

ACCESSORIES & EQUIPMENT Instrument

Panel and Console Trim - CTS Sedan

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Front Floor Console Trim Plate Bolt	2.5	22 lb in
Front Floor Console Bolt	9	80 lb in
Front Floor Console Rear Compartment Bolt	2.5	22 lb in
Heater and Air Conditioning and Blower Module Bolt	9	80 lb in
Instrument Panel Accessory Bezel Bolt	1.5	13 lb in
Instrument Panel Carrier Bracket Bolt	2.5	22 lb in
Instrument Panel Center Air Outlet Bracket Bolt	1.5	13 lb in
Instrument Panel Compartment Bolt	2.5	22 lb in
Instrument Panel Compartment Bolt (Latch / Dampener)	1.5	13 lb in
Instrument Panel Inflatable Restraint Module Bolt	9	80 lb in
Instrument Panel Insulator Bolt	2.5	22 lb in
Instrument Panel Insulator Nut	6	53 lb in
Instrument Panel Knee Bolster Bolt	2.5	22 lb in
Instrument Panel Lower Trim Pad Bolt	2.5	22 lb in
Instrument Panel Lower Trim Panel Bolt	2.5	22 lb in
Instrument Panel Molding Bolt	2.5	22 lb in
Instrument Panel Outer Air Outlet Bolt	1.5	13 lb in
Instrument Panel Outer Bolt	2.5	22 lb in
Instrument Panel Tie Bar Bolt	22	16 lb ft
Instrument Panel Tie Bar Brace Bolts	9	80 lb in
Instrument Panel Trim Pad Bolt	2.5	22 lb in
Instrument Panel Trim Plate Bolt	2.5	22 lb in
Instrument Panel Upper Bolt	2.5	22 lb in
Lower Instrument Panel Tie Bar Bolt	22	16 lb ft
Roof Console Accessory Switch Trim Plate Bolt	2.5	22 lb in
Roof Console Opening Trim Plate Bolt	2.5	22 lb in
Upper Instrument Panel Tie Bar Bolt	22	16 lb ft

SCHEMATIC WIRING DIAGRAMS

INSTRUMENT PANEL COMPARTMENT WIRING SCHEMATICS

Instrument Panel Compartment Door

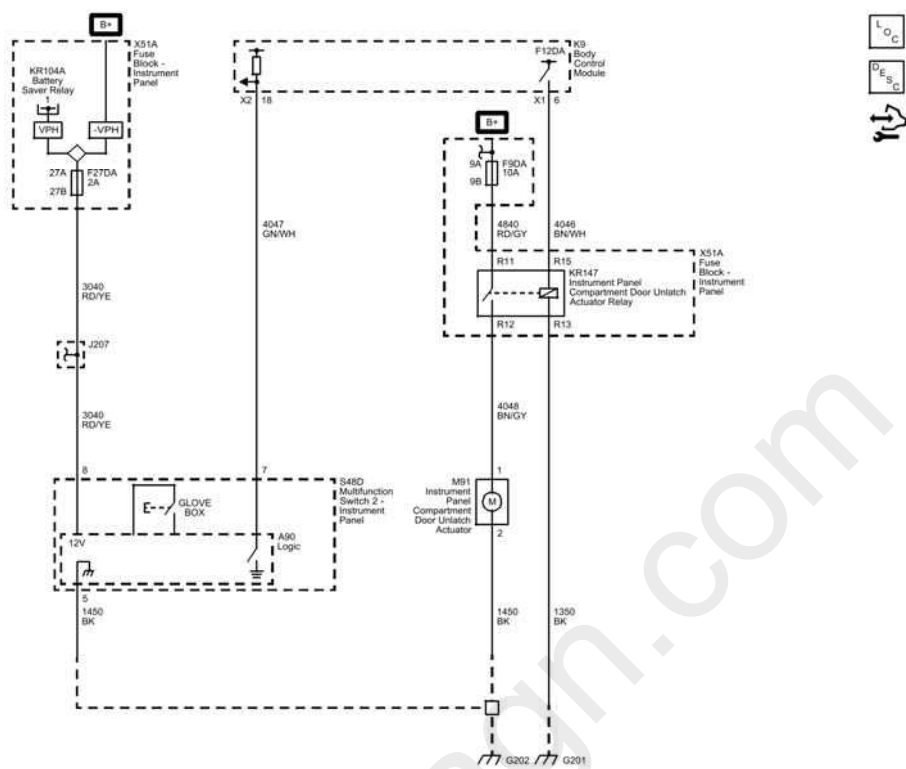


Fig. 1: Instrument Panel Compartment Door
Courtesy of GENERAL MOTORS COMPANY

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC CODE INDEX

DIAGNOSTIC CODE INDEX

DTC	Description
DTC B324D	DTC B324D Instrument Panel Compartment Door Latch Actuator Circuit

DTC B324D: INSTRUMENT PANEL COMPARTMENT DOOR LATCH ACTUATOR 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 B324D

Instrument Panel Compartment Door Latch Actuator Circuit

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

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B324D 01, B324D 04	B324D 01, B324D 04	-	-
Instrument Panel Compartment Door Unlatch Actuator Relay Control	B324D 02	B324D 04	B324D 01	-
Instrument Panel Compartment Door Unlatch Actuator Relay Ground	-	B324D 04	-	-

Circuit/System Description

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

Conditions for Running the DTC

When the relay is being actively commanded by the body control module

Conditions for Setting the DTC

B324D 01 and B324D 04

A loss of B+ voltage to the body control module.

B324D 01

The body control module detects short to battery in the instrument panel compartment door unlatch actuator relay control circuit.

B324D 02

The body control module detects short to ground in the instrument panel compartment door unlatch actuator relay control circuit.

B324D 04

The body control module detects an open/high resistance in the instrument panel compartment door unlatch actuator relay control circuit.

Action Taken When the DTC Sets

B324D 01 and B324D 04

The instrument panel multifunction switch 2 will be inoperative.

B324D 01

The instrument panel compartment door will not latch.

B324D 02 or B324D 04

The body control module will command the relay, but the relay will not energize and the instrument panel compartment door unlatch actuator will not activate.

Conditions for Clearing the DTC

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

Reference Information

Schematic Reference

- **Instrument Panel Compartment Schematics**
- **Door Lock/Indicator Schematics**

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX - SEDAN

Description and Operation

Instrument Panel Compartment Description and Operation

Electrical Information Reference

- **Circuit Testing**

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the M91 Instrument Panel Compartment Door Unlatch Actuator activates when pressing the appropriate switch on the S48D Multifunction Switch 2 - Instrument Panel.

- **If the M91 Instrument Panel Compartment Door Unlatch Actuator does not activate**

Refer to Circuit/System Testing.

- **If the M91 Instrument Panel Compartment Door Unlatch Actuator activates**

3. All OK.

Circuit/System Testing

1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.
 - **If the test lamp does not illuminate and the circuit fuse is good**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ignition circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, verify the fuse is not open and there is voltage at the fuse.
 - **If the test lamp does not illuminate and the circuit fuse is open**
 3. Ignition OFF.
 4. Test for infinite resistance between the ignition circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module
 - **If the test lamp illuminates**
3. Ignition OFF and all vehicle systems OFF, disconnect the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay. It may take up to 2 minutes for all vehicle systems to power down.
4. Test for less than 10 ohms between the ground circuit terminal R13 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.

- If 2 ohms or greater, repair the open/high resistance in the circuit.
- If less than 2 ohms, repair the open/high resistance in the ground connection.
- **If less than 10 ohms**
- 5. Connect a test lamp between the control circuit terminal R15 and the ground circuit terminal R13.
- 6. Verify the test lamp briefly illuminates when pressing the appropriate switch on the S48D Multifunction Switch 2 - Instrument Panel.
 - **If the test lamp is always OFF**
 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit terminal and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module, ignition ON.
 2. Test for less than 1 V between the control circuit terminal and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp turns ON and OFF**
- 7. Test or replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

Component Testing

Relay Test

1. Ignition OFF, disconnect the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.
2. Test for 60-200 ohms between terminals 1 and 3.
 - **If less than 60 ohms or greater than 200 ohms**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If between 60-200 ohms**
- 3. Test for infinite resistance between the terminals listed below:
 - 4 and 1
 - 4 and 5
 - 4 and 3
 - 3 and 5

- **If less than infinite resistance**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal 1 and 12 V. Install a jumper wire between relay terminal 3 and ground.
5. Test for less than 2 ohms between terminals 4 and 5.

- **If 2 ohms or greater**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If less than 2 ohms**

6. All OK.

Repair Instructions

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

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

SYMPTOMS-INSTRUMENT PANEL AND CONSOLE TRIM

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

1. Perform the **Diagnostic System Check - Vehicle** before using the Symptom Tables in order to verify that all of the following are true:
 - There are no DTCs set.
 - The control modules can communicate via the serial data link.
2. Review the system operation in order to familiarize yourself with the system functions. Refer to **Instrument Panel Compartment Description and Operation**.

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the system. Refer to **Checking Aftermarket Accessories** .
- Inspect the easily accessible or visible system components for obvious damage or conditions which 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 the symptom diagnostic procedure below in order to diagnose the symptom:

Instrument Panel Compartment Door Latch Release Malfunction

INSTRUMENT PANEL COMPARTMENT DOOR LATCH RELEASE MALFUNCTION

Diagnostic Instructions

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

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
BCM B+	B324D 01, B324D 04	B324D 01, B324D 04	-	-
Instrument Panel Compartment Door Unlatch Actuator Relay B+	1	1	-	-
Instrument Panel Compartment Door Unlatch Actuator Relay Control	B324D 02	B324D 04	B324D 01	-
Instrument Panel Compartment Door Unlatch Actuator Relay Ground	-	B324D 04	-	-
Instrument Panel Compartment Door Unlatch Actuator Control	1	1	1	-
Instrument Panel Compartment Door Unlatch Actuator Ground	-	1	-	-
Glove Box Release Signal	2	2	2	-
Instrument Panel Multifunction Switch 2 Ground	-	2	-	-
1. Instrument Panel Compartment Door Unlatch Actuator Inoperative 2. Glove Box Release Switch Inoperative				

Circuit/System Description

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

relay then closes, supplying battery positive voltage through the relay and the instrument panel compartment door latch control circuit activating the latch releasing the instrument panel compartment door.

Reference Information

Schematic Reference

Instrument Panel Compartment Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX - SEDAN

Description and Operation

Instrument Panel Compartment Description and Operation

Electrical Information Reference

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Glove Box Unlatch Switch parameter changes from Inactive to Active to Inactive when pressing the appropriate switch on the S48D Multifunction Switch 2 - Instrument Panel.

- **If the parameter does not change**

Refer to Circuit/System Testing - Instrument Panel Compartment Door Release Switch Inoperative.

- **If the parameter changes**

3. Verify the M91 Instrument Panel Compartment Door Unlatch Actuator activates when pressing the appropriate switch on the S48D Multifunction Switch 2 - Instrument Panel.

- **If the M91 Instrument Panel Compartment Door Unlatch Actuator does not activate**

Refer to Circuit/System Testing - Instrument Panel Compartment Door Latch Inoperative.

- **If the M91 Instrument Panel Compartment Door Unlatch Actuator activates**

4. All OK.

Circuit/System Testing

Instrument Panel Compartment Door Release Switch Inoperative

1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.
 - **If the test lamp does not illuminate and the circuit fuse is good**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ignition circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, verify the fuse is not open and there is voltage at the fuse.
 - **If the test lamp does not illuminate and the circuit fuse is open**
 3. Ignition OFF.
 4. Test for infinite resistance between the ignition circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the K9 Body Control Module
 - **If the test lamp illuminates**
3. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S48D Multifunction Switch 2 - Instrument Panel. It may take up to 2 minutes for all vehicle systems to power down.
4. Test for less than 10 ohms between the ground circuit terminal 5 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
5. Ignition ON.
6. Test for greater than 10 V between the signal circuit terminal 7 and ground.
 - **If 10 V or less**
 1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the signal circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Test for less than 2 ohms in the signal circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If greater than 10 V**

7. Test or replace the S48D Multifunction Switch 2 - Instrument Panel.

Instrument Panel Compartment Door Latch Inoperative

1. Ignition OFF and all vehicle systems OFF, disconnect the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay. It may take up to 2 minutes for all vehicle systems to power down.
2. Test for less than 10 ohms between the ground circuit terminal R13 and ground.
 - **If 10 ohms or greater**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal R11 and ground.
 - **If the test lamp does not illuminate and the circuit fuse is good**
 1. Ignition OFF.
 2. Test for less than 2 ohms in the B+ circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, verify the fuse is not open and there is voltage at the fuse.
 - **If the test lamp does not illuminate and the circuit fuse is open**
 1. Ignition OFF.
 2. Test for infinite resistance between the B+ circuit and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance
 3. Ignition OFF, disconnect the harness connector at the M91 Instrument Panel Compartment Door Unlatch Actuator.
 4. Test for infinite resistance between the control circuit terminal 2 and ground.
 - If less than infinite resistance, repair the short to ground on the circuit.
 - If infinite resistance, replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.
 - **If the test lamp illuminates**
5. Connect a test lamp between the control circuit terminal R15 and the ground circuit terminal R13.
6. Verify the test lamp turns ON and OFF when pressing the appropriate switch on the S48D Multifunction Switch 2 - Instrument Panel.
 - **If the test lamp is always OFF**
 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module.
 2. Test for infinite resistance between the control circuit terminal and ground.

- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance
- 3. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the K9 Body Control Module.
 - **If the test lamp is always ON**
- 1. Ignition OFF, remove the test lamp, disconnect the X1 harness connector at the K9 Body Control Module, ignition ON.
- 2. Test for less than 1 V between the control circuit terminal and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, replace the K9 Body Control Module.
 - **If the test lamp turns ON and OFF**
- 7. Verify that a test lamp does not illuminate between the control circuit terminal R12 and ground.
 - **If the test lamp illuminates**

Repair the short to voltage on the control circuit.

○ **If the test lamp does not illuminate**
- 8. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M91 Instrument Panel Compartment Door Unlatch Actuator. It may take up to 2 minutes for all vehicle systems to power down.
- 9. Test for less than 10 ohms between the ground circuit terminal 2 and ground.
 - **If 10 ohms or greater**
- 1. Ignition OFF.
- 2. Test for less than 2 ohms in the ground circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, repair the open/high resistance in the ground connection.
 - **If less than 10 ohms**
- 10. Connect the harness connector at the M91 Instrument Panel Compartment Door Unlatch Actuator.
- 11. Ignition ON, connect a 10 A fused jumper wire between the B+ circuit terminal R11 and the control circuit terminal R12.
- 12. Verify the M91 Instrument Panel Compartment Door Unlatch Actuator is activated.
 - **If the M91 Instrument Panel Compartment Door Unlatch Actuator does not activate**
- 1. Ignition OFF, remove the 10 A fused jumper wire, disconnect the harness connector at the M91 Instrument Panel Compartment Door Unlatch Actuator.
- 2. Test for less than 2 ohms in the control circuit end to end.
 - If 2 ohms or greater, repair the open/high resistance in the circuit.
 - If less than 2 ohms, replace the M91 Instrument Panel Compartment Door Unlatch Actuator.
 - **If the M91 Instrument Panel Compartment Door Unlatch Actuator activates**
- 13. Test or replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

Component Testing

Relay Test

1. Ignition OFF, disconnect the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.
2. Test for 60-200 ohms between terminals 1 and 3.
 - **If less than 60 ohms or greater than 200 ohms**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If between 60-200 ohms**
3. Test for infinite resistance between the terminals listed below:
 - 4 and 1
 - 4 and 5
 - 4 and 3
 - 3 and 5
 - **If less than infinite resistance**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If infinite resistance**
4. Install a 3 A fused jumper wire between relay terminal 1 and 12 V. Install a jumper wire between relay terminal 3 and ground.
 5. Test for less than 2 ohms between terminals 4 and 5.
 - **If 2 ohms or greater**

Replace the KR147 Instrument Panel Compartment Door Unlatch Actuator Relay.

- **If less than 2 ohms**
6. All OK

Instrument Panel Compartment Door Release Switch

1. Ignition OFF, disconnect the harness connector at the S48D Multifunction Switch 2 - Instrument Panel.
2. Test for infinite resistance between the signal terminal 7 and the ground terminal 1 with the switch in the open position.
 - **If less than infinite resistance**

Replace the S48D Multifunction Switch 2 - Instrument Panel.

- **If infinite resistance**
3. Test for less than 3 ohms between the signal terminal 7 and the ground terminal 1 with the switch in the closed position.

- **If 3 ohms or greater**

Replace the S48D Multifunction Switch 2 - Instrument Panel.

- **If less than 3 ohms**

4. All OK.

Instrument Panel Compartment Door Release Actuator

1. Ignition OFF, disconnect the harness connector at the M91 Instrument Panel Compartment Door Unlatch Actuator.
2. Install a 10 A fused jumper wire between the control terminal 1 and 12 V. Install a jumper wire between the ground terminal 2 and ground.
3. Verify the M91 Instrument Panel Compartment Door Unlatch Actuator activates.
 - **If the M91 Instrument Panel Compartment Door Unlatch Actuator does not activate.**

Replace the M91 Instrument Panel Compartment Door Unlatch Actuator.

- **If the M91 Instrument Panel Compartment Door Unlatch Actuator does activate.**

4. All OK.

Repair Instructions

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

- **Relay Replacement (Within an Electrical Center)** , **Relay Replacement (Attached to Wire Harness)**
- **Instrument Panel Compartment Door Latch Actuator Replacement**
- **Instrument Panel Multifunction Switch Replacement**
- **Control Module References** for body control module replacement, programming and setup

REPAIR INSTRUCTIONS

INSTRUMENT PANEL LOWER TRIM PANEL INSULATOR REPLACEMENT - LEFT SIDE

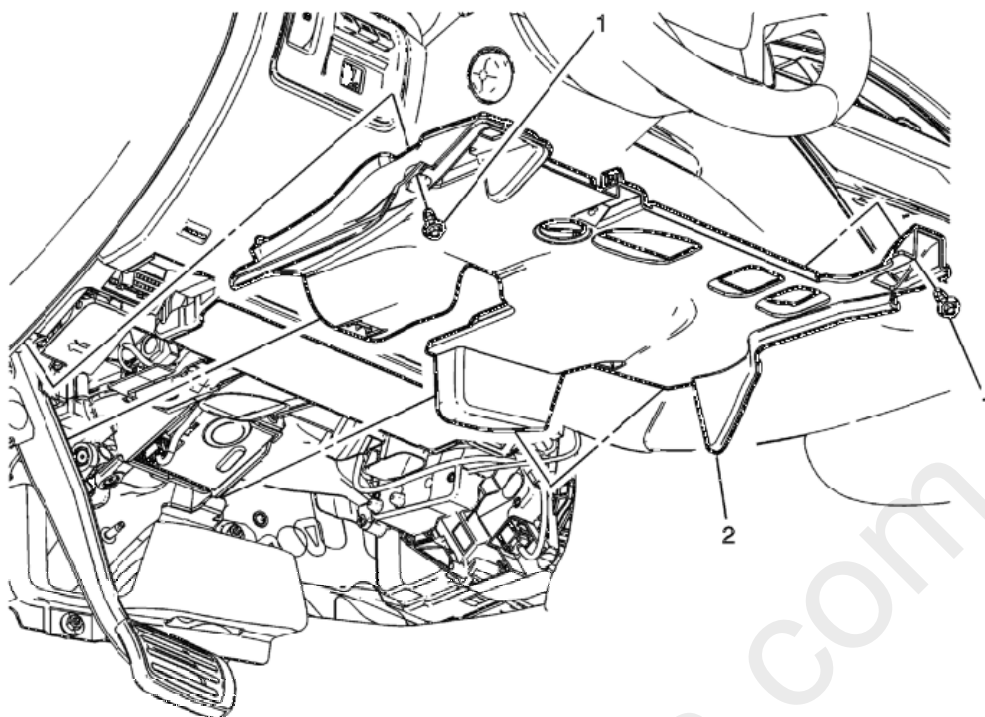


Fig. 2: Instrument Panel Lower Trim Panel Insulator - Left Side
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Lower Trim Panel Insulator Replacement - Left Side

Callout	Component Name
1	Instrument Panel Insulator Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Lower Trim Panel Insulator - Left Side Procedure 1. Use a flat-bladed plastic trim tool to release the retainer and tabs securing the insulator to the instrument carrier. 2. Disconnect electrical connection. 3. Unclip the hood release handle from the insulator panel.

INSTRUMENT PANEL LOWER TRIM PANEL INSULATOR REPLACEMENT - RIGHT SIDE

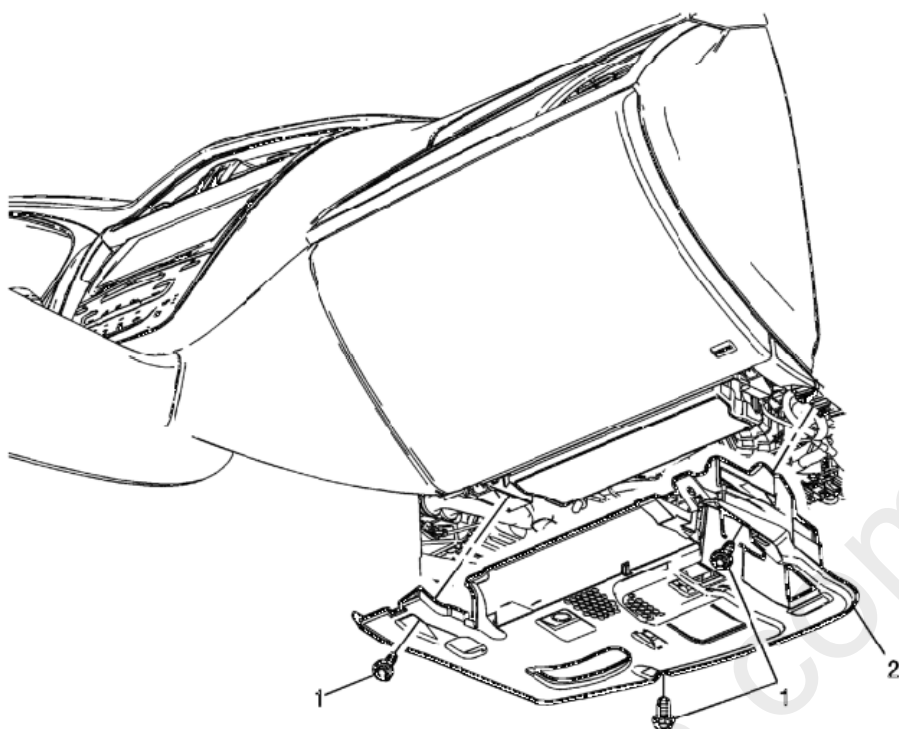


Fig. 3: Instrument Panel Lower Trim Panel Insulator - Right Side
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Lower Trim Panel Insulator Replacement - Right Side

Callout	Component Name
Preliminary Procedures 1. Remove the instrument panel insulator hole cover. Refer to <u>Instrument Panel Insulator Hole Cover Replacement</u>. 2. Remove the heater and air conditioning remote control. Refer to <u>Heater and Air Conditioning Remote Control Replacement</u>. NOTE: When removing the instrument panel lower trim panel insulator for any reason, it is required that the connector to the HVAC module be disconnected. If the vehicle battery has NOT been disconnected, when reinstalling / reconnecting the module, the BROWN J2 connector must be connected last. Once all the parts are all in place, check and clear all DTCs in the HVAC module.	
1	Instrument Panel Insulator Bolt (Qty: 3) Procedure Reposition the front floor panel carpet at the insulator panel to access the front fastener. CAUTION: Refer to <u>Fastener Caution</u> .

	Tighten 2.5 (22 lb in)
2	Instrument Panel Lower Trim Panel Insulator - Right Side Procedures 1. Disconnect the electrical connectors. 2. Transfer components as necessary.

INSTRUMENT PANEL INSULATOR HOLE COVER REPLACEMENT

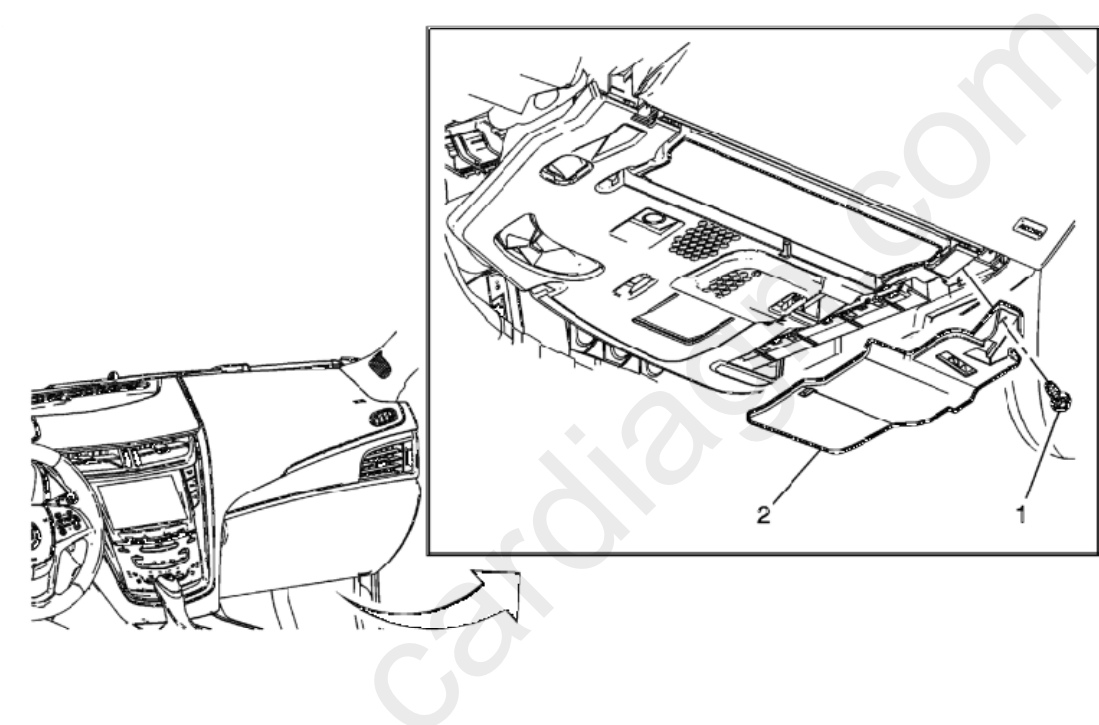


Fig. 4: Instrument Panel Insulator Hole Cover
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Insulator Hole Cover Replacement

Callout	Component Name
1	Instrument Panel Insulator Bolt CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)

Instrument Panel Insulator Hole Cover

Procedure

Unclip the heater and air conditioning remote control module from the instrument panel insulator hole cover without disconnecting the electrical.

2

NOTE:

If the HVAC module has been disconnected and the battery has NOT been disconnected, the BROWN J2 connector must be connected last prior to reinstalling the module. Once all the parts are all in place, check and clear all DTC's in the HVAC module.

INSTRUMENT PANEL ACCESSORY BRACKET REPLACEMENT

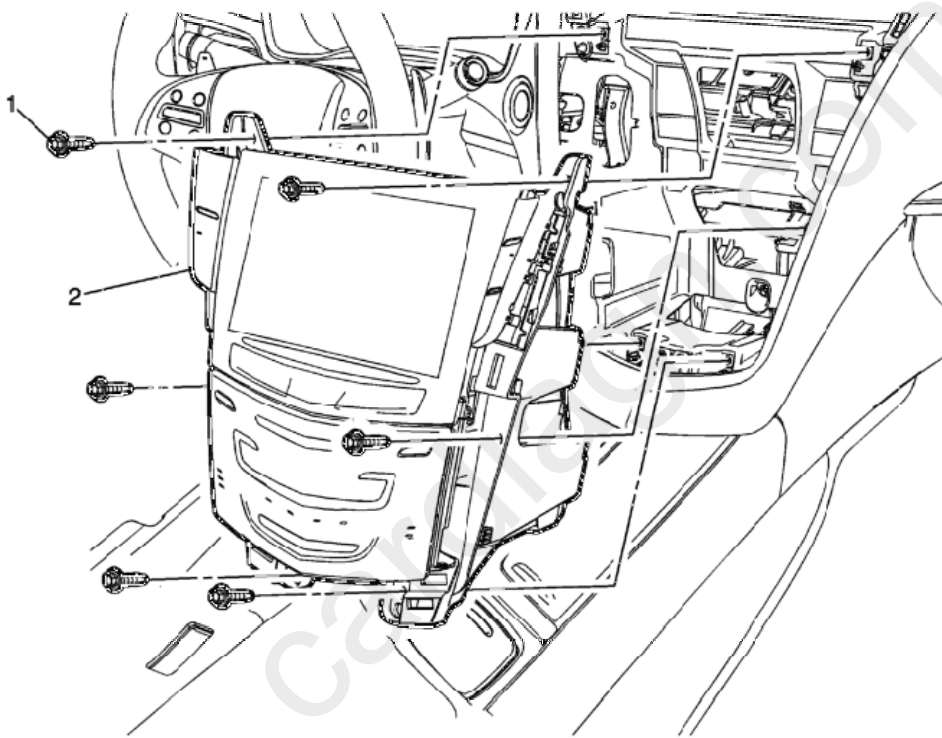


Fig. 5: Instrument Panel Accessory Bracket

Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Accessory Bracket Replacement

Callout	Component Name
Preliminary Procedure	
1. Remove the instrument panel trim plate. Refer to <u>Instrument Panel Trim Plate Replacement</u> .	
2. Remove the instrument panel accessory center trim plate. Refer to <u>Instrument Panel Accessory Center Trim Plate Replacement</u> .	
	Instrument Panel Carrier Bracket Bolt (Qty: 6)

1	CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Accessory Bracket Procedure 1. Disconnect all electrical connectors. 2. Remove the Radio Control Assembly. Refer to <u>Radio Control Assembly Replacement</u> . 3. Transfer components as necessary.

INSTRUMENT PANEL EXTENSION REPLACEMENT

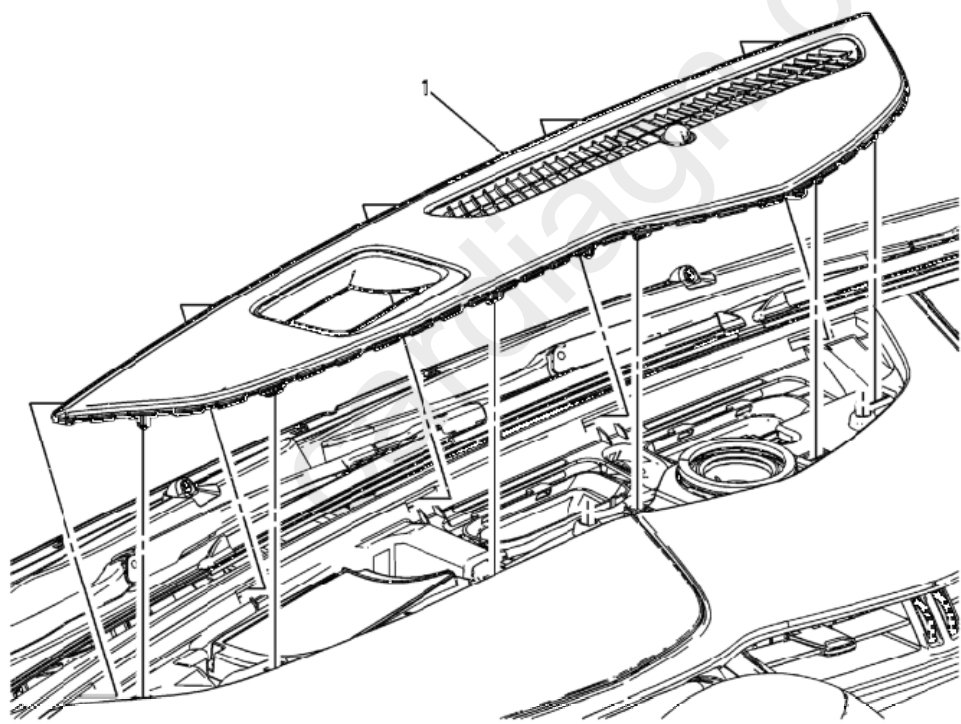


Fig. 6: Instrument Panel Extension
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Extension Replacement

Callout	Component Name
	Instrument Panel Extension

Procedures

1

1. Use a flat-bladed plastic trim tool to remove the extension from the instrument carrier.
2. Disconnect the electrical connector.
3. Transfer components as necessary.

INSTRUMENT PANEL KNEE BOLSTER OUTER DEFLECTOR REPLACEMENT

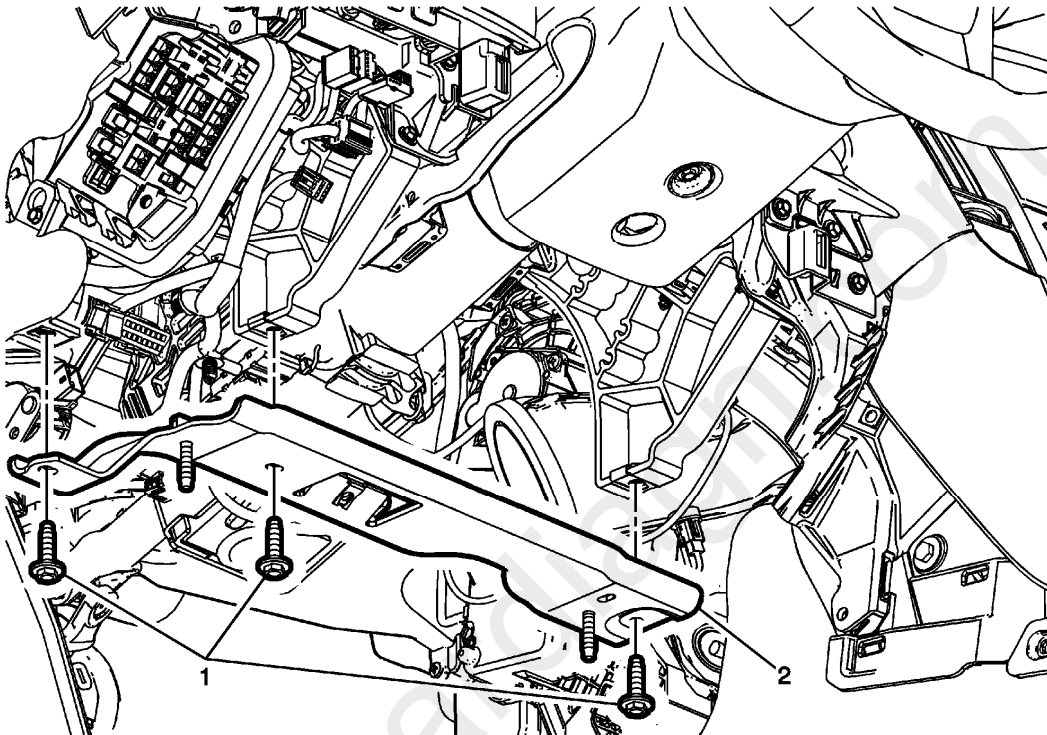


Fig. 7: Instrument Panel Knee Bolster Outer Deflector
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Knee Bolster Outer Deflector Replacement

Callout	Component Name
Preliminary Procedure Remove the left front floor air outlet duct. Refer to <u>Floor Front Air Outlet Duct Replacement - Left Side</u> .	
1	Instrument Panel Tie Bar Brace Bolt (Qty: 3) CAUTION: Refer to <u>Fastener Caution</u> . Tighten:

	9 (80 lb in)
2	Instrument Panel Knee Bolster Outer Deflector

INSTRUMENT PANEL KNEE BOLSTER REPLACEMENT

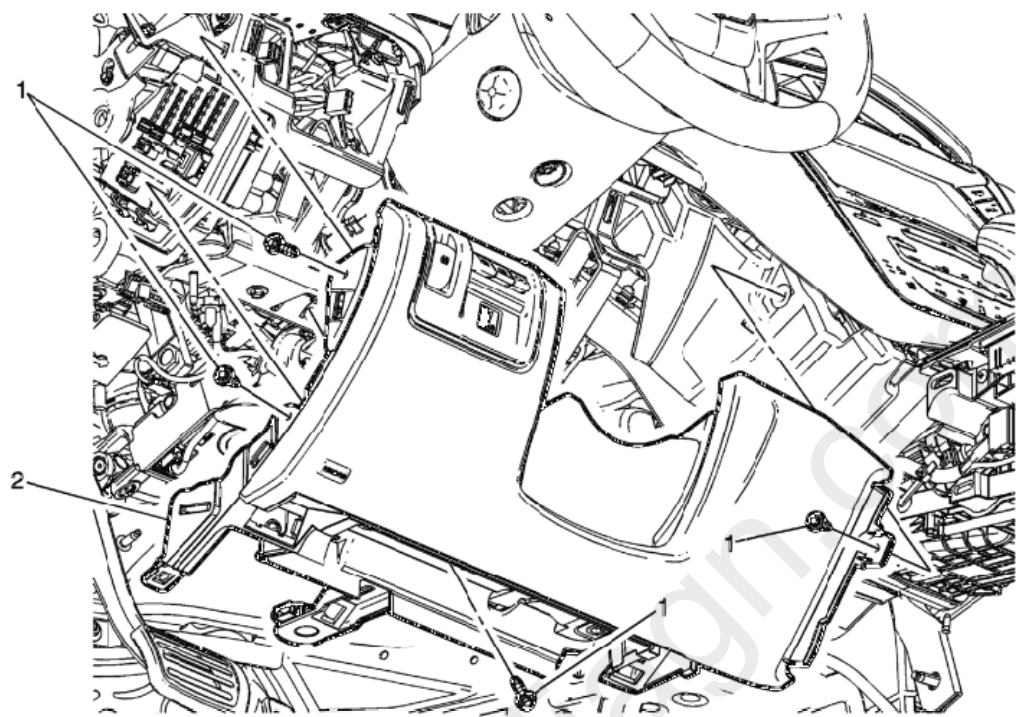


Fig. 8: Instrument Panel Knee Bolster
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Knee Bolster Replacement

Callout	Component Name
Preliminary Procedure	
1. Disable the SIR system. Refer to <u>SIR Disabling and Enabling</u> . 2. Remove the driver side inflatable restraint instrument panel lower module. Refer to <u>Instrument Panel Lower Airbag Replacement - Driver Side</u> . 3. Remove the left instrument panel outer trim cover. Refer to <u>Instrument Panel Outer Trim Cover Replacement</u>. 4. Remove the left instrument panel lower trim panel insulator. Refer to <u>Instrument Panel Lower Trim Panel Insulator Replacement - Left Side</u>. 5. Remove the left front floor console side trim panel. Refer to <u>Front Floor Console Side Trim Panel Replacement - Left Side</u> 6. Remove the instrument panel center trim plate applique. Refer to <u>Instrument Panel Center Trim Plate Applique Replacement</u>.	
	Instrument Panel Knee Bolster Bolt (Qty: 4)

1	CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Knee Bolster Procedures 1. Use a flat bladed plastic trim tool in order to release the retainer clips securing the knee bolster to the instrument carrier. 2. Disconnect electrical connections. 3. Transfer all necessary components.

INSTRUMENT PANEL TRIM PLATE APPLIQUE REPLACEMENT - RIGHT SIDE

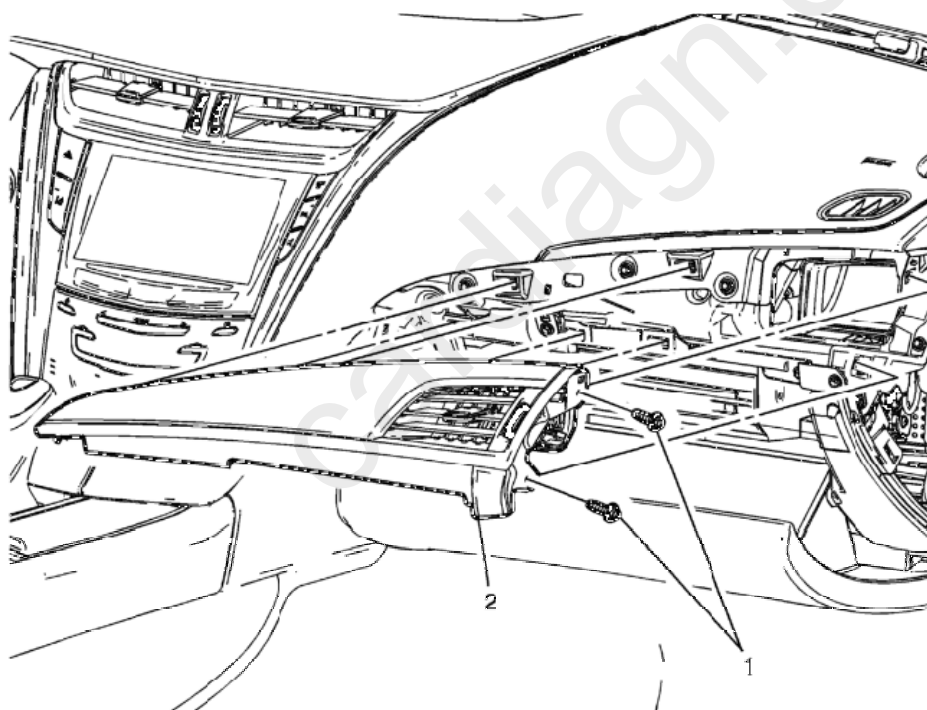


Fig. 9: Instrument Panel Trim Plate Applique - Right Side
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Trim Plate Applique Replacement - Right Side

Callout	Component Name
Preliminary Procedure Remove the right instrument panel outer trim cover. Refer to <u>Instrument Panel Outer Trim Cover</u>	

Replacement.

1	Instrument Panel Molding Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Trim Plate Applique - Right Side Procedures 1. Open the instrument panel compartment door to access the lower edge of the trim plate applique. 2. Use a flat-bladed plastic trim tool to remove the trim plate applique from the instrument panel carrier. 3. Transfer components as necessary.

INSTRUMENT PANEL TRIM PLATE APPLIQUE REPLACEMENT - LEFT SIDE

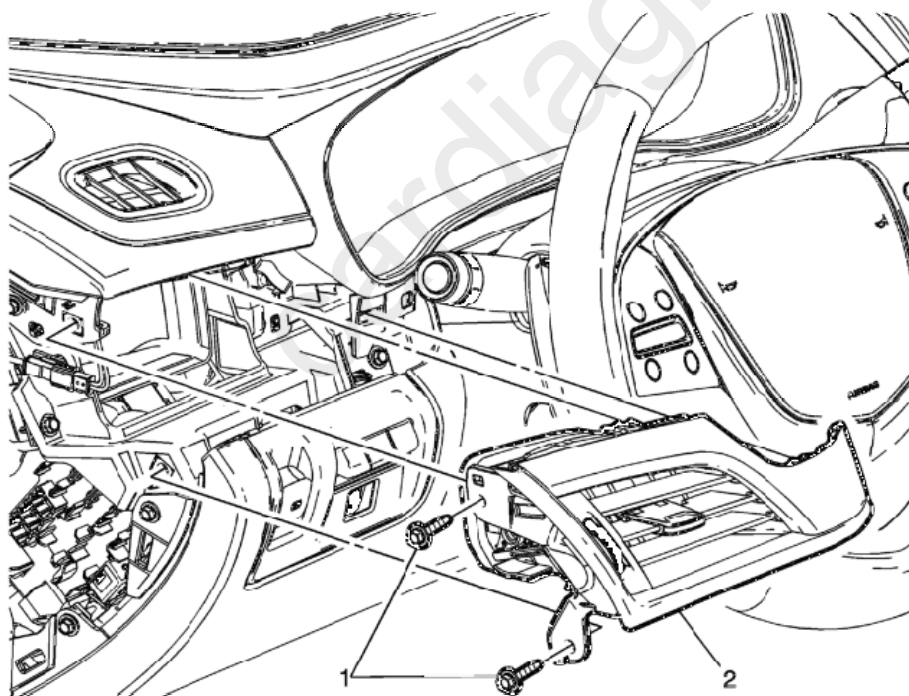


Fig. 10: Instrument Panel Trim Plate Applique - Left Side
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Trim Plate Applique Replacement - Left Side

Callout	Component Name
Preliminary Procedure Remove the instrument panel outer trim cover. Refer to <u>Instrument Panel Outer Trim Cover Replacement</u> .	
1	Instrument Panel Molding Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Trim Plate Applique - Left Side Procedure 1. Use a flat-bladed plastic trim tool to remove the trim plate applique from the instrument panel carrier. 2. Transfer components as necessary.

INSTRUMENT PANEL CENTER TRIM PLATE APPLIQUE REPLACEMENT

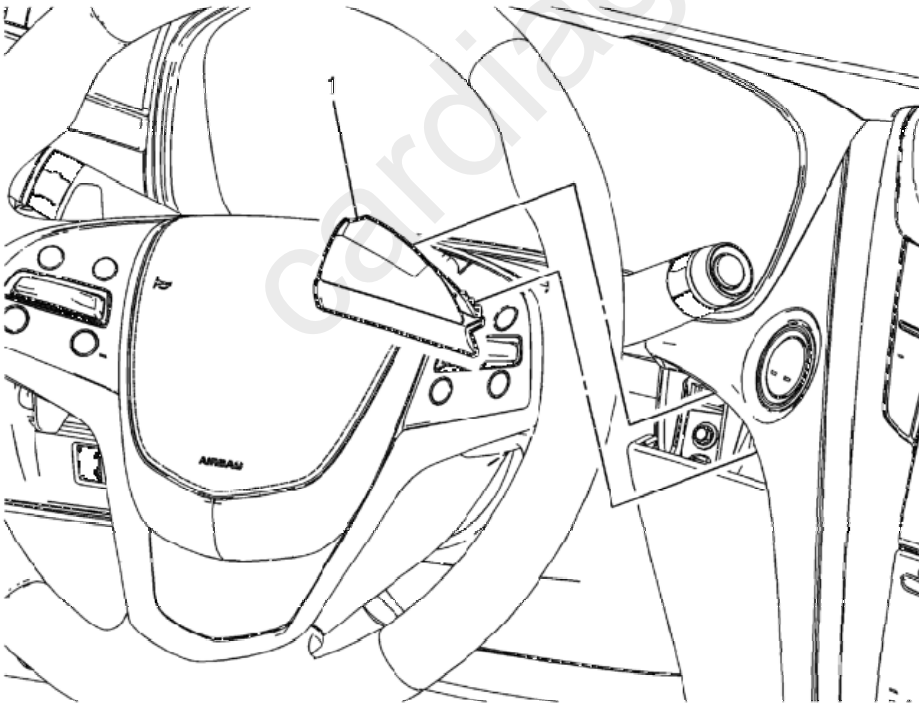


Fig. 11: Instrument Panel Center Trim Plate Applique
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Center Trim Plate Applique Replacement

Callout	Component Name
1	Instrument Panel Center Trim Plate Applique Procedure Use a flat-bladed plastic trim tool to remove the center trim plate applique from the instrument panel carrier.

INSTRUMENT PANEL TRIM PLATE REPLACEMENT

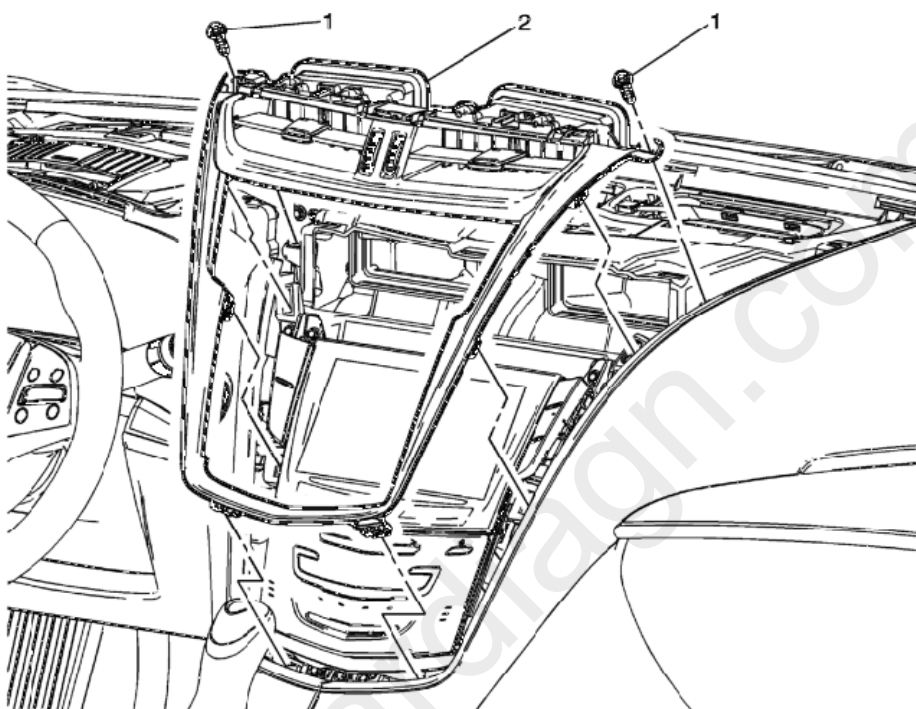


Fig. 12: Instrument Panel Trim Plate
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Trim Plate Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel center trim pad. Refer to <u>Instrument Panel Center Trim Pad Replacement</u> .	
1	Instrument Panel Trim Plate Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)

2	Instrument Panel Trim Plate
	Procedure 1. Use a flat-bladed plastic trim tool to remove the trim plate from the instrument panel carrier. 2. Transfer components as necessary.

INSTRUMENT PANEL ACCESSORY CENTER TRIM PLATE REPLACEMENT

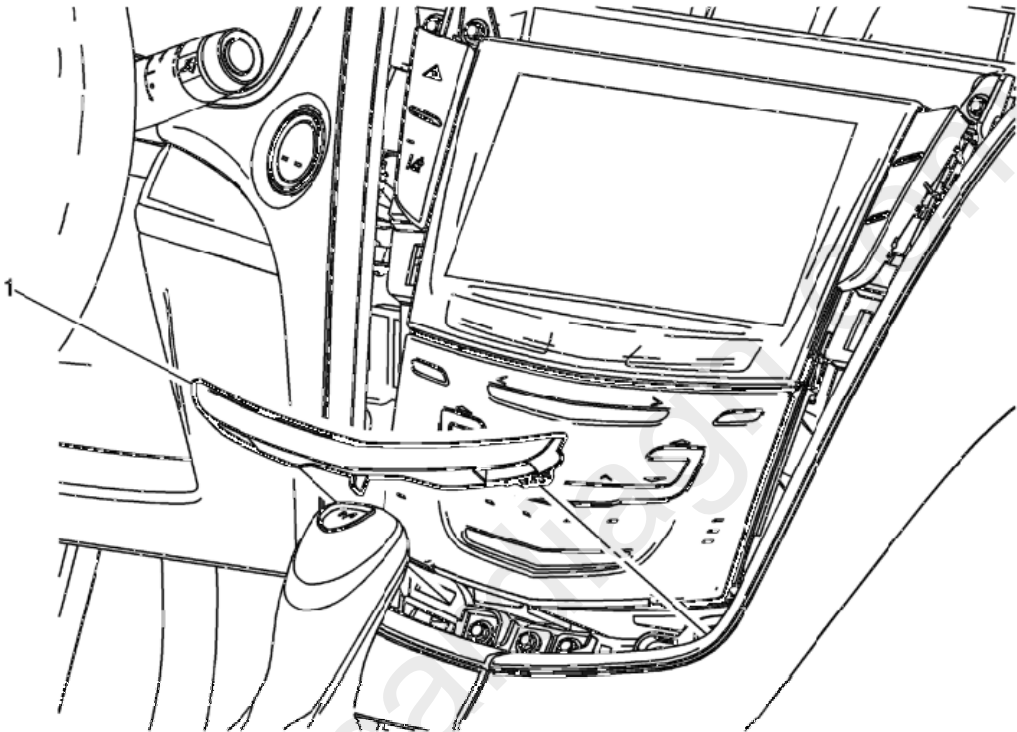


Fig. 13: Instrument Panel Accessory Center Trim Plate
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Accessory Center Trim Plate Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel trim plate. Refer to Instrument Panel Trim Plate Replacement .	
1	Instrument Panel Accessory Center Trim Plate Procedure Use a flat-bladed plastic trim tool to remove the center trim plate from the instrument panel carrier.

INSTRUMENT PANEL CENTER TRIM PAD REPLACEMENT

Removal Procedure

1. Remove the radio front speaker. Refer to **Radio Front Speaker Replacement** .

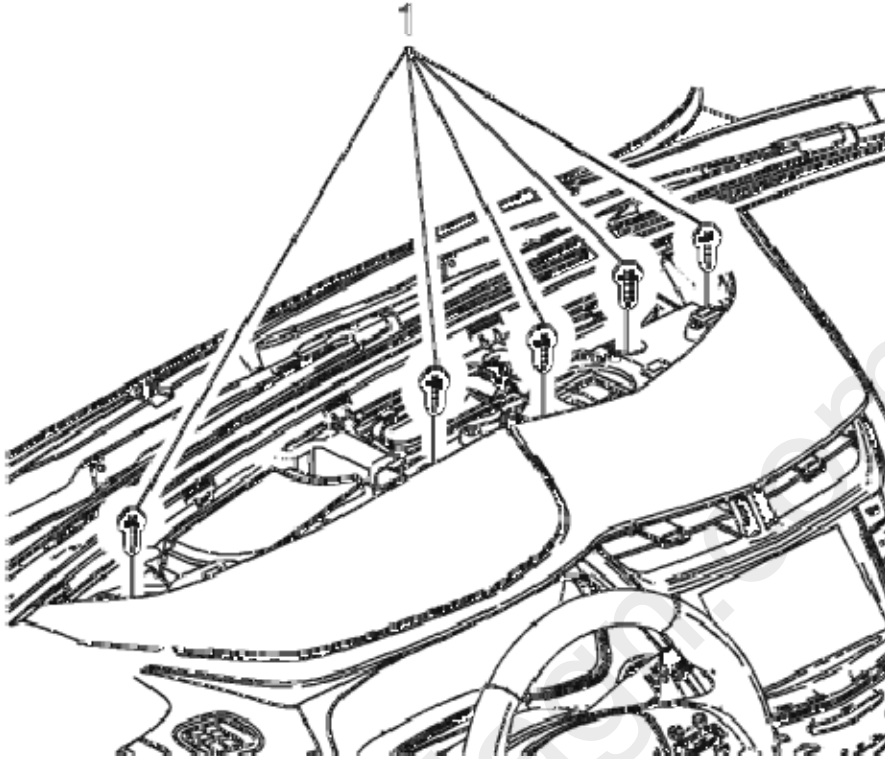


Fig. 14: Instrument Panel Upper Bolt
Courtesy of GENERAL MOTORS COMPANY

2. Remove the instrument panel upper bolt (1) which secure the instrument panel center trim pad to the carrier.

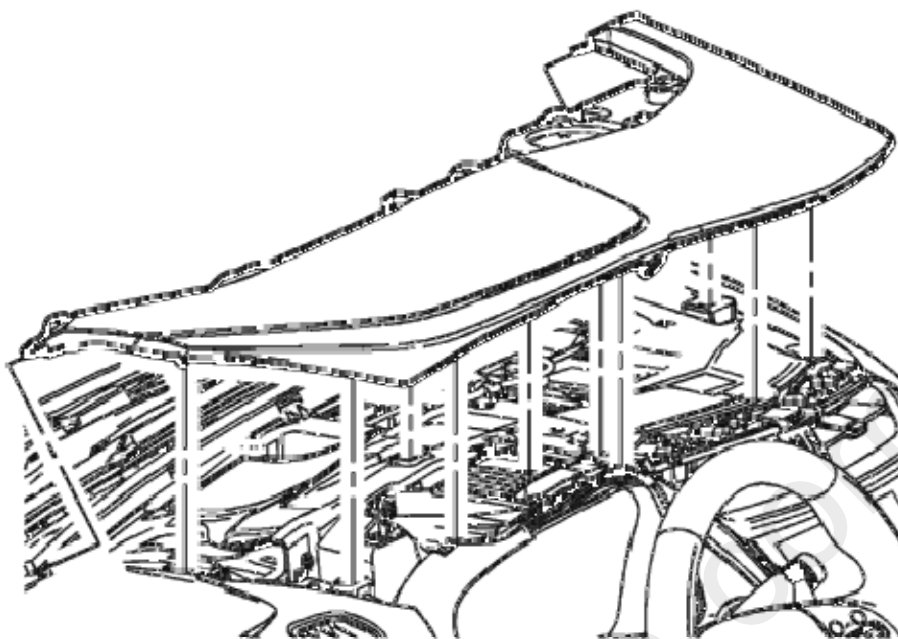


Fig. 15: Instrument Panel Center Trim Pad
Courtesy of GENERAL MOTORS COMPANY

3. Use a flat bladed plastic trim tool in order to release the retainers securing the center trim pad to the carrier.

Installation Procedure

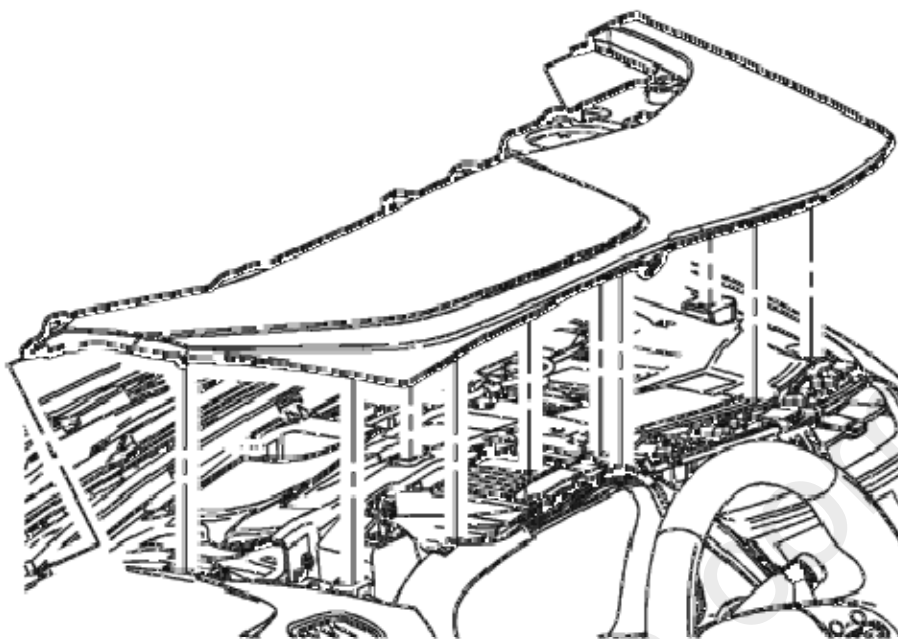


Fig. 16: Instrument Panel Center Trim Pad
Courtesy of GENERAL MOTORS COMPANY

1. Install the instrument panel center trim pad.

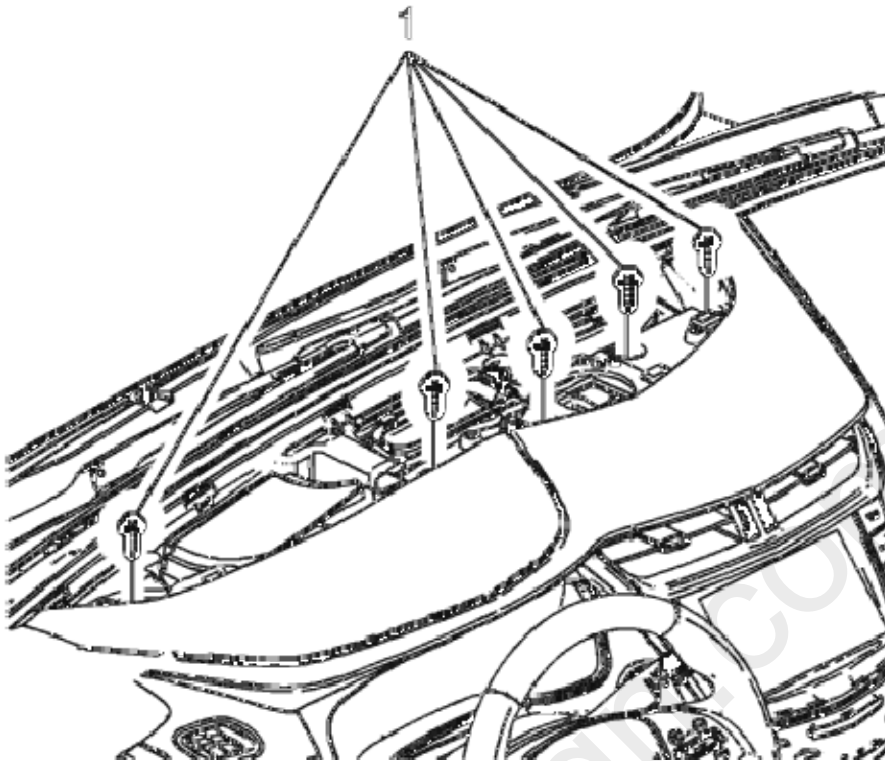


Fig. 17: Instrument Panel Upper Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

2. Install the instrument panel upper bolt (1) and tighten to 2.5 (22 lb in).
3. Install the radio front speaker. Refer to Radio Front Speaker Replacement .

INSTRUMENT PANEL ACCESSORY BEZEL REPLACEMENT

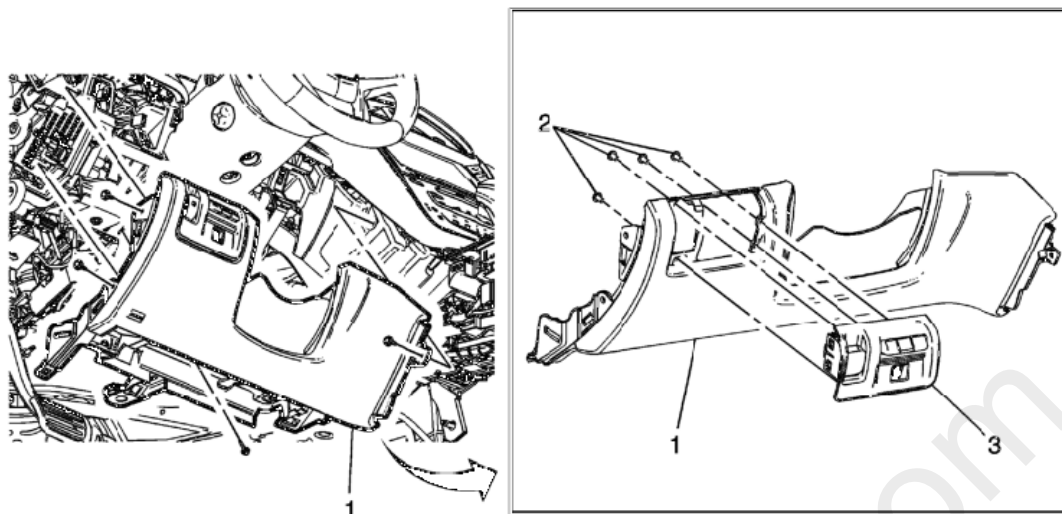


Fig. 18: Instrument Panel Accessory Bezel
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Accessory Bezel Replacement

Callout	Component Name
1	Instrument Panel Knee Bolster Refer to <u>Instrument Panel Knee Bolster Replacement.</u>
2	Instrument Panel Accessory Bezel Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 1.5 (13 lb in)
3	Instrument Panel Accessory Bezel Procedure Transfer components as necessary.

INSTRUMENT PANEL CLUSTER TRIM PLATE APPLIQUE REPLACEMENT

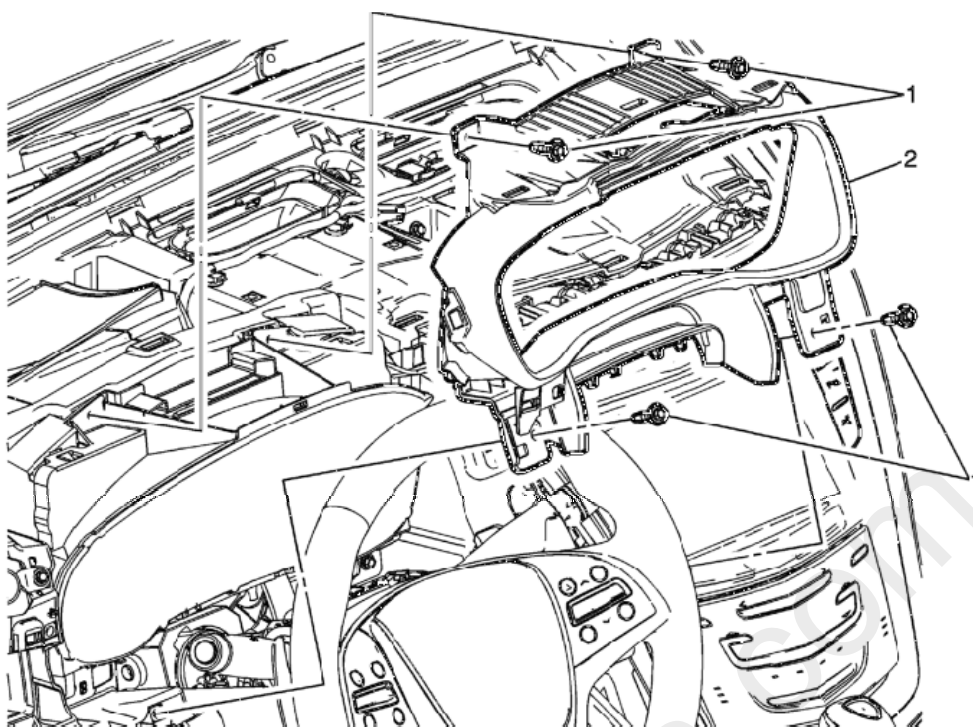


Fig. 19: Instrument Panel Cluster Trim Plate Applique
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Cluster Trim Plate Applique Replacement

Callout	Component Name
Preliminary Procedures	
1. Remove the instrument panel center trim pad. Refer to <u>Instrument Panel Center Trim Pad Replacement</u>. 2. Remove the left instrument panel lower center trim panel. Refer to <u>Instrument Panel Lower Center Trim Panel Replacement (Right Side)</u>, <u>Instrument Panel Lower Center Trim Panel Replacement (Left Side)</u>. 3. Remove the left instrument panel trim plate applique. Refer to <u>Instrument Panel Trim Plate Applique Replacement - Left Side</u>. 4. Remove the steering column upper trim cover. Refer to <u>Steering Column Upper Trim Cover Replacement</u>.	
1	Instrument Panel Outer Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten: 2.5 (22 lb in)

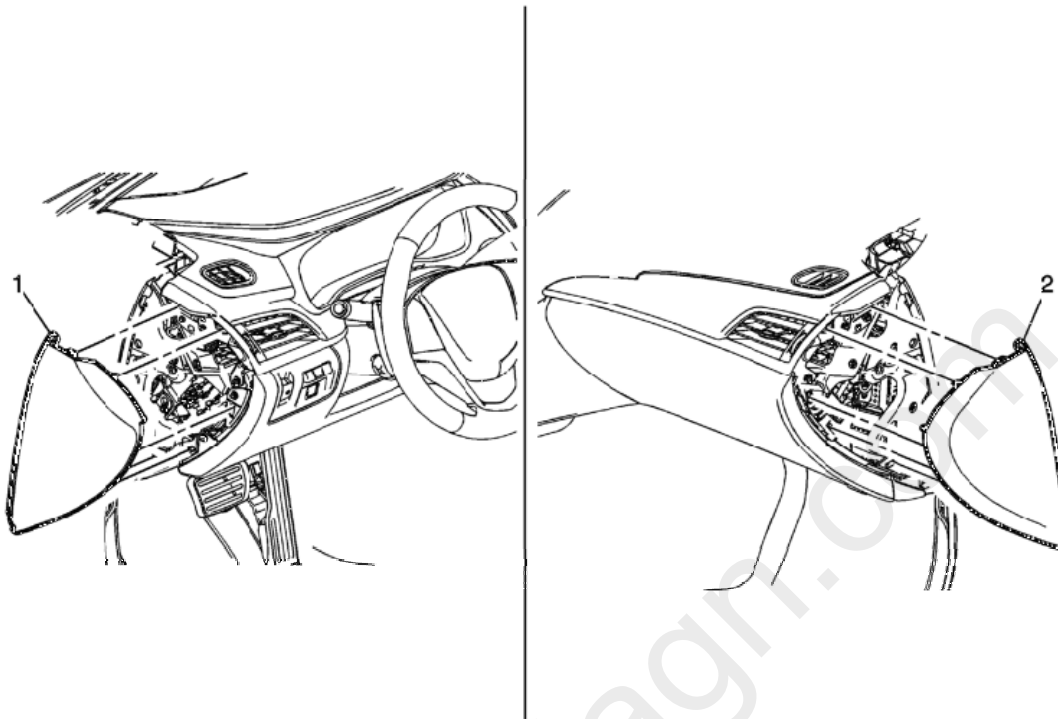
INSTRUMENT PANEL OUTER TRIM COVER REPLACEMENT

Fig. 20: Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Outer Trim Cover Replacement

Callout	Component Name
1	Instrument Panel Outer Trim Cover - Left Procedure Use a flat bladed plastic trim tool to aid in the removal of the outer trim cover from the instrument panel assembly.
2	Instrument Panel Outer Trim Cover - Right Procedure Use a flat bladed plastic trim tool to aid in the removal of the outer trim cover from the instrument panel assembly.

INSTRUMENT PANEL LOWER EXTENSION INSULATOR REPLACEMENT

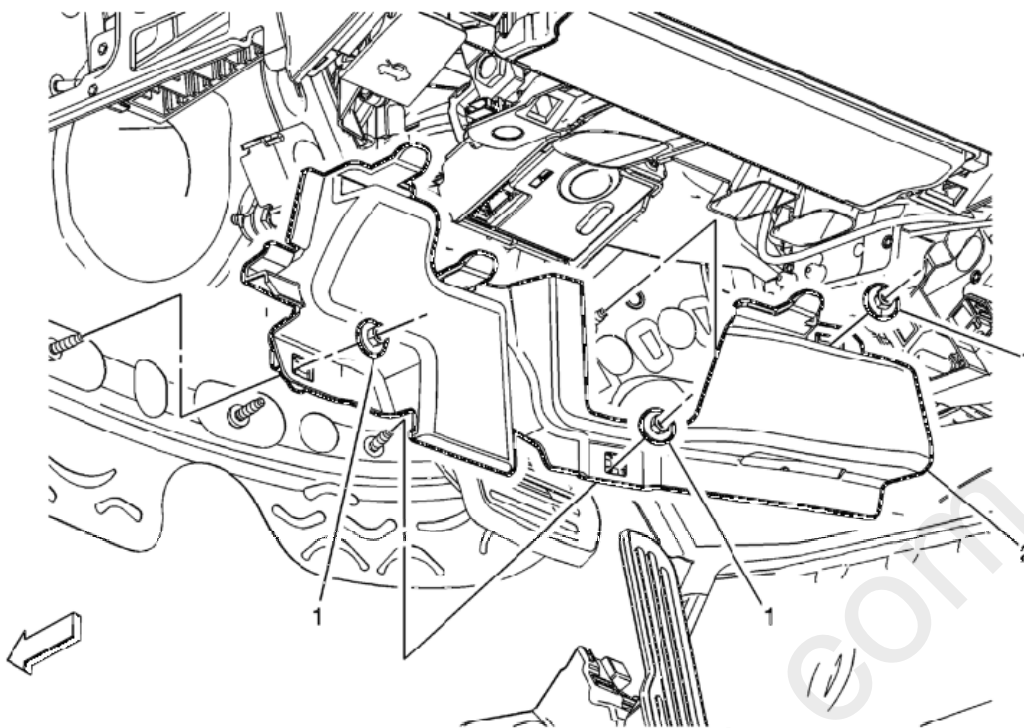


Fig. 21: Instrument Panel Lower Extension Insulator
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Lower Extension Insulator Replacement

Callout	Component Name
Preliminary Procedure Remove the left instrument panel lower trim panel insulator. Refer to <u>Instrument Panel Lower Trim Panel Insulator Replacement - Left Side</u> .	
1	Instrument Panel Insulator Nut (Qty: 3) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 6 (53 lb in)
2	Instrument Panel Lower Extension Insulator

INSTRUMENT PANEL LOWER CENTER TRIM PANEL REPLACEMENT (RIGHT SIDE)

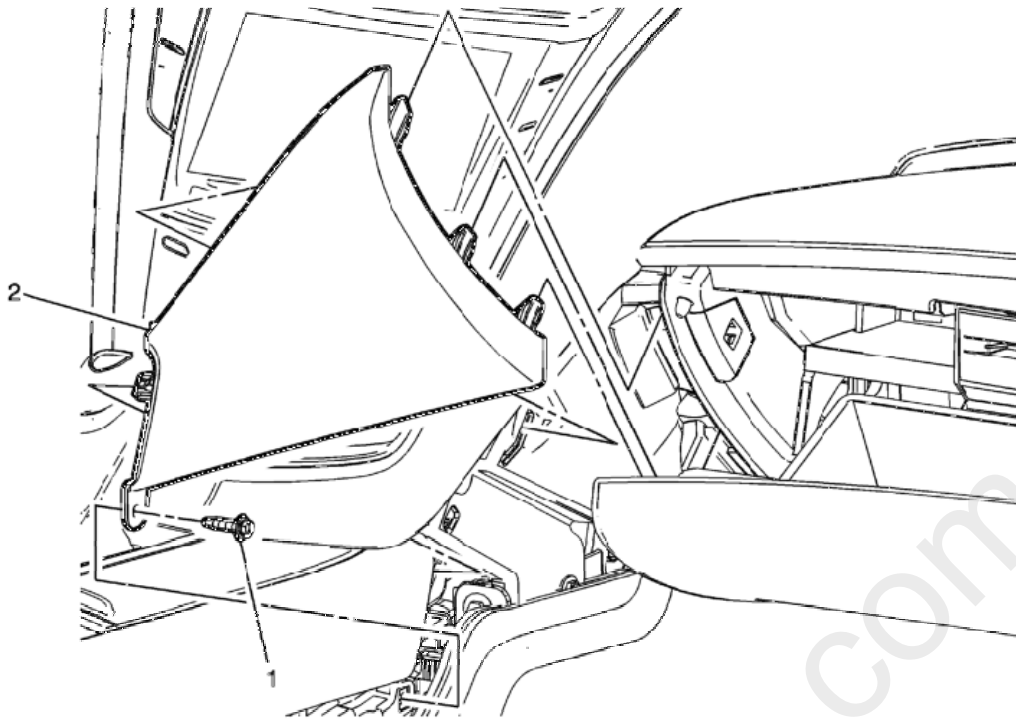


Fig. 22: Instrument Panel Lower Center Trim Panel (Right Side)
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Lower Center Trim Panel Replacement (Right Side)

Callout	Component Name
Preliminary Procedure Remove the right front floor console side trim panel. Refer to Front Floor Console Side Trim Panel Replacement - Right Side .	
1	Instrument Panel Lower Trim Panel Bolt CAUTION: Refer to Fastener Caution . Tighten 2.5 (22 lb in)
2	Instrument Panel Lower Center Trim Panel Procedure Use a flat-bladed plastic trim tool to remove the trim panel from the instrument panel carrier.

INSTRUMENT PANEL LOWER CENTER TRIM PANEL REPLACEMENT (LEFT SIDE)

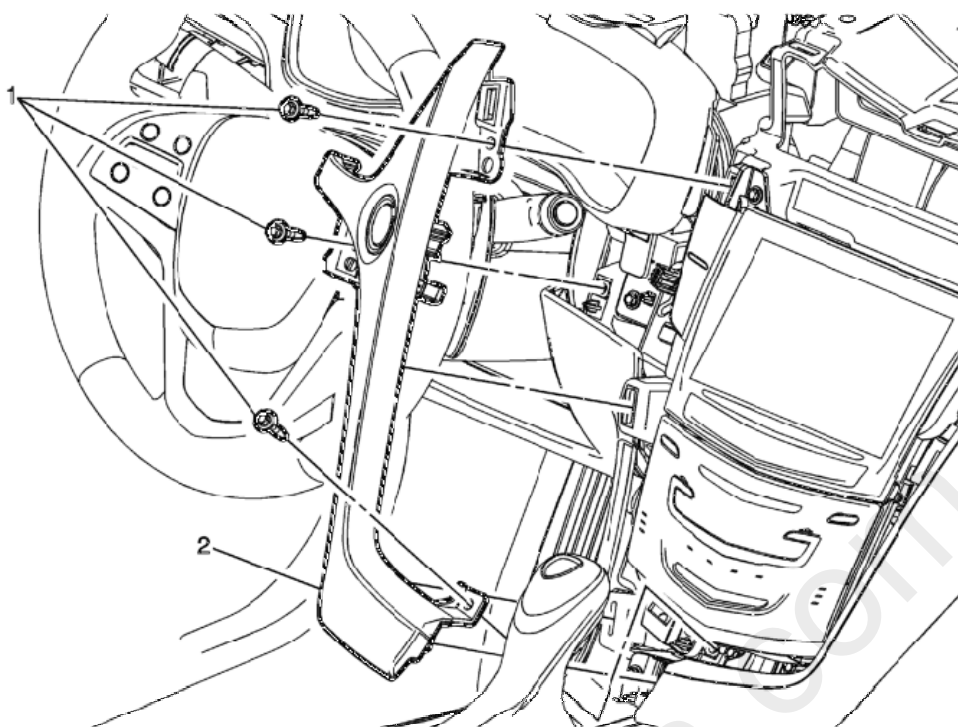


Fig. 23: Instrument Panel Lower Center Trim Panel (Left Side)

Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Lower Center Trim Panel Replacement (Left Side)

Callout	Component Name
Preliminary Procedures 1. Remove the instrument panel center trim plate applique. Refer to <u>Instrument Panel Center Trim Plate Applique Replacement</u>. 2. Remove the instrument panel accessory center trim plate. Refer to <u>Instrument Panel Accessory Center Trim Plate Replacement</u>.	
1	Instrument Panel Lower Trim Pad Bolt (Qty: 3) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Lower Center Trim Panel Procedure 1. Use a flat-bladed plastic trim tool to remove the trim panel from the instrument panel carrier.

2. Disconnect the electrical connector.

INSTRUMENT PANEL COMPARTMENT SHELF REPLACEMENT

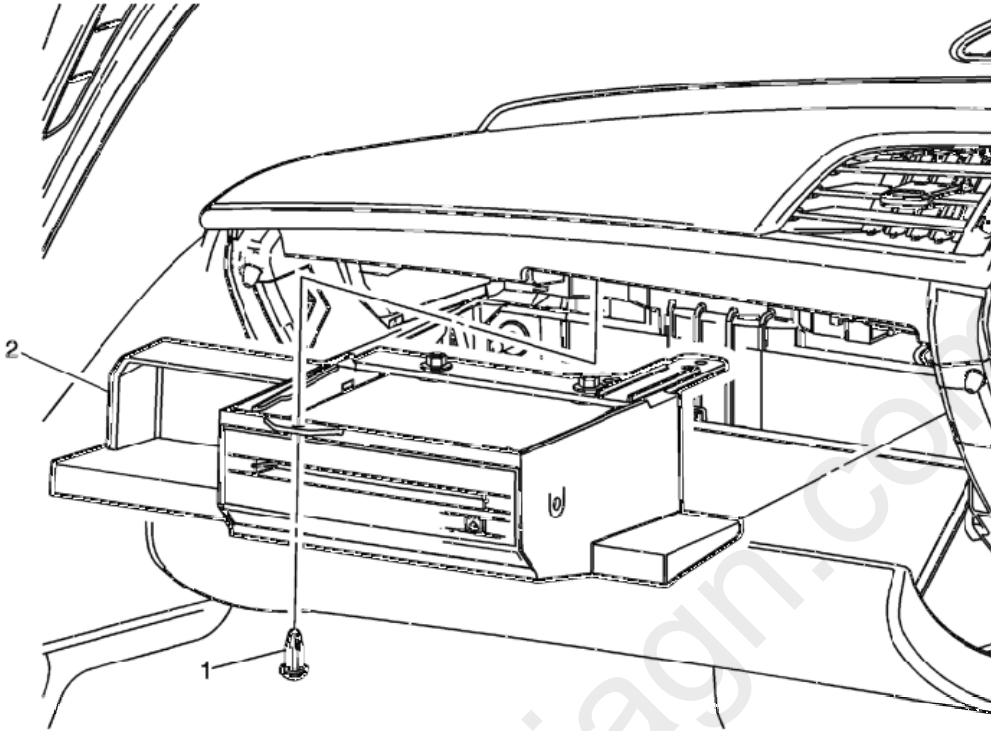


Fig. 24: Instrument Panel Compartment Shelf
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Compartment Shelf Replacement

Callout	Component Name
1	Instrument Panel Compartment Retainer
2	Instrument Panel Compartment Shelf
	Procedures
	1. Disconnect the electrical connector.
	2. Transfer components as necessary.

INSTRUMENT PANEL CENTER COMPARTMENT REPLACEMENT

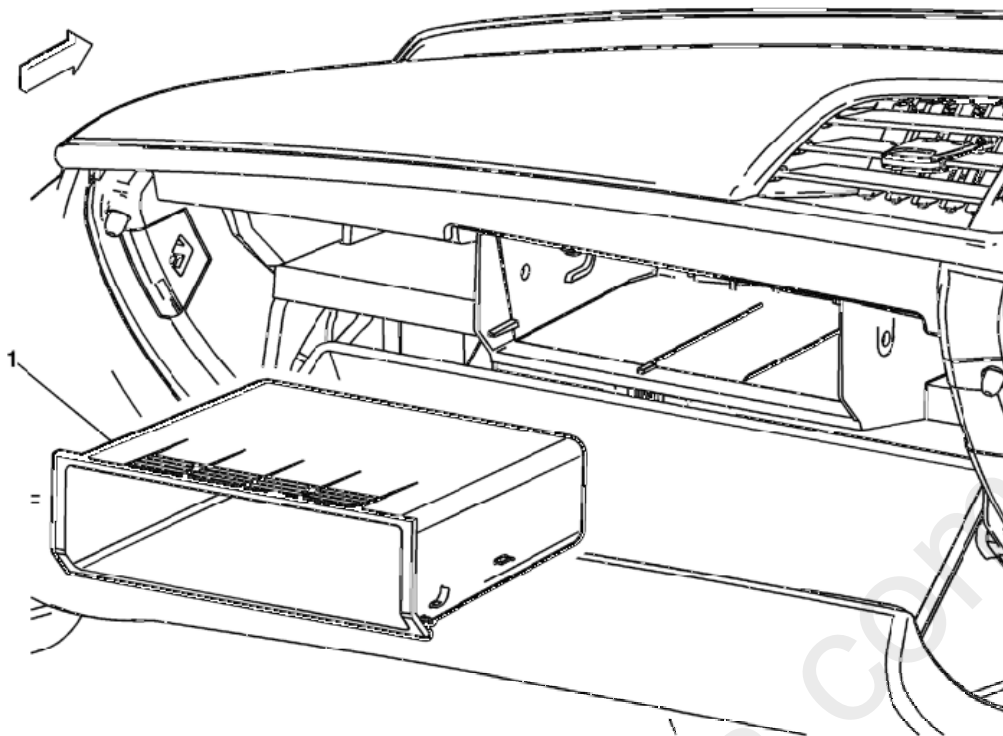


Fig. 25: Instrument Panel Center Compartment
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Center Compartment Replacement

Callout	Component Name
1	Instrument Panel Center Compartment Procedure Open the instrument panel compartment door to access the instrument panel center compartment.

INSTRUMENT PANEL COMPARTMENT REPLACEMENT

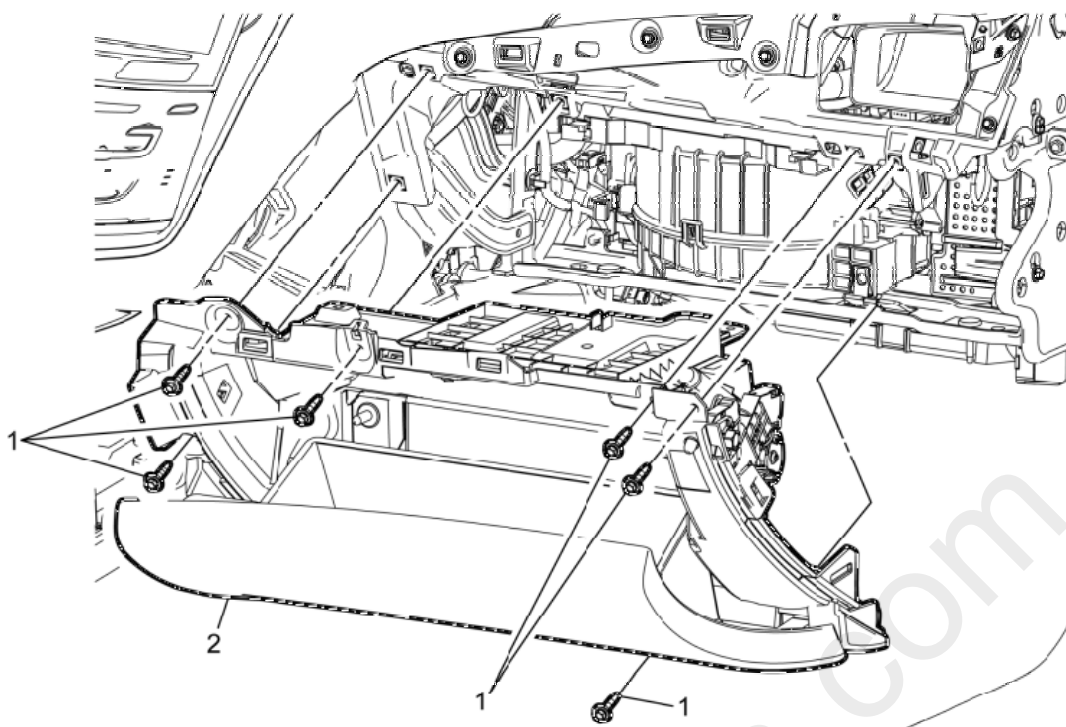


Fig. 26: Instrument Panel Compartment
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Compartment Replacement

Callout	Component Name
Preliminary Procedure 1. Remove the passenger instrument panel lower airbag. Refer to <u>Instrument Panel Lower Airbag Replacement - Passenger Side</u> . 2. Remove the right instrument panel trim plate applique. Refer to <u>Instrument Panel Trim Plate Applique Replacement - Right Side</u>. 3. Remove the right instrument panel lower center trim panel. Refer to <u>Instrument Panel Lower Center Trim Panel Replacement (Right Side)</u>, <u>Instrument Panel Lower Center Trim Panel Replacement (Left Side)</u> 4. Remove the instrument panel compartment shelf. Refer to <u>Instrument Panel Compartment Shelf Replacement</u>.	
1	Instrument Panel Compartment Bolt (Qty: 6) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)

	Instrument Panel Compartment
2	Procedures 1. Disconnect all electrical connectors. 2. Transfer components as necessary.

INSTRUMENT PANEL COMPARTMENT DOOR LATCH ACTUATOR REPLACEMENT

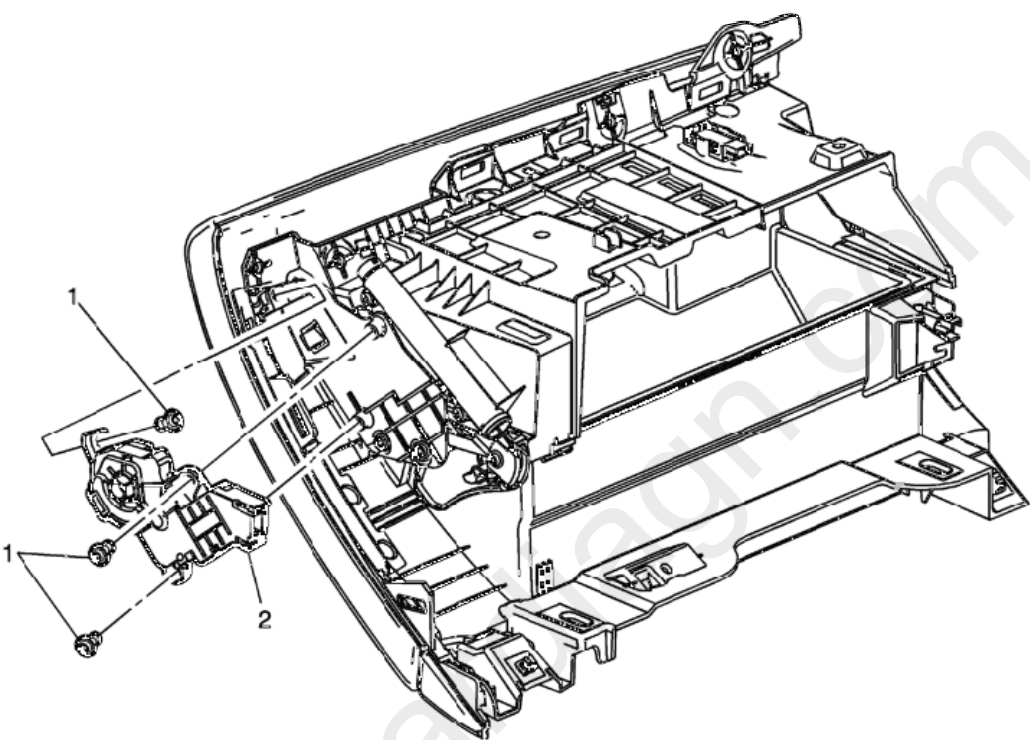


Fig. 27: Instrument Panel Compartment Door Latch Actuator
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Compartment Door Latch Actuator Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel compartment. Refer to Instrument Panel Compartment Replacement .	
1	Instrument Panel Compartment Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 1.5 (13 lb in)

INSTRUMENT PANEL COMPARTMENT DOOR DAMPENER REPLACEMENT

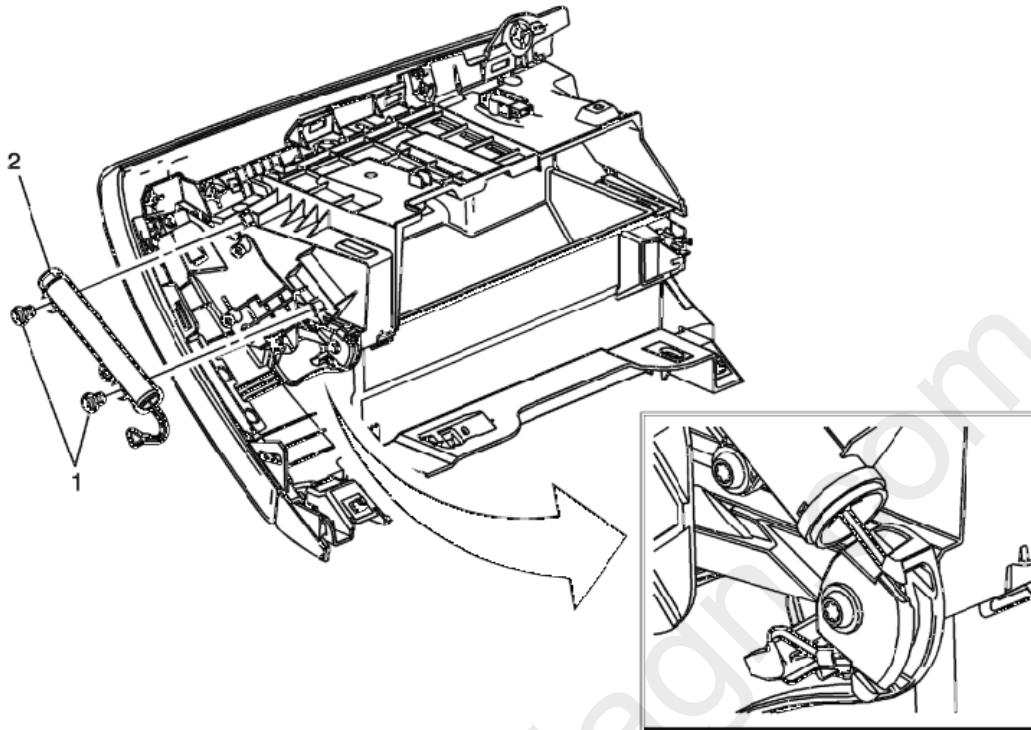


Fig. 28: Instrument Panel Compartment Door Dampener

Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Compartment Door Dampener Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel compartment door latch actuator. Refer to <u>Instrument Panel Compartment Door Latch Actuator Replacement</u> .	
1	Instrument Panel Compartment Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 1.5 (13 lb in)
2	Instrument Panel Compartment Door Dampener Procedure Disconnect the door dampener from the door stop and retainer.

INSTRUMENT PANEL TRIM PAD REPLACEMENT (PASSENGER SIDE)

Removal Procedure

1. Disable the SIR system. Refer to **SIR Disabling and Enabling** .
2. Remove the windshield garnish molding. Refer to **Windshield Garnish Molding Replacement** .
3. Remove the left instrument panel lower center trim panel. Refer to **Instrument Panel Lower Center Trim Panel Replacement (Right Side)**, **Instrument Panel Lower Center Trim Panel Replacement (Left Side)**.
4. Remove the instrument panel compartment. Refer to **Instrument Panel Compartment Replacement**.

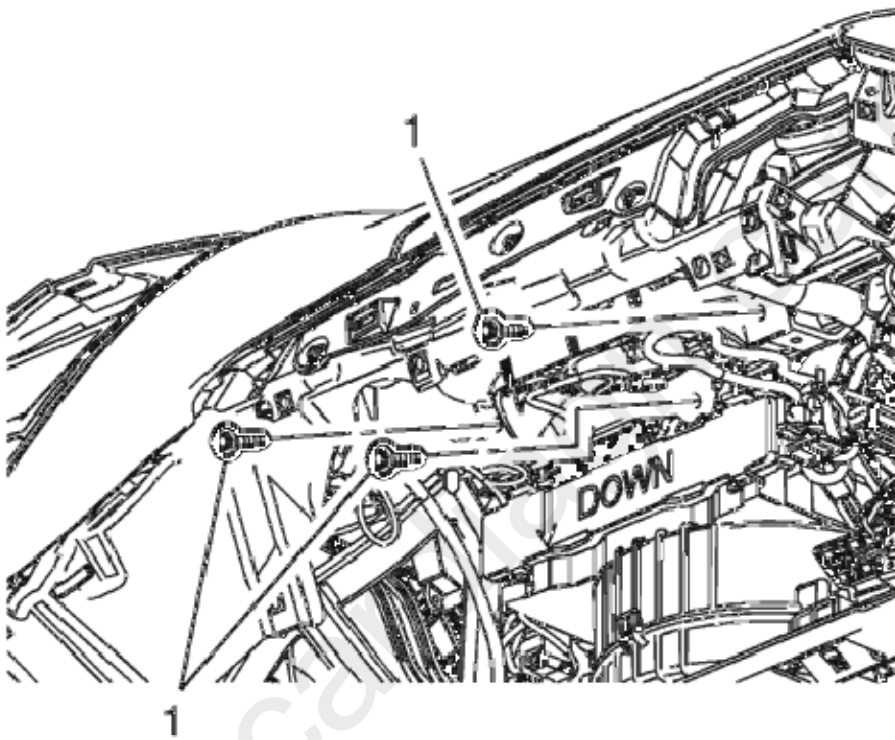


Fig. 29: Securing Airbag To Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

5. Remove the bolts (1) securing the airbag to the instrument panel trim pad.

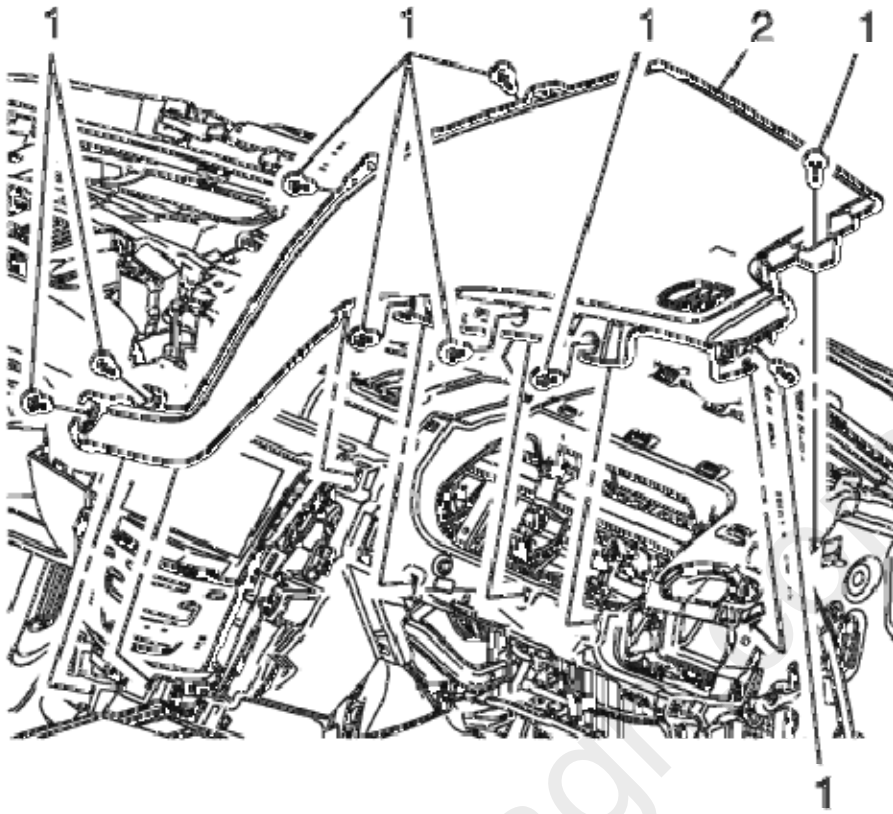


Fig. 30: Securing Instrument Panel Trim Pad To Instrument Panel Carrier
Courtesy of GENERAL MOTORS COMPANY

6. Remove the bolts (1) securing the instrument panel trim pad to the instrument panel carrier.
7. Remove the instrument panel trim panel (2).
8. Disconnect all electrical connectors.
9. Transfer components as necessary.

Installation Procedure

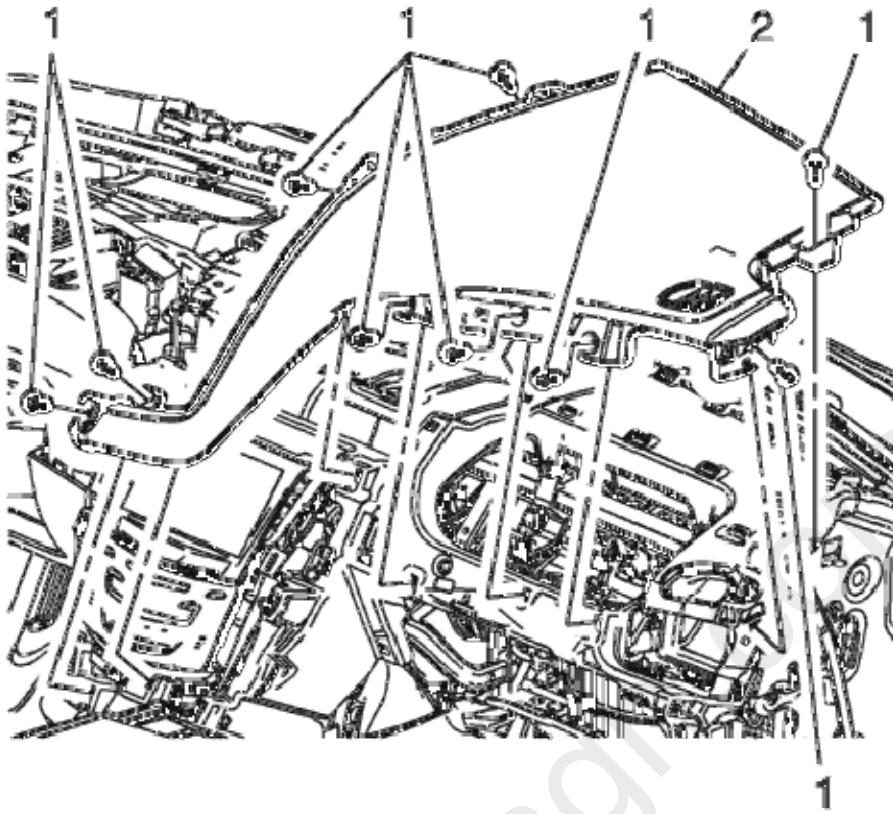


Fig. 31: Securing Instrument Panel Trim Pad To Instrument Panel Carrier
Courtesy of GENERAL MOTORS COMPANY

1. Install the instrument panel trim pad (2) secured by retainers to the instrument panel carrier.

CAUTION: Refer to Fastener Caution .

2. Install the bolts (1) securing the instrument panel trim pad to the instrument panel carrier and tighten to 2.5 (22 lb in).

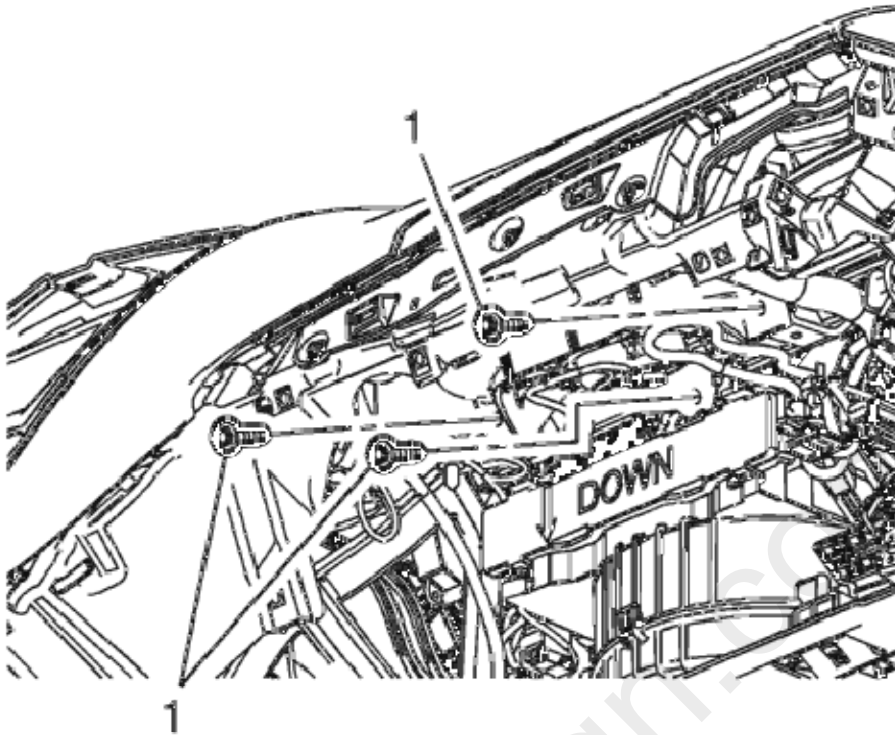


Fig. 32: Securing Airbag To Instrument Panel Trim Pad
Courtesy of GENERAL MOTORS COMPANY

3. Install the bolts (1) securing the instrument panel inflatable restraint module to the instrument panel tie bar and tighten to 9 (80 lb in).
4. Install the instrument panel compartment. Refer to **Instrument Panel Compartment Replacement**.
5. Install the left instrument panel lower center trim panel. Refer to **Instrument Panel Lower Center Trim Panel Replacement (Right Side)**, **Instrument Panel Lower Center Trim Panel Replacement (Left Side)**.
6. Install the windshield garnish molding. Refer to **Windshield Garnish Molding Replacement**.
7. Enable the SIR system. Refer to **SIR Disabling and Enabling**.

INSTRUMENT PANEL TRIM PAD REPLACEMENT (DRIVER SIDE)

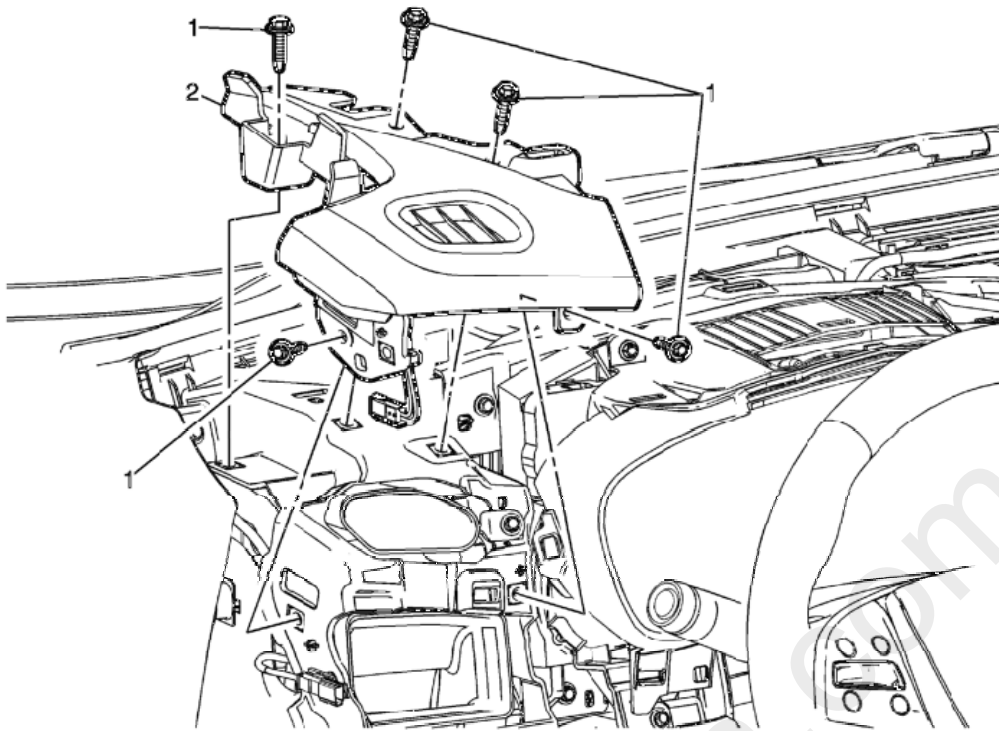


Fig. 33: Instrument Panel Trim Pad (Driver Side)
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Trim Pad Replacement (Driver Side)

Callout	Component Name
Preliminary Procedures 1. Remove the left side windshield garnish molding. Refer to <u>Windshield Garnish Molding Replacement</u> . 2. Remove the instrument panel center trim pad. Refer to <u>Instrument Panel Center Trim Pad Replacement</u>. 3. Remove the left instrument panel trim plate applique. Refer to <u>Instrument Panel Trim Plate Applique Replacement - Left Side</u>.	
1	Instrument Panel Upper Bolt (Qty: 5) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Instrument Panel Trim Pad Procedure Disconnect the electrical connector.

INSTRUMENT PANEL CENTER SUPPORT BRACKET REPLACEMENT

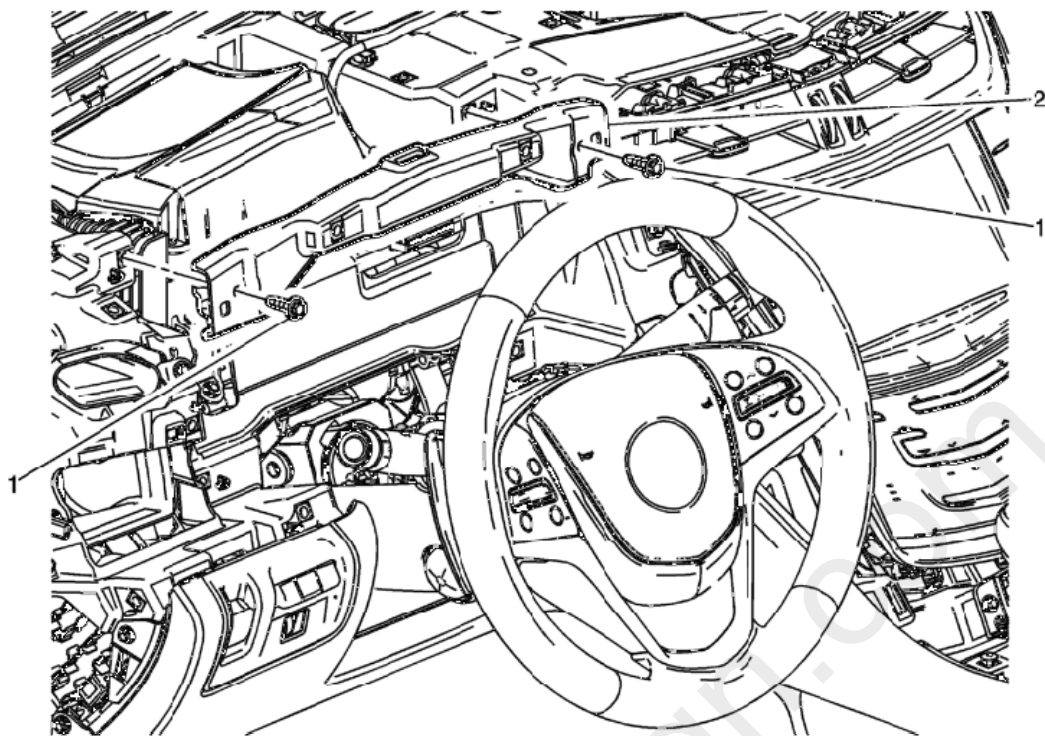


Fig. 34: Instrument Panel Center Support Bracket
Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Center Support Bracket Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument cluster. Refer to Instrument Cluster Replacement .	
1	Instrument Panel Carrier Bracket Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 2.5 (22 lb in)
2	Instrument Panel Center Support Bracket

INSTRUMENT CARRIER REPLACEMENT

Removal Procedure

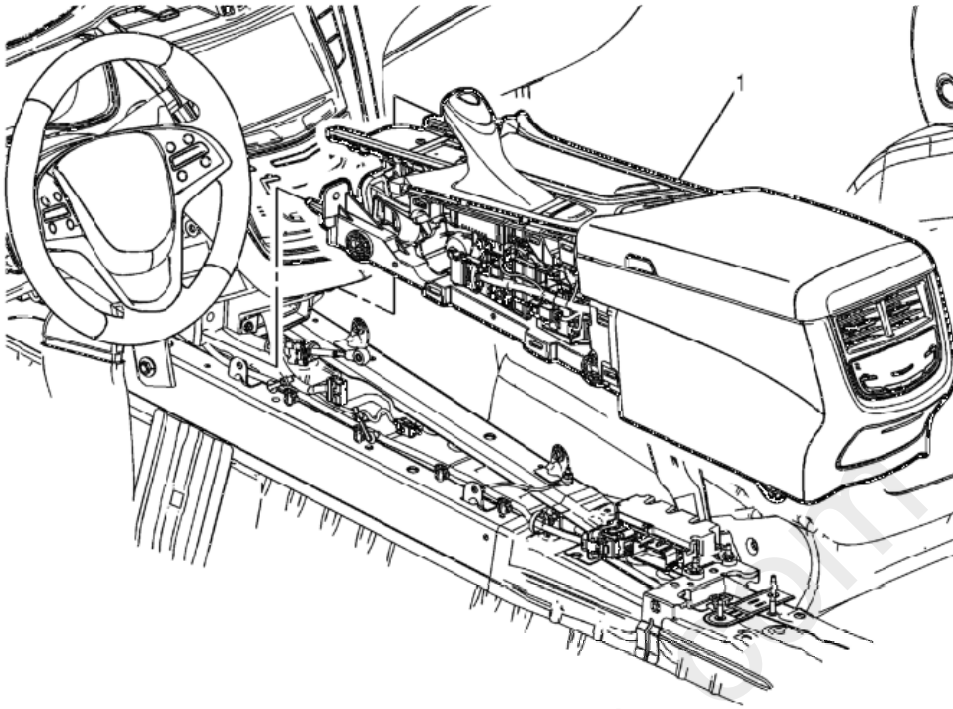


Fig. 35: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

1. Remove the front floor console (1). Refer to **Front Floor Console Replacement**.

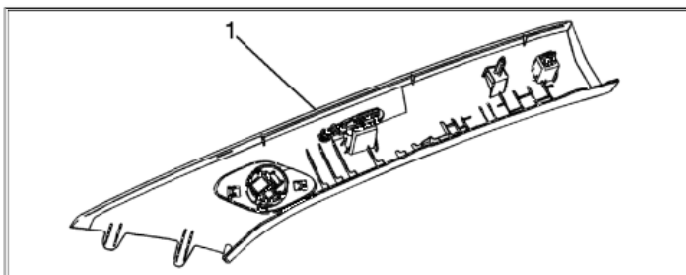
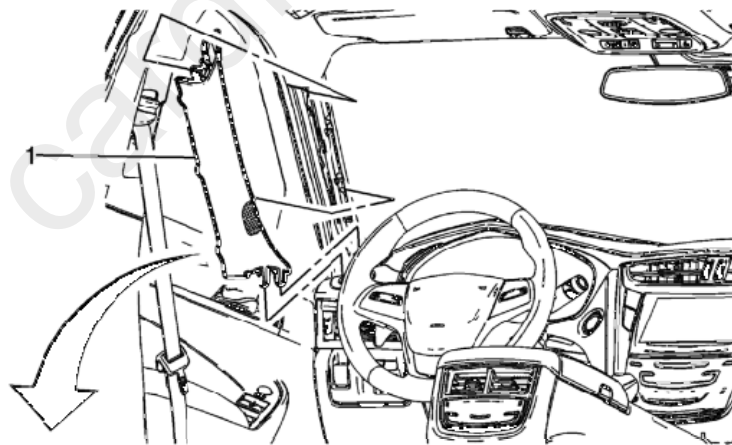


Fig. 36: Windshield Garnish Molding
Courtesy of GENERAL MOTORS COMPANY

2. Remove the windshield garnish molding (1). Refer to **Windshield Garnish Molding Replacement**.

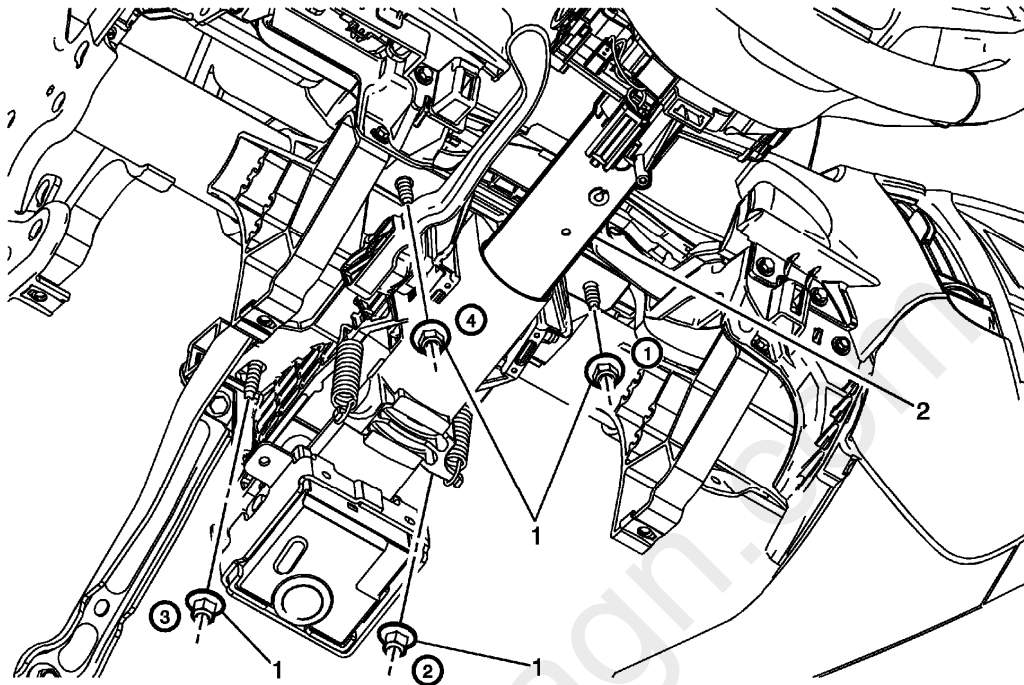


Fig. 37: Steering Column
Courtesy of GENERAL MOTORS COMPANY

3. Remove the steering column (2). Refer to **Steering Column Replacement**.

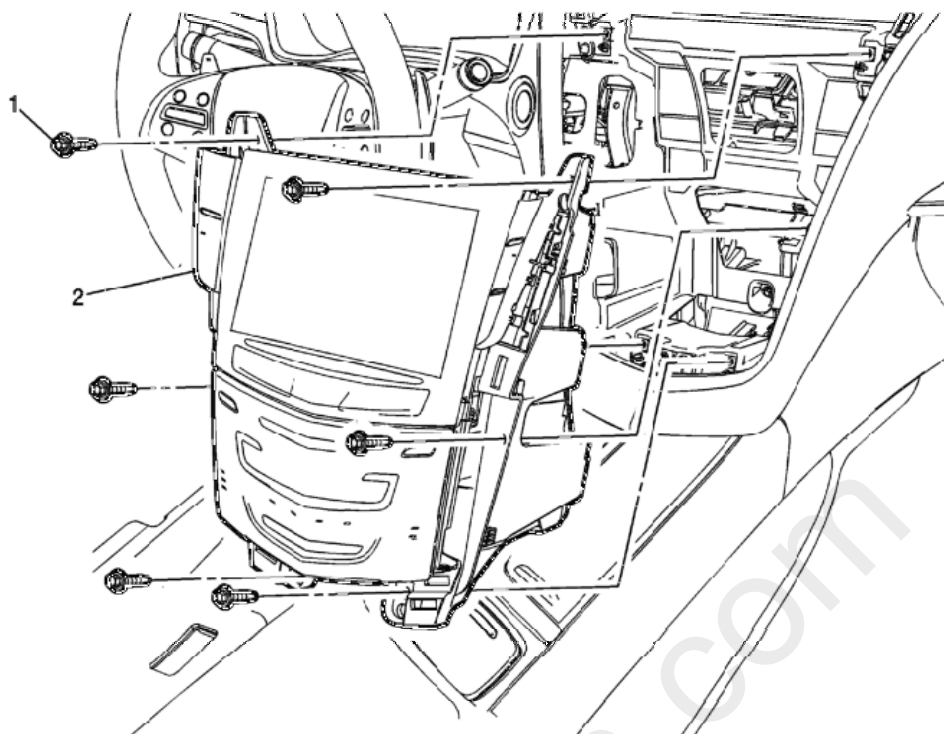


Fig. 38: Instrument Panel Accessory Bracket
Courtesy of GENERAL MOTORS COMPANY

4. Remove the instrument panel bracket (2) as an assembly, it is not necessary to remove the radio control assembly or other components from the bracket. Refer to **Instrument Panel Accessory Bracket Replacement**.

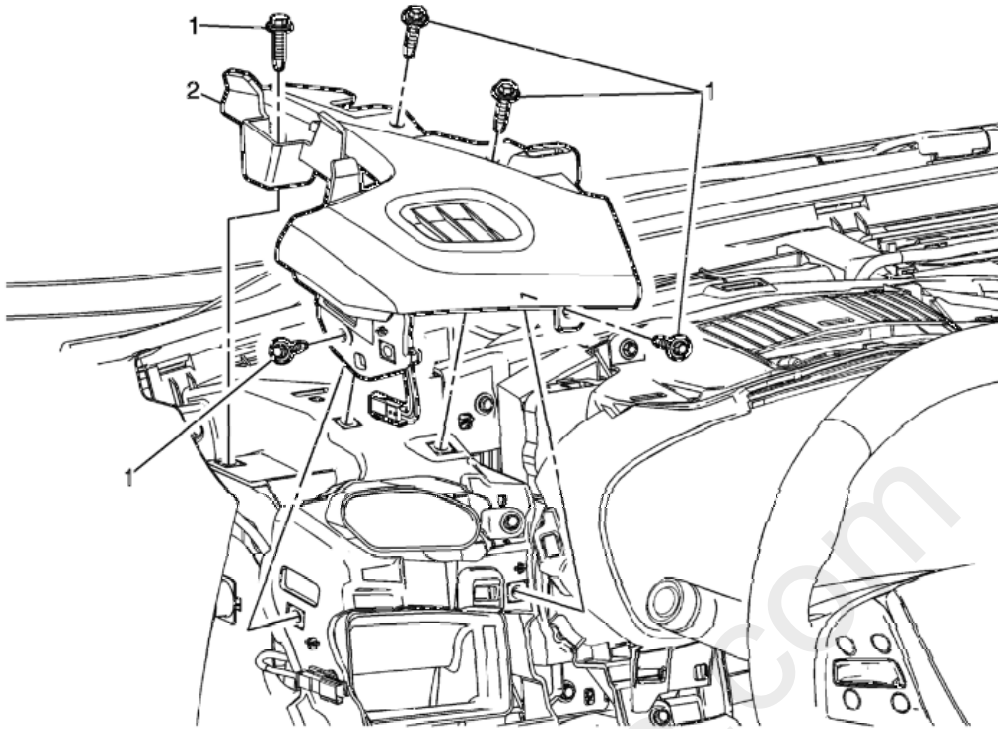


Fig. 39: Instrument Panel Trim Pad (Driver Side)
Courtesy of GENERAL MOTORS COMPANY

5. Remove the driver side instrument panel trim pad (2). Refer to **Instrument Panel Trim Pad Replacement (Passenger Side)**, **Instrument Panel Trim Pad Replacement (Driver Side)**.

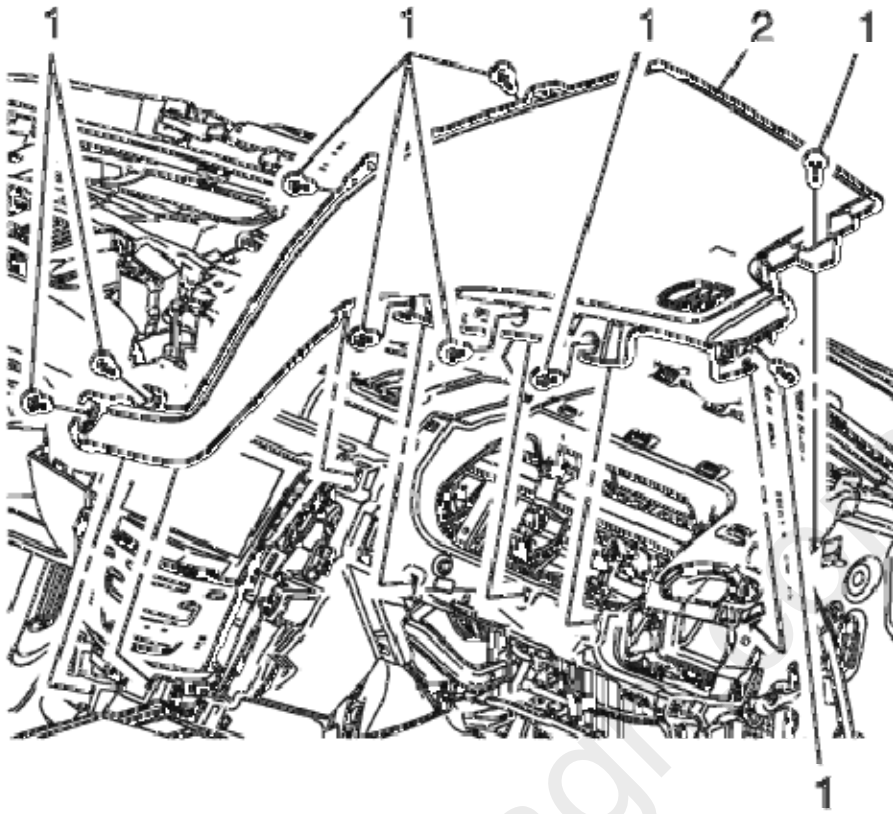


Fig. 40: Securing Instrument Panel Trim Pad To Instrument Panel Carrier
Courtesy of GENERAL MOTORS COMPANY

6. Remove the passenger side instrument panel trim pad (2). Refer to **Instrument Panel Trim Pad Replacement (Passenger Side)**, **Instrument Panel Trim Pad Replacement (Driver Side)**.

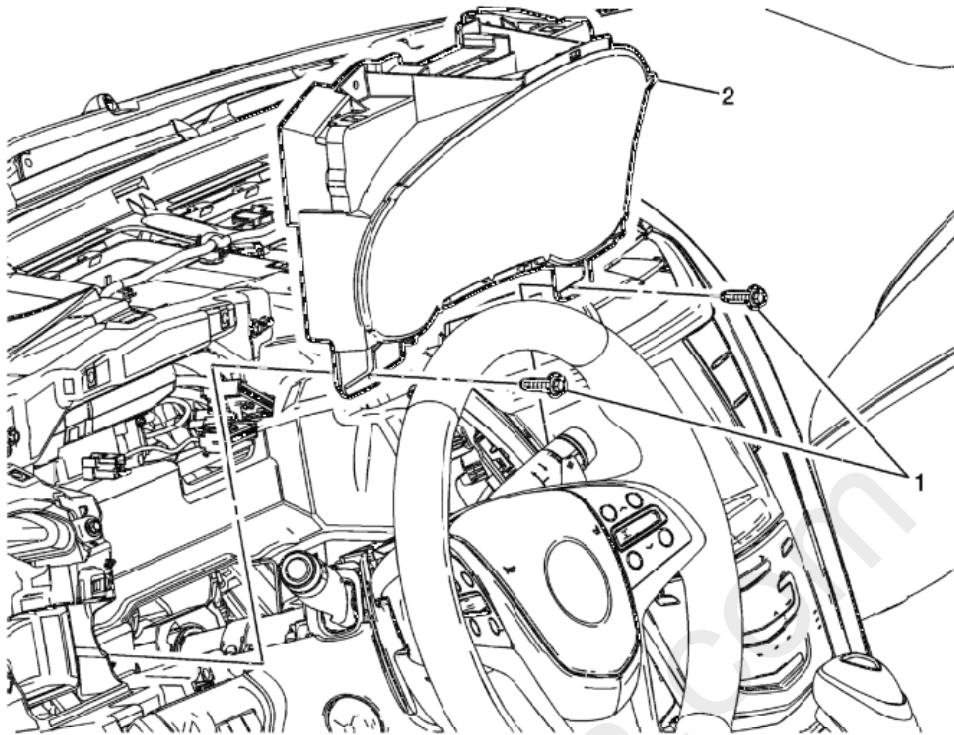


Fig. 41: Instrument Cluster
 Courtesy of GENERAL MOTORS COMPANY

7. Remove the instrument cluster (2). Refer to **Instrument Cluster Replacement** .

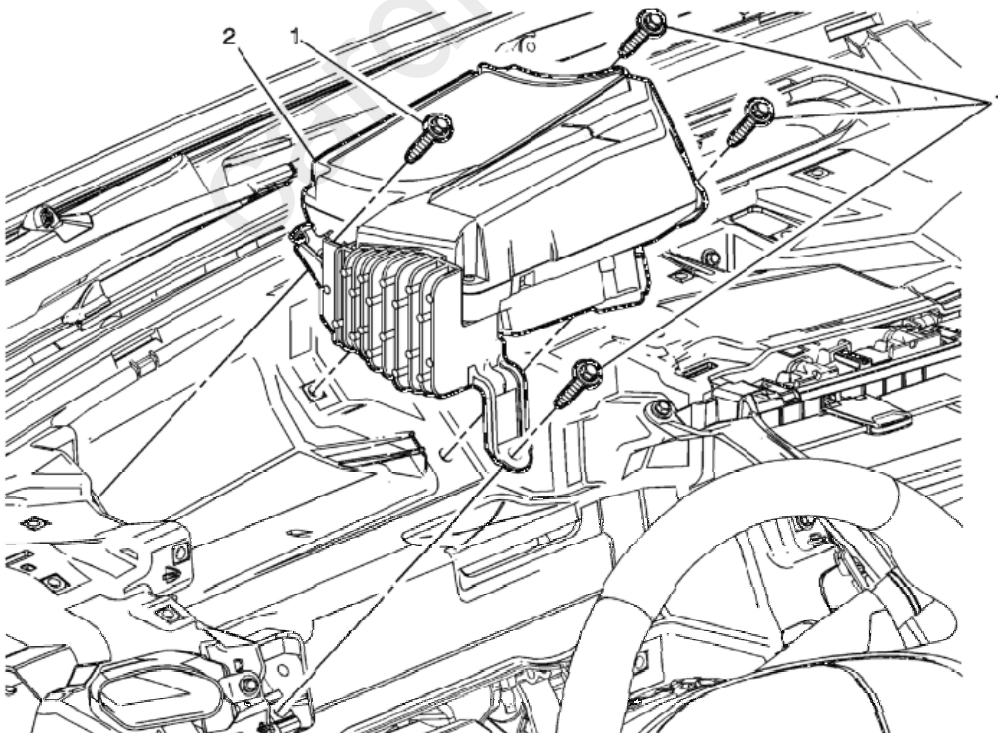


Fig. 42: Head-Up Display

Courtesy of GENERAL MOTORS COMPANY

8. Remove the head-up display, if equipped. (2). Refer to **Head-Up Display Replacement** .

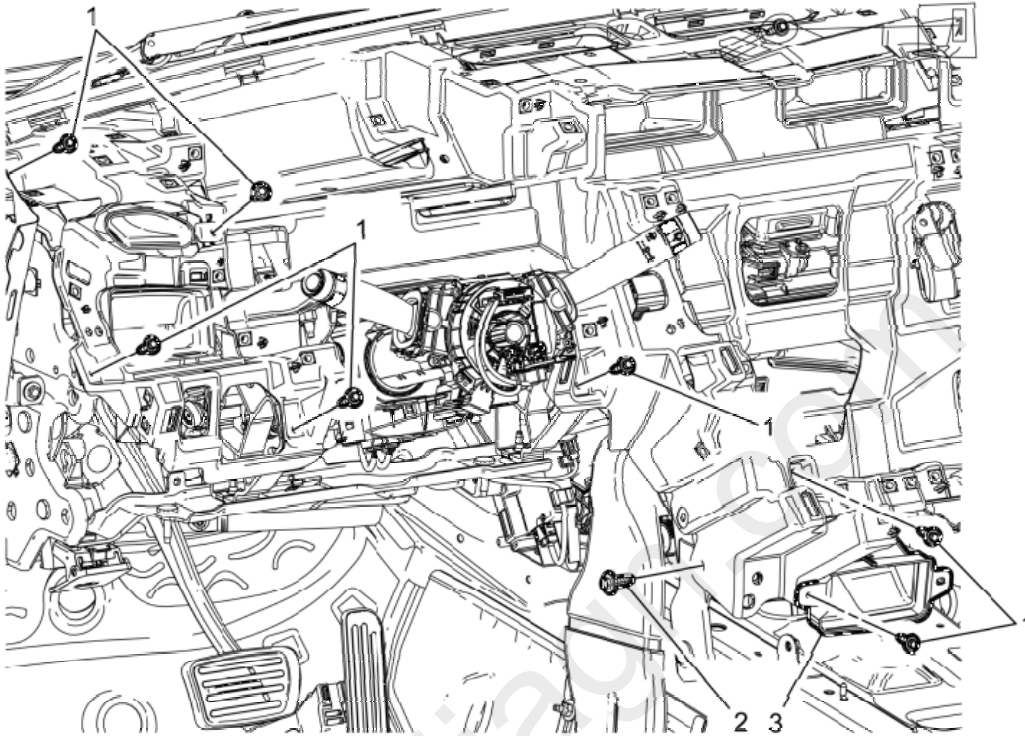


Fig. 43: Instrument Carrier Bolts, Instrument Panel Bolt And Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

9. Remove the instrument carrier bolts (1), the instrument panel bolt (2) and the front floor console rear air duct (3).

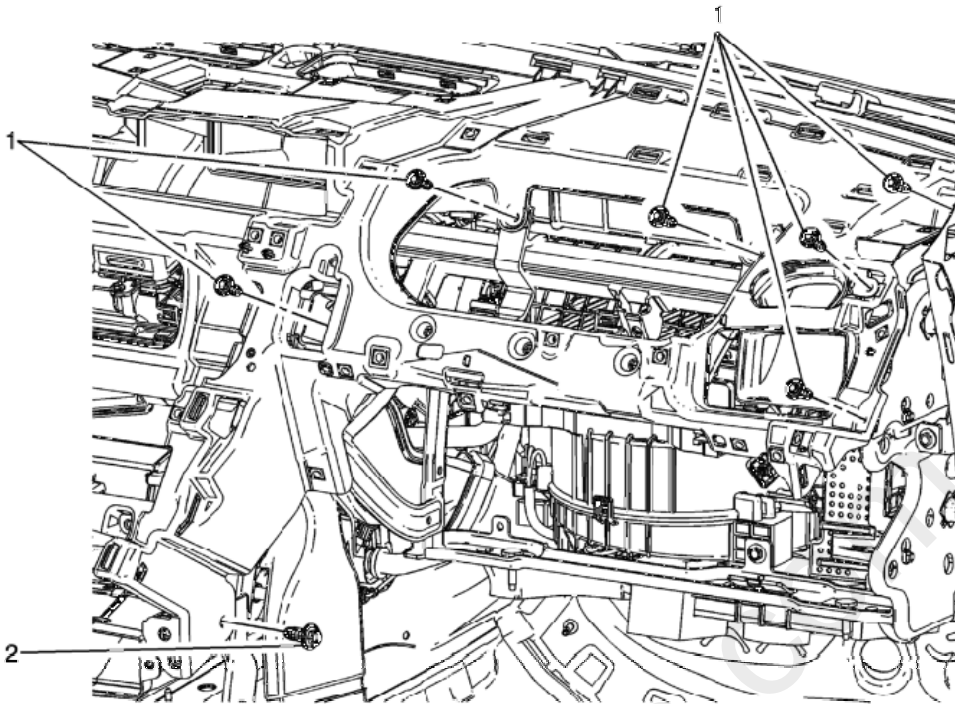


Fig. 44: Instrument Carrier Bolts And Instrument Panel Bolts
 Courtesy of GENERAL MOTORS COMPANY

10. Remove the instrument carrier bolts (1) and the instrument panel bolt (2).

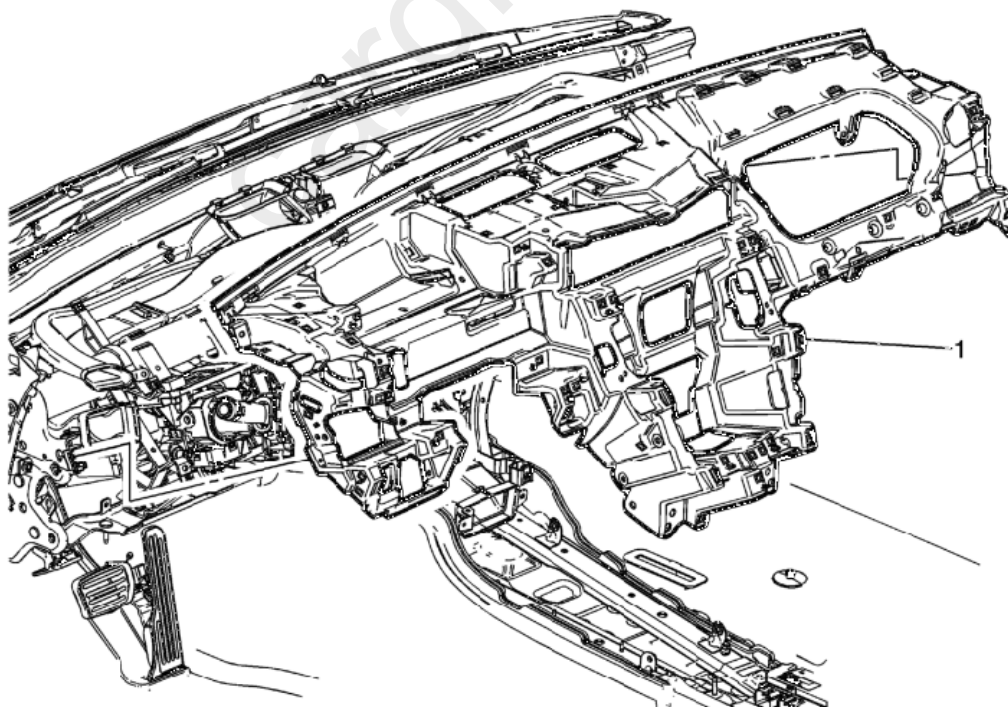


Fig. 45: Instrument Carrier

Courtesy of GENERAL MOTORS COMPANY

11. Note the location and routing of the instrument panel electrical harness assembly, to ensure proper reinstallation.
12. Disconnect the fasteners securing the instrument panel electrical harness assembly to the instrument carrier and position out of the way.
13. Use a flat bladed plastic trim tool to help separate the instrument carrier (1) from the defroster nozzle.
14. With the aid of an assistant lift the instrument carrier (1) rearward and upward from the tie bar assembly.
15. Remove the instrument carrier from the vehicle.

Installation Procedure

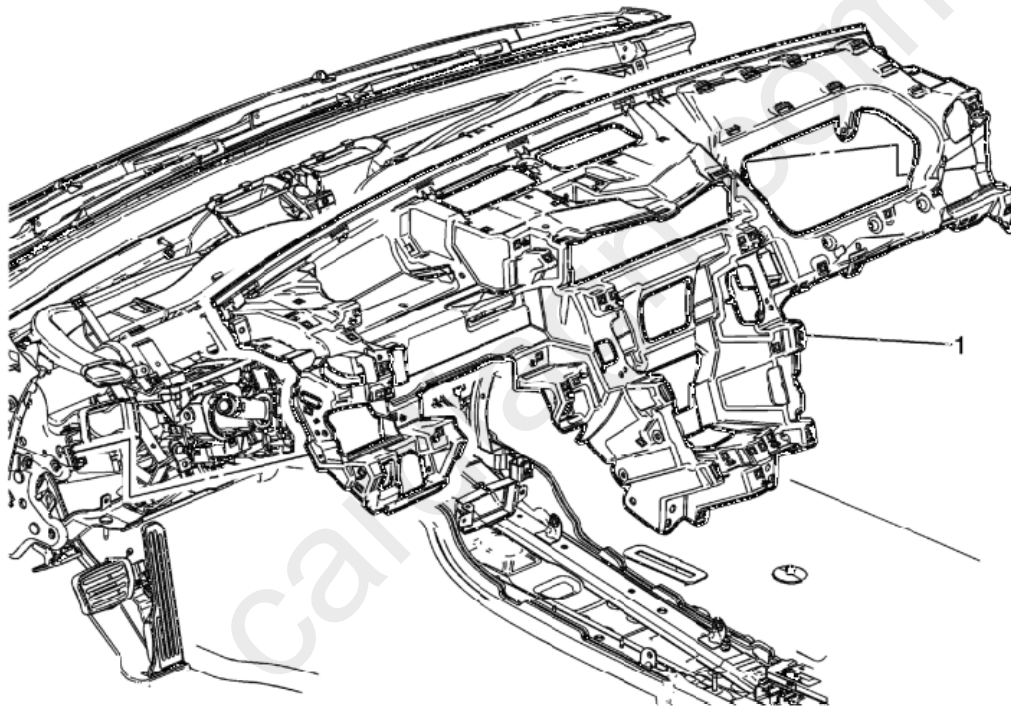


Fig. 46: Instrument Carrier

Courtesy of GENERAL MOTORS COMPANY

1. With the aid of an assistant, load the instrument carrier (1) to the instrument panel tie bar.
2. Reposition the instrument panel wiring harness into the vehicle position as was noted in the removal and connect the fasteners securing the instrument panel wiring harness to the instrument carrier (1).

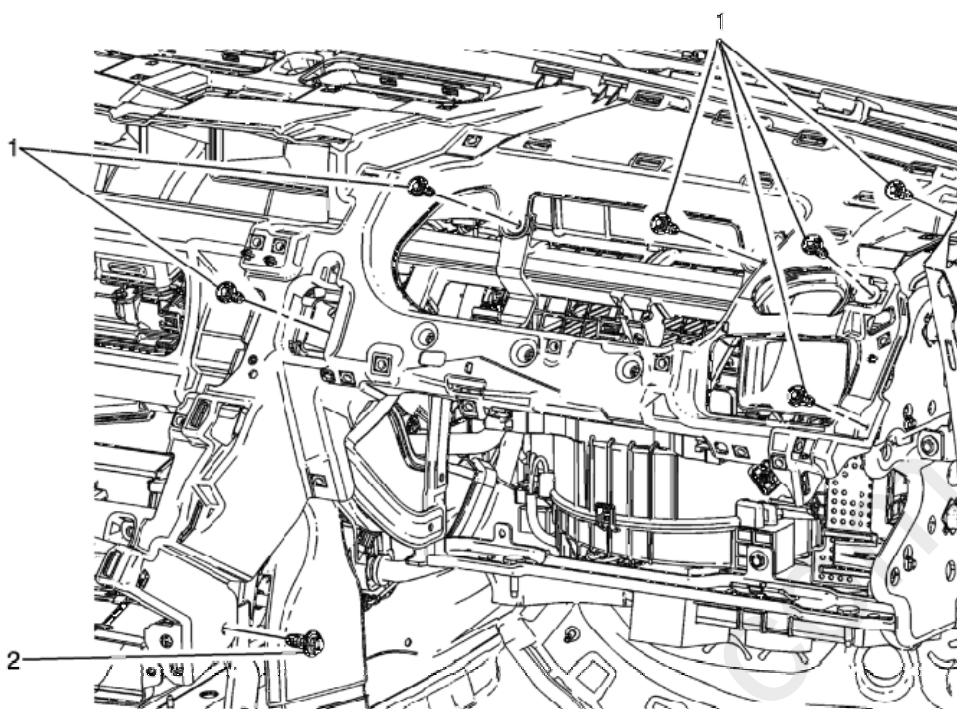


Fig. 47: Instrument Carrier Bolts And Instrument Panel Bolts
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the instrument carrier bolts (1) and tighten to 2.5 (22 lb in).
4. Install the instrument panel bolt (2) and tighten to 9 (80 lb in).

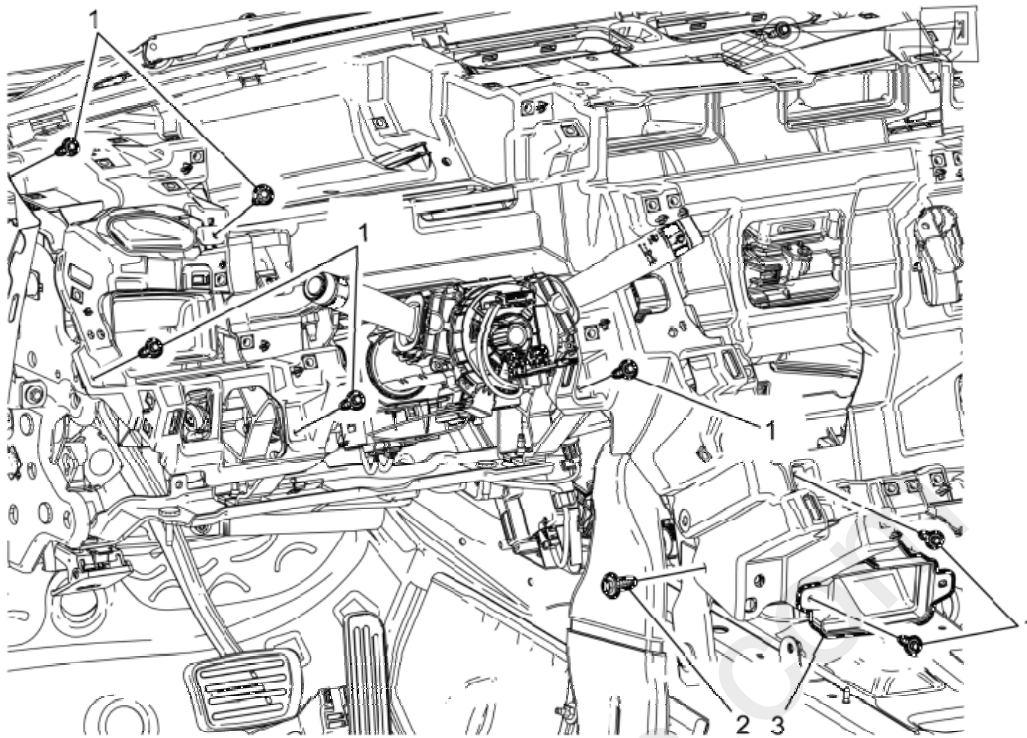


Fig. 48: Instrument Carrier Bolts, Instrument Panel Bolt And Front Floor Console Rear Air Duct
Courtesy of GENERAL MOTORS COMPANY

5. Install the instrument carrier bolts (1) and tighten to 2.5 (22 lb in). Replace the front floor console rear air duct (3). Refer to **Front Floor Console Rear Air Duct Replacement** .
6. Install the instrument panel bolt (2) and tighten to 9 (80 lb in).

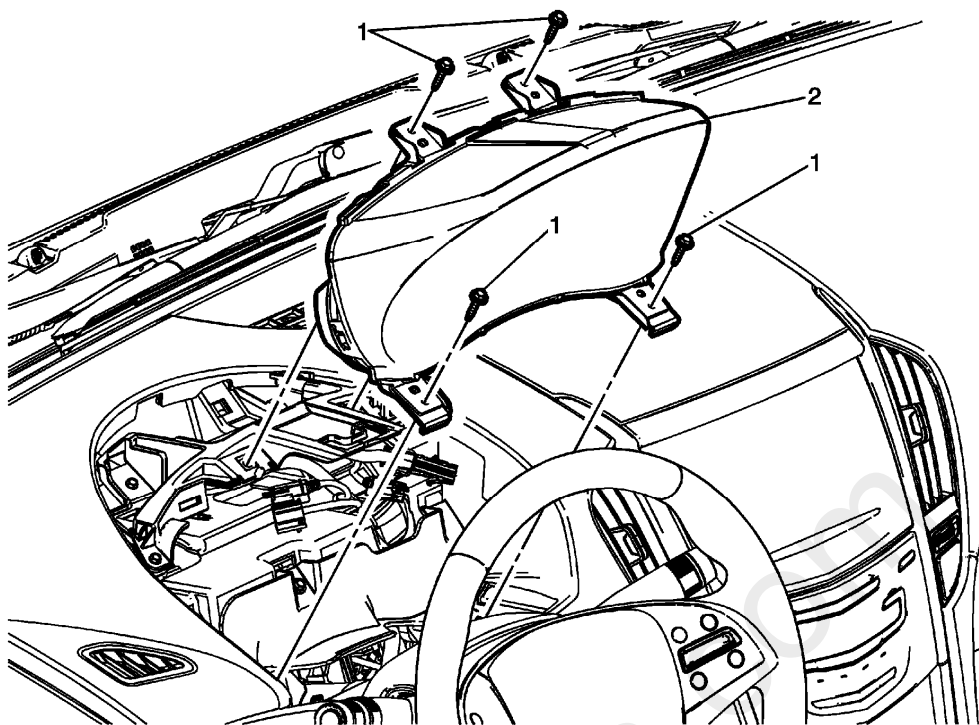


Fig. 49: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

7. Install the instrument cluster (2). Refer to **Instrument Cluster Replacement** .

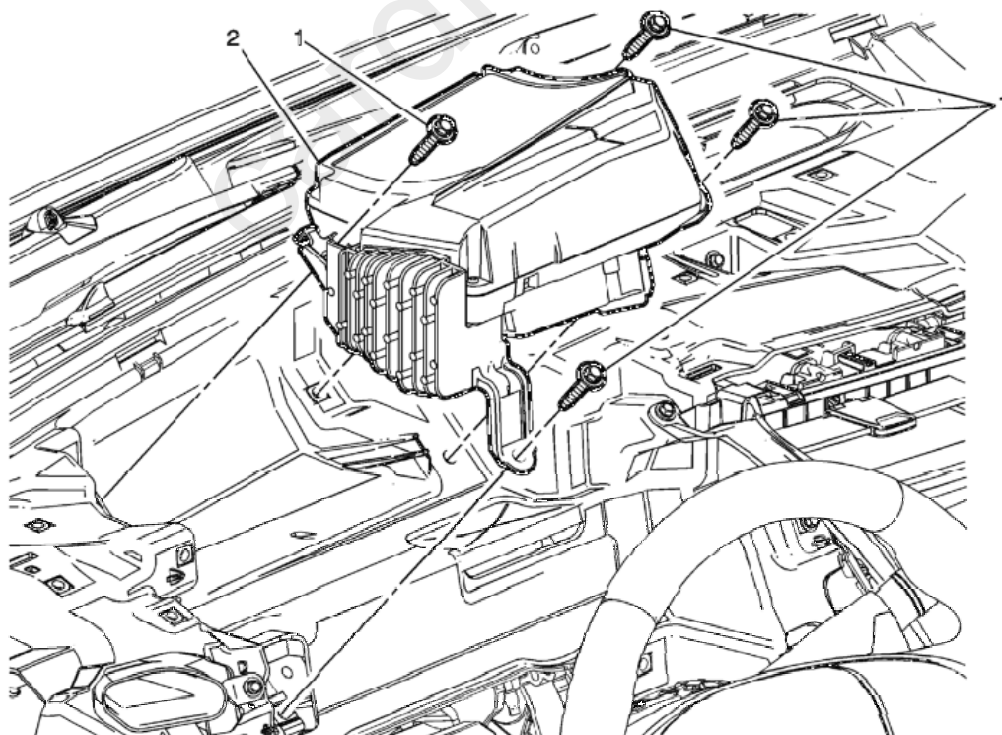


Fig. 50: Head-Up Display

Courtesy of GENERAL MOTORS COMPANY

8. Install the head-up display, if equipped. (2). Refer to **Head-Up Display Replacement** .

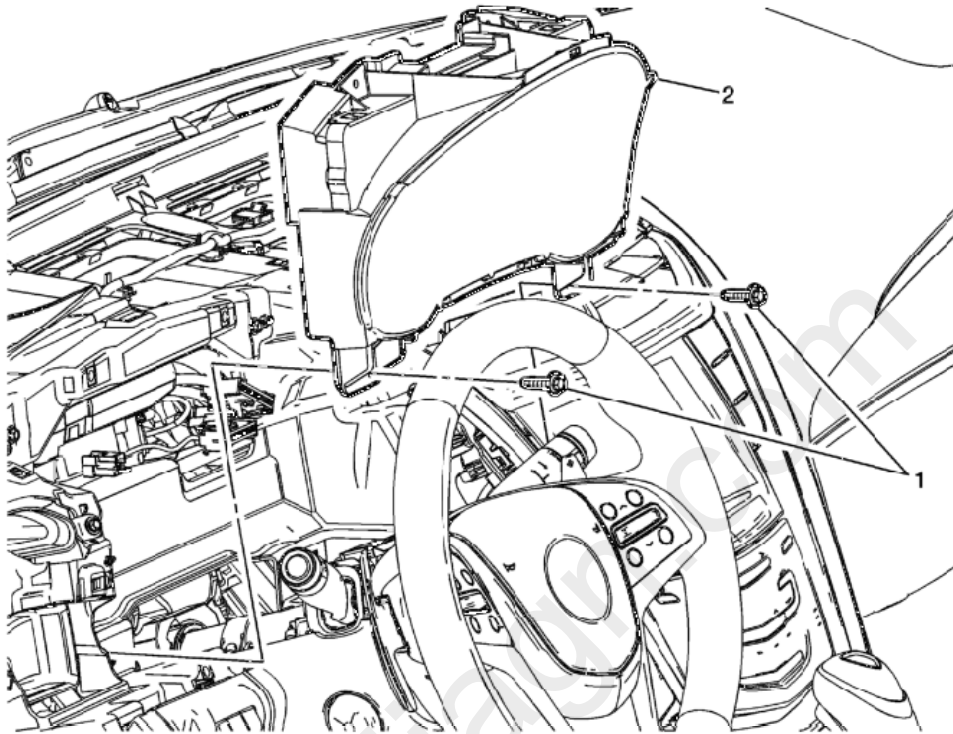


Fig. 51: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

9. Install the instrument cluster (2). Refer to **Instrument Cluster Replacement** .

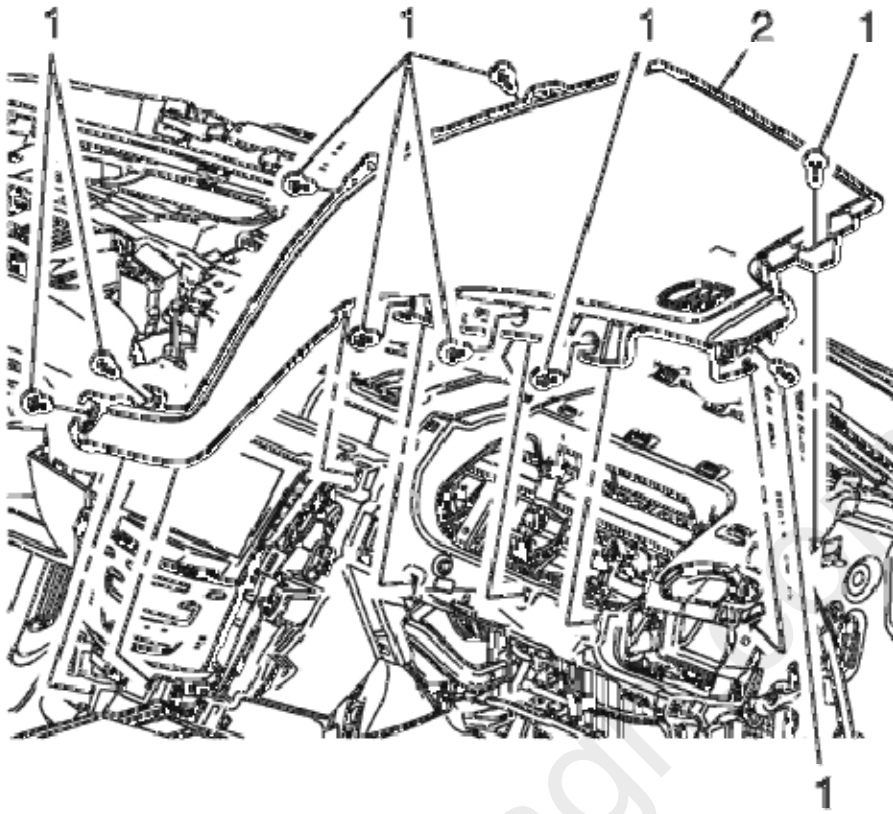


Fig. 52: Securing Instrument Panel Trim Pad To Instrument Panel Carrier
Courtesy of GENERAL MOTORS COMPANY

10. Install the passenger side instrument panel trim pad (2). Refer to **Instrument Panel Trim Pad Replacement (Passenger Side)**, **Instrument Panel Trim Pad Replacement (Driver Side)**.

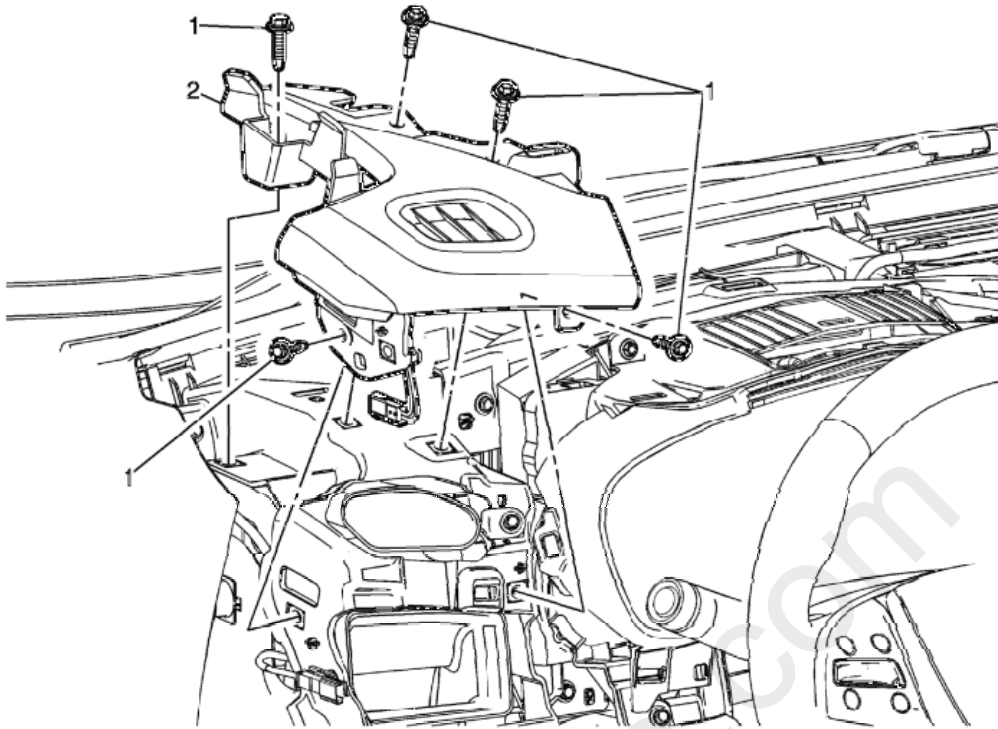


Fig. 53: Instrument Panel Trim Pad (Driver Side)
Courtesy of GENERAL MOTORS COMPANY

11. Install the driver side instrument panel trim pad (2). Refer to **Instrument Panel Trim Pad Replacement (Passenger Side)**, **Instrument Panel Trim Pad Replacement (Driver Side)**.

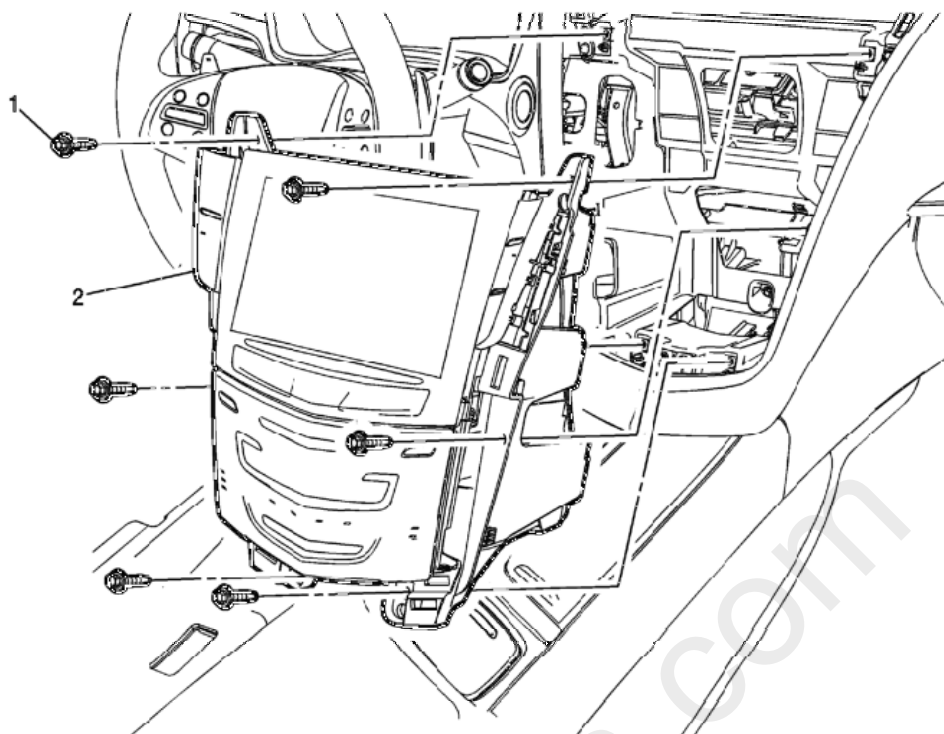


Fig. 54: Instrument Panel Accessory Bracket
Courtesy of GENERAL MOTORS COMPANY

12. Install the instrument panel accessory bracket (2). Refer to **Instrument Panel Accessory Bracket Replacement**.

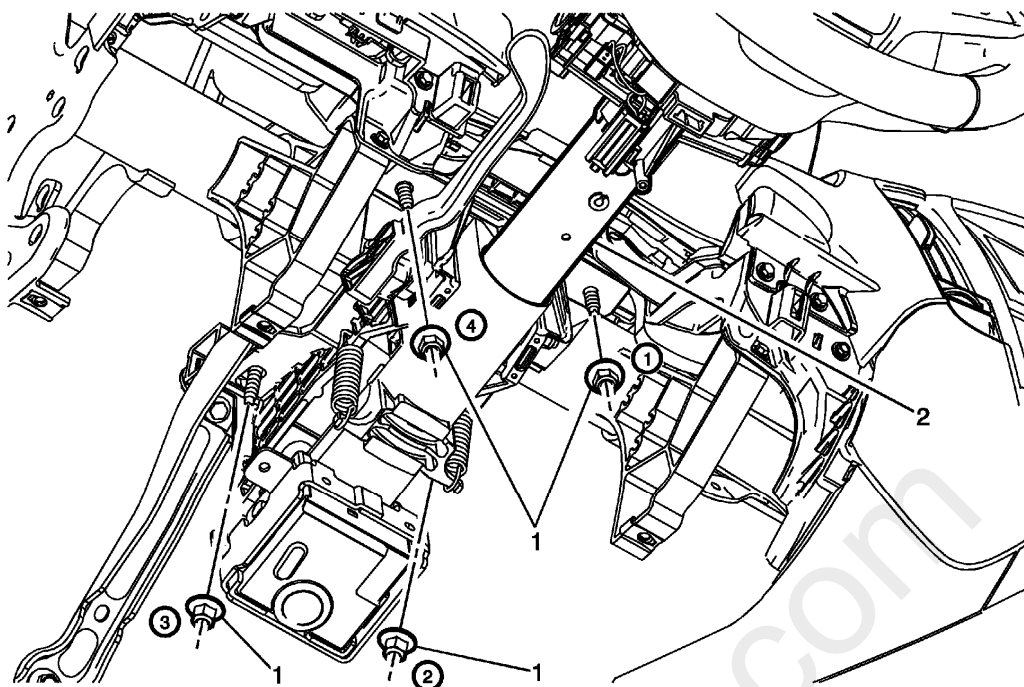


Fig. 55: Steering Column

Courtesy of GENERAL MOTORS COMPANY

13. Install the steering column (2). Refer to **Steering Column Replacement** .

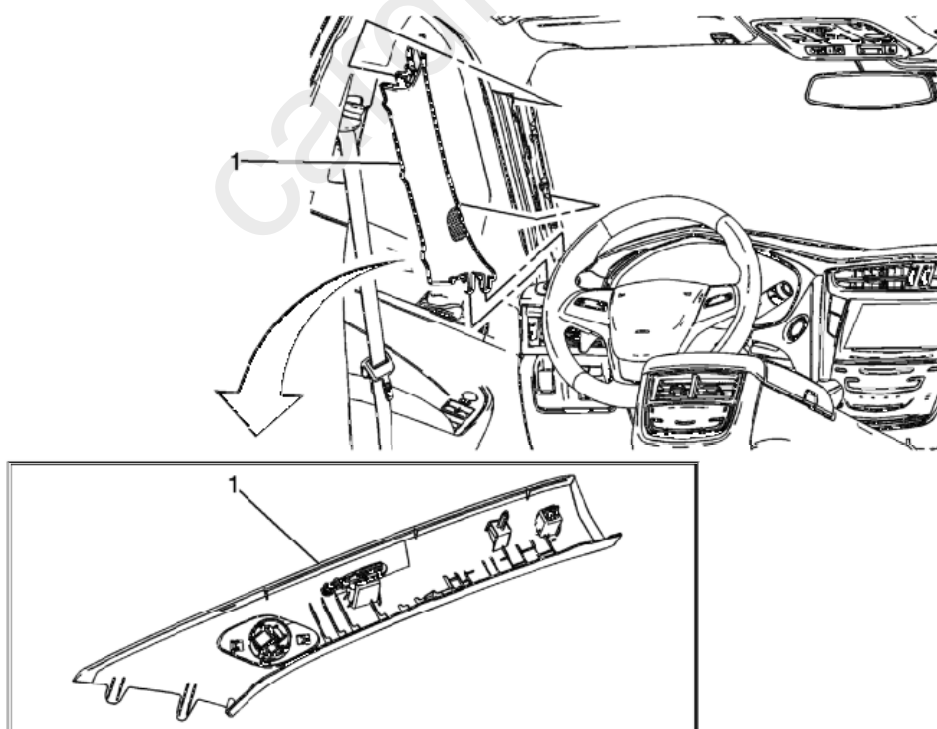


Fig. 56: Windshield Garnish Molding
Courtesy of GENERAL MOTORS COMPANY

14. Install the windshield garnish molding (1). Refer to **Windshield Garnish Molding Replacement** .

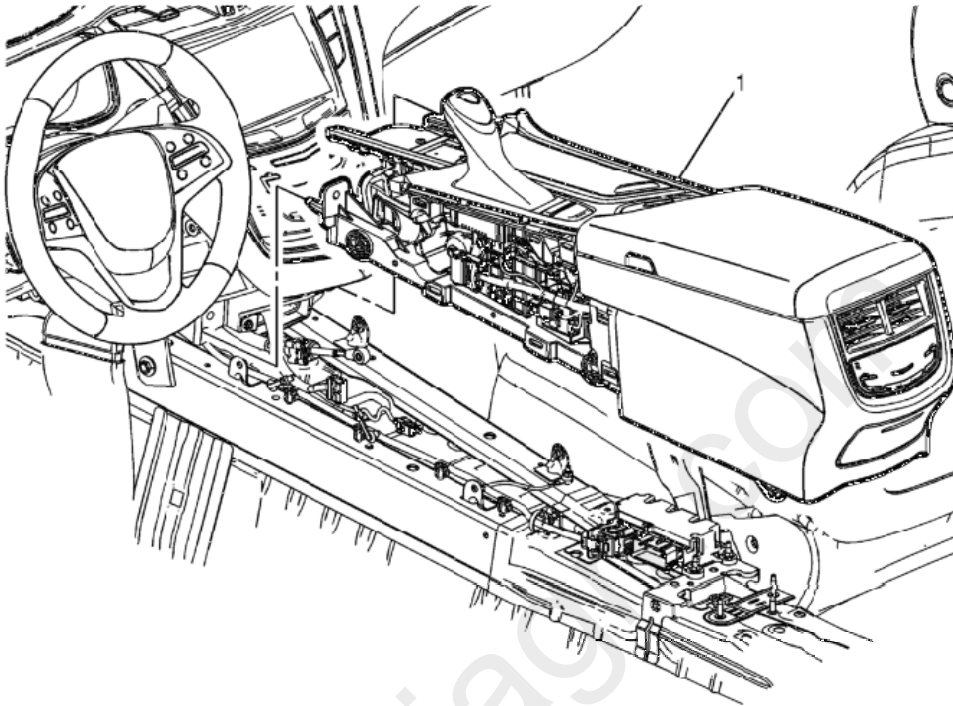


Fig. 57: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

15. Install the front floor console (1). Refer to **Front Floor Console Replacement**.

INSTRUMENT PANEL TIE BAR REPLACEMENT

Removal Procedure

1. Remove the instrument carrier. Refer to **Instrument Carrier Replacement**.
2. Remove the radio bracket. Refer to **Radio Bracket Replacement** .
3. Remove the windshield wiper system module. Refer to **Windshield Wiper System Module Replacement** .
4. Remove the front side doors. Refer to **Front Side Door Replacement** .
5. Remove the left and right side window defogger outlet ducts. Refer to **Side Window Defogger Outlet Duct Replacement - Left Side** , and **Side Window Defogger Outlet Duct Replacement - Right Side** .
6. Remove the left and right air distributor ducts. Refer to **Air Distributor Duct Replacement - Left Side** , and **Air Distributor Duct Replacement - Right Side** .

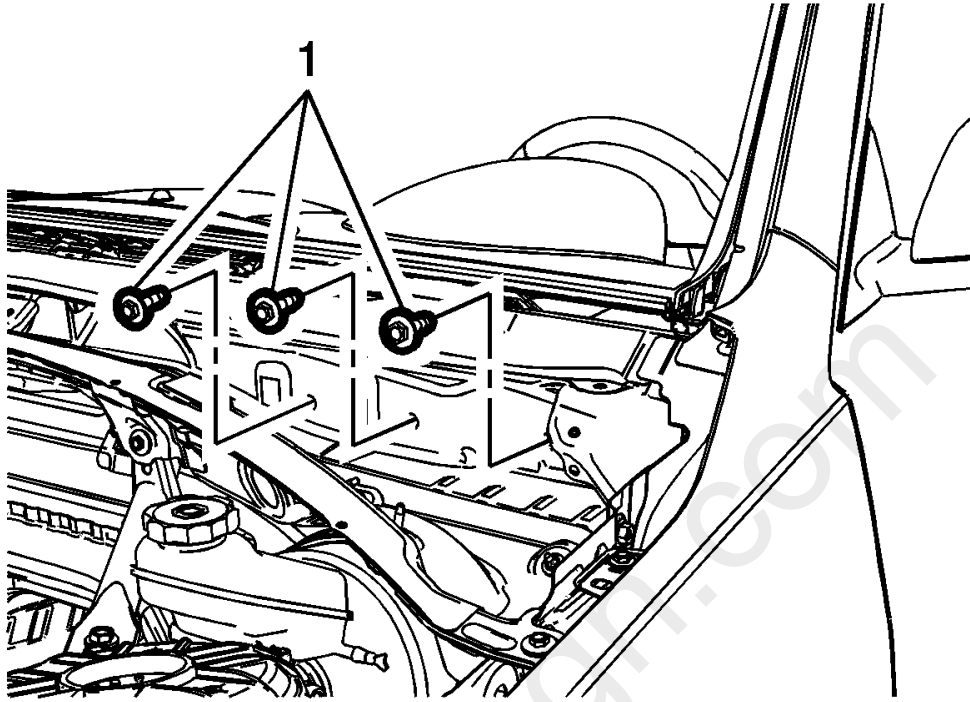


Fig. 58: Instrument Panel Tie Bar Brace Bolts
Courtesy of GENERAL MOTORS COMPANY

7. Remove the instrument panel tie bar brace bolts (1) from the dash and cowl panel.

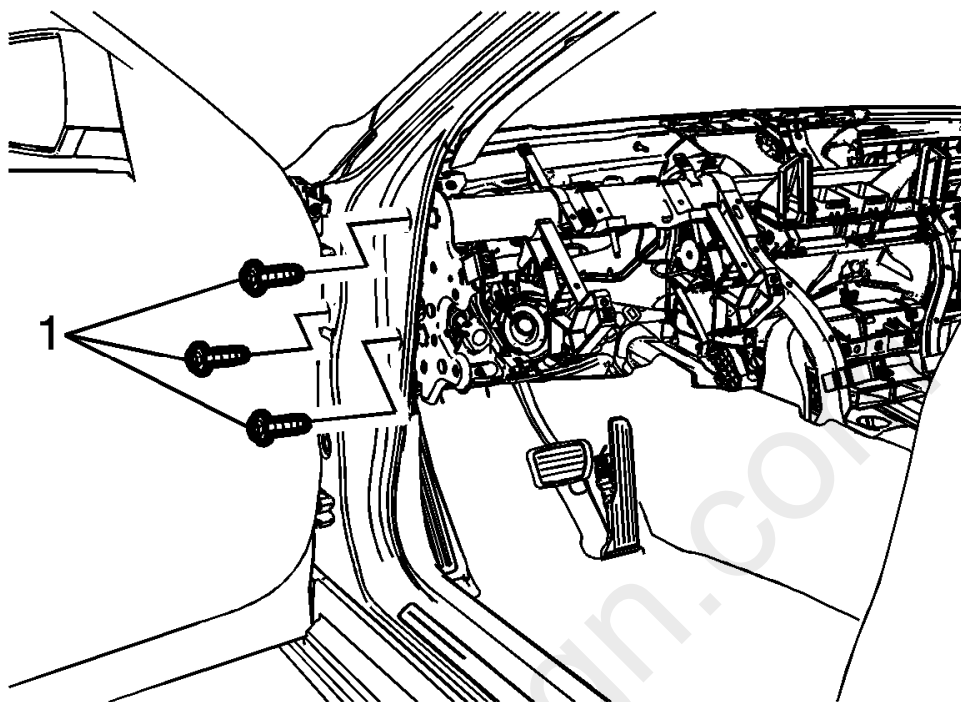


Fig. 59: Instrument Panel Tie Bar Bolts At Body Side Outer Frame Access Holes
Courtesy of GENERAL MOTORS COMPANY

8. Remove the instrument panel tie bar bolts (1) from the body side outer frame access holes.

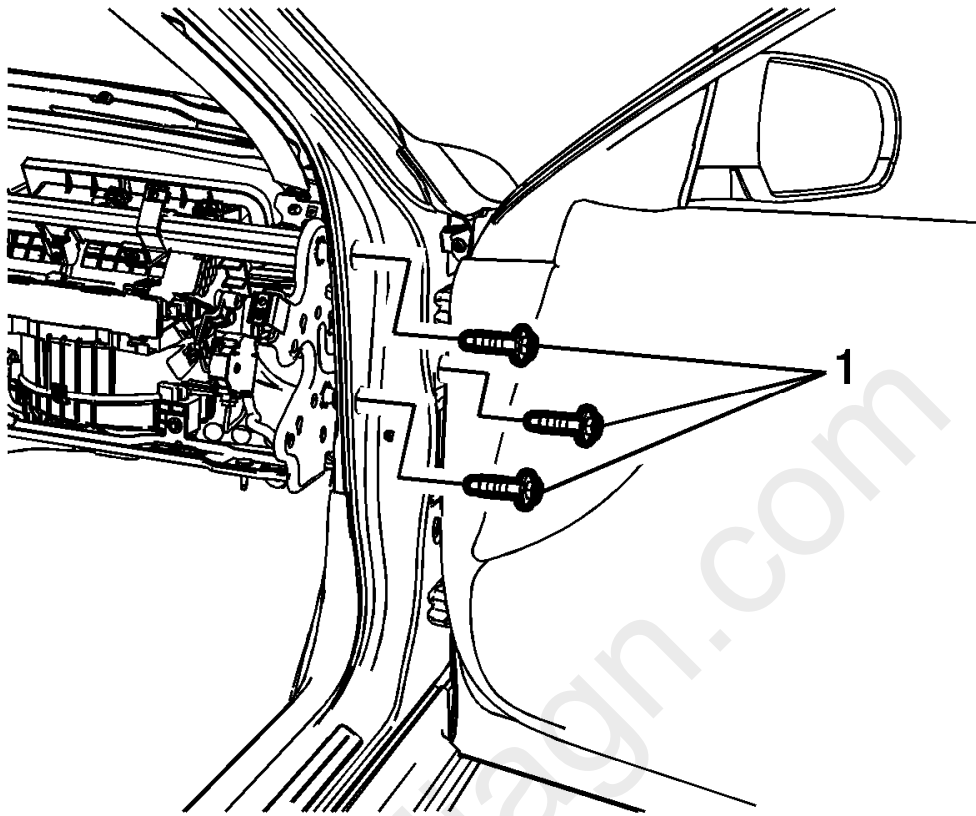


Fig. 60: Instrument Panel Tie Bar Bolts At Body Side Outer Frame Access Holes
Courtesy of GENERAL MOTORS COMPANY

9. Remove the instrument panel tie bar bolts (1) from the body side outer frame access holes.

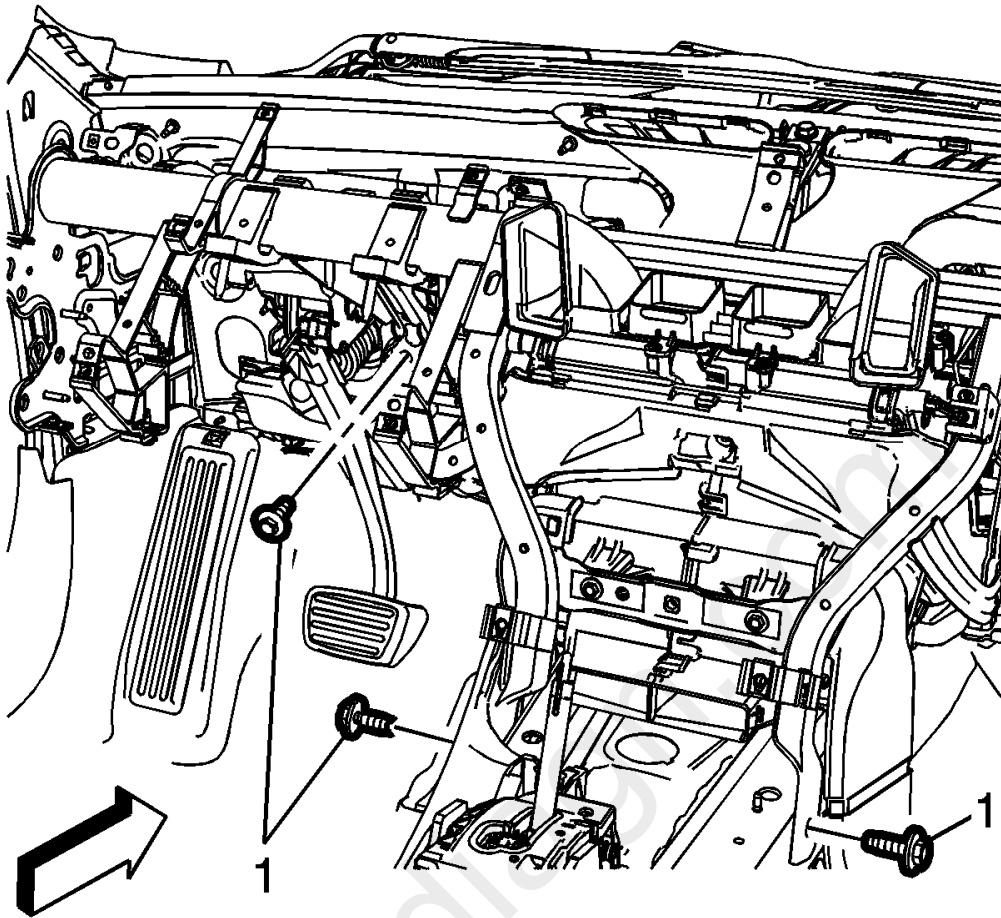


Fig. 61: Lower Instrument Panel Tie Bar Bolts At Instrument Panel Tie Bar Braces
Courtesy of GENERAL MOTORS COMPANY

10. Remove the lower instrument panel tie bar bolts (1) from the instrument panel tie bar braces.

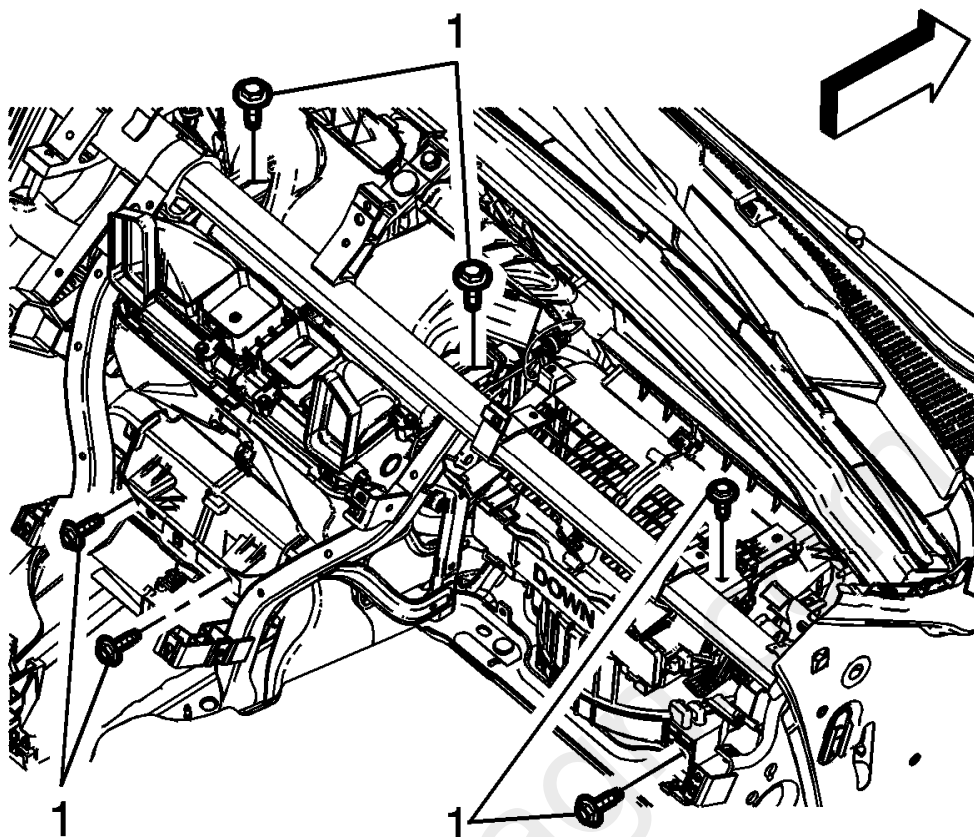


Fig. 62: Instrument Panel Tie Bar Assembly To Heater And Air Conditioning And Blower Module Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Remove the bolts (1) securing the instrument panel tie bar assembly to the heater and air conditioning and blower module.

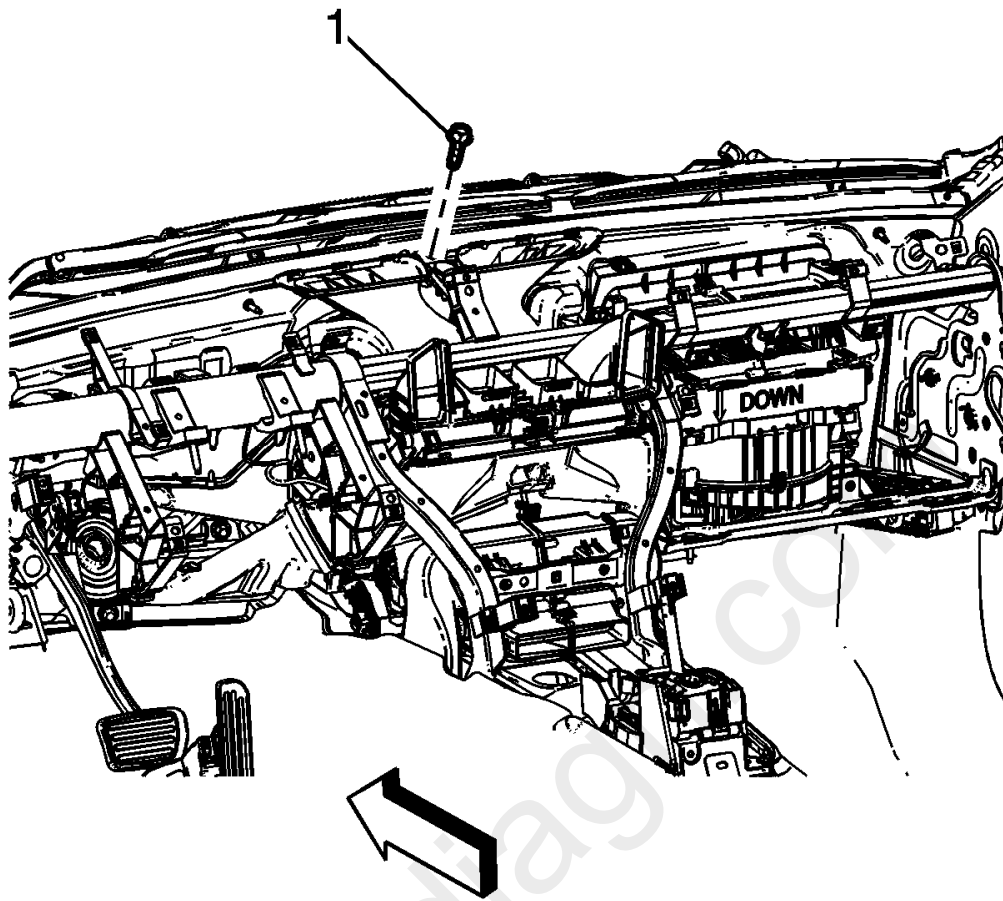


Fig. 63: Upper Instrument Panel Tie Bar Bolt
Courtesy of GENERAL MOTORS COMPANY

12. Remove the upper instrument panel tie bar bolt (1) securing the instrument panel tie bar assembly to the instrument panel carrier support.
13. Note the location and routing of the instrument panel wiring harness and unclip the harness and reposition from the tie bar.
14. Support the HVAC module in order to prevent damage.
15. Reposition the front floor carpet as necessary.

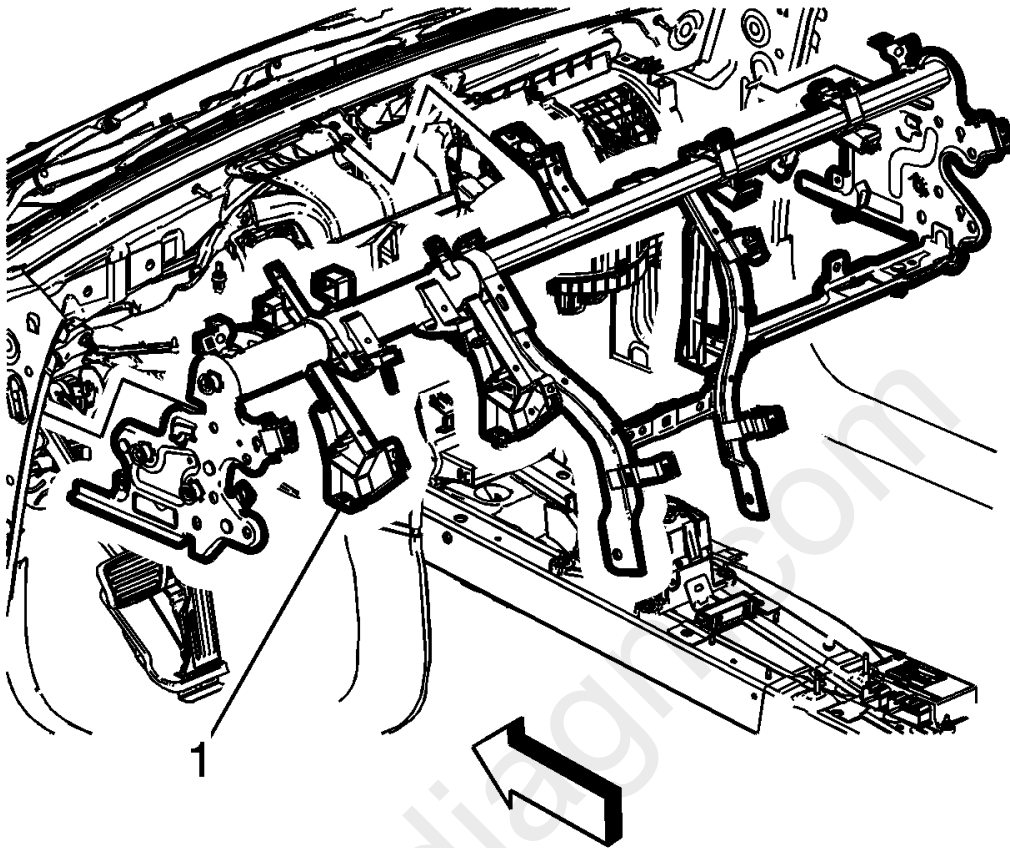


Fig. 64: Instrument Panel Tie Bar
Courtesy of GENERAL MOTORS COMPANY

16. With the aid of an assistant remove the instrument panel tie bar assembly (1) from the vehicle.

Installation Procedure

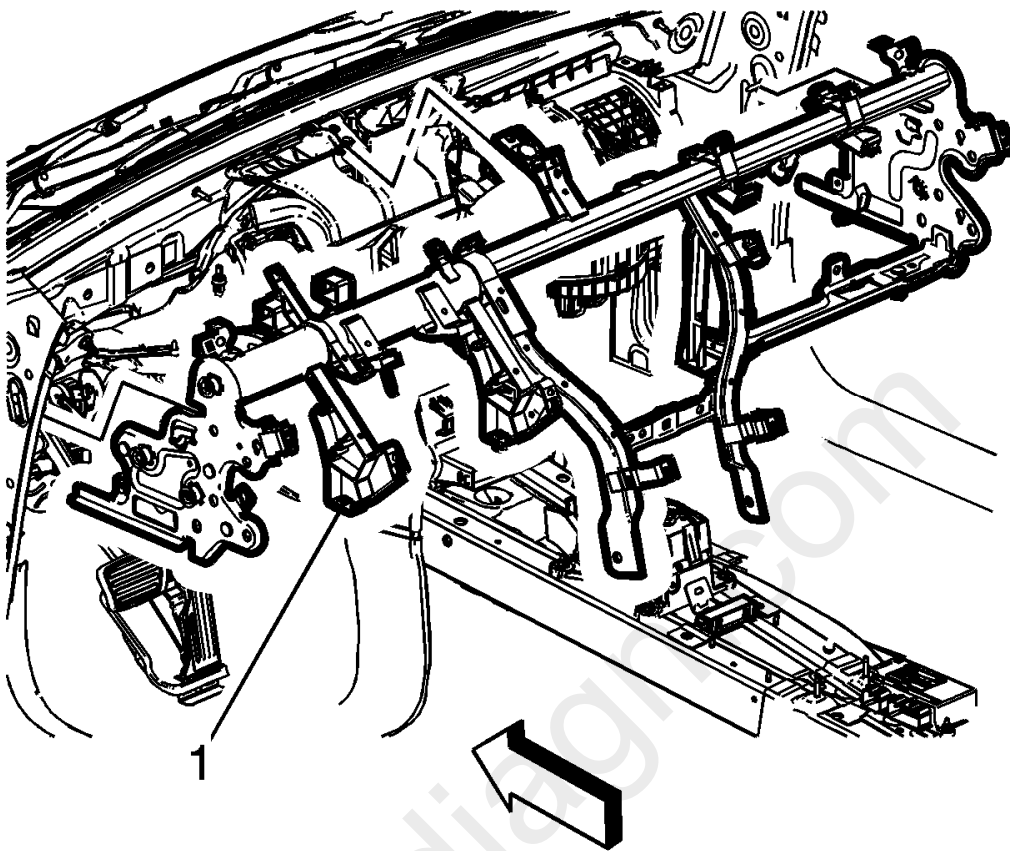


Fig. 65: Instrument Panel Tie Bar
Courtesy of GENERAL MOTORS COMPANY

1. With the aid of an assistant position the instrument panel tie bar assembly (1) into the vehicle and to the locator pins.
2. Install the instrument panel wiring harness assembly to its in vehicle position as it was noted in the removal procedure.

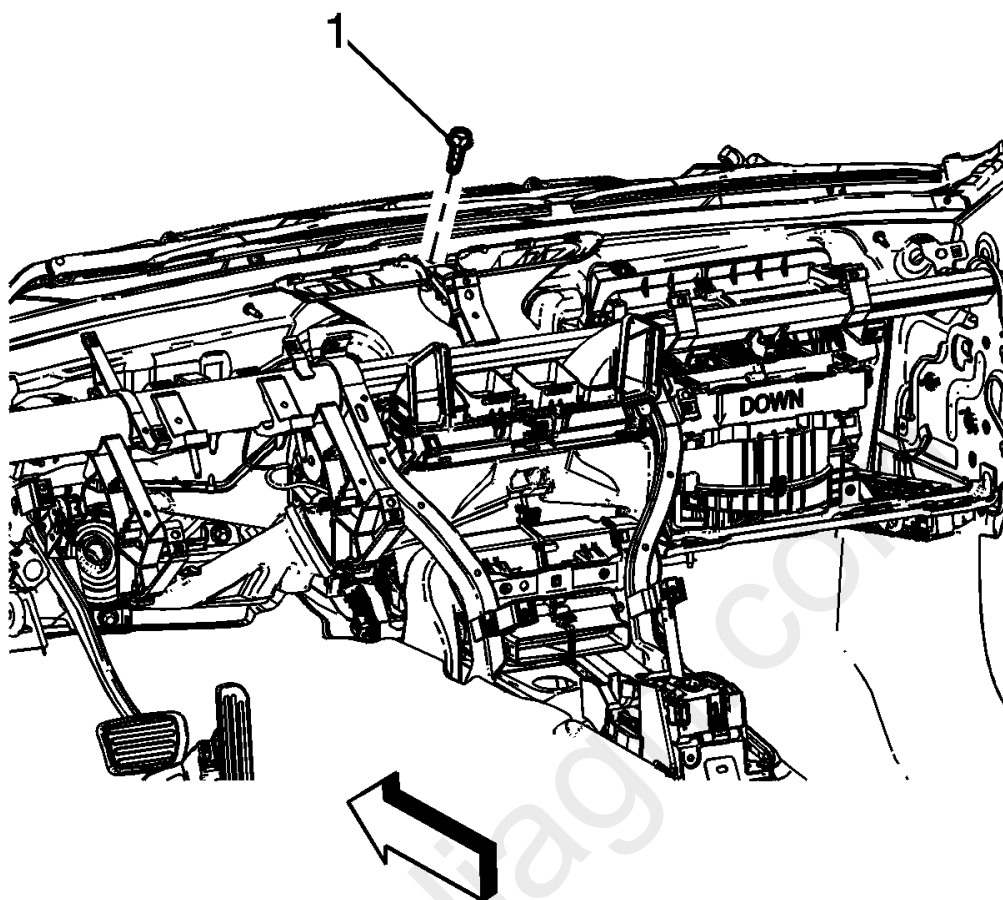


Fig. 66: Upper Instrument Panel Tie Bar Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the upper instrument panel tie bar bolt (1) securing the instrument panel tie bar assembly to the instrument panel carrier support and tighten to 22 (16 lb ft).

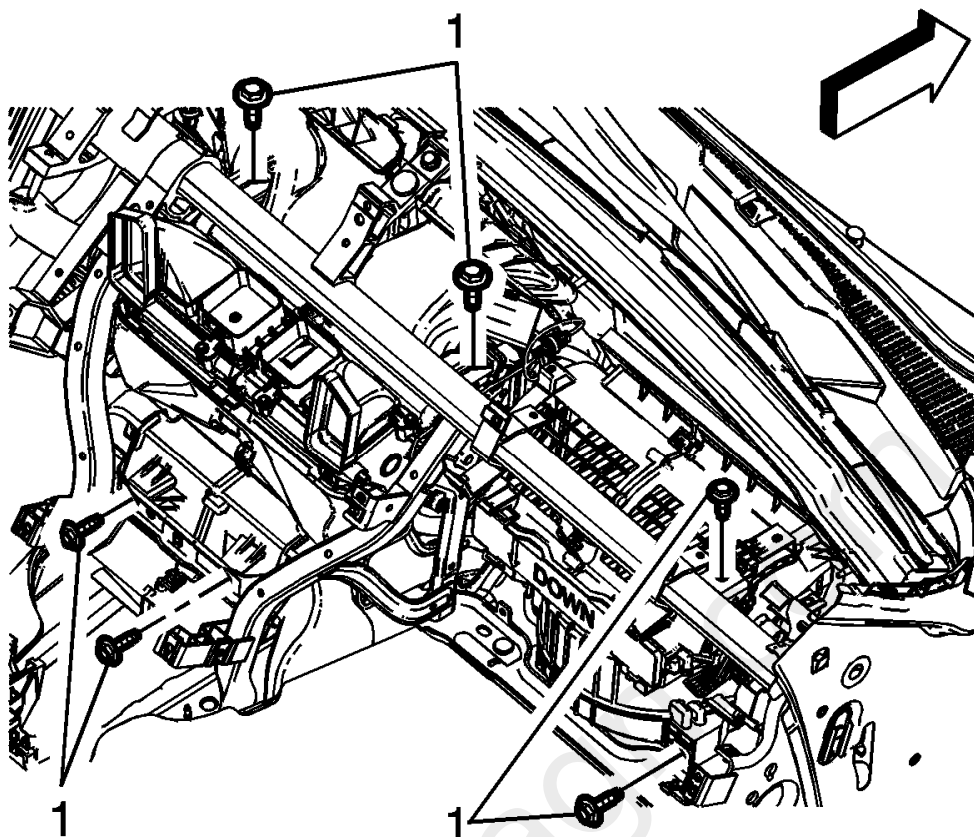


Fig. 67: Instrument Panel Tie Bar Assembly To Heater And Air Conditioning And Blower Module Bolts

Courtesy of GENERAL MOTORS COMPANY

4. Install the bolts (1) securing the instrument panel tie bar assembly to the heater and air conditioning and blower module and tighten to 9 (80 lb in) .

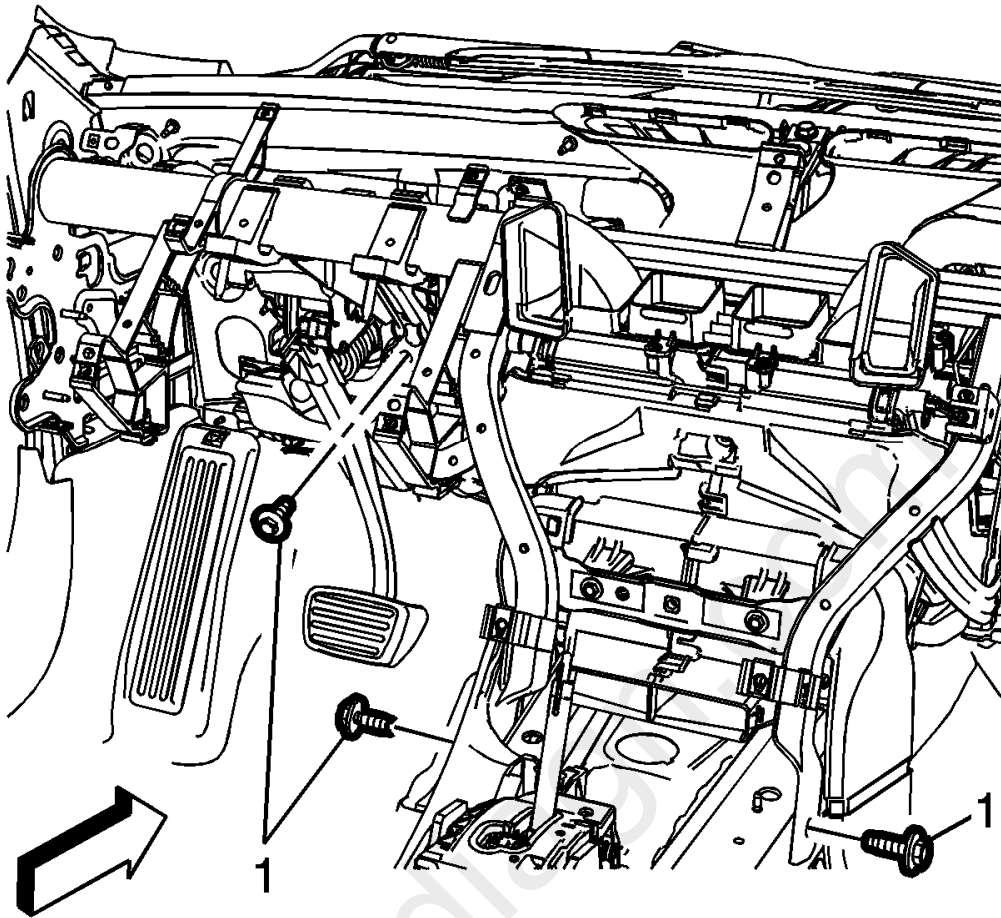


Fig. 68: Lower Instrument Panel Tie Bar Bolts At Instrument Panel Tie Bar Braces
Courtesy of GENERAL MOTORS COMPANY

5. Install the lower instrument panel tie bar bolts (1) to the instrument panel tie bar braces and tighten to 22 (16 lb ft).

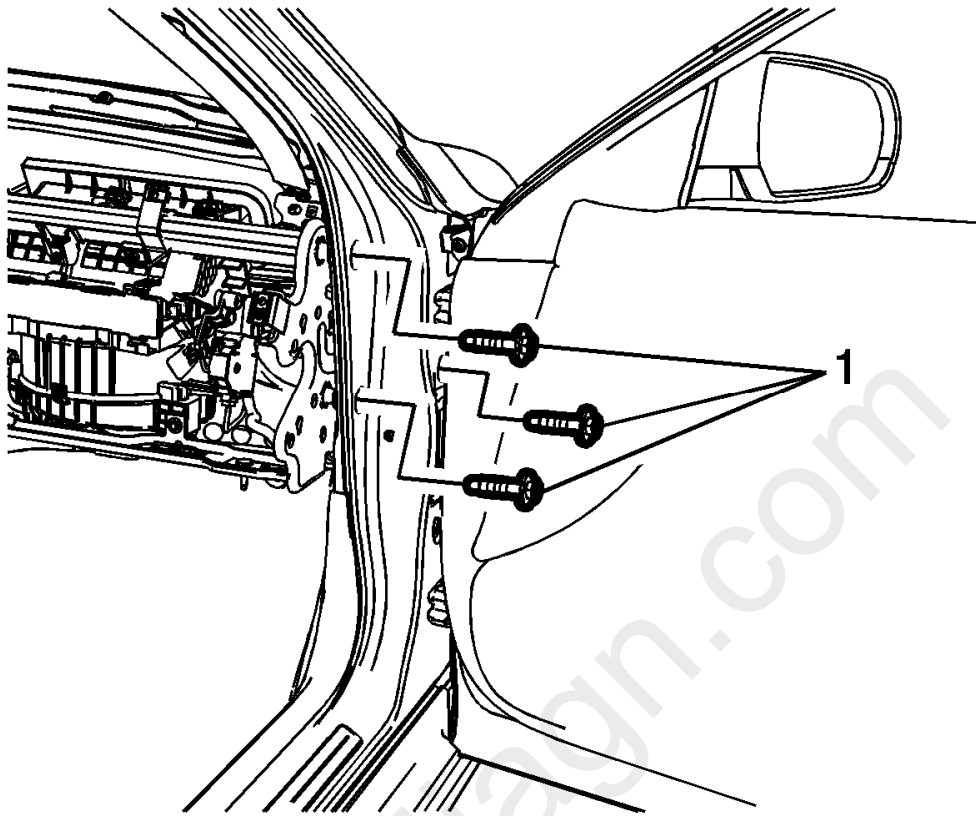


Fig. 69: Instrument Panel Tie Bar Bolts At Body Side Outer Frame Access Holes
Courtesy of GENERAL MOTORS COMPANY

6. Install the instrument panel tie bar bolts (1) into the body side outer frame access holes and tighten to 22 (16 lb ft).

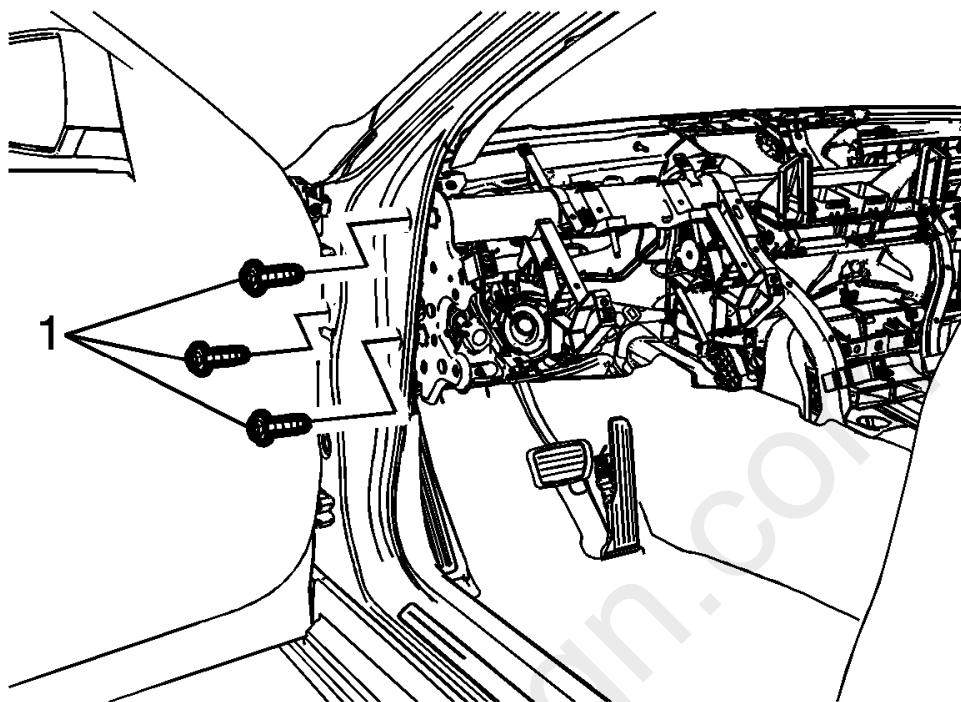


Fig. 70: Instrument Panel Tie Bar Bolts At Body Side Outer Frame Access Holes
Courtesy of GENERAL MOTORS COMPANY

7. Install the instrument panel tie bar bolts (1) into the body side outer frame access holes and tighten to 22 (16 lb ft).

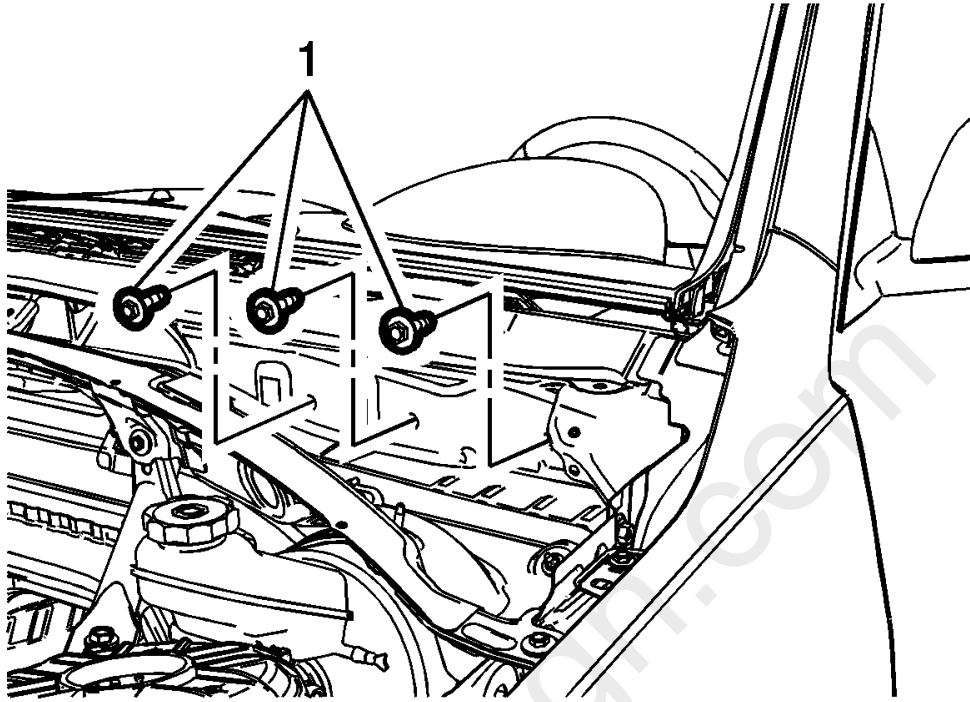


Fig. 71: Instrument Panel Tie Bar Brace Bolts
 Courtesy of GENERAL MOTORS COMPANY

NOTE: Verify the air conditioning evaporator and blower case drain bellow is aligned with the air conditioning evaporator and blower case drain hole.

8. Install the instrument panel tie bar brace bolts (1) to the dash and cowl panel and tighten to 22 (16 lb ft).
9. Install the left and right air distributor ducts. Refer to **Air Distributor Duct Replacement - Left Side** , and **Air Distributor Duct Replacement - Right Side** .
10. Install the left and right side window defogger outlet ducts. Refer to **Side Window Defogger Outlet Duct Replacement - Left Side** , and **Side Window Defogger Outlet Duct Replacement - Right Side** .
11. Install the front side doors. Refer to **Front Side Door Replacement** .
12. Install the windshield wiper system module. Refer to **Windshield Wiper System Module Replacement** .
13. Install the radio bracket. Refer to **Radio Bracket Replacement** .
14. Install the instrument carrier. Do not install the left front floor console side trim panel and the right instrument panel center trim panel at this time. Refer to **Instrument Carrier Replacement**.
15. Turn the AC on full cold, on hi blower for 10 minutes with the left side carpet pulled back to visually

- inspect for water leaks at the air conditioning evaporator and blower case drain bellow connection.
16. If a leak is found, reposition and reseal the bellow and inspect for water leaks.
 17. Install the left front floor console side trim panel. Refer to **Front Floor Console Side Trim Panel Replacement - Left Side**.
 18. Install the right instrument panel lower center trim panel. Refer to **Instrument Panel Lower Center Trim Panel Replacement (Right Side)**, **Instrument Panel Lower Center Trim Panel Replacement (Left Side)**.

FRONT FLOOR CONSOLE FRONT COMPARTMENT REPLACEMENT

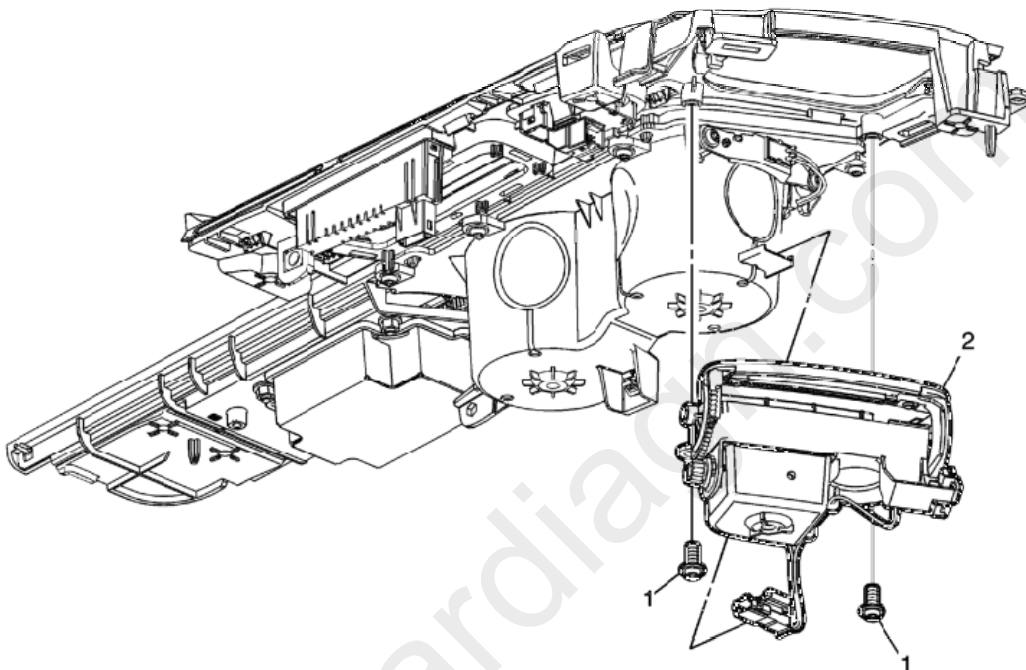


Fig. 72: Front Floor Console Front Compartment
Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Front Compartment Replacement

Callout	Component Name
Preliminary Procedure Remove the front floor console cup holder plate. Refer to <u>Front Floor Console Cup Holder Plate Replacement</u> .	
1	Front Floor Console Trim Plate Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> .

	Tighten 2.5 (22 lb in)
2	Front Floor Console Front Compartment Procedure Disconnect the electrical connector from the cup holder.

FRONT FLOOR CONSOLE CUP HOLDER REPLACEMENT

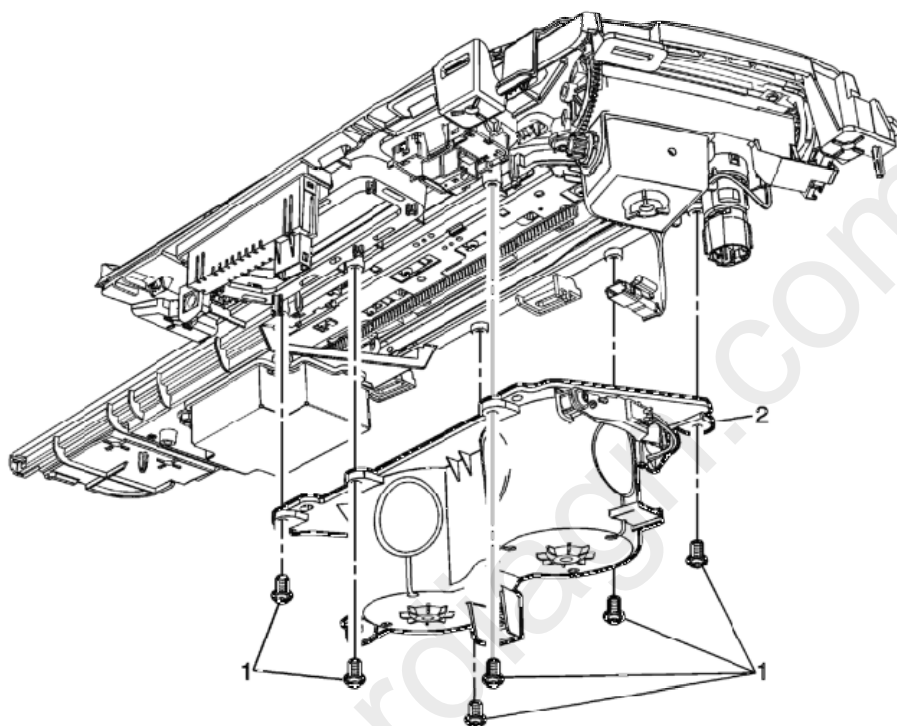


Fig. 73: Front Floor Console Cup Holder
Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Cup Holder Replacement

Callout	Component Name
Preliminary Procedure Remove the front floor console cup holder plate. Refer to <u>Front Floor Console Cup Holder Plate Replacement</u> .	
1	Front Floor Console Trim Plate Bolt (Qty: 6) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
	Front Floor Console Cup Holder

Procedure

Disconnect the electrical connector from the cup holder.

FRONT FLOOR CONSOLE COMPARTMENT REPLACEMENT**Removal Procedure**

1. Remove the front floor console armrest hinge cover. Refer to **Front Floor Console Armrest Hinge Cover Replacement**.

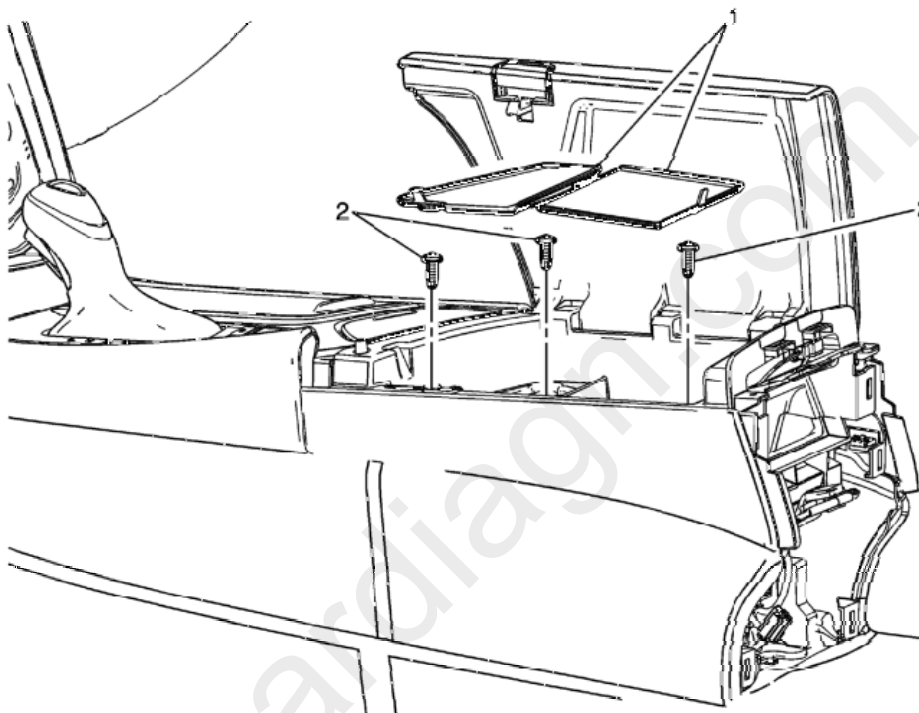


Fig. 74: Front Floor Console Center Compartment Liner
Courtesy of GENERAL MOTORS COMPANY

2. Open the compartment and remove the front floor console center compartment liner (1) to access the front floor console trim plate bolt (2).

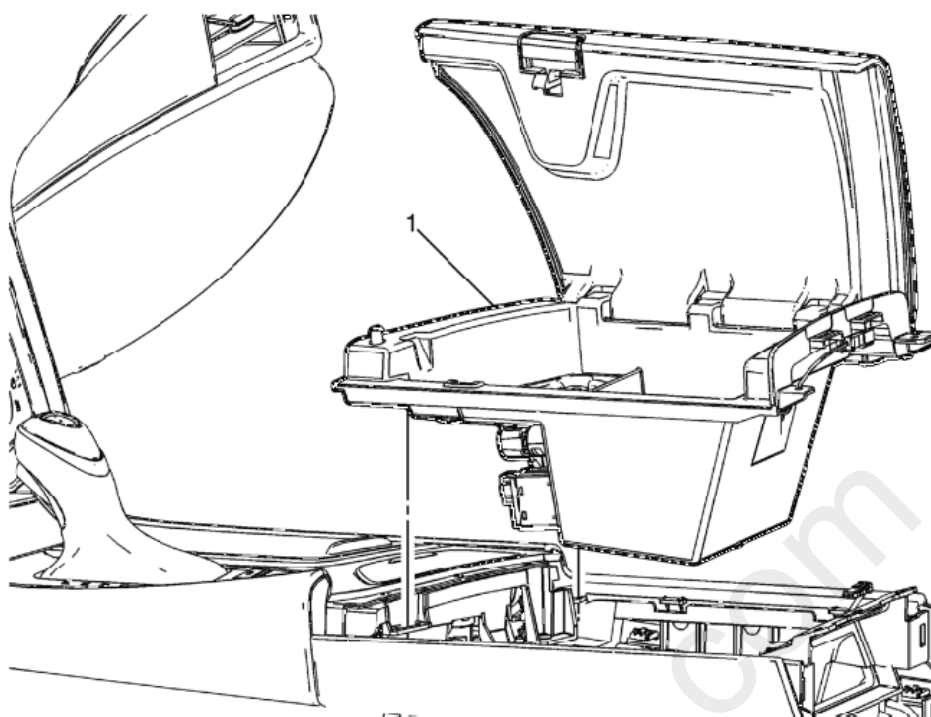


Fig. 75: Front Floor Console Compartment
Courtesy of GENERAL MOTORS COMPANY

3. Remove the front floor console compartment (1) from the vehicle.
4. Disconnect all electrical connectors.
5. Transfer components as necessary.

Installation Procedure

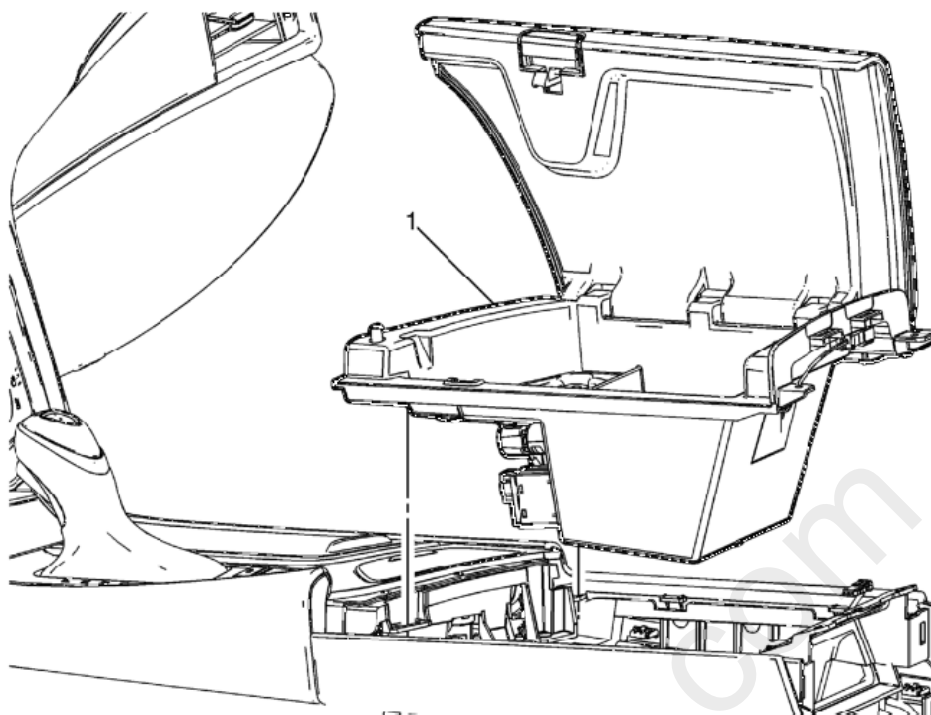


Fig. 76: Front Floor Console Compartment
Courtesy of GENERAL MOTORS COMPANY

1. Install the front floor console compartment (1) into the vehicle.
2. Connect all electrical connectors.

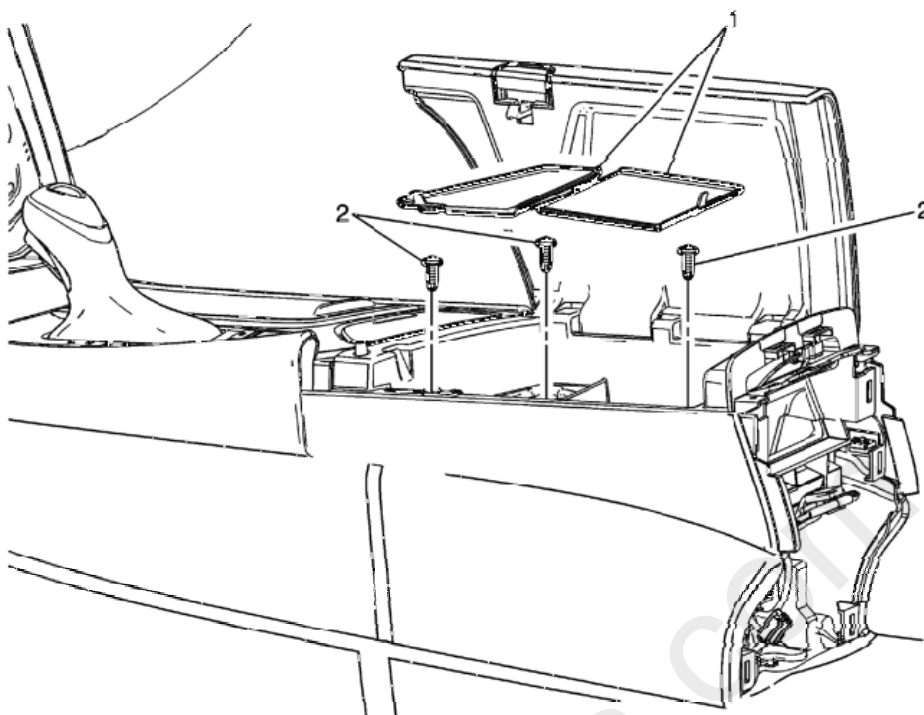


Fig. 77: Front Floor Console Center Compartment Liner
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the front floor console trim plate bolt (2) and tighten to 2.5 (22 lb in).
4. Return the front floor console center compartment liner (1) into the compartment.
5. Install the front floor console armrest hinge cover. Refer to **Front Floor Console Armrest Hinge Cover Replacement**.

FRONT FLOOR CONSOLE REAR TRIM PANEL REPLACEMENT

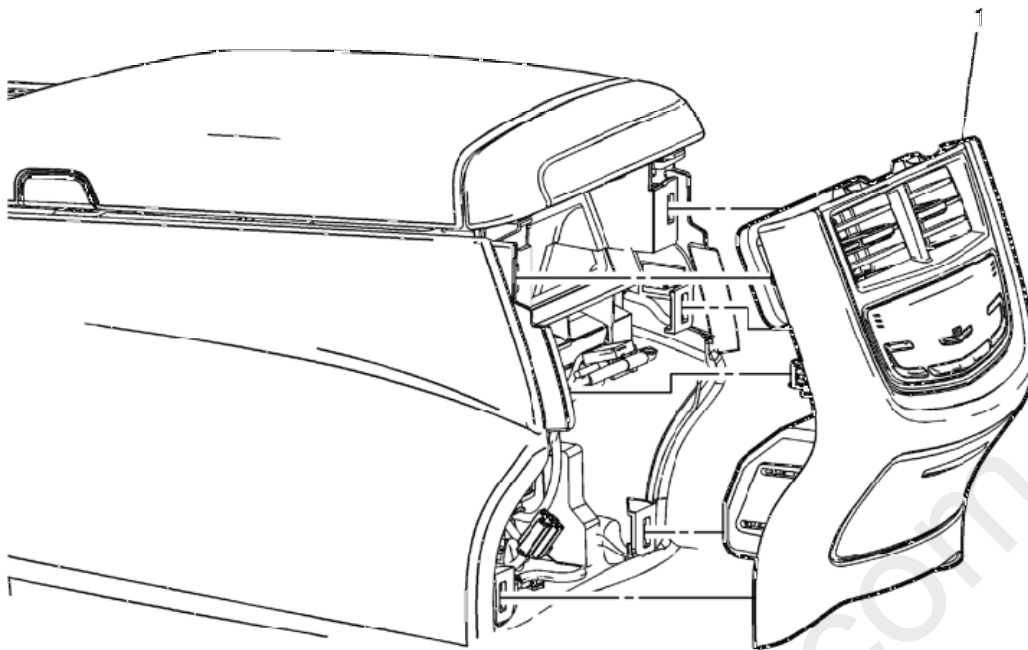


Fig. 78: Front Floor Console Rear Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Rear Trim Panel Replacement

Callout	Component Name
1	Front Floor Console Rear Trim Panel Procedures 1. Use a flat-bladed plastic trim tool to remove the cover from the console. 2. Disconnect all electrical connectors. 3. When replacing the console cover, transfer all necessary components.

FRONT FLOOR CONSOLE SIDE TRIM PANEL REPLACEMENT - RIGHT SIDE

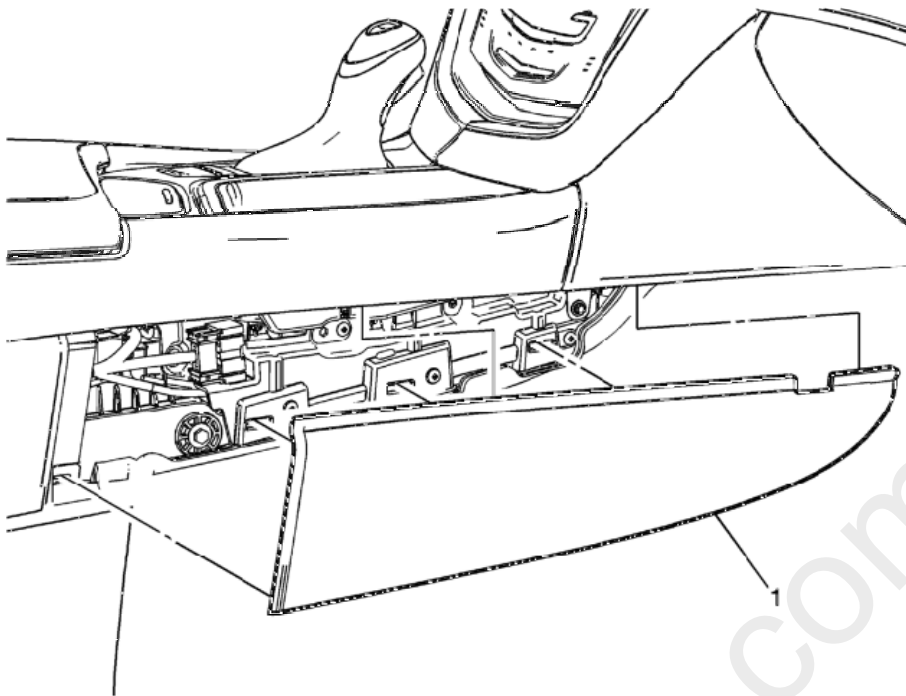


Fig. 79: Front Floor Console Side Trim Panel - Right Side
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Side Trim Panel Replacement - Right Side

Callout	Component Name
1	Front Floor Console Side Trim Panel - Right Side
Procedure Use a flat-bladed plastic trim tool to remove the trim panel from the console.	

FRONT FLOOR CONSOLE SIDE TRIM PANEL REPLACEMENT - LEFT SIDE

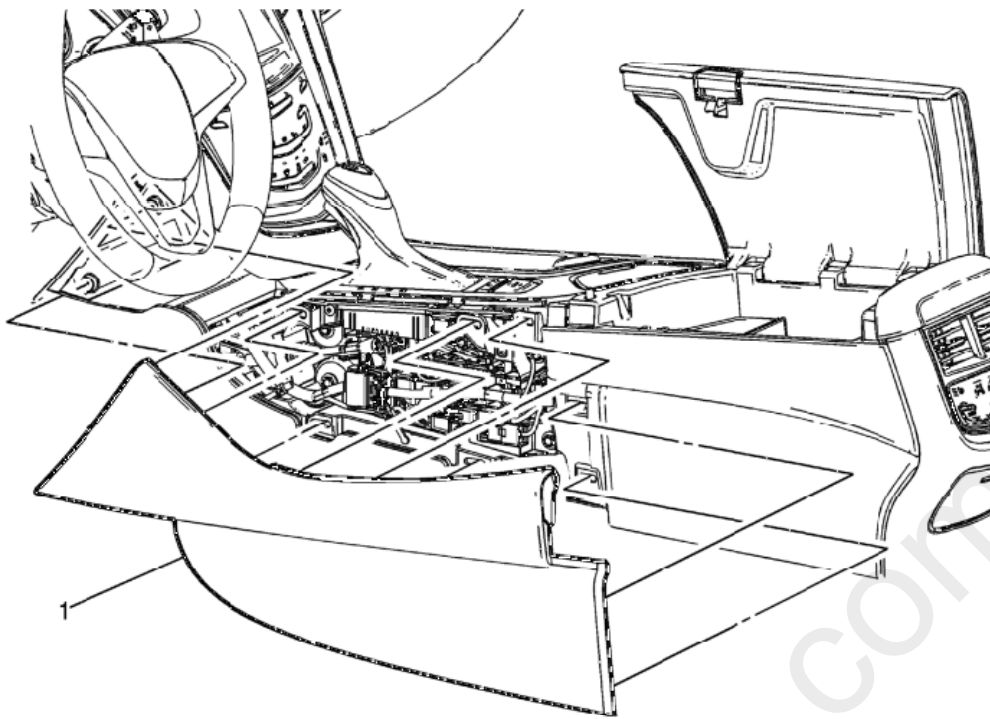


Fig. 80: Front Floor Console Side Trim Panel - Left Side
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Side Trim Panel Replacement - Left Side

Callout	Component Name
1	Front Floor Console Side Trim Panel - Left Side Procedures 1. Move the driver seat rearward. 2. Use a flat-bladed plastic trim tool to release the trim panel from the console.

FRONT FLOOR CONSOLE FRONT ASHTRAY REPLACEMENT

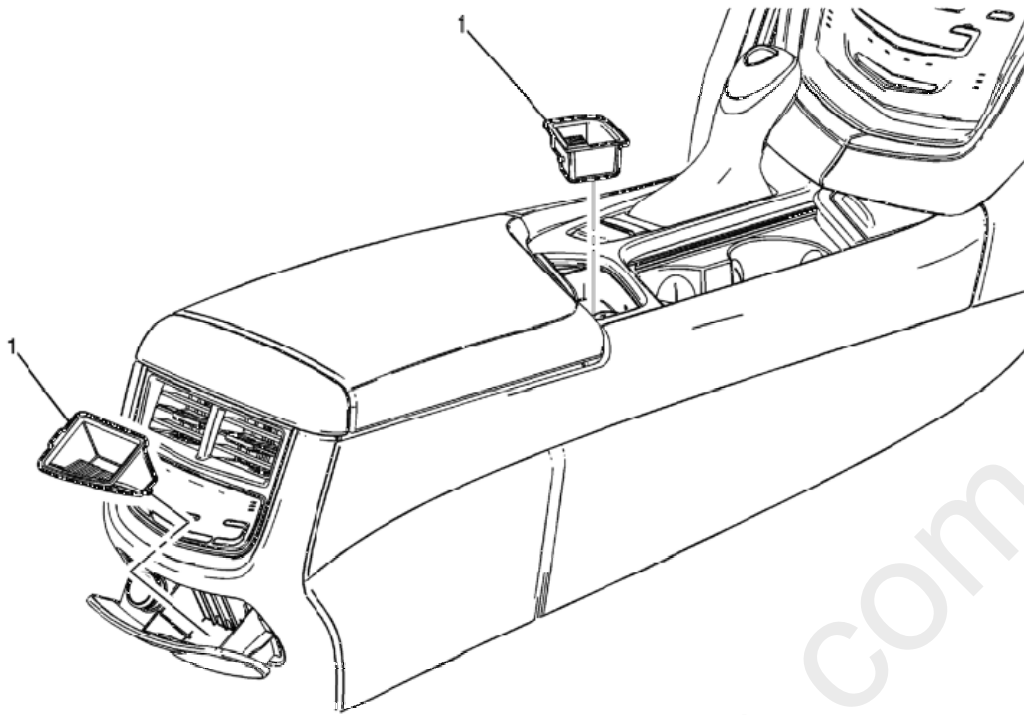


Fig. 81: Front Floor Console Front Ashtray
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Front Ashtray Replacement

Callout	Component Name
1	Front Floor Console Front Ashtray

FRONT FLOOR CONSOLE CUP HOLDER PLATE REPLACEMENT

Removal Procedure

1. Remove the transmission control lever knob. Refer to **Transmission Control Lever Knob Replacement** , or **Transmission Control Lever Knob Replacement** .
2. Remove the automatic transmission control indicator. Refer to **Automatic Transmission Control Indicator Replacement** .
3. Remove the right front floor rear console side trim panel. Refer to **Front Floor Rear Console Side Trim Panel Replacement - Right Side**.

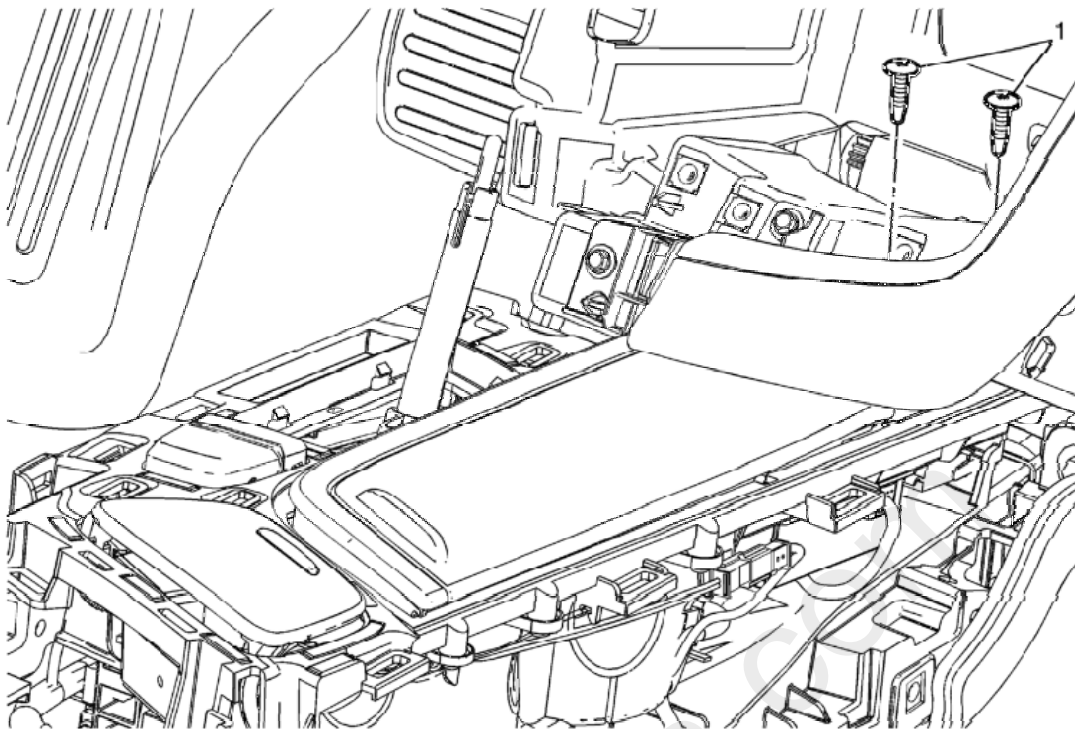


Fig. 82: Front Floor Console Trim Plate Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Remove the front floor console trim plate bolt (1) which secure the plate to the lower console.

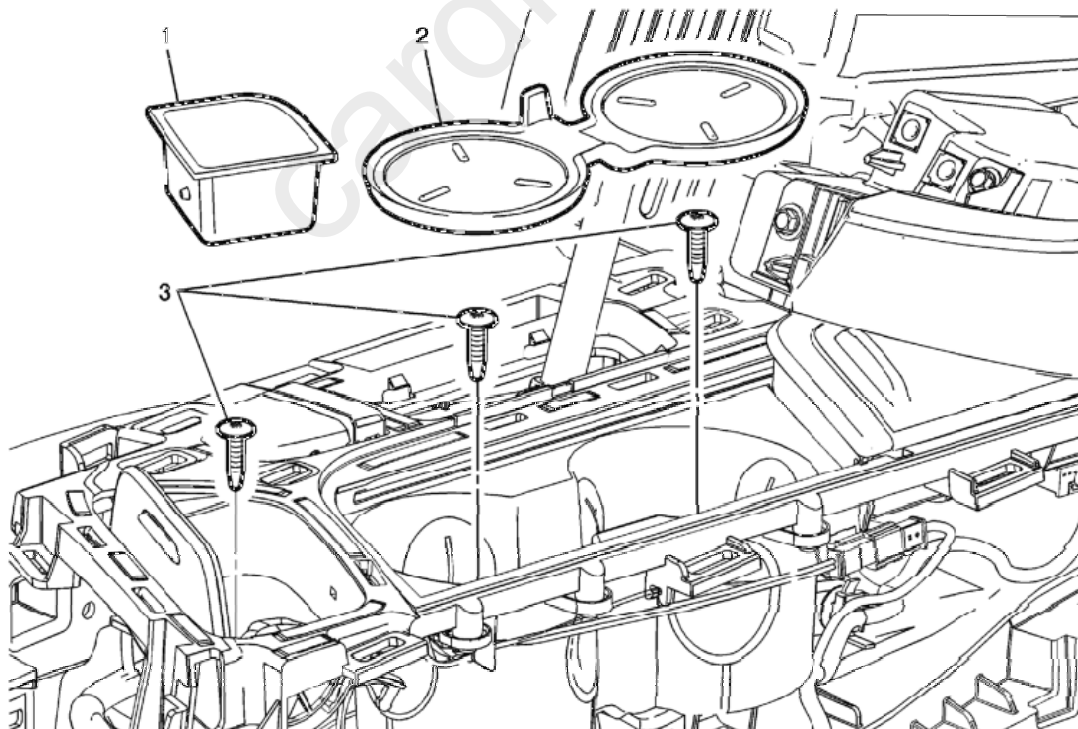


Fig. 83: Front Floor Console Front Compartment Liner
Courtesy of GENERAL MOTORS COMPANY

5. Open the compartments to remove the front floor console front compartment liner (1) and the front floor console cup holder liner (2) to access the hidden fasteners (3).

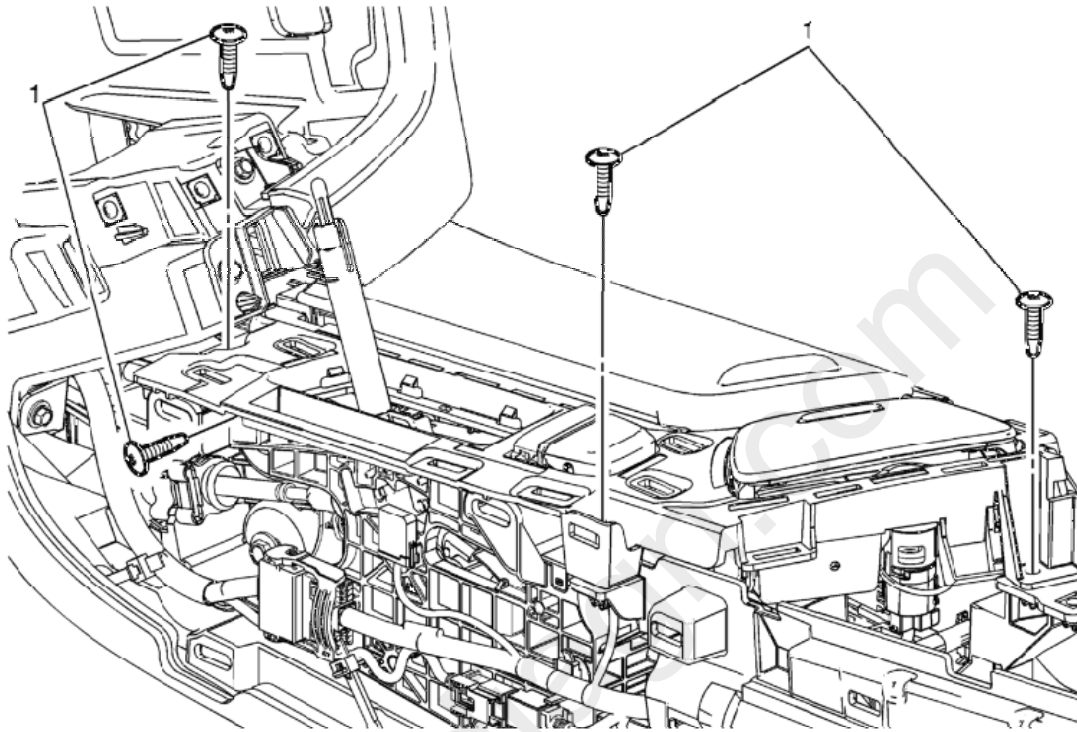


Fig. 84: Front Floor Console Trim Plate Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Remove the front floor console trim plate bolt (1) which secure the plate to the floor console assembly.

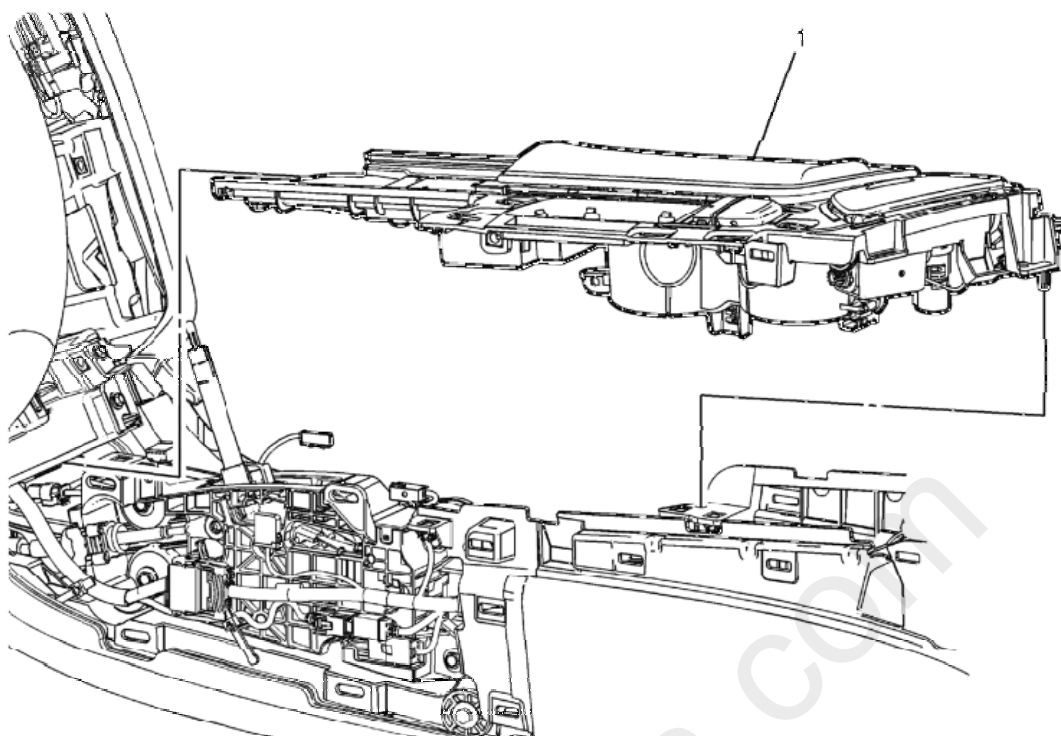


Fig. 85: Front Floor Console Cup Holder Plate
Courtesy of GENERAL MOTORS COMPANY

NOTE: The cup holder plate door motor assembly is not able to withstand any free falls without any damage to its components during the assembly processes. If the component is miss handled and dropped, the component is deemed nonfunctional and is not guaranteed to function properly. The motor assembly will need to be replaced.

7. Remove the front floor console cup holder plate (1) from the vehicle.
8. Disconnect the electrical connectors.
9. Transfer components as necessary.

Installation Procedure

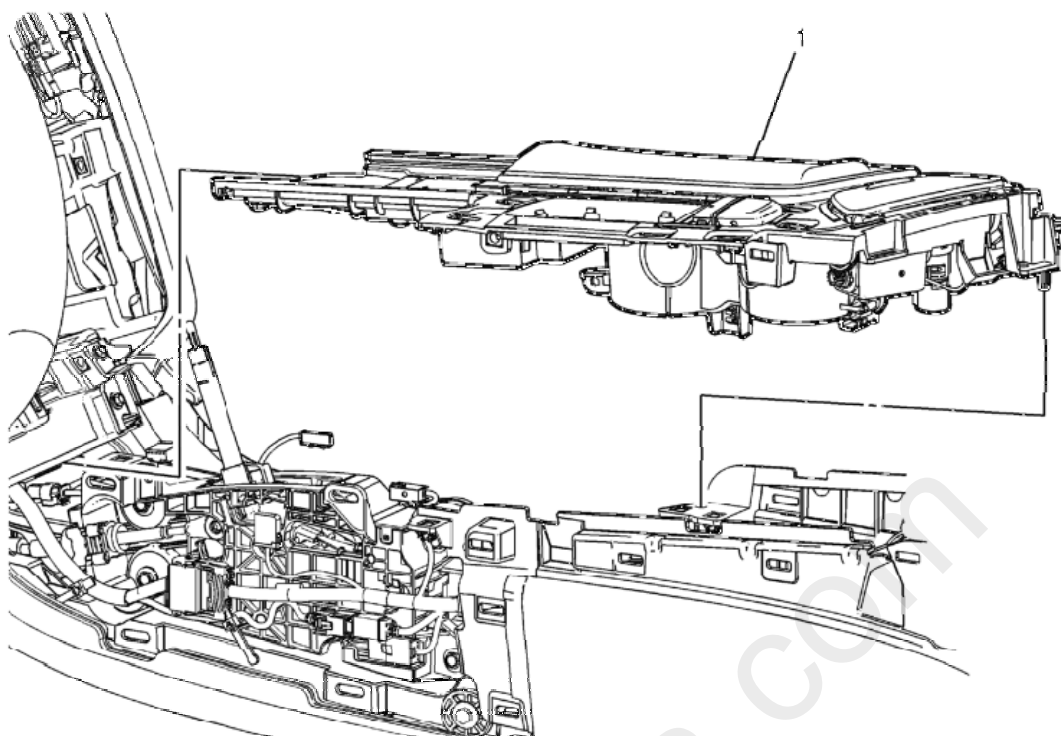


Fig. 86: Front Floor Console Cup Holder Plate
Courtesy of GENERAL MOTORS COMPANY

1. Install the front floor console cup holder plate (1) into the vehicle.

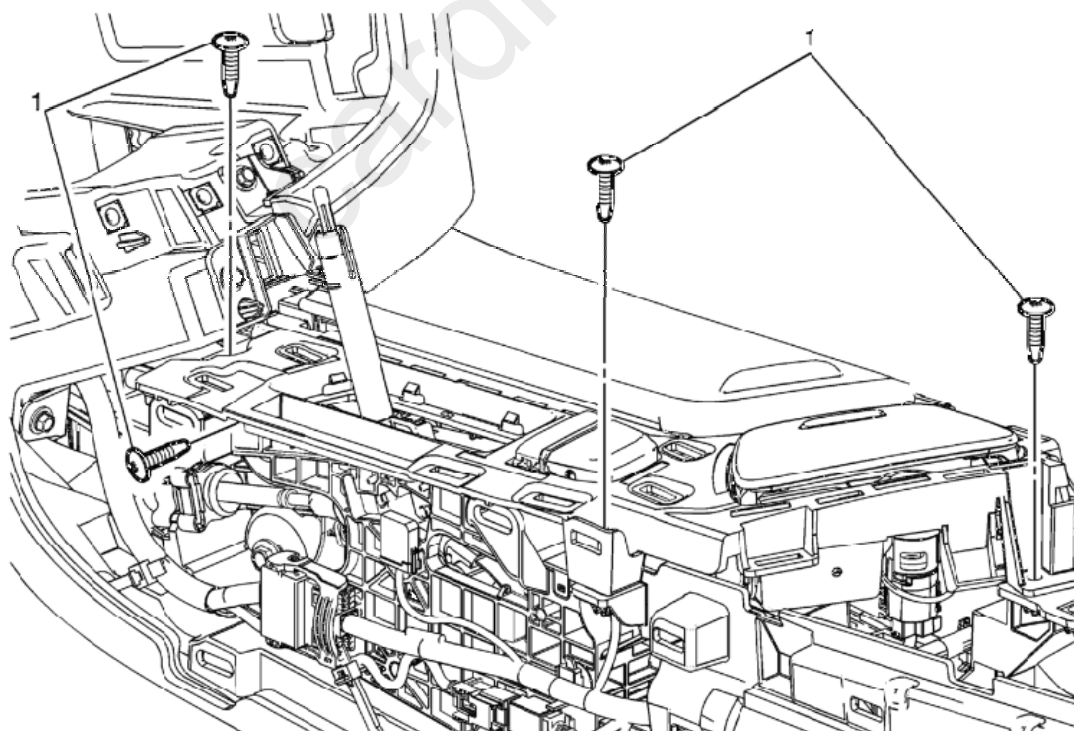


Fig. 87: Front Floor Console Trim Plate Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

2. Install the front floor console trim plate bolt (1) and tighten to 2.5 (22 lb in).

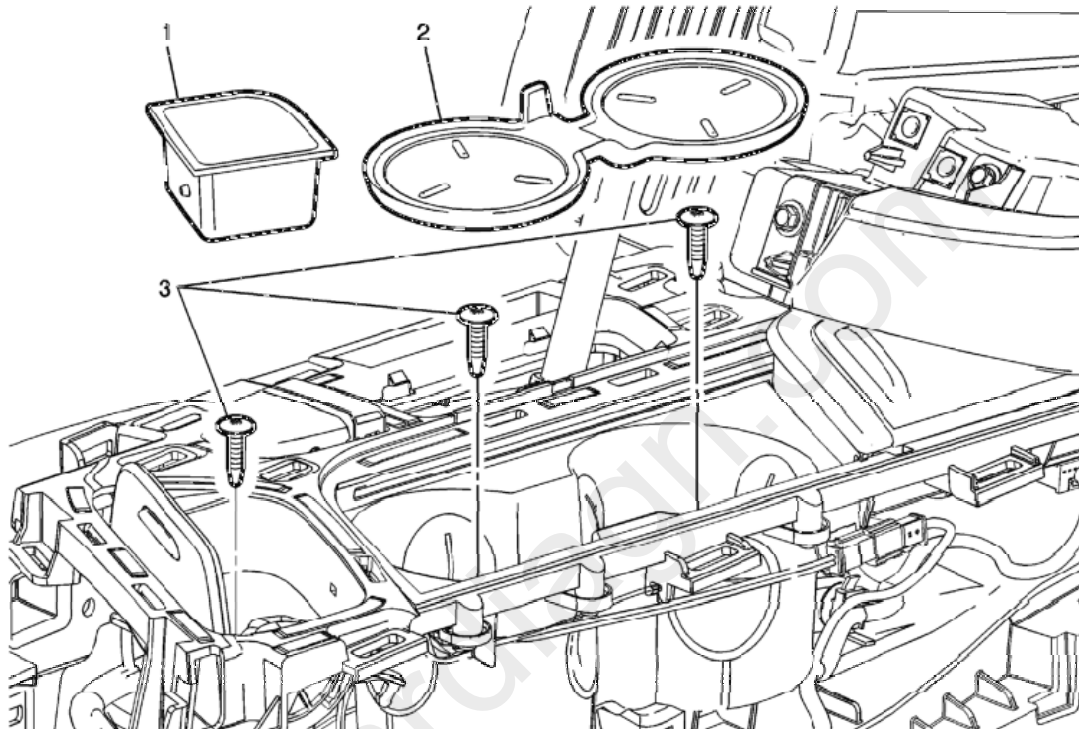


Fig. 88: Front Floor Console Front Compartment Liner
Courtesy of GENERAL MOTORS COMPANY

3. Install the front floor console trim plate bolt (3) and tighten to 2.5 (22 lb in). Return the front floor console front compartment liner (1) and the front floor console cup holder liner (2) to the compartments.

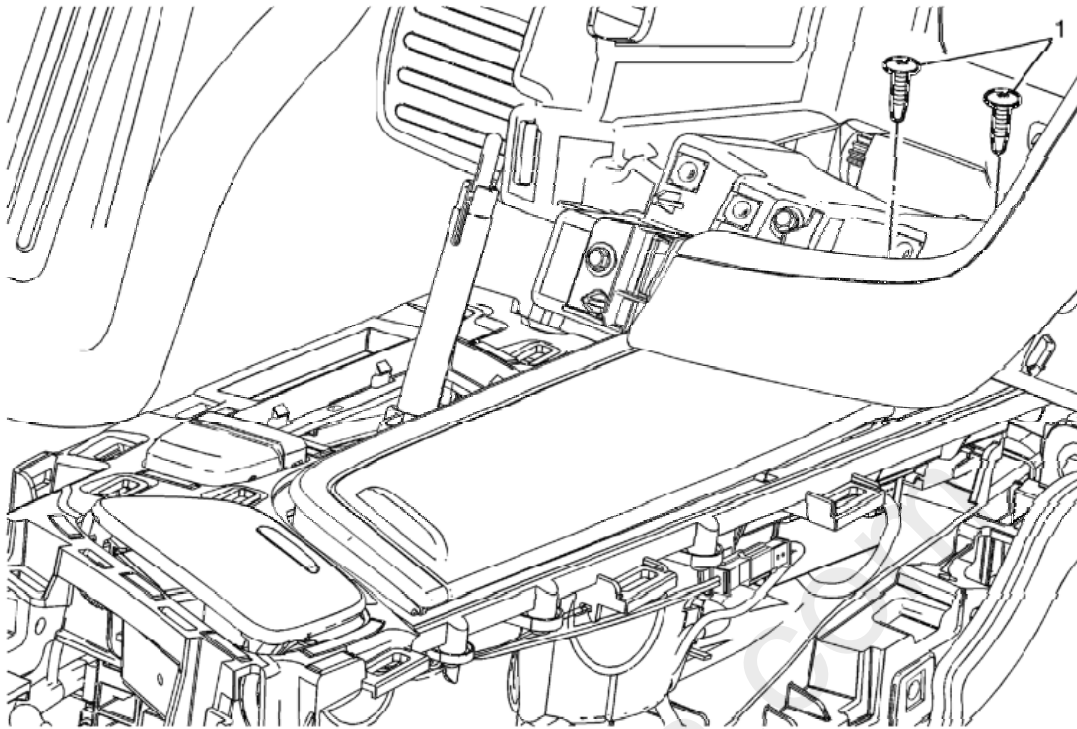


Fig. 89: Front Floor Console Trim Plate Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Install the front floor console trim plate bolt (1) and tighten to 2.5 (22 lb in).
5. Install the right front floor rear console side trim panel. Refer to **Front Floor Rear Console Side Trim Panel Replacement - Right Side**.
6. Install the automatic transmission control indicator. Refer to **Automatic Transmission Control Indicator Replacement**.
7. Install the transmission control lever knob. Refer to **Transmission Control Lever Knob Replacement**, or **Transmission Control Lever Knob Replacement**.

FRONT FLOOR CONSOLE REAR COMPARTMENT REPLACEMENT

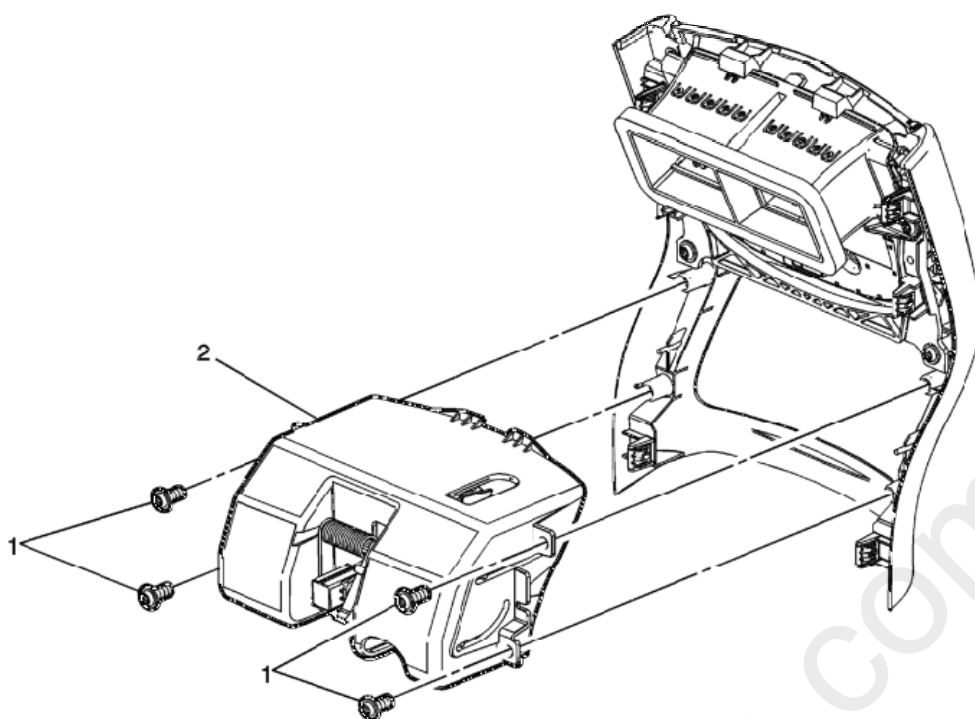


Fig. 90: Front Floor Console Rear Compartment
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Rear Compartment Replacement

Callout	Component Name
Preliminary Procedure Remove the front floor console rear trim panel. Refer to <u>Front Floor Console Rear Trim Panel Replacement</u> .	
1	Front Floor Console Rear Compartment Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Front Floor Console Rear Compartment Procedure Transfer components as necessary.

FRONT FLOOR CONSOLE REPLACEMENT

Removal Procedure

1. Remove the left front floor console side trim panel. Refer to **Front Floor Console Side Trim Panel**

Replacement - Left Side.

2. Remove the right instrument panel lower center trim panel. Refer to **Instrument Panel Lower Center Trim Panel Replacement (Right Side)**.

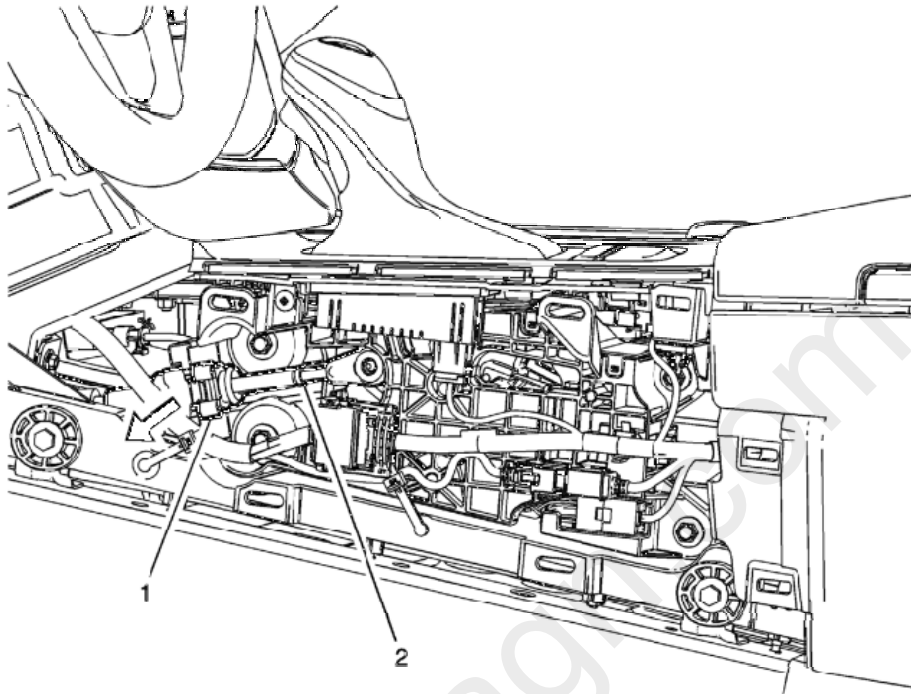


Fig. 91: Transmission Range Selector Lever Cable Retainer
Courtesy of GENERAL MOTORS COMPANY

3. Slide the transmission range selector lever cable retainer (1) forward and remove the transmission range selector cable from the transmission control base.
4. Disconnect the transmission range selector lever cable terminal (2) from the shift pin.

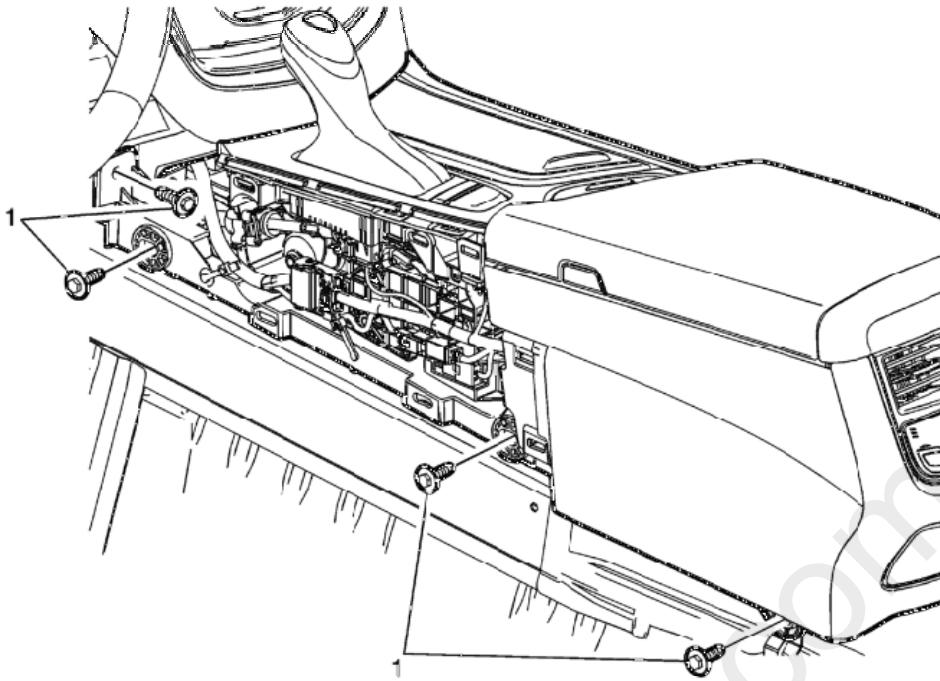


Fig. 92: Front Floor Console Bolt
Courtesy of GENERAL MOTORS COMPANY

NOTE: Reposition the rear carpet and the driver seat as necessary to access the rear console bolt.

5. Remove the front floor console bolt (1) which secure the floor console assembly to the instrument panel and floor.

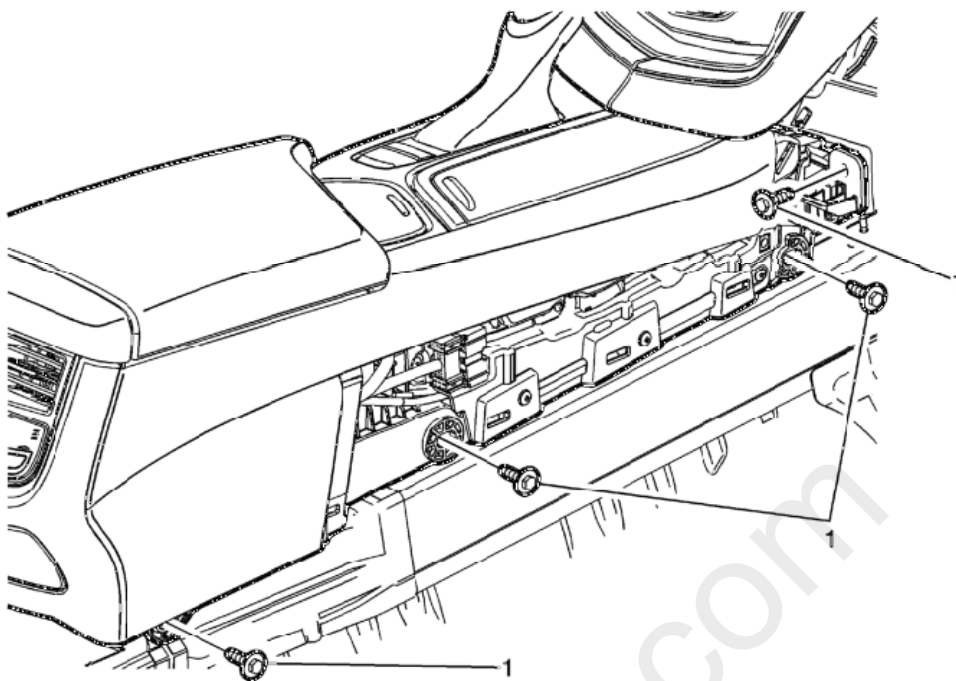


Fig. 93: Front Floor Console Bolt
Courtesy of GENERAL MOTORS COMPANY

NOTE: Reposition the rear carpet and the passenger seat as necessary to access the rear console bolt.

6. Remove the front floor console bolt (1) which secure the floor console assembly to the instrument panel and floor.

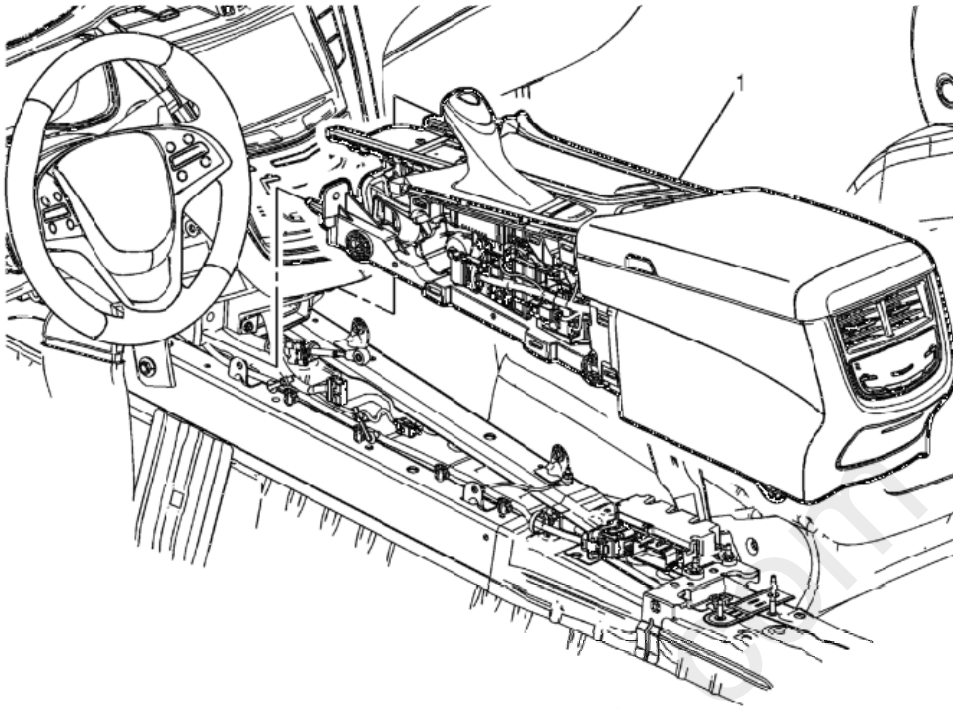


Fig. 94: Front Floor Console
Courtesy of GENERAL MOTORS COMPANY

7. Disconnect all electrical connectors.
8. With the aid of an assistant lift the front floor console assembly (1) rearward and upward away from the instrument panel assembly. Careful not to damage the front floor console cup holder plate.
9. Transfer components as necessary.

Installation Procedure

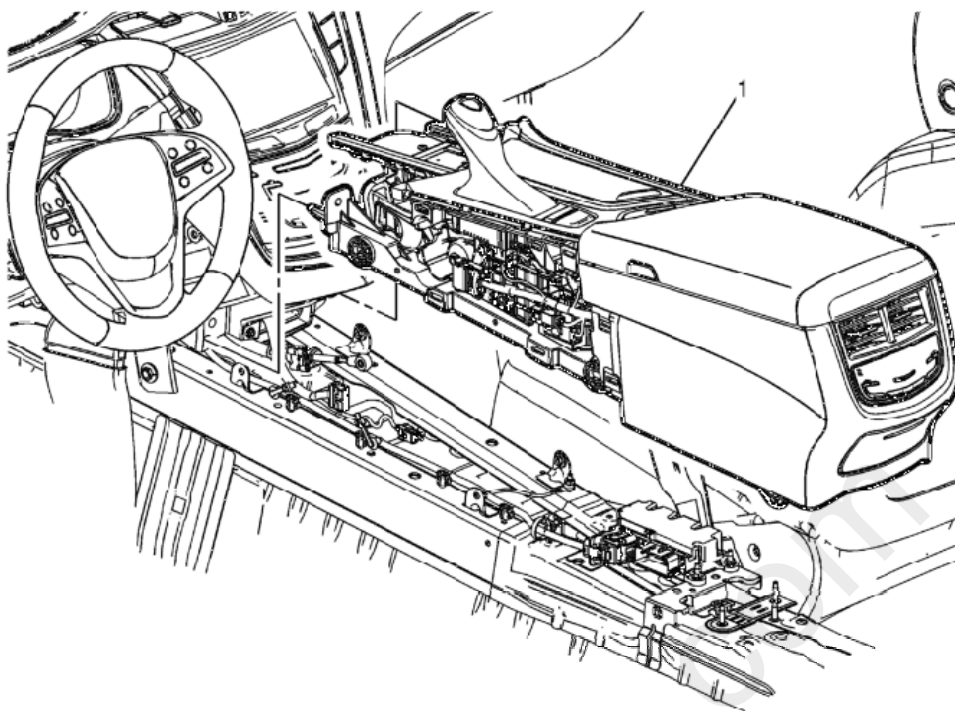


Fig. 95: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

1. Install the front floor console assembly (1) into the vehicle.
2. Connect all electrical connectors.

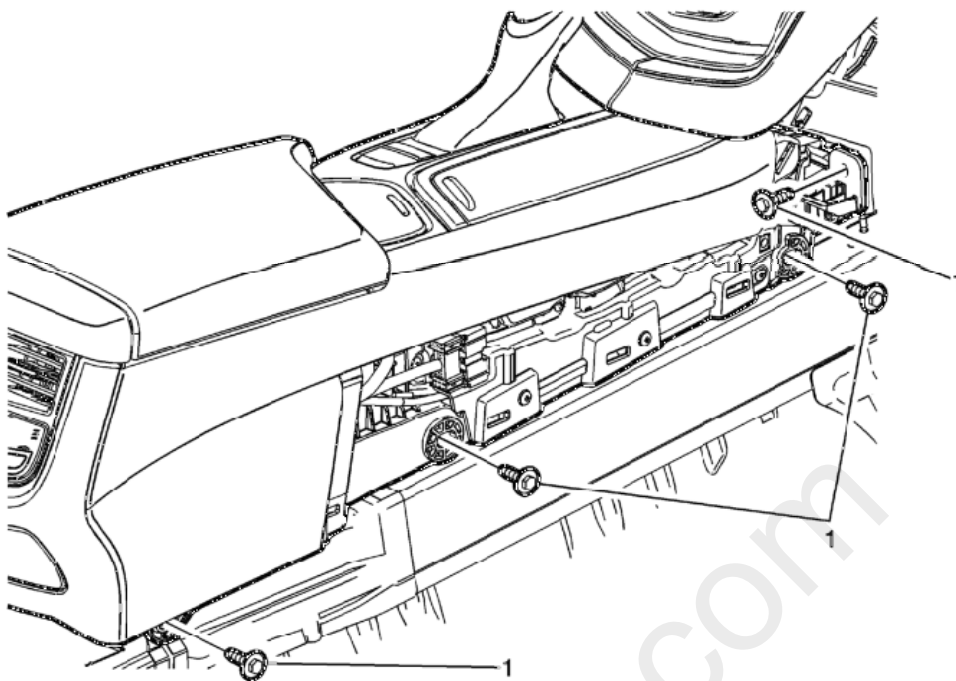


Fig. 96: Front Floor Console Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the front floor console bolt (1) and tighten to 9 (80 lb in).

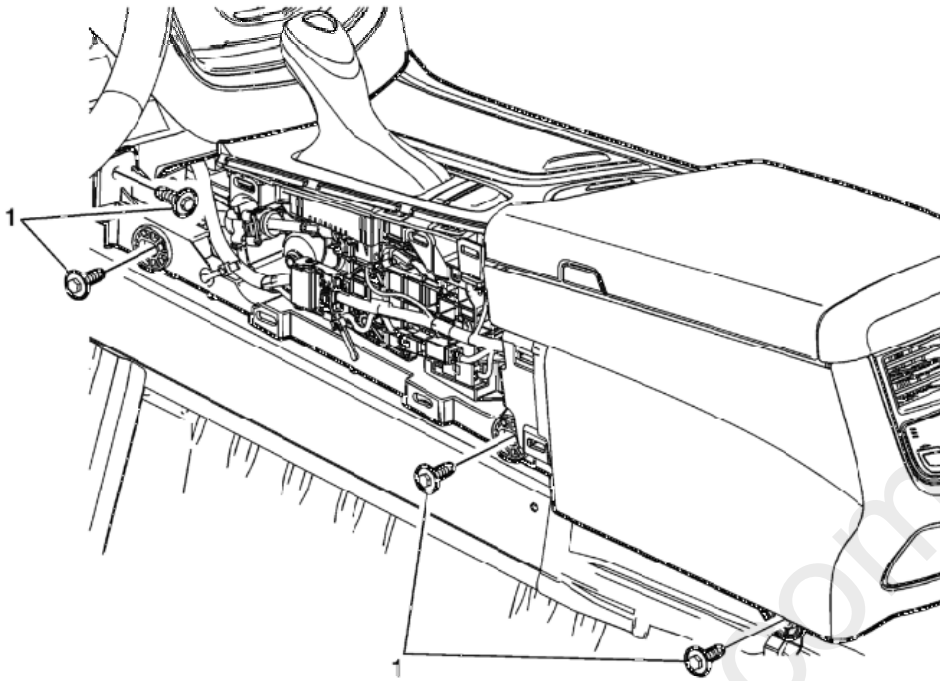


Fig. 97: Front Floor Console Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Install the front floor console bolt (1) and tighten to 9 (80 lb in).

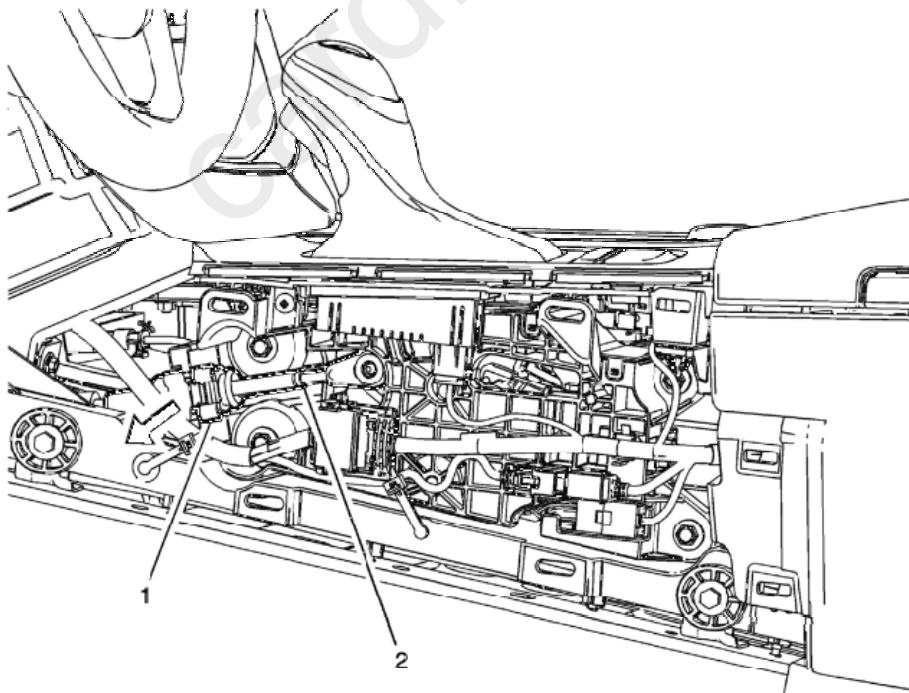


Fig. 98: Transmission Range Selector Lever Cable Retainer
 Courtesy of GENERAL MOTORS COMPANY

5. Connect the transmission range selector lever cable terminal (2) to the shift pin.
6. Install the transmission range selector cable (1) to the transmission control base by pressing down until it seats into place.
7. Install the right instrument panel lower center trim panel. Refer to **Instrument Panel Lower Center Trim Panel Replacement (Right Side)**, **Instrument Panel Lower Center Trim Panel Replacement (Left Side)**.
8. Install the left front floor console side trim panel. Refer to **Front Floor Console Side Trim Panel Replacement - Left Side**.

FRONT FLOOR LOWER CONSOLE REPLACEMENT

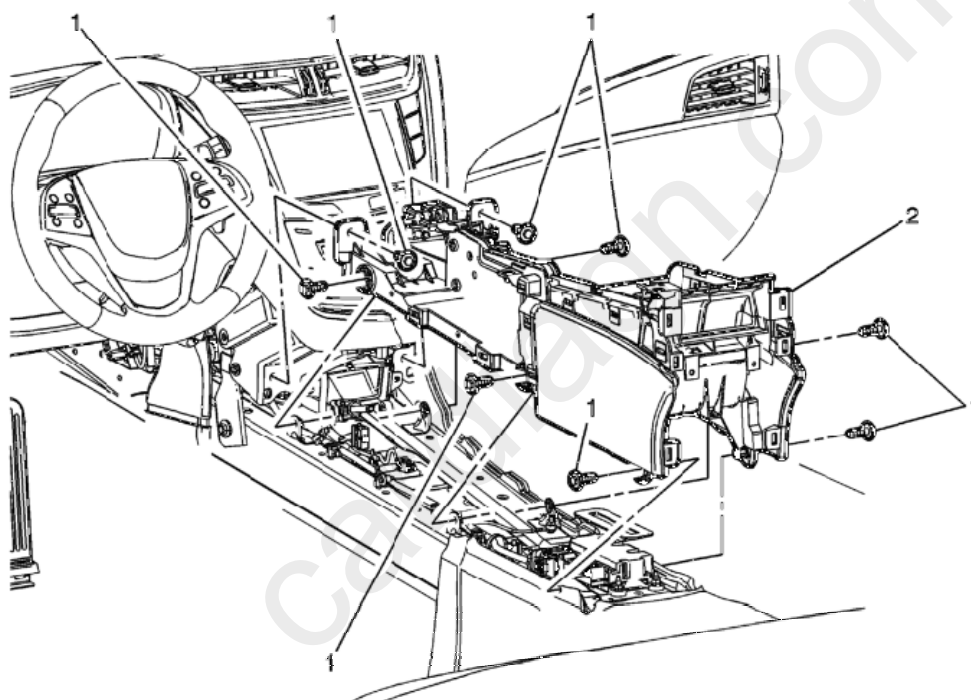


Fig. 99: Front Floor Lower Console
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Lower Console Replacement

Callout	Component Name
Preliminary Procedures	
1.	Remove the front floor console cup holder plate. Refer to <u>Front Floor Console Cup Holder Plate Replacement</u> .
2.	Remove the left front floor rear console side trim panel. Refer to <u>Front Floor Rear Console Side Trim Panel Replacement - Left Side</u> .

3. Remove the transmission control. Refer to <u>Transmission Control Replacement</u> .	
1	Front Floor Console Fastener (Qty: 8) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 9 (80 lb in)
2	Front Floor Lower Console Procedure 1. Disconnect electrical connections. 2. With the aid of an assistant lift the front floor lower console rearward and upward away from the instrument panel assembly. 3. Transfer components as necessary.

FRONT FLOOR REAR CONSOLE SIDE TRIM PANEL REPLACEMENT - LEFT SIDE

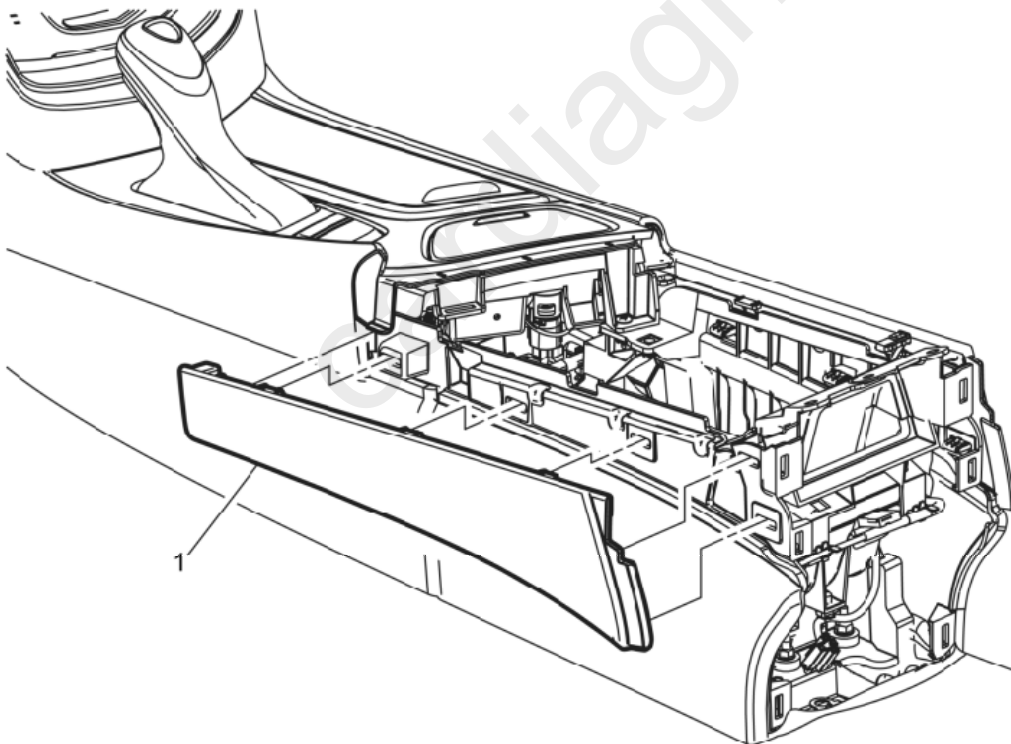


Fig. 100: Front Floor Rear Console Side Trim Panel - Left Side
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Rear Console Side Trim Panel Replacement - Left Side

Callout	Component Name
Preliminary Procedure Remove the front floor console compartment. Refer to <u>Front Floor Console Compartment Replacement</u> .	
1	Front Floor Rear Console Side Trim Panel - Left Side Procedures 1. Position the driver seat as necessary to access the panel. 2. Use a flat-bladed plastic trim tool to remove the trim panel from the console.

FRONT FLOOR REAR CONSOLE SIDE TRIM PANEL REPLACEMENT - RIGHT SIDE

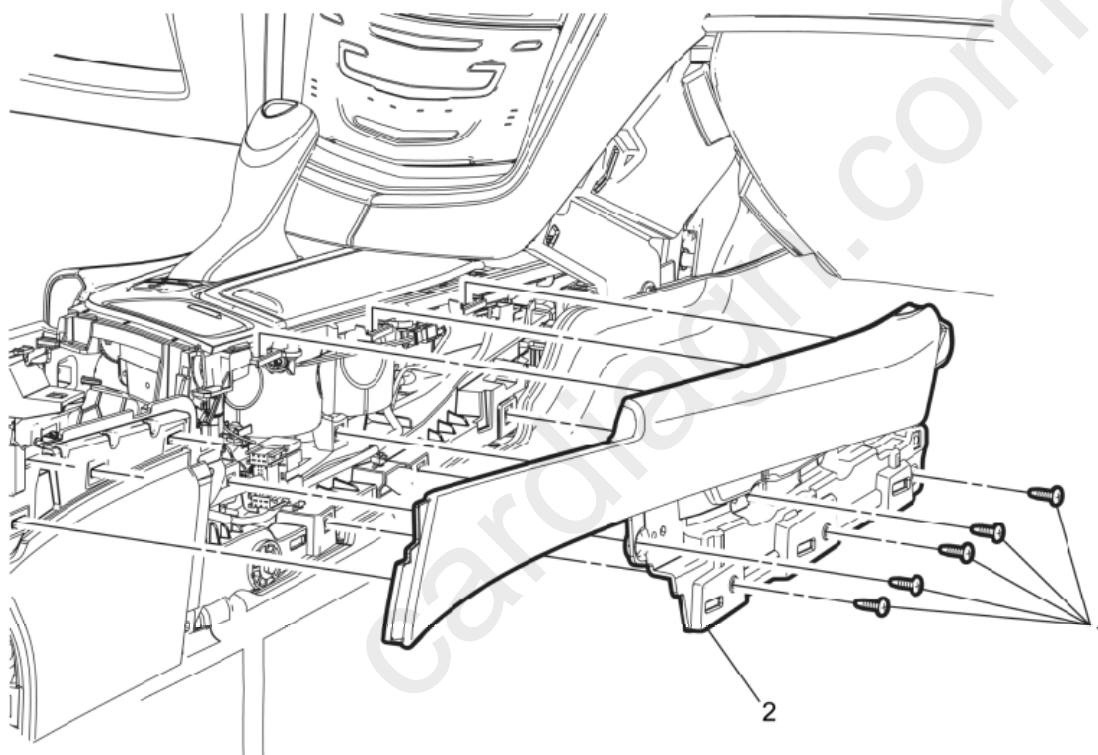


Fig. 101: Front Floor Rear Console Side Trim Panel - Right Side
Courtesy of GENERAL MOTORS COMPANY

Front Floor Rear Console Side Trim Panel Replacement - Right Side

Callout	Component Name
Preliminary Procedures 1. Remove the front floor console compartment. Refer to <u>Front Floor Console Compartment Replacement</u>. 2. Remove the rear instrument panel lower center trim panel. Refer to <u>Instrument Panel Lower Center Trim Panel Replacement (Right Side)</u>, <u>Instrument Panel Lower Center Trim Panel</u>	

Replacement (Left Side).

1	Front Floor Console Trim Plate Bolt (Qty: 5) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Front Floor Rear Console Side Trim Panel Procedures 1. Remove the four electrical harness retainers and reposition the harness. 2. Move the passenger seat rearward and recline. 3. Use a flat-bladed plastic trim tool to remove the trim panel from the console. 4. Pull outward at the rear of the trim panel and upward at the front. Roll the front edge of the trim panel out from under the instrument panel.

FRONT FLOOR CONSOLE BRACKET REPLACEMENT

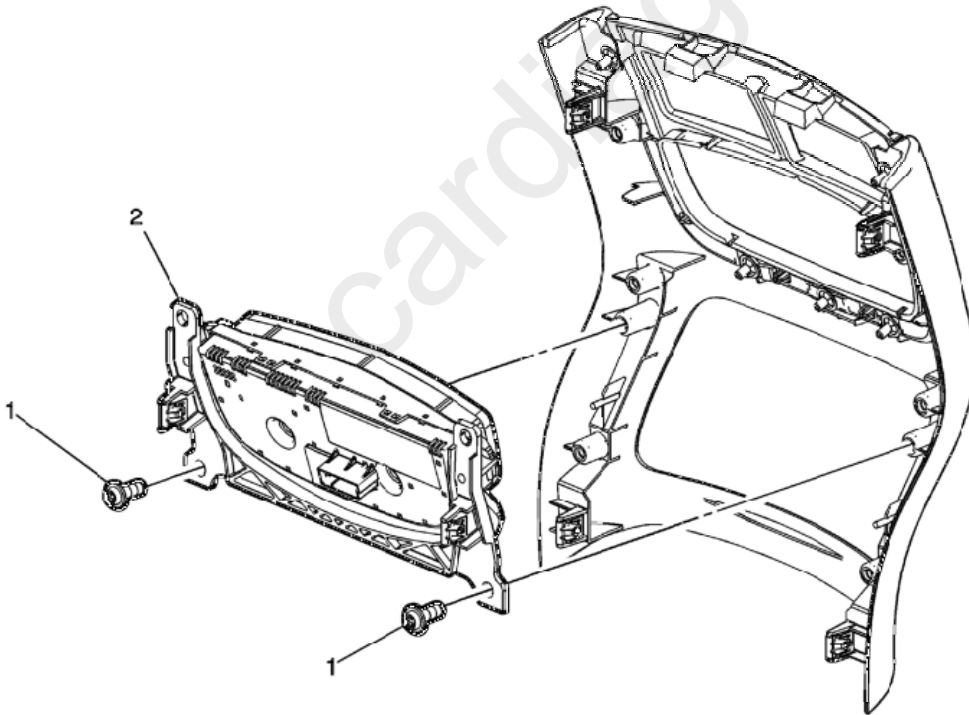


Fig. 102: Front Floor Console Bracket
Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Bracket Replacement

Callout	Component Name
Preliminary Procedure Remove the front floor console rear air outlet. Refer to <u>Front Floor Console Rear Air Outlet Replacement</u> .	
1	Front Floor Console Rear Compartment Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Front Floor Console Bracket Procedure Transfer components as necessary.

FRONT FLOOR CONSOLE ARMREST REPLACEMENT

Removal Procedure

1. Remove the front floor console compartment. Refer to **Front Floor Console Compartment Replacement**.

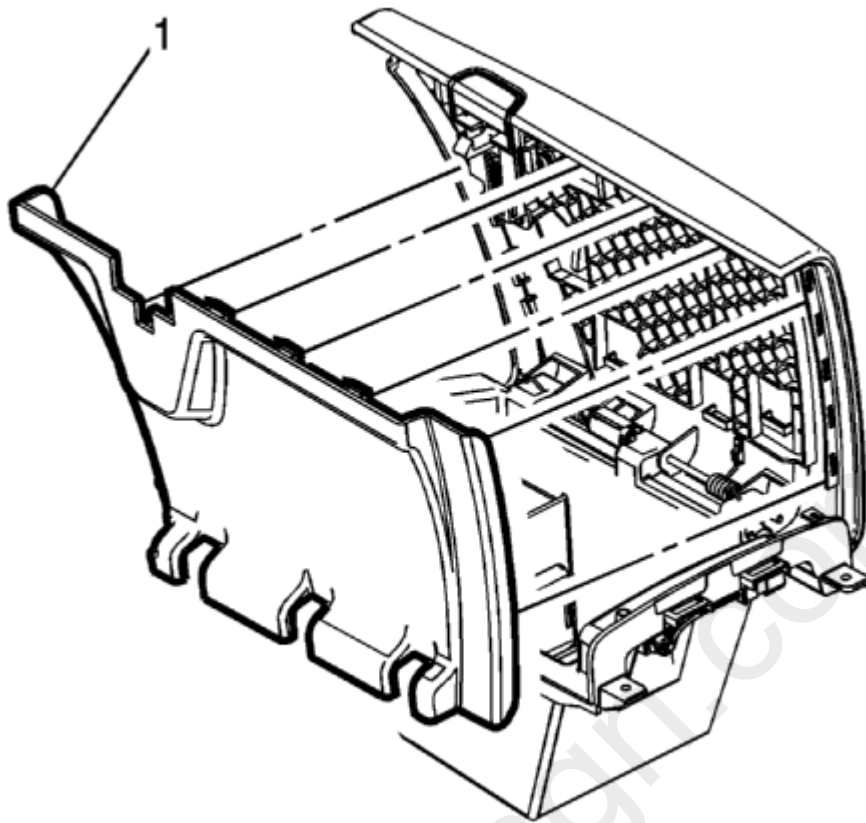


Fig. 103: Front Floor Console Armrest Hinge
Courtesy of GENERAL MOTORS COMPANY

2. Use a plastic flat bladed tool to release the front floor console armrest hinge (1) from the armrest assembly.

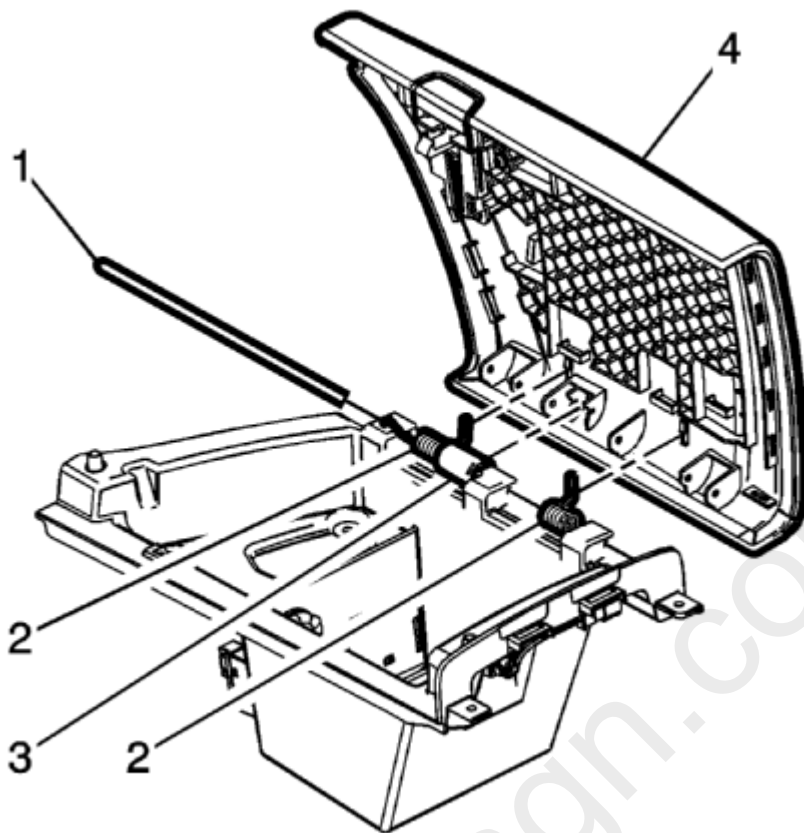


Fig. 104: Front Floor Console Armrest Hinge Pin
Courtesy of GENERAL MOTORS COMPANY

3. Use a suitable tool to pull the front floor console armrest hinge pin (1) forward in the vehicle to access the front floor console armrest hinge spring (2) and the front floor console armrest dampener (3).
4. Remove the front floor console armrest (4).

Installation Procedure

1. When replacing the front floor console armrest, transfer all necessary components.

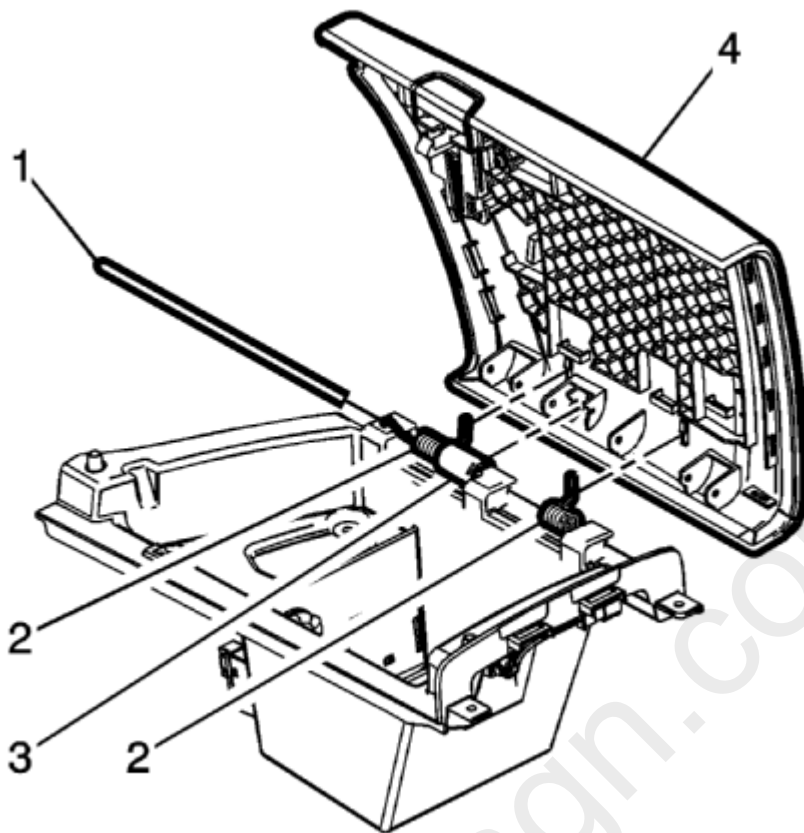


Fig. 105: Front Floor Console Armrest Hinge Pin
Courtesy of GENERAL MOTORS COMPANY

2. Install the front floor console armrest hinge spring (2) and the front floor console armrest dampener (3) to the front floor console armrest (4).
3. Install the front floor console armrest hinge pin (1).

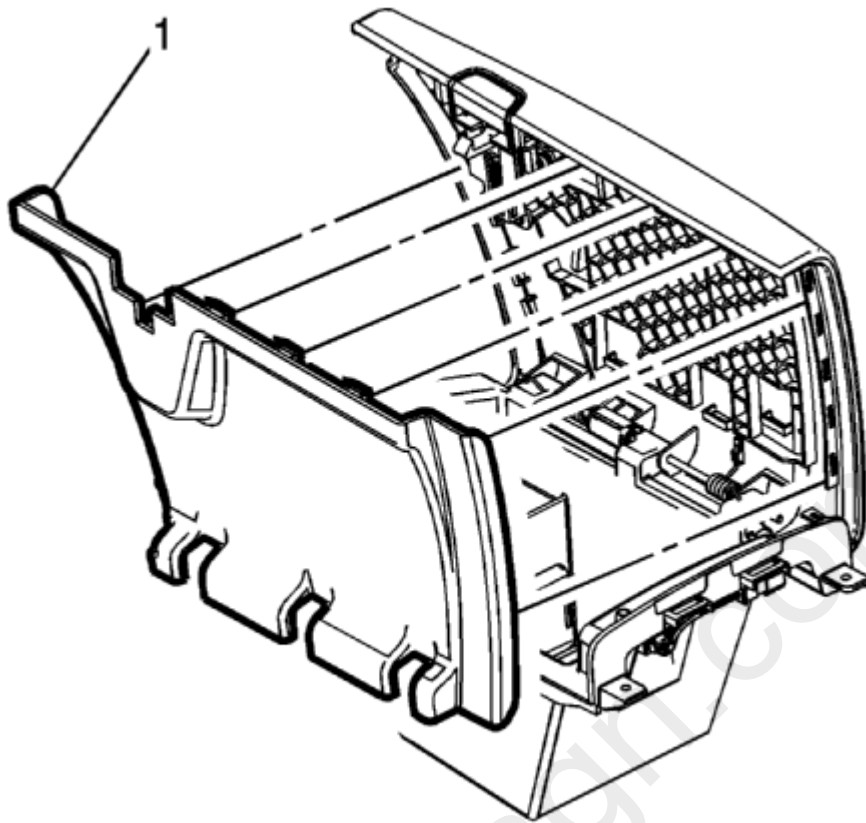


Fig. 106: Front Floor Console Armrest Hinge
Courtesy of GENERAL MOTORS COMPANY

4. Install the front floor console armrest hinge (1) to the armrest assembly.
5. Install the front floor console compartment. Refer to **Front Floor Console Compartment Replacement**.

FRONT FLOOR CONSOLE ARMREST HINGE COVER REPLACEMENT

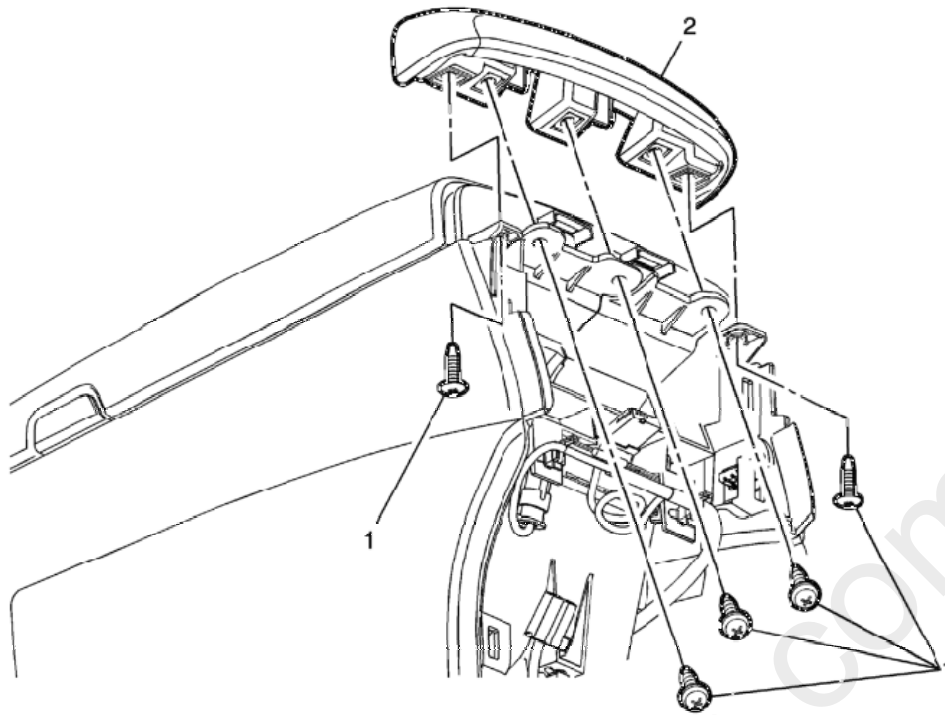


Fig. 107: Front Floor Console Armrest Hinge Cover
 Courtesy of GENERAL MOTORS COMPANY

Front Floor Console Armrest Hinge Cover Replacement

Callout	Component Name
Preliminary Procedure Remove the front floor console rear trim panel. Refer to <u>Front Floor Console Rear Trim Panel Replacement</u> .	
1	Front Floor Console Trim Plate Bolt (Qty: 5) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 (22 lb in)
2	Front Floor Console Armrest Hinge Cover

ROOF CONSOLE REPLACEMENT

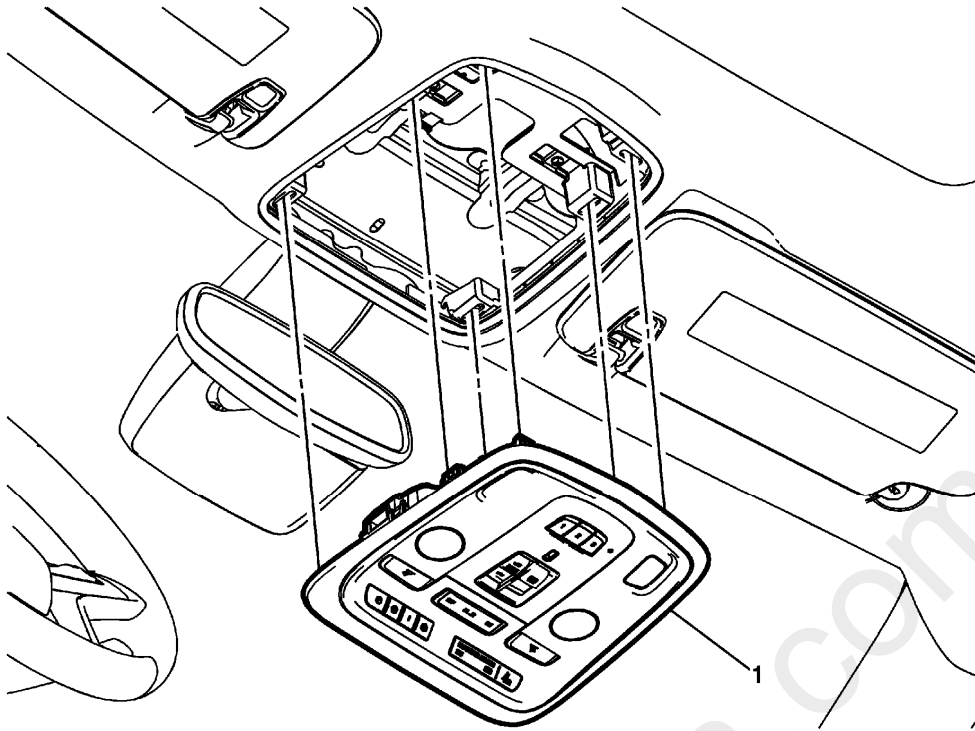


Fig. 108: Roof Console Assembly
 Courtesy of GENERAL MOTORS COMPANY

Roof Console Replacement

Callout	Component Name
1	Roof Console Assembly Procedure 1. Use a flat-bladed plastic trim tool to release the 6 retainers securing the roof console to the headliner. 2. Disconnect the electrical connections. 3. When replacing the roof console assembly, transfer all necessary components.

ROOF CONSOLE ACCESSORY SWITCH TRIM PLATE REPLACEMENT

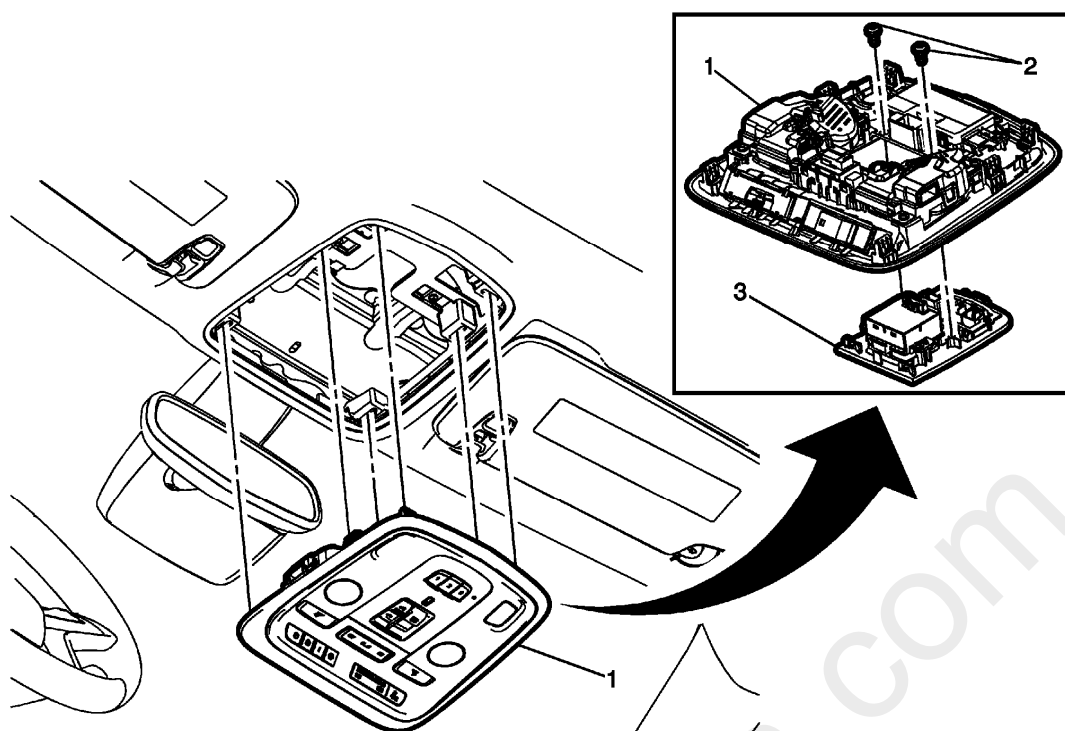


Fig. 109: Roof Console Accessory Switch Trim Plate & Fasteners
 Courtesy of GENERAL MOTORS COMPANY

Roof Console Accessory Switch Trim Plate Replacement

Callout	Component Name
1	Roof Console Refer to <u>Roof Console Replacement</u> .
2	Roof Console Accessory Switch Trim Plate Fasteners (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> .
3	Roof Console Accessory Switch Trim Plate Procedure When replacing the roof console accessory switch trim plate, transfer all necessary components.

ROOF CONSOLE OPENING TRIM PLATE REPLACEMENT

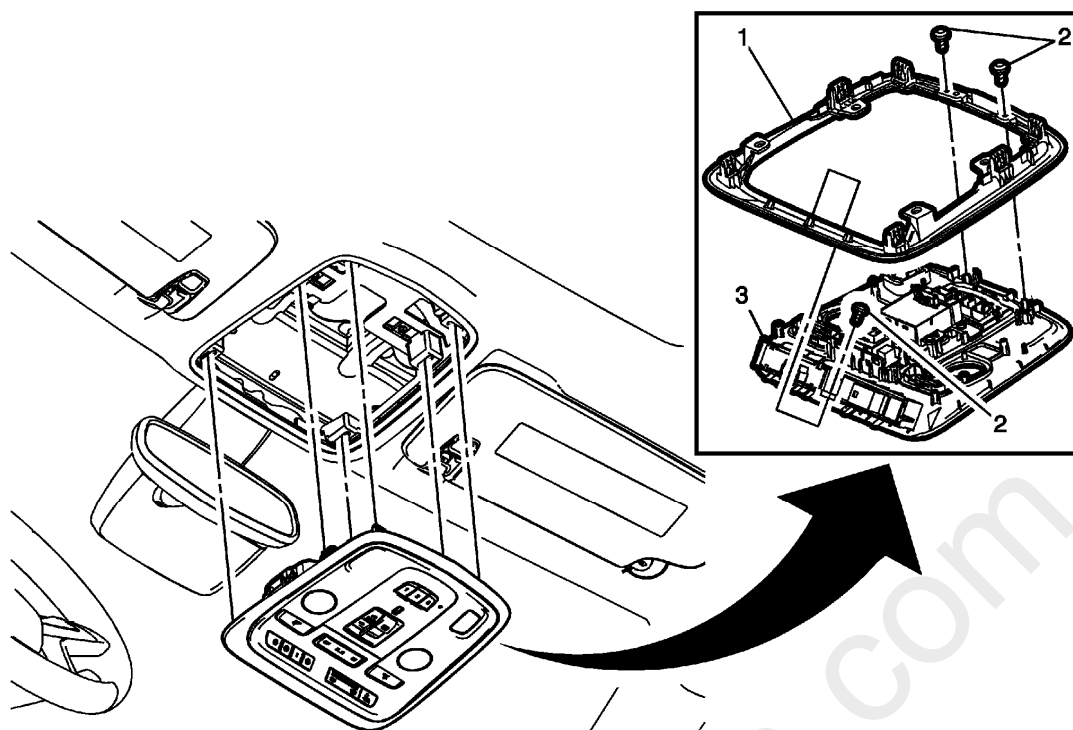


Fig. 110: Roof Console, Opening Trim Plate & Fasteners
Courtesy of GENERAL MOTORS COMPANY

Roof Console Opening Trim Plate Replacement

Callout	Component Name
Preliminary Procedure Remove the center reading and courtesy lamp. Refer to <u>Center Reading and Courtesy Lamp Replacement</u> .	
1	Roof Console
2	Roof Console Opening Trim Plate Fasteners (Qty: 3) CAUTION: Refer to <u>Fastener Caution</u> .
3	Roof Console Opening Trim Plate Procedure When replacing the roof console opening trim plate, transfer all necessary components.

DESCRIPTION AND OPERATION

INSTRUMENT PANEL COMPARTMENT DESCRIPTION AND OPERATION

Instrument Panel Compartment Door Release System Components

- Body control module (BCM)

- Glove compartment release switch
- Instrument panel compartment door unlatch actuator
- Instrument panel compartment door unlatch actuator relay

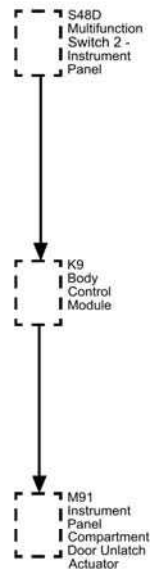


Fig. 111: Instrument Panel Compartment Door Unlatch Actuator Wiring Schematic
 Courtesy of GENERAL MOTORS COMPANY

Instrument Panel Compartment Door Release Operation

When the glove compartment release switch is pressed, the instrument panel compartment release switch signal circuit is switched to ground. The BCM responds by applying battery voltage to the relay control circuit which energizes the relay. The relay is supplied with battery voltage at all times from a 10A fuse. With the relay coil energized, the relay switch contacts close allowing battery voltage to be supplied to the instrument panel compartment door unlatch actuator causing the actuator to release. The glove compartment release switch ground is part of instrument panel multifunction switch 2.