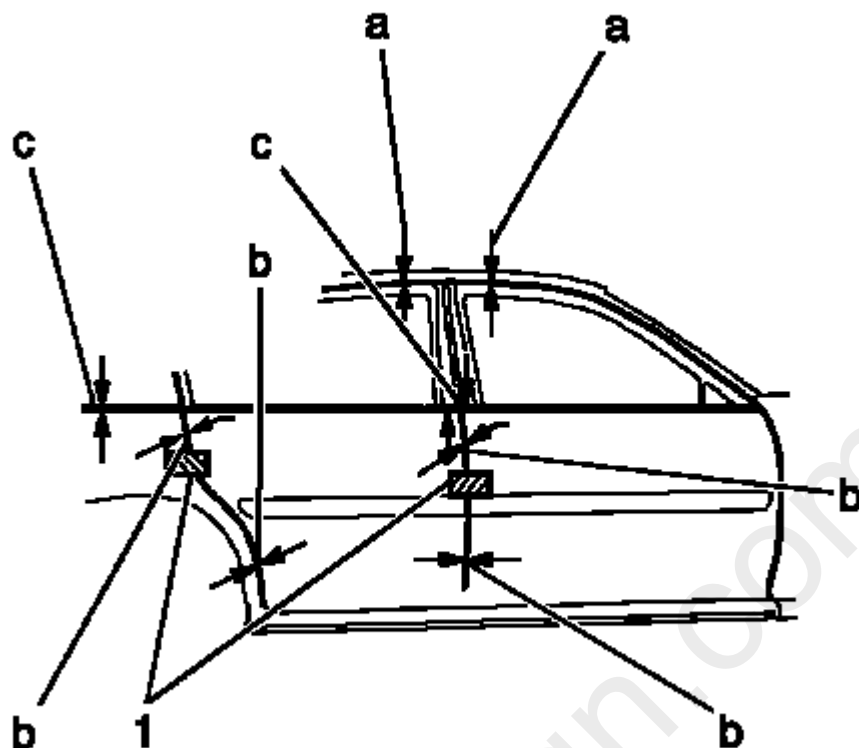


Fig. 3: View Of Door Adjustment
Courtesy of GENERAL MOTORS COMPANY

3. Loosen the door hinge to pillar bolts. This will allow adjustment of the door at the hinge pillar in the following directions:
 - Up or down (c), 0.0-2.0 mm (0.0-0.08 in) upwards, 1 mm (0.04 in) upwards preferred.
 - Fore or aft (b), 3-5 mm (0.12-0.20 in) equal gap, 4 mm (0.16 in) preferred.
4. Reposition the door as needed.

CAUTION: Refer to Fastener Caution .

5. Position the door fore or aft at the hinge pillar attachment. Perform the following steps as needed:
 1. Loosen the bolts.
 2. Reposition the door.
 3. Tighten the bolts to 33 N.m (24 lb ft).
6. Verify the doors are flush to within 1 mm (0.04 in), with a flushing magnet (1) located in the striker area below the beltline.
7. If in or out adjustment is needed, remove the door hinge. Refer to **Front Side Door Upper Hinge and**

Lower Hinge Replacement (Wagon), Front Side Door Upper Hinge and Lower Hinge Replacement (Coupe), or Rear Side Door Upper Hinge and Lower Hinge Replacement.

8. Drill the door side of the hinge holes with a 13 mm (0.5 in) drill bit in order to allow for 2.5 mm (0.10 in) in or out adjustment.
9. Use replacement bolts, GM P/N 11519454 on the door side of the hinge.
10. Leave the bolts on the door side of the hinge loose.
11. Align the front door to the front fender first, if needed.
12. Position the door in or out. Perform the following steps as needed:
 1. Loosen the bolts.
 2. Reposition the door.
 3. Tighten the bolts to 33 N.m (24 lb ft).
13. Align the rear door to the front door and rear quarter, if needed.
14. Position the door in or out. Perform the following steps as needed:
 1. Loosen the bolts.
 2. Reposition the door.
 3. Tighten the bolts to 33 N.m (24 lb ft).
15. Adjust the seal gap (a) at the door header to 13-17 mm (0.52-0.68 in), 15 mm (0.60 in) preferred, by placing knee near the beltline and pulling inward or pushing outward.
16. Verify door header to door header at the center pillar is flush to within 1 mm (0.04 in). Adjust the door headers if necessary.
17. Verify all door gaps are within specifications.
18. Adjust the lock striker. Refer to **Door Lock Striker Adjustment (Wagon)** , **Door Lock Striker Adjustment (Coupe)** .

FRONT SIDE DOOR REPLACEMENT (WAGON)

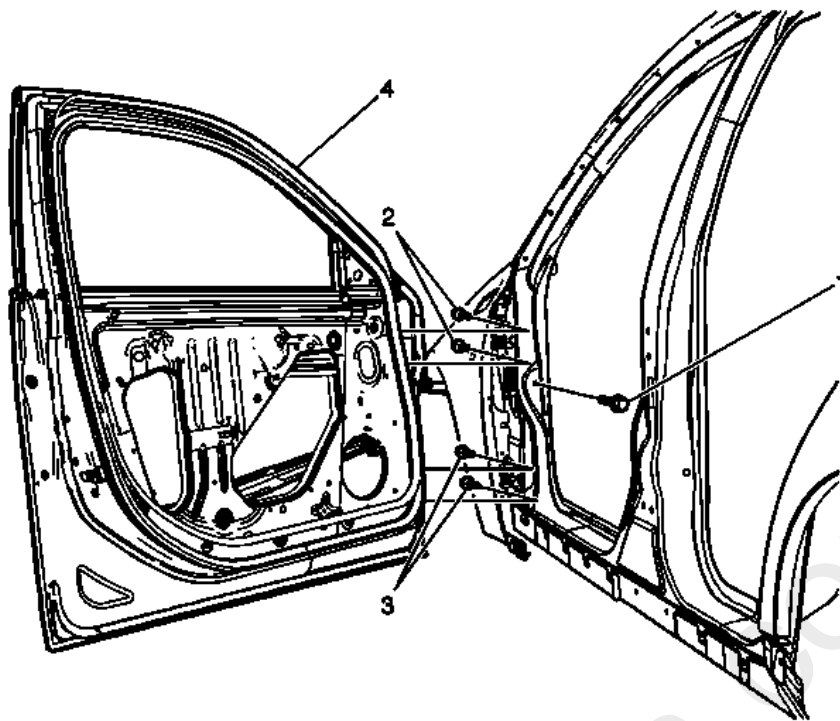


Fig. 4: Front Side Door Replacement
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Replacement (Wagon)

Callout	Component Name
WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS.	
Preliminary Procedures 1. Disable the supplemental inflatable restraint (SIR) system. Refer to <u>SIR Disabling and Enabling</u> . 2. Remove the front door trim panel. Refer to <u>Front Side Door Trim Panel Replacement (Wagon)</u> .	
1	Front Side Door Check Link Bolt to Body CAUTION: Refer to <u>Fastener Caution</u> . 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 Upper Hinge Bolt (Qty: 2) Tighten 33 N.m (24 lb ft)
3	Front Side Door Lower Hinge Bolts (Qty: 2) Tighten 33 N.m (24 lb ft)
4	Front Side Door Assembly Procedure When replacing the door it is necessary to transfer all of the internal components.

FRONT SIDE DOOR REPLACEMENT (COUPE)

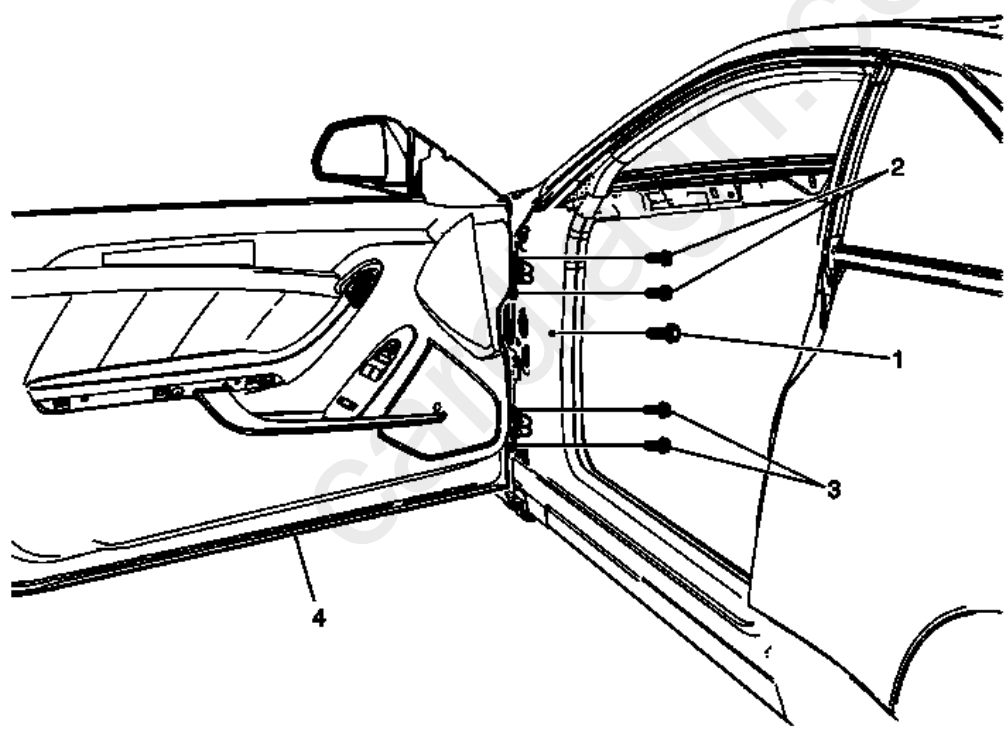


Fig. 5: Front Side Door & Components (Coupe)
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Replacement (Coupe)

Callout	Component Name
WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not	

strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS.

Preliminary Procedures

1. Disable the supplemental inflatable restraint (SIR) system. Refer to **SIR Disabling and Enabling** .
2. Remove the front door trim panel. Refer to **Front Side Door Trim Panel Replacement (Coupe)** .

1	Front Side Door Check Link Bolt to Body CAUTION: Refer to <u>Fastener Caution</u> . 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 Upper Hinge (Qty: 2) Tighten 33 N.m (24 lb ft)
3	Front Side Door Lower Hinge (Qty: 2) Tighten 33 N.m (24 lb ft)
4	Front Side Door Assembly Procedure When replacing the door it is necessary to transfer all of the internal components.

REAR DOOR REPLACEMENT

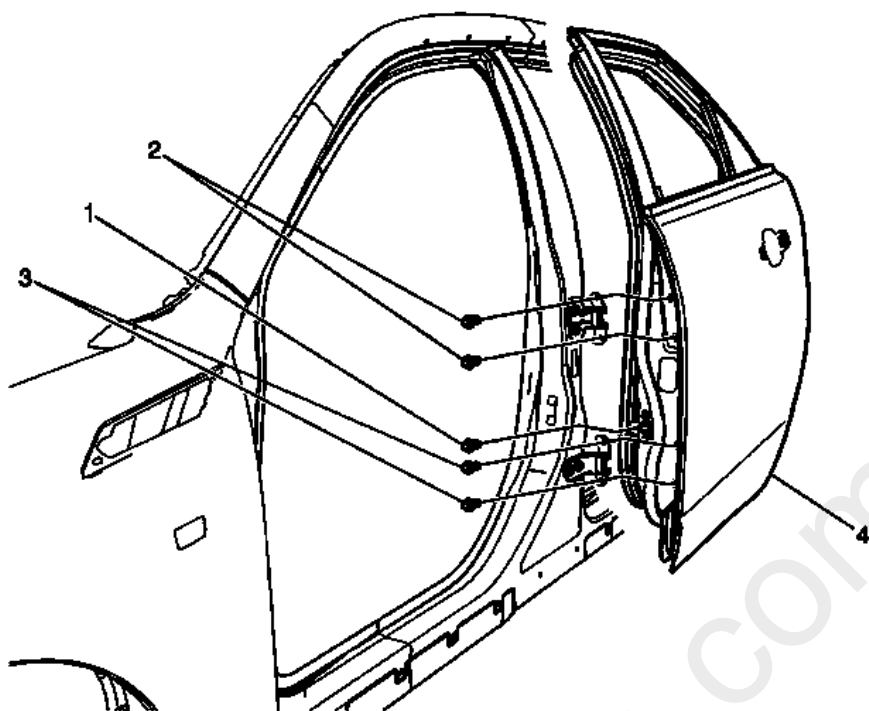


Fig. 6: Rear Door

Courtesy of GENERAL MOTORS COMPANY

Rear Door Replacement

Callout	Component Name
WARNING: In order to prevent SIR deployment, personal injury, or unnecessary SIR system repairs, do not strike the door or the door pillar in the area of the side impact sensor (SIS). Turn OFF the ignition and remove the key when performing service in the area of the SIS.	
Preliminary Procedures 1. Disable the supplemental inflatable restraint (SIR) system. Refer to <u>SIR Disabling and Enabling</u> . 2. Remove the rear door trim panel. Refer to <u>Rear Side Door Trim Panel Replacement (Wagon)</u> .	
1	Rear Side Door Check Link Bolt to Body CAUTION: Refer to <u>Fastener Caution</u> . 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 Upper Hinge Bolt (Qty: 2) Tighten 33 N.m (24 lb ft)
3	Rear Side Door Lower Hinge Bolt (Qty: 2) Tighten 33 N.m (24 lb ft)
4	Rear Side Door Assembly Procedure When replacing the door it is necessary to transfer all of the internal components.

FRONT FENDER REPLACEMENT

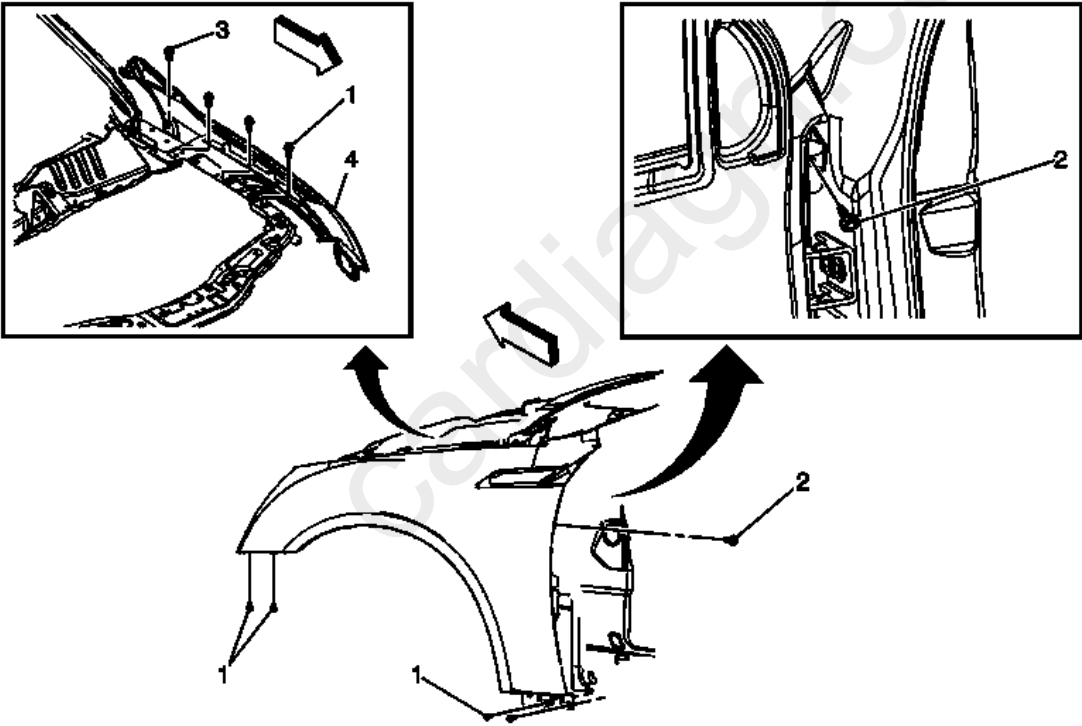


Fig. 7: Front Fender
Courtesy of GENERAL MOTORS COMPANY

Front Fender Replacement

Callout	Component Name
Preliminary Procedures	
1.	Remove the rocker panel molding. Refer to <u>Rocker Panel Molding Replacement (Coupe)</u> ,

Rocker Panel Molding Replacement (Wagon) .

2. Remove the bumper fascia. Refer to **Front Bumper Fascia Replacement** .
3. Remove the wheelhouse liner. Refer to **Front Wheelhouse Liner Replacement** .
4. Remove the air inlet grille panel side seal. Refer to **Air Inlet Grille Panel Side Seal Replacement** .

1	Front Fender Bolt (Qty: 9) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 3 N.m (25 lb in)
2	Front Fender Bolt Procedure Open the door to access the bolt. Tighten 3 N.m (25 lb in)
3	Front Fender Bolt TIP: The bolt is attached vertical to the fender. Simply loosen the bolt rather than remove it and risk losing it in the plenum. Tighten 3 N.m (25 lb in)
4	Front Fender TIP: Peel tape and press in place prior to new fender installation to achieve proper flushness to windshield pillar.

LIFTGATE ADJUSTMENT

1. Remove the liftgate upper applique. Refer to **Liftgate Upper Applique Replacement (Wagon)** .
2. Lower the rear edge of the headliner. Refer to **Headlining Trim Panel Replacement (Coupe)** , **Headlining Trim Panel Replacement (Wagon)**

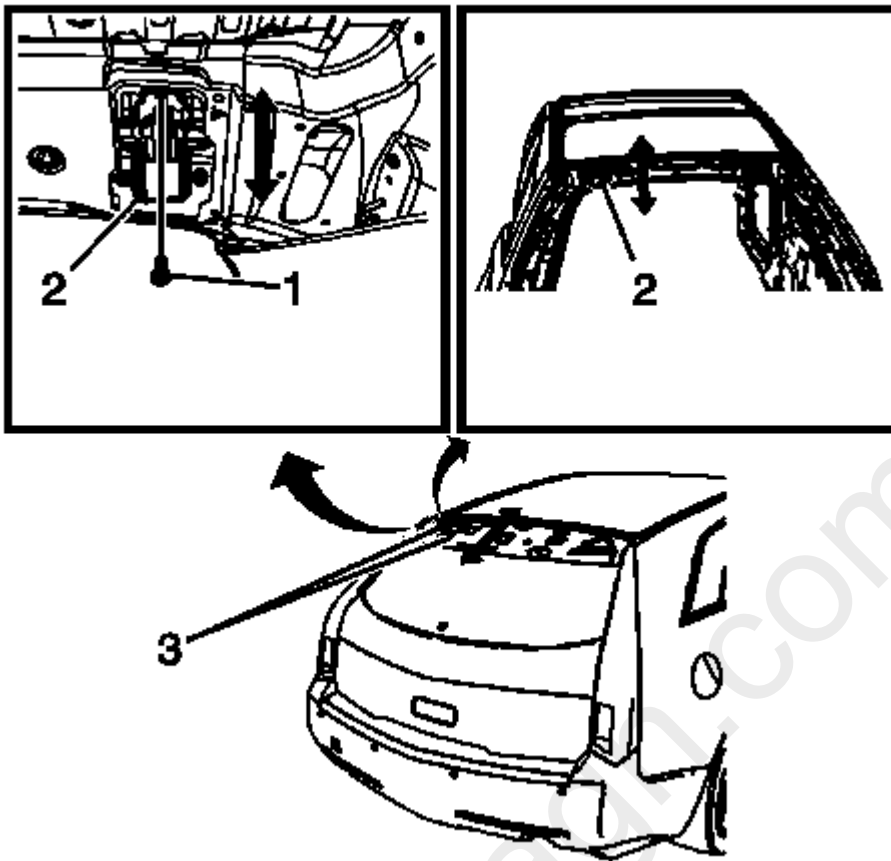


Fig. 8: Identifying Liftgate Hinge To Liftgate Bolts
Courtesy of GENERAL MOTORS COMPANY

3. Loosen the liftgate hinge to liftgate bolts (3).
4. Loosen the liftgate hinge to rear header nuts (2).
5. Loosen the liftgate hinge to rear header bolt (1).
6. Mark the location of the liftgate striker to the vehicle body with a wax pencil.
7. Remove the liftgate striker. Refer to **Liftgate Latch Striker Replacement** .
8. Remove the liftgate wedges on both sides. Refer to **Liftgate Wedge Replacement**.

NOTE: **Ensure the liftgate does not contact the top and each side of the vehicle body.**

9. Close the liftgate.

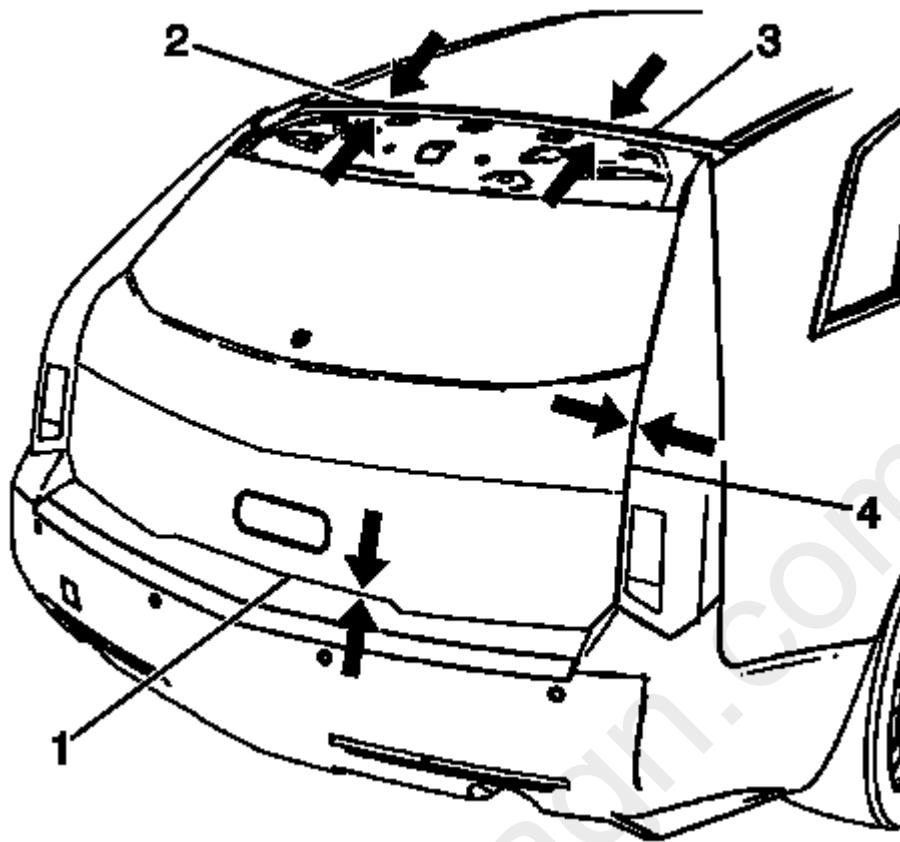


Fig. 9: Liftgate, Roof Panel & Bumper Fascia
Courtesy of GENERAL MOTORS COMPANY

10. Align the liftgate in order to achieve an equal gap of 6.5 mm (0.25 in) between the liftgate and the roof panel (2 and 3).
11. Align the liftgate in order to achieve an equal gap of 4.5 mm (0.17 in) between the liftgate and the rear quarter panel on both sides (4).
12. Align the liftgate in order to achieve an equal gap of 6.7 mm (0.26 in) between the liftgate and the rear bumper fascia (1).

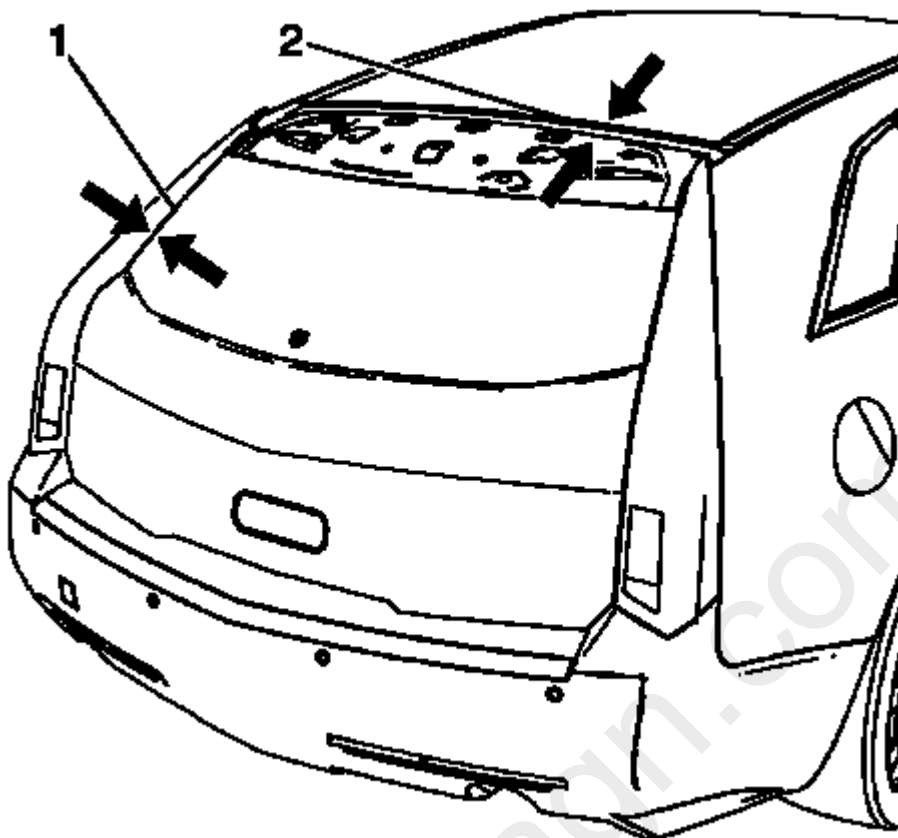


Fig. 10: Identifying Liftgate Height Difference
Courtesy of GENERAL MOTORS COMPANY

13. Align the liftgate in order to achieve a height difference of - 1.5 mm from the rear quarter panel to the liftgate (1).
14. Align the liftgate in order to achieve a height difference of - 1.0 mm from the roof panel to the liftgate (2).

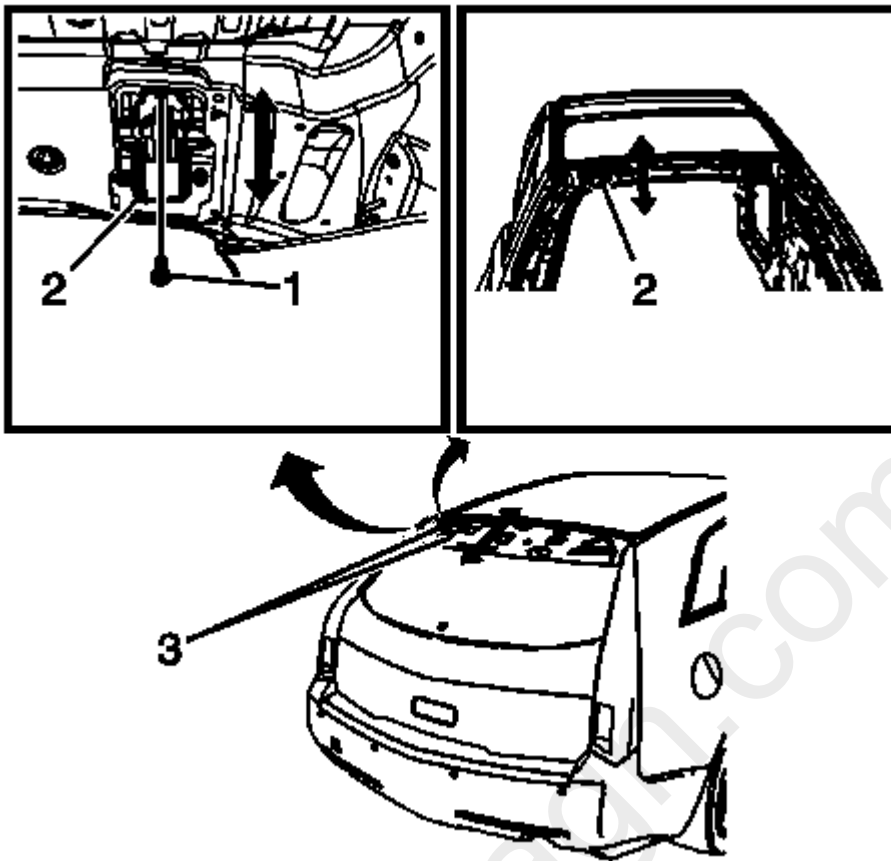


Fig. 11: Identifying Liftgate Hinge To Liftgate Bolts
 Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

15. Verify the alignment of the liftgate to the vehicle body .
16. Tighten the liftgate hinge to header bolt (1) to 58 N.m (43 lb ft).
17. Tighten the liftgate hinge to header nuts (2) to 22 N.m (16 lb ft).
18. Tighten the liftgate hinge to liftgate bolts (3) to 22 N.m (16 lb ft).
19. Install the liftgate striker. Refer to Liftgate Latch Striker Replacement .
20. Close the liftgate and ensure the liftgate striker does not alter the liftgate to body alignment.
21. Adjust the liftgate striker if required. Refer to Liftgate Lock Striker Adjustment .
22. Install the liftgate wedges on both sides. Refer to Liftgate Wedge Replacement.
23. Reposition the headliner. Refer to Liftgate Upper Applique Replacement (Wagon) .
24. Install the liftgate upper applique. Refer to Headlining Trim Panel Replacement (Coupe) , Headlining Trim Panel Replacement (Wagon) .

LIFTGATE REPLACEMENT

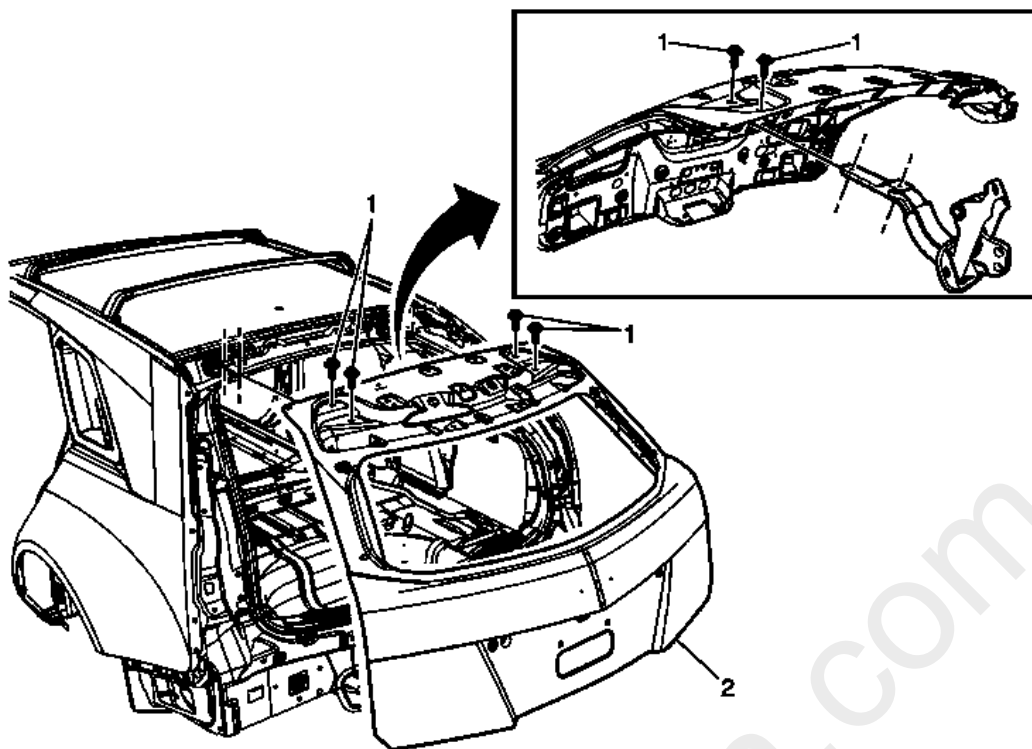


Fig. 12: View Of Liftgate & Hinge Bolts
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Replacement

Callout	Component Name
Preliminary Procedures 1. Disconnect the battery. Refer to <u>Battery Negative Cable Disconnection and Connection (Coupe)</u> , <u>Battery Negative Cable Disconnection and Connection (Wagon)</u> . 2. Disconnect the liftgate actuator from the liftgate. Refer to <u>Liftgate Hydraulic Actuator Replacement</u> . 3. Disconnect the liftgate strut. Refer to <u>Liftgate Strut Replacement</u>. 4. Remove the liftgate upper applique. Refer to <u>Liftgate Upper Applique Replacement (Wagon)</u> . 5. Disconnect the electrical connectors.	
1	Liftgate Hinge Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 25 N.m (18 lb ft)
	Liftgate

2	Procedure 1. Transfer parts as needed. 2. Adjust the liftgate if needed.
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HOOD PRIMARY LATCH RELEASE CABLE HANDLE REPLACEMENT

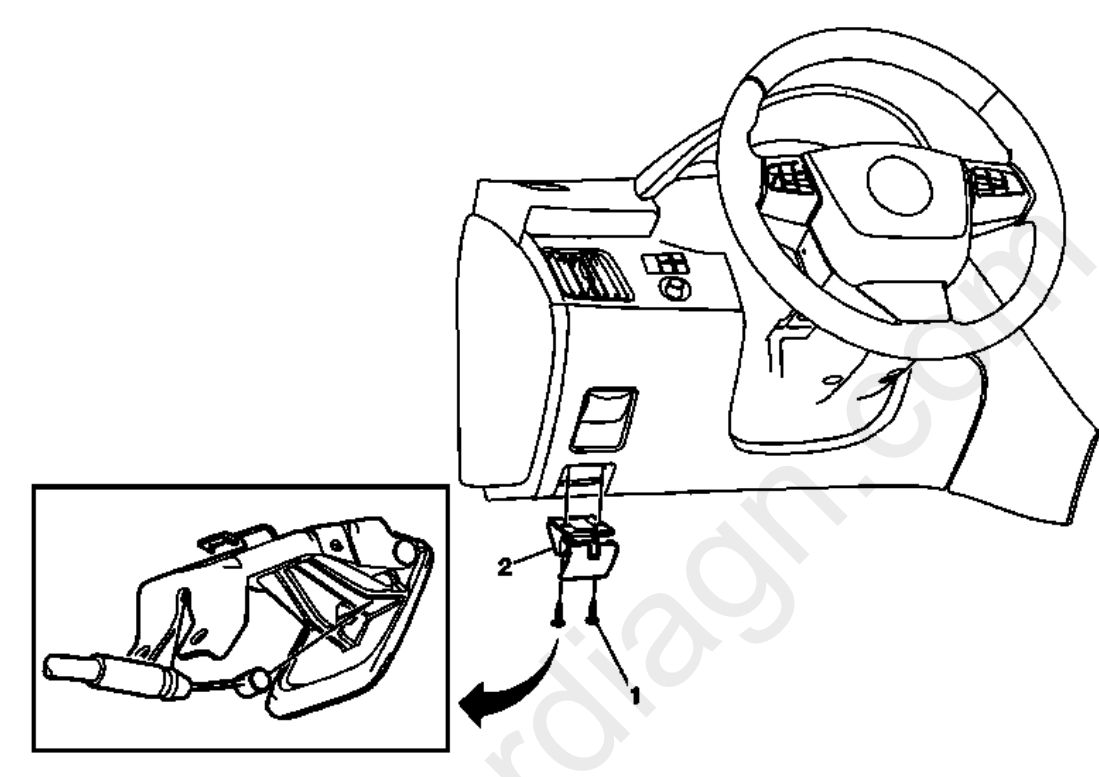


Fig. 13: Hood Primary Latch Release Cable Handle
Courtesy of GENERAL MOTORS COMPANY

Hood Primary Latch Release Cable Handle Replacement

Callout	Component Name
1	Hood Primary Latch Release Handle Screw (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 10 N.m (89 lb in)
2	Hood Primary Latch Release Handle TIP: To release the handle, pull down the cable and unhook from the handle.

FRONT SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT (WAGON)

Removal Procedure

1. Remove the check link bolt from the body.
2. Remove the front wheelhouse liner. Refer to **Front Wheelhouse Liner Replacement** .

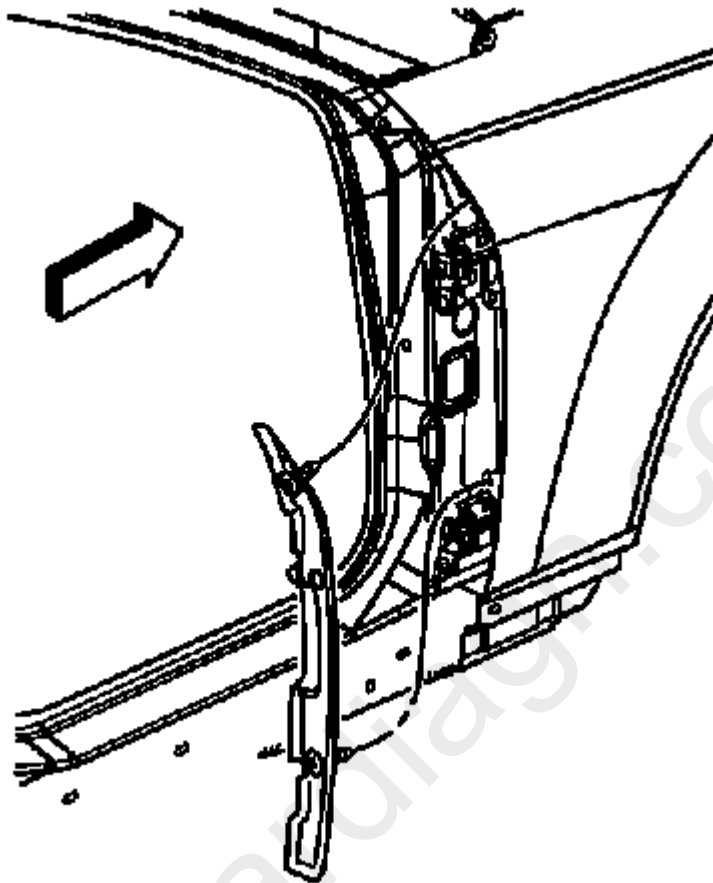


Fig. 14: View Of Fender Sound Insulator
Courtesy of GENERAL MOTORS COMPANY

NOTE: Replace only one hinge at a time then repeat procedure for the second hinge, if needed.

3. Remove the push-in fasteners securing the fender sound insulator to the front fender.
4. Remove the fender sound insulator.

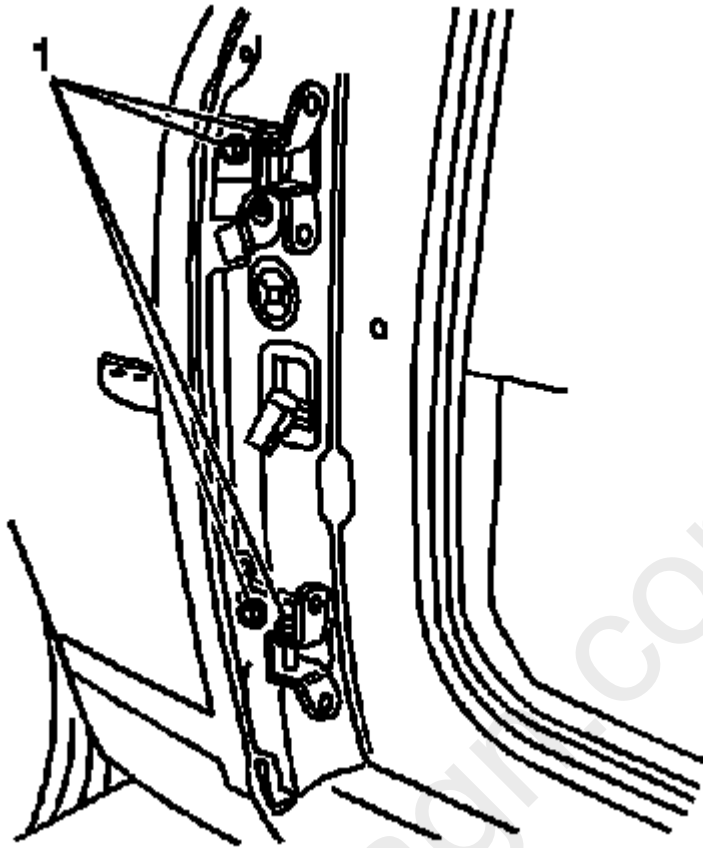


Fig. 15: View Of Front Door Hinges
Courtesy of GENERAL MOTORS COMPANY

5. Mark the position of the hinge on the body.
6. Support the door.
7. Remove the hinge bolts (1) from the body.
8. Remove the hinge bolts from the door.

Installation Procedure

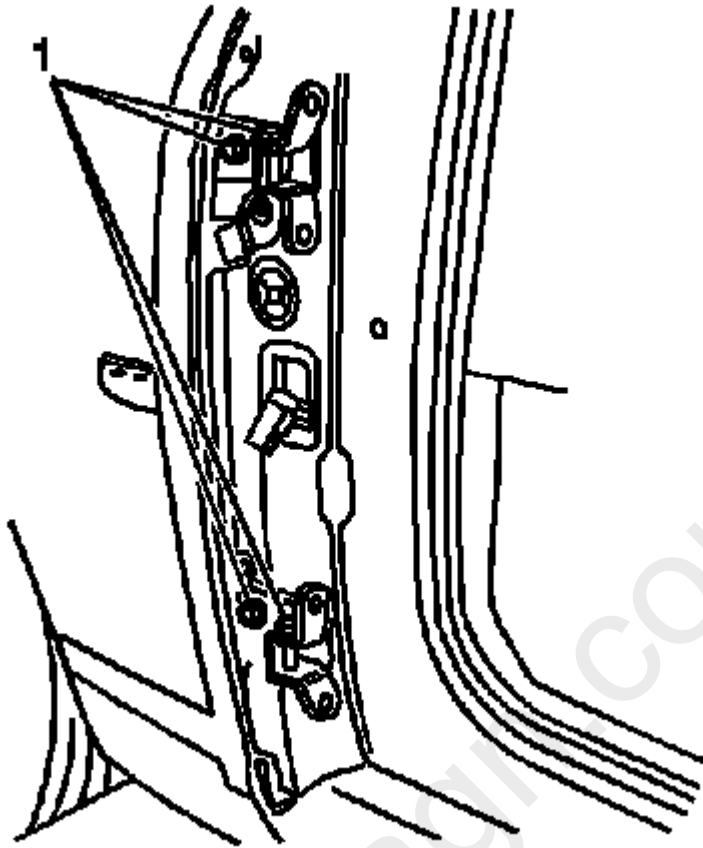


Fig. 16: View Of Front Door Hinges
Courtesy of GENERAL MOTORS COMPANY

1. Align the hinge to the marks made on the body during removal.

CAUTION: Refer to Fastener Caution .

2. Install the hinge to body bolts (1) and tighten to 33 N.m (24 lb ft).
3. Install the hinge to door bolts and tighten to 33 N.m (24 lb ft).
4. Remove the door support.

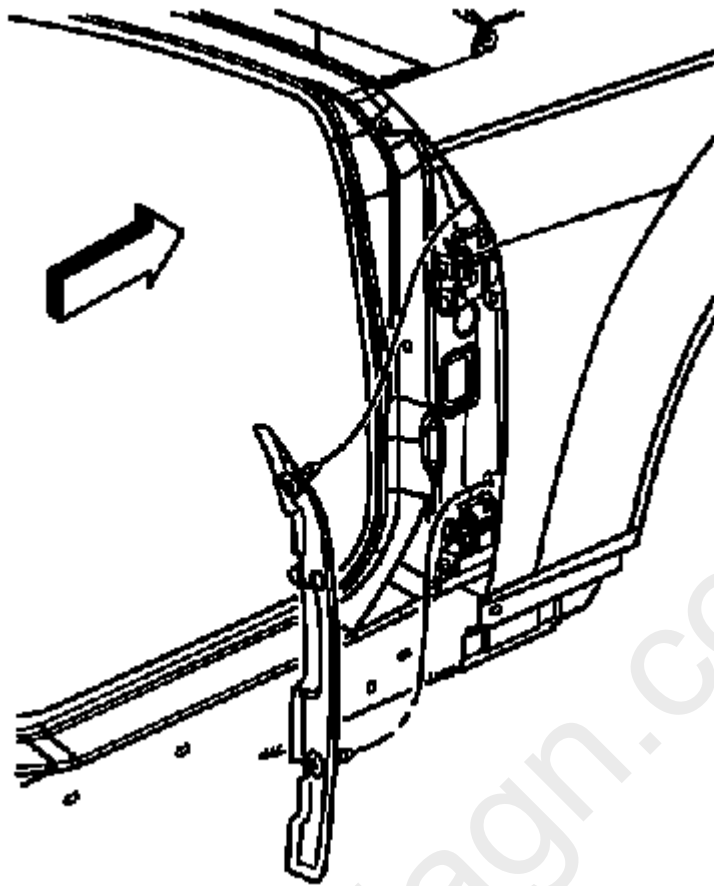


Fig. 17: View Of Fender Sound Insulator
Courtesy of GENERAL MOTORS COMPANY

5. Install the fender sound insulator.

CAUTION: Striker alignment is a crucial part of door latch operation. Do not use the door striker to adjust the door to the vehicle. Failure to properly adjust the striker can result in damage to the door latch and the striker.

6. Adjust the door. Refer to **Door Adjustment**.
7. Install the check link bolt to the body and tighten to 22 N.m (16 lb ft).
8. Touch up any paint damage to the hinge and the bolts with body color paint.
9. Install the front wheelhouse liner. Refer to **Front Wheelhouse Liner Replacement**.

FRONT SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT (COUPE)

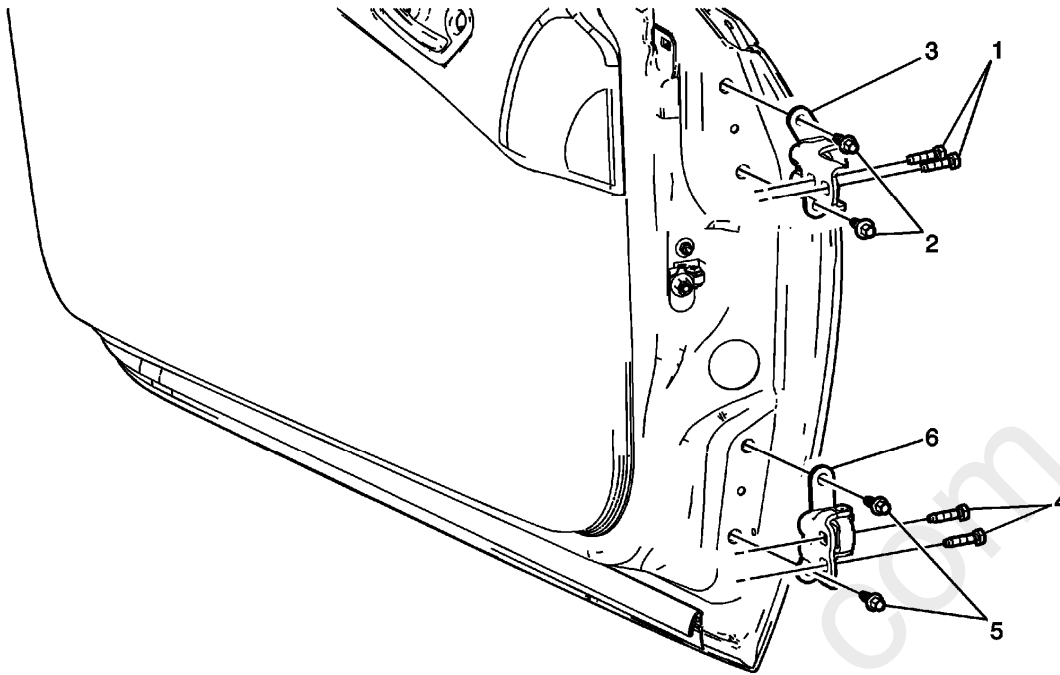


Fig. 18: View Of Front Side Door Hinge
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Upper Hinge and Lower Hinge Replacement (Coupe)

Callout	Component Name
1	Front Side Door Upper Hinge Bolts (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Procedures 1. Before removing the door, apply a double layer of masking tape around the perimeter of the painted surfaces. 2. Mark the location of the hinge being removed. 3. Remove the front wheelhouse liner. Refer to <u>Front Wheelhouse Liner Replacement</u> 4. Support the door before removing the hinge bolts. Tighten 34 N.m (25 lb ft)
2	Front Side Door Upper Hinge to Door Bolts (Qty: 2) Tighten 10 N.m (89 lb in)

3	Front Side Door Upper Hinge
4	Front Side Door Lower Hinge Bolts (Qty: 2) Tighten 34 N.m (25 lb ft)
5	Front Side Door Lower Hinge Bolts (Qty: 2) Tighten 10 N.m (89 lb in)
6	Front Side Door Lower Hinge

HOOD HINGE REPLACEMENT (STANDARD)

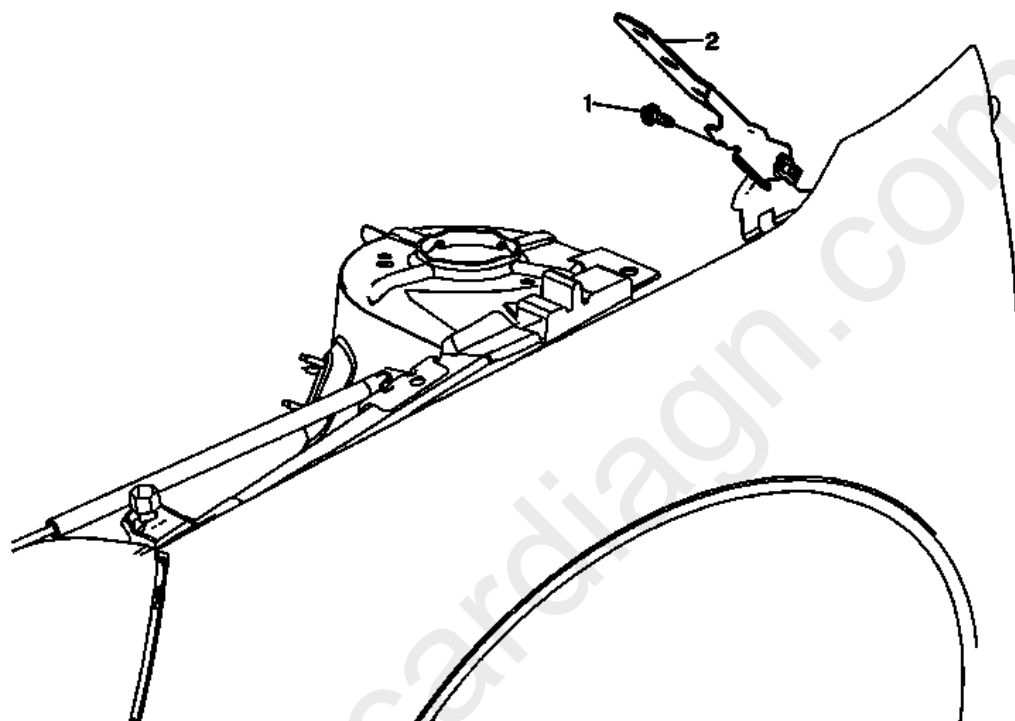


Fig. 19: Hood Hinge Replacement

Courtesy of GENERAL MOTORS COMPANY

Hood Hinge Replacement (Standard)

Callout	Component Name
Preliminary Procedure	
Remove the hood. Refer to <u>Hood Replacement</u> .	
1	Hood Hinge Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten

	10 N.m (89 lb in)
2	Hood Hinge

LIFTGATE HINGE REPLACEMENT

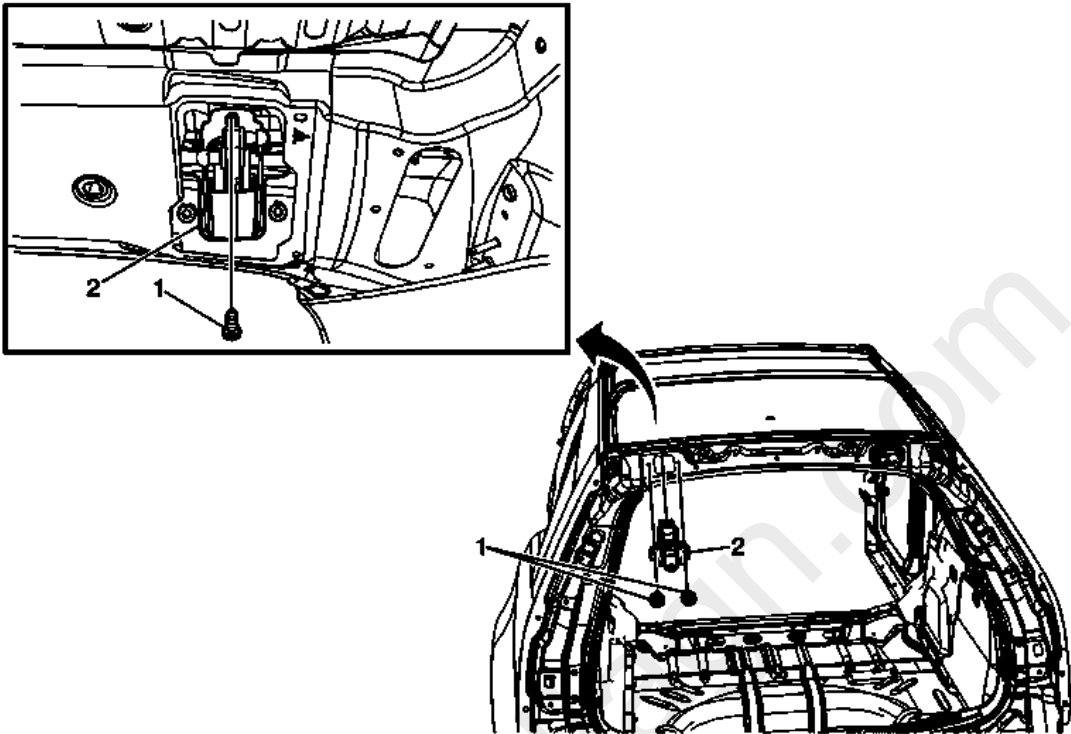


Fig. 20: Liftgate Hinge & Bolts
Courtesy of GENERAL MOTORS COMPANY

Liftgate Hinge Replacement

Callout	Component Name
Preliminary Procedures 1. Remove the liftgate. Refer to Liftgate Replacement. 2. Lower the rear of the headliner to access the inner bolts. Refer to Headlining Trim Panel Replacement (Coupe) , Headlining Trim Panel Replacement (Wagon) . 3. Use a grease pencil to mark the liftgate hinge position to the body prior to removal.	
1	Liftgate Hinge Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 25 N.m (18 lb ft)

2

Liftgate Hinge

Procedure

Adjust the liftgate if needed.

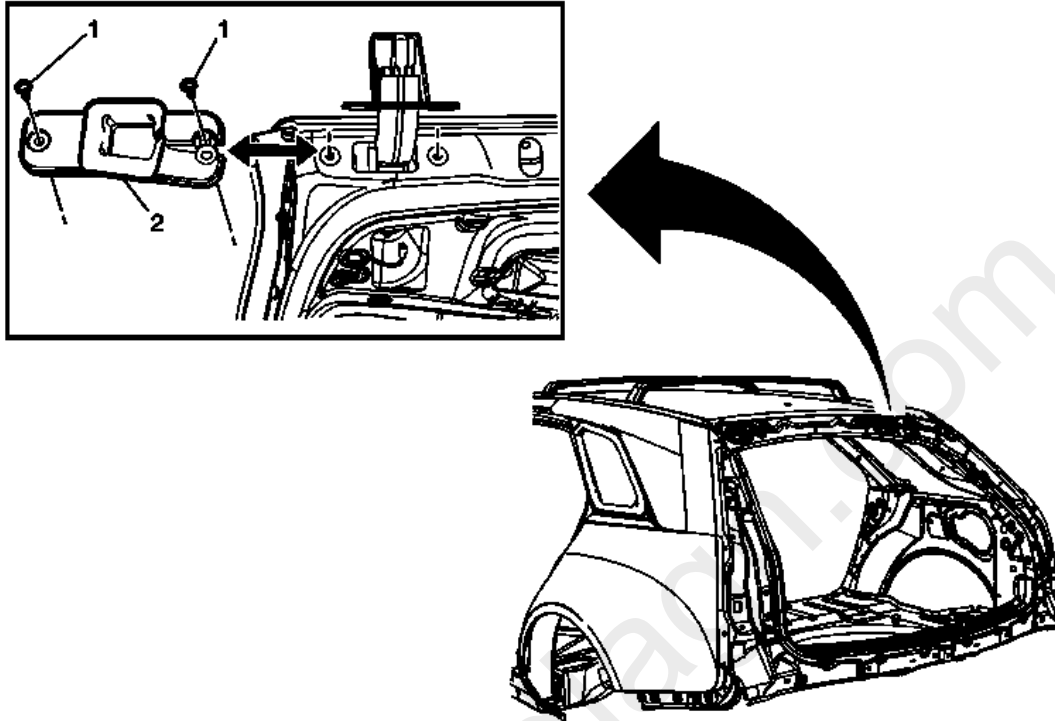
LIFTGATE HINGE SEAL REPLACEMENT

Fig. 21: Liftgate Hinge Seal & Retainers
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Hinge Seal Replacement

Callout	Component Name
Preliminary Procedure	
Open the liftgate to the full open position and support the liftgate.	
1	Liftgate Hinge Seal Retainer (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2 N.m (18 lb in)
2	Liftgate Hinge Seal Procedure Open the slit end of the liftgate hinge seal and slide outward from the center of the liftgate.

REAR COMPARTMENT LID HINGE COVER REPLACEMENT (COUPE)

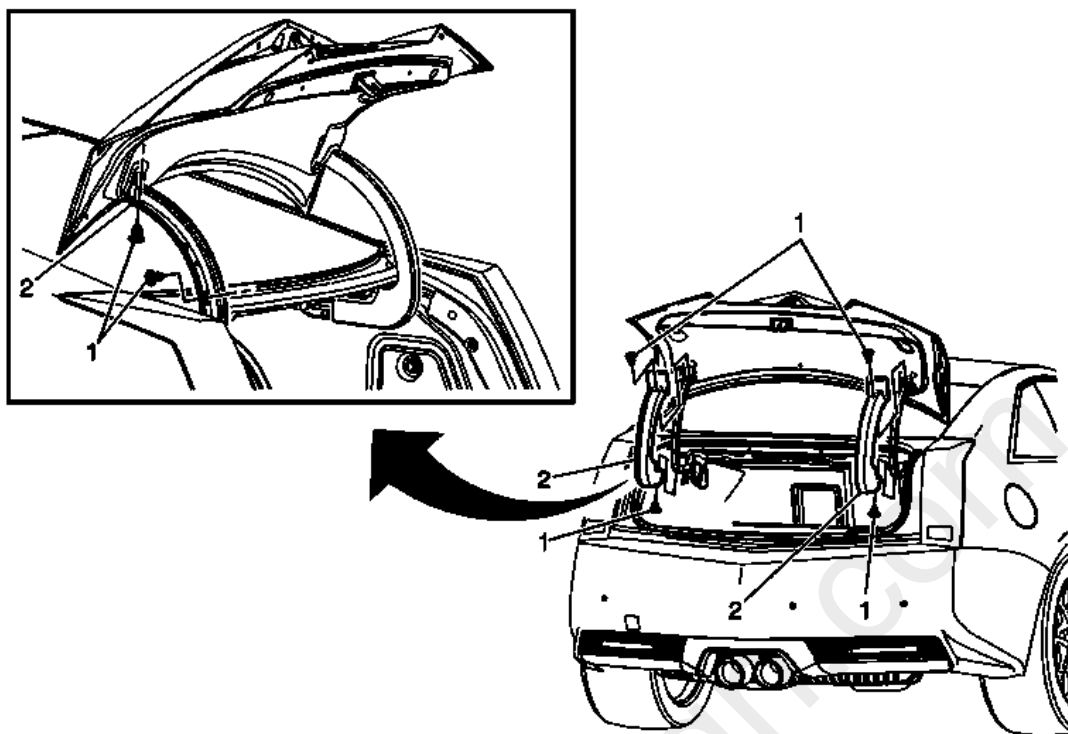


Fig. 22: Rear Compartment Lid Hinge Covers & Retainers (Coupe)
Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Hinge Cover Replacement (Coupe)

Callout	Component Name
1	Rear Compartment Lid Hinge Cover Push-In Retainer (Qty: 4)
2	Rear Compartment Lid Hinge Cover (Qty: 2)

REAR COMPARTMENT LID HINGE REPLACEMENT (COUPE)

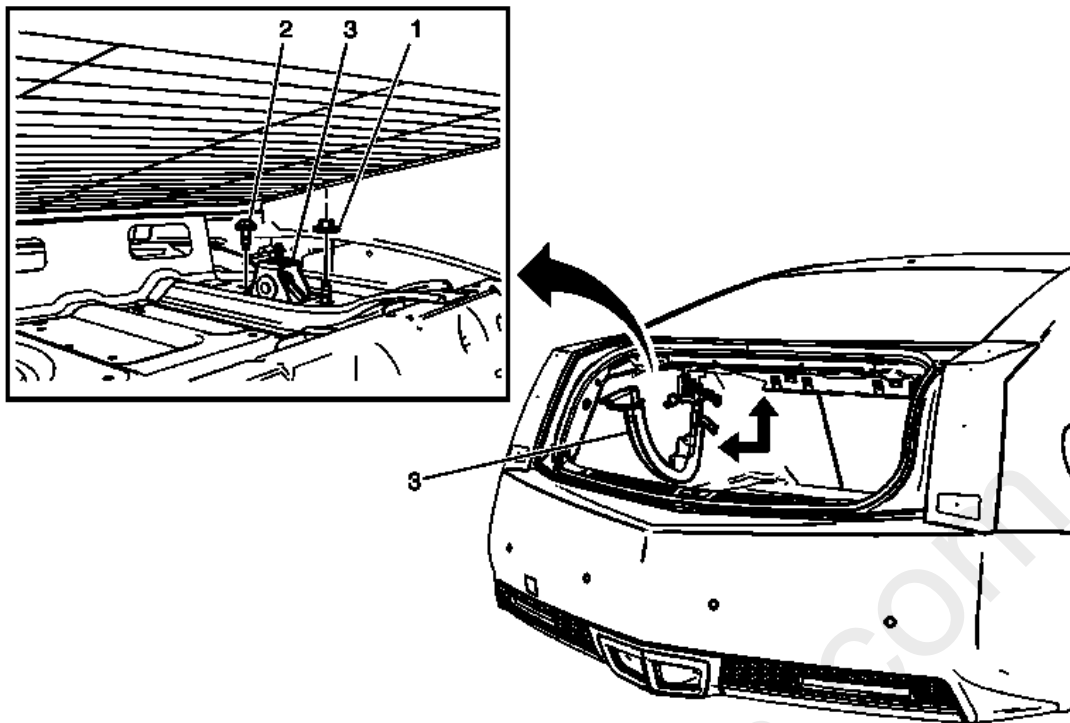


Fig. 23: Rear Compartment Lid Hinge, Bolt & Nut (Coupe)
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Hinge Replacement (Coupe)

Callout	Component Name
Preliminary Procedures	
1. Remove the rear window trim panel. Refer to <u>Rear Window Panel Trim Replacement (Coupe)</u> . 2. Remove the rear compartment lid. Refer to <u>Rear Compartment Lid Replacement (Coupe)</u> . 3. Disconnect the rear compartment lid hinge torque rods. Refer to <u>Rear Compartment Lid Hinge Torque Rod Replacement</u> .	
1	Rear Compartment Lid Hinge Nut CAUTION: Refer to <u>Fastener Caution</u> . Tighten 10 N.m (89 lb in)
2	Rear Compartment Lid Hinge Bolt Tighten 10 N.m (89 lb in)
	Rear Compartment Lid Hinge

	Procedures
3	1. Transfer parts as needed. 2. Adjust the rear compartment lid if needed. Refer to <u>Rear Compartment Lid Adjustment.</u>

REAR SIDE DOOR UPPER HINGE AND LOWER HINGE REPLACEMENT

Removal Procedure

1. Remove the check link bolt from the body.

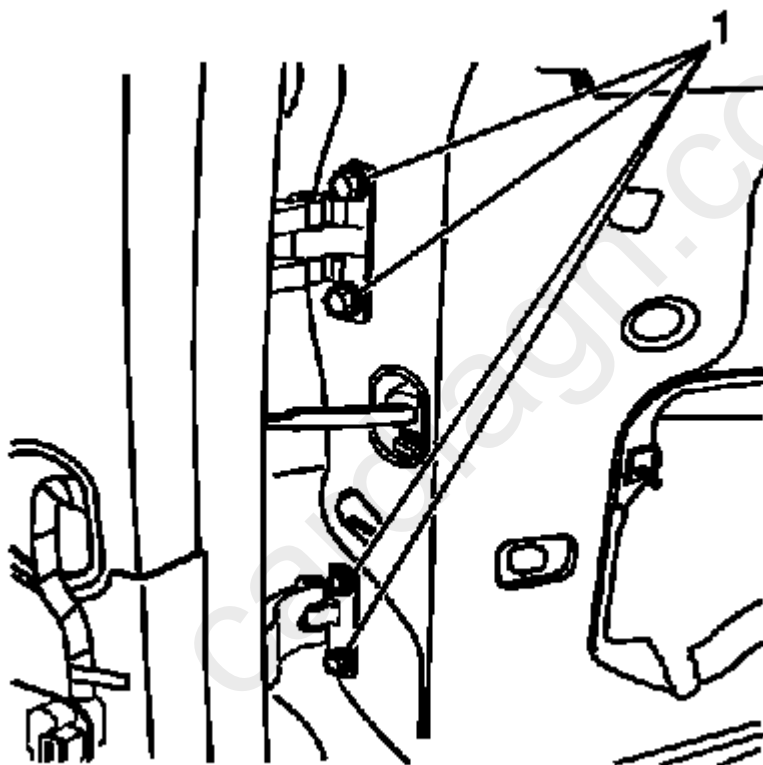


Fig. 24: View Of Door Hinge Fasteners
 Courtesy of GENERAL MOTORS COMPANY

NOTE: Replace only one hinge at a time then repeat procedure for the second hinge, if needed.

2. Open the rear and the front doors.
3. Support the door.

4. Mark the position of the hinge on the body.
5. Remove the hinge to body bolts (1).
6. Remove the hinge to door bolts.

Installation Procedure

1. Align the pillar side of the hinge to the marks made on the pillar during removal.
2. Install the hinge to the pillar.

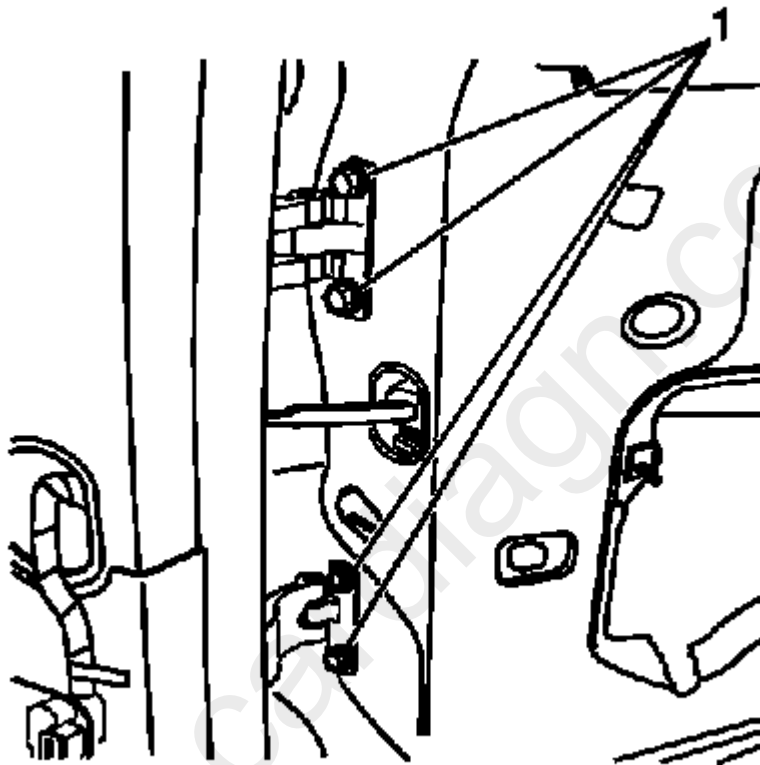


Fig. 25: View Of Door Hinge Fasteners
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the bolts (1). Tighten the hinge to pillar bolts to 33 N.m (24 lb ft).
4. Align the hinge to the door.
5. Install the bolts. Tighten the hinge to door bolts to 33 N.m (24 lb ft).
6. Remove the door support.

7. Install the check link bolt to the body and tighten to 22 N.m (16 lb ft).

CAUTION: Striker alignment is a crucial part of door latch operation. Do not use the door striker to adjust the door to the vehicle. Failure to properly adjust the striker can result in damage to the door latch and the striker.

8. Adjust the door. Refer to **Door Adjustment**.
9. Touch up any paint damage to the hinge and the bolts with body color paint.

HOOD ADJUSTMENT

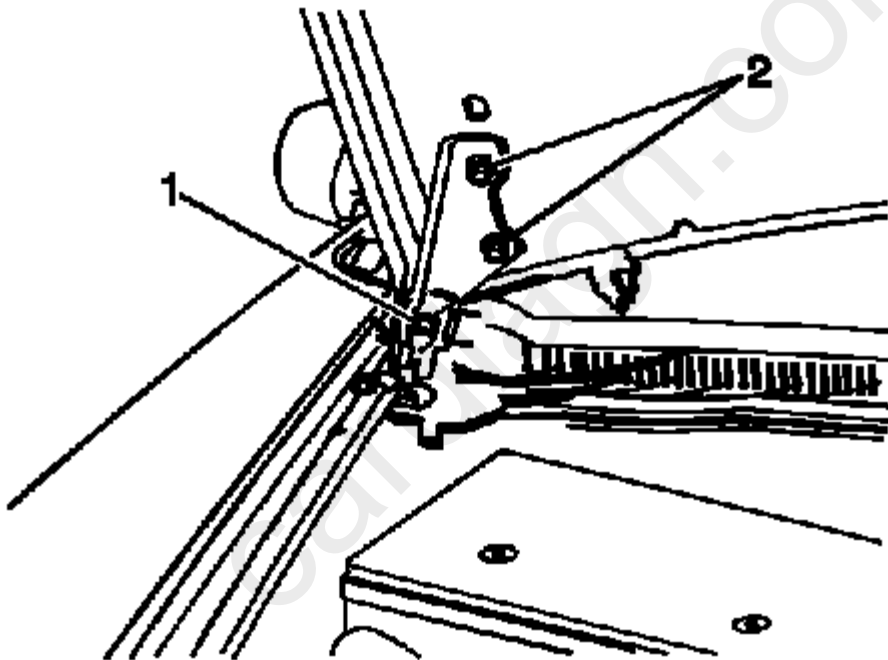


Fig. 26: View Of Hood Hinges

Courtesy of GENERAL MOTORS COMPANY

1. Loosen the fasteners (2) that secure the hood to the hood hinges (1).
2. Adjust the hood in order to obtain an even gap on both sides between the hood and the fenders and so that the hood is flush with both fenders on the front edge.

CAUTION: Refer to **Fastener Caution** .

3. Tighten the fasteners (2) in order to secure the hood to the hood hinges (1) and tighten to 9 N.m (80 lb in).

HOOD REPLACEMENT

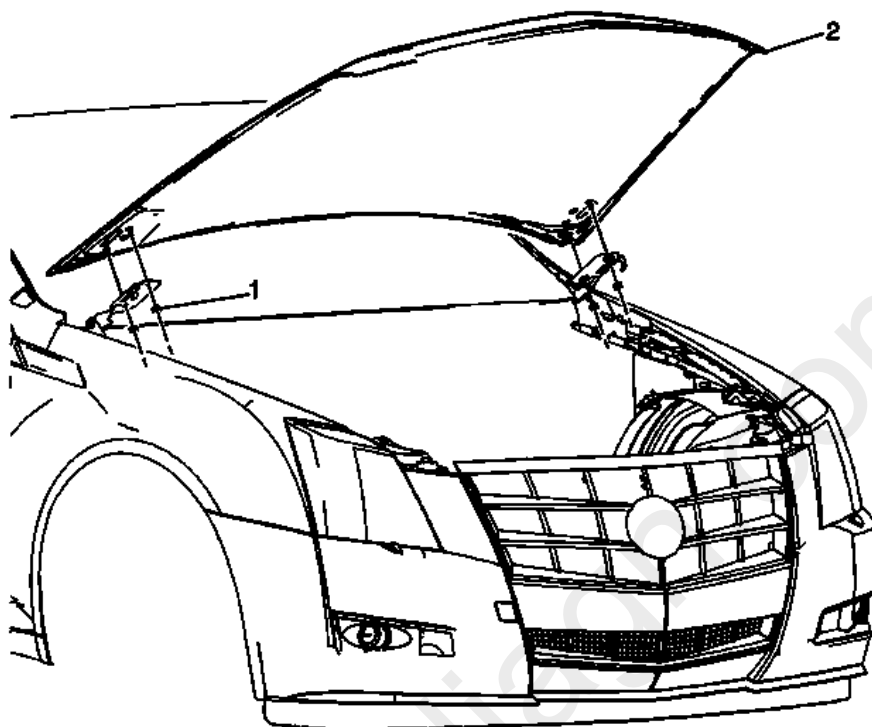


Fig. 27: Hood

Courtesy of GENERAL MOTORS COMPANY

Hood Replacement

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.	
Preliminary Procedure Disconnect the hood strut rod. Refer to <u>Hood Open Assist Rod Replacement</u> .	
1	Hood Hinge Nut (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Procedure 1. Disconnect the windshield washer hose. 2. Transfer components as necessary.

	Tighten 25 N.m (18 lb ft)
2	Hood

HOOD INSULATOR REPLACEMENT

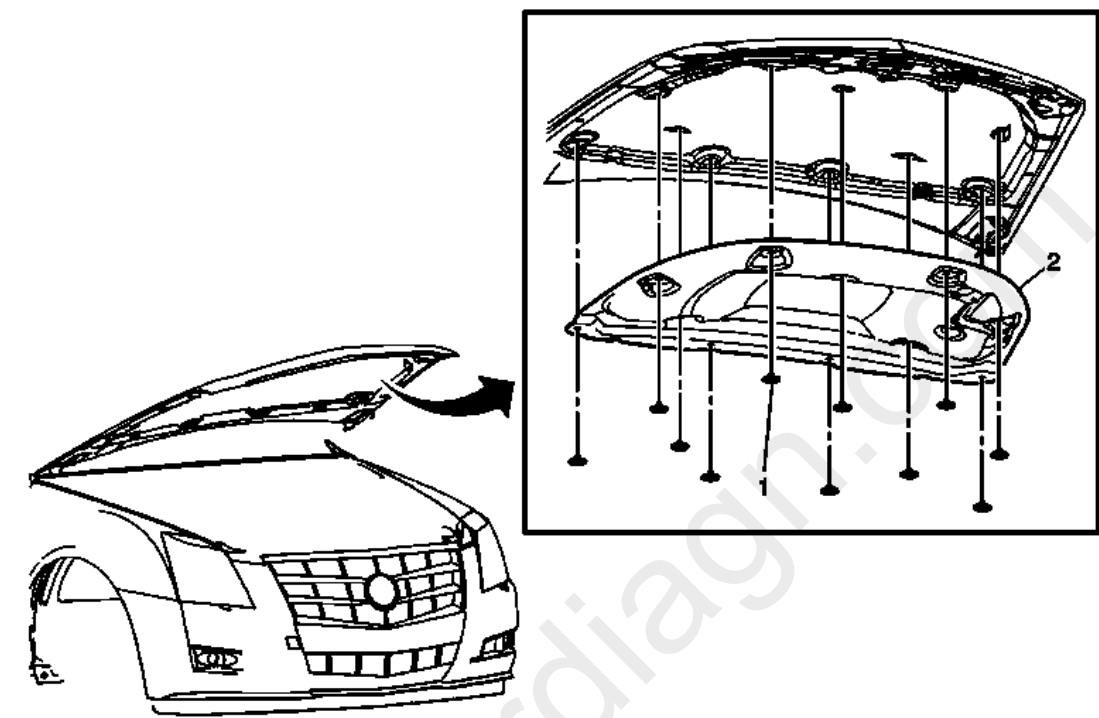


Fig. 28: Hood Insulator
Courtesy of GENERAL MOTORS COMPANY

Hood Insulator Replacement

Callout	Component Name
1	Hood Insulator Plastic Retainer (Qty: 11)
2	Hood Insulator

HOOD LATCH ADJUSTMENT

- NOTE:** Ensure that you have the proper alignment of the hood to the body before you tighten the hood latch mounting fasteners under the following conditions:
- After removing the hood latch assembly
 - After loosening the mounting bolts
 - After changing the hood adjustment

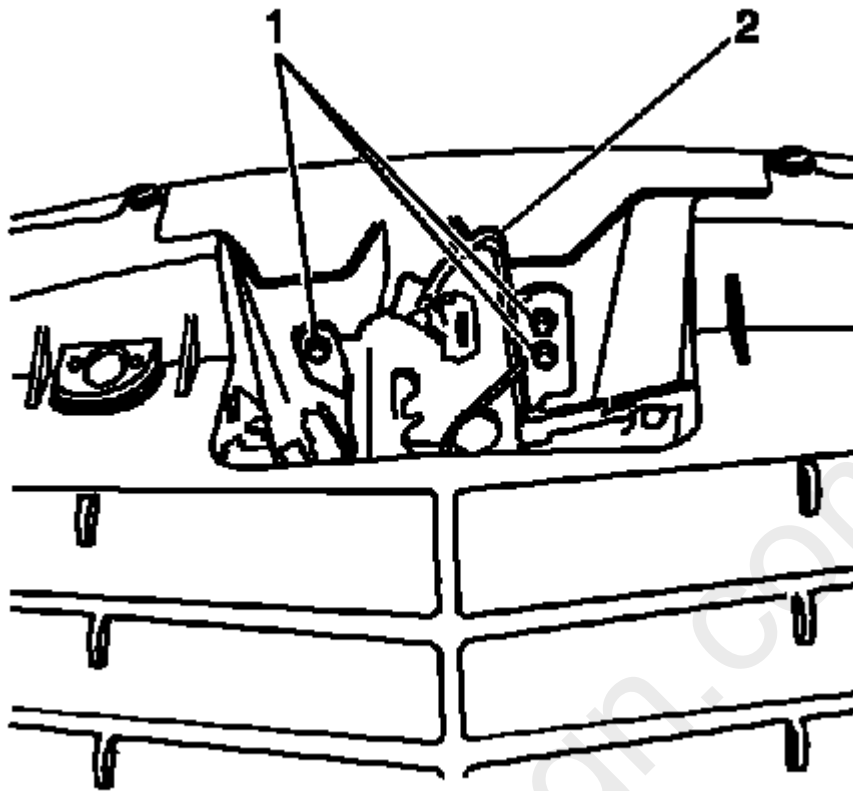


Fig. 29: View Of Hood Latch

Courtesy of GENERAL MOTORS COMPANY

1. With the hood latch attaching fasteners (1) loose, slowly lower the hood onto the latch (2) in order to achieve the proper cross vehicle adjustment of the hood latch.
2. Raise the hood.

CAUTION: Refer to Fastener Caution .

3. Tighten the fasteners to 9 N.m (80 lb in).

HOOD PRIMARY AND SECONDARY LATCH REPLACEMENT

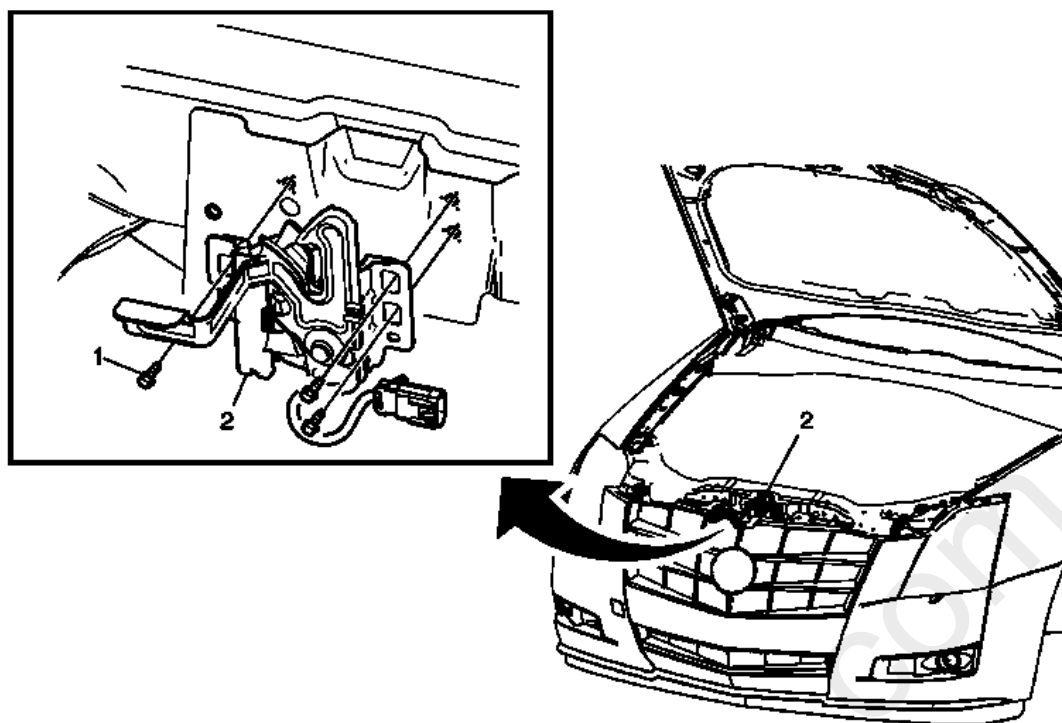


Fig. 30: Hood Primary and Secondary Latch
 Courtesy of GENERAL MOTORS COMPANY

Hood Primary and Secondary Latch Replacement

Callout	Component Name
Preliminary Procedure	
Remove the front compartment sight shields. Refer to Front Compartment Sight Shields Replacement .	
1	Hood Primary and Secondary Latch Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 10 N.m (89 lb in)
2	Hood Primary and Secondary Latch Procedure 1. Disconnect the remote start electrical connector, if equipped. 2. Disconnect the release cable from the hood latch by squeezing the cable retainer.

REAR COMPARTMENT LID ADJUSTMENT

Front-to-Rear, Side-to-Side

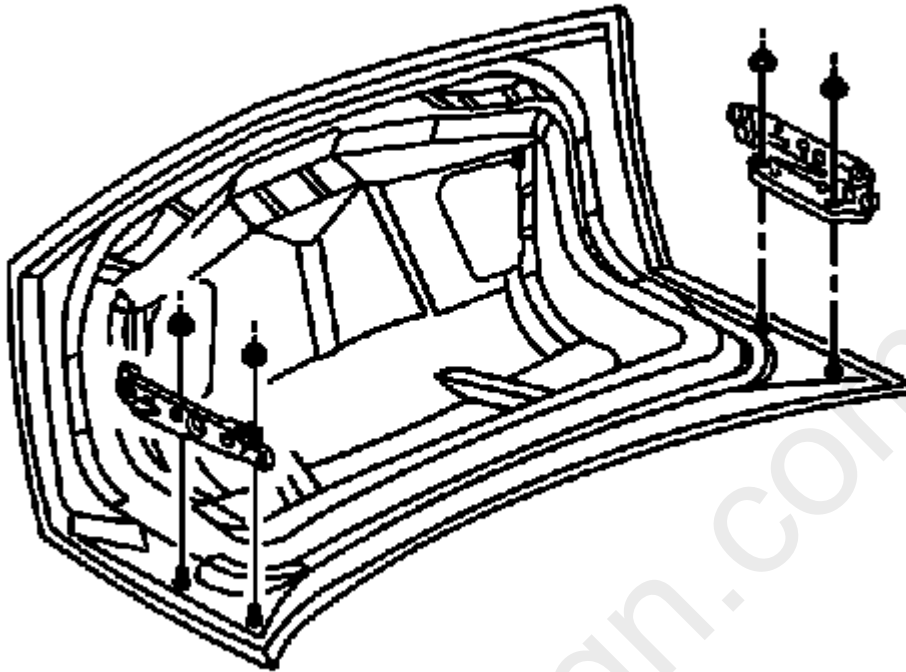


Fig. 31: Identifying Rear Compartment Lid-To-Rear Compartment Lid Hinge Fasteners
Courtesy of GENERAL MOTORS COMPANY

1. Loosen the fasteners securing the rear compartment lid to the rear compartment lid hinges.
2. Align the rear compartment lid in order to achieve an equal 3 mm (1/8 mm) gap around the entire perimeter of the rear compartment lid.

CAUTION: Refer to Fastener Caution .

3. Tighten the hinge fasteners to 25 N.m (18 lb ft).

Up and Down Adjustment

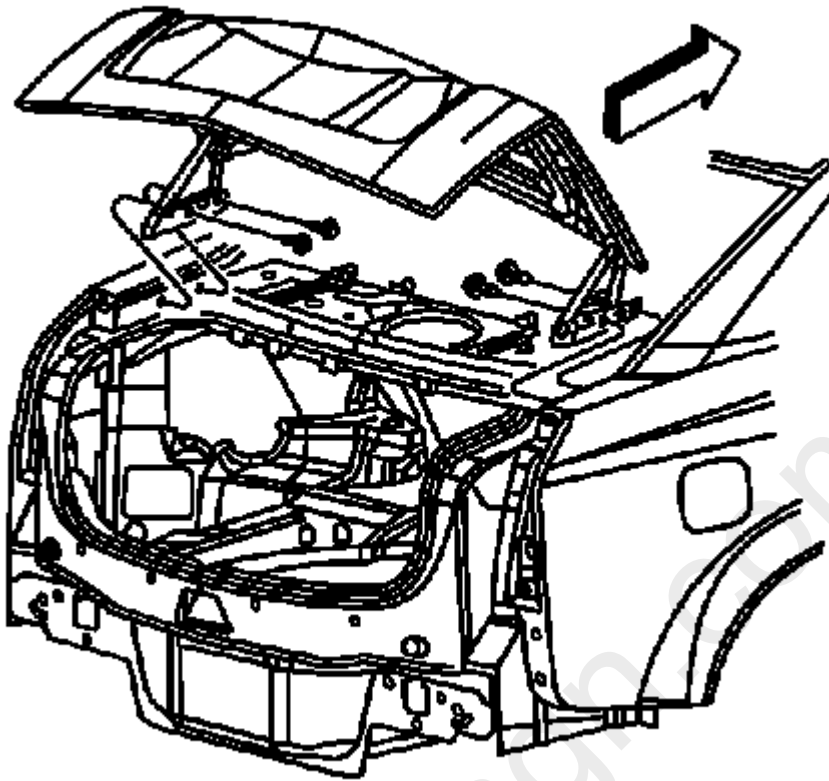


Fig. 32: Identifying Rear Compartment Lid Hinge-To-Vehicle Body Fasteners
Courtesy of GENERAL MOTORS COMPANY

1. Loosen the fasteners securing the rear compartment lid hinge to the vehicle body.
2. Move the rear compartment lid in order to adjust it to a flush fit with the vehicle quarter panels.
3. Tighten the fasteners to 25 N.m (18 lb ft) in order to secure the rear compartment lid hinge to the vehicle body.
4. Close the rear compartment.
5. Adjusting the rear compartment overslam bumpers may be necessary.

REAR COMPARTMENT LID REPLACEMENT (COUPE)

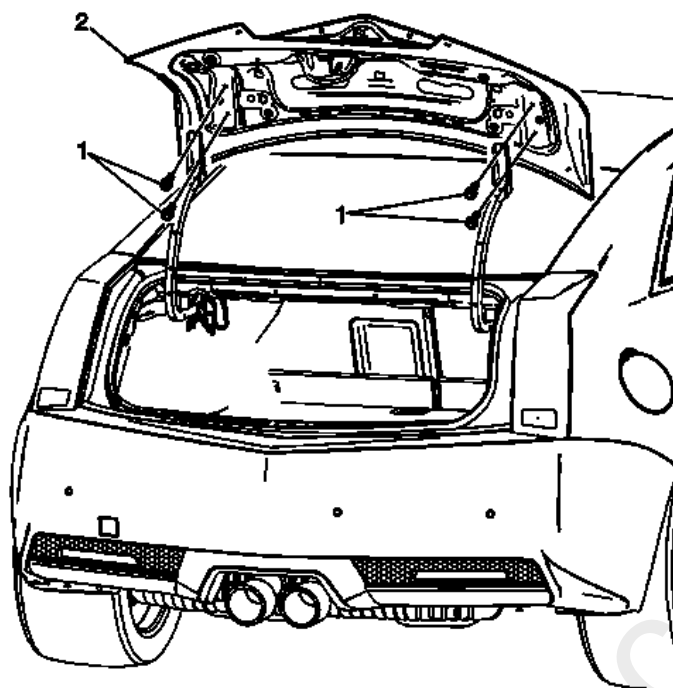


Fig. 33: Rear Compartment Lid & Bolts (Coupe)
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Replacement (Coupe)

Callout	Component Name
Preliminary Procedures 1. Remove the rear compartment lid inner trim panel. Refer to <u>Rear Compartment Lid Inner Panel Trim Replacement (Coupe)</u> . 2. Remove the rear compartment lid hinge covers. Refer to <u>Rear Compartment Lid Hinge Cover Replacement (Coupe)</u>.	
1	Rear Compartment Lid Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 25 N.m (19 lb ft)
2	Rear Compartment Lid Procedure 1. Disconnect the electrical connector.

2. Adjust the rear compartment lid as needed. Refer to **Rear Compartment Lid Adjustment**.
3. Transfer components as necessary.

FRONT SIDE DOOR CHECK LINK REPLACEMENT (WAGON)

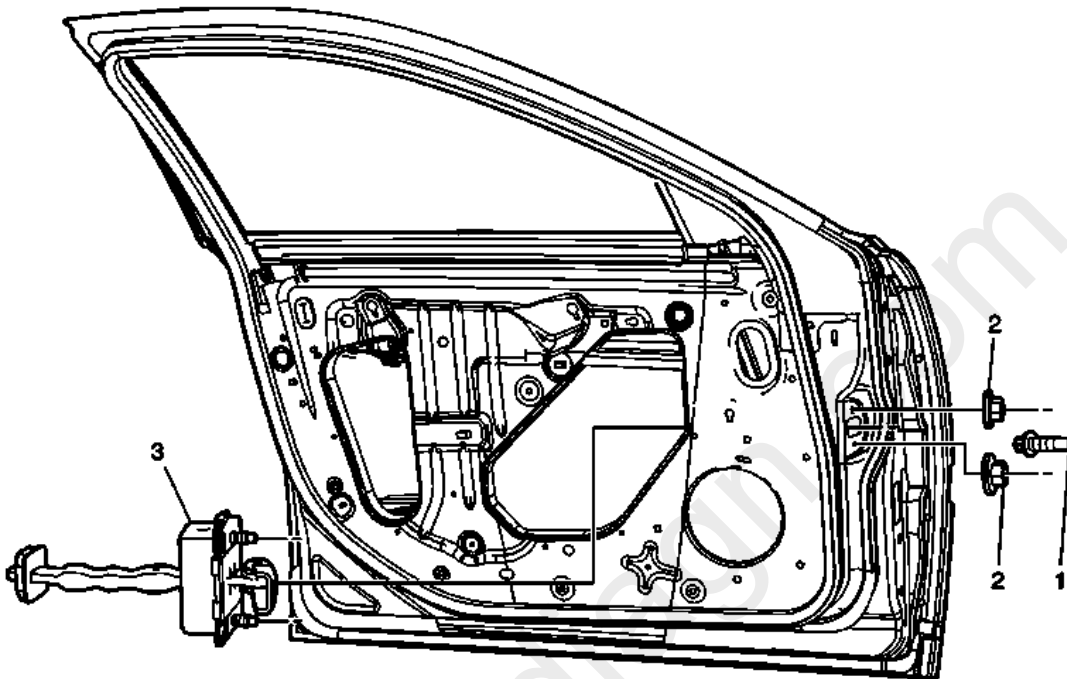


Fig. 34: Front Side Door Check Link
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Check Link Replacement (Wagon)

Callout	Component Name
Preliminary Procedure	
Remove the front side door trim panel. Refer to <u>Front Side Door Trim Panel Replacement (Wagon)</u> .	
1	Front Side Door Check Link Bolt to Body CAUTION: Refer to <u>Fastener Caution</u>. TIP: Place the door in the full open position. Tighten 22 N.m (16 lb ft)
	Front Side Door Check Link Nut to Door (Qty: 2) Procedure

2	Remove the water deflector. Tighten 9 N.m (80 lb in)
3	Front Side Door Check Link

FRONT SIDE DOOR CHECK LINK REPLACEMENT (COUPE)

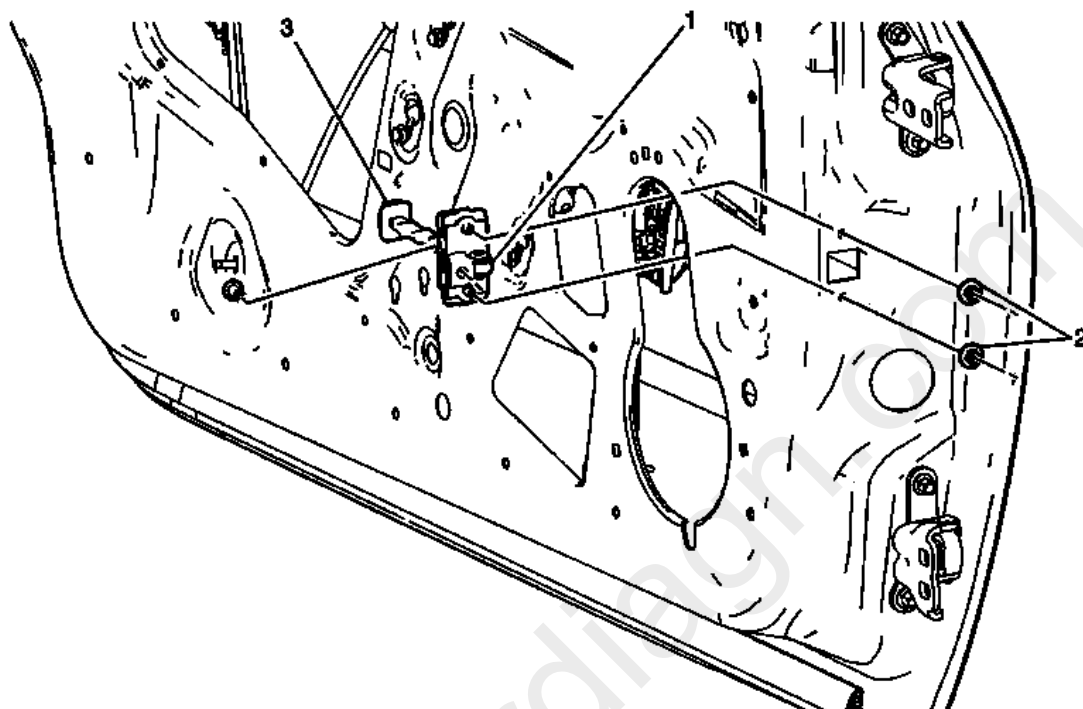


Fig. 35: Identifying Check Link & Bolts
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Check Link Replacement (Coupe)

Callout	Component Name
Preliminary Procedures 1. Remove the front side door trim panel. Refer to <u>Front Side Door Trim Panel Replacement (Coupe)</u> . 2. Remove the front side door lower speaker. <u>Radio Front Side Door Lower Speaker Replacement</u> .	
1	Front Side Door Check Link Screw to Pillar CAUTION: Refer to <u>Fastener Caution</u> .

	Tighten 10 N.m (89 lb in)
2	Front Side Door Check Link Nut (Qty: 2) Procedures 1. Move the window to the full up position. 2. Remove the water deflector. Tighten 10 N.m (89 lb in)
3	Front Side Door Check Link TIP: Remove the check link from inside the door

REAR SIDE DOOR CHECK LINK REPLACEMENT

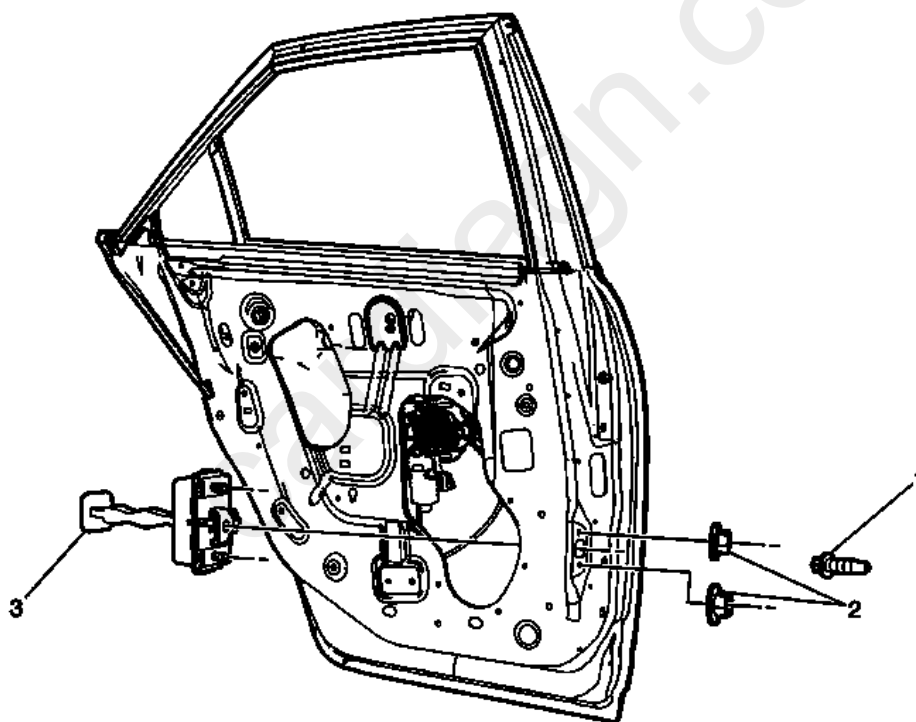


Fig. 36: Rear Side Door Check Link
Courtesy of GENERAL MOTORS COMPANY

Rear Side Door Check Link Replacement

Callout	Component Name
Preliminary Procedure	
Remove the rear side door trim panel. Refer to Rear Side Door Trim Panel Replacement (Wagon) .	
	Rear Side Door Check Link Bolt to Body

1	CAUTION: Refer to <u>Fastener Caution</u> . Tighten 22 N.m (16 lb ft)
2	Rear Side Door Check Link Nut to Door (Qty: 2) Procedures 1. Move the window to the full up position. 2. Remove the water deflector. Tighten 9 N.m (80 lb in)
3	Rear Side Door Check Link TIP: Remove the check link from inside the door

FUEL TANK FILLER DOOR REPLACEMENT

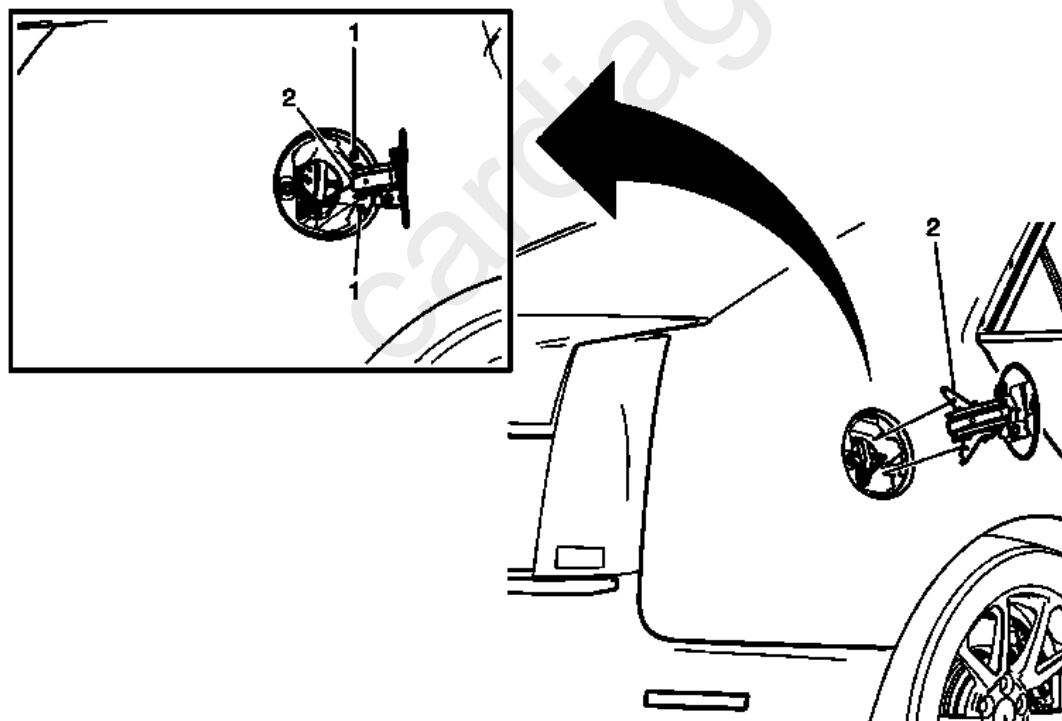


Fig. 37: Fuel Tank Filler Door
Courtesy of GENERAL MOTORS COMPANY

Fuel Tank Filler Door Replacement

Callout	Component Name
Preliminary Procedures Remove the fuel filler door pocket. Refer to Fuel Tank Filler Pipe Housing Replacement .	
1	Fuel Tank Filler Door Rivet (Qty: 2) WARNING: Refer to Eye Protection Warning . Procedure Disconnect the tether.
2	Fuel Tank Filler Door

FUEL TANK FILLER PIPE HOUSING REPLACEMENT

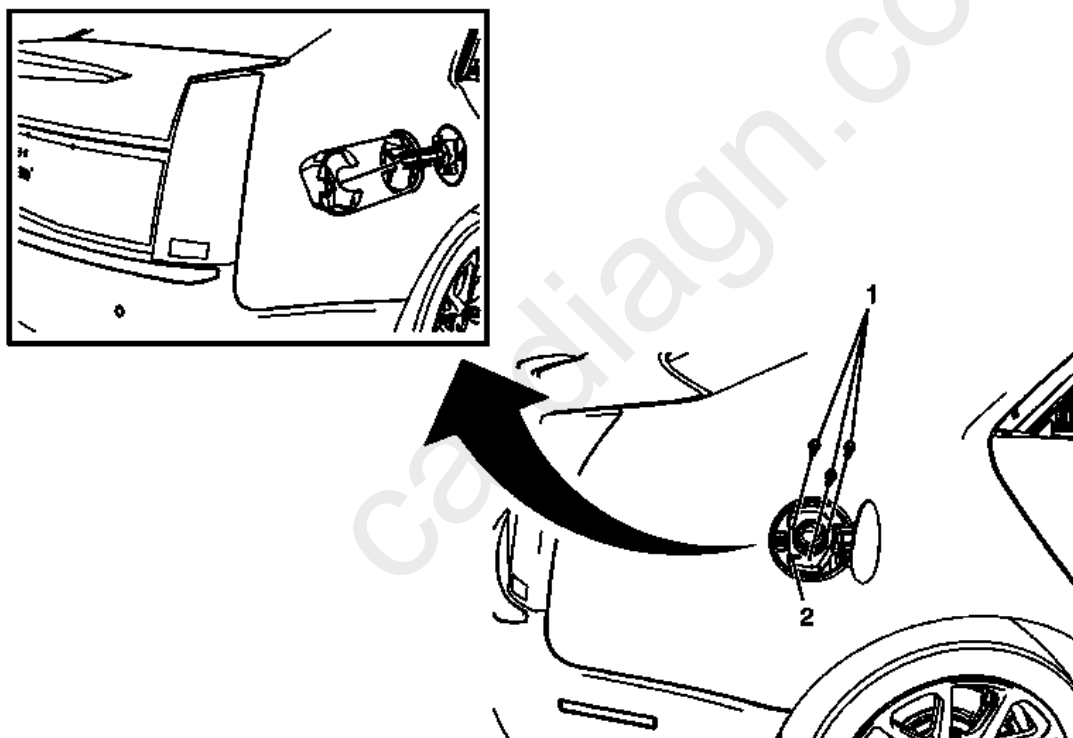


Fig. 38: Fuel Tank Filler Pipe Housing
Courtesy of GENERAL MOTORS COMPANY

Fuel Tank Filler Pipe Housing Replacement

Callout	Component Name
	Fuel Filler Door Pocket Bolt (Qty: 3) CAUTION:

	Refer to Fastener Caution . Procedure 1. Remove the fuel filler cap. 2. Remove the nut from the actuator, if equipped. Tighten 10 N.m (89 lb in)
1	
2	Fuel Filler Door Pocket

HOOD OPEN ASSIST ROD REPLACEMENT

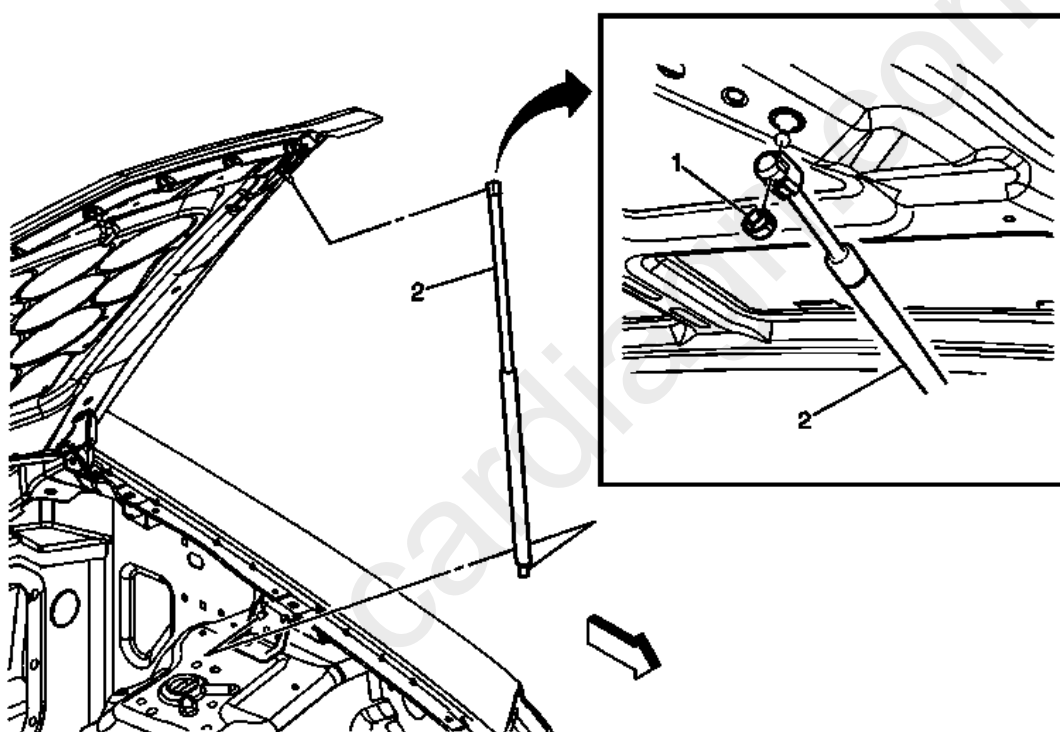


Fig. 39: Hood Open Assist Rod
Courtesy of GENERAL MOTORS COMPANY

Hood Open Assist Rod Replacement

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.	
	Hood Open Assist Rod Retainer (Qty: 2)

	Procedure
1	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.
2	Hood Open Assist Rod

REAR COMPARTMENT LID HINGE TORQUE ROD REPLACEMENT

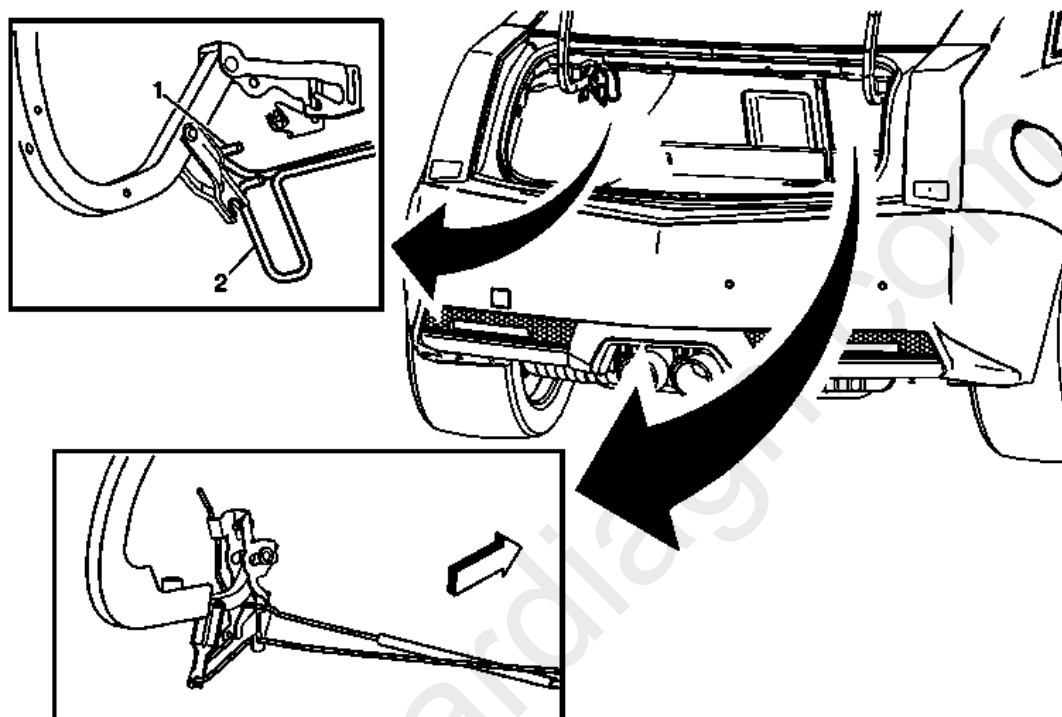


Fig. 40: Rear Compartment Lid Hinge Torque Rods
 Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Hinge Torque Rod Replacement

Callout	Component Name
WARNING: Refer to <u>Hood Hold-Open Device Warning</u> .	
Preliminary Procedure Open and support the rear compartment lid. Special Tools BO-125 Torque Rod Lifter For equivalent regional tools, refer to <u>Special Tools</u> .	
1	Rear Compartment Lid Hinge Torque Rod - Right Side TIP: Only use the special tool to remove and install the rear compartment lid hinge torque rod.
2	Rear Compartment Lid Hinge Torque Rod - Left Side TIP: Only use the special tool to remove and install the rear compartment lid hinge torque

HOOD FRONT WEATHERSTRIP REPLACEMENT

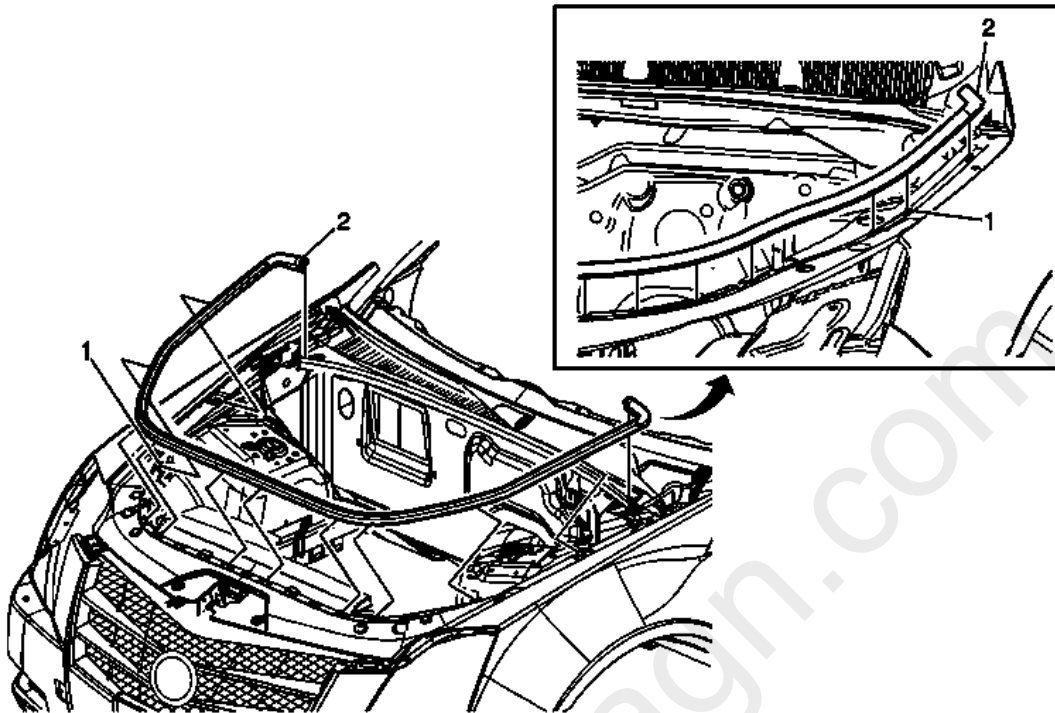


Fig. 41: Hood Front Weatherstrip & Retainers
Courtesy of GENERAL MOTORS COMPANY

Hood Front Weatherstrip Replacement

Callout	Component Name
1	Hood Front Weatherstrip Retainer (Qty: 20)
2	Hood Front Weatherstrip

FRONT COMPARTMENT SIDE SIGHT SHIELD REPLACEMENT

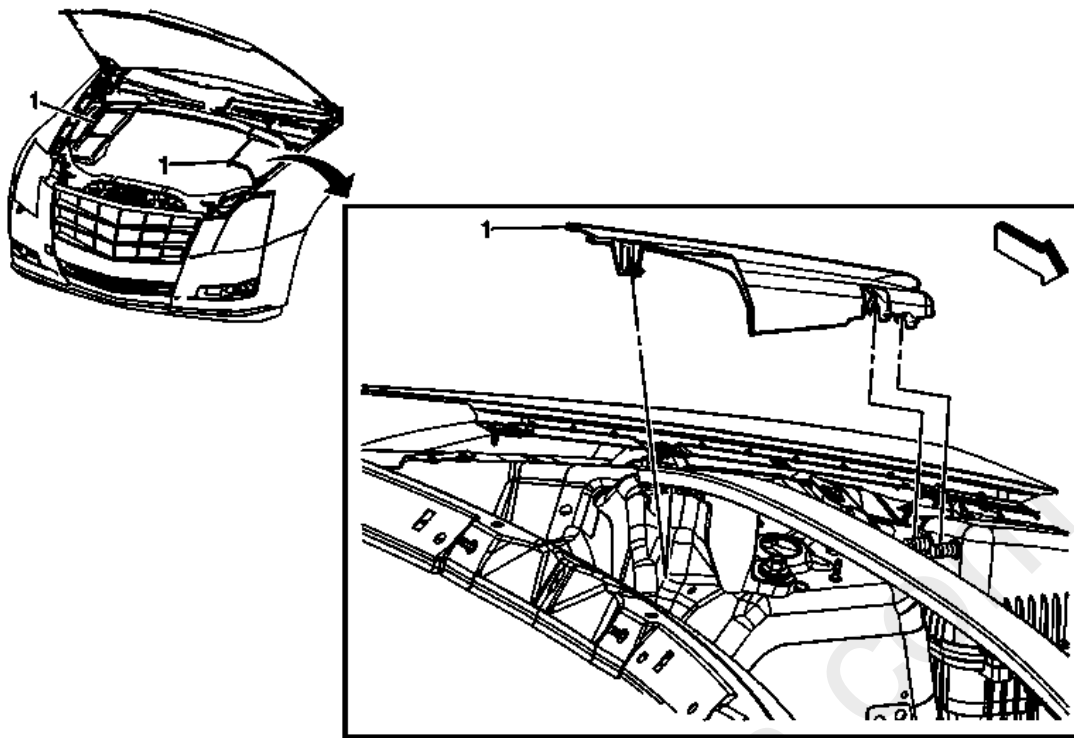


Fig. 42: Front Compartment Side Sight Shield
 Courtesy of GENERAL MOTORS COMPANY

Front Compartment Side Sight Shield Replacement

Callout	Component Name
1	Front Compartment Side Sight Shield
	Procedure 1. Release the tabs on each side in order to remove the shield. 2. Ensure the shield sits below the hood seal.

FRONT COMPARTMENT SIGHT SHIELDS REPLACEMENT

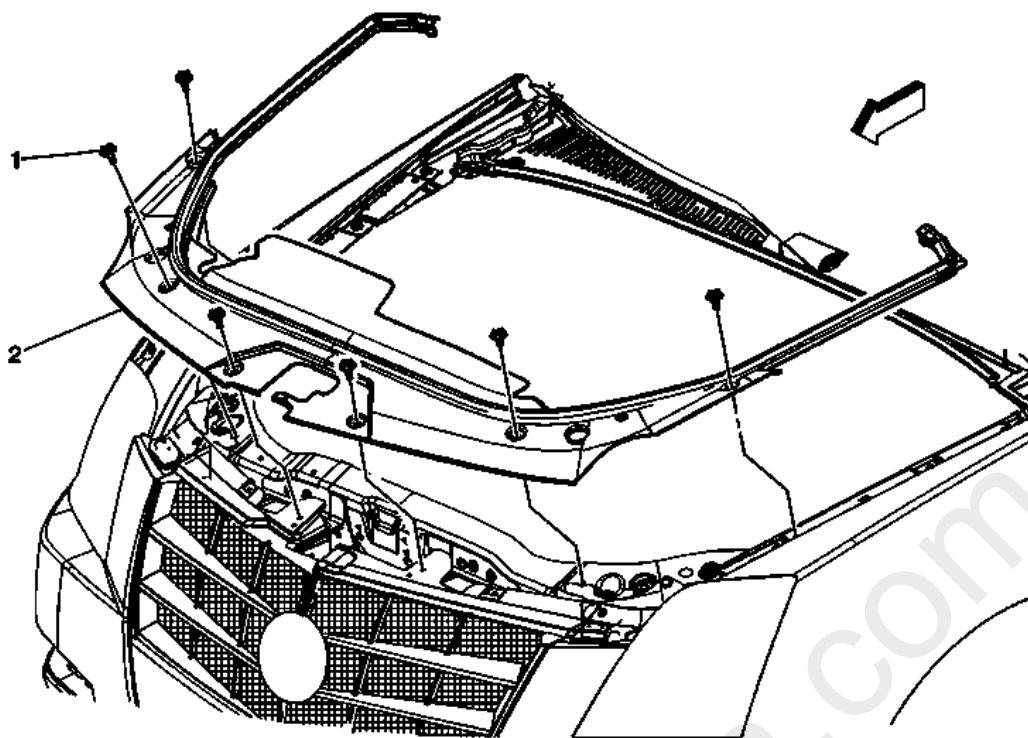


Fig. 43: Front Compartment Sight Shields
 Courtesy of GENERAL MOTORS COMPANY

Front Compartment Sight Shields Replacement

Callout	Component Name
1	Front Compartment Sight Shield Plastic Retainer (Qty: 6) Procedure Rotate the plastic retainer counterclockwise and remove.
2	Front Compartment Sight Shield

FRONT SIDE DOOR BOTTOM AUXILIARY SEALING STRIP REPLACEMENT (WAGON)

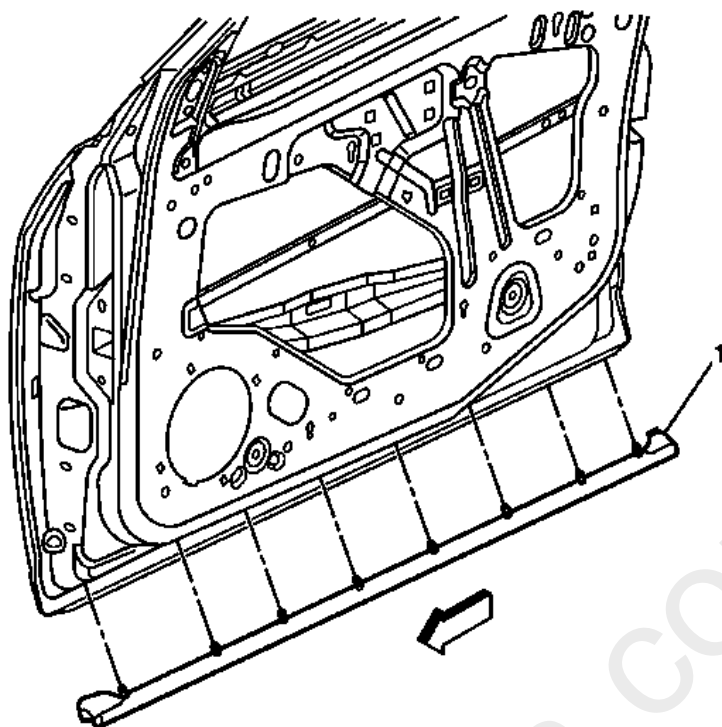


Fig. 44: Front Side Door Bottom Auxiliary Sealing Strip
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Bottom Auxiliary Sealing Strip Replacement (Wagon)

Callout	Component Name
1	Front Side Door Bottom Auxiliary Sealing Strip Procedure Ensure that all the retainer clips are removed. TIP: Place the door in the full open position to remove the retainers .

FRONT SIDE DOOR BOTTOM AUXILIARY SEALING STRIP REPLACEMENT (COUPE)

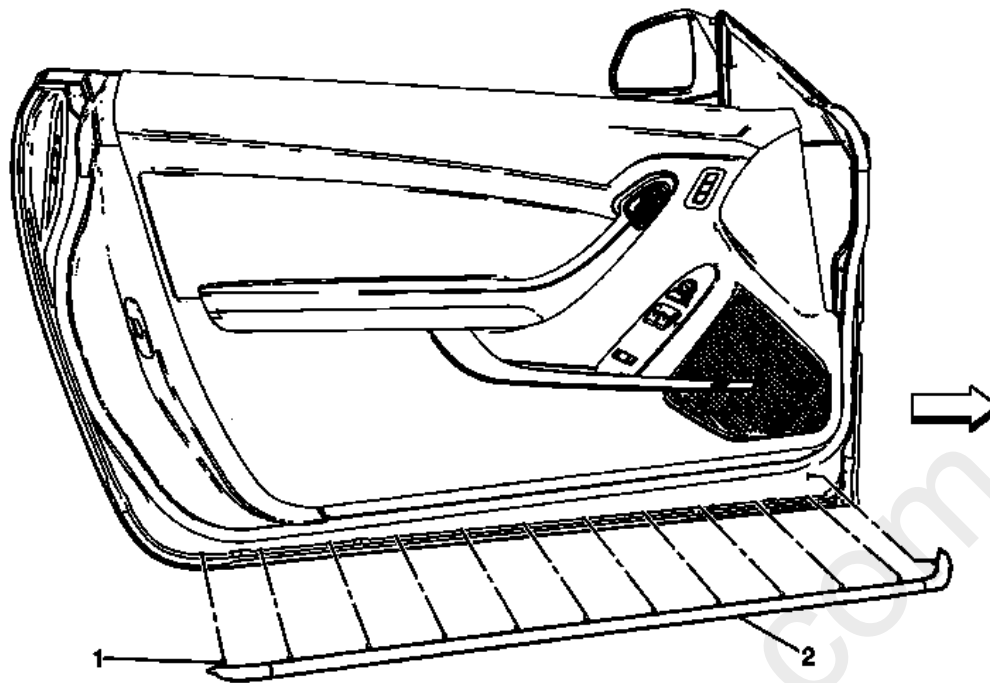


Fig. 45: Front Side Door Bottom Auxiliary Sealing Strip & Retainers (Coupe)
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Bottom Auxiliary Sealing Strip Replacement (Coupe)

Callout	Component Name
1	Front Side Door Bottom Auxiliary Sealing Strip Retainers (Qty: 12) TIP: Place the door in the full open position to remove the retainers .
2	Front Side Door Bottom Auxiliary Sealing Strip

REAR SIDE DOOR BOTTOM AUXILIARY SEALING STRIP REPLACEMENT

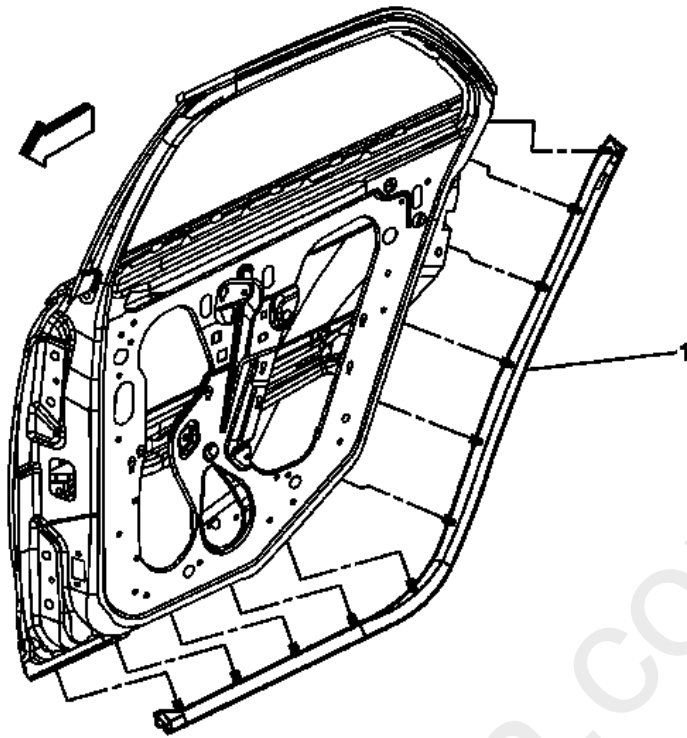


Fig. 46: Rear Side Door Bottom Auxiliary Sealing Strip
 Courtesy of GENERAL MOTORS COMPANY

Rear Side Door Bottom Auxiliary Sealing Strip Replacement

Callout	Component Name
1	Rear Side Door Bottom Auxiliary Sealing Strip Procedure Ensure that all the retainer clips are removed. TIP: Place the door in the full open position to remove the retainers .

LIFTGATE STRUT REPLACEMENT

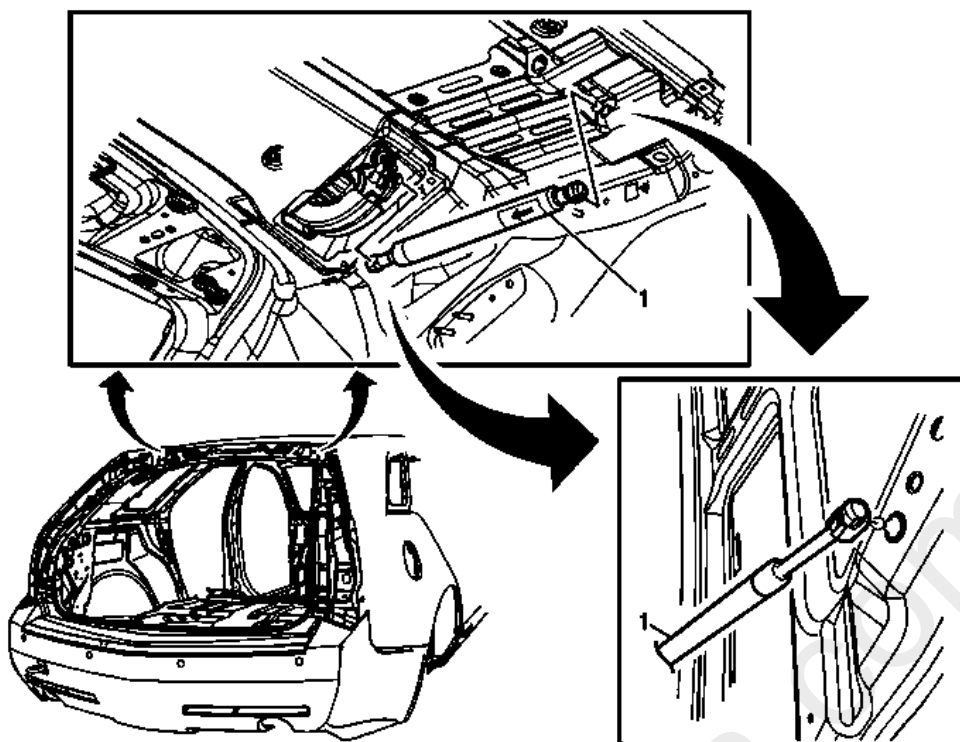


Fig. 47: Liftgate Strut Rod

Courtesy of GENERAL MOTORS COMPANY

Liftgate Strut Replacement

Callout	Component Name
Preliminary Procedure Lower the headliner. Refer to <u>Headlining Trim Panel Replacement (Coupe)</u> <u>Headlining Trim Panel Replacement (Wagon)</u> .	
1	Liftgate Strut Rod 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 rod is reinstalled. If the clip cannot be fully seated, a new rod should be installed. 3. Ensure the arrow on the strut is pointing toward the roof structure.

REAR COMPARTMENT LID STRUT REPLACEMENT

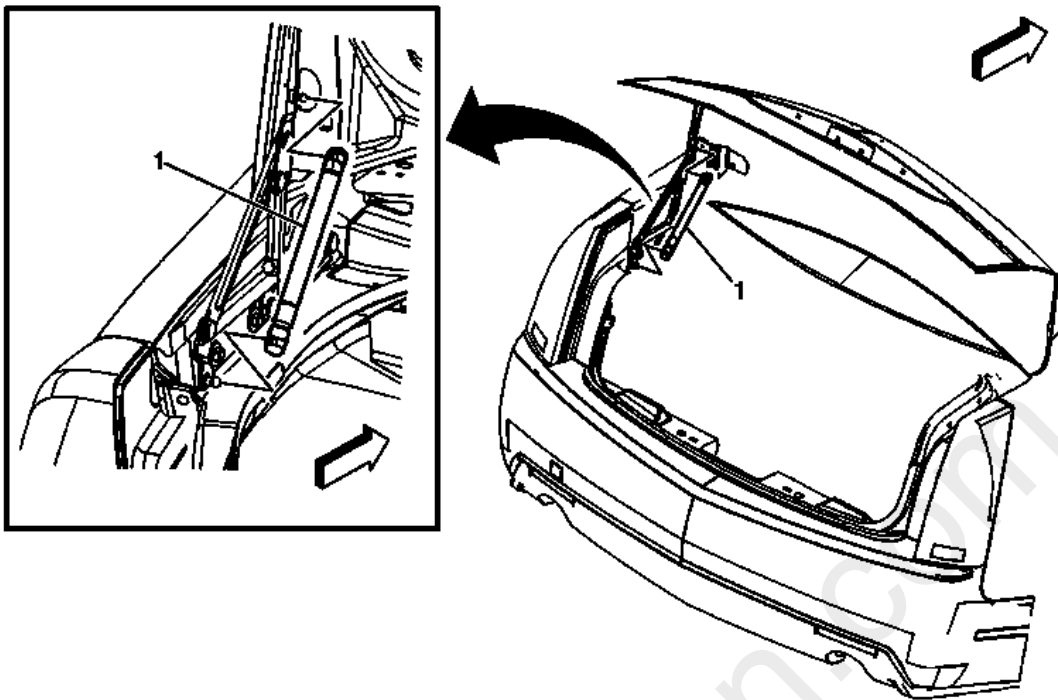


Fig. 48: Rear Compartment Lid Strut
Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Strut Replacement

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.	
1	Rear Compartment Lid Strut (Qty: 2) Procedure 1. Release the locking tabs on the strut. 2. Ensure the clip is fully seated when the rod is installed. If the clip cannot be fully seated a new rod should be installed.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE (WAGON)

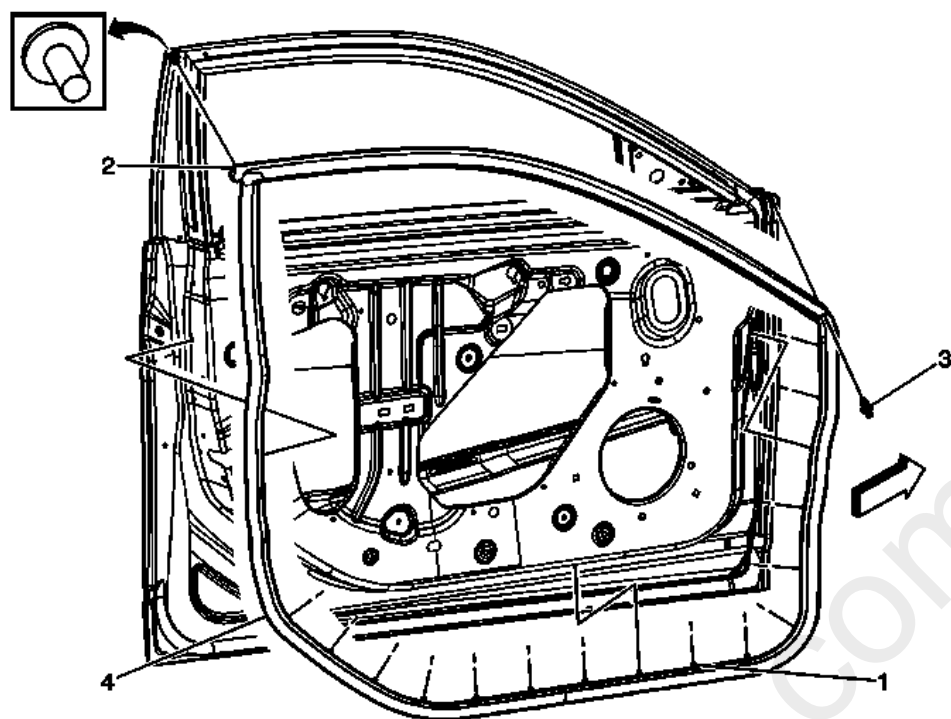


Fig. 49: Front Side Door Upper Auxiliary Weatherstrip Replacement
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Weatherstrip Replacement - Door Side (Wagon)

Callout	Component Name
Preliminary Procedure Remove the check link bolt from the body side only . Refer to <u>Front Side Door Check Link Replacement (Wagon)</u> .	
1	Front Side Door Upper Auxiliary Weatherstrip Retainer (Qty :18) Procedures 1. Open the front side door to the fully open position. 2. Use a suitable tool to remove the retainers from around the lower door. • Pull rearward on the weatherstrip, use the tool to release the push in pin retainer. • Remove all old push-in pins retainer.
2	Front Side Door Upper Auxiliary Weatherstrip Upper Retainer Procedures 1. The weatherstrip clips to a weld-on retainer at the top of the door frame (2). 2. Pull rearward on the weatherstrip to expose the weld-on retainer located on the top of the door frame.

3	Front Side Door Upper Auxiliary Weatherstrip Retainer Procedure Lift up on the weatherstrip by the door window frame to expose the push in retainer (3)
4	Front Side Door Upper Auxiliary Weatherstrip Procedure 1. Ensure that the auxiliary weatherstrip is fully seated in the upper door frame channel. 2. Verify proper door operation.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - DOOR SIDE (COUPE)

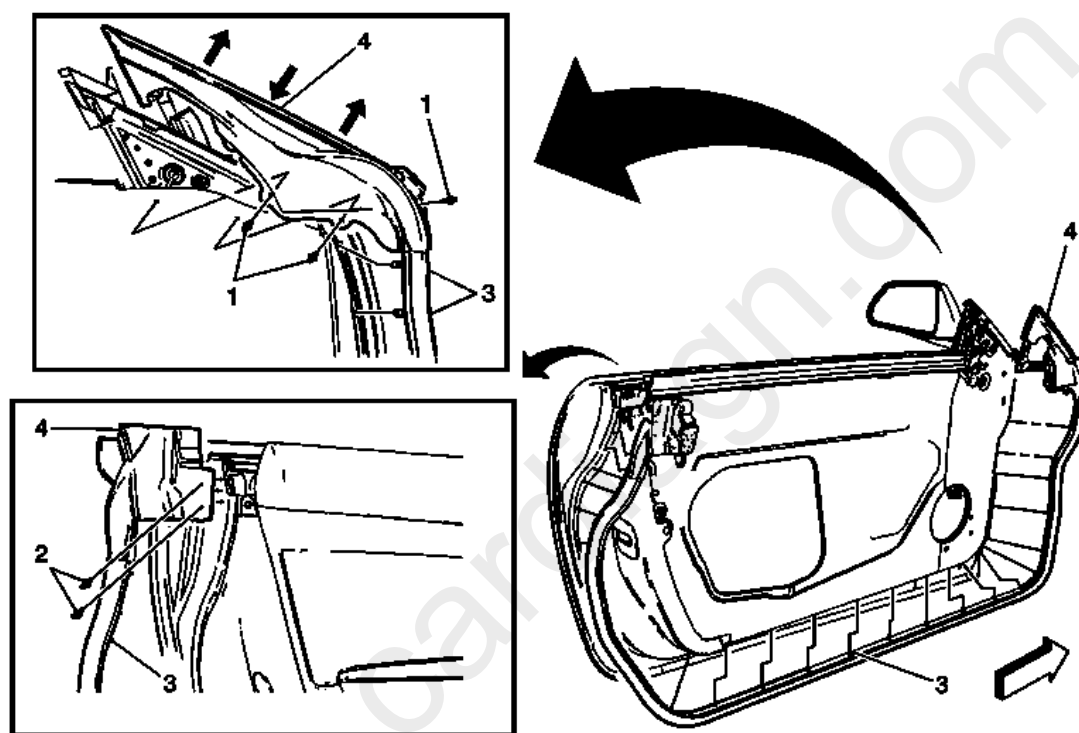


Fig. 50: Front Side Door Weatherstrip & Components (Coupe)
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Weatherstrip Replacement - Door Side (Coupe)

Callout	Component Name
Preliminary Procedures Remove the front side door trim panel. Refer to <u>Front Side Door Trim Panel Replacement (Coupe)</u> .	
1	Front Side Door Weatherstrip Push Pins (Qty: 3) Preliminary Procedures 1. Place the door in the full open position to remove the retainers .

	2. Use a suitable tool to remove the retainers from the around the doors edge.
2	Front Side Door Weatherstrip Push Pins (Qty: 2)
3	Front Side Door Weatherstrip Retainers (Qty: 16)
4	Front Side Door Weatherstrip

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE (WAGON)

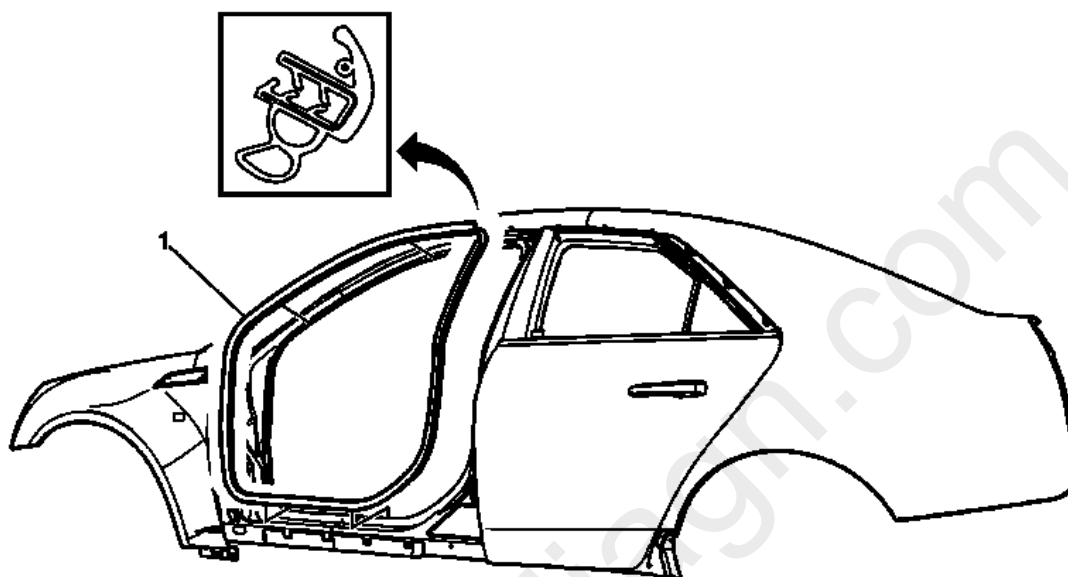


Fig. 51: Front Door Opening Weatherstrip
Courtesy of GENERAL MOTORS COMPANY

Front Side Door Weatherstrip Replacement - Body Side (Wagon)

Callout	Component Name
Preliminary Procedure	
Remove the front door sill plate. Refer to Front Side Door Sill Trim Plate Replacement (Wagon) .	
1	Front Side Door Opening Weatherstrip 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. Using a rubber mallet, ensure that the weatherstrip is seated on the entire door

opening flange.

FRONT SIDE DOOR WEATHERSTRIP REPLACEMENT - BODY SIDE (COUPE)

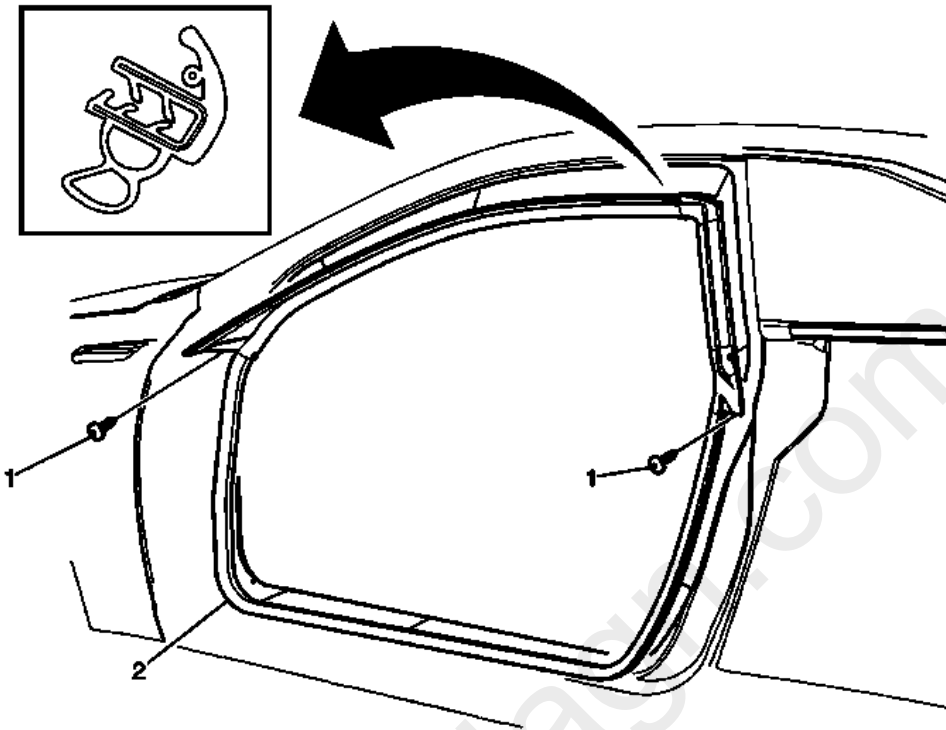


Fig. 52: Front Side Door Weatherstrip & Retainers (Coupe)

Courtesy of GENERAL MOTORS COMPANY

Front Side Door Weatherstrip Replacement - Body Side (Coupe)

Callout	Component Name
Preliminary Procedure	
1. Remove the instrument panel side trim. Refer to <u>Instrument Panel Side Trim Panel Replacement</u>	
2. Remove the front carpet retainer. Refer to <u>Front Side Door Sill Trim Plate Replacement (Coupe)</u>	
1	Front Side Door Weatherstrip Retainers (Qty: 2) Procedure One push pin is located in each corner of the door weatherstrip
2	Front Side Door Weatherstrip Procedure When installing the weatherstrip start in the right upper corner working counter clockwise around the door ring.

FRONT SIDE DOOR AUXILIARY WEATHERSTRIP REPLACEMENT

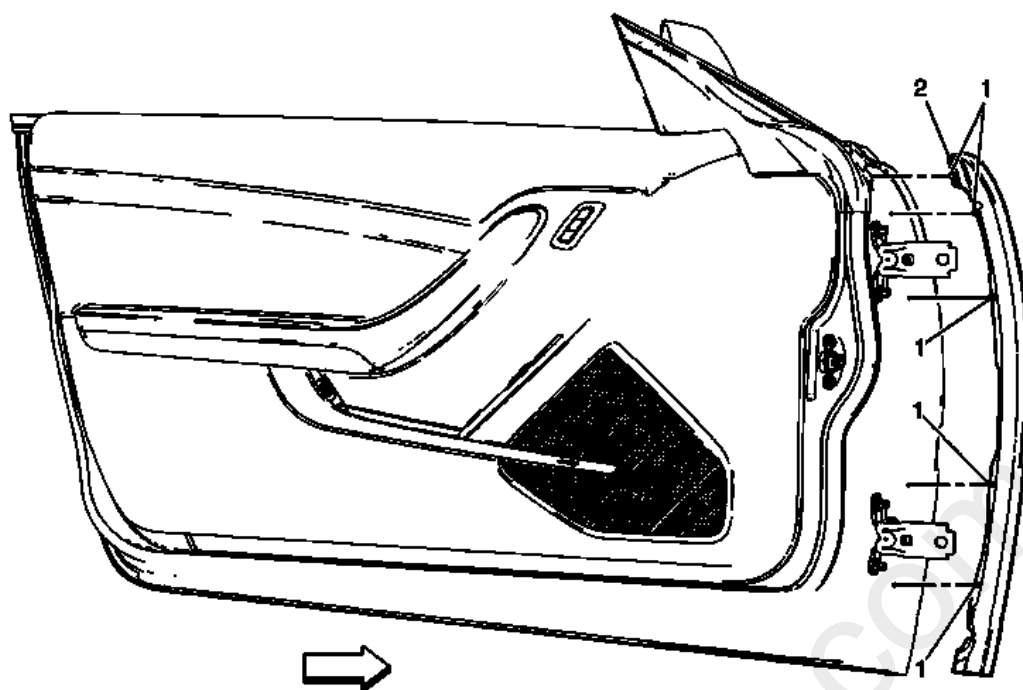


Fig. 53: Front Side Door Auxiliary Weatherstrip & Push Pins
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Auxiliary Weatherstrip Replacement

Callout	Component Name
1	Front Side Door Weatherstrip Push Pins (Qty: 5) Preliminary Procedures 1. Place the door in the full open position to remove the retainers. 2. Use a suitable tool to remove the retainers from the around the doors edge.
2	Front Side Door Weatherstrip

FRONT DOOR OPENING WEATHERSTRIP REPLACEMENT

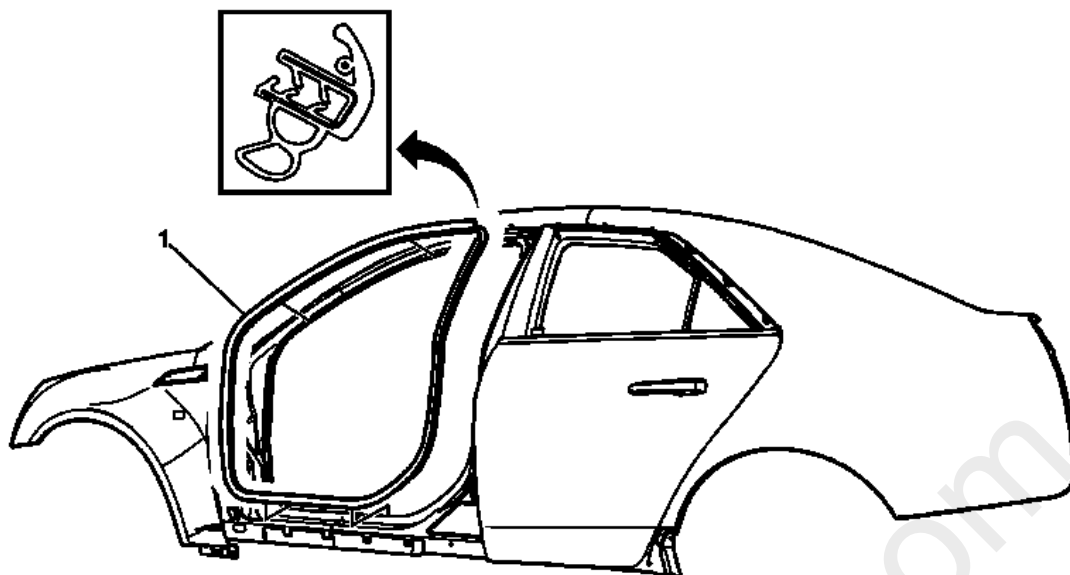


Fig. 54: Front Door Opening Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Front Door Opening Weatherstrip Replacement

Callout	Component Name
Preliminary Procedure Remove the front door sill plate. Refer to Front Side Door Sill Trim Plate Replacement (Coupe) , Front Side Door Sill Trim Plate Replacement (Wagon) .	
1	Front Side Door Opening Weatherstrip 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. Using a rubber mallet, ensure that the weatherstrip is seated on the entire door opening flange.

FRONT SIDE DOOR UPPER AUXILIARY WEATHERSTRIP REPLACEMENT

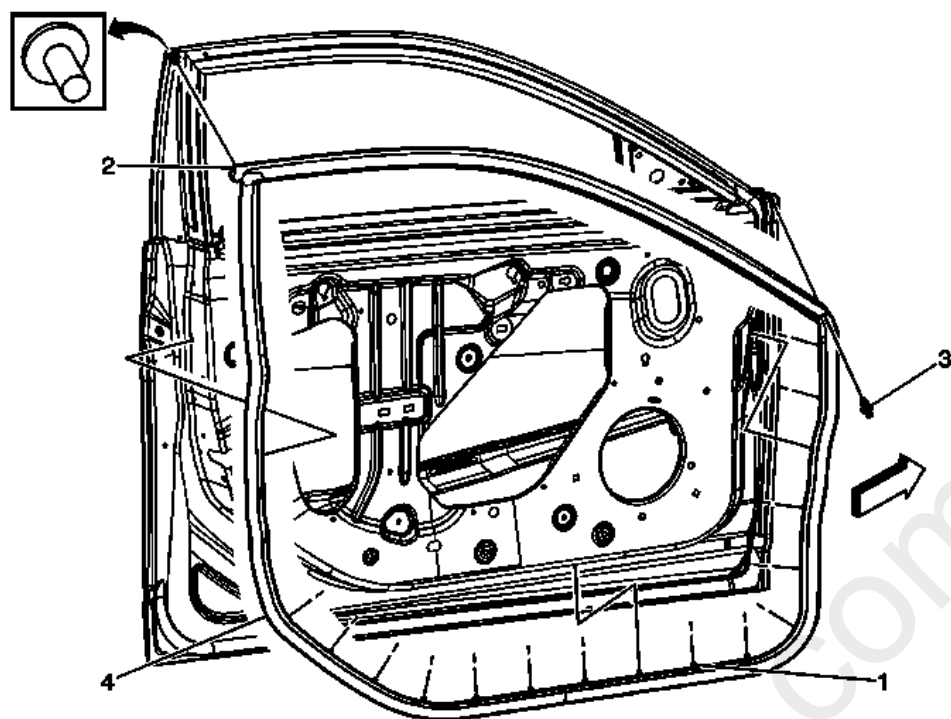


Fig. 55: Front Side Door Upper Auxiliary Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Front Side Door Upper Auxiliary Weatherstrip Replacement

Callout	Component Name
Preliminary Procedure Remove the check link bolt from the body side only . Refer to Front Side Door Check Link Replacement (Coupe) , Front Side Door Check Link Replacement (Wagon) .	
1	Front Side Door Upper Auxiliary Weatherstrip Retainer (Qty :18) Procedures 1. Open the front side door to the fully open position. 2. Use a suitable tool to remove the retainers from around the lower door. • Pull rearward on the weatherstrip, use the tool to release the push in pin retainer. • Remove all old push-in pins retainer.
2	Front Side Door Upper Auxiliary Weatherstrip Upper Retainer Procedures 1. The weatherstrip clips to a weld-on retainer at the top of the door frame (2). 2. Pull rearward on the weatherstrip to expose the weld-on retainer located on the top of the door frame.

3	Front Side Door Upper Auxiliary Weatherstrip Retainer Procedure Lift up on the weatherstrip by the door window frame to expose the push in retainer (3)
4	Front Side Door Upper Auxiliary Weatherstrip Procedure 1. Ensure that the auxiliary weatherstrip is fully seated in the upper door frame channel. 2. Verify proper door operation.

LIFTGATE WEATHERSTRIP REPLACEMENT

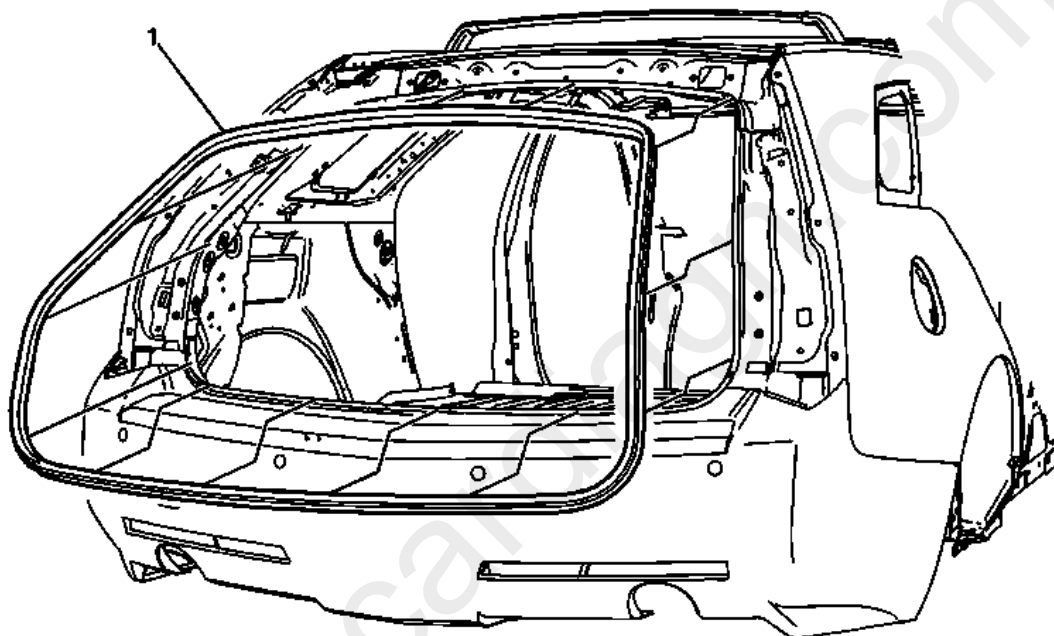


Fig. 56: Liftgate Weatherstrip
Courtesy of GENERAL MOTORS COMPANY

Liftgate Weatherstrip Replacement

Callout	Component Name
1	Liftgate Weatherstrip Procedure Clean the area where the seal will be mounted. Use a suitable solvent with a mixture of 50 percent isopropyl alcohol and 50 percent water by volume, or high-flash naphtha.

LIFTGATE UPPER WEATHERSTRIP REPLACEMENT

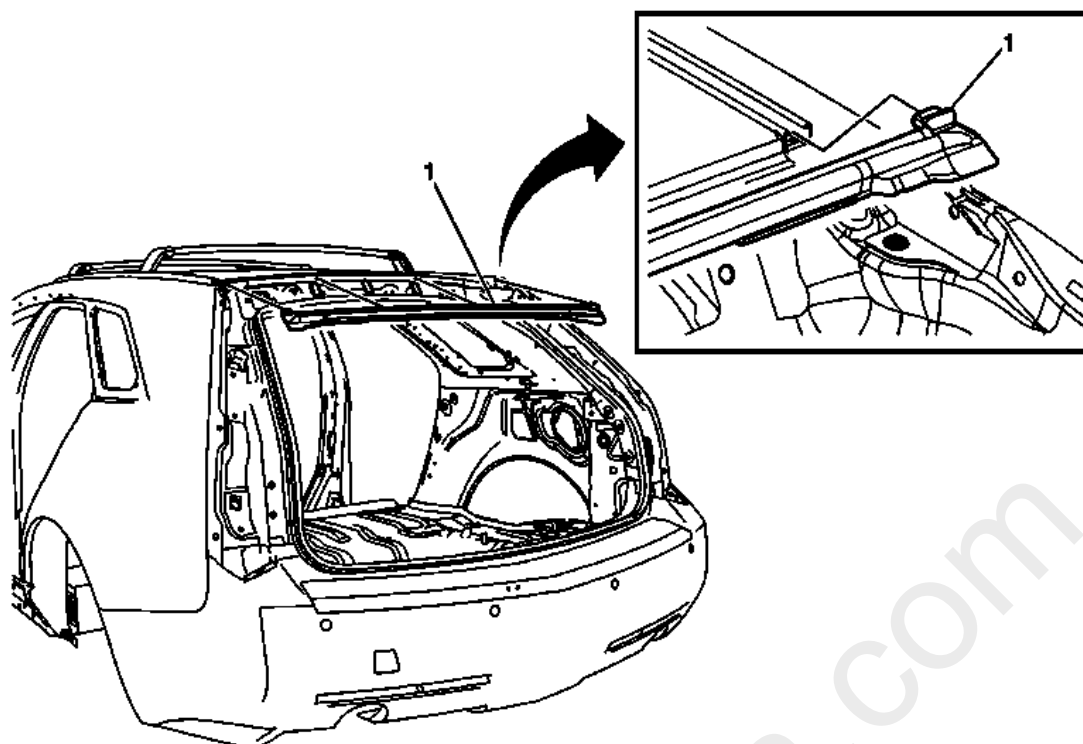


Fig. 57: Liftgate Upper Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Liftgate Upper Weatherstrip Replacement

Callout	Component Name
	Liftgate Upper Weatherstrip
1	Procedure 1. Clean the area where the liftgate upper weatherstrip will be mounted. Use a suitable solvent with a mixture to 50 percent isopropyl alcohol and 50 percent water by volume, or high-flash naphtha. 2. Apply thumb pressure to the liftgate upper weatherstrip to ensure the weatherstrip is fully seated into the retainer.

REAR COMPARTMENT LID WEATHERSTRIP REPLACEMENT (COUPE)

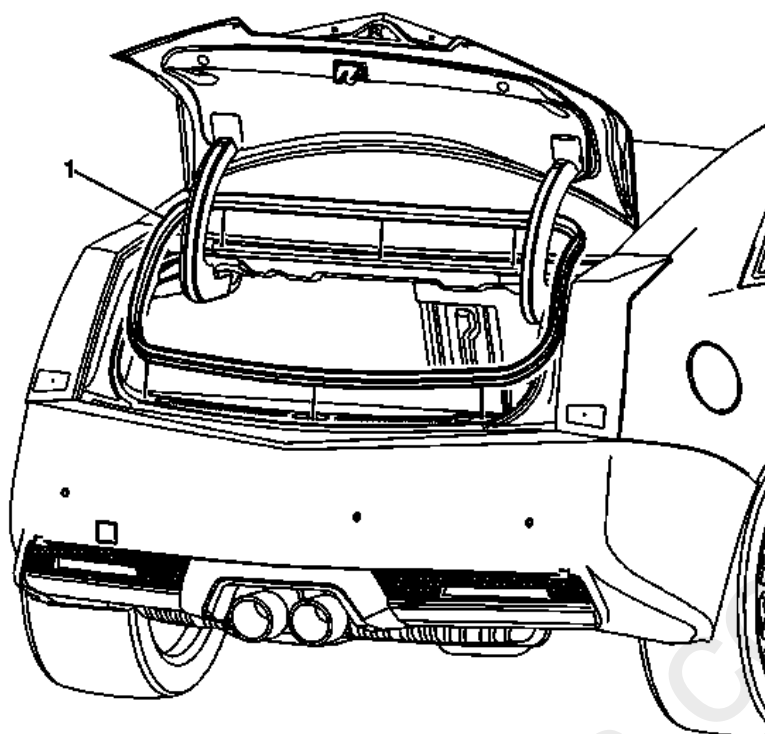


Fig. 58: Rear Compartment Lid Weatherstrip (Coupe)

Courtesy of GENERAL MOTORS COMPANY

Rear Compartment Lid Weatherstrip Replacement (Coupe)

Callout	Component Name
1	Rear Compartment Lid Weatherstrip Procedure 1. Disconnect any electrical connector. 2. Clean the area where the seal will be mounted. Use a suitable solvent with a mixture of 50 percent isopropyl alcohol and 50 percent water by volume, or high-flash naphtha

REAR DOOR OPENING WEATHERSTRIP REPLACEMENT

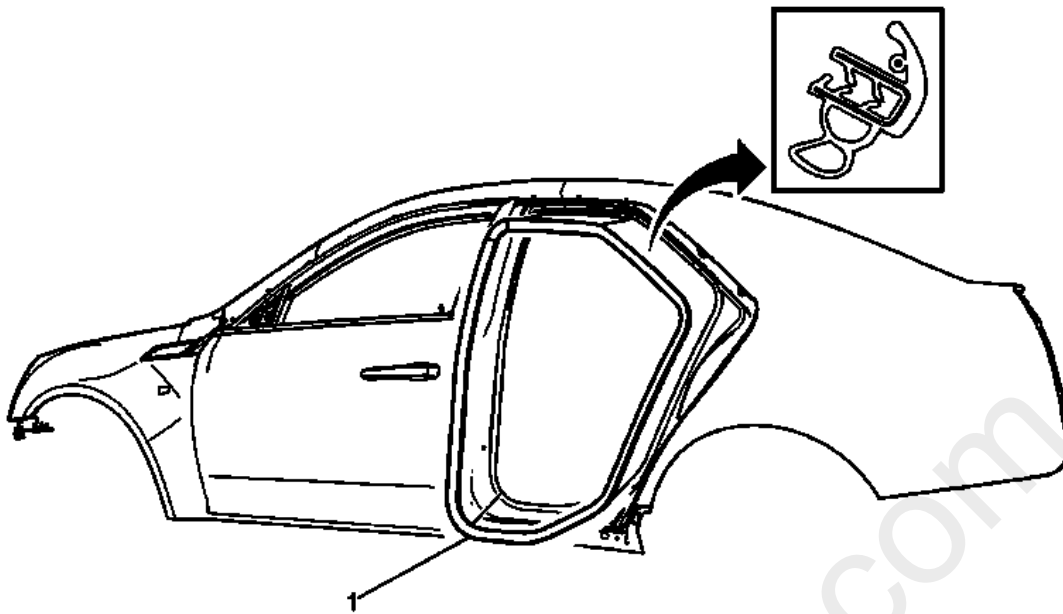


Fig. 59: Rear Door Opening Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Rear Door Opening Weatherstrip Replacement

Callout	Component Name
Preliminary Procedure	
Remove the rear door sill plate. Refer to Rear Side Door Sill Trim Plate Replacement (Wagon) .	
1	Rear Side Door Opening Weatherstrip
	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. Using a rubber mallet, ensure that the weatherstrip is seated on the entire door opening flange.

REAR SIDE DOOR UPPER AUXILIARY WEATHERSTRIP REPLACEMENT

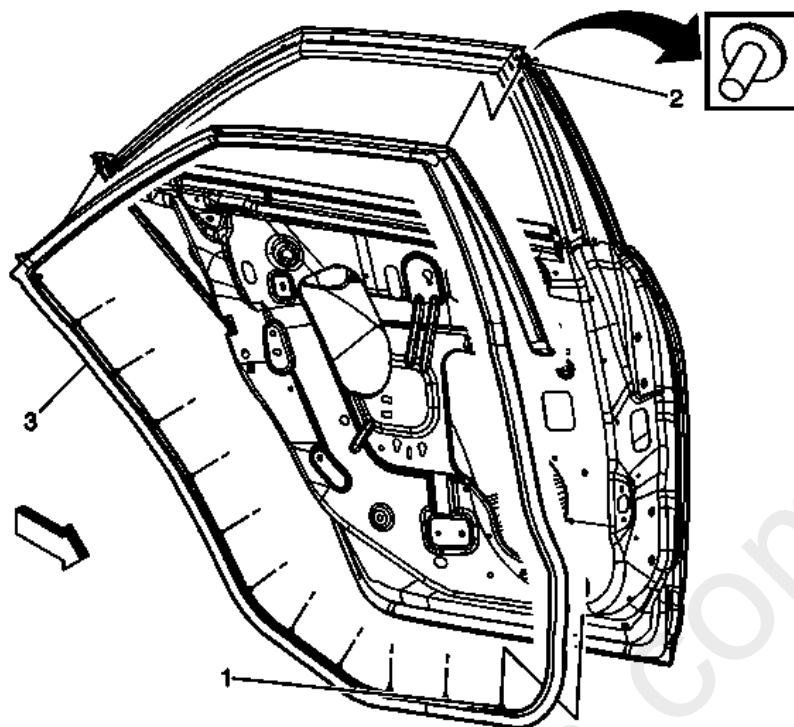


Fig. 60: Rear Side Door Upper Auxiliary Weatherstrip
 Courtesy of GENERAL MOTORS COMPANY

Rear Side Door Upper Auxiliary Weatherstrip Replacement

Callout	Component Name
Preliminary Procedure Remove the check link bolt from the body side only . Refer to <u>Rear Side Door Check Link Replacement.</u>	
1	Rear Side Door Upper Auxiliary Weatherstrip Retainer (Qty :17) Procedure 1. Open the front side door to the fully open position. 2. Use a suitable tool to remove the retainers from around the lower door. • Pull rearward on the weatherstrip, use the tool to release the push in pin retainer. • Remove all old push-in pins retainer.
2	Rear Side Door Upper Auxiliary Weatherstrip Retainer Procedure 1. The weatherstrip clips to a weld-on retainer at the top of the door frame (2). 2. Pull rearward on the weatherstrip to expose the weld-on retainer located on the top of the door frame.

3	Rear Side Door Upper Auxiliary Weatherstrip Procedure 1. Ensure that the auxiliary weatherstrip is fully seated in the upper door frame channel. 2. Verify proper door operation.
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LIFTGATE WEDGE REPLACEMENT

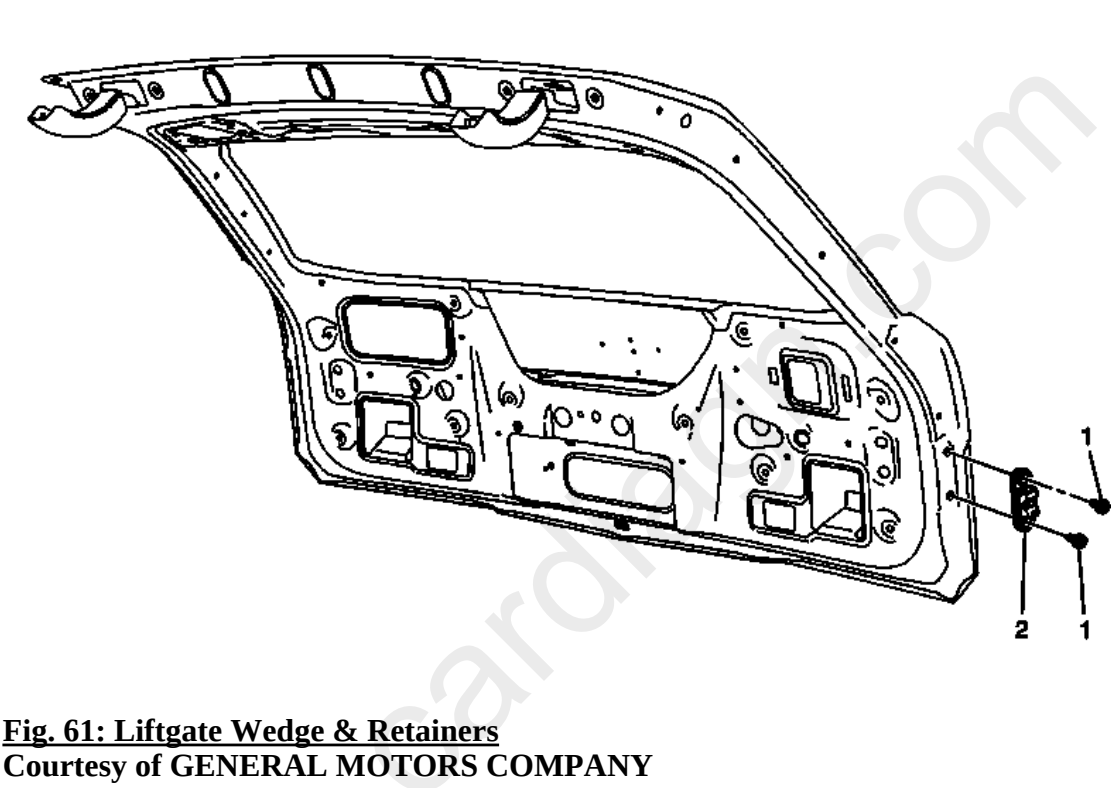


Fig. 61: Liftgate Wedge & Retainers
Courtesy of GENERAL MOTORS COMPANY

Liftgate Wedge Replacement

Callout	Component Name
1	Liftgate Wedge Retainer (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 7 N.m (62 lb in)
2	Liftgate Wedge

LIFTGATE WEDGE REPLACEMENT - BODY SIDE

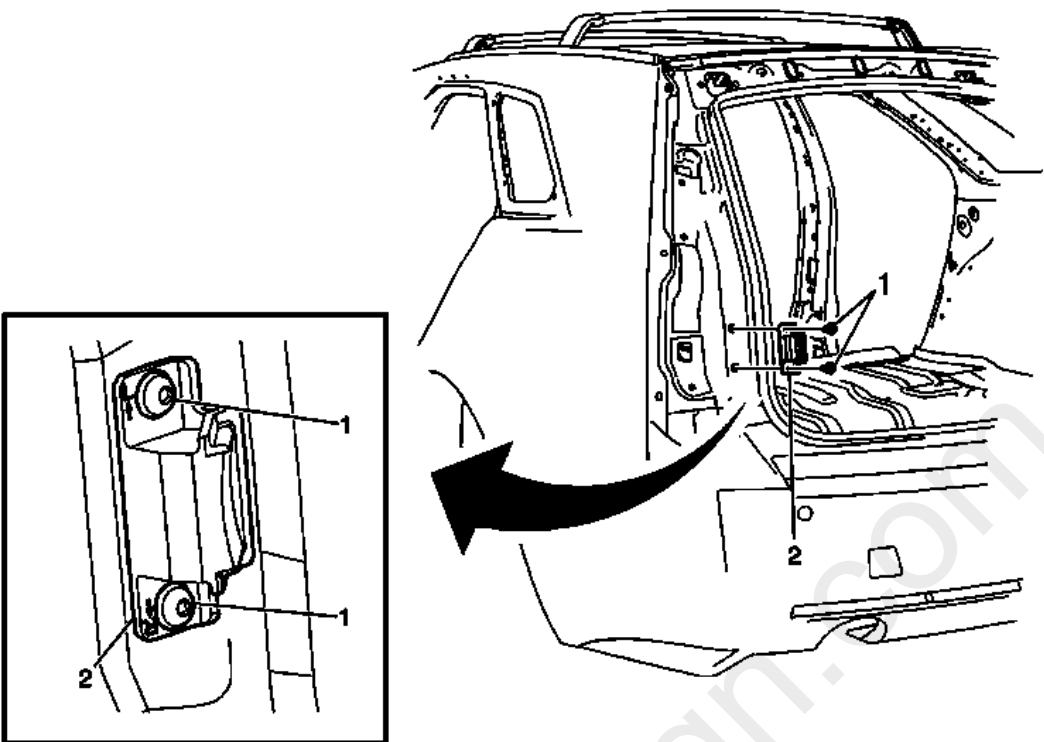


Fig. 62: View Of Liftgate Wedge - Body Side
Courtesy of GENERAL MOTORS COMPANY

Liftgate Wedge Replacement - Body Side

Callout	Component Name
Preliminary Procedure Remove the left or right tail lamp assembly. Refer to <u>Tail Lamp Replacement (Coupe)</u> , <u>Tail Lamp Replacement (Wagon)</u> .	
1	Liftgate Wedge Retainer (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 7 N.m (62 lb in)
2	Liftgate Wedge TIP: The liftgate wedge will fit the right or left side.

DESCRIPTION AND OPERATION

HOOD AJAR INDICATOR DESCRIPTION AND OPERATION

Hood Ajar Switch

The hood ajar switch provides closure status of the hood to the body control module (BCM). The switch is integrated into the hood latch assembly. The hood ajar switch provides two separate inputs to the BCM. These separate inputs allow the BCM to actively monitor for a hood ajar switch fault.

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

Hood Ajar Indicator/Message

When the hood is ajar, a message is displayed on the driver information center (DIC) or the hood ajar indicator will be illuminated.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Illustration	Tool Number/ Description
	BO-125 KM-125 Torque Rod Lifter

