

2017 ACCESSORIES & EQUIPMENT**Instrument Panel and Console Trim - Encore, Trax****SPECIFICATIONS****FASTENER SPECIFICATIONS****Reusable Threaded Fastener Tightening Specifications**

NOTE: <i>All fasteners listed in this table can be reused after removal.</i>	
Application	Specification
	Metric (English)
Front Floor Console Bolt	2.5 N.m (22 lb in)
Front Floor Console Cup Holder Fastener	2.5 N.m (22 lb in)
Front Floor Console Fastener	2.5 N.m (22 lb in)
Front Floor Lower Console Bolt	2.5 N.m (22 lb in)
Instrument Panel Accessory Bezel Bolt	2.5 N.m (22 lb in)
Instrument Panel Accessory Trim Center Plate Bolt	9 N.m (80 lb in)
Instrument Panel Airbag Bolt	2.5 N.m (22 lb in)
Instrument Panel Bolt	2.5 N.m (22 lb in)
Instrument Panel Compartment Bolt	9 N.m (80 lb in)
Instrument Panel Compartment Door Latch Striker Bolt	9 N.m (80 lb in)
Instrument Panel Driver Knee Bolster Inner Bracket Bolt	9 N.m (80 lb in)
Instrument Panel Knee Bolster Bolt	2.5 N.m (22 lb in)
Instrument Panel Knee Bolster Fastener	2.5 N.m (22 lb in)
Instrument Panel Knee Bolster Outer Bracket Bolt	9 N.m (80 lb in)
Instrument Panel Knee Bolster Outer Bracket Nut	9 N.m (80 lb in)
Instrument Panel Lower Trim Panel Insulator Bolt	1.8 N.m (16 lb in)
Instrument Panel Retainer Bolt	2.5 N.m (22 lb in)
Instrument Panel Tie Bar Assembly to the Brake Pedal Bracket Bolt	9 N.m (80 lb in)
Instrument Panel Tie Bar Assembly to the Cowl Panel Nut	22 N.m (16 lb in)
Instrument Panel Tie Bar Lower Support Bracket to the Front Floor Tunnel Panel Bolt	22 N.m (26 lb in)
Instrument Panel Tie Bar to the Brake Pedal Mounting Bracket Bolt	22 N.m (16 lb ft)
Instrument Panel Tie Bar to the HVAC Module Fastener	9 N.m (80 lb in)
Instrument Panel Tie Bar to the Vehicle Body Bolt	22 N.m (16 lb ft)
Instrument Panel Trim Plate Applique Bolt	2.5 N.m (22 lb in)
Radio Control Bolt	2.5 N.m (22 lb in)
Roof Console Fastener	2.5 N.m (22 lb in)

REPAIR INSTRUCTIONS**INSTRUMENT PANEL LOWER TRIM PANEL INSULATOR REPLACEMENT (CHEVROLET)**

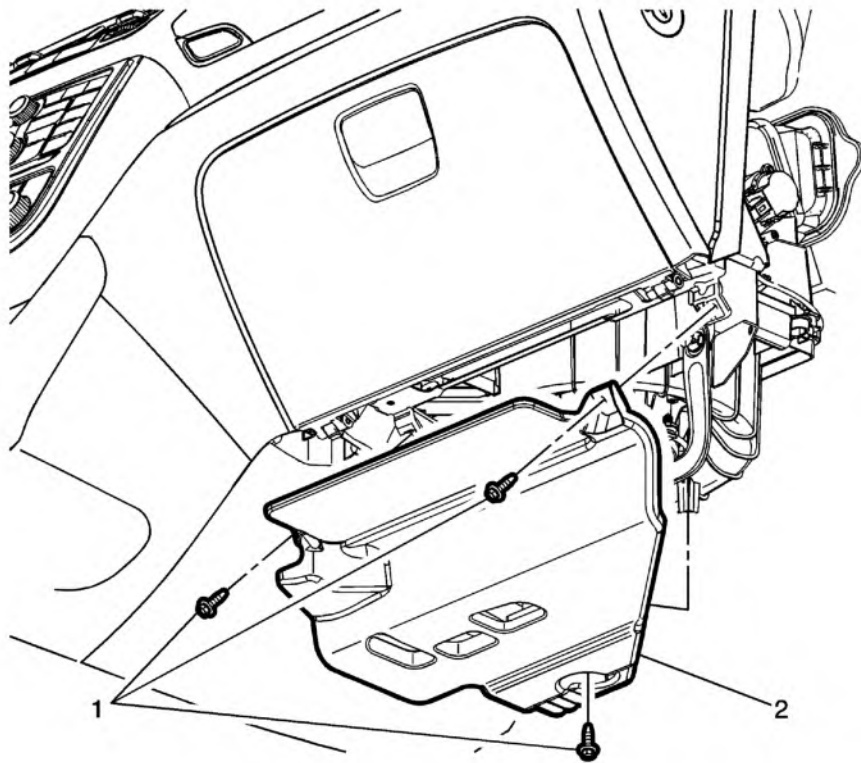


Fig. 1: Instrument Panel Lower Trim Panel Insulator
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Lower Trim Panel Insulator Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 1.8 N.m (16 lb in)
2	Instrument Panel Lower Trim Panel Insulator

INSTRUMENT PANEL LOWER TRIM PANEL INSULATOR REPLACEMENT (BUICK)

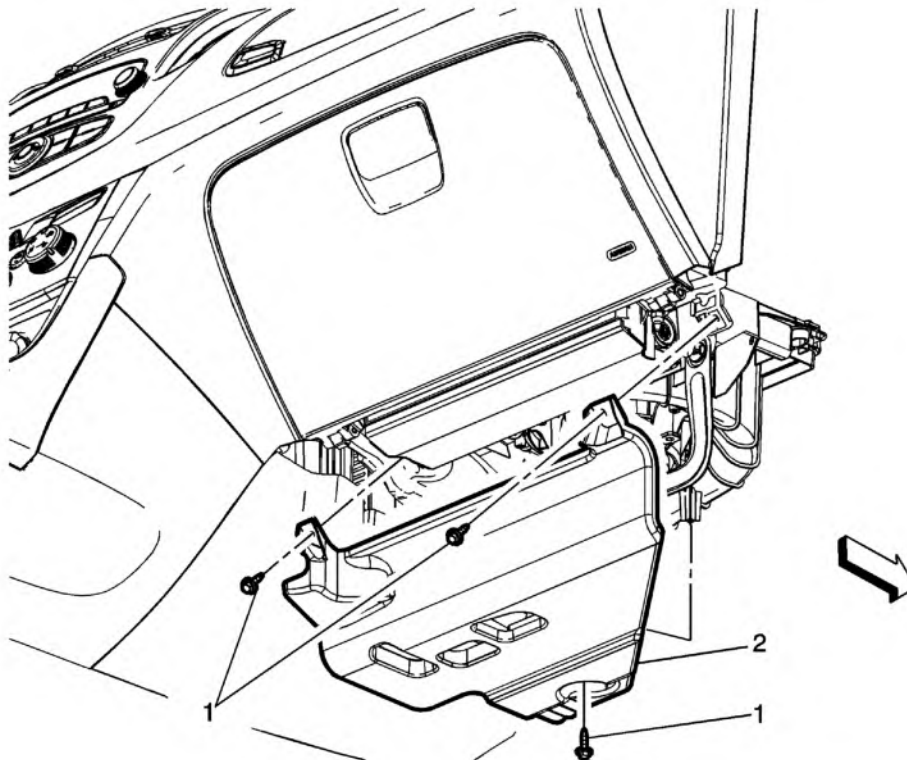


Fig. 2: Instrument Panel Lower Trim Panel (Buick).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Lower Trim Panel Insulator Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 1.8 N.m (16 lb in)
2	Instrument Panel Lower Trim Panel Insulator

INSTRUMENT PANEL LOWER CENTER TRIM PLATE APPLIQUE REPLACEMENT (BUICK)

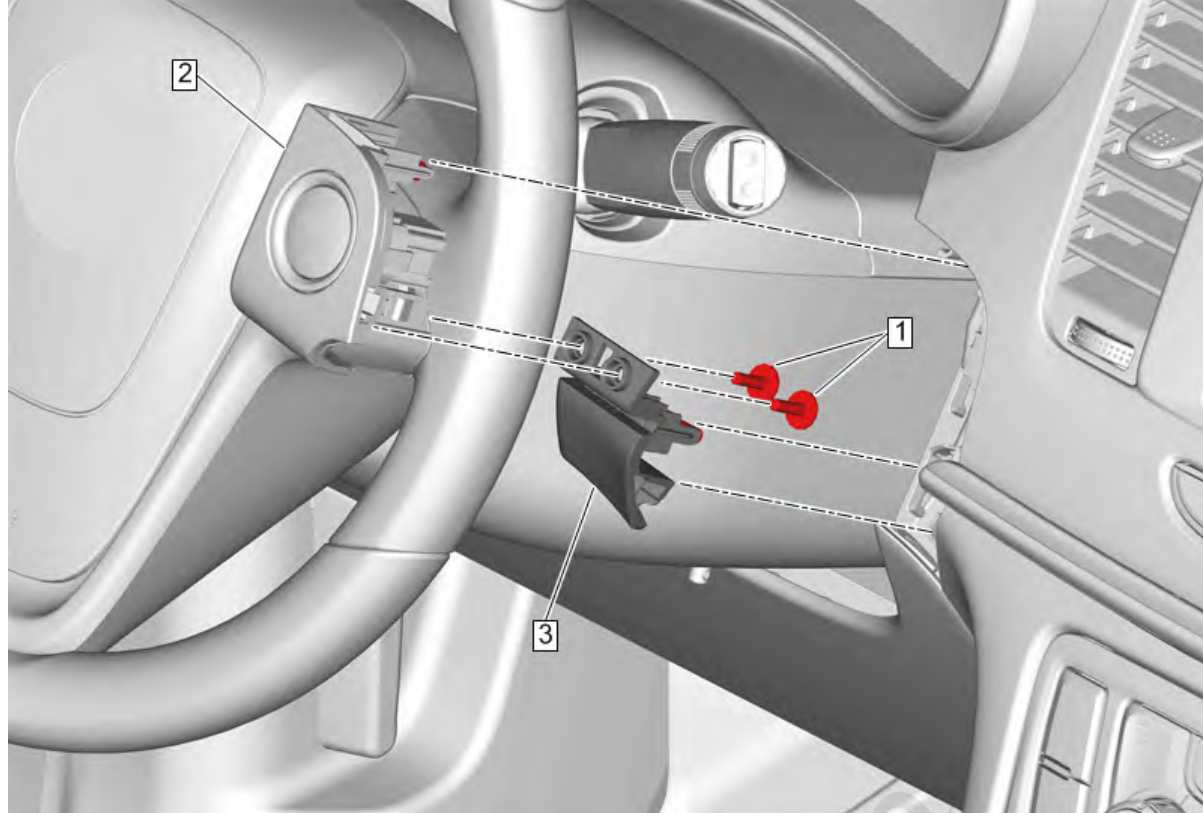


Fig. 3: Instrument Panel Lower Center Trim Plate Applique (Buick).

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Accessory Trim Center Plate Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Center Trim Plate Applique
3	Instrument Panel Lower Center Trim Plate Applique Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connector.

INSTRUMENT PANEL INSTRUMENT CLUSTER HOOD REPLACEMENT (CHEVROLET)

Removal Procedure

1. Remove Steering Column Upper Trim Cover - [Steering Column Upper Trim Cover Replacement \(Chevrolet, With BTM\)](#), [Steering Column Upper Trim Cover Replacement \(Chevrolet, Without BTM\)](#).

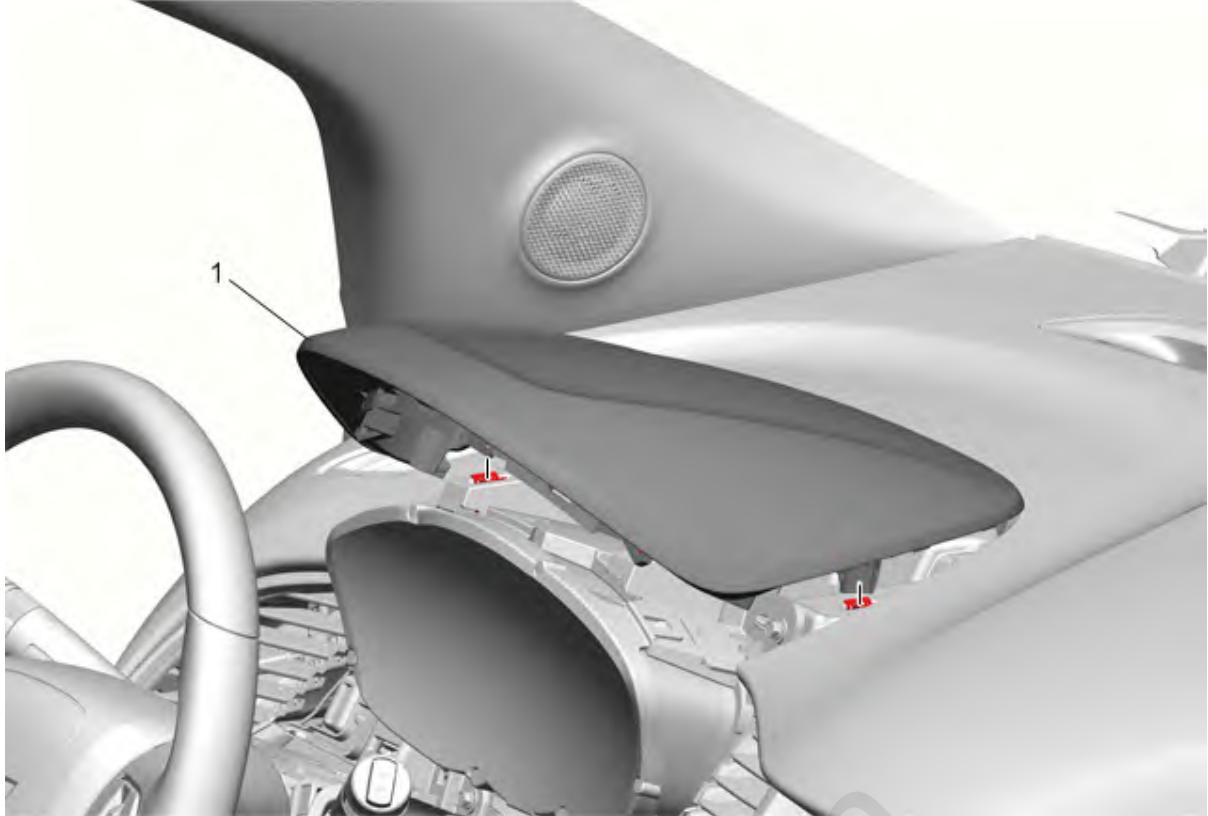


Fig. 4: Instrument Panel Instrument Cluster Hood
Courtesy of GENERAL MOTORS COMPANY

2. Release Instrument Panel Instrument Cluster Hood (1)
3. Lift up from the rear edge of the hood first.

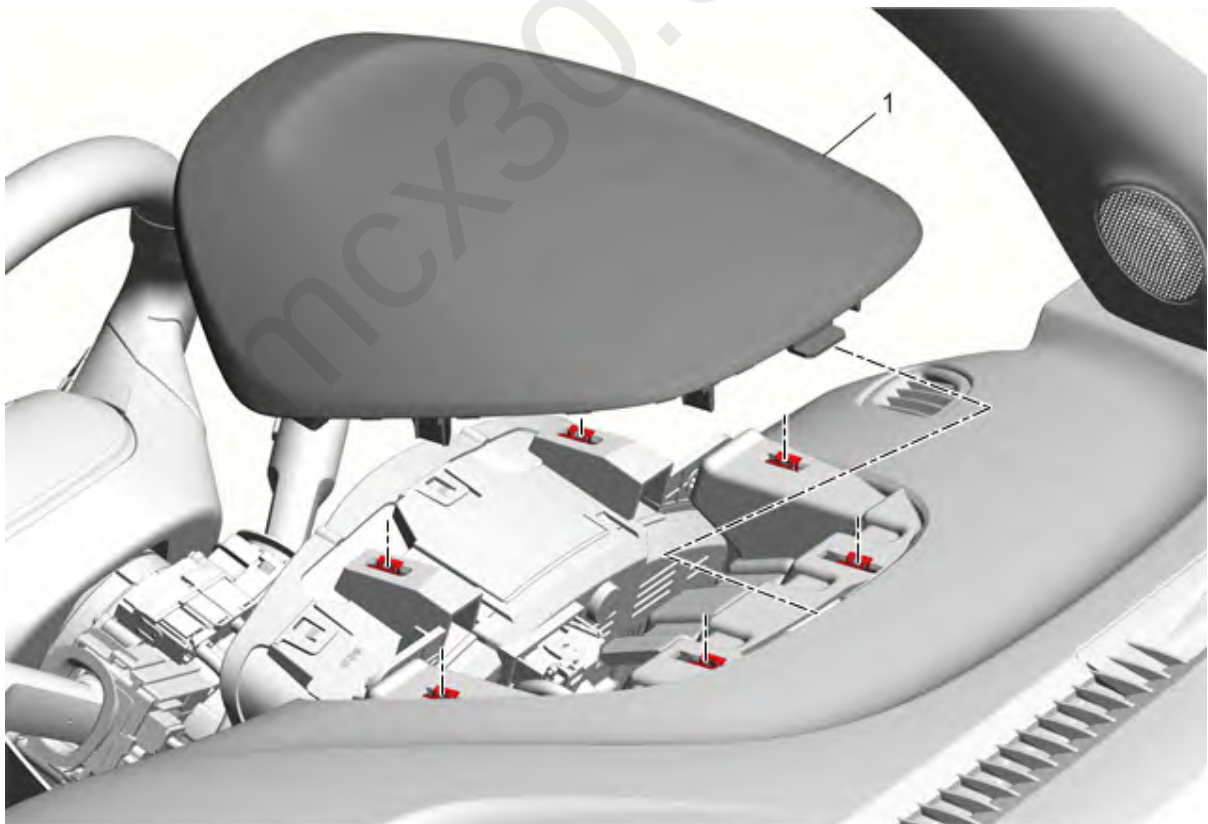


Fig. 5: Retainer Clips And Pulling Hood
Courtesy of GENERAL MOTORS COMPANY

4. After the retainer clips have been released, carefully pull the hood (1) rearward to disengage the tab.
5. Remove Instrument Panel Instrument Cluster Hood (1)

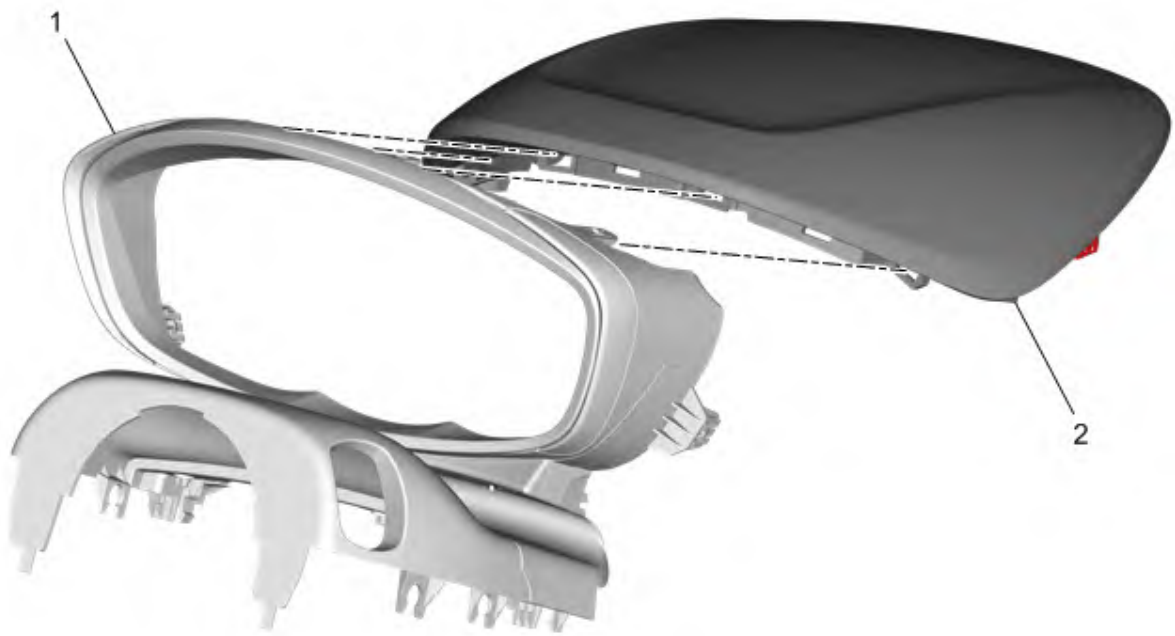


Fig. 6: Steering Column Upper Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

NOTE: It is necessary to attach the two components prior to installation to insure proper connection of the retaining tabs. The tabs of the steering column upper trim cover are weak and can be bent or not properly install to the hood.

1. Before installing, connect the steering column upper trim cover (1) to the instrument panel instrument cluster hood (1).

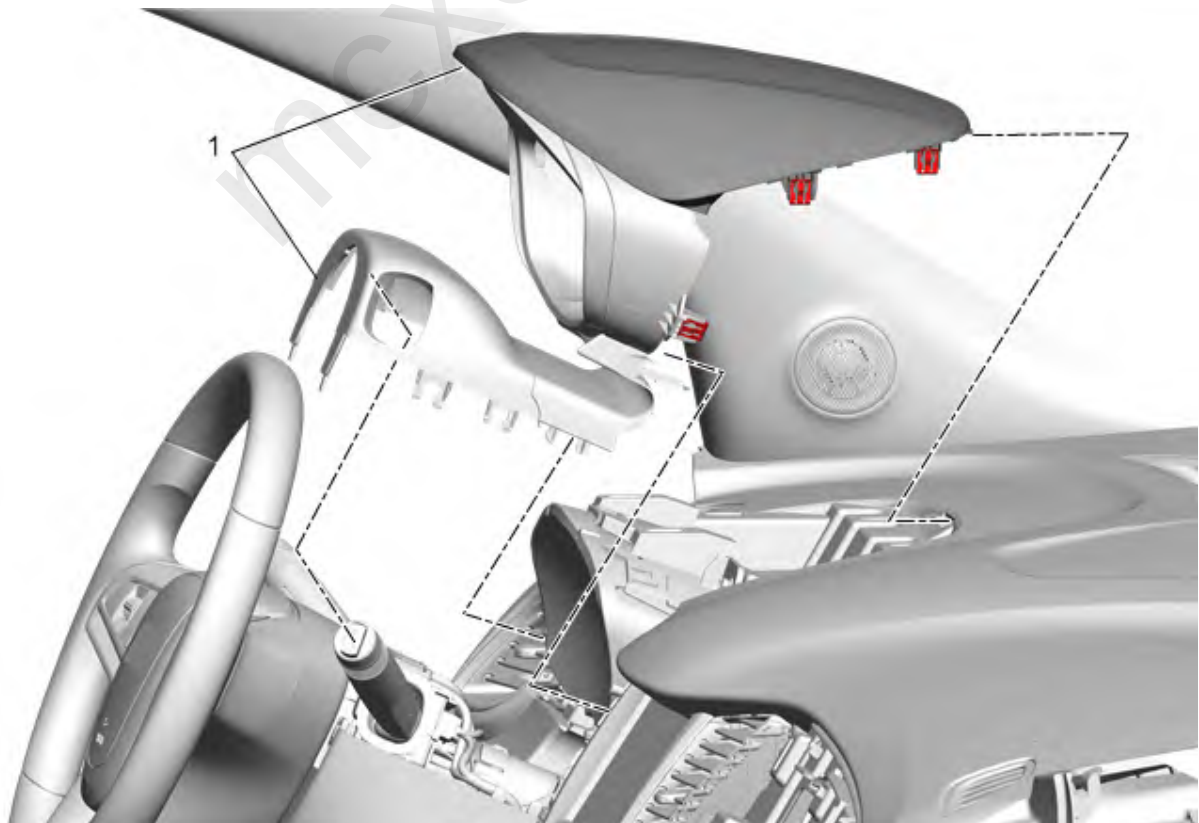


Fig. 7: Instrument Panel Instrument Cluster Hood Assembly
 Courtesy of GENERAL MOTORS COMPANY

2. Loosely install the steering column upper trim cover and instrument panel instrument cluster hood assembly (1) to the steering column and instrument panel assembly.
3. Carefully route the steering column upper trim cover over the windshield wiper switch and inserting the tab of the instrument panel instrument cluster hood in the slot of the instrument panel assembly.
4. Secure the retainers.
5. Install Instrument Panel Upper Trim Panel - Right Side- [Instrument Panel Upper Trim Panel Replacement - Right Side \(Chevrolet\)](#).
6. Install Instrument Panel Upper Trim Panel - Left Side- [Instrument Panel Upper Trim Panel Replacement - Left Side \(Chevrolet\)](#).

INSTRUMENT PANEL SWITCH TRIM PLATE REPLACEMENT (CHEVROLET)

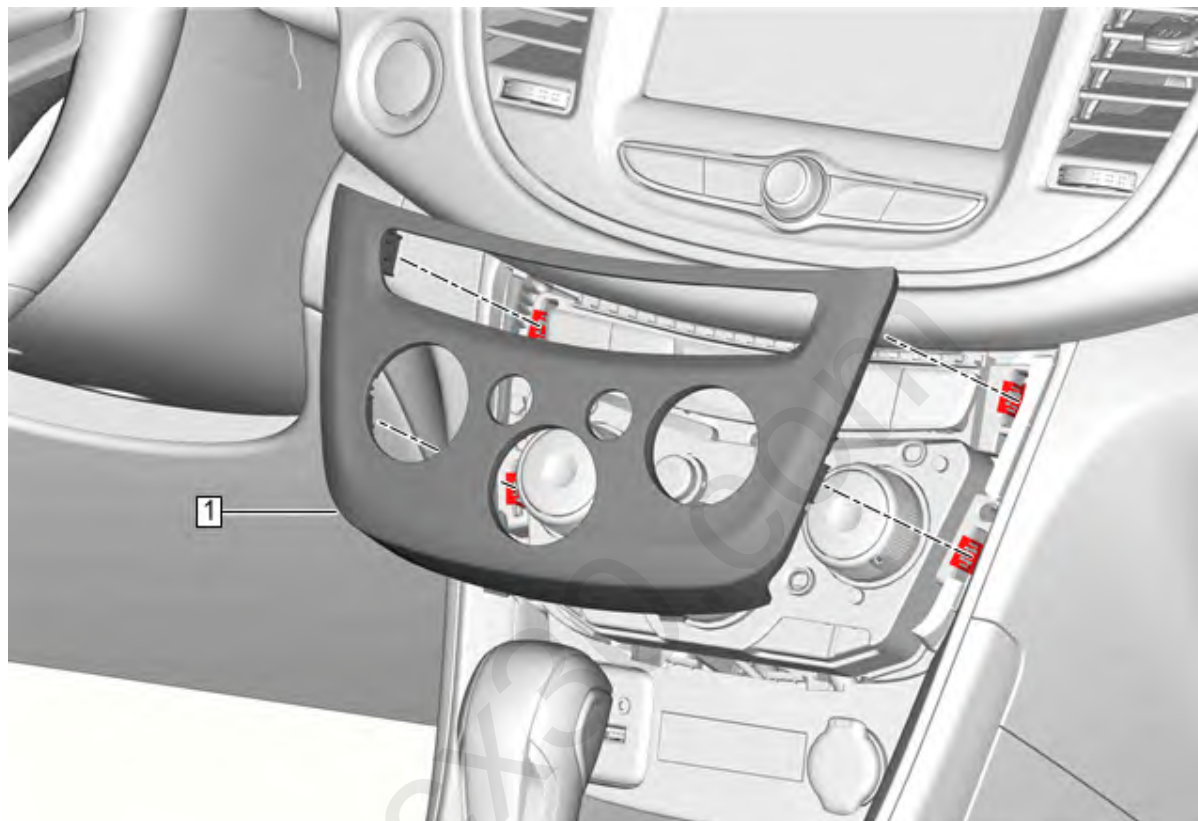


Fig. 8: Instrument Panel Switch Trim Plate
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Switch Trim Plate Procedure Use a flat bladed plastic trim tool.

DAYTIME RUNNING LAMP AMBIENT LIGHT BEZEL REPLACEMENT (CHEVROLET)



Fig. 9: Daytime Running Lamp Ambient Light Bezel
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Daytime Running Lamp Ambient Light Bezel Procedure 1. Use a flat bladed plastic trim tool to aid in the removal of the bezel from the instrument panel assembly. 2. Disconnect the electrical connector. 3. Transfer components as necessary.

INSTRUMENT PANEL KNEE BOLSTER INNER BRACKET REPLACEMENT

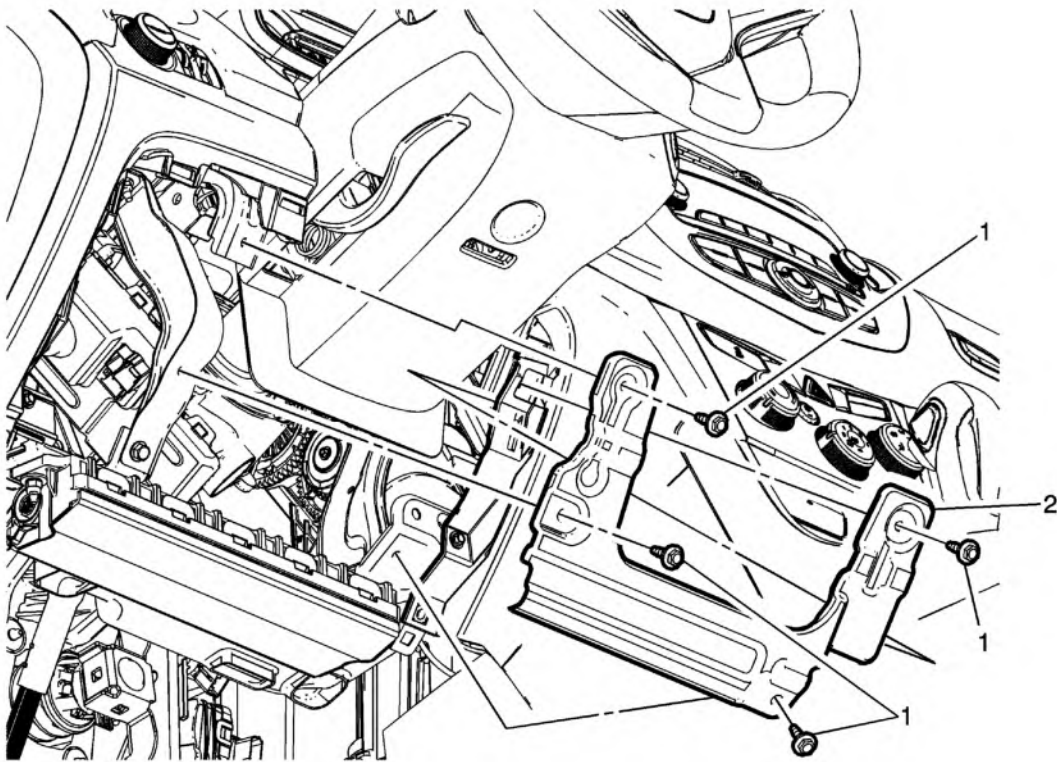


Fig. 10: Instrument Panel Knee Bolster Inner Bracket

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Remove the instrument panel knee bolster. Refer to Instrument Panel Knee Bolster Replacement (Buick) Instrument Panel Knee Bolster Replacement (Chevrolet) .	
1	Instrument Panel Driver Knee Bolster Inner Bracket Bolt (Qty: 4) CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Instrument Panel Knee Bolster Inner Bracket

INSTRUMENT PANEL KNEE BOLSTER OUTER BRACKET REPLACEMENT

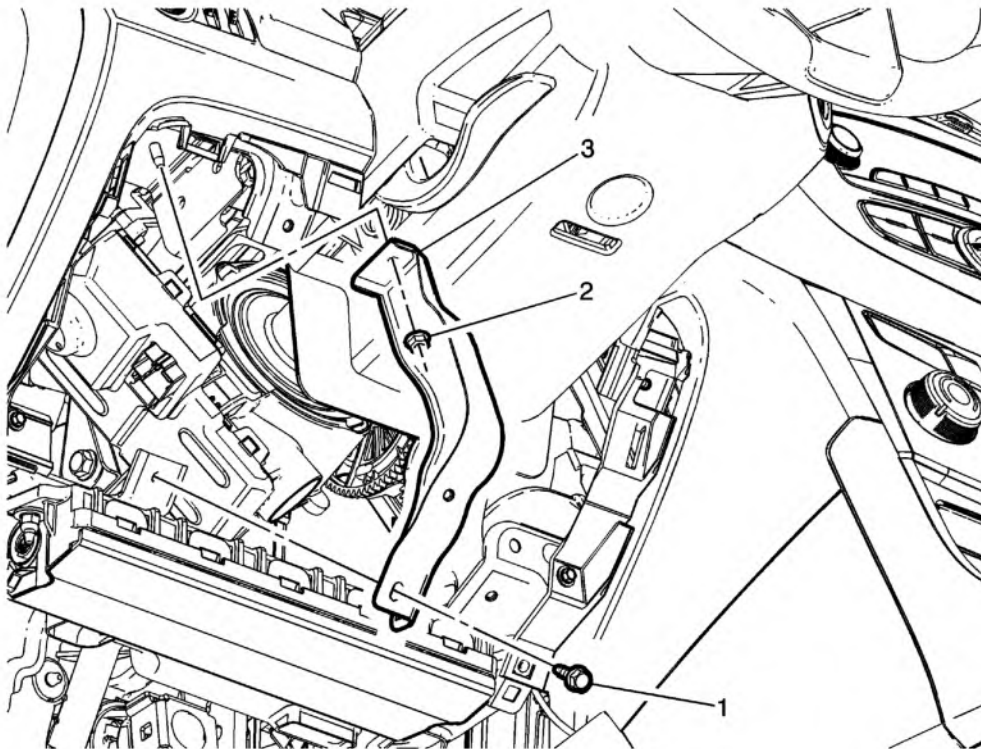


Fig. 11: Instrument Panel Knee Bolster Outer Bracket

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures Remove the instrument panel knee bolster inner bracket. Refer to Instrument Panel Knee Bolster Inner Bracket Replacement .	
1	Instrument Panel Knee Bolster Outer Bracket Bolt CAUTION: Refer to Fastener Caution . Tighten 9 N.m (80 lb in)
2	Instrument Panel Knee Bolster Outer Bracket Nut Tighten 9 N.m (80 lb in)
3	Instrument Panel Knee Bolster Outer Bracket

INSTRUMENT PANEL KNEE BOLSTER REPLACEMENT (BUICK)

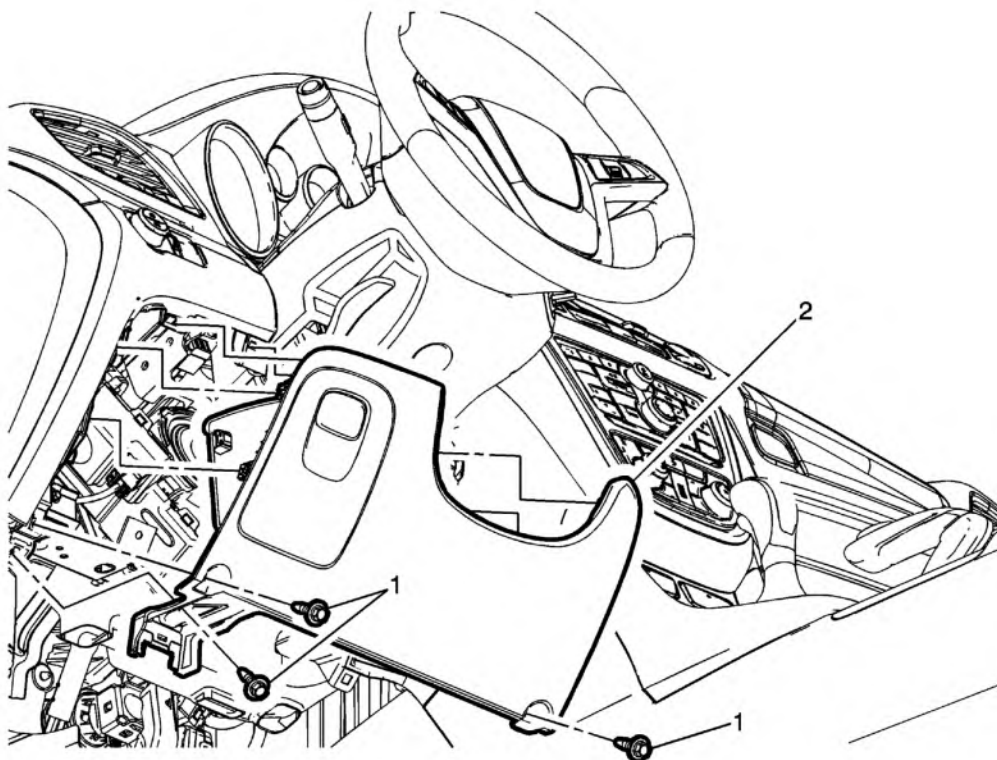


Fig. 12: Instrument Panel Knee Bolster (Encore).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Knee Bolster Fastener (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Knee Bolster Procedure 1. Use a flat bladed plastic trim tool in order to release the retainers securing the knee bolster to the instrument panel assembly. 2. Disconnect the data link connector.

INSTRUMENT PANEL KNEE BOLSTER REPLACEMENT (CHEVROLET)

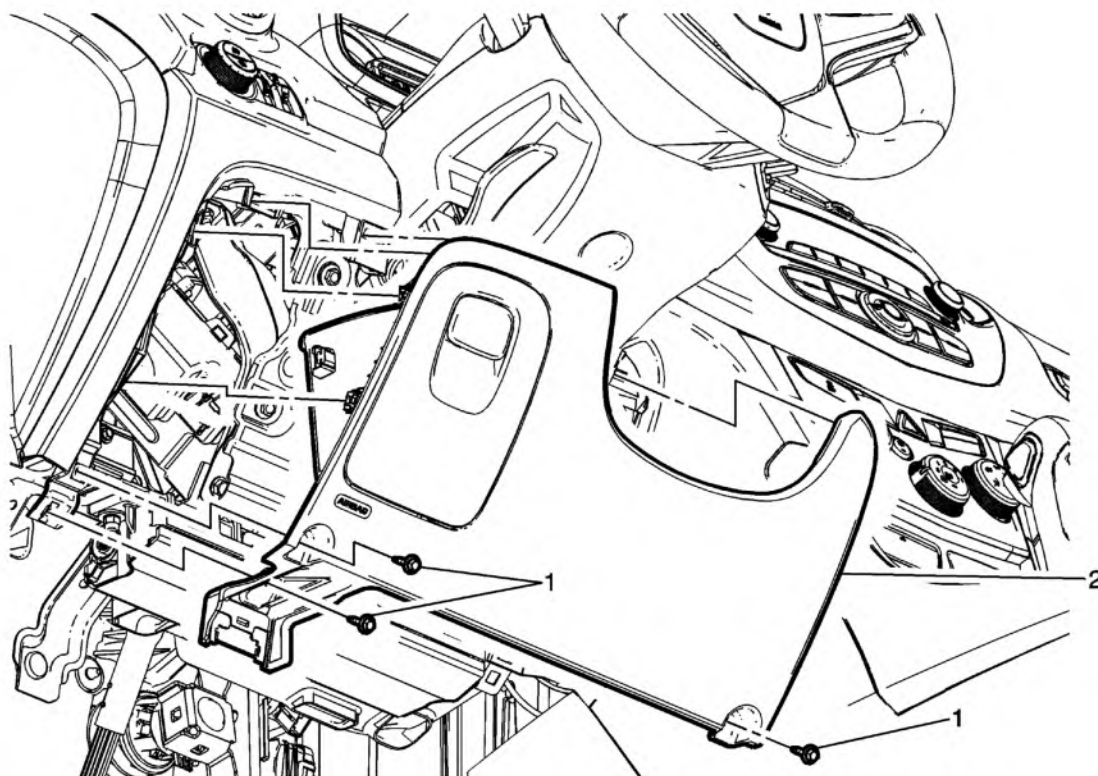


Fig. 13: Instrument Panel Knee Bolster (Trax)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Knee Bolster Bolt (Qty: 3) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Knee Bolster Procedure 1. Use a flat bladed plastic trim tool in order to release the retainers securing the knee bolster to the instrument panel assembly. 2. Disconnect the data link connector.

INSTRUMENT PANEL TRIM PLATE APPLIQUE REPLACEMENT - RIGHT SIDE (CHEVROLET)

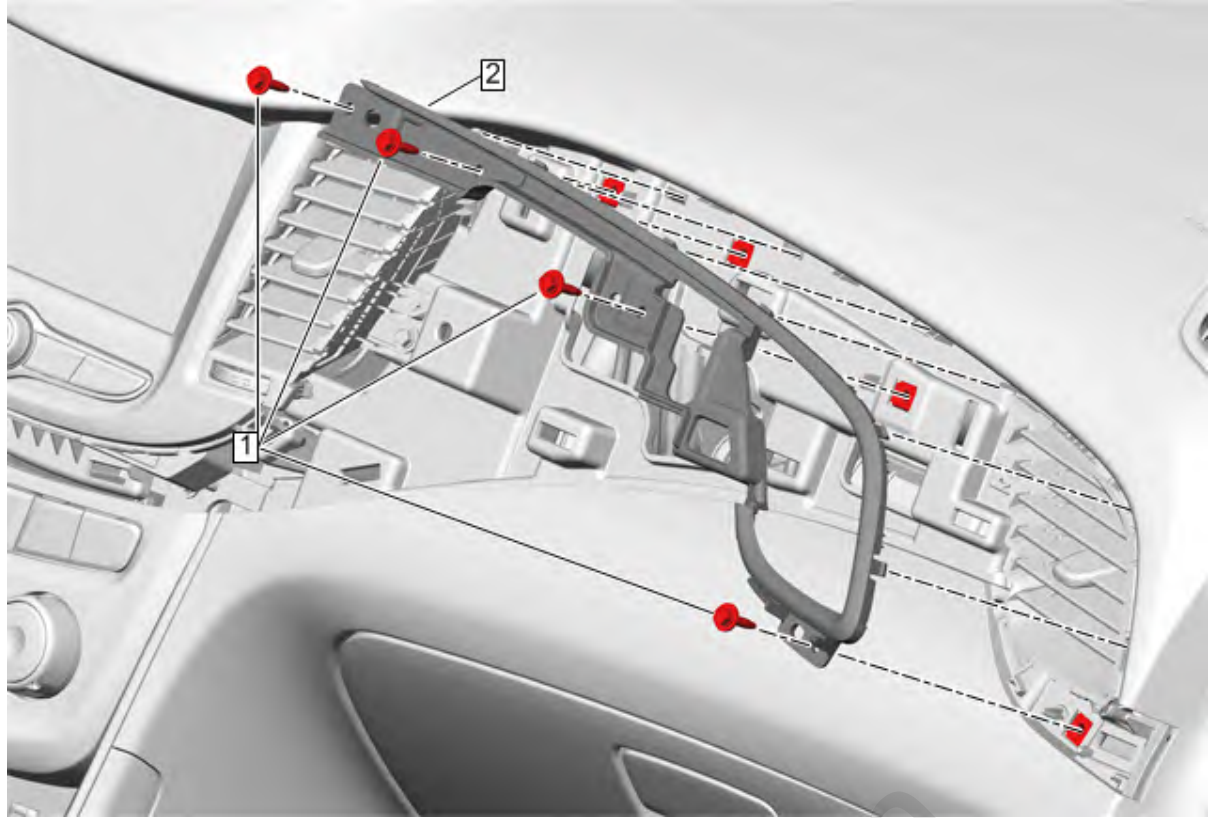


Fig. 14: Instrument Panel Trim Plate Applique - Right Side (Chevrolet).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Upper Trim Panel Replacement - Right Side (Chevrolet).</u> <u>Instrument Panel Trim Plate Replacement - Right Side (Chevrolet).</u>	
1	Instrument Panel Trim Plate Applique Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Trim Plate Applique - Right Side Procedure Release the retaining tabs.

INSTRUMENT PANEL TRIM PLATE APPLIQUE REPLACEMENT - LEFT SIDE (CHEVROLET)

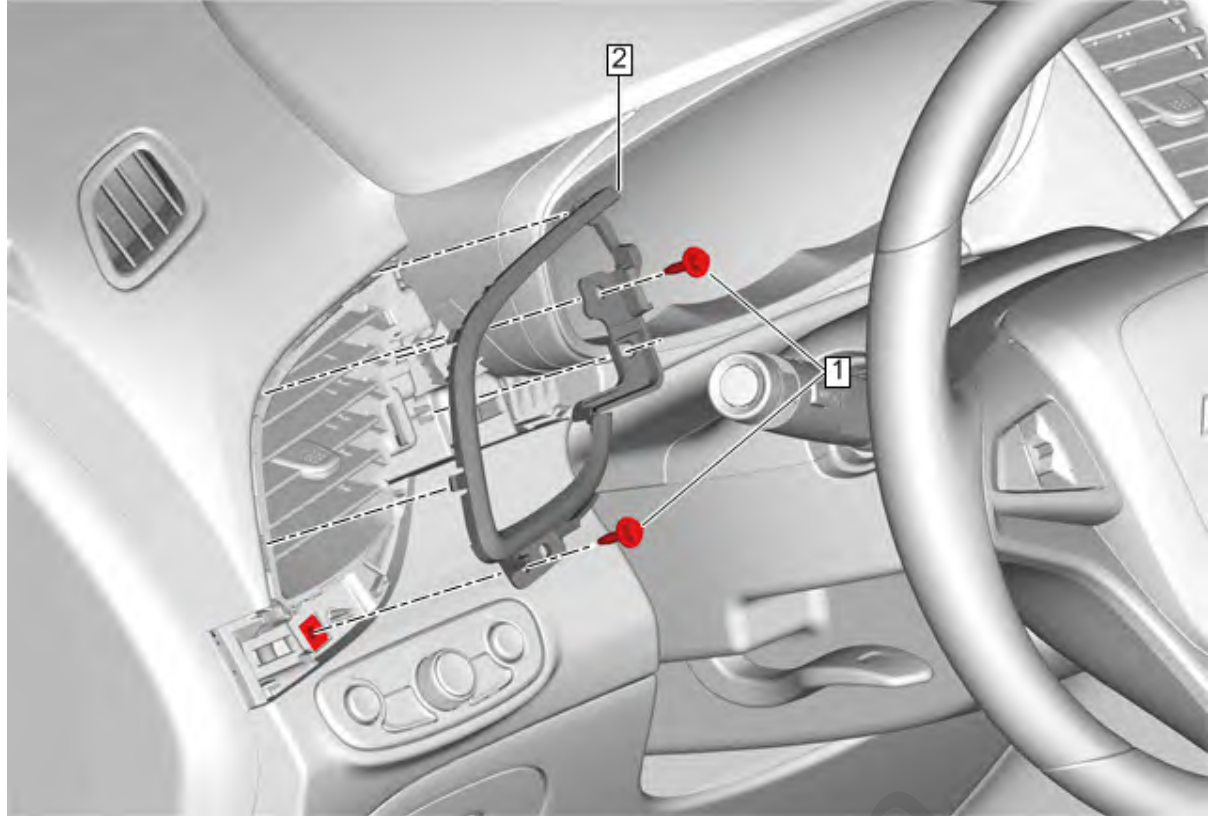


Fig. 15: Instrument Panel Trim Plate Applique - Left Side (Chevrolet).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure 1. <u>Instrument Panel Upper Trim Panel Replacement - Left Side (Chevrolet).</u> 2. <u>Instrument Panel Trim Plate Replacement - Left Side (Chevrolet).</u>	
1	Instrument Panel Trim Plate Applique Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Trim Plate Applique - Left Side Procedure Release the retaining tabs.

INSTRUMENT PANEL CENTER TRIM PLATE APPLIQUE REPLACEMENT (BUICK)

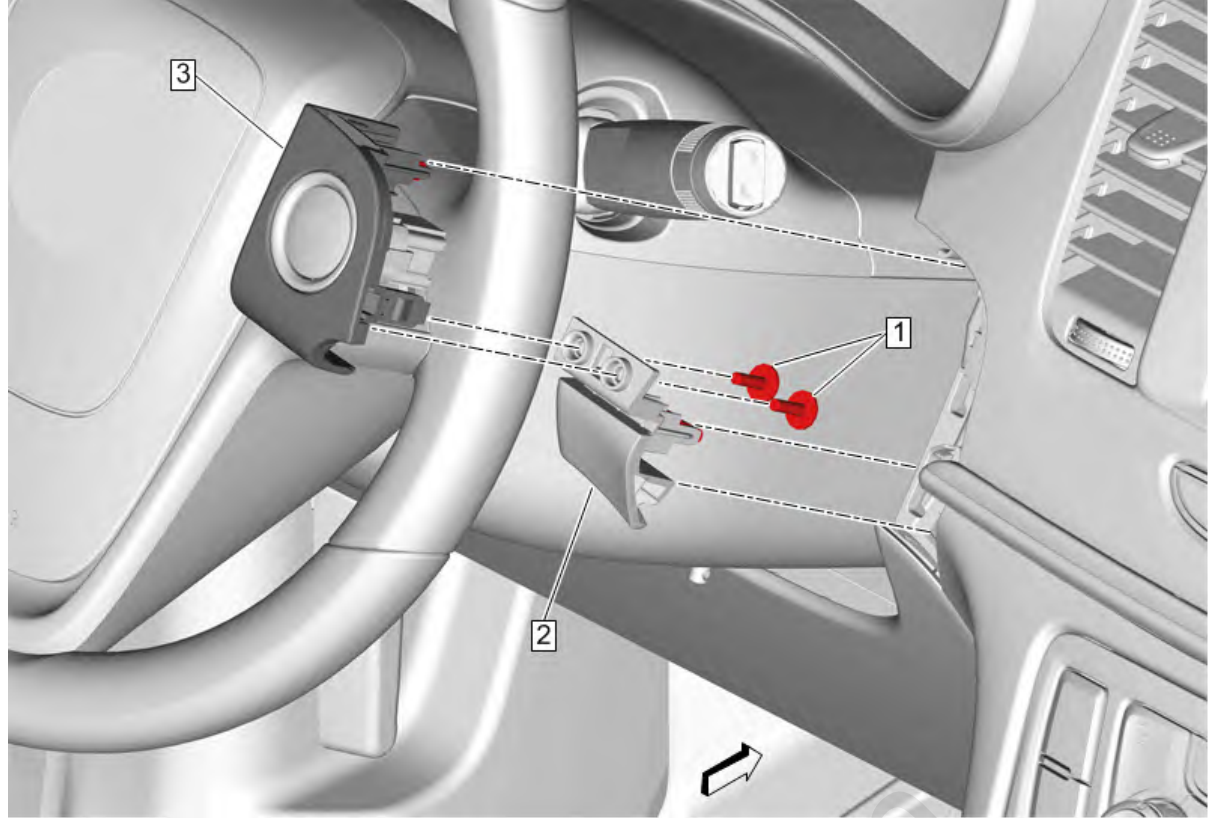


Fig. 16: Instrument Panel Center Trim Plate Applique (Buick).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Accessory Trim Center Plate Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Lower Center Trim Plate Applique
3	Instrument Panel Center Trim Plate Applique Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connector.

INSTRUMENT PANEL TRIM PLATE REPLACEMENT - RIGHT SIDE (CHEVROLET)



Fig. 17: Instrument Panel Trim Plate - Right Side (Chevrolet).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Trim Plate Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL TRIM PLATE REPLACEMENT - LEFT SIDE (CHEVROLET)



Fig. 18: Instrument Panel Trim Plate - Left Side (Chevrolet).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Instrument Panel Trim Plate Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL TRIM PLATE REPLACEMENT (BUICK)

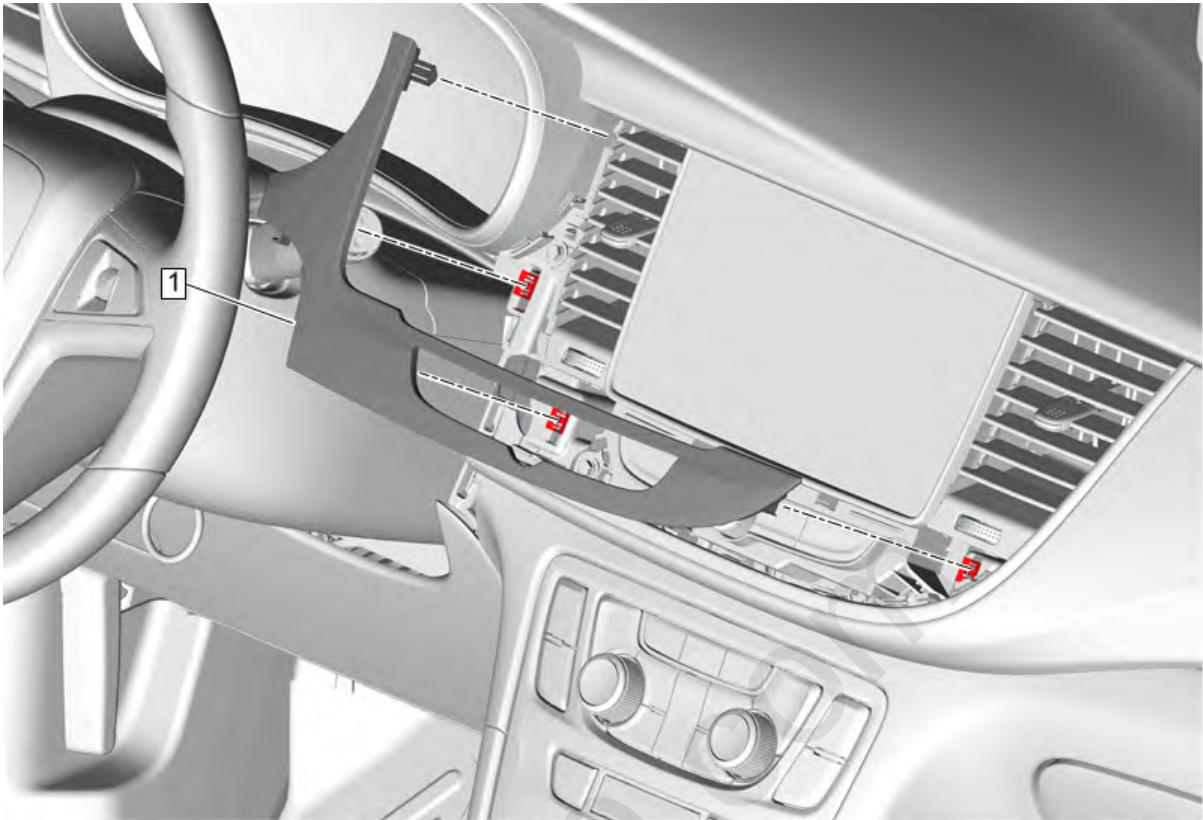


Fig. 19: Instrument Panel Trim Plate (Buick)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Center Trim Plate Applique Replacement (Buick)</u>	
1	Instrument Panel Trim Plate Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL LOWER TRIM PLATE APPLIQUE REPLACEMENT - RIGHT SIDE (BUICK)

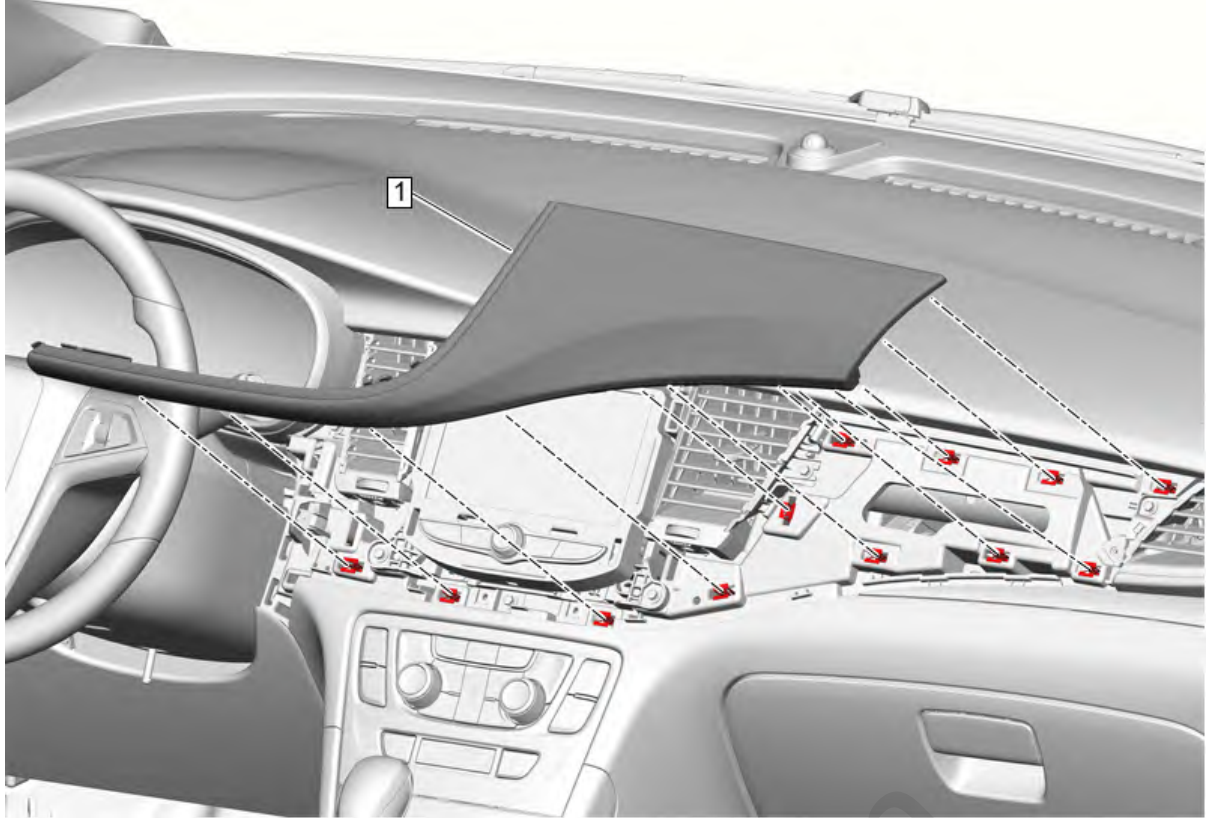


Fig. 20: Panel Lower Trim Plate Applique - Right Side
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Trim Plate Replacement (Buick)</u>	
1	Instrument Panel Lower Trim Plate Applique - Right Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL LOWER TRIM PLATE APPLIQUE REPLACEMENT - LEFT SIDE (BUICK)

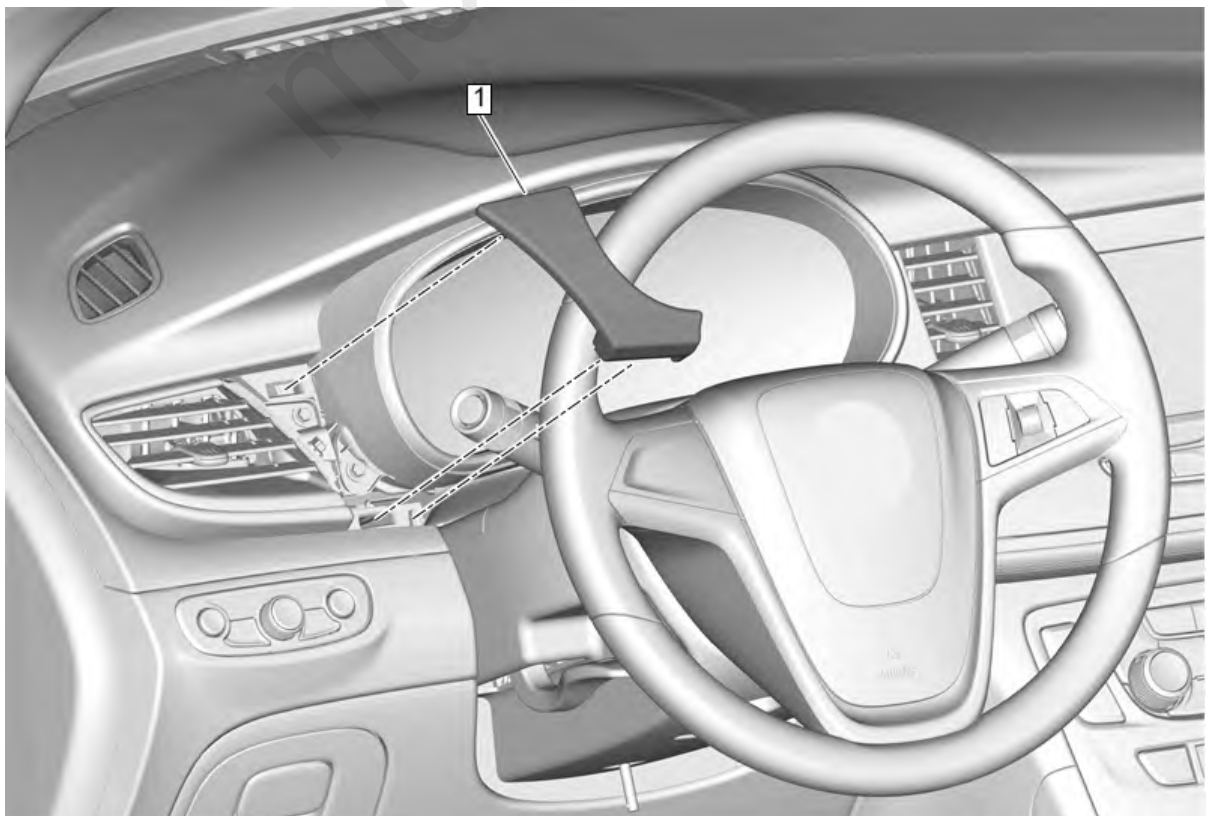


Fig. 21: Instrument Panel Lower Trim Plate Applique - Left Side (Buick)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Lower Trim Plate Applique - Left Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL RADIO REAR TRIM PLATE REPLACEMENT (CHEVROLET)

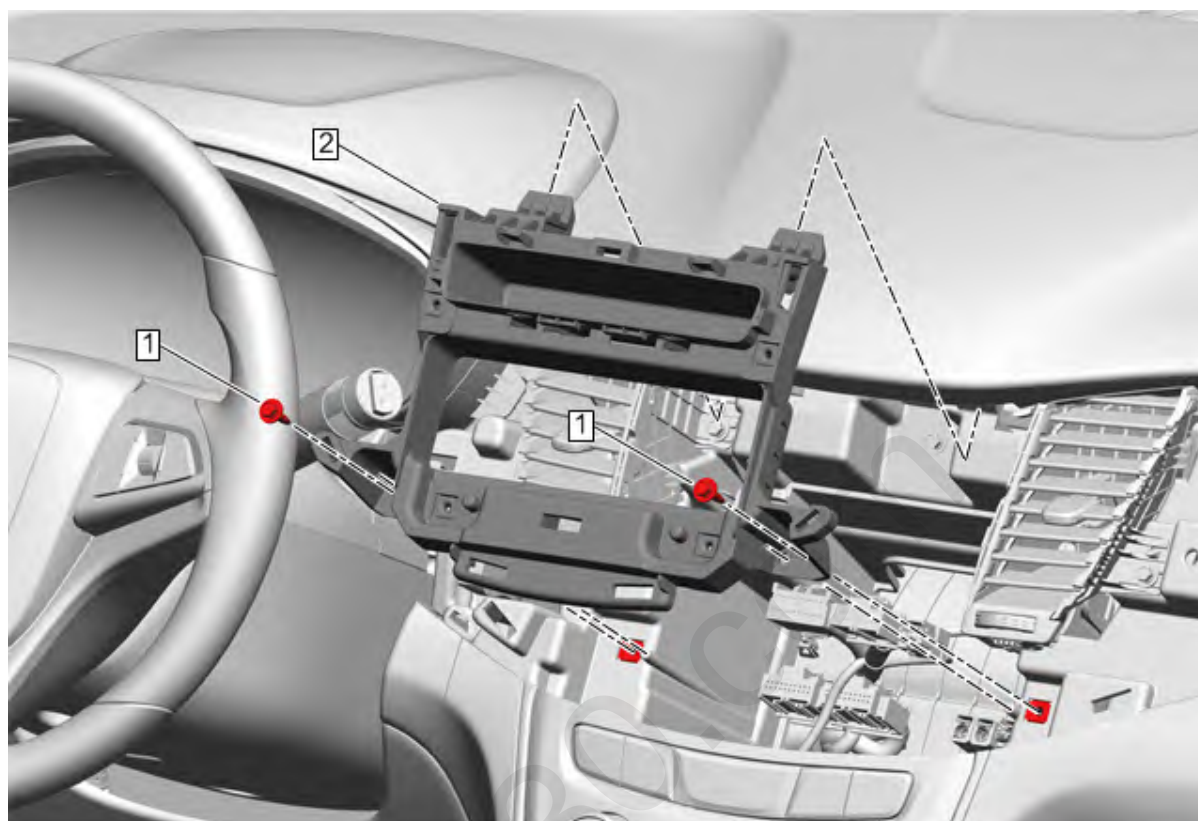


Fig. 22: Instrument Panel Radio Rear Trim Plate (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Radio Replacement (Buick)</u> , <u>Radio Replacement (Chevrolet with IOA)</u> , <u>Radio Replacement (Chevrolet with IP1)</u>	
1	Radio Control Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Radio Rear Trim Plate

INSTRUMENT PANEL UPPER TRIM PANEL REPLACEMENT (BUICK)

Removal Procedure

1. Remove Windshield Defroster Outlet Duct - Windshield Defroster Outlet Duct Replacement (Buick).
2. Remove Side Window Defogger Outlet Duct - Left Side - Side Window Defogger Outlet Duct Replacement - Left Side (Buick).
3. Remove Side Window Defogger Outlet Duct - Right Side - Side Window Defogger Outlet Duct Replacement - Right Side (Buick).

4. Remove Airbag Instrument Panel Module - [Airbag Instrument Panel Module Replacement](#)

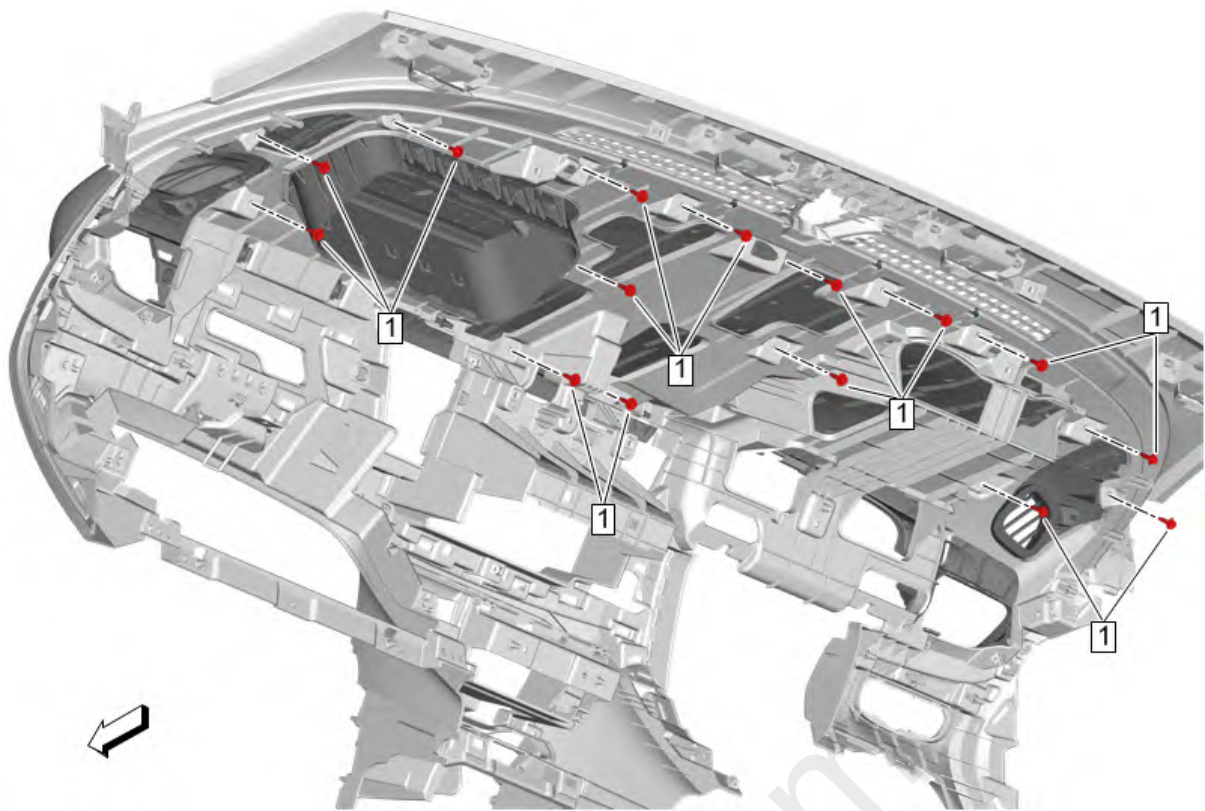


Fig. 23: Instrument Panel Retainer Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Retainer Bolt (1)

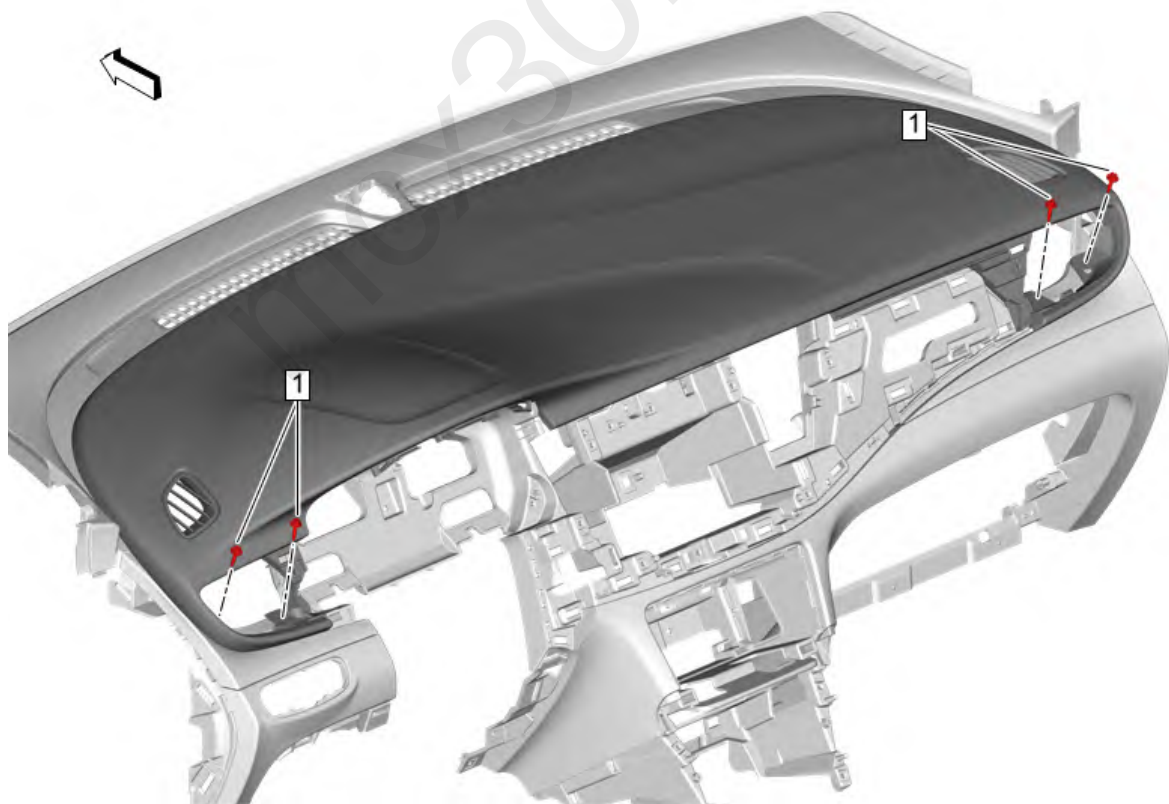


Fig. 24: Instrument Panel Retainer Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Retainer Bolt (1)

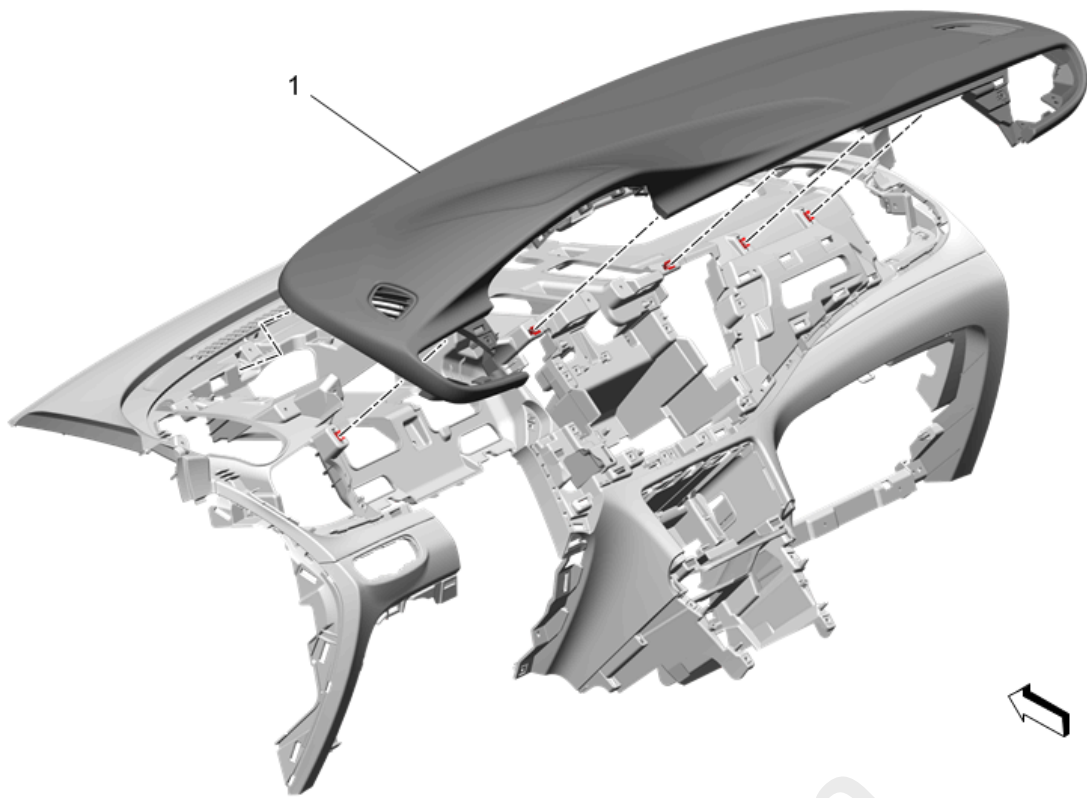


Fig. 25: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Upper Trim Panel (1)
8. Release the retainers.

Installation Procedure

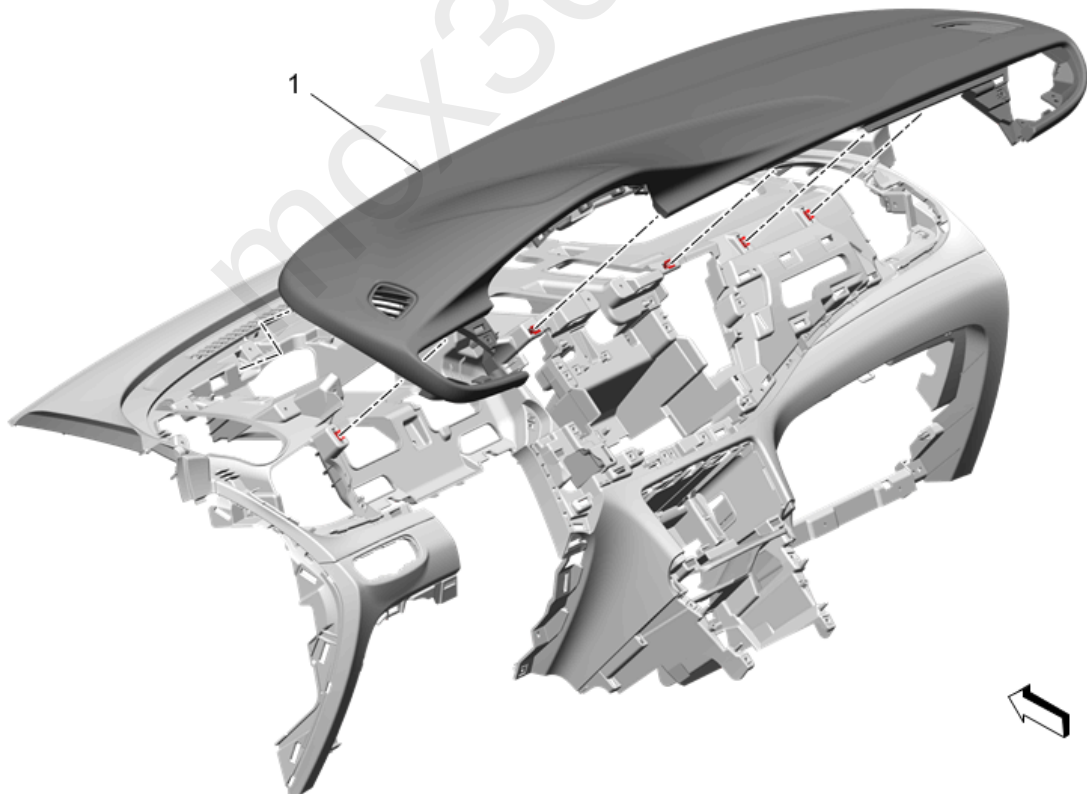


Fig. 26: Instrument Panel Upper Trim Panel
Courtesy of GENERAL MOTORS COMPANY

1. Install Instrument Panel Upper Trim Panel (1)

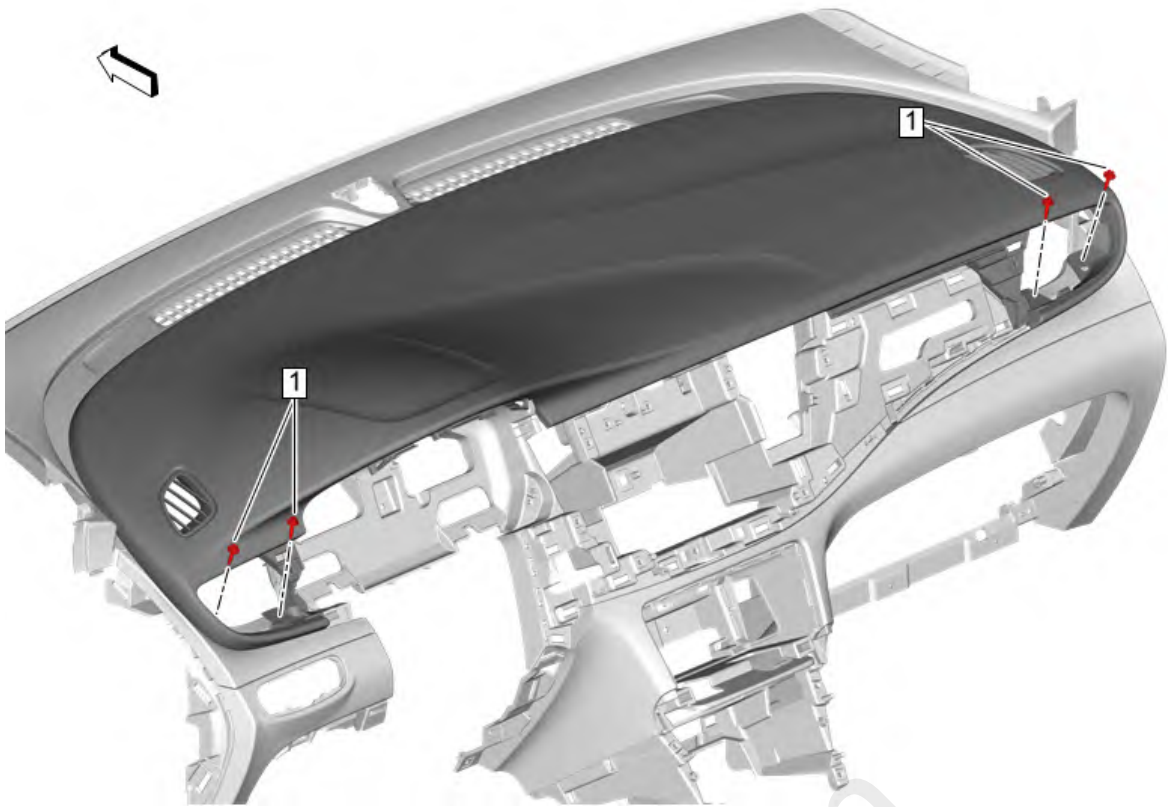


Fig. 27: Instrument Panel Retainer Bolt
 Courtesy of GENERAL MOTORS COMPANY

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

2. Install Instrument Panel Retainer Bolt (1) and tighten 2.5 N.m (22 lb in)

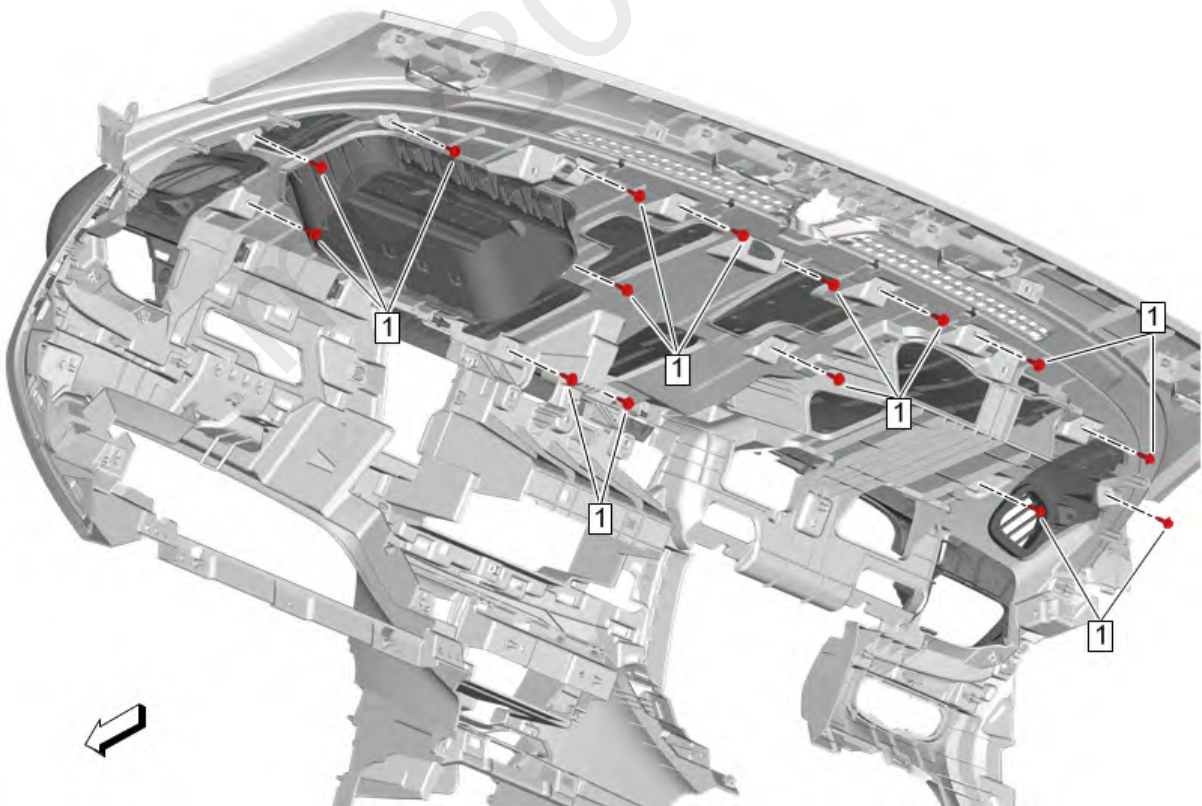


Fig. 28: Instrument Panel Retainer Bolt
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Retainer Bolt (1) and tighten 2.5 N.m (22 lb in)
4. Install Airbag Instrument Panel Module - [Airbag Instrument Panel Module Replacement](#)
5. Install Side Window Defogger Outlet Duct - Right Side - [Side Window Defogger Outlet Duct Replacement - Right Side \(Buick\)](#)

6. Install Side Window Defogger Outlet Duct - Left Side- [Side Window Defogger Outlet Duct Replacement - Left Side \(Buick\)](#)
7. Install Windshield Defroster Outlet Duct - [Windshield Defroster Outlet Duct Replacement \(Buick\)](#)

INSTRUMENT PANEL UPPER TRIM PANEL COVER REPLACEMENT (CHEVROLET)

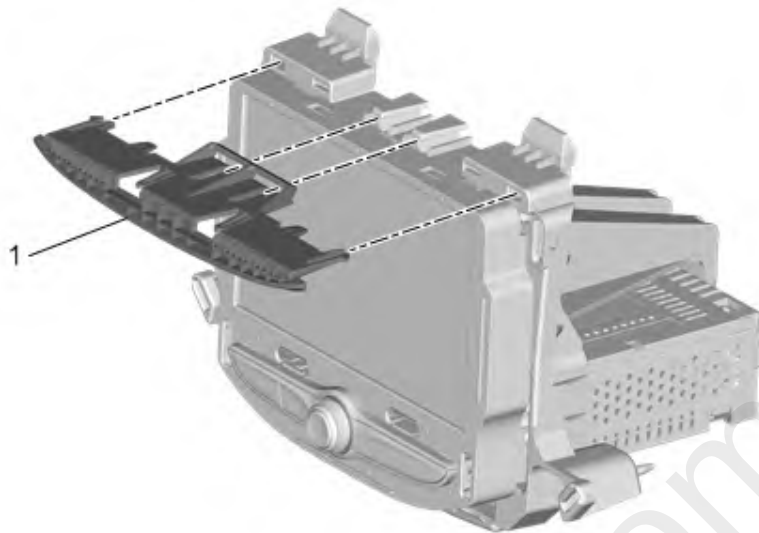


Fig. 29: Instrument Panel Upper Trim Panel Cover (Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Radio Bracket Replacement (Chevrolet)	
1	Instrument Panel Upper Trim Panel Cover Procedure Release the retaining tabs.

INSTRUMENT PANEL UPPER TRIM PANEL REPLACEMENT - RIGHT SIDE (BUICK)

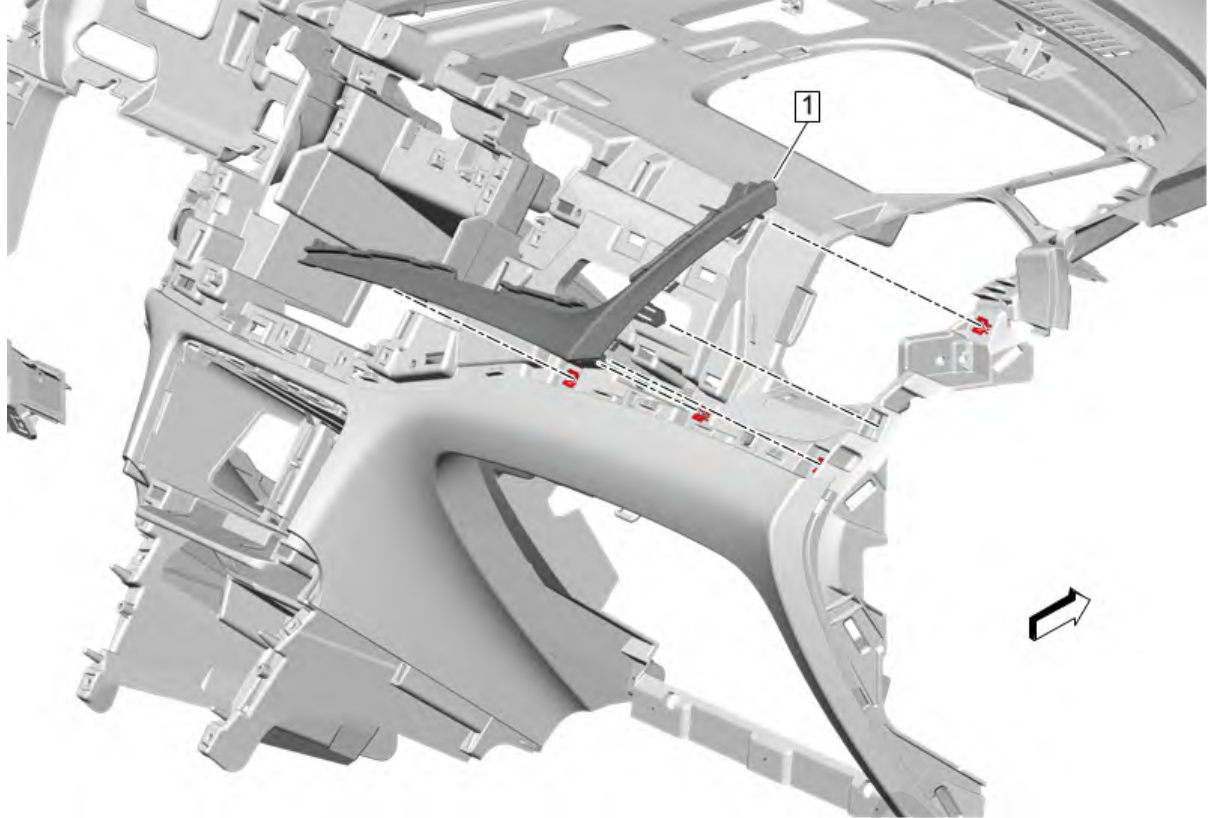


Fig. 30: Instrument Panel Upper Trim Panel - Right Side (Buick).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Upper Trim Panel Replacement (Buick).</u>	
1	Instrument Panel Upper Trim Panel - Right Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL UPPER TRIM PANEL REPLACEMENT - RIGHT SIDE (CHEVROLET)

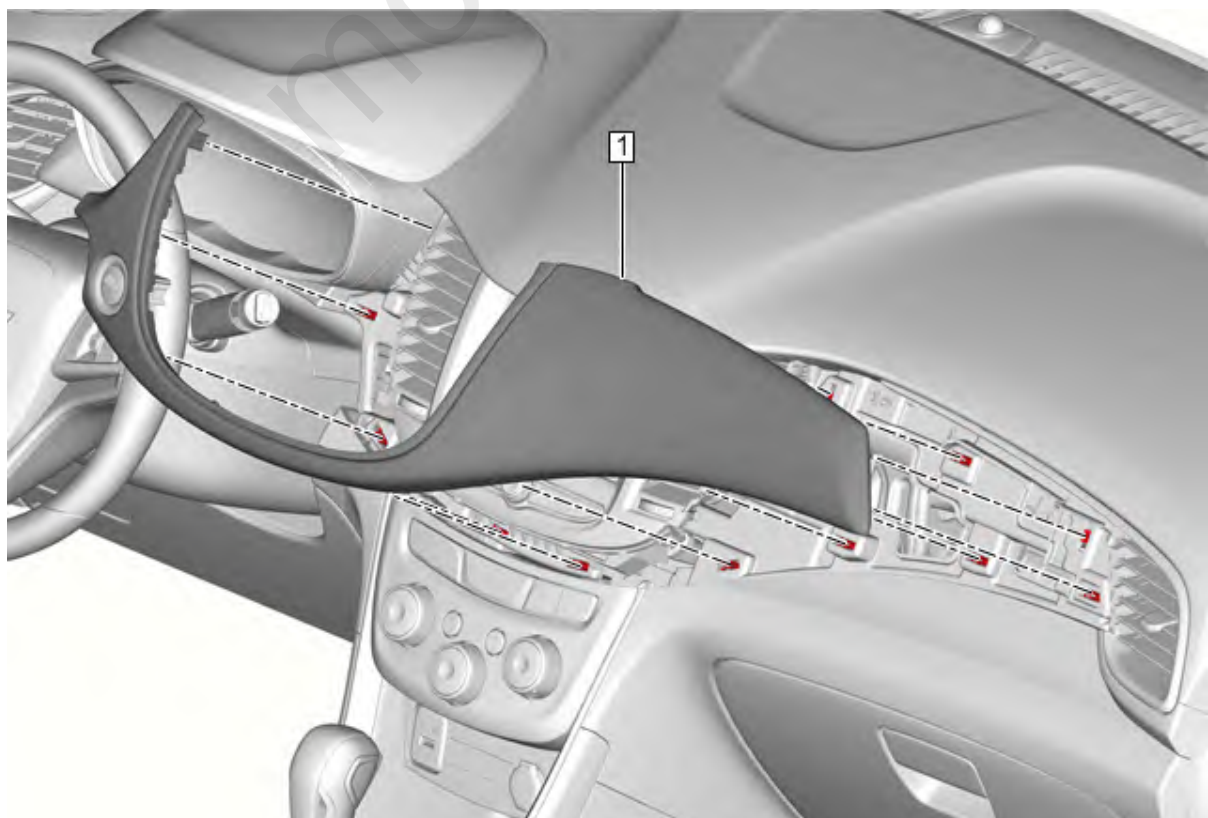


Fig. 31: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Upper Trim Panel Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connector. 3. Transfer components as necessary.

INSTRUMENT PANEL UPPER TRIM PANEL REPLACEMENT - LEFT SIDE (BUICK)

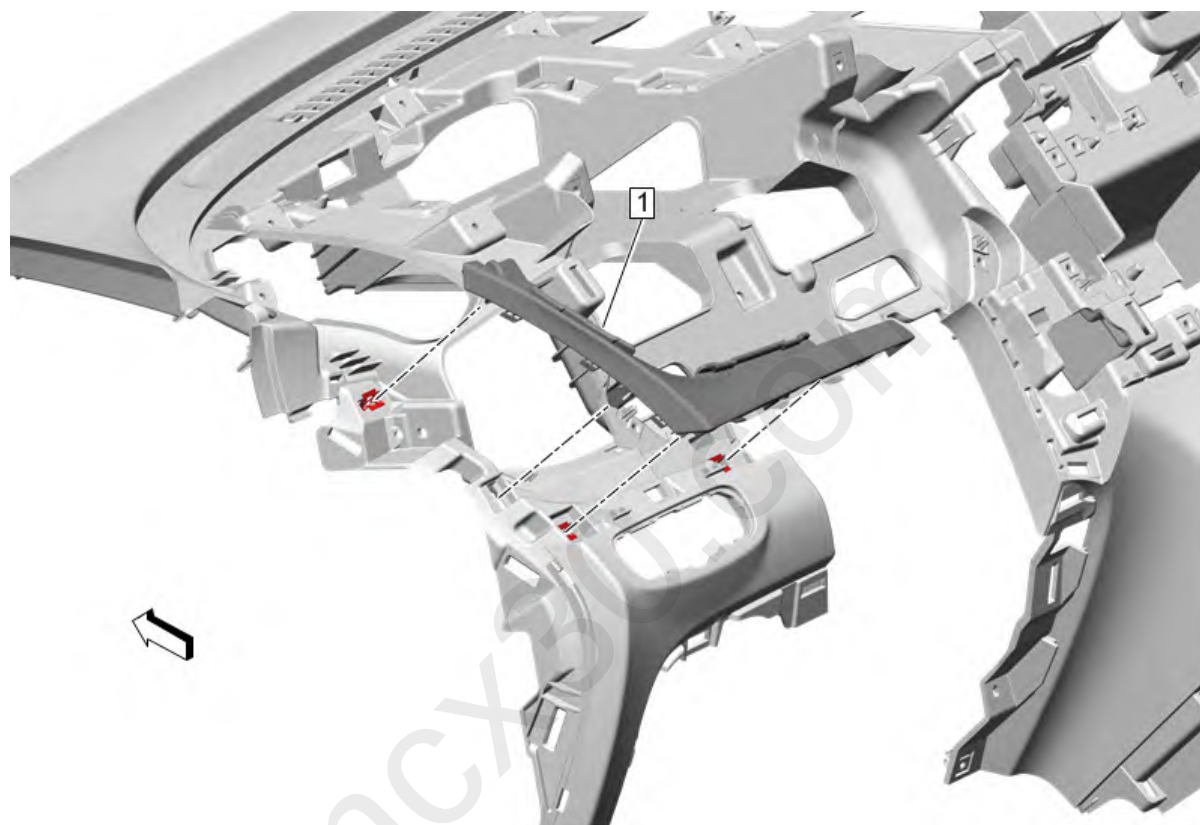


Fig. 32: Instrument Panel Upper Trim Panel - Left Side (Buick)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Upper Trim Panel Replacement (Buick)</u>	
1	Instrument Panel Upper Trim Panel - Left Side Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL UPPER TRIM PANEL REPLACEMENT - LEFT SIDE (CHEVROLET)

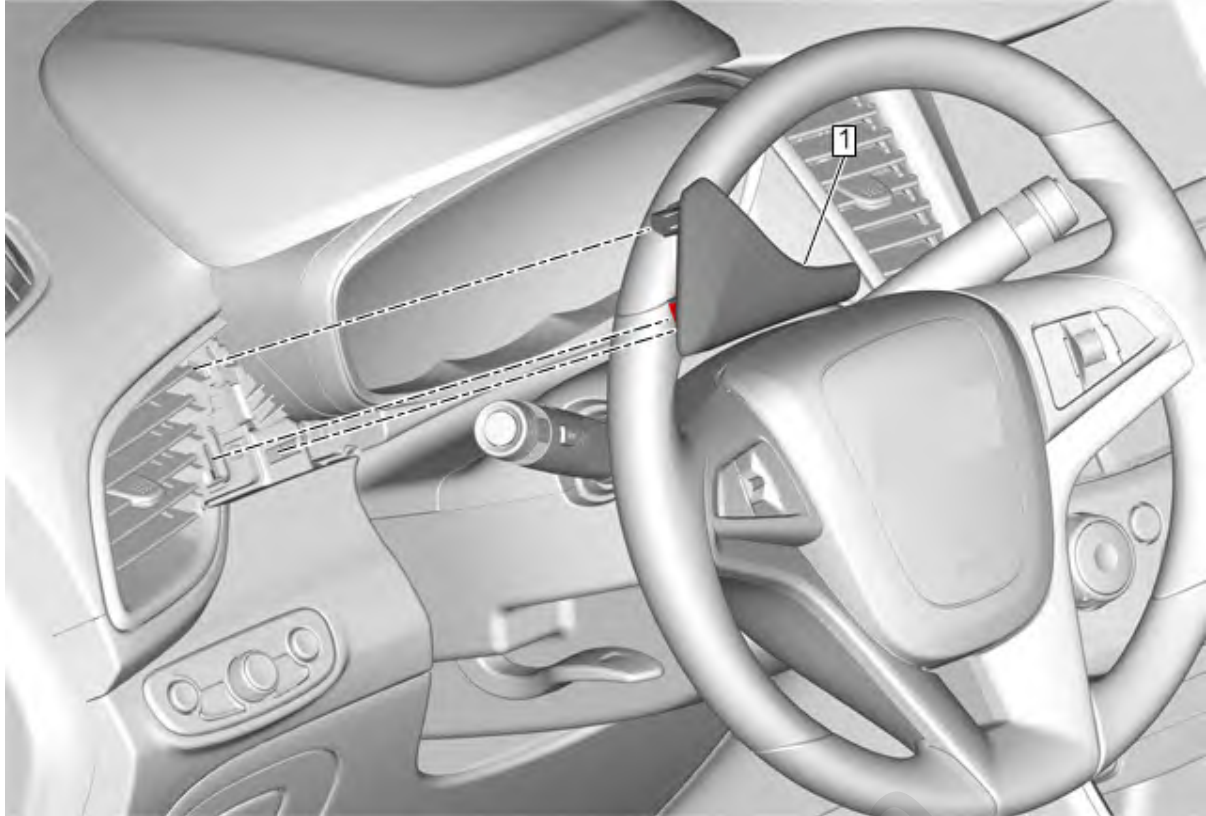


Fig. 33: Instrument Panel Upper Trim Panel - Left Side (Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Upper Trim Panel Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL ACCESSORY BEZEL REPLACEMENT (BUICK)

Removal Procedure

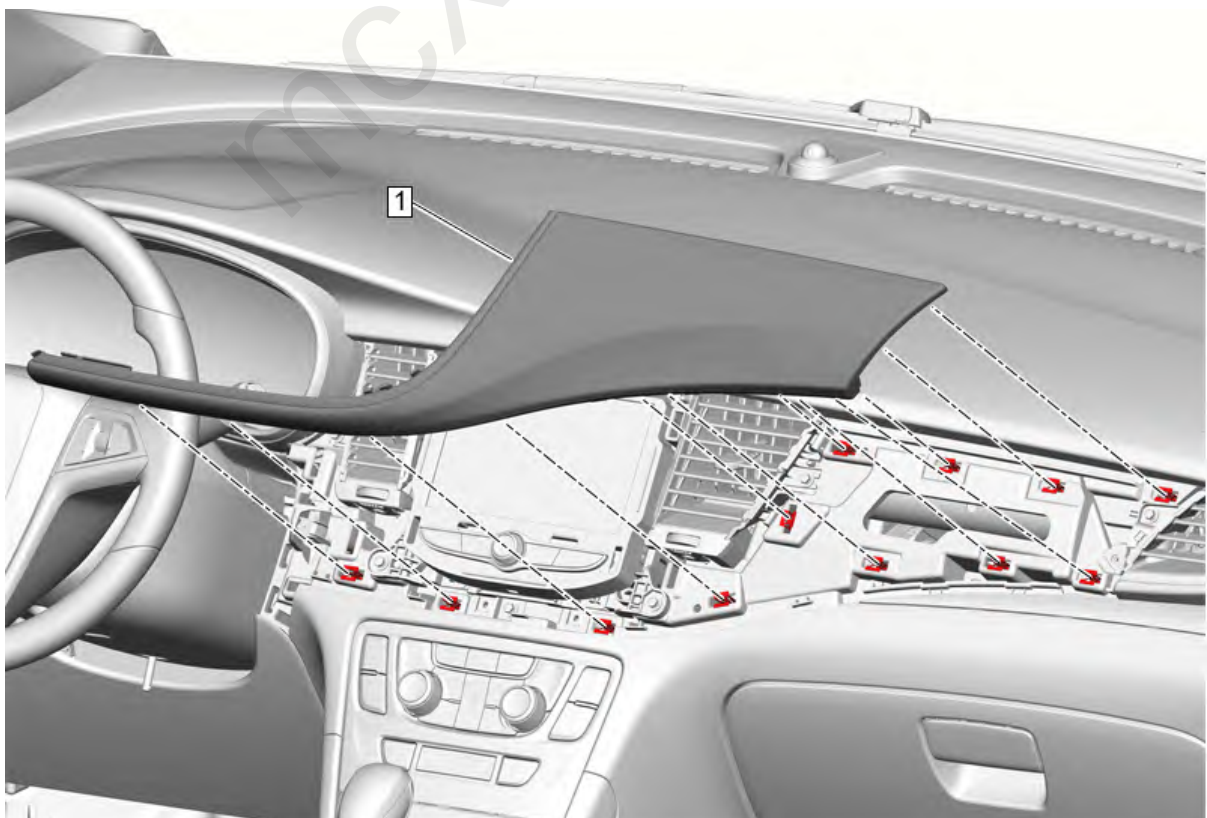


Fig. 34: Panel Lower Trim Plate Applique - Right Side

Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Lower Trim Plate Applique - Right Side (1) - [Instrument Panel Lower Trim Plate Applique Replacement - Right Side \(Buick\)](#).

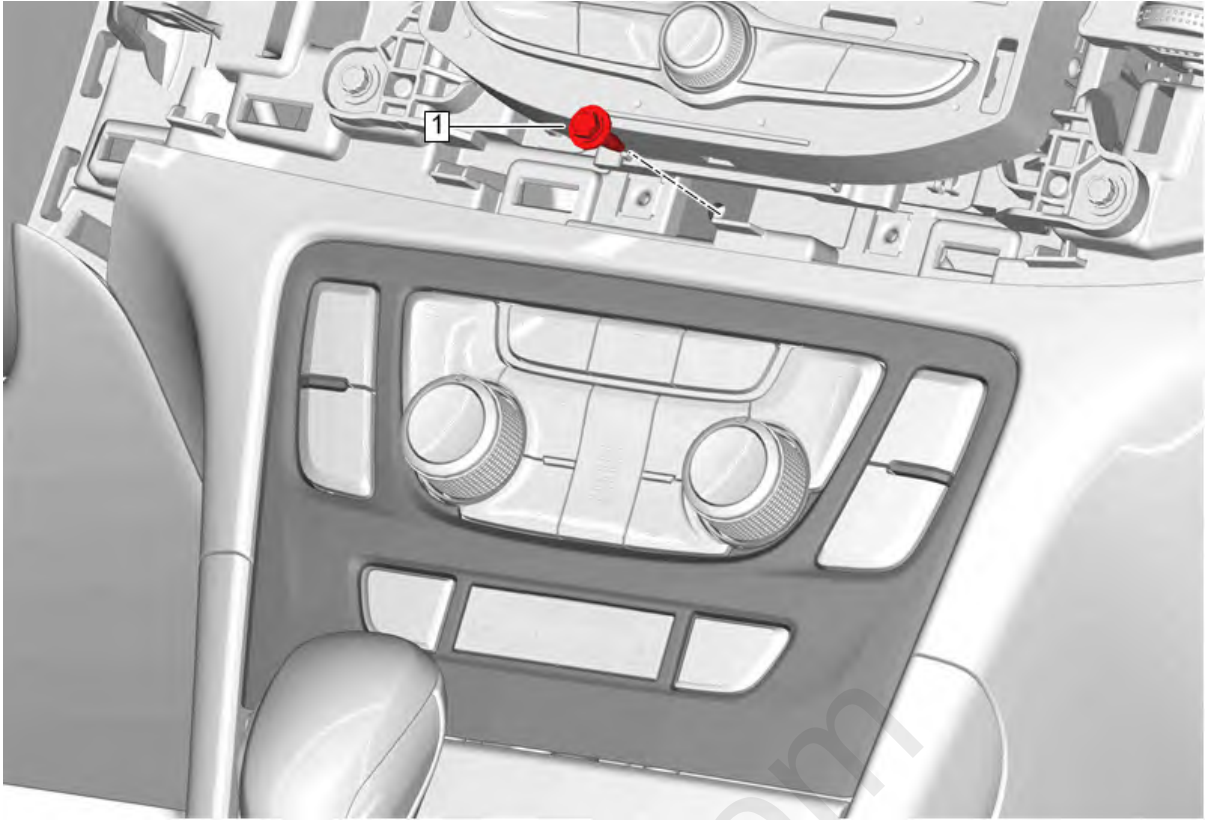


Fig. 35: Panel Accessory Bezel

Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Accessory Bezel Bolt (1)

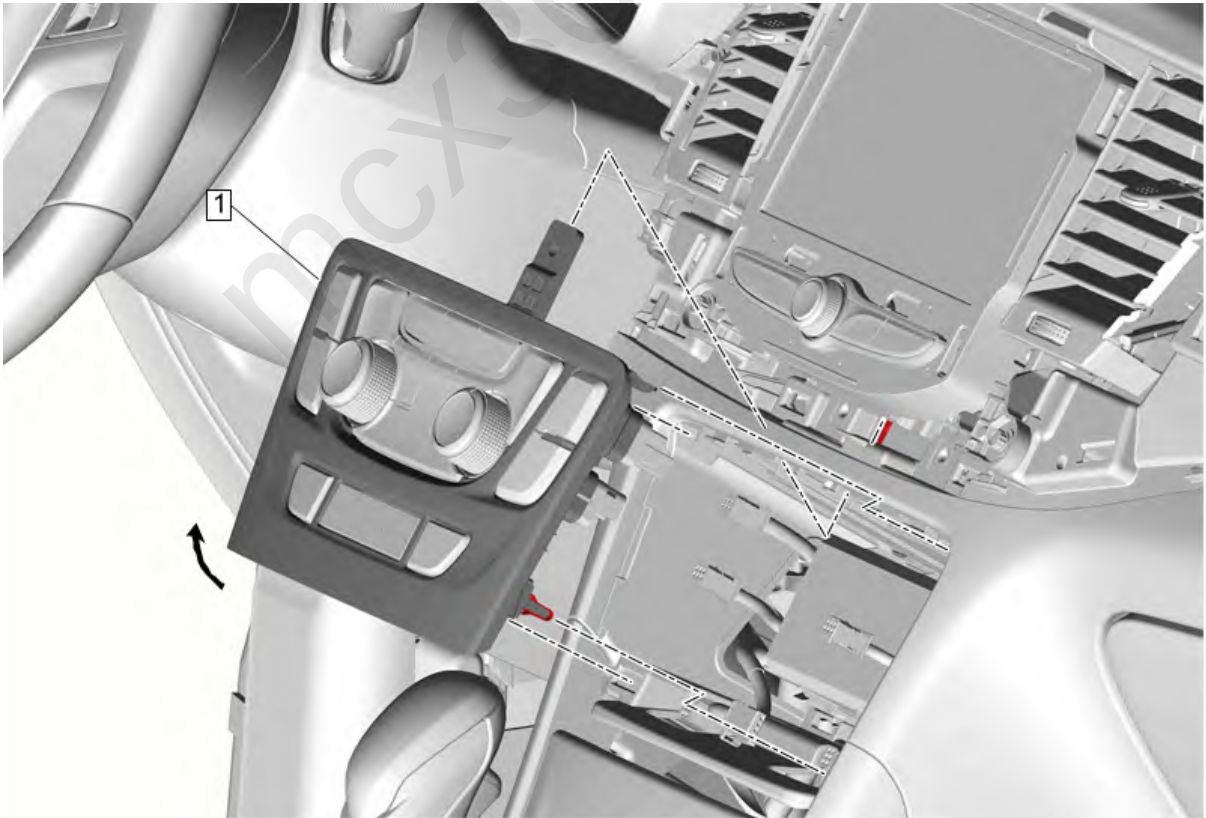


Fig. 36: Instrument Panel Accessory Bezel

Courtesy of GENERAL MOTORS COMPANY

3. Remove Instrument Panel Accessory Bezel (1)
4. Starting at the bottom, release the retainers and slide the bezel down to clear the tab.
5. Disconnect the electrical connectors.

6. Transfer components as necessary.

Installation Procedure

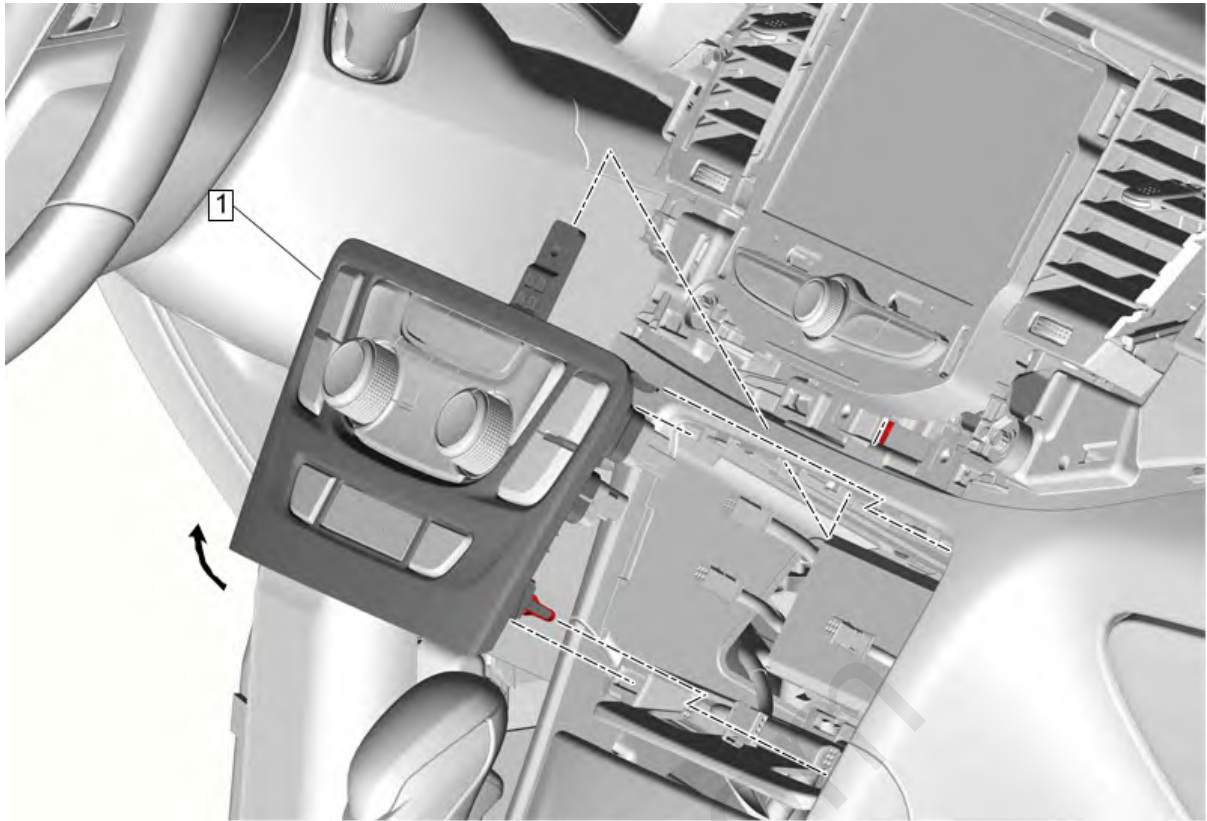


Fig. 37: Instrument Panel Accessory Bezel
Courtesy of GENERAL MOTORS COMPANY

1. Connect the electrical connectors.
2. Install Instrument Panel Accessory Bezel (1)

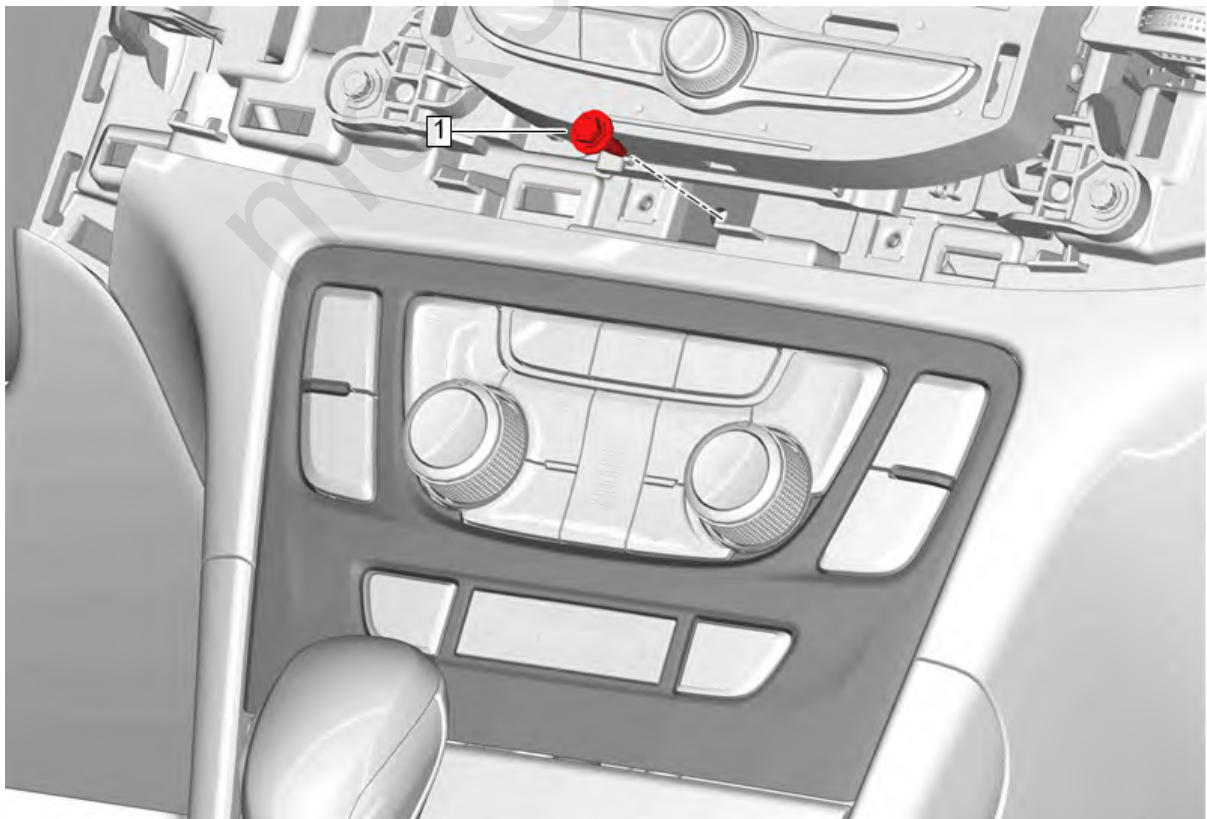


Fig. 38: Panel Accessory Bezel
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Instrument Panel Accessory Bezel Bolt (1) and tighten 2.5 N.m (22 lb in)

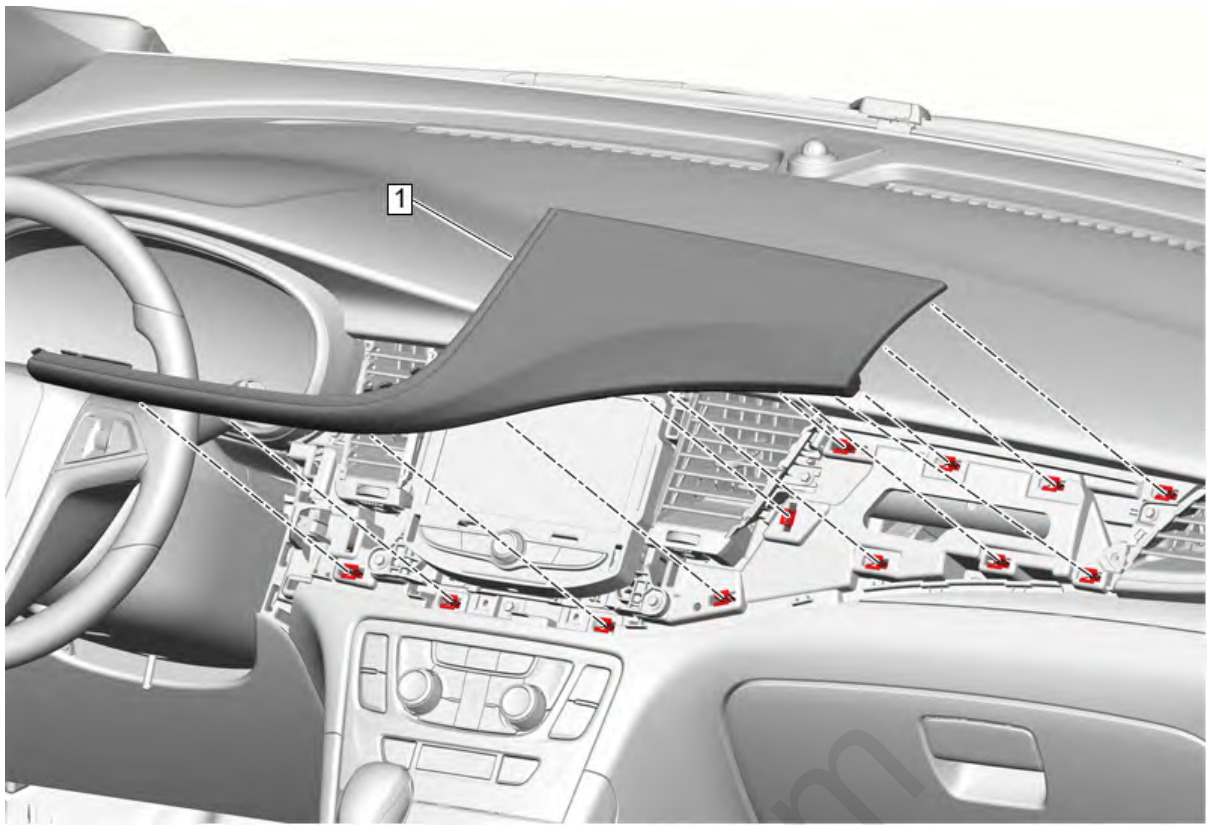


Fig. 39: Panel Lower Trim Plate Applique - Right Side
Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Lower Trim Plate Applique - Right Side (1) - **Instrument Panel Lower Trim Plate Applique Replacement - Right Side (Buick)**

FORWARD COLLISION ALERT DISPLAY BEZEL REPLACEMENT (WITH UEU, BUICK)



Fig. 40: Forward Collision Alert Display Bezel (With UEU, Buick)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Forward Collision Alert Display Bezel Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connector. 3. Transfer components as necessary.

FORWARD COLLISION ALERT DISPLAY BEZEL REPLACEMENT (WITH UEU, CHEVROLET)

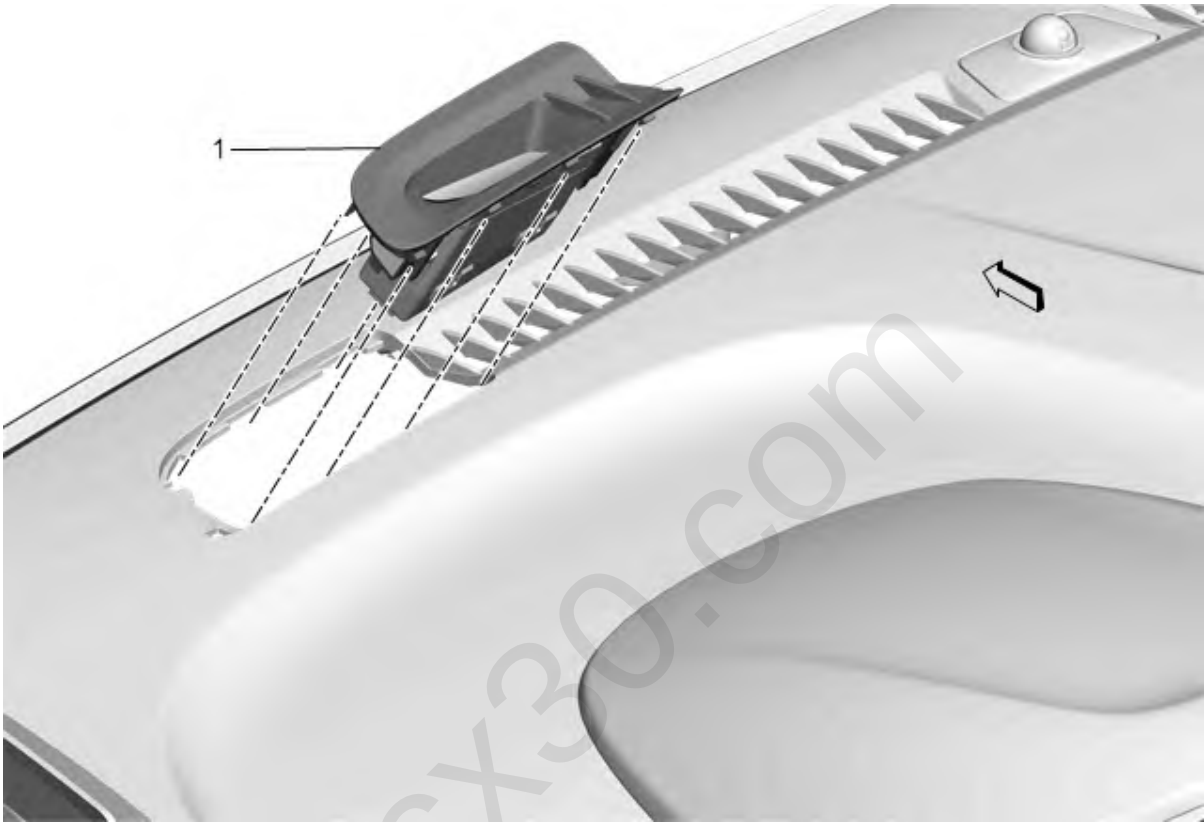


Fig. 41: Forward Collision Alert Display Bezel
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Forward Collision Alert Display Bezel Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connector. 3. Transfer components as necessary.

FORWARD COLLISION ALERT DISPLAY BEZEL REPLACEMENT (WITHOUT UEU, CHEVROLET)

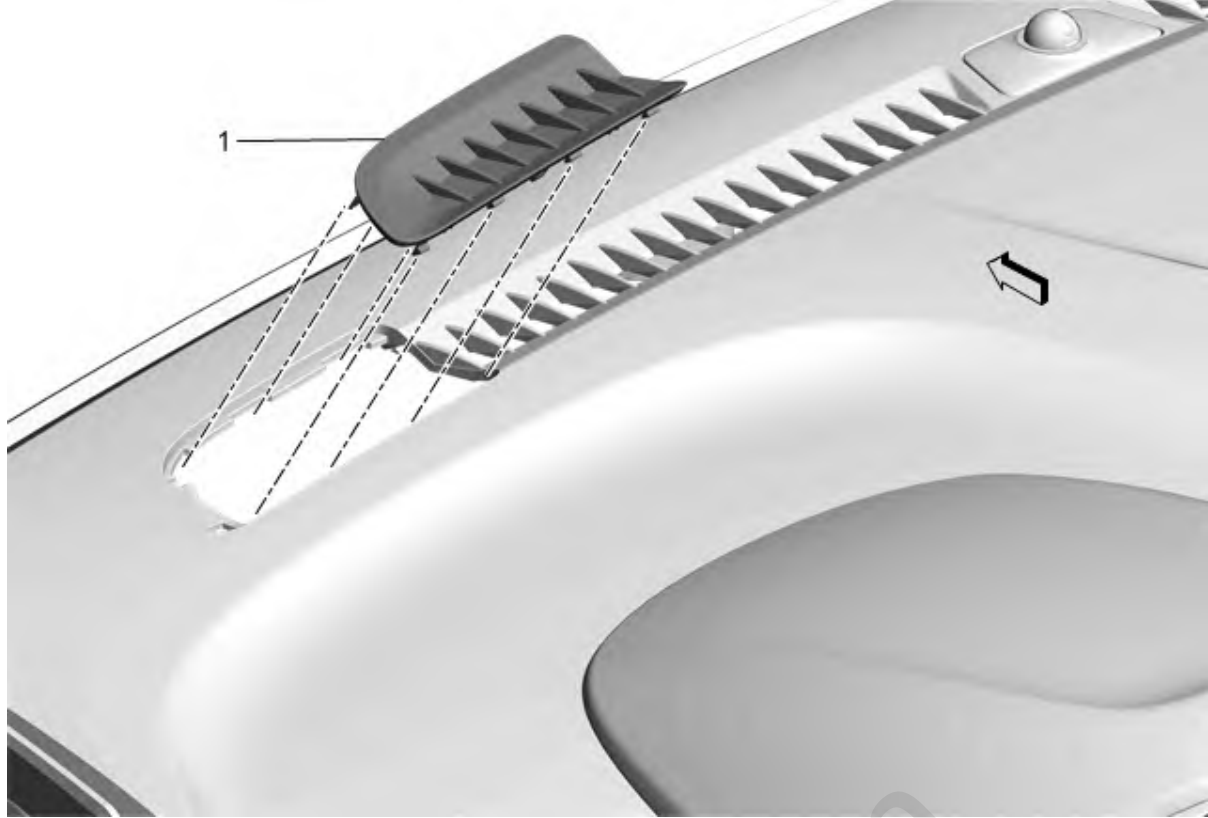


Fig. 42: Forward Collision Alert Display Bezel (Without UEU, Chevrolet).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Forward Collision Alert Display Bezel Procedure Use a flat bladed plastic trim tool.

FORWARD COLLISION ALERT DISPLAY BEZEL REPLACEMENT (WITHOUT UEU, BUICK)



Fig. 43: Forward Collision Alert Display Bezel (Without UEU, Buick).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Forward Collision Alert Display Bezel Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL OUTER TRIM COVER REPLACEMENT (BUICK)

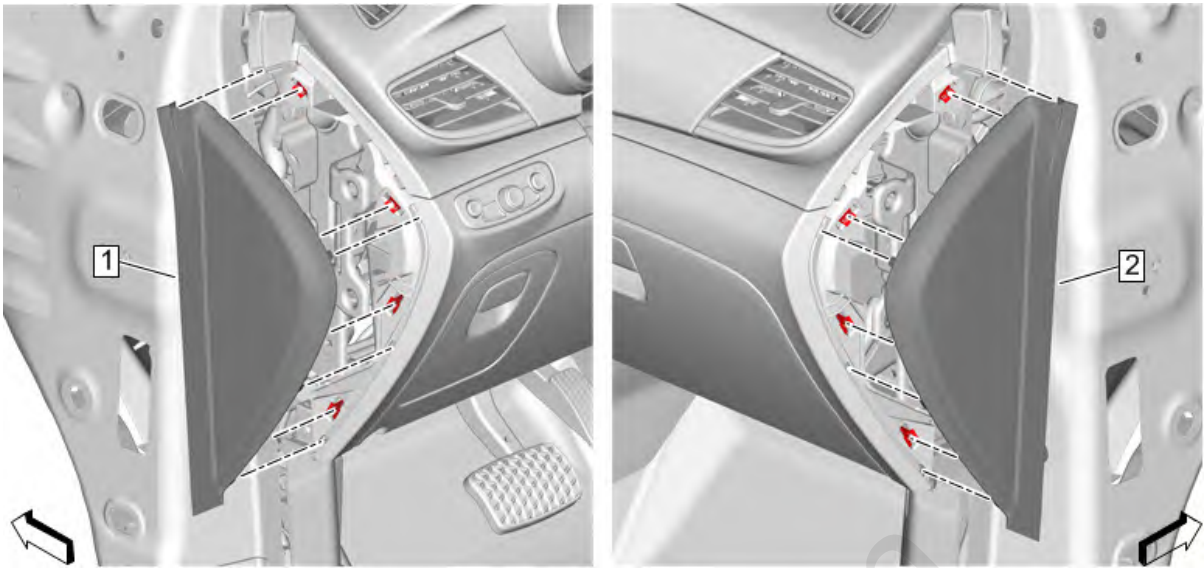


Fig. 44: Instrument Panel Outer Trim Cover
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Outer Trim Cover - Left Procedure Use a flat bladed plastic trim tool, start releasing the panel from the bottom working toward the top.
2	Instrument Panel Outer Trim Cover - Right Procedure Use a flat bladed plastic trim tool, start releasing the panel from the bottom working toward the top.

INSTRUMENT PANEL OUTER TRIM COVER REPLACEMENT (CHEVROLET)

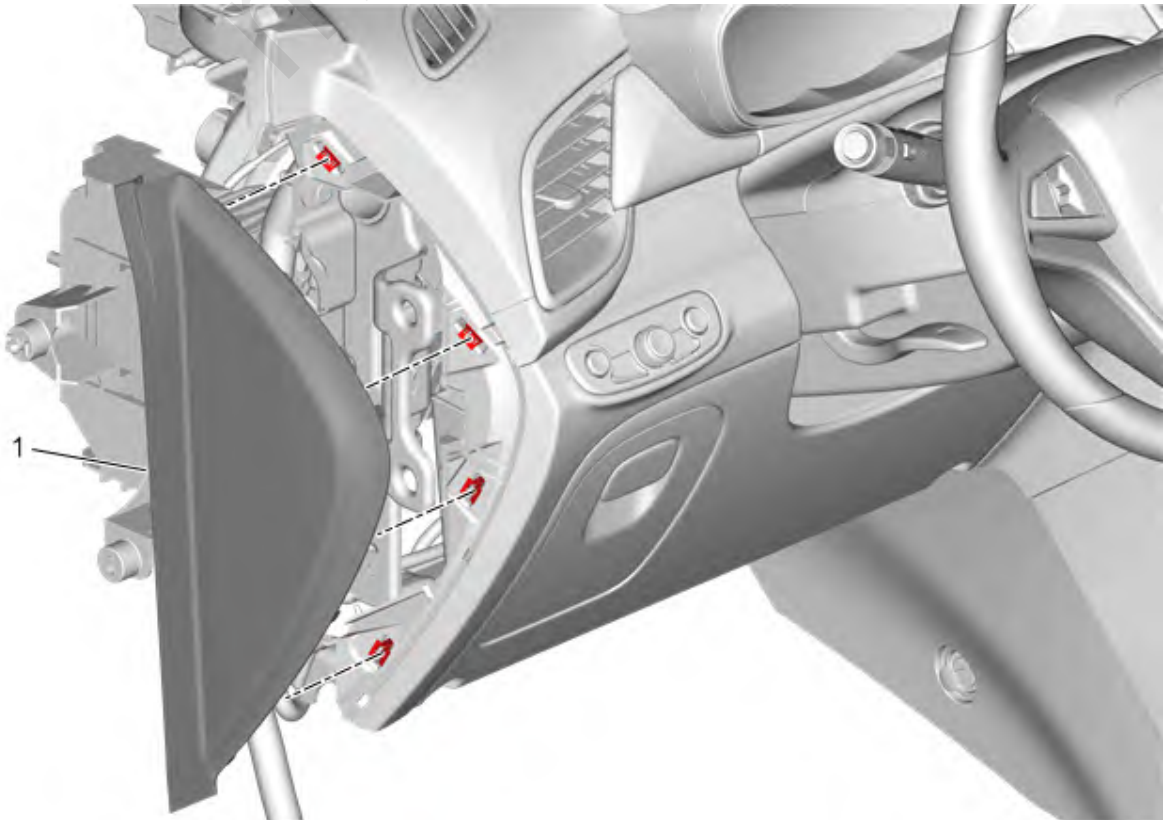


Fig. 45: Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Instrument Panel Outer Trim Cover Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL LOWER CENTER TRIM PANEL REPLACEMENT (CHEVROLET)

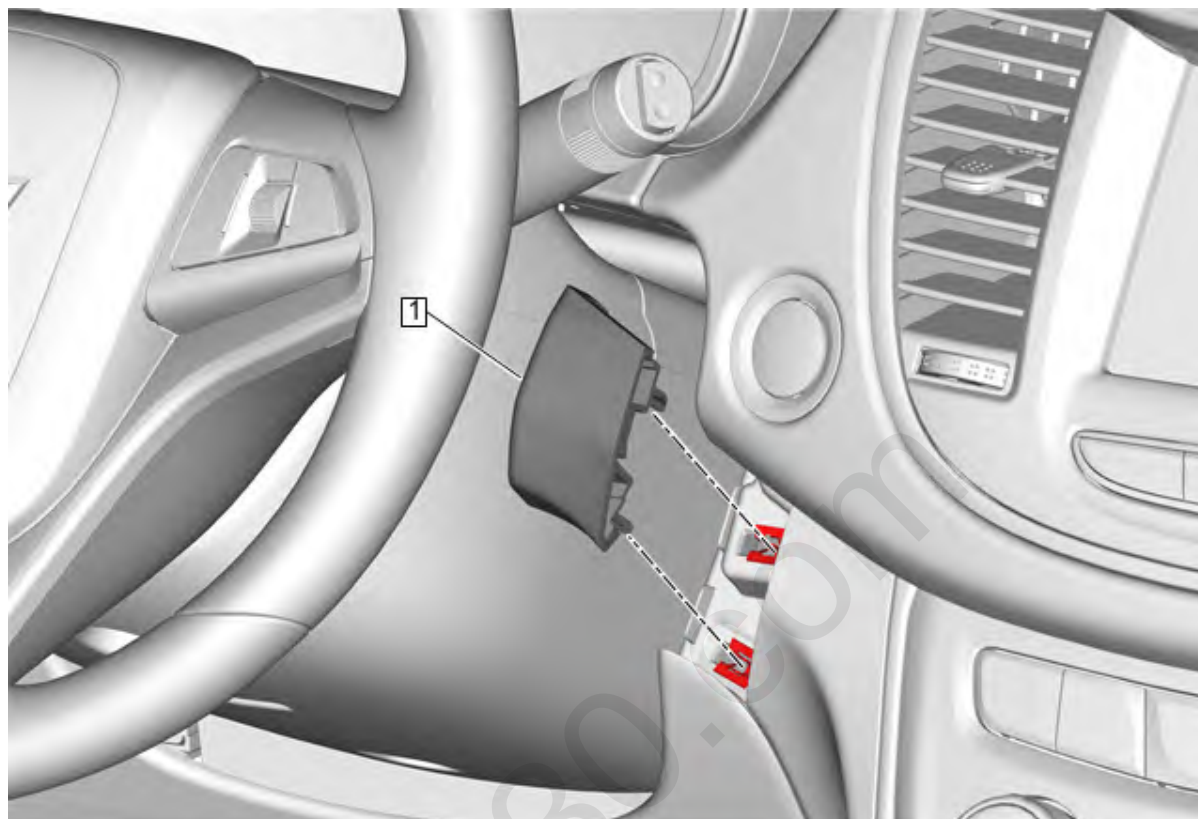


Fig. 46: Instrument Panel Lower Center Trim Panel (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure 1. Loosen Instrument Panel Upper Trim Panel - Right Side - Instrument Panel Upper Trim Panel Replacement - Right Side (Chevrolet) . 2. Loosen Instrument Panel Knee Bolster - Instrument Panel Knee Bolster Replacement (Chevrolet) .	
1	Instrument Panel Lower Center Trim Panel Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL COMPARTMENT REPLACEMENT

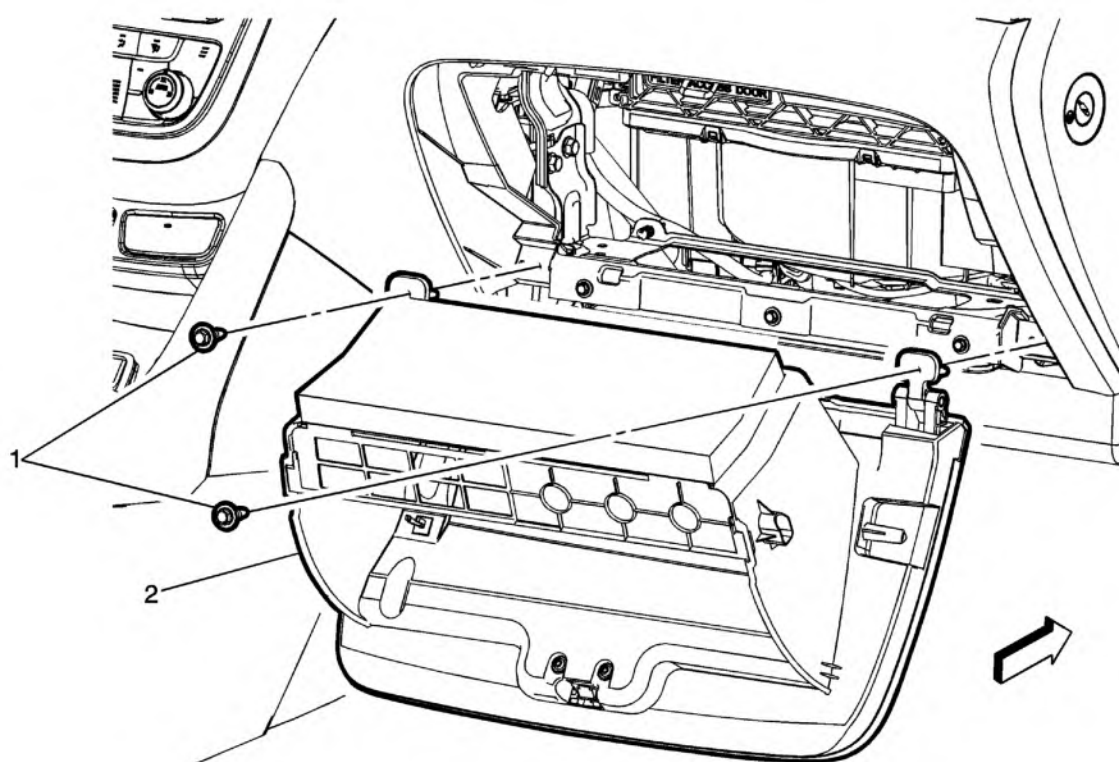


Fig. 47: Instrument Panel Compartment
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure 1. Open the instrument panel compartment to the full open position. 2. Disconnect the instrument panel compartment dampener from the compartment assembly by depressing the tabs on the compartment and sliding the dampener rod off.	
1	Instrument Panel Compartment Bolt (Qty: 2) CAUTION: Refer to Fastener Caution . Procedure To access the fasteners, squeeze the sides of the compartment assembly and allow the compartment to lower past the compartment stops. Tighten 2.5 N.m (22 lb in)
2	Instrument Panel Compartment Procedure When replacing the instrument panel compartment, transfer all necessary components.

INSTRUMENT PANEL COMPARTMENT DOOR DAMPENER REPLACEMENT

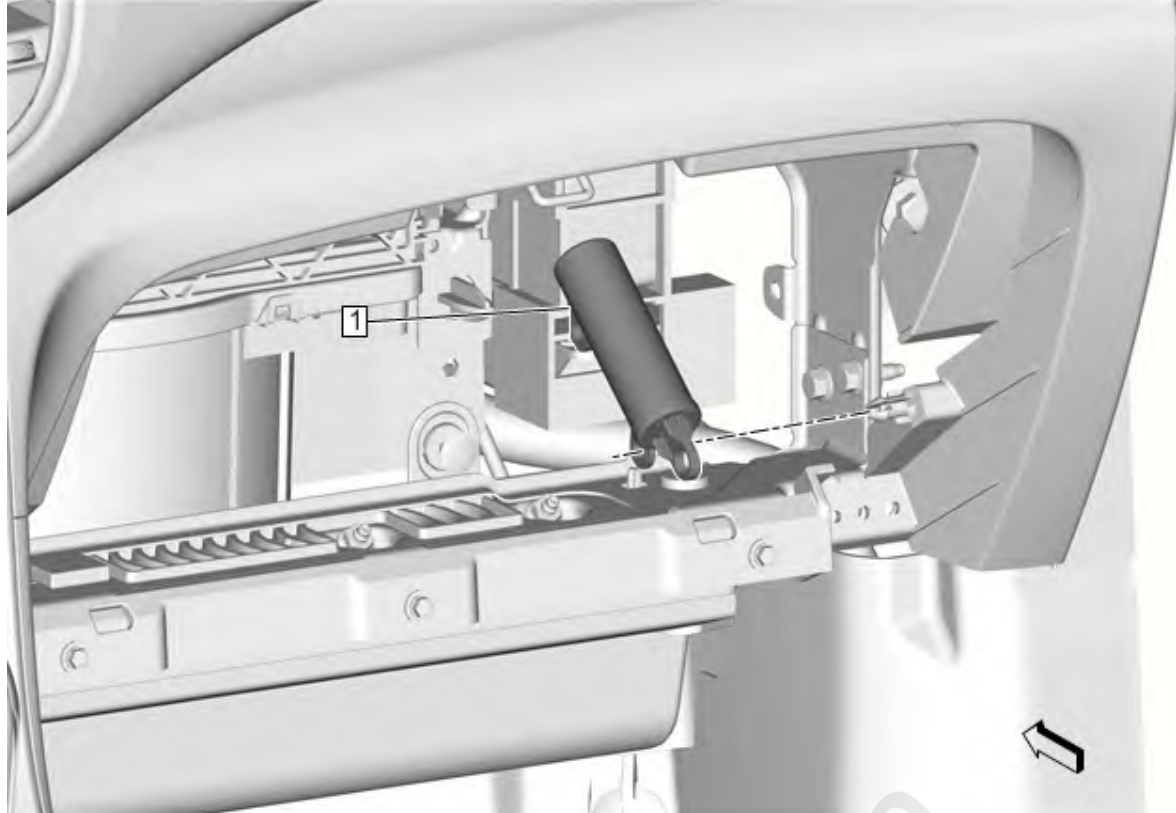


Fig. 48: Instrument Panel Compartment Door Dampener
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Compartment Replacement</u>	
1	Instrument Panel Compartment Door Dampener Procedure Release the clips with a suitable tool.

INSTRUMENT PANEL ASSEMBLY REPLACEMENT (BUICK)

Removal Procedure

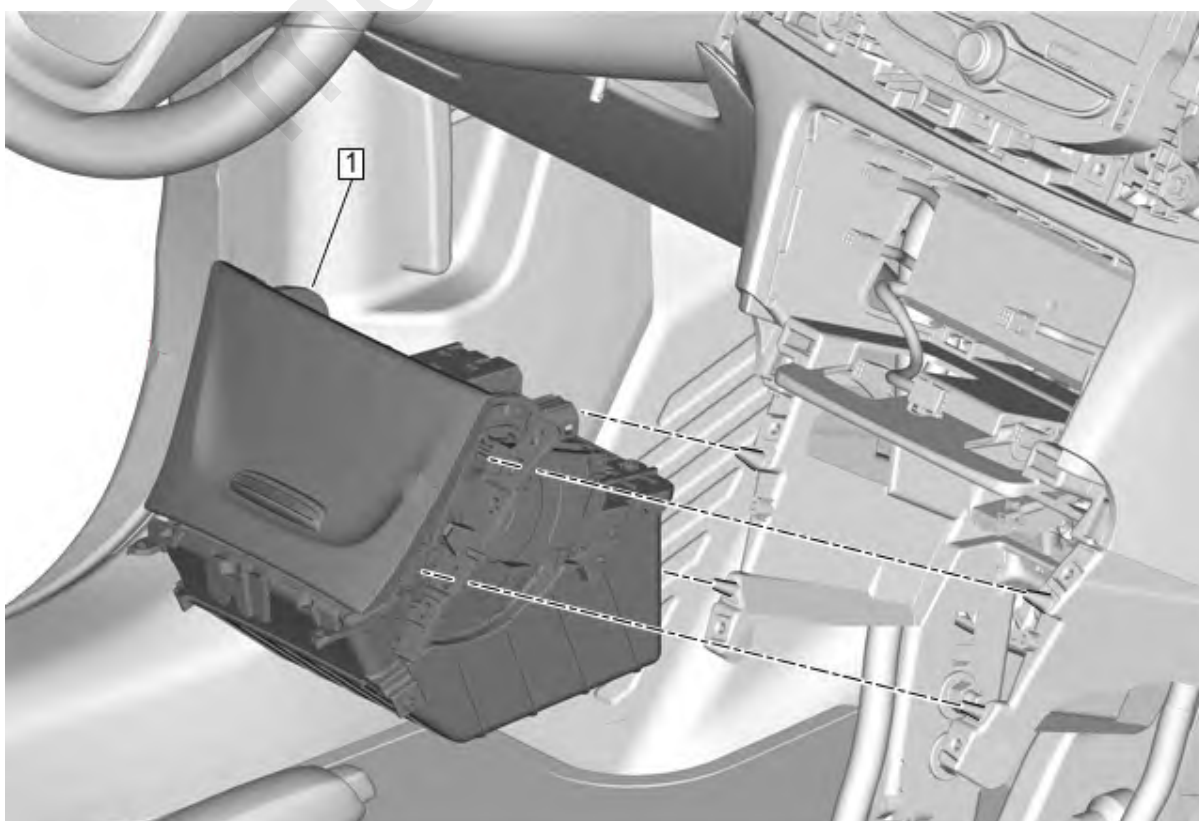


Fig. 49: Front Floor Console Stowage Tray.
Courtesy of GENERAL MOTORS COMPANY

1. Remove Front Floor Console Stowage Tray (1) - **Front Floor Console Stowage Tray Replacement (Buick).**

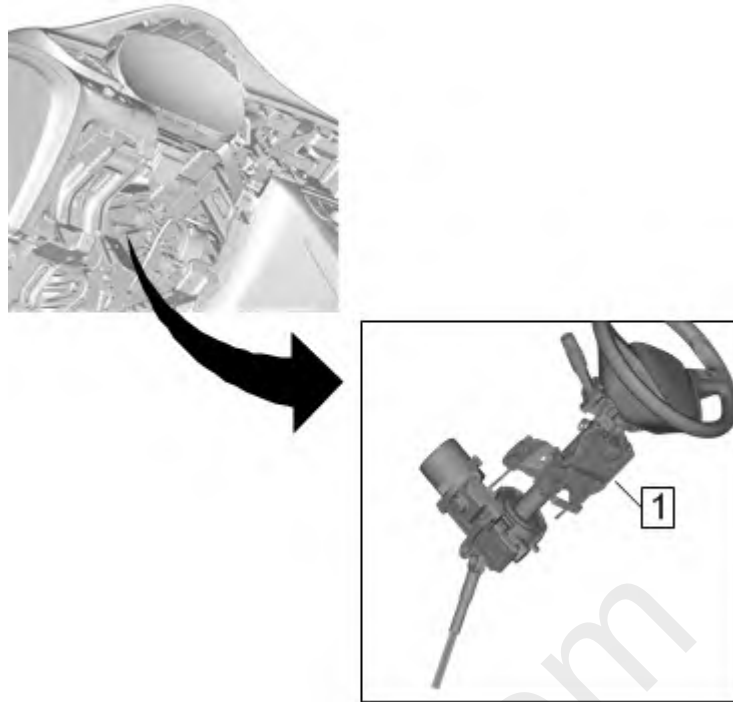


Fig. 50: Steering Column
Courtesy of GENERAL MOTORS COMPANY

2. Remove Steering Column (1) - **Steering Column Replacement (Buick, Mexico, NJ1, With BTM, With N06) Steering Column Replacement (Buick, Canada/United States, NJ1, With BTM, Without N06).**

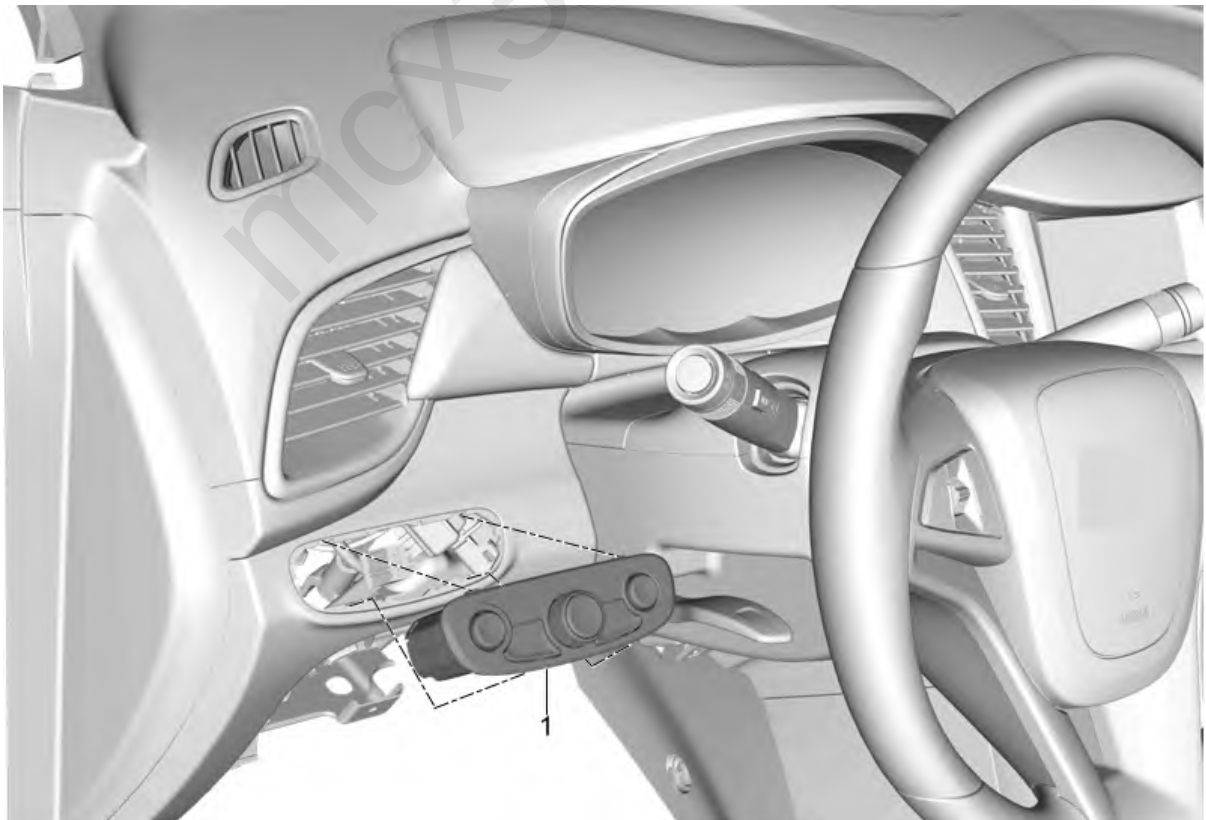


Fig. 51: Headlamp Switch
Courtesy of GENERAL MOTORS COMPANY

3. Remove Headlamp Switch (1) - **Headlamp Switch Replacement**

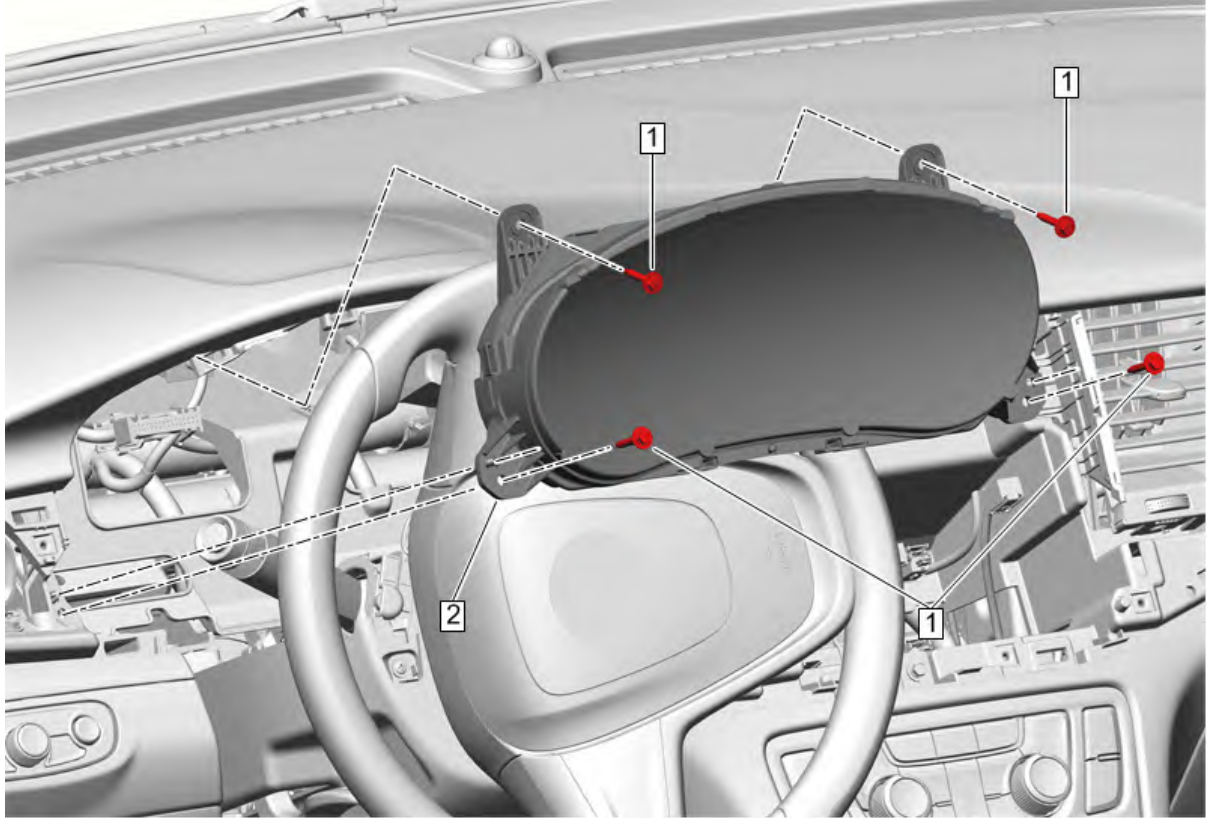


Fig. 52: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

4. Remove Instrument Cluster (2) - **Instrument Cluster Replacement (Buick)**.

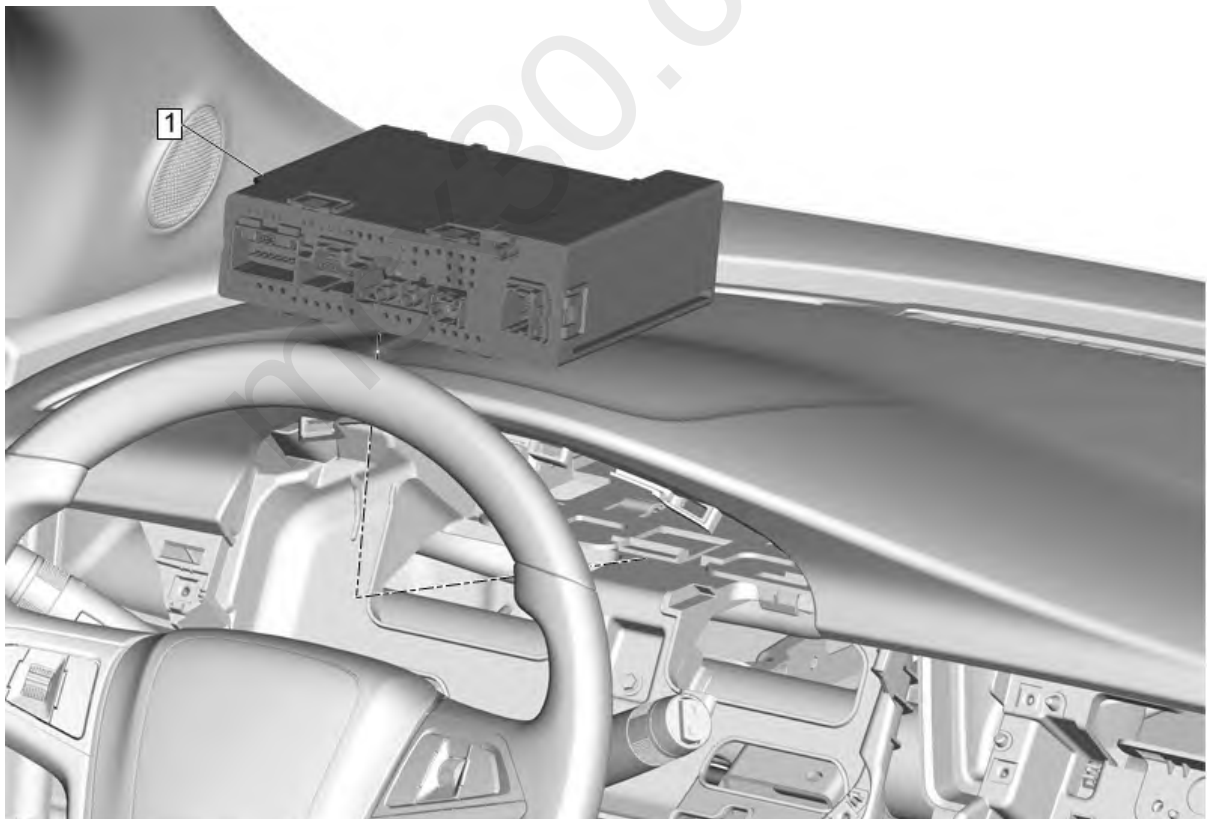


Fig. 53: Radio (Encore)

Courtesy of GENERAL MOTORS COMPANY

5. Remove Radio (1) - **Radio Replacement (Buick)**.

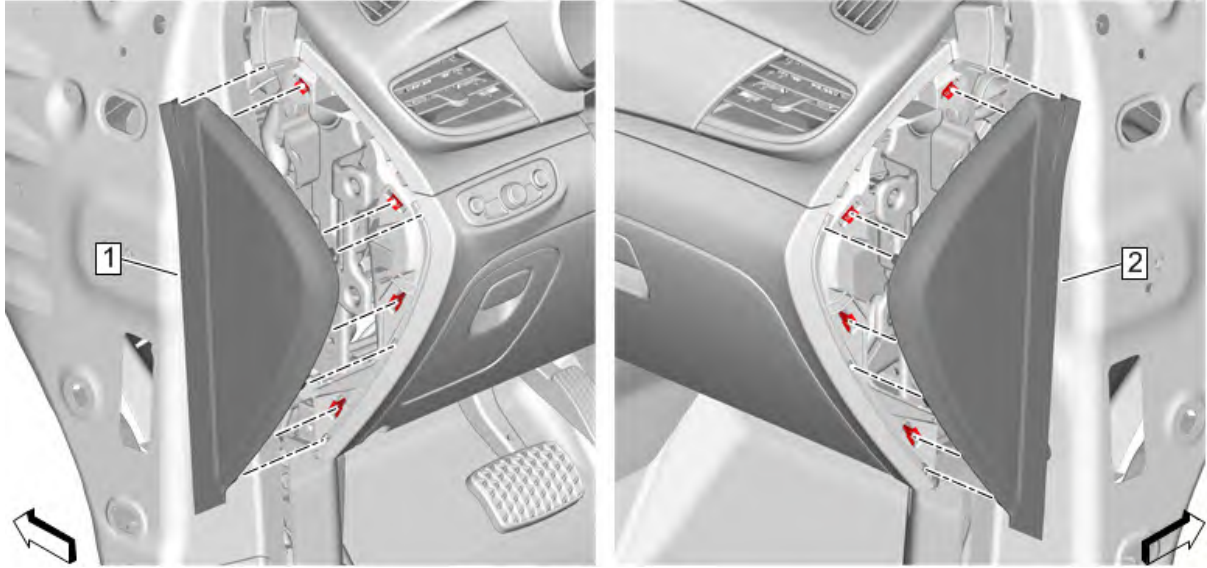


Fig. 54: Instrument Panel Outer Trim Cover

Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Outer Trim Cover (1, 2) - [Instrument Panel Outer Trim Cover Replacement \(Buick\)](#)

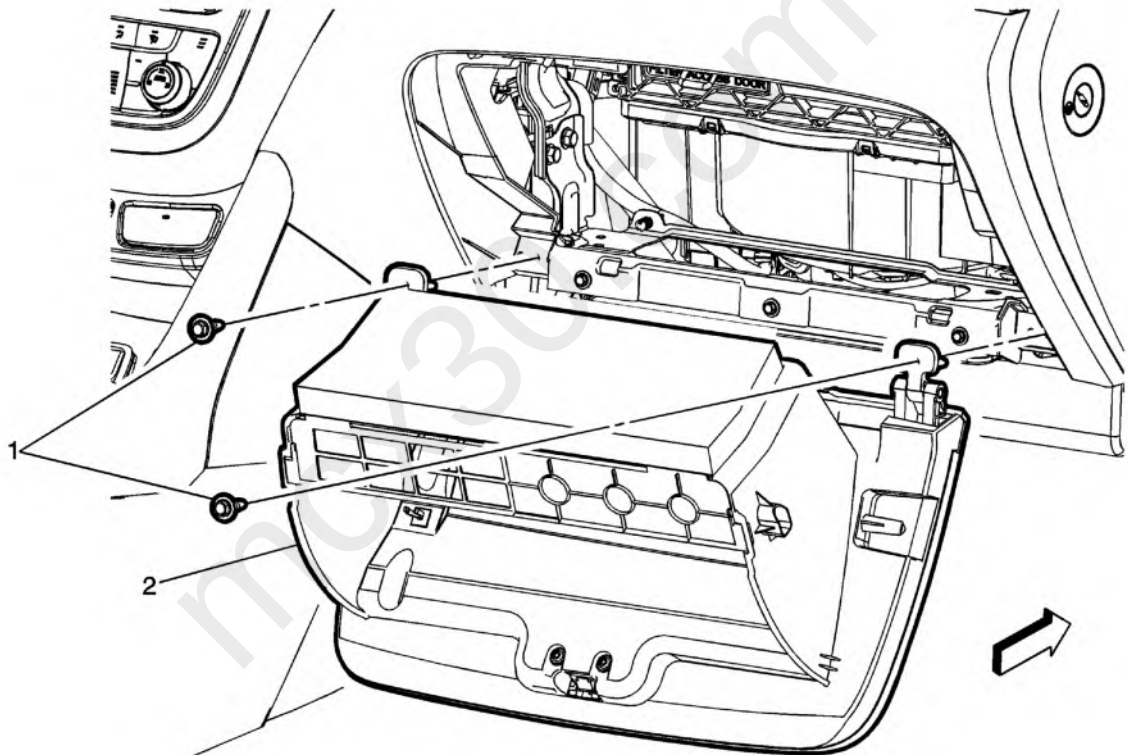


Fig. 55: Instrument Panel Compartment

Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Compartment (2) - [Instrument Panel Compartment Replacement](#)

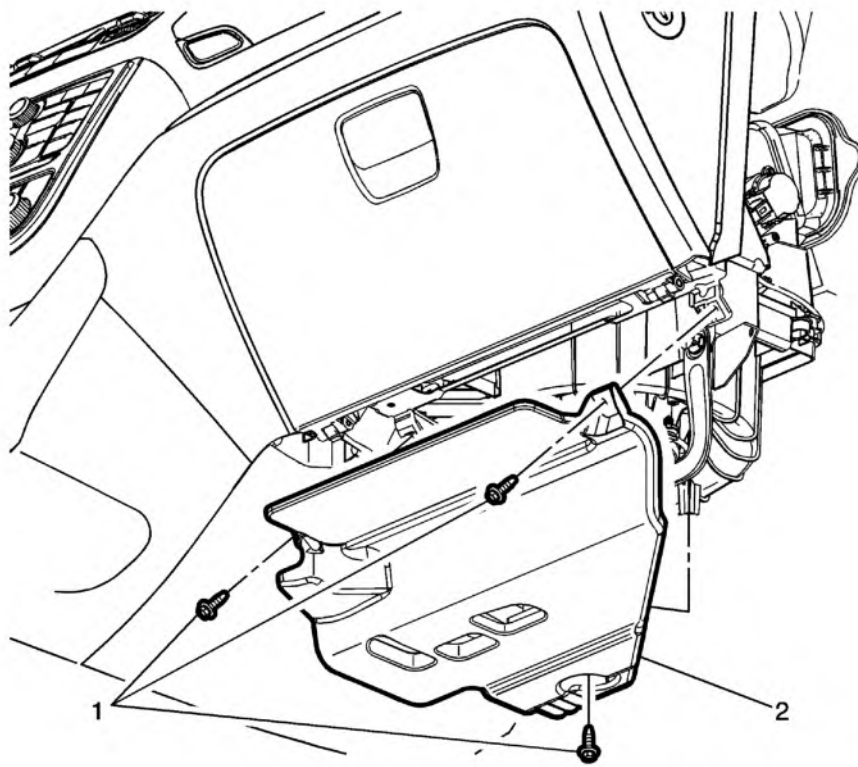


Fig. 56: Instrument Panel Lower Trim Panel Insulator
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Lower Trim Panel Insulator (2) - [Instrument Panel Lower Trim Panel Insulator Replacement \(Buick\)](#).



Fig. 57: Sun Load Temperature Sensor Bezel
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Sun Load Temperature Sensor Bezel (1) - [Sun Load Temperature Sensor Bezel Replacement \(Buick\)](#).

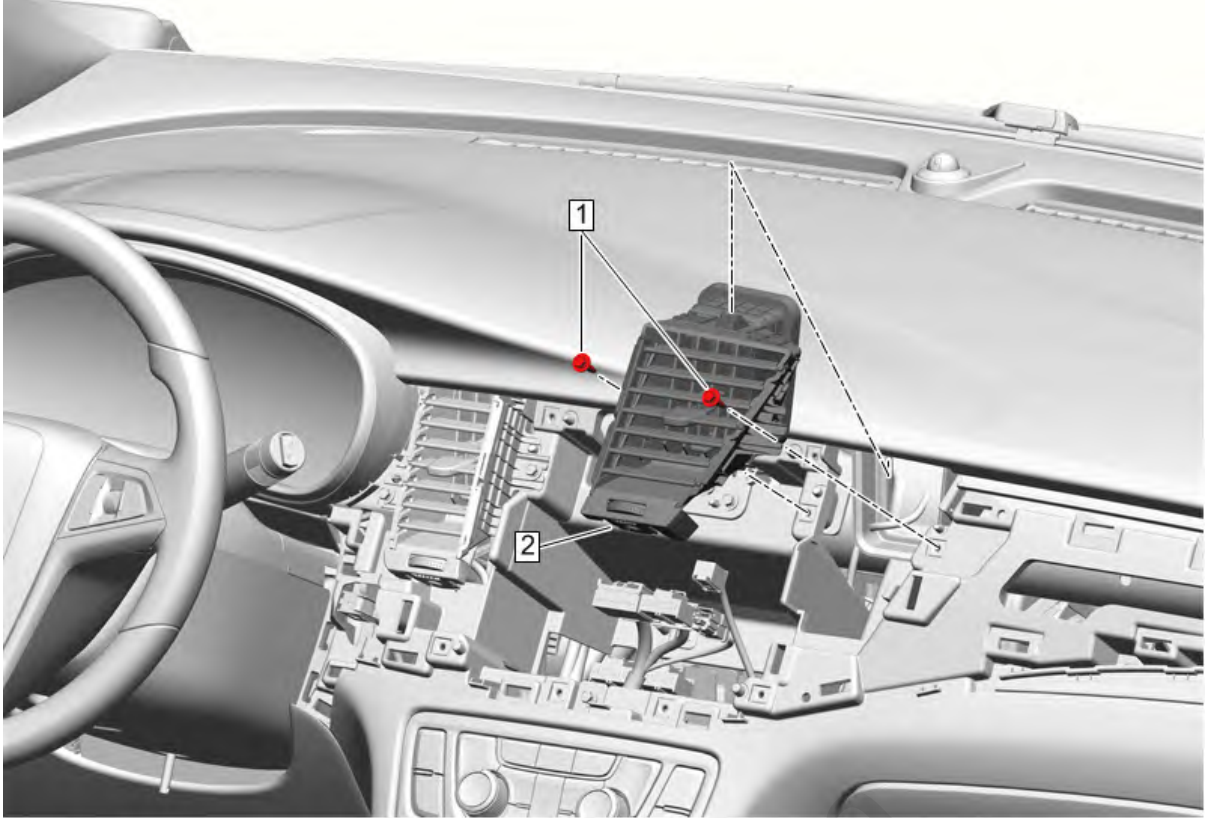


Fig. 58: Instrument Panel Center Air Outlet - Right Side (Buick).
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Buick).**

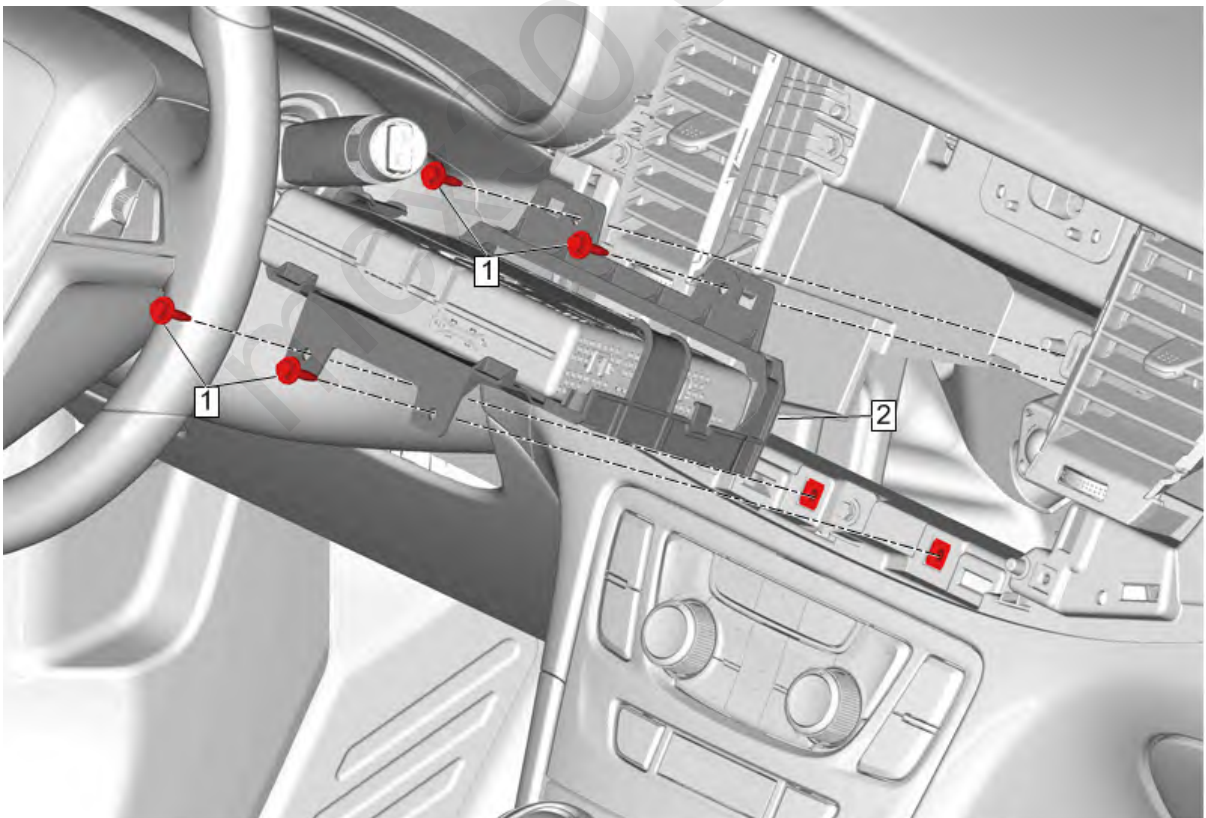


Fig. 59: Human Machine Interface Control Module Bracket
 Courtesy of GENERAL MOTORS COMPANY

11. Remove Human Machine Interface Control Module Bracket (2) - **Human Machine Interface Control Module Bracket Replacement**

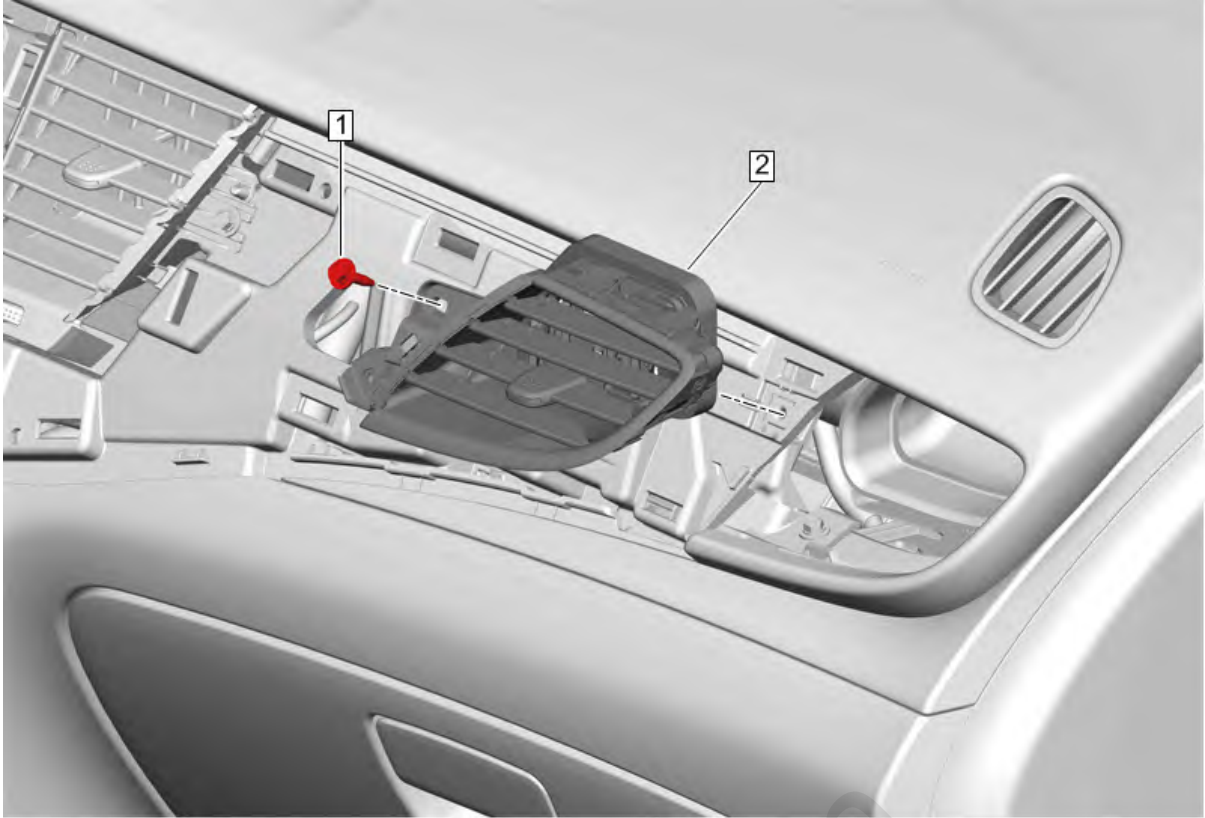


Fig. 60: Instrument Panel Outer Air Outlet - Right Side (Buick)
 Courtesy of GENERAL MOTORS COMPANY

12. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Buick)**

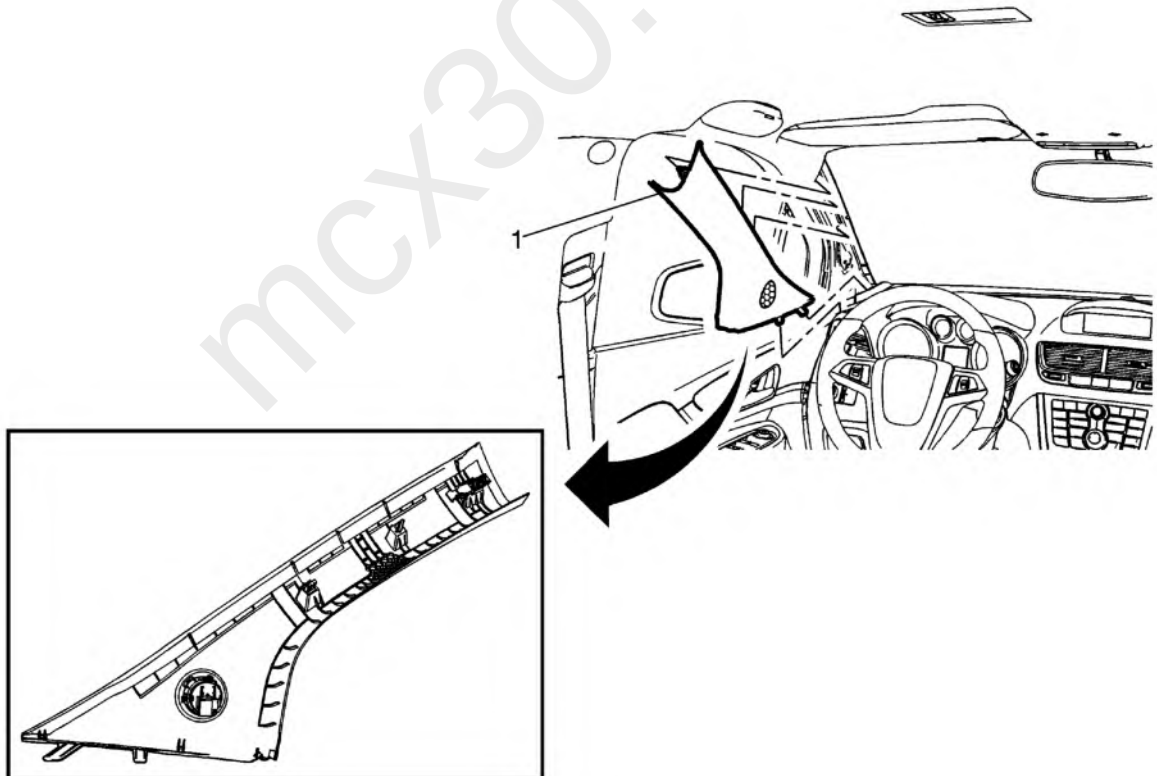


Fig. 61: Windshield Garnish Molding Assembly
 Courtesy of GENERAL MOTORS COMPANY

13. Remove Windshield Garnish Molding (1) - **Windshield Garnish Molding Replacement (Buick)**
14. Remove Heater and Air Conditioning Remote Control - **Heater and Air Conditioning Remote Control Replacement**

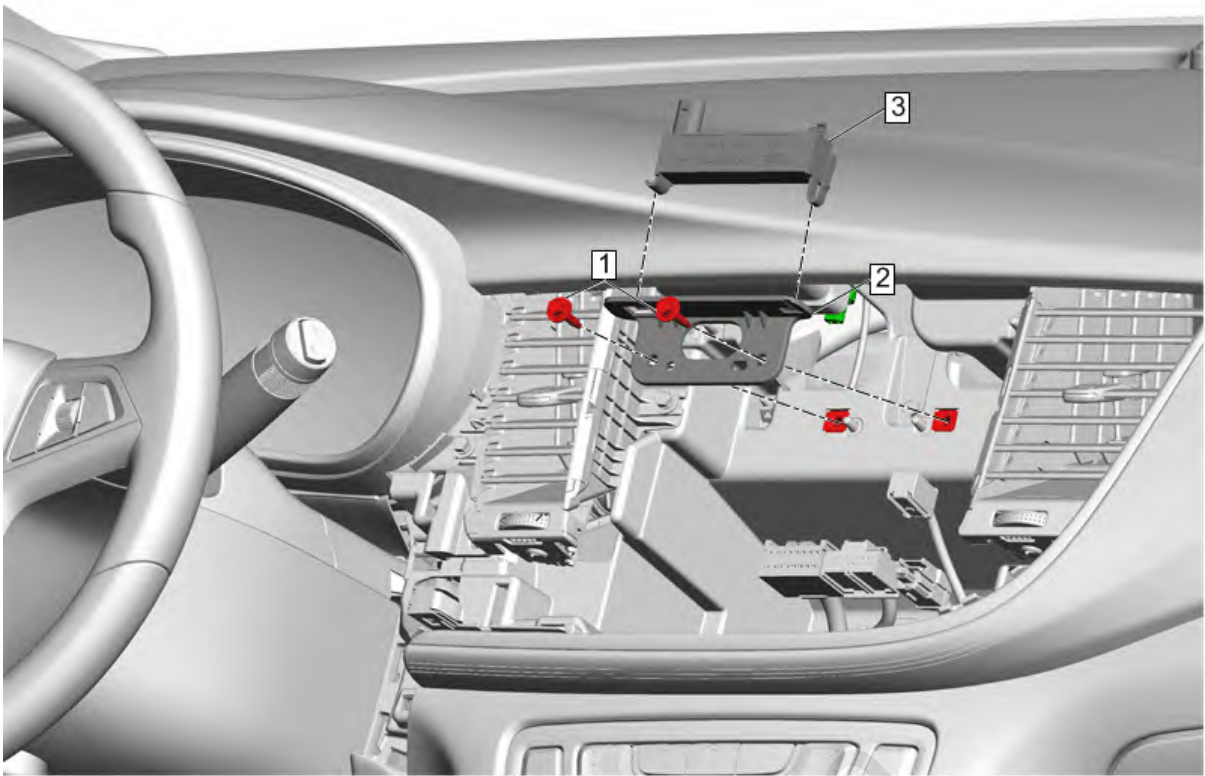


Fig. 62: Low Frequency Instrument Panel Antenna (Buick).

Courtesy of GENERAL MOTORS COMPANY

15. Remove Low Frequency Instrument Panel Antenna (3) - **Low Frequency Instrument Panel Antenna Replacement (Buick).**

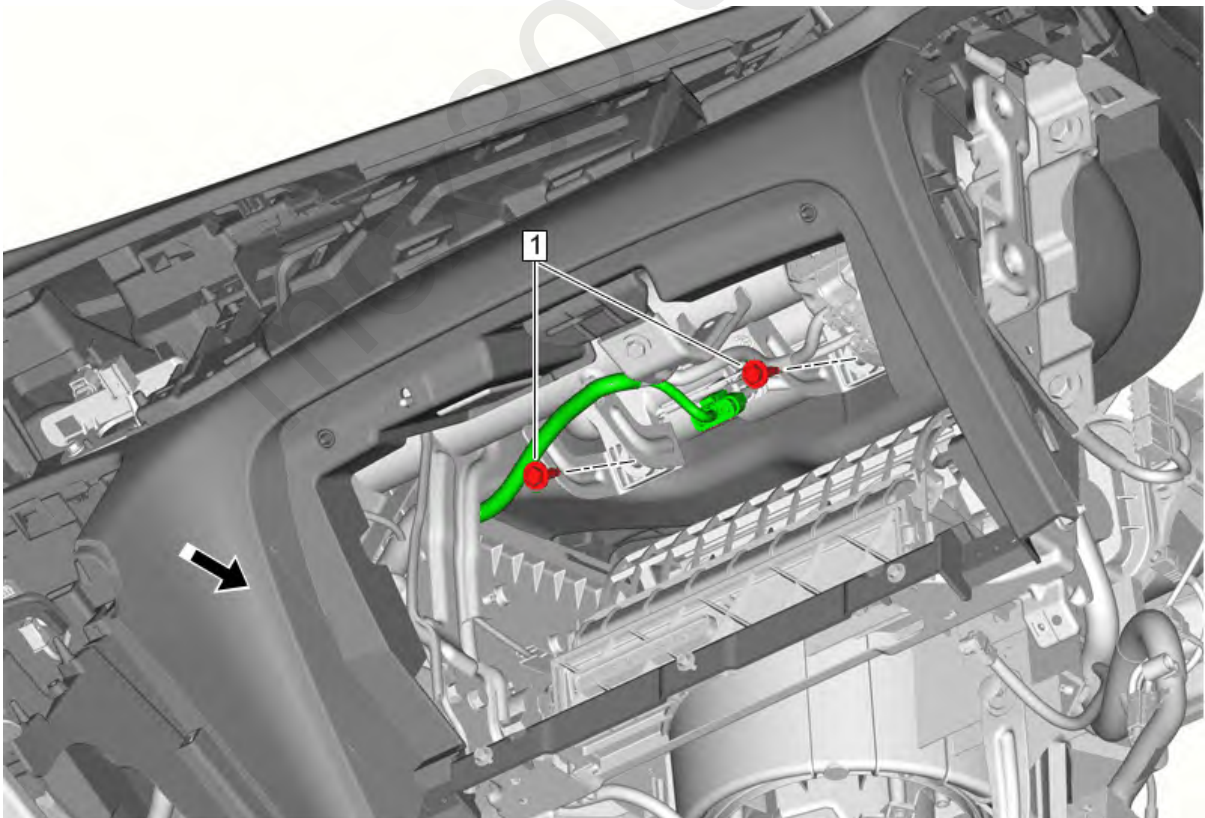


Fig. 63: Instrument Panel Airbag Bolt

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Airbag Bolt (1)
17. Disconnect the electrical connector.

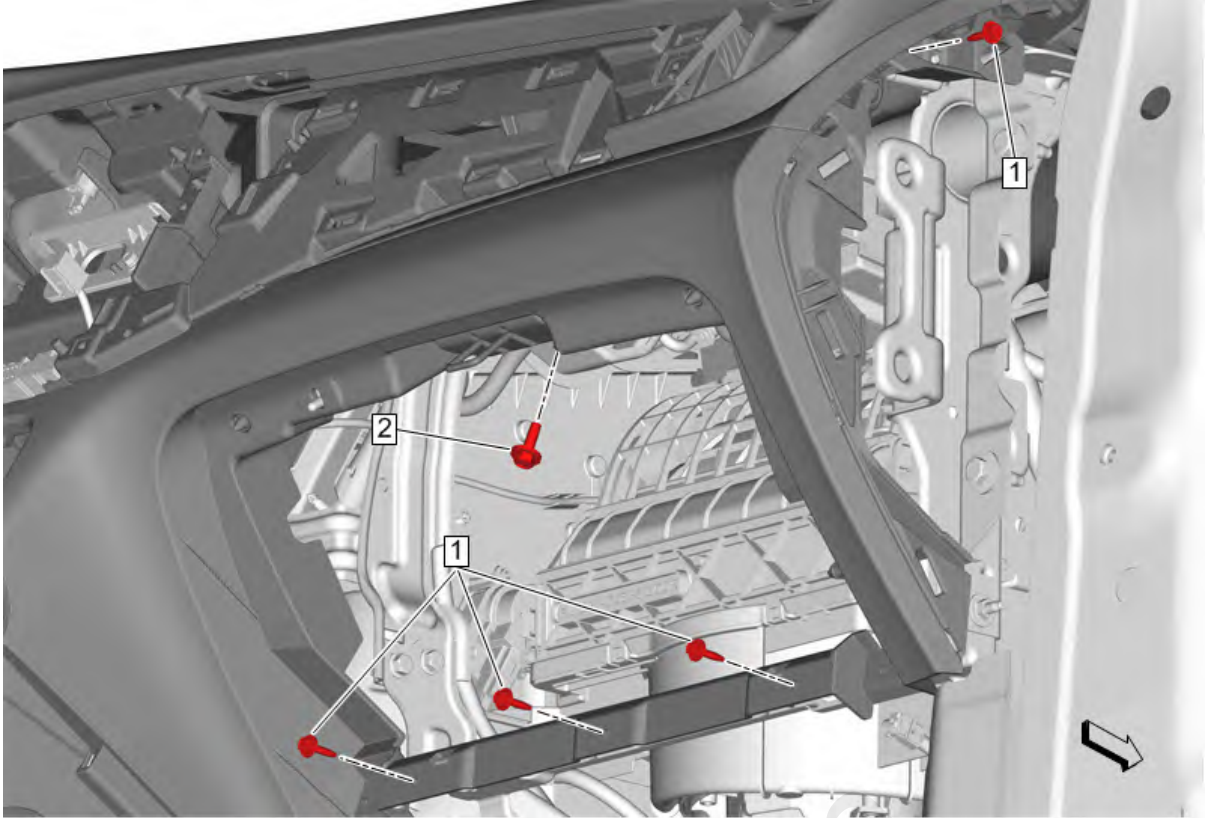


Fig. 64: Instrument Panel Bolt And Instrument Panel Compartment Door Latch Striker Bolt

Courtesy of GENERAL MOTORS COMPANY

18. Remove Instrument Panel Bolt (1)
19. Remove Instrument Panel Compartment Door Latch Striker Bolt (2)

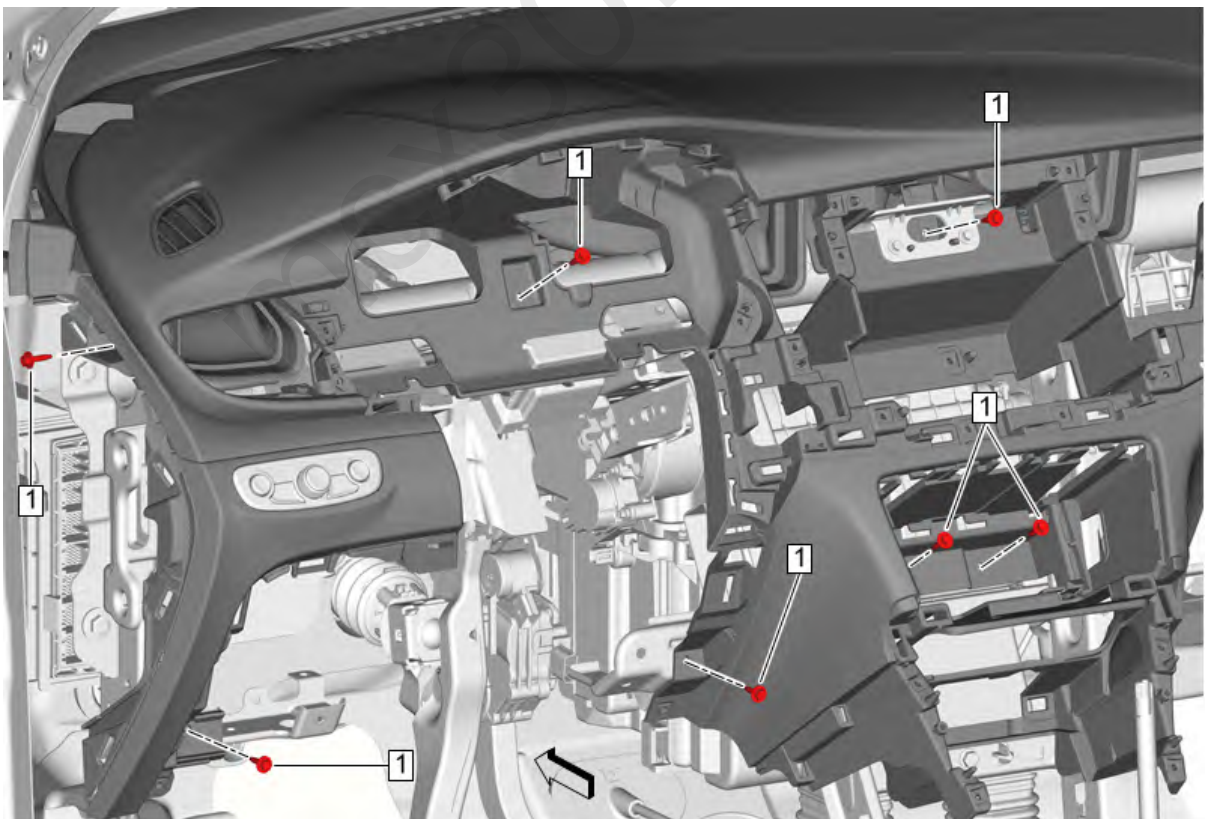


Fig. 65: Instrument Panel Bolt

Courtesy of GENERAL MOTORS COMPANY

20. Remove Instrument Panel Bolt (1)
21. Note the location and routing of the instrument panel electrical harness assembly, to ensure proper reinstallation.

22. Disconnect the fasteners securing the instrument panel electrical harness assembly to the instrument panel and position out of the way.

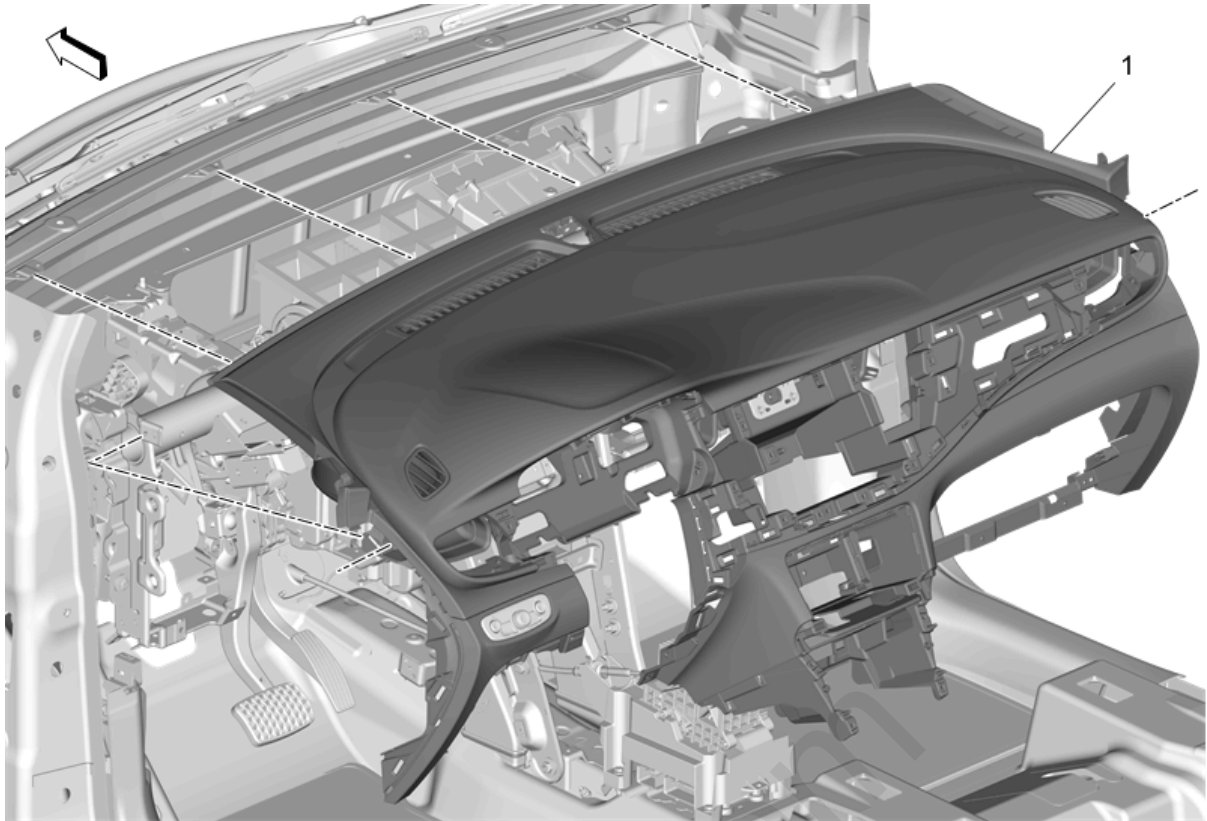


Fig. 66: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

23. With the aid of an assistant, lift the instrument panel (1) rearward and upward from the tie bar assembly.
24. Remove the instrument panel (1) from the vehicle.
25. Transfer all necessary components.

Installation Procedure

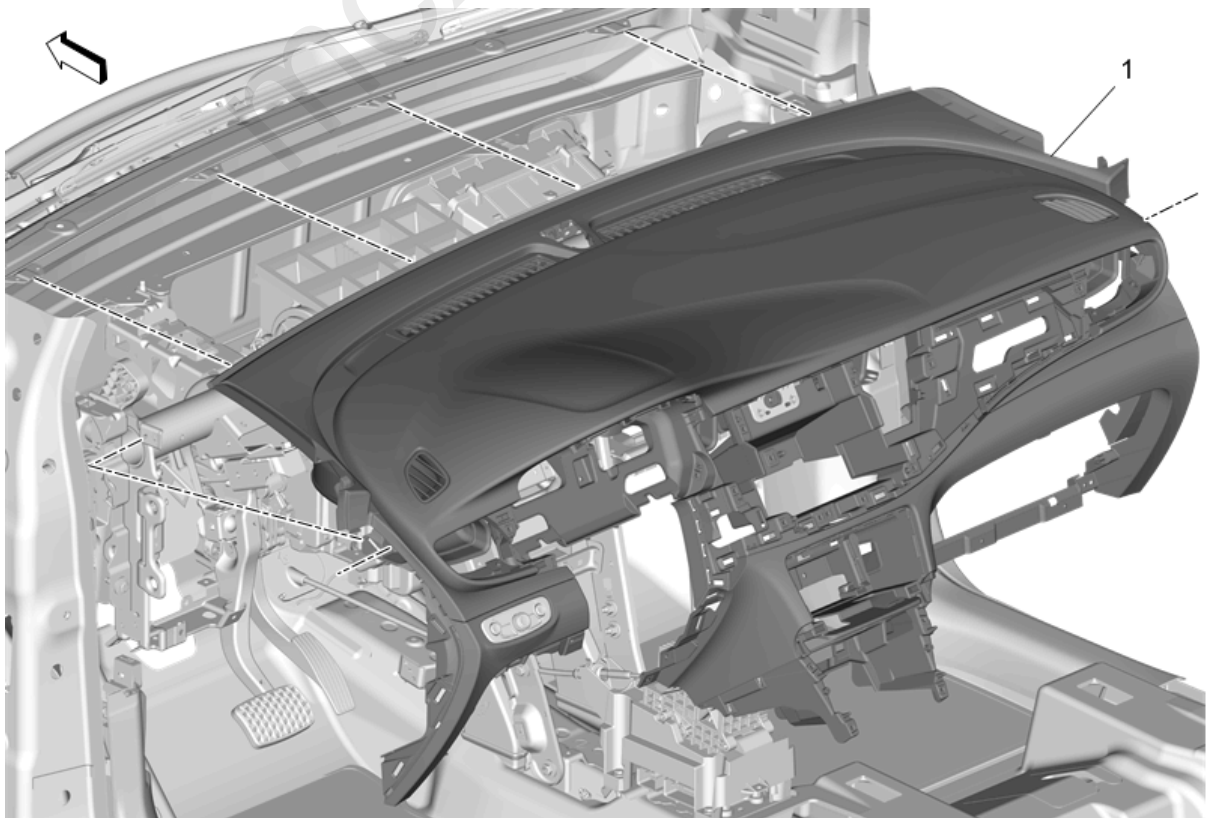


Fig. 67: Instrument Panel

Courtesy of GENERAL MOTORS COMPANY

1. With the aid of an assistant, install the instrument panel (1) to the instrument panel tie bar and the locator pins.
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 panel (1).

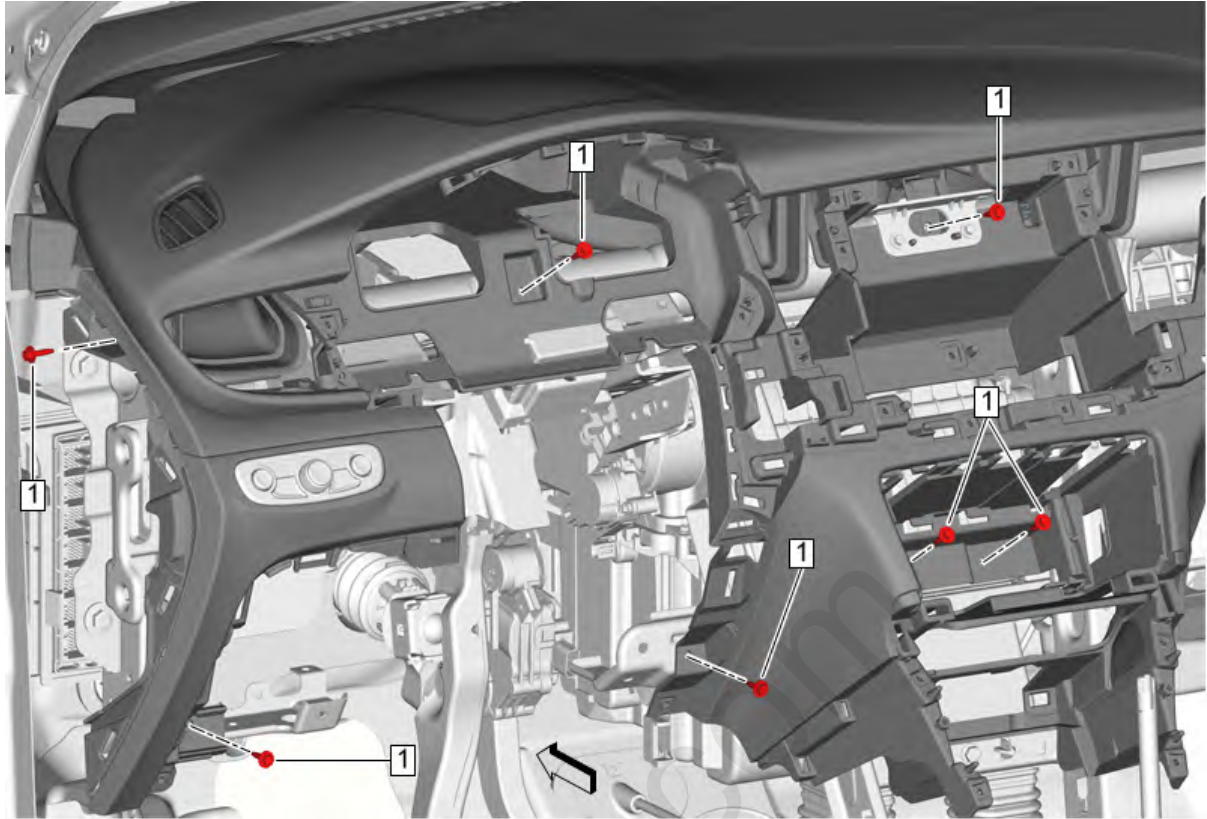


Fig. 68: Instrument Panel Bolt

Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution**.

3. Install Instrument Panel Bolt (1) and tighten 2.5 N.m (22 lb in)

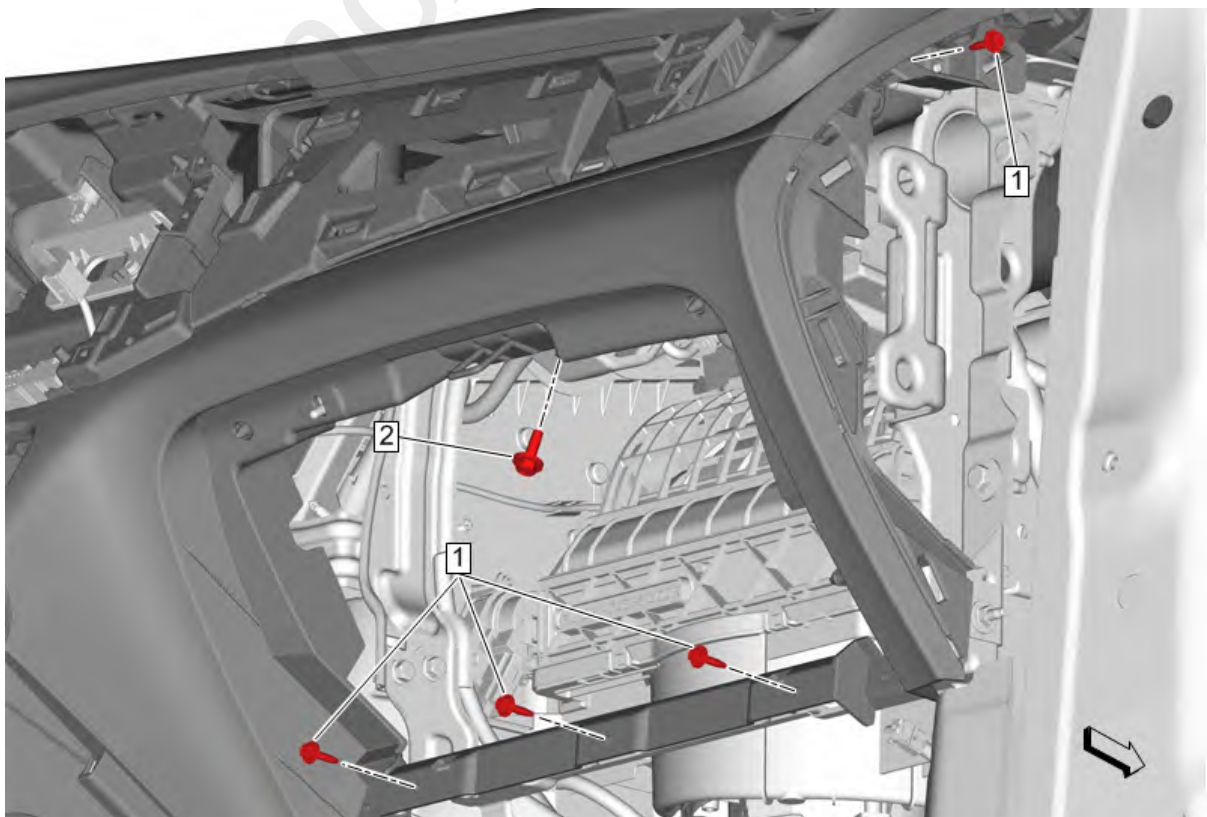


Fig. 69: Instrument Panel Bolt And Instrument Panel Compartment Door Latch Striker Bolt

4. Install Instrument Panel Bolt (1) and tighten 2.5 N.m (22 lb in)
5. Install Instrument Panel Compartment Door Latch Striker Bolt (2) and tighten 9 N.m (80 lb in)

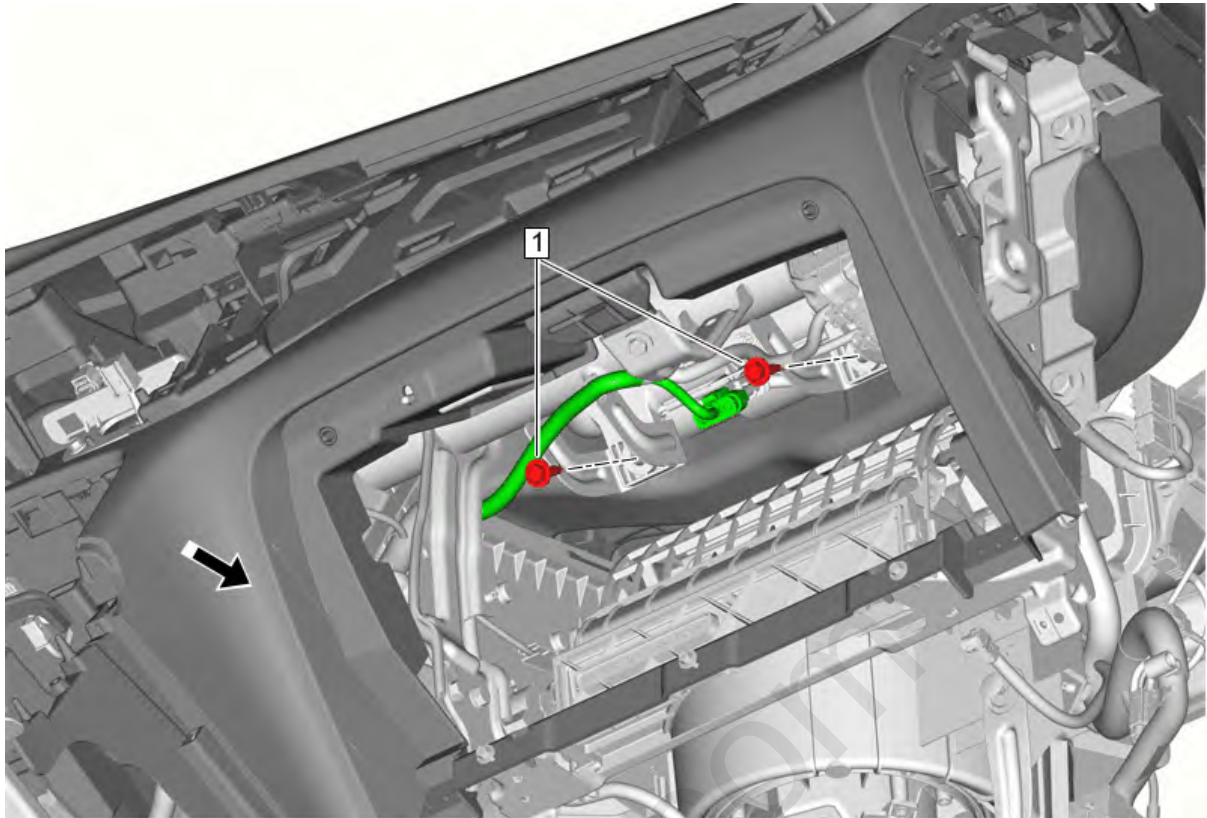


Fig. 70: Instrument Panel Airbag Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Install Instrument Panel Airbag Bolt (1) and tighten 9 N.m (80 lb in)
7. Connect the electrical connector.

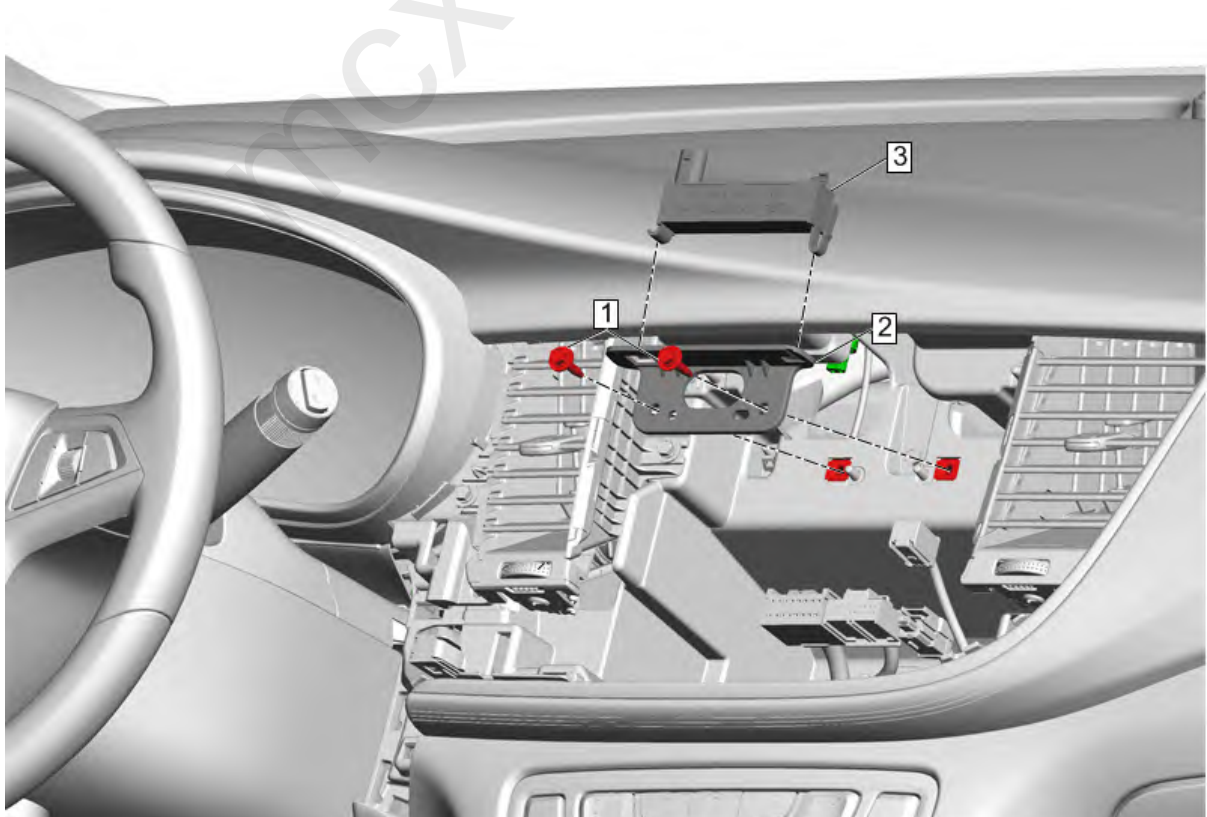


Fig. 71: Low Frequency Instrument Panel Antenna (Buick)
Courtesy of GENERAL MOTORS COMPANY

8. Install Low Frequency Instrument Panel Antenna (3) - [Low Frequency Instrument Panel Antenna Replacement \(Buick\)](#)
9. Install Heater and Air Conditioning Remote Control - [Heater and Air Conditioning Remote Control Replacement](#)

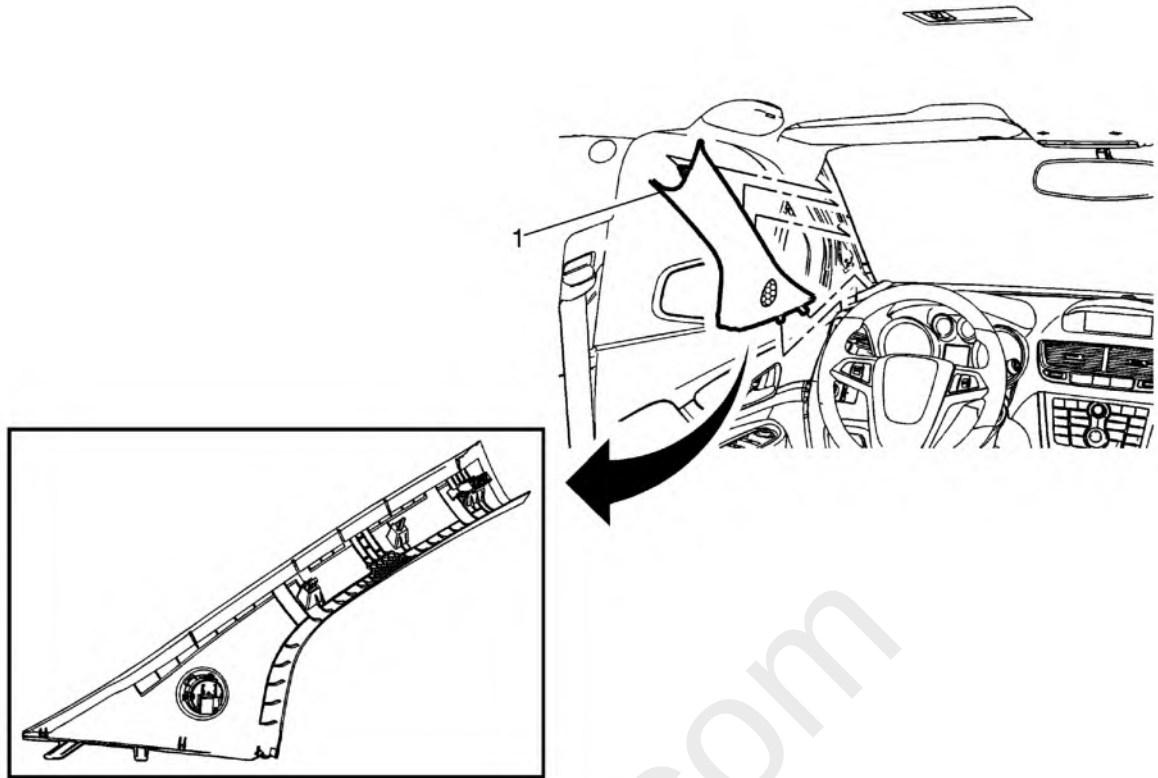


Fig. 72: Windshield Garnish Molding Assembly.
Courtesy of GENERAL MOTORS COMPANY

10. Install Windshield Garnish Molding (1) - [Windshield Garnish Molding Replacement \(Buick\)](#)

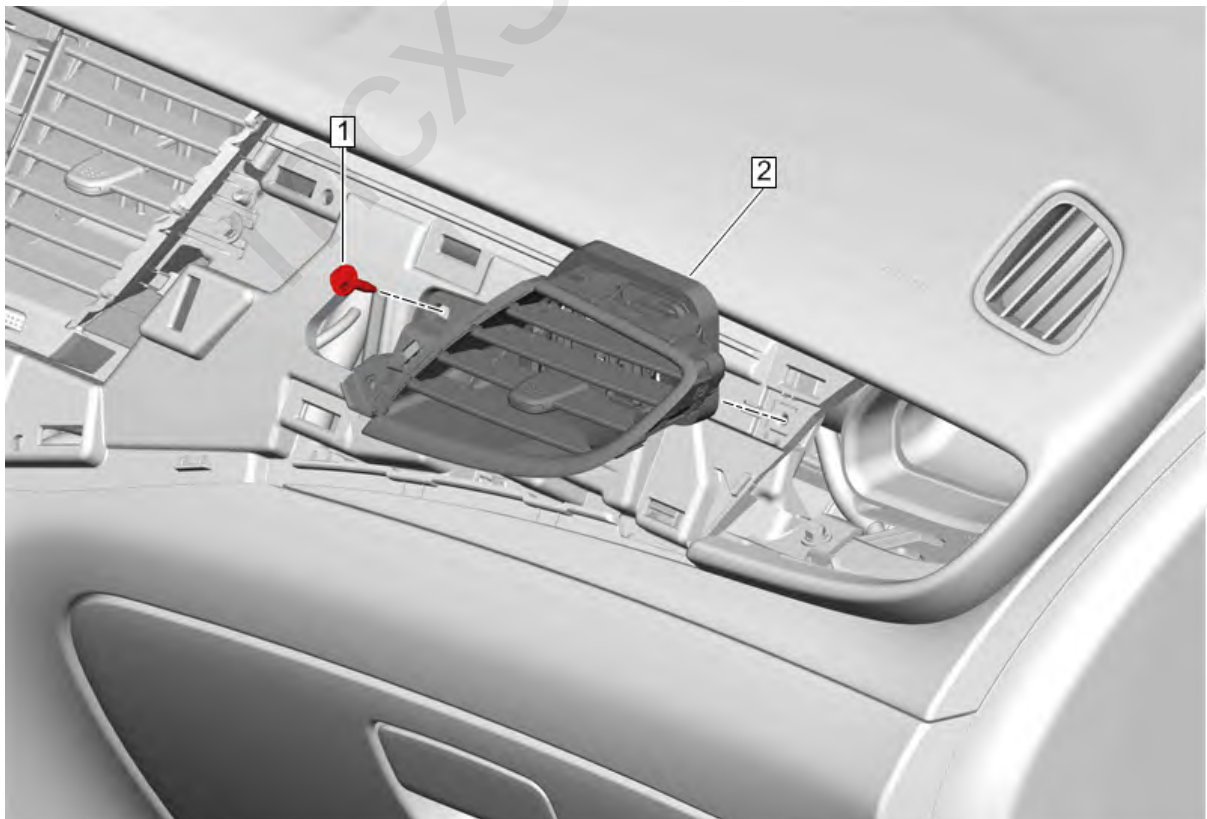


Fig. 73: Instrument Panel Outer Air Outlet - Right Side (Buick)
Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Outer Air Outlet - Right Side (2) - [Instrument Panel Outer Air Outlet Replacement - Right Side \(Buick\)](#)

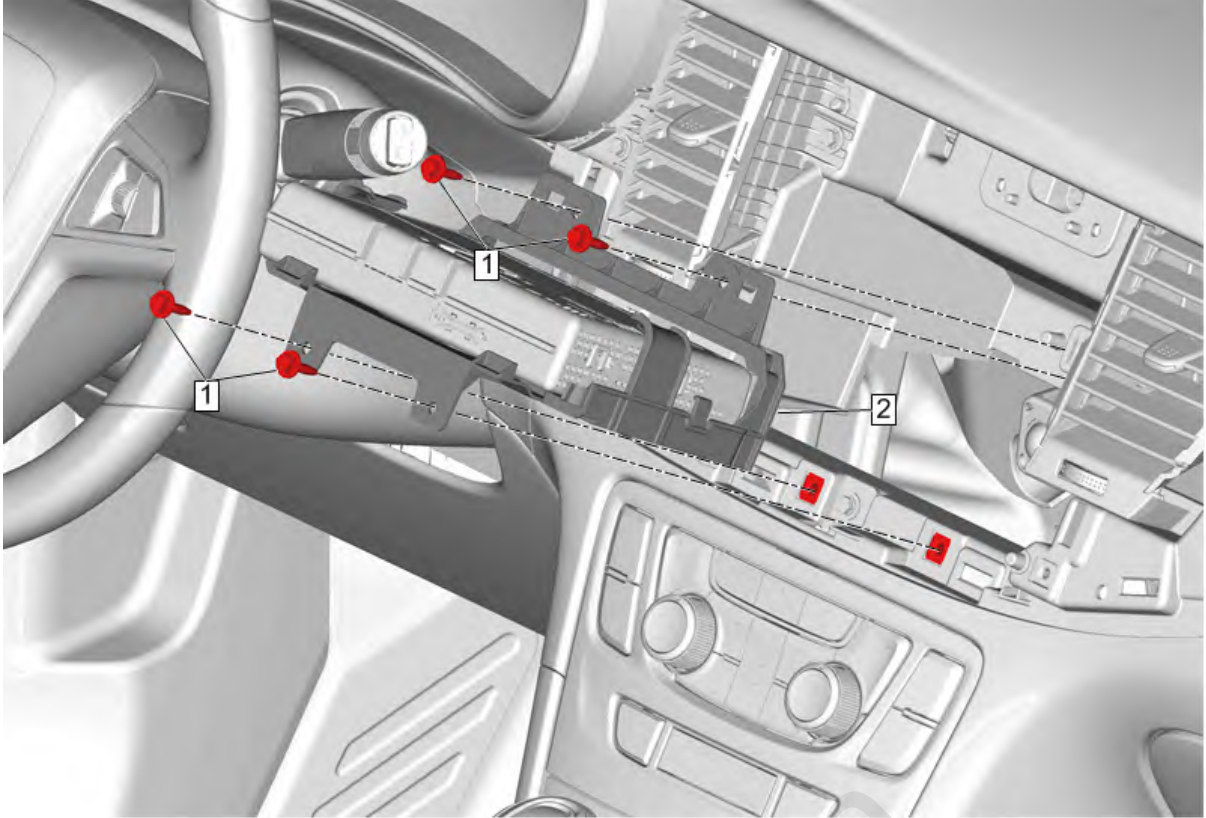


Fig. 74: Human Machine Interface Control Module Bracket
 Courtesy of GENERAL MOTORS COMPANY

12. Install Human Machine Interface Control Module Bracket (2) - **Human Machine Interface Control Module Bracket Replacement**

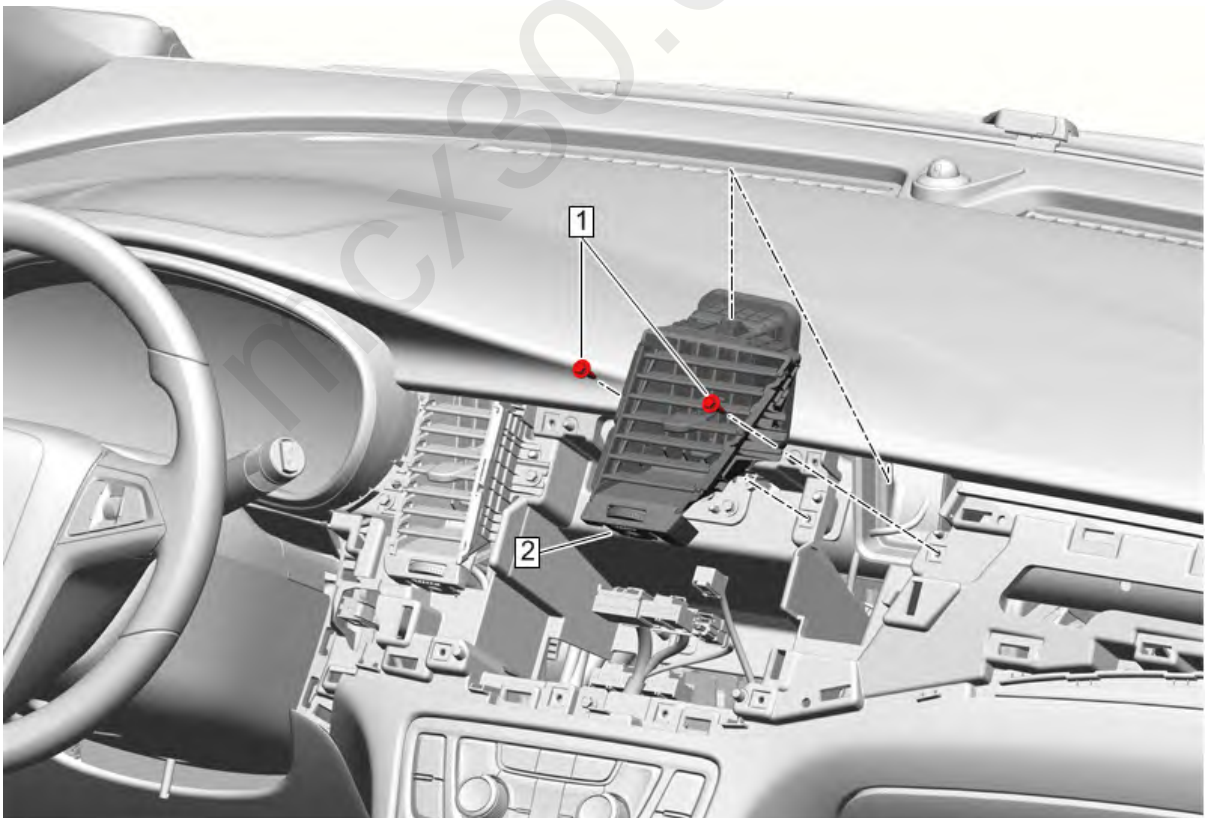


Fig. 75: Instrument Panel Center Air Outlet - Right Side (Buick)
 Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Buick)**



Fig. 76: Sun Load Temperature Sensor Bezel
 Courtesy of GENERAL MOTORS COMPANY

14. Install Sun Load Temperature Sensor Bezel (1) - [Sun Load Temperature Sensor Bezel Replacement \(Buick\)](#)

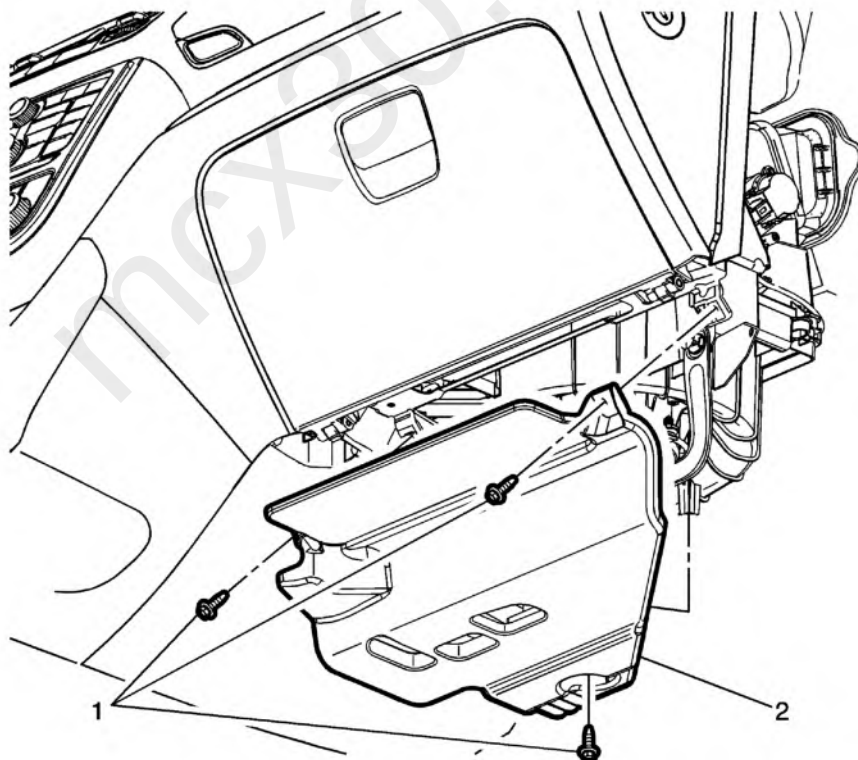


Fig. 77: Instrument Panel Lower Trim Panel Insulator
 Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Lower Trim Panel Insulator (2)- [Instrument Panel Lower Trim Panel Insulator Replacement \(Buick\)](#)

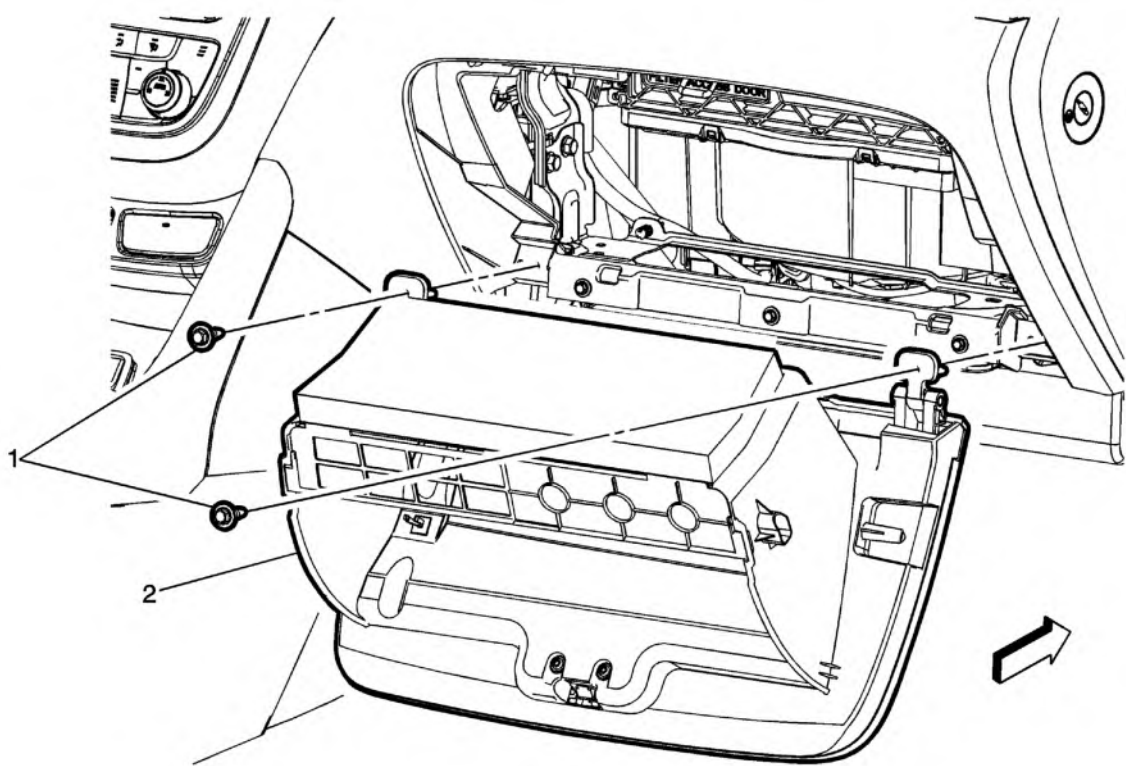


Fig. 78: Instrument Panel Compartment
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Compartment (2) - **Instrument Panel Compartment Replacement**

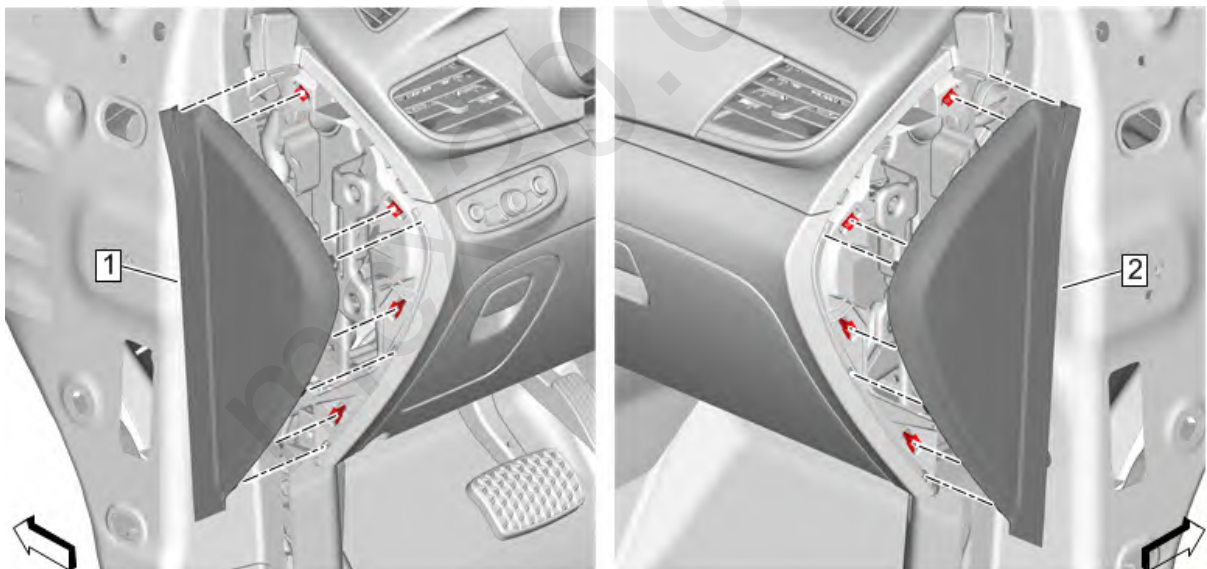


Fig. 79: Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

17. Install Instrument Panel Outer Trim Cover (1, 2)- **Instrument Panel Outer Trim Cover Replacement (Buick)**

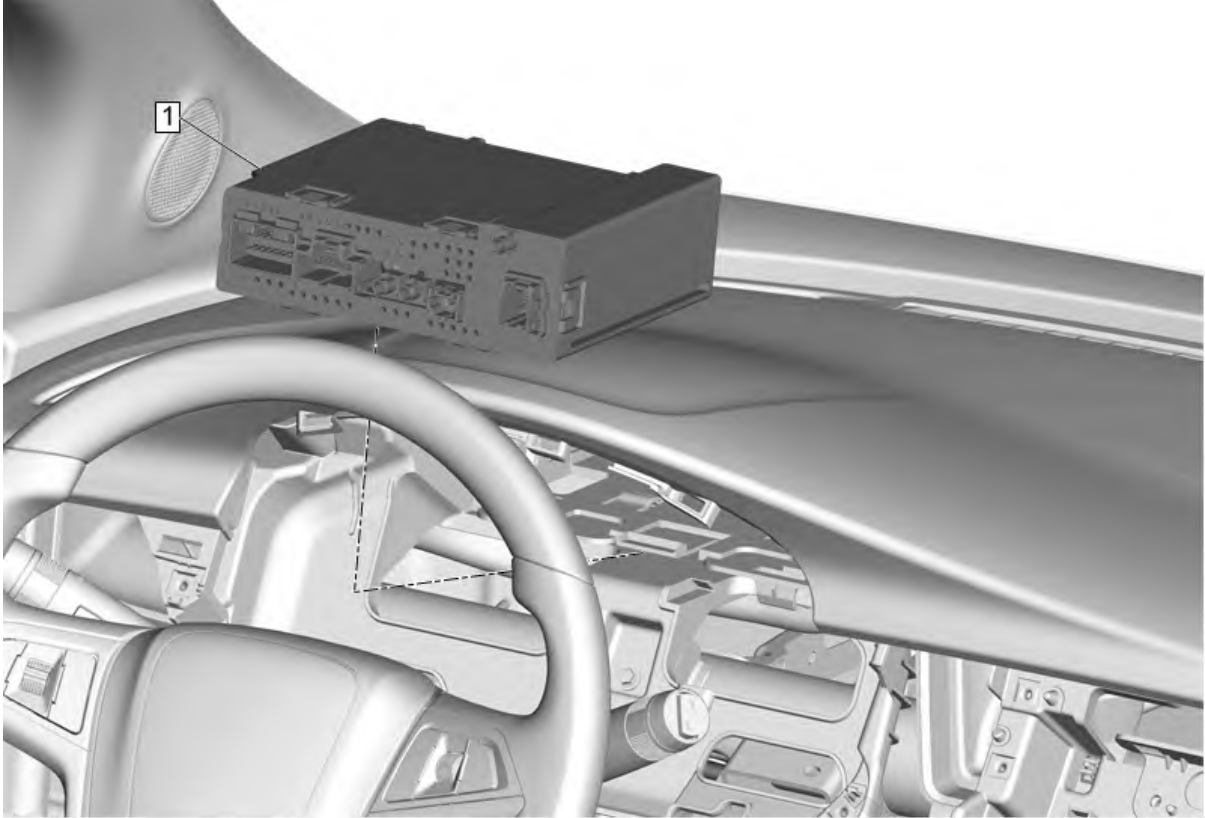


Fig. 80: Radio (Encore)

Courtesy of GENERAL MOTORS COMPANY

18. Install Radio (1) - **Radio Replacement (Buick)**

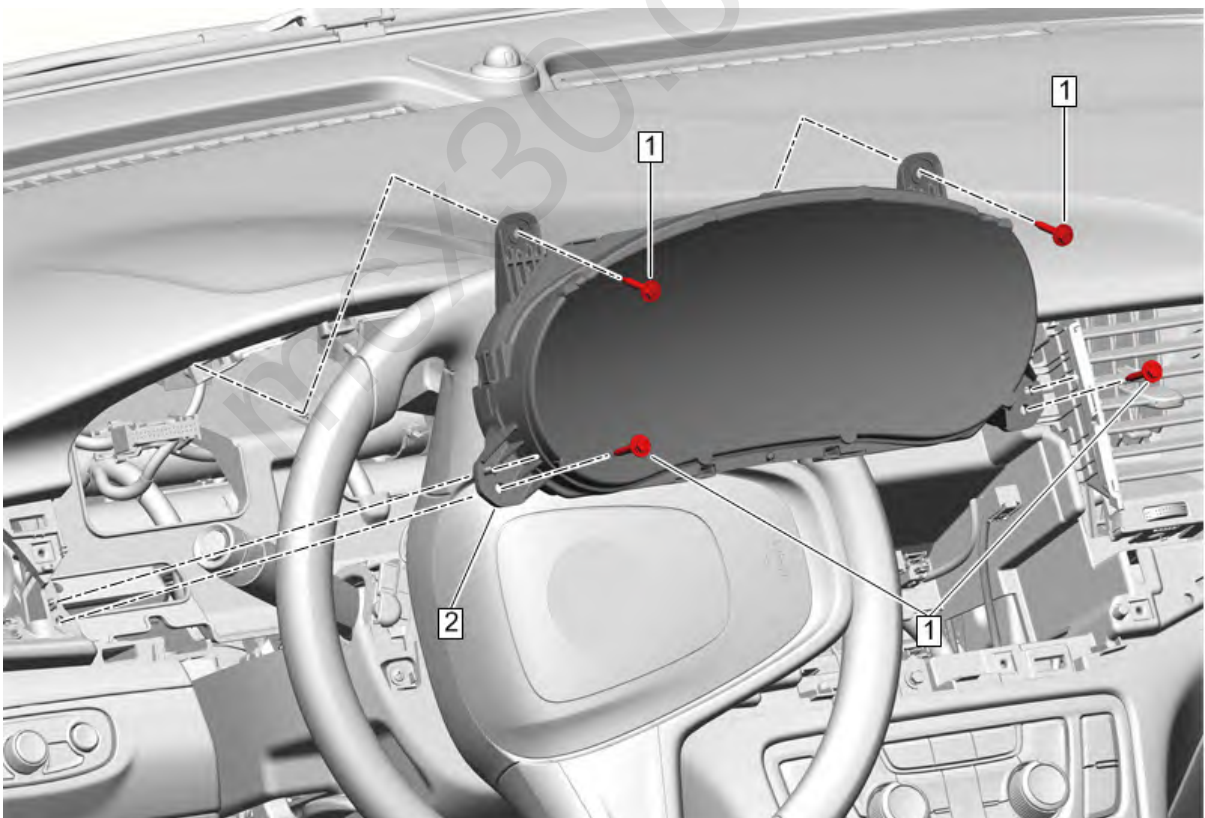


Fig. 81: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

19. Install Instrument Cluster (2) - **Instrument Cluster Replacement (Buick)** **Instrument Cluster Replacement (Chevrolet)**

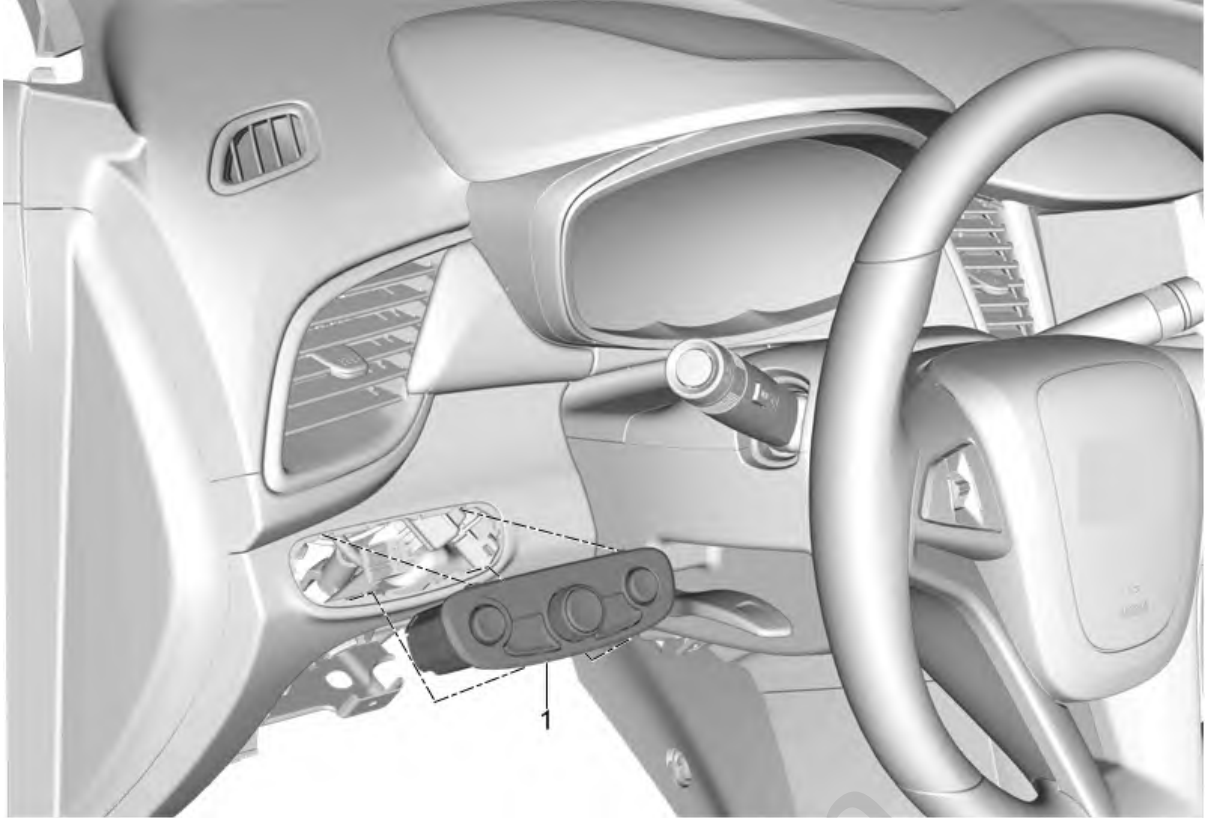


Fig. 82: Headlamp Switch

Courtesy of GENERAL MOTORS COMPANY

20. Install Headlamp Switch (1) - [Headlamp Switch Replacement](#)

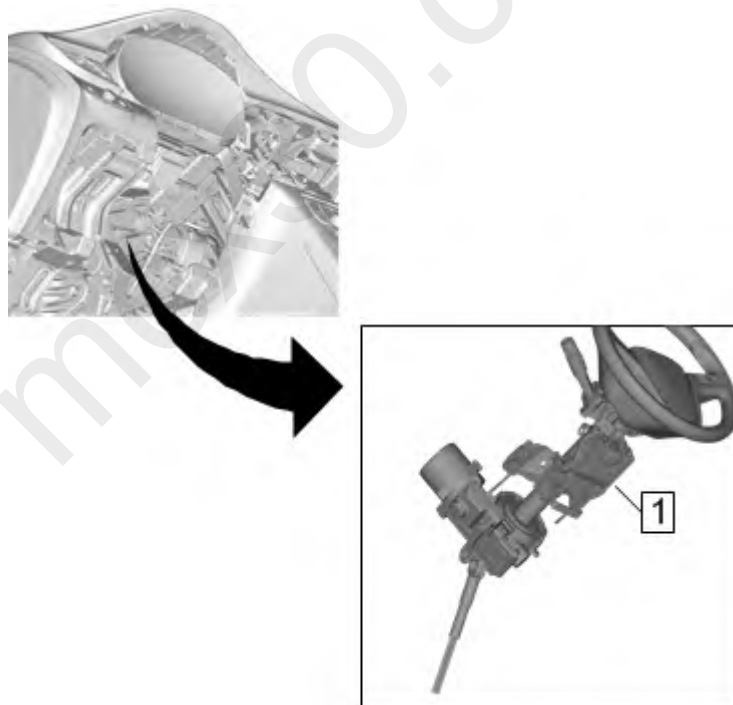


Fig. 83: Steering Column

Courtesy of GENERAL MOTORS COMPANY

21. Install Steering Column (1) - [Steering Column Replacement \(Buick, Mexico, NJ1, With BTM, With N06\)](#), [Steering Column Replacement \(Buick, Canada/United States, NJ1, With BTM, Without N06\)](#)

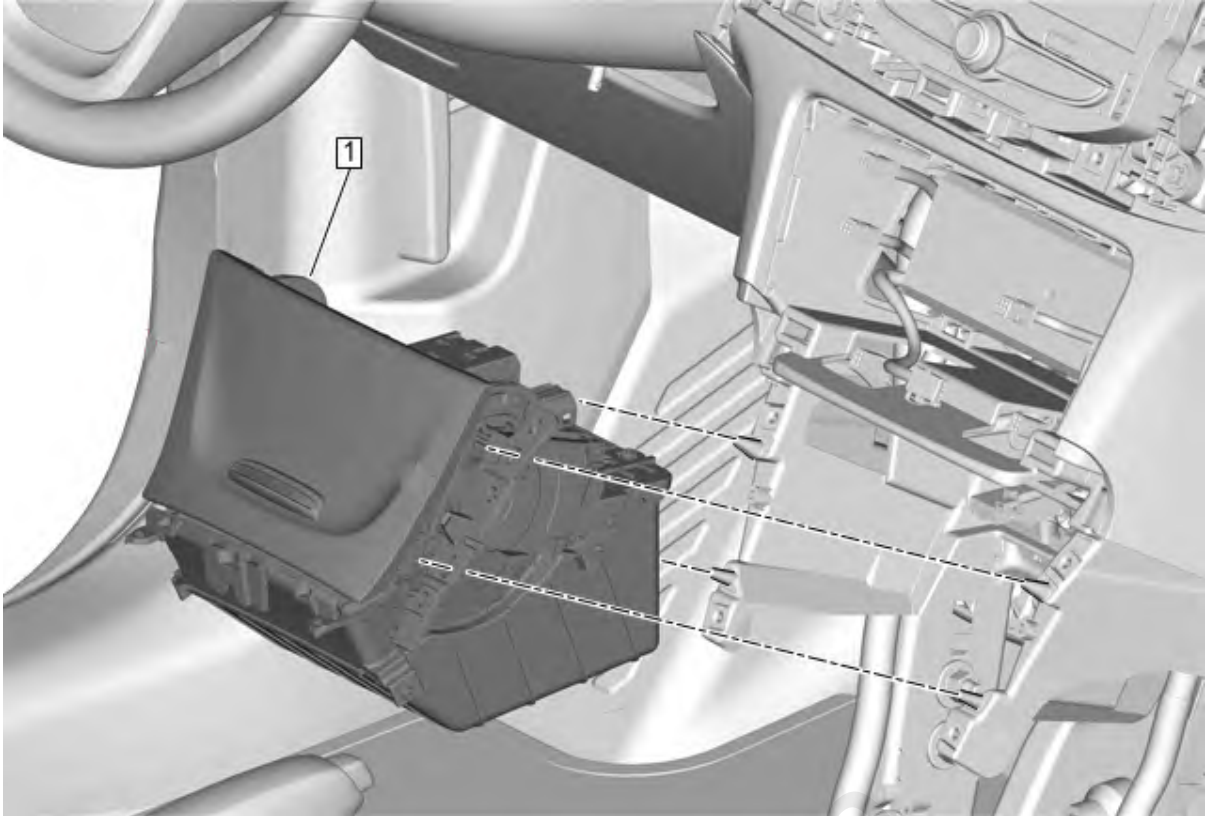


Fig. 84: Front Floor Console Stowage Tray
Courtesy of GENERAL MOTORS COMPANY

22. Install Front Floor Console Stowage Tray (1) - **Front Floor Console Stowage Tray Replacement (Buick)**

INSTRUMENT PANEL ASSEMBLY REPLACEMENT (CHEVROLET)

Removal Procedure

1. Disable the SIR system. **SIR Disabling and Enabling**

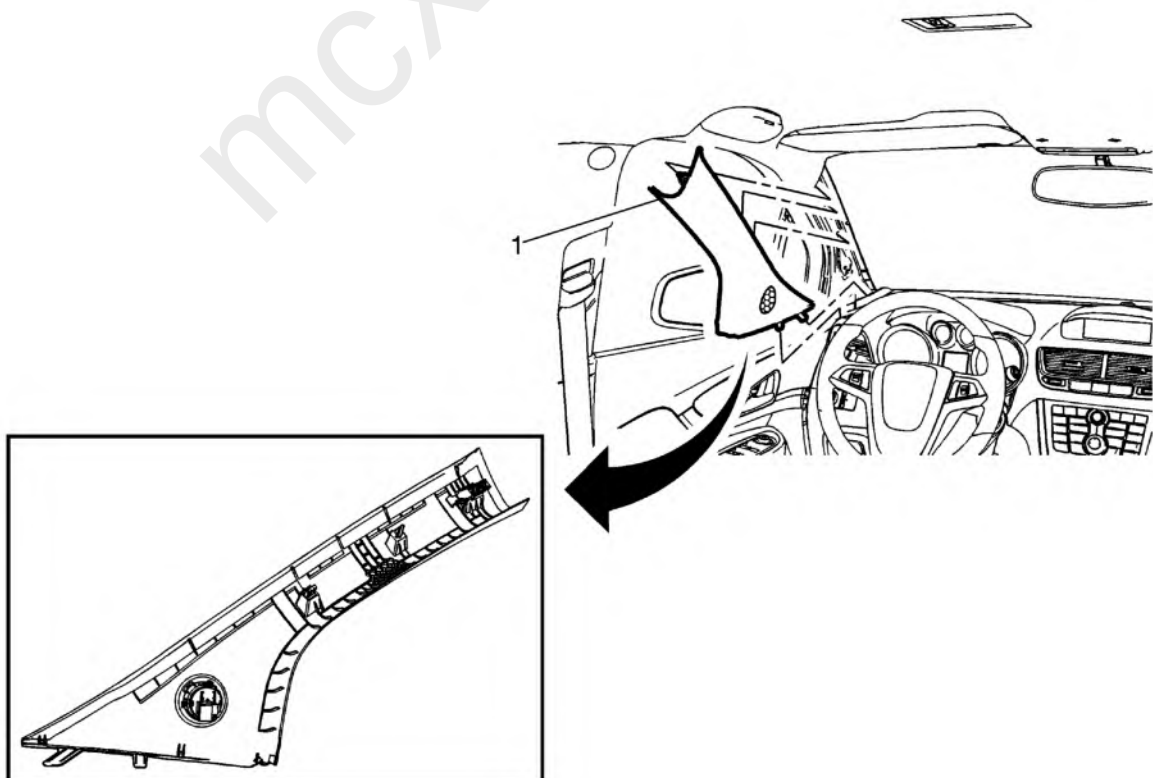


Fig. 85: Windshield Garnish Molding Assembly
Courtesy of GENERAL MOTORS COMPANY

2. Remove Windshield Garnish Molding (1) - [Windshield Garnish Molding Replacement \(Chevrolet\)](#)

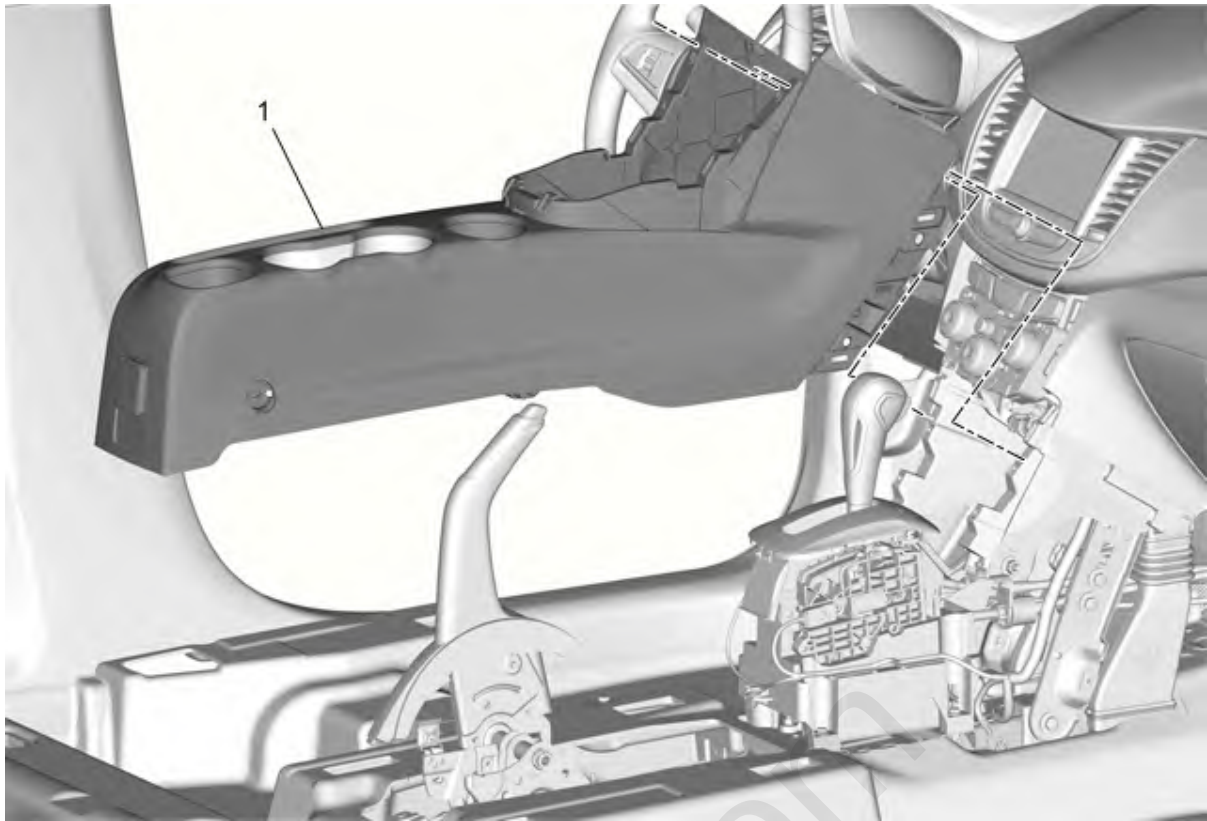


Fig. 86: Front Floor Console

Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Console (1) - [Front Floor Console Replacement \(Chevrolet\)](#)

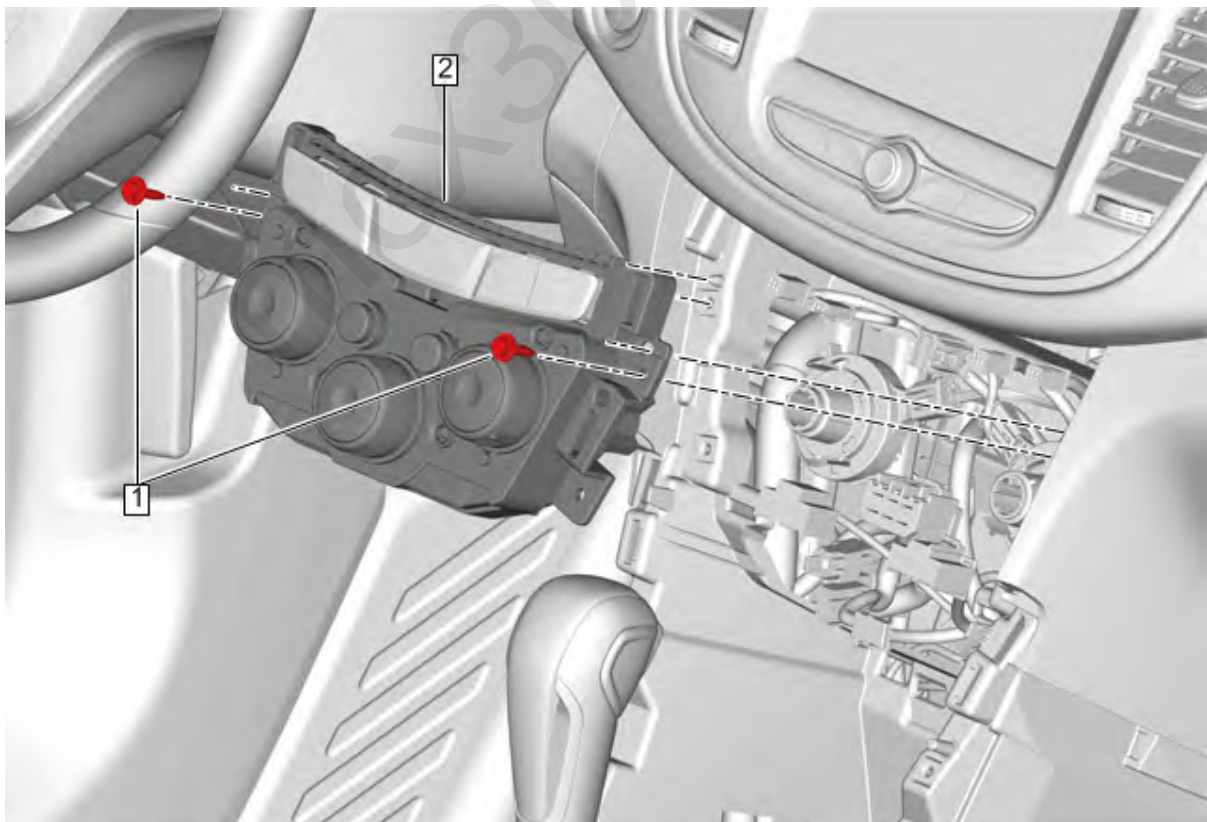


Fig. 87: Heater and Air Conditioning Control with Cable Control

Courtesy of GENERAL MOTORS COMPANY

4. Remove Heater and Air Conditioning Control with Cable Control (2) - [Heater and Air Conditioning Control with Cable Control Replacement \(C60\)](#)

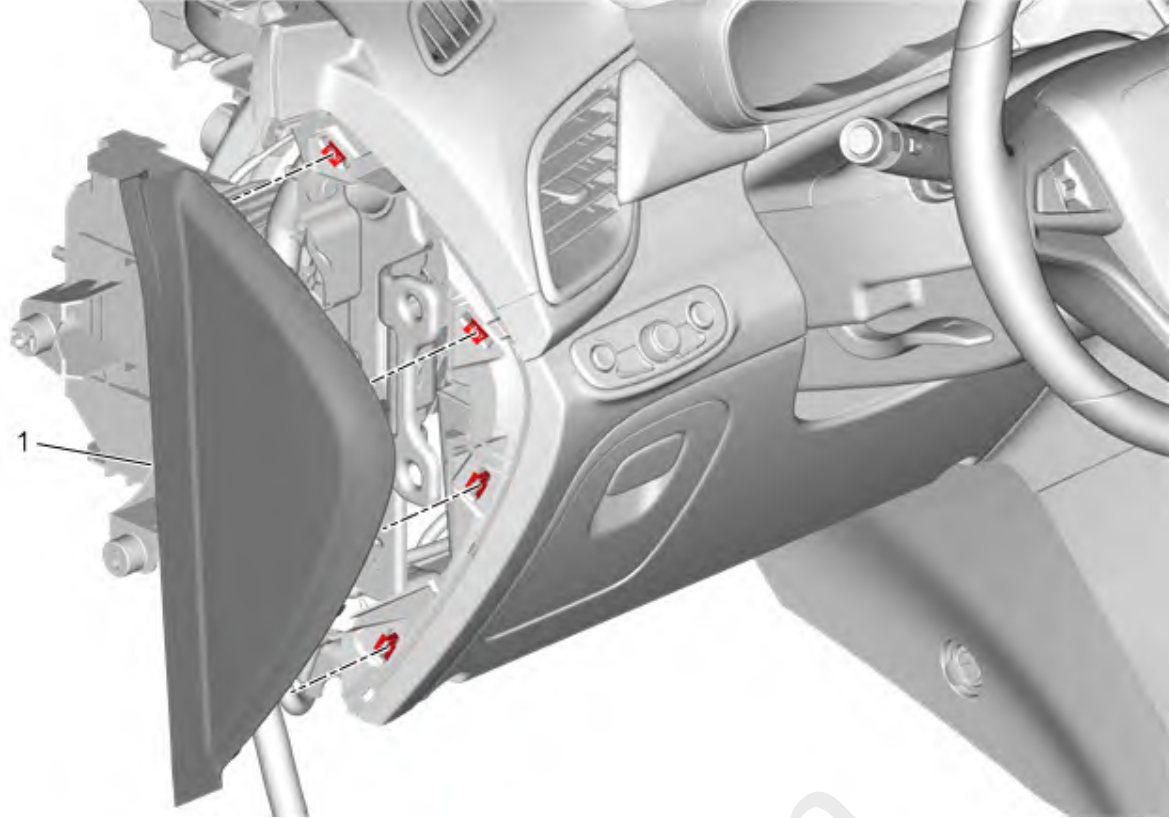


Fig. 88: Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Instrument Panel Outer Trim Cover (1) - [Instrument Panel Outer Trim Cover Replacement \(Chevrolet\)](#)

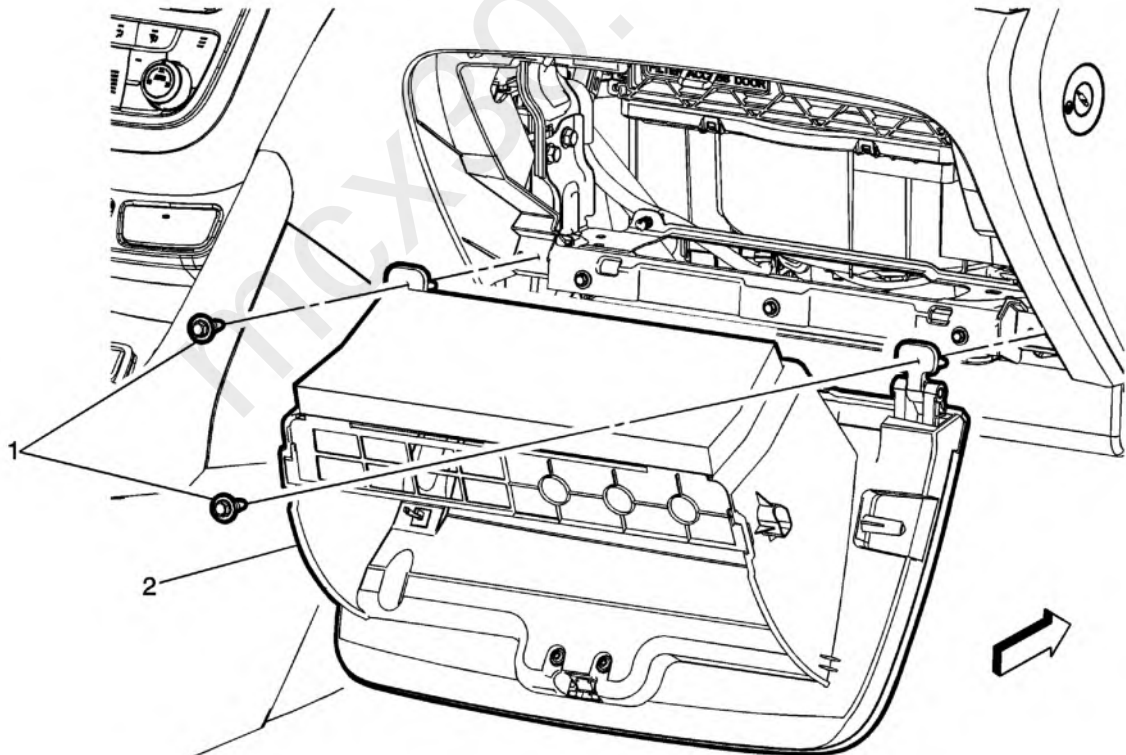


Fig. 89: Instrument Panel Compartment
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Instrument Panel Compartment (1) - [Instrument Panel Compartment Replacement](#)

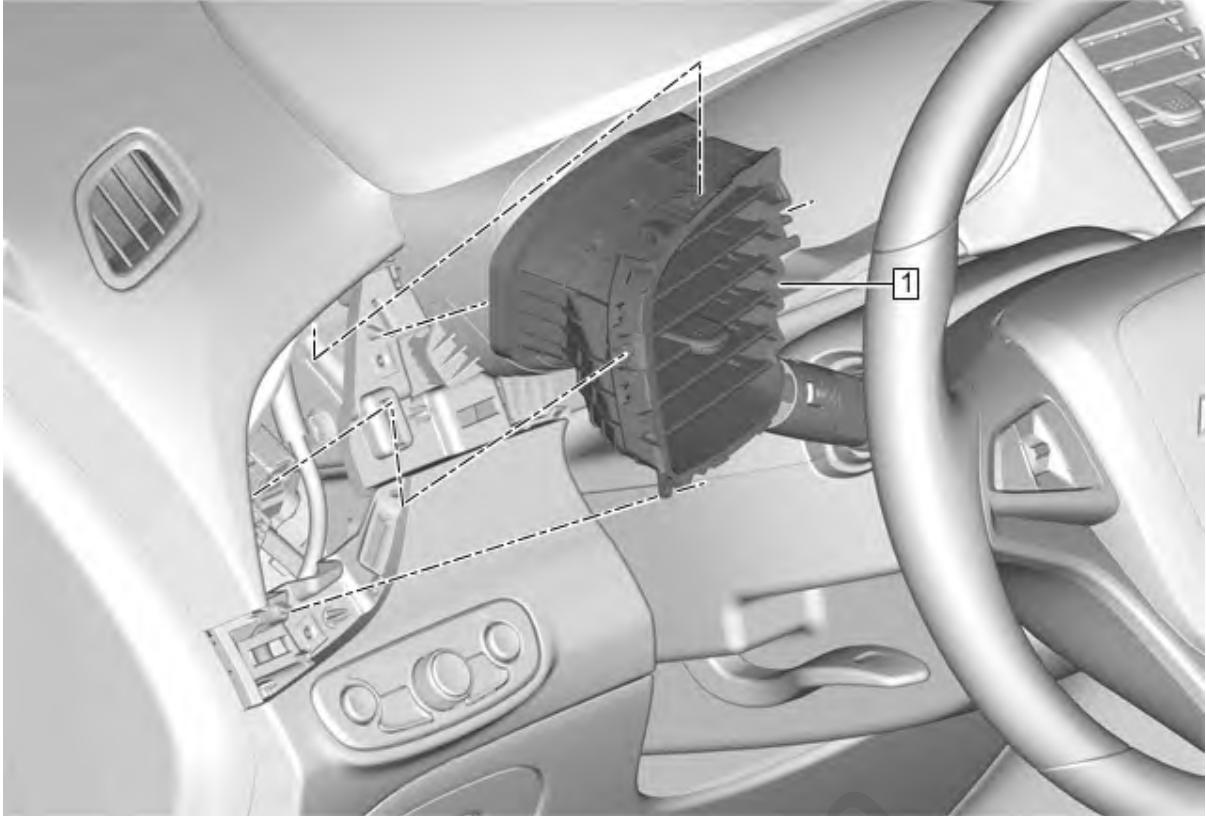


Fig. 90: Instrument Panel Outer Air Outlet - Left Side (Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

7. Remove Instrument Panel Outer Air Outlet - Left Side (1) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Chevrolet)**

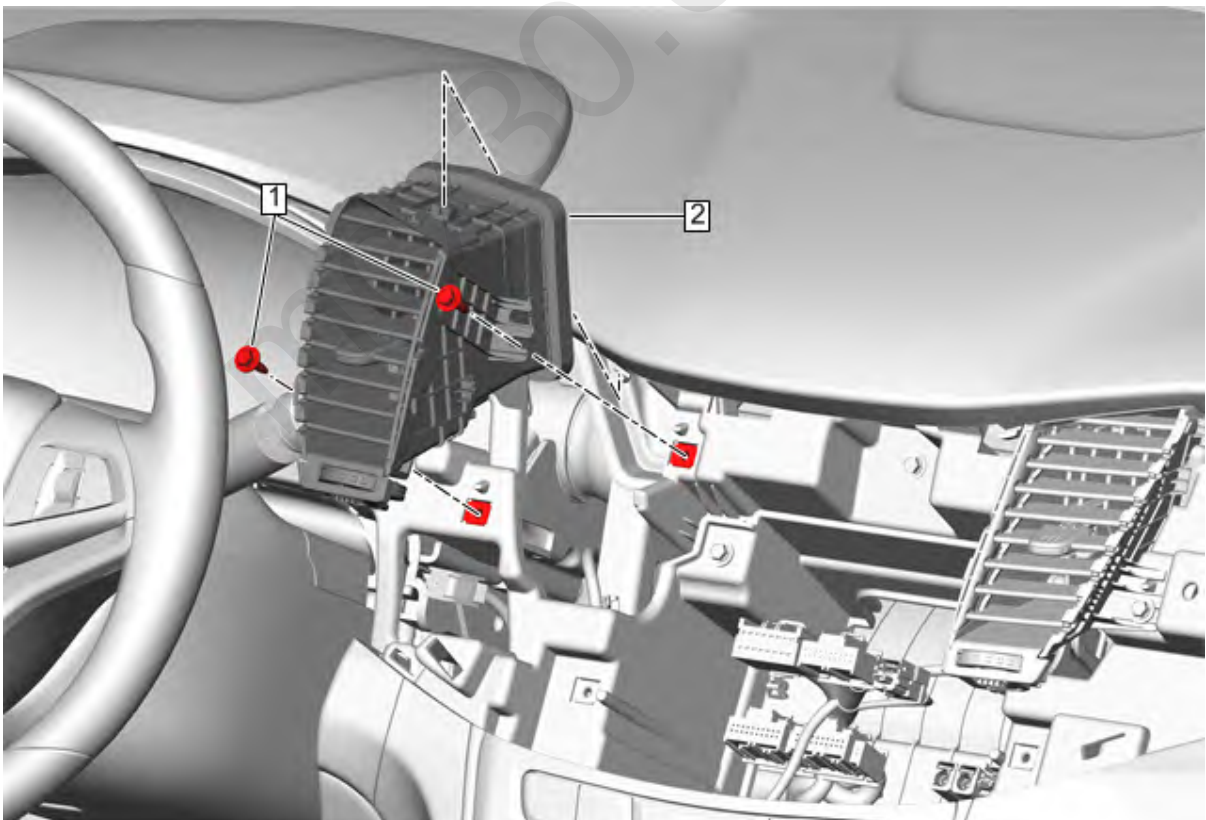


Fig. 91: Instrument Panel Center Air Outlet - Left Side (Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

8. Remove Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Chevrolet)**

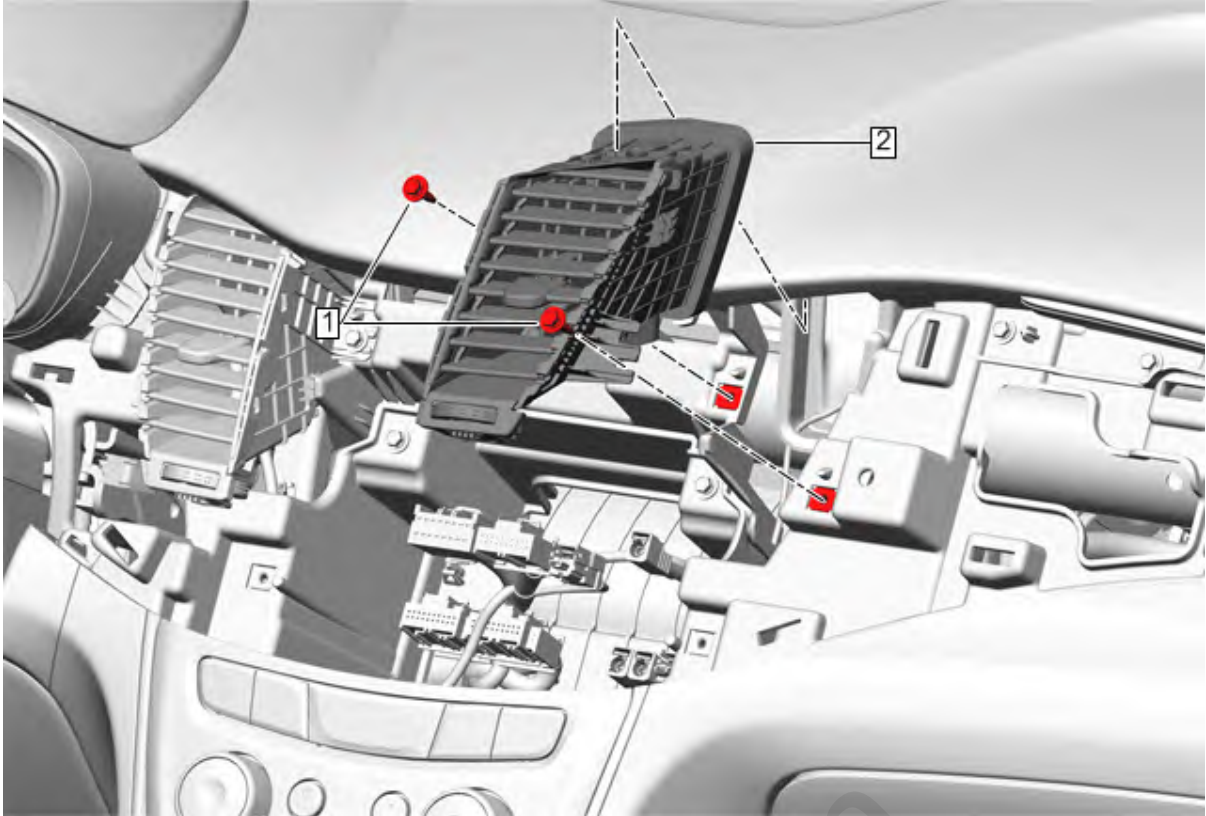


Fig. 92: Instrument Panel Center Air Outlet - Right Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Chevrolet)**

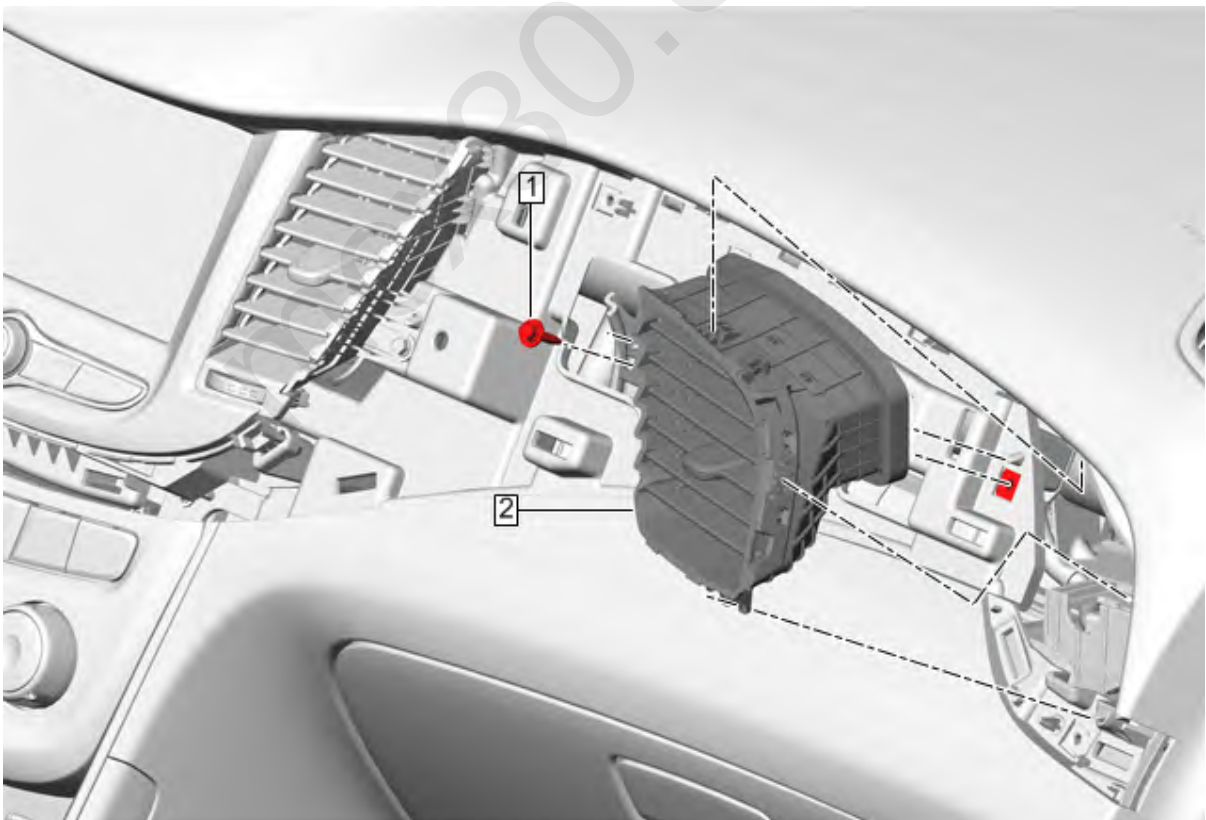


Fig. 93: Instrument Panel Outer Air Outlet - Right Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

10. Remove Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Chevrolet)**

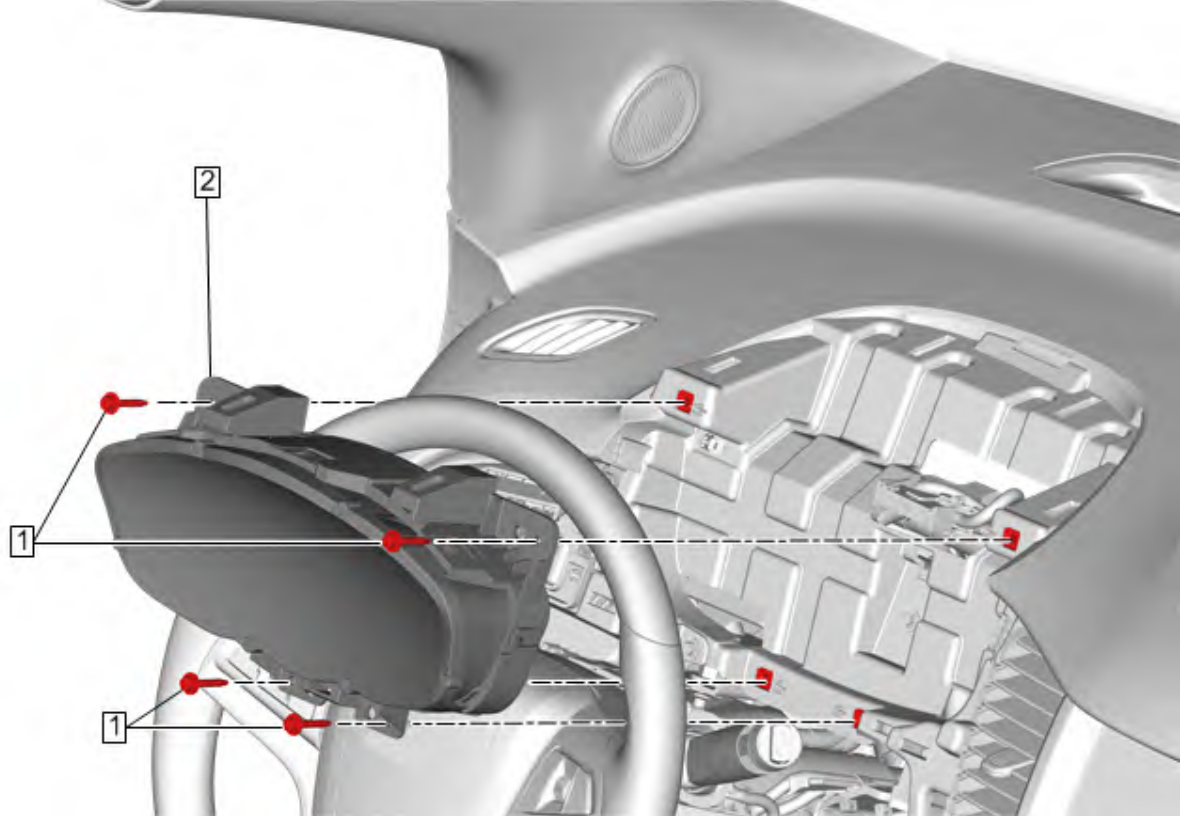


Fig. 94: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

11. Remove Instrument Cluster (2) - [Instrument Cluster Replacement \(Buick\)](#), [Instrument Cluster Replacement \(Chevrolet\)](#)

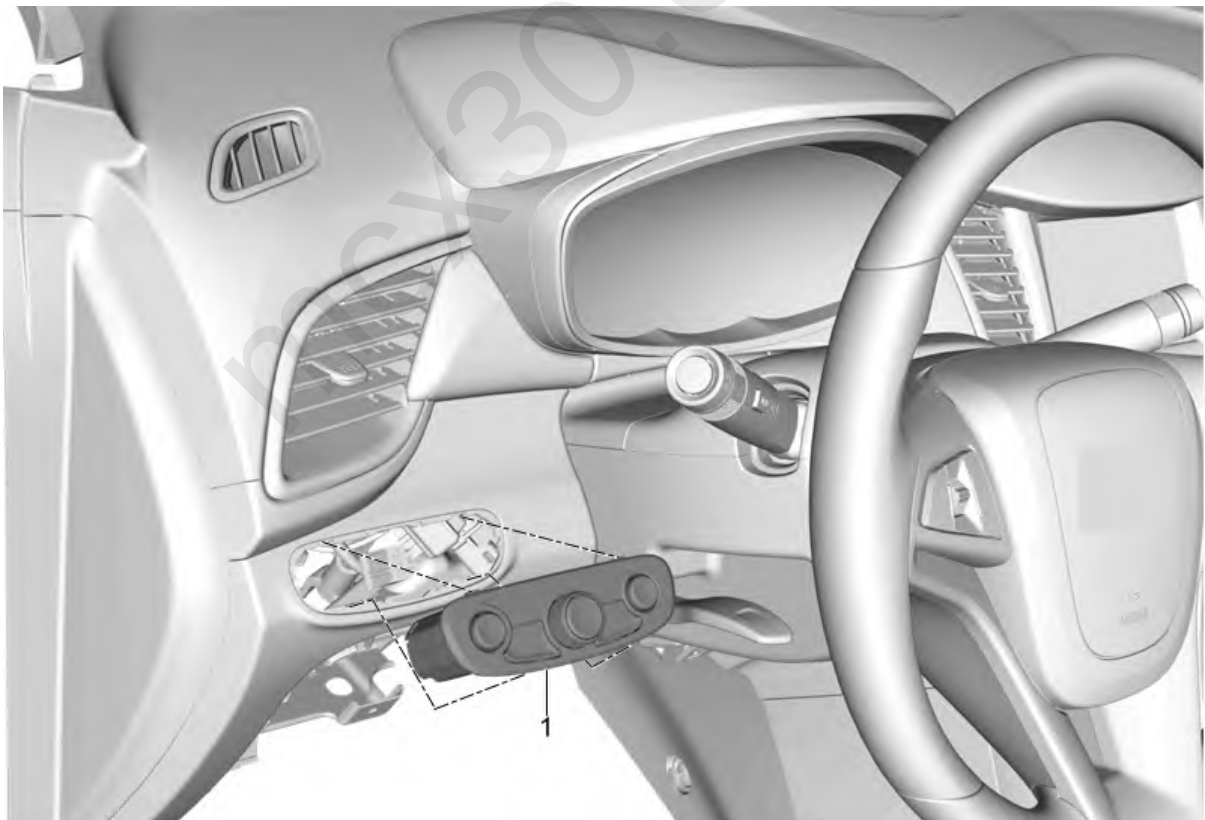


Fig. 95: Headlamp Switch

Courtesy of GENERAL MOTORS COMPANY

12. Remove Headlamp Switch (1) - [Headlamp Switch Replacement](#)



Fig. 96: Daytime Running Lamp Ambient Light Bezel

Courtesy of GENERAL MOTORS COMPANY

13. Remove Daytime Running Lamp Ambient Light Bezel (1) - [Daytime Running Lamp Ambient Light Bezel Replacement \(Chevrolet\)](#)

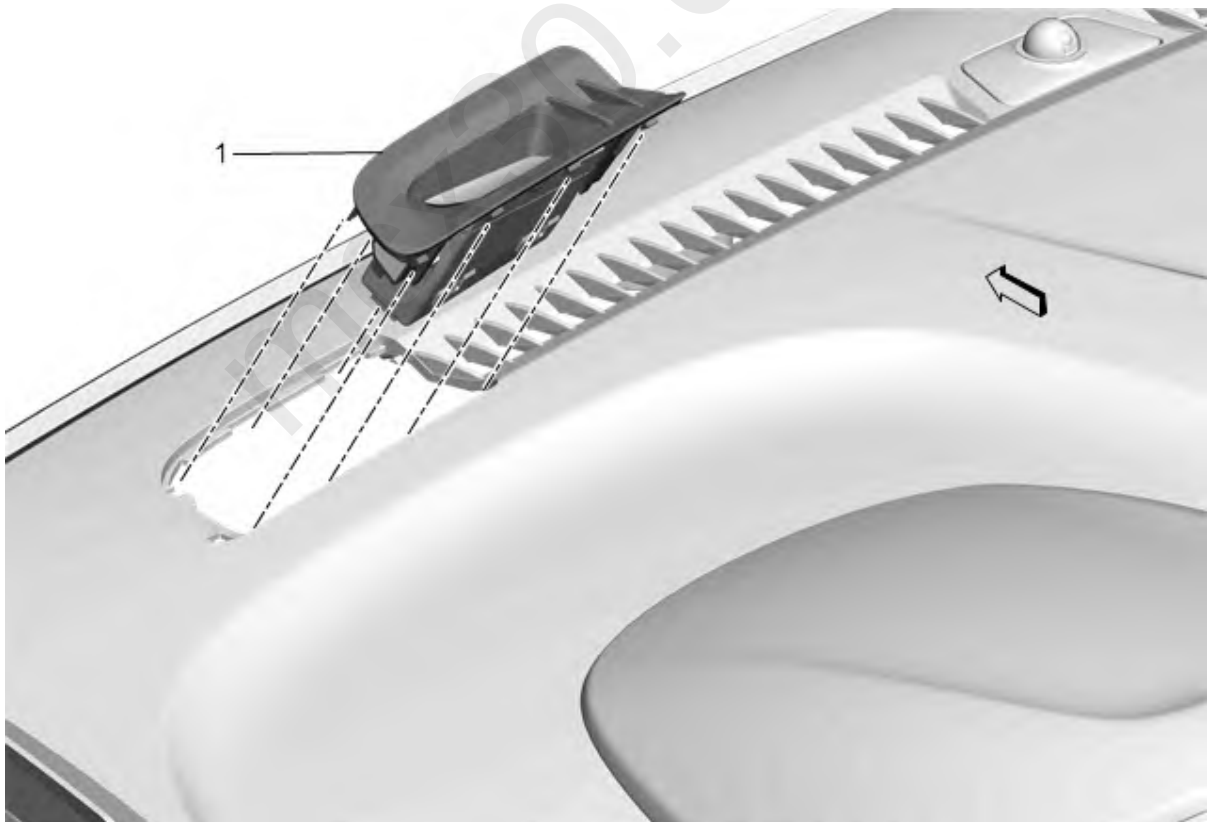


Fig. 97: Forward Collision Alert Display Bezel

Courtesy of GENERAL MOTORS COMPANY

14. Remove Forward Collision Alert Display Bezel (1) - [Forward Collision Alert Display Bezel Replacement \(With UEU, Chevrolet\)](#)[Forward Collision Alert Display Bezel Replacement \(Without UEU, Chevrolet\)](#)

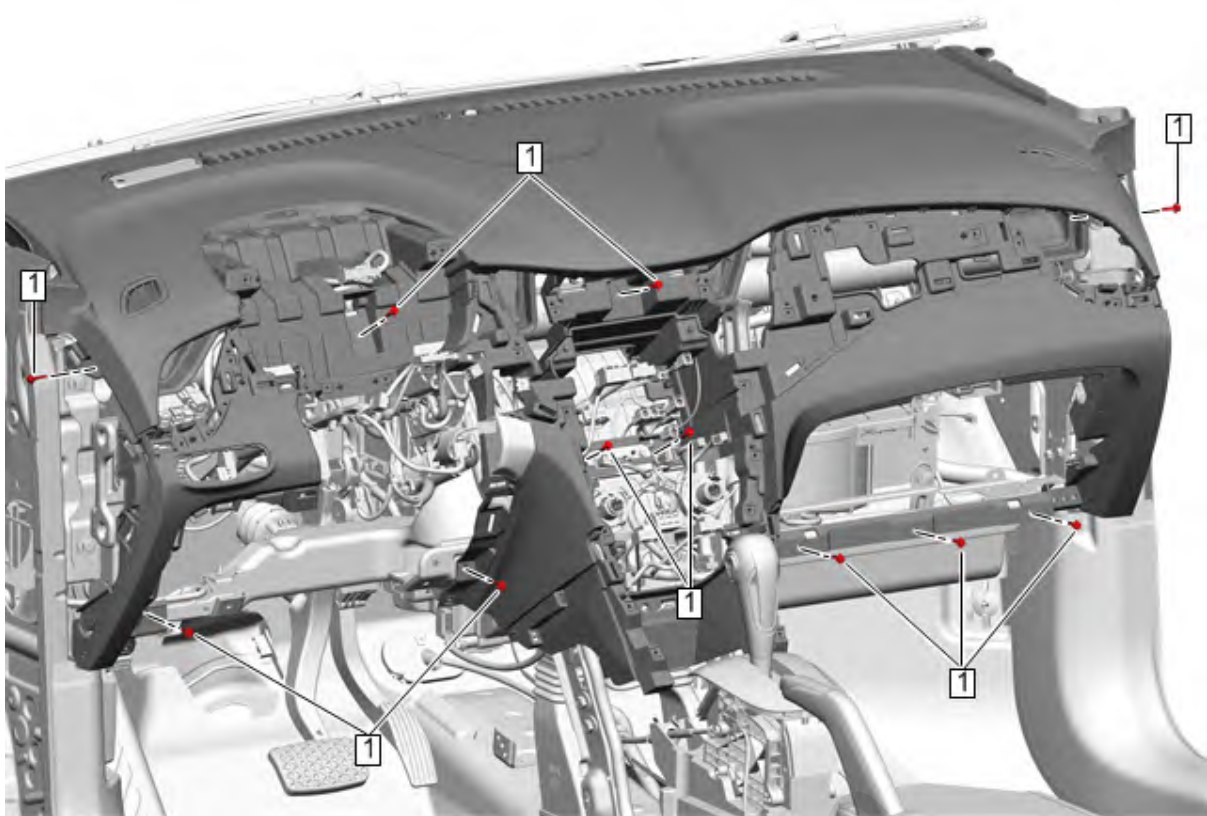


Fig. 98: Instrument Panel Bolt

Courtesy of GENERAL MOTORS COMPANY

15. Remove Instrument Panel Bolt (1)

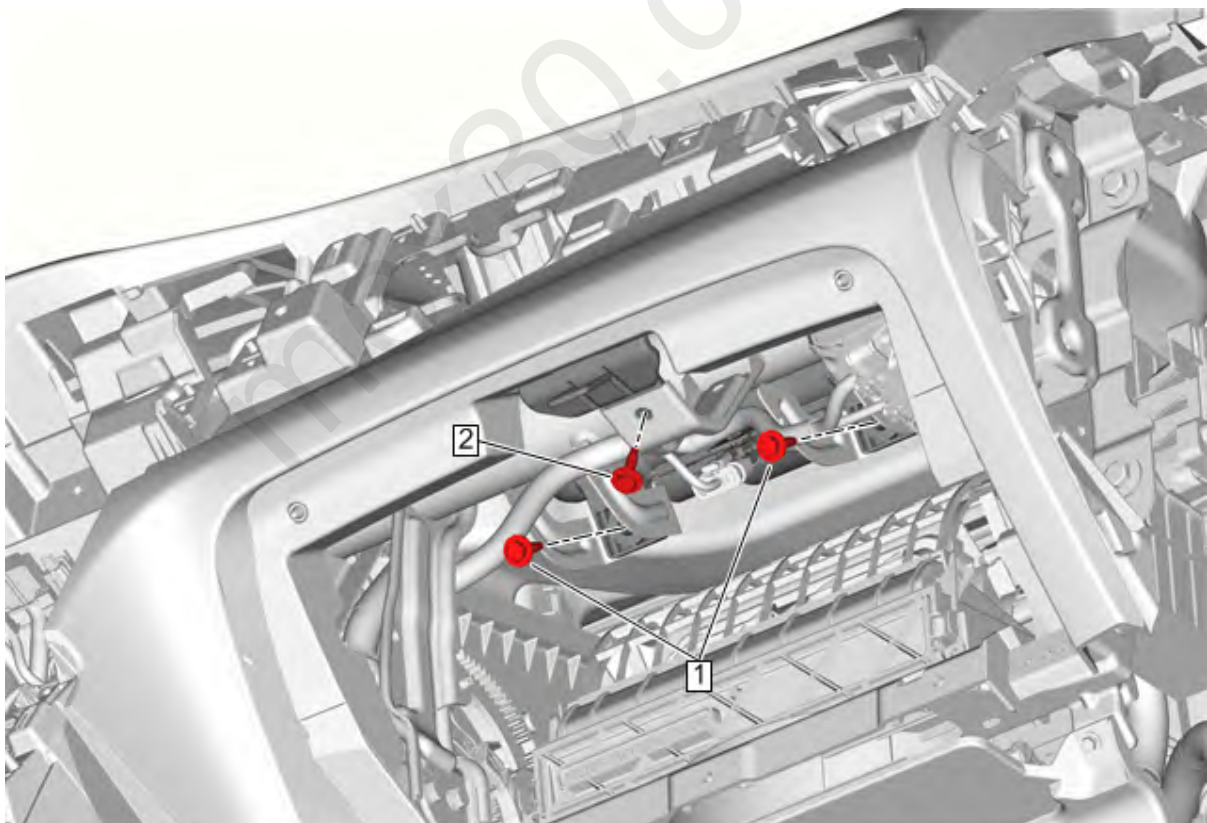


Fig. 99: Panel Compartment Door Latch Striker Bolt And Panel Airbag Bolt

Courtesy of GENERAL MOTORS COMPANY

16. Remove Instrument Panel Airbag Bolt (1)
17. Remove Instrument Panel Compartment Door Latch Striker Bolt (2)
18. Disconnect the instrument panel airbag electrical connector from the instrument panel harness.
19. Note the location and routing of the instrument panel electrical harness assembly, to ensure proper reinstallation.

20. Disconnect the fasteners securing the instrument panel electrical harness assembly to the instrument panel and position out of the way.

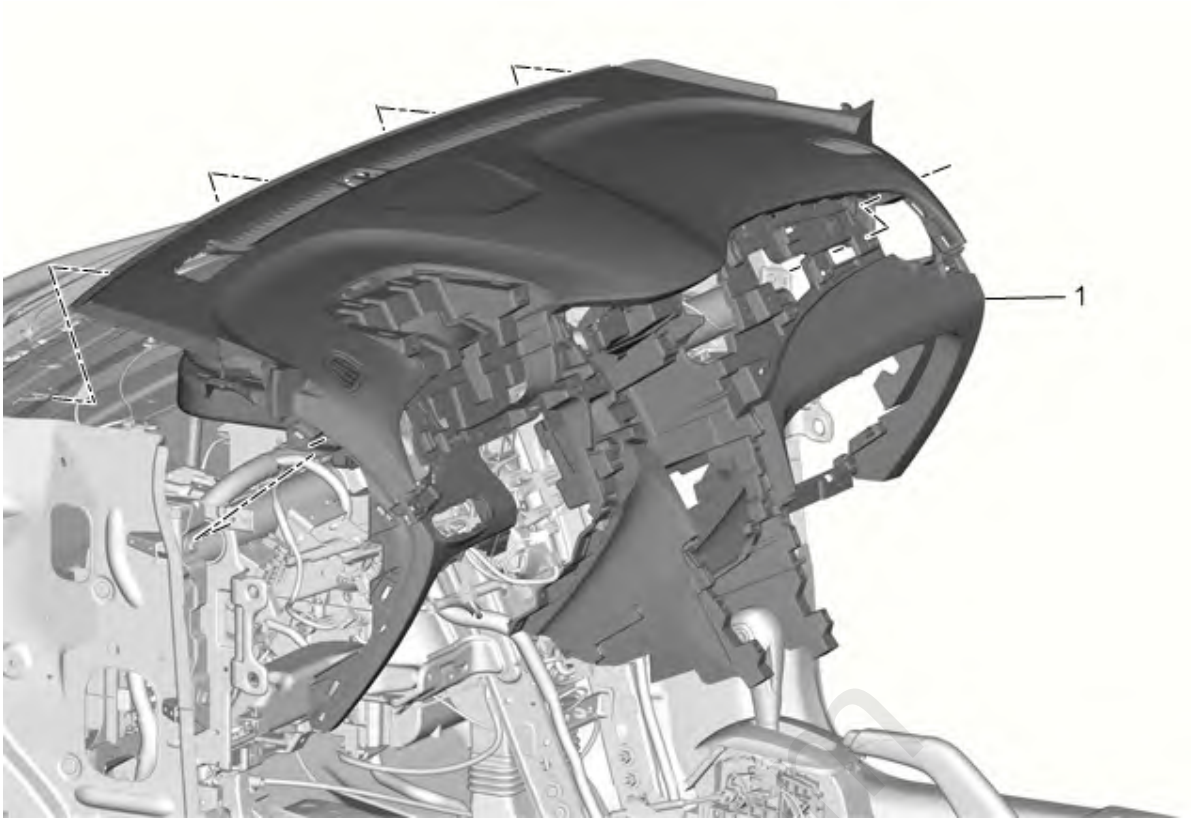


Fig. 100: Instrument Panel Assembly.

Courtesy of GENERAL MOTORS COMPANY

21. With the aid of an assistant, lift the instrument panel (1) rearward and upward from the tie bar assembly.
22. Remove the instrument panel (1) from the vehicle.
23. Transfer components as necessary.

Installation Procedure

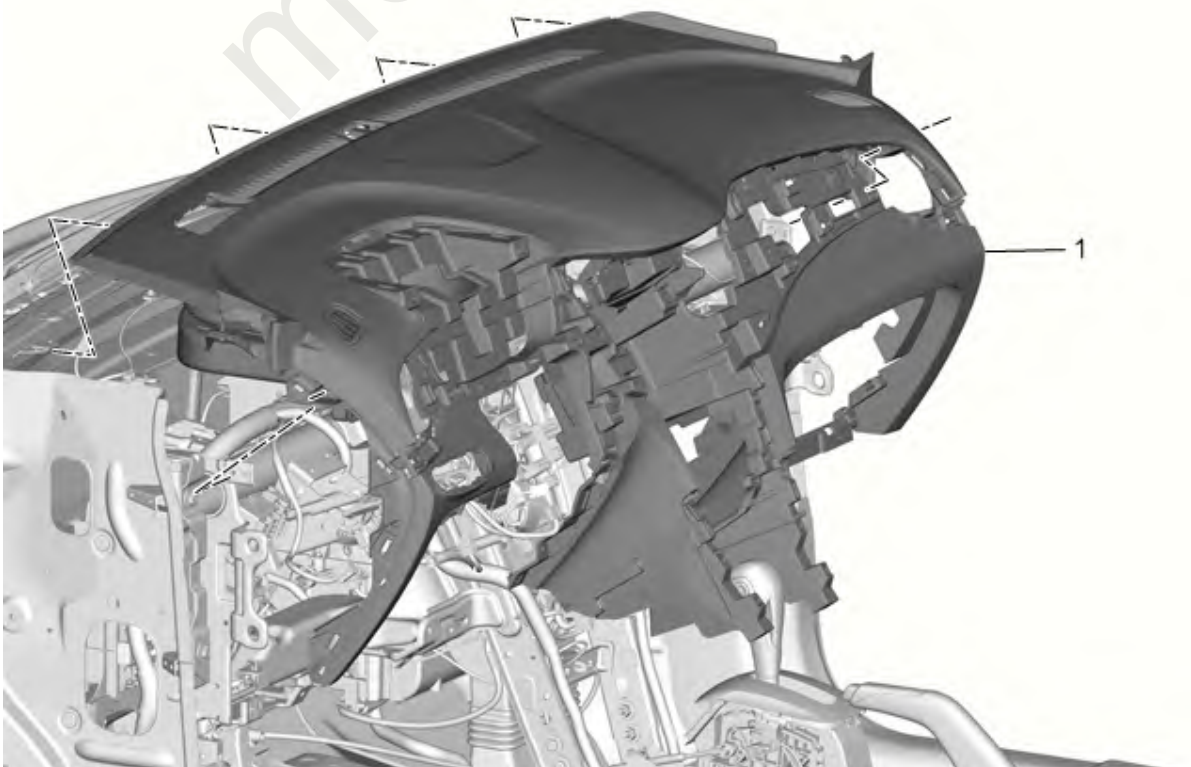


Fig. 101: Instrument Panel Assembly.

Courtesy of GENERAL MOTORS COMPANY

1. With the aid of an assistant, load the instrument panel (1) to the instrument panel tie bar to the locator pins.
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 panel (1).

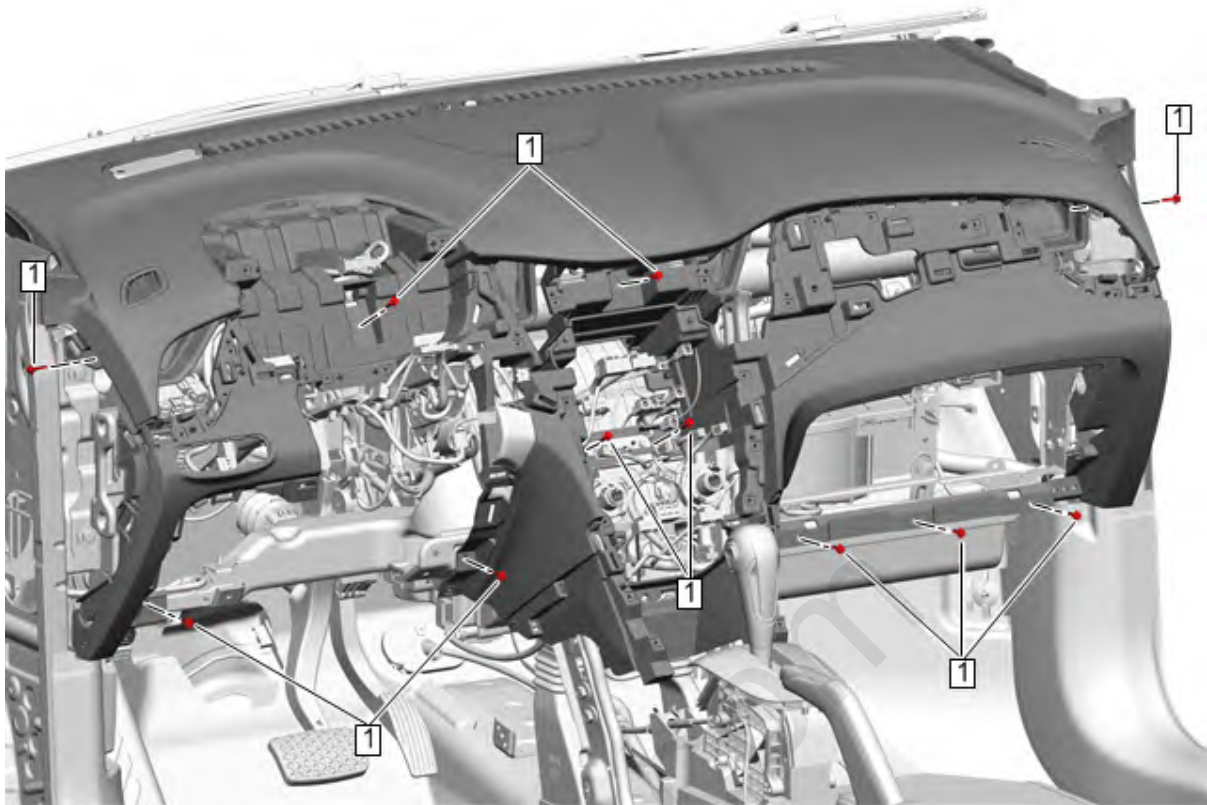


Fig. 102: Instrument Panel Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to **Fastener Caution** .

3. Install Instrument Panel Bolt (1) and tighten 2.5 N.m (22 lb in)

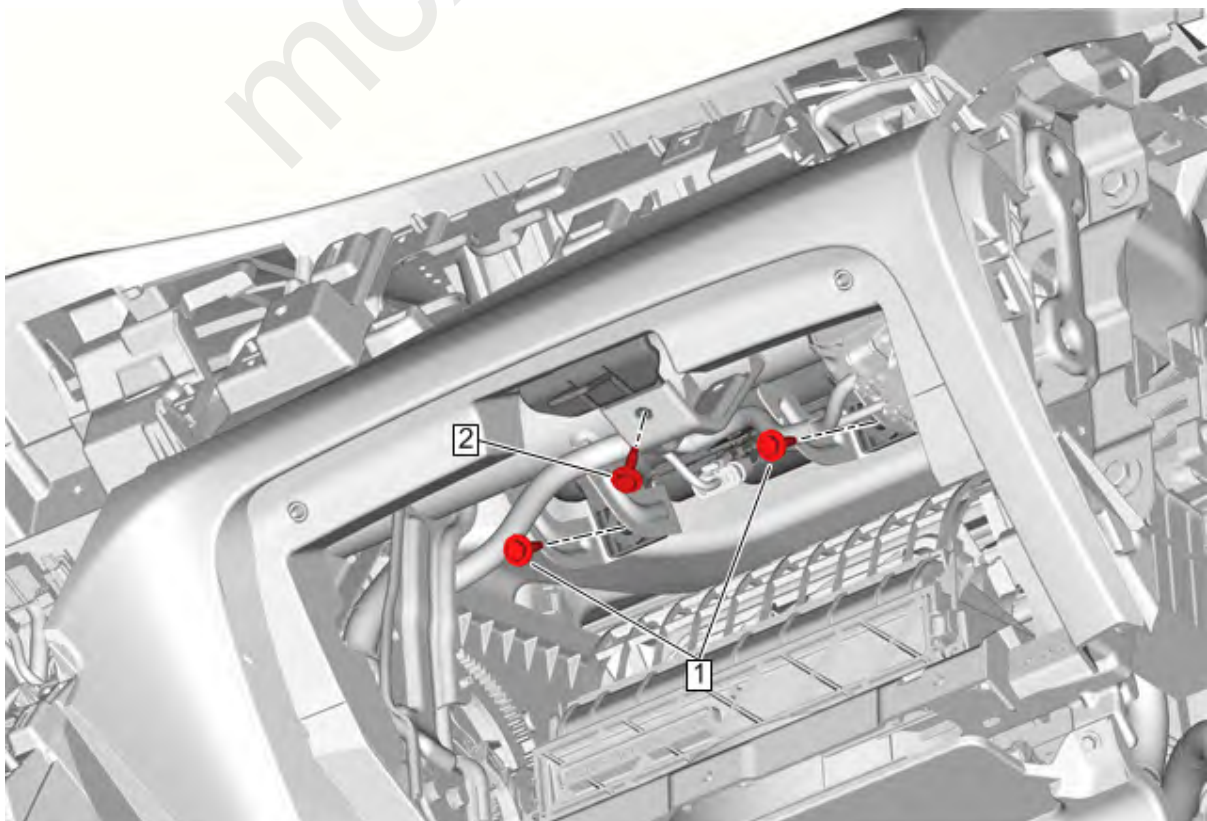


Fig. 103: Panel Compartment Door Latch Striker Bolt And Panel Airbag Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Airbag Bolt (1) and tighten 9 N.m (80 lb in)
5. Instrument Panel Compartment Door Latch Striker Bolt (2) and tighten 9 N.m (80 lb in)
6. Connect the electrical connector.

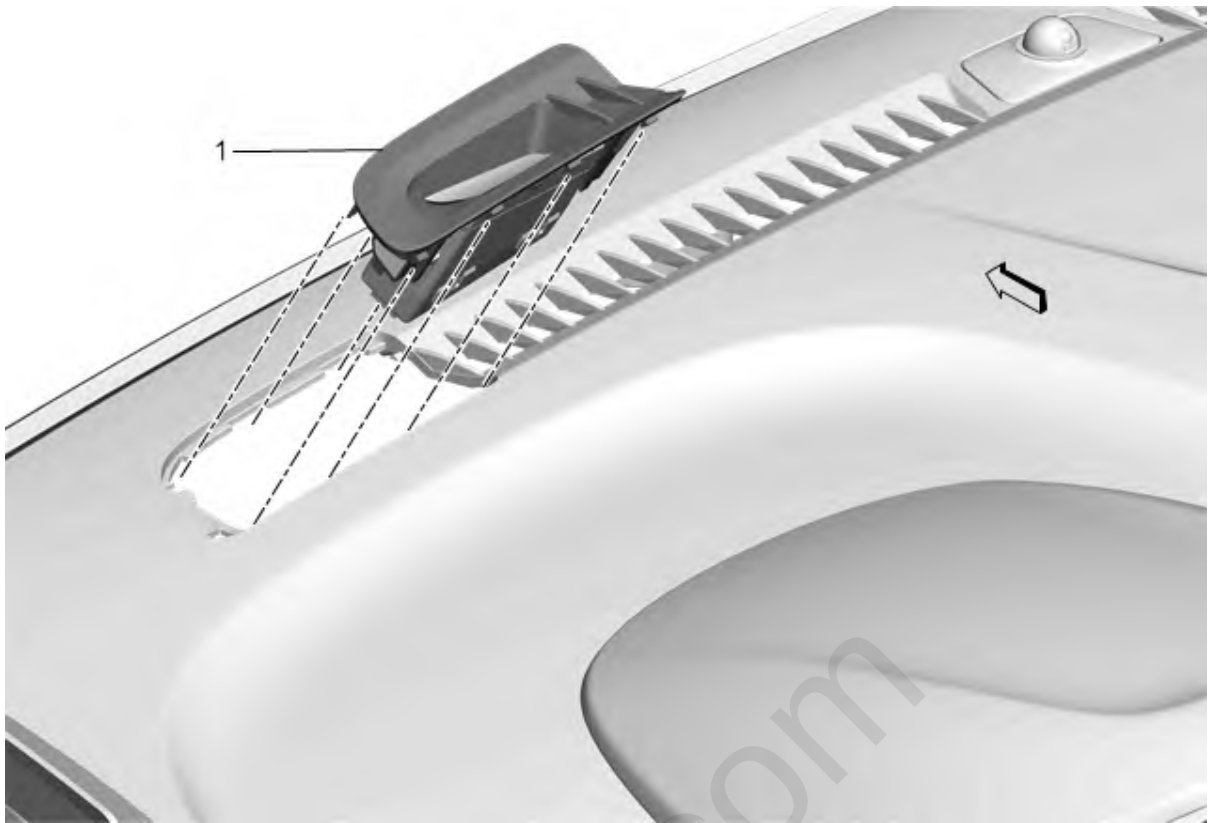


Fig. 104: Forward Collision Alert Display Bezel
Courtesy of GENERAL MOTORS COMPANY

7. Install Forward Collision Alert Display Bezel (1) - [Forward Collision Alert Display Bezel Replacement \(With UEU, Chevrolet\)](#) [Forward Collision Alert Display Bezel Replacement \(Without UEU, Chevrolet\)](#)

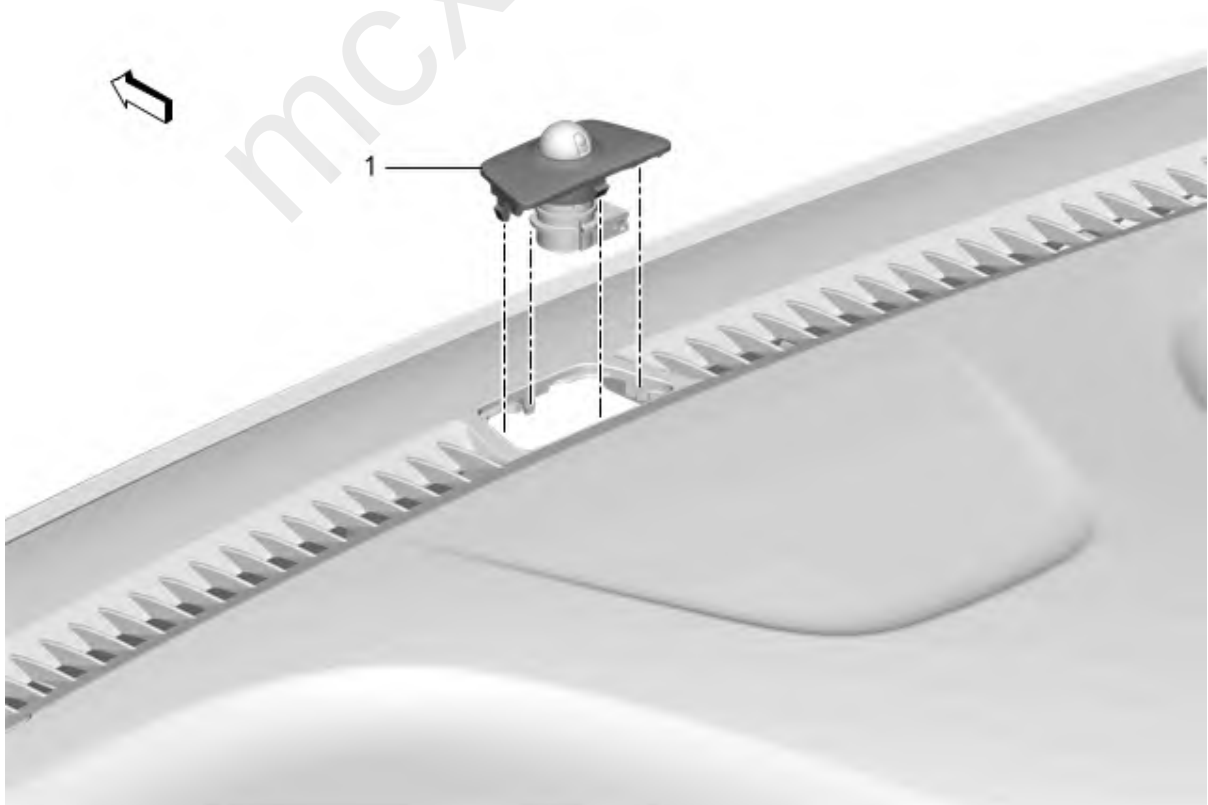


Fig. 105: Daytime Running Lamp Ambient Light Bezel
Courtesy of GENERAL MOTORS COMPANY

8. Install Daytime Running Lamp Ambient Light Bezel (1) - [Daytime Running Lamp Ambient Light Bezel Replacement \(Chevrolet\)](#)

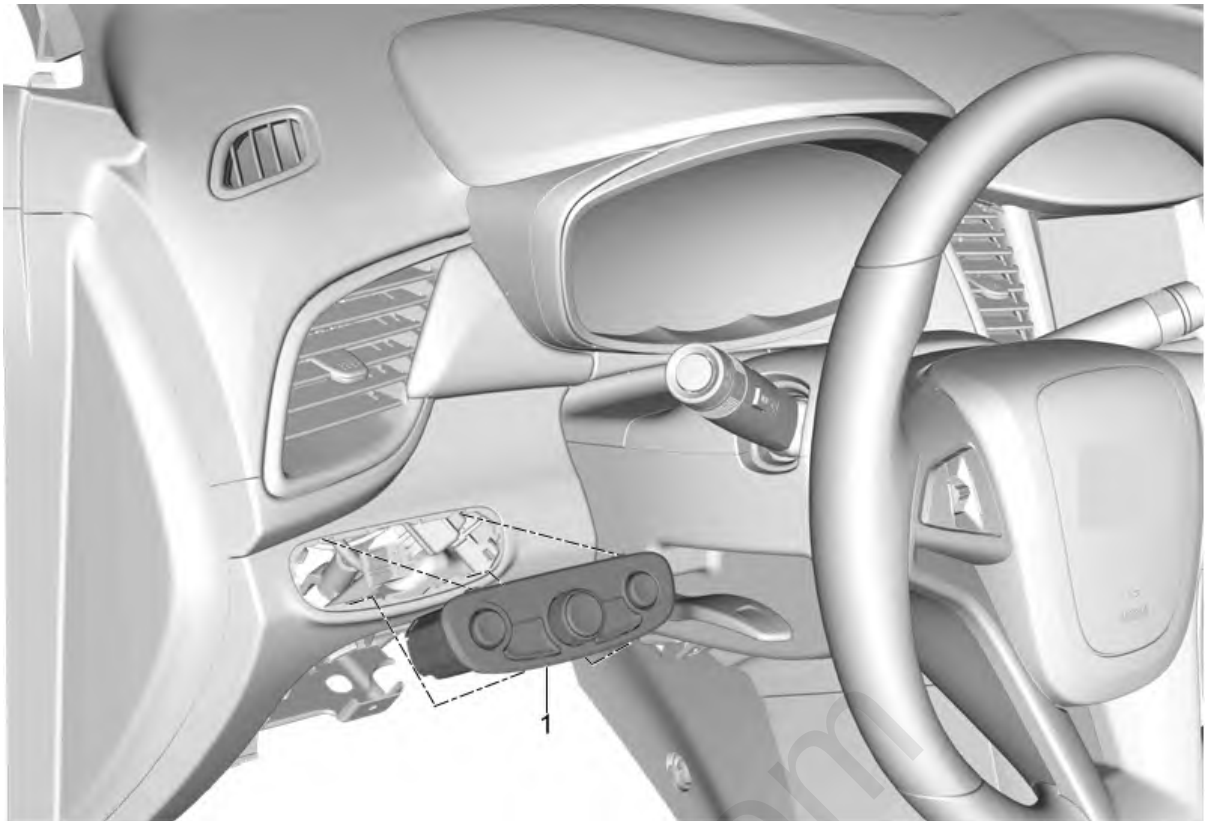


Fig. 106: Headlamp Switch

Courtesy of GENERAL MOTORS COMPANY

9. Install Headlamp Switch (1) - [Headlamp Switch Replacement](#)

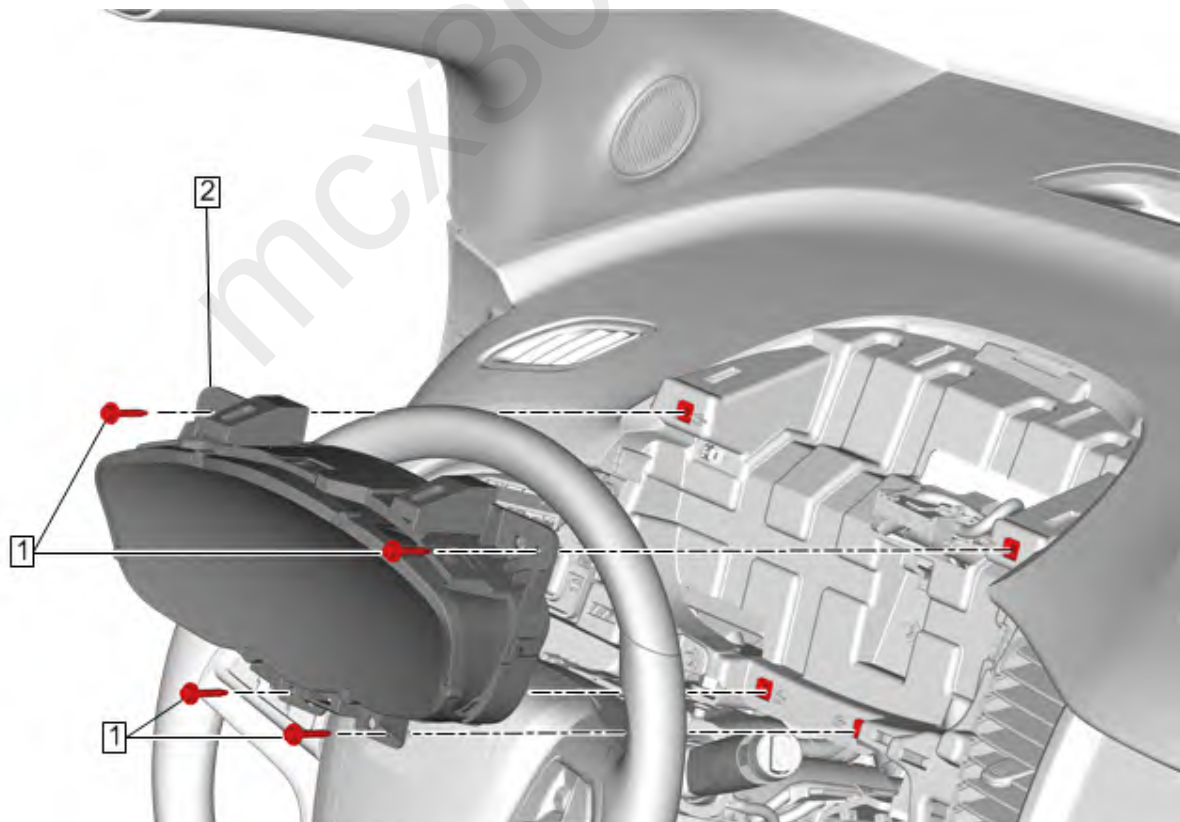


Fig. 107: Instrument Cluster

Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Cluster (2) - [Instrument Cluster Replacement \(Buick\)](#) [Instrument Cluster Replacement \(Chevrolet\)](#)

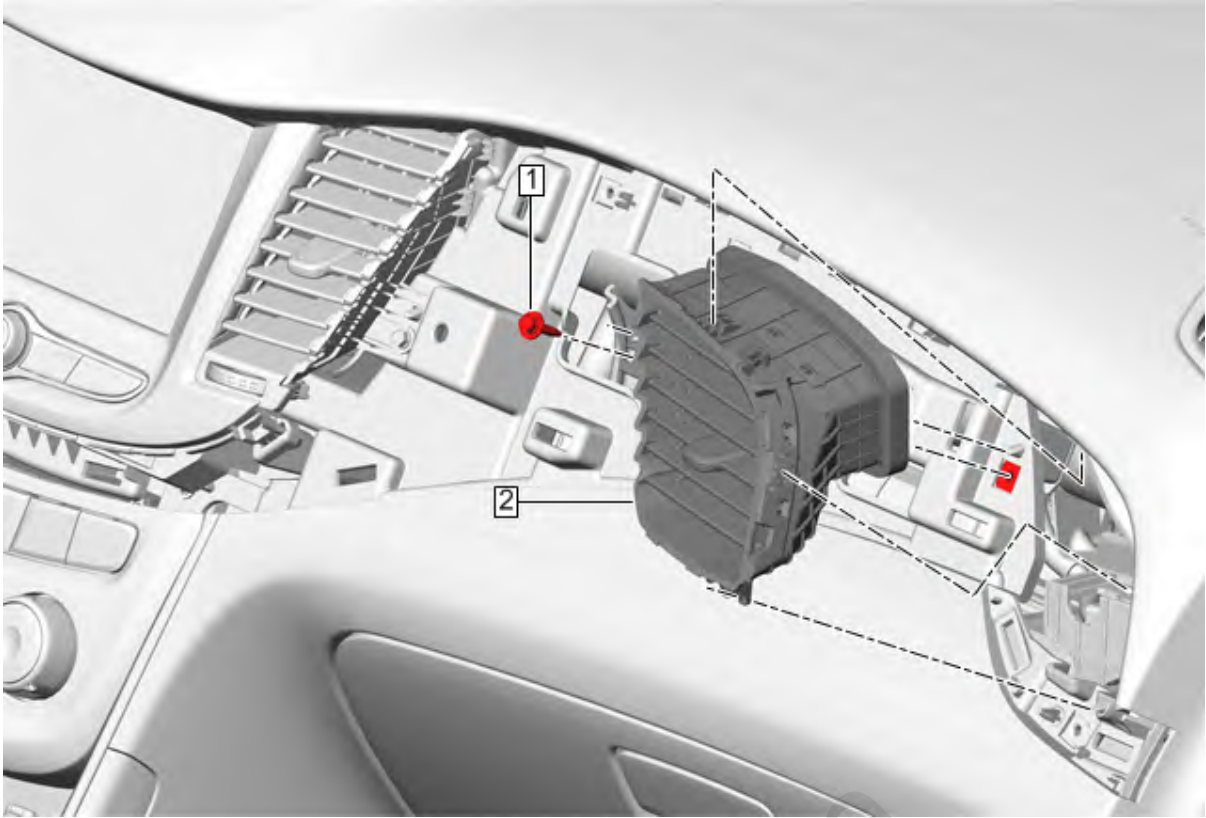


Fig. 108: Instrument Panel Outer Air Outlet - Right Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

11. Install Instrument Panel Outer Air Outlet - Right Side (2) - **Instrument Panel Outer Air Outlet Replacement - Right Side (Chevrolet)**

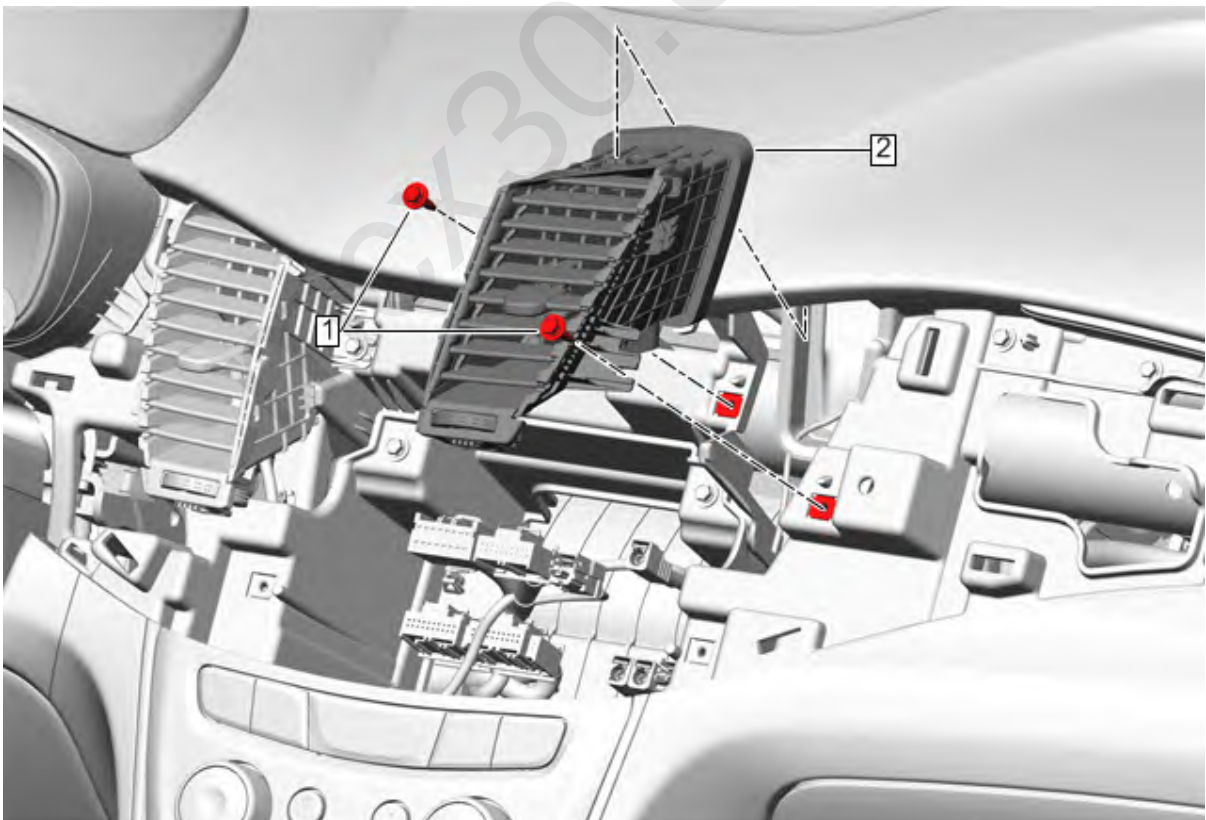


Fig. 109: Instrument Panel Center Air Outlet - Right Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

12. Install Instrument Panel Center Air Outlet - Right Side (2) - **Instrument Panel Center Air Outlet Replacement - Right Side (Chevrolet)**

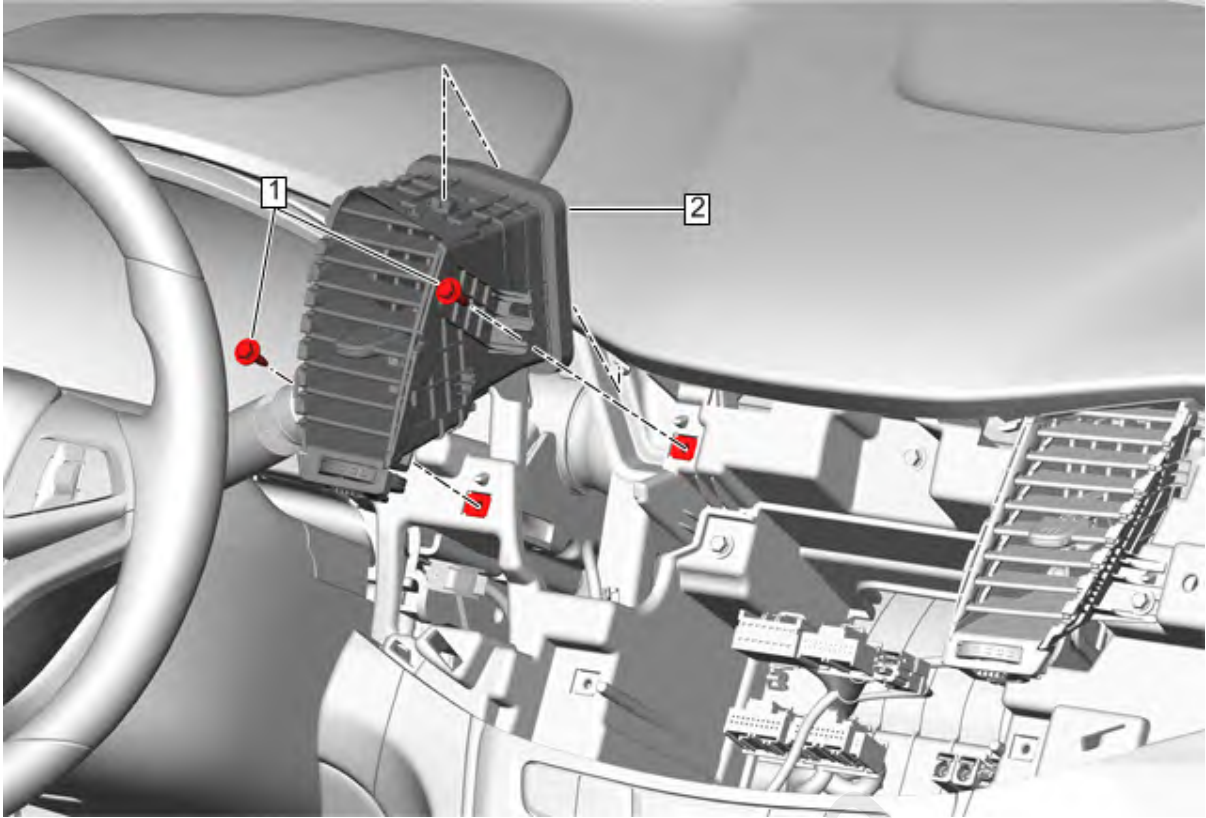


Fig. 110: Instrument Panel Center Air Outlet - Left Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

13. Install Instrument Panel Center Air Outlet - Left Side (2) - **Instrument Panel Center Air Outlet Replacement - Left Side (Chevrolet)**

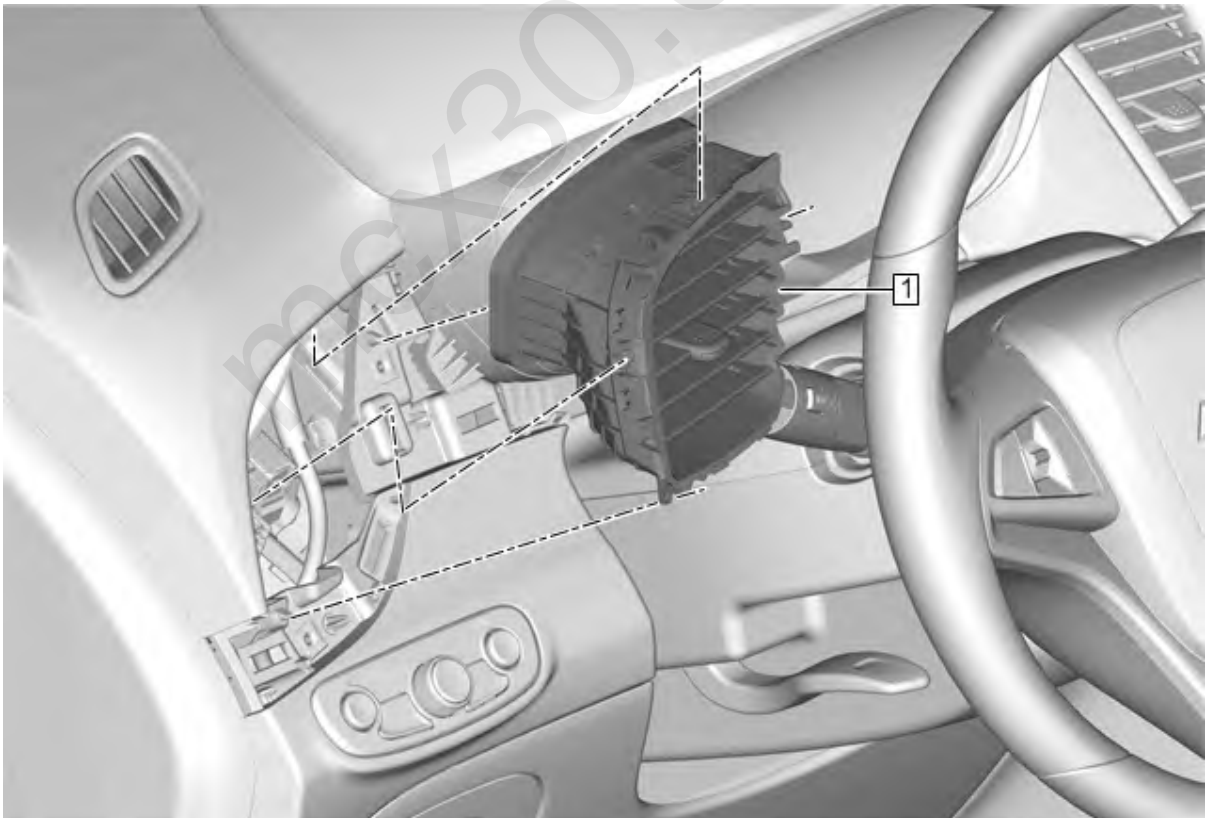


Fig. 111: Instrument Panel Outer Air Outlet - Left Side (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

14. Install Instrument Panel Outer Air Outlet - Left Side (1) - **Instrument Panel Outer Air Outlet Replacement - Left Side (Chevrolet)**

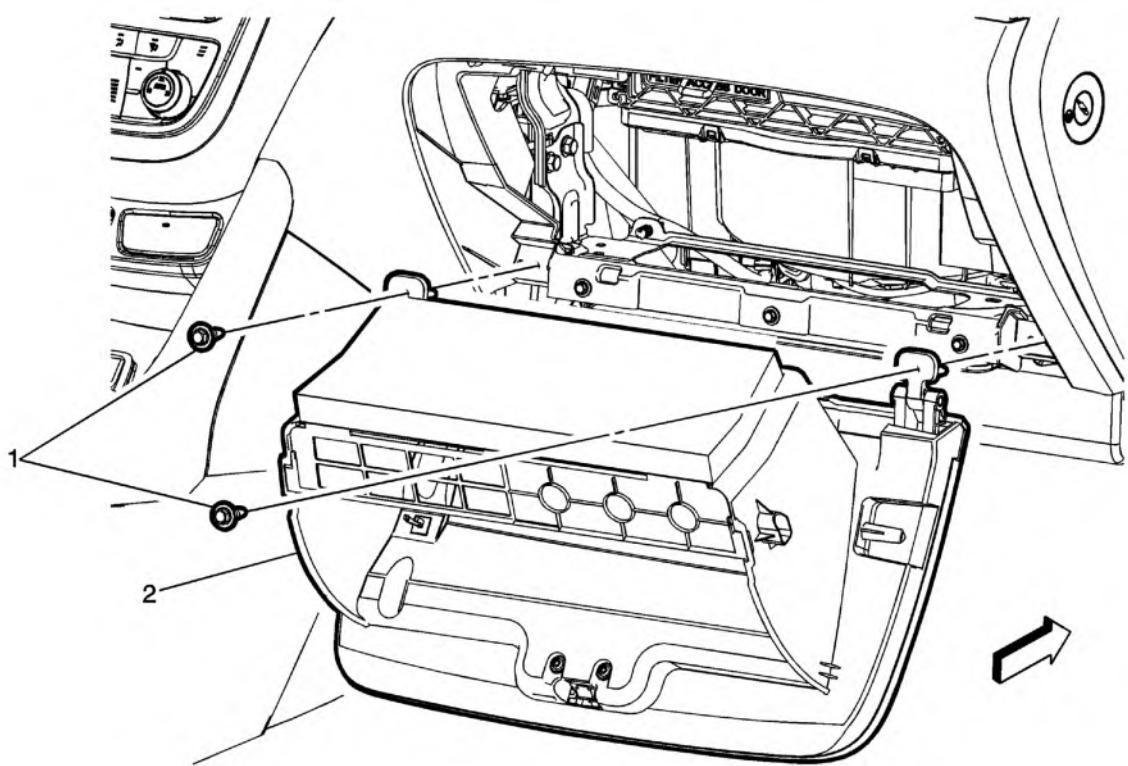


Fig. 112: Instrument Panel Compartment
 Courtesy of GENERAL MOTORS COMPANY

15. Install Instrument Panel Compartment (2) - [Instrument Panel Compartment Replacement](#)

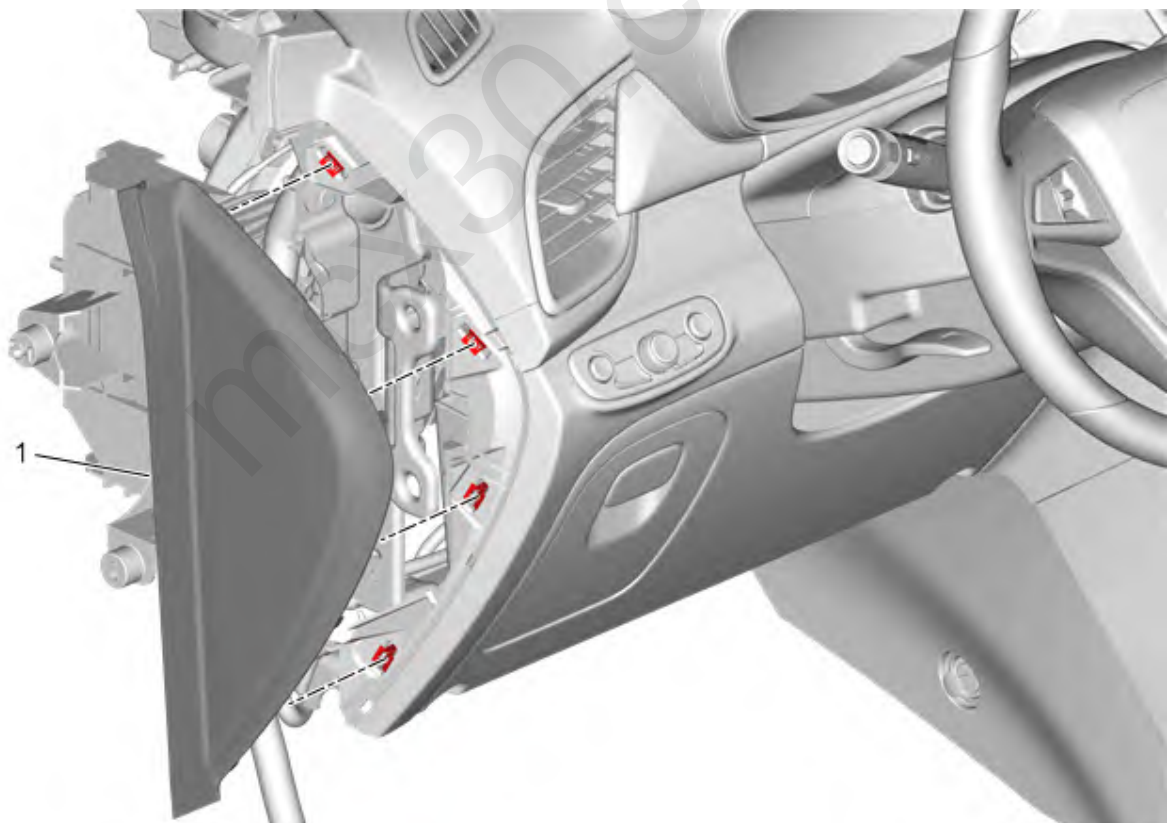


Fig. 113: Instrument Panel Outer Trim Cover
 Courtesy of GENERAL MOTORS COMPANY

16. Install Instrument Panel Outer Trim Cover (1) - [Instrument Panel Outer Trim Cover Replacement \(Chevrolet\)](#)

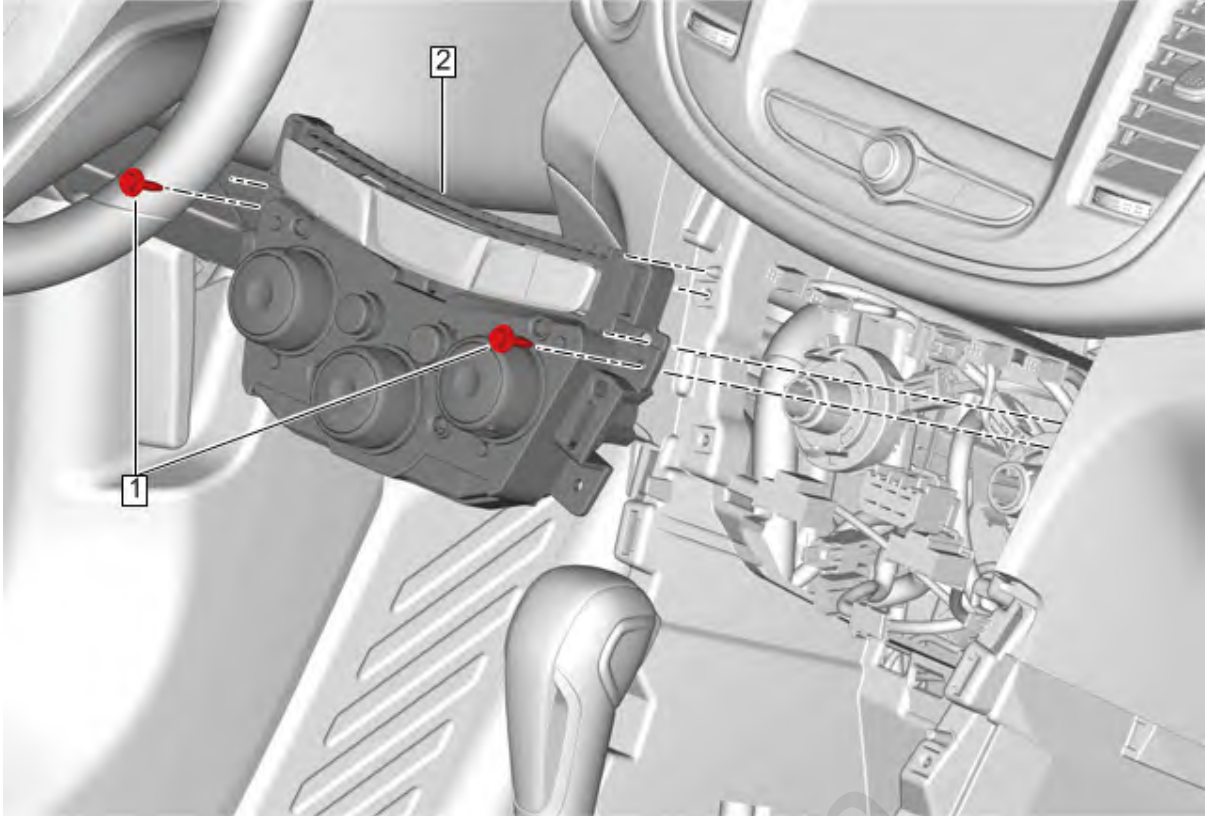


Fig. 114: Heater and Air Conditioning Control with Cable Control
 Courtesy of GENERAL MOTORS COMPANY

17. Install Heater and Air Conditioning Control with Cable Control (2) - [Heater and Air Conditioning Control with Cable Control Replacement \(C60\)](#)

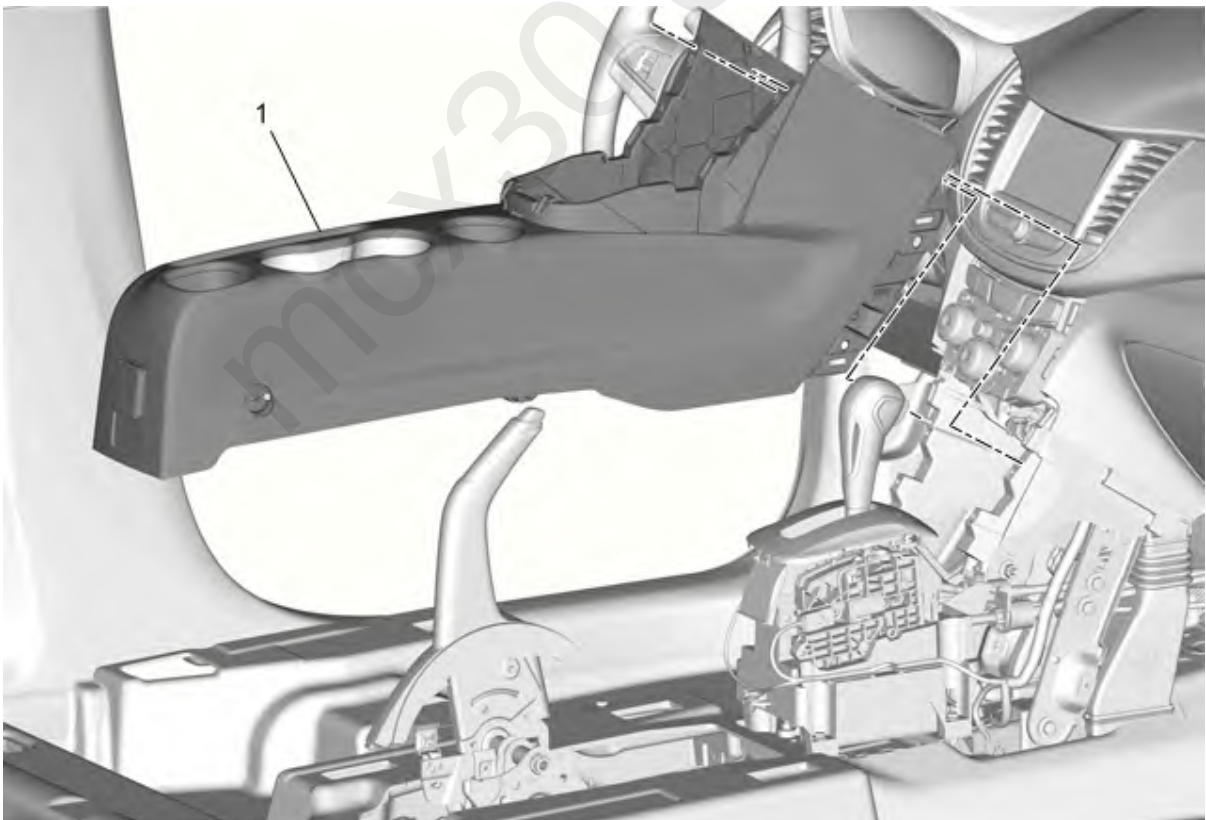


Fig. 115: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

18. Install Front Floor Console (1) - [Front Floor Console Replacement \(Chevrolet\)](#)

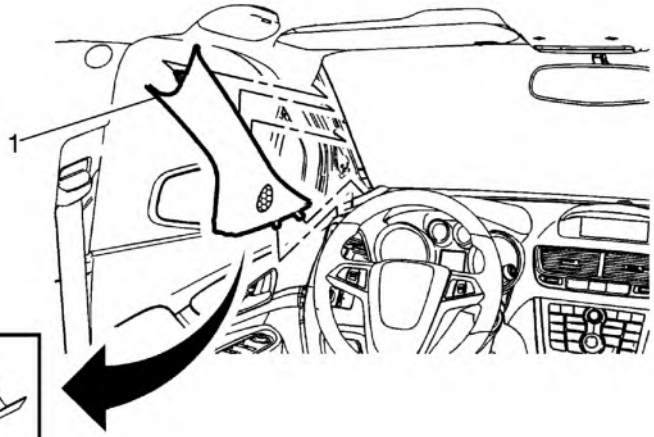
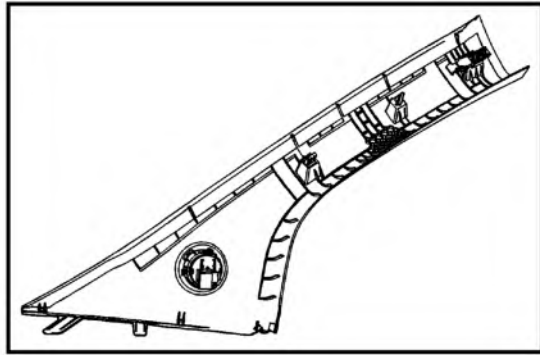


Fig. 116: Windshield Garnish Molding Assembly.
Courtesy of GENERAL MOTORS COMPANY

19. Install Windshield Garnish Molding (1) - [Windshield Garnish Molding Replacement \(Chevrolet\)](#)
20. Enable the SIR System. [SIR Disabling and Enabling](#)

INSTRUMENT PANEL TIE BAR REPLACEMENT (BUICK)

Removal Procedure

1. Remove the Instrument panel assembly. Refer to [Instrument Panel Assembly Replacement \(Buick\)](#).
2. Remove the instrument panel lower trim panel insulator. Refer to [Instrument Panel Lower Trim Panel Insulator Replacement \(Buick\)](#).
3. Remove the passenger side inflatable restraint instrument panel lower module, if equipped. Refer to [Instrument Panel Lower Airbag Replacement - Passenger Side \(AYF\)](#).

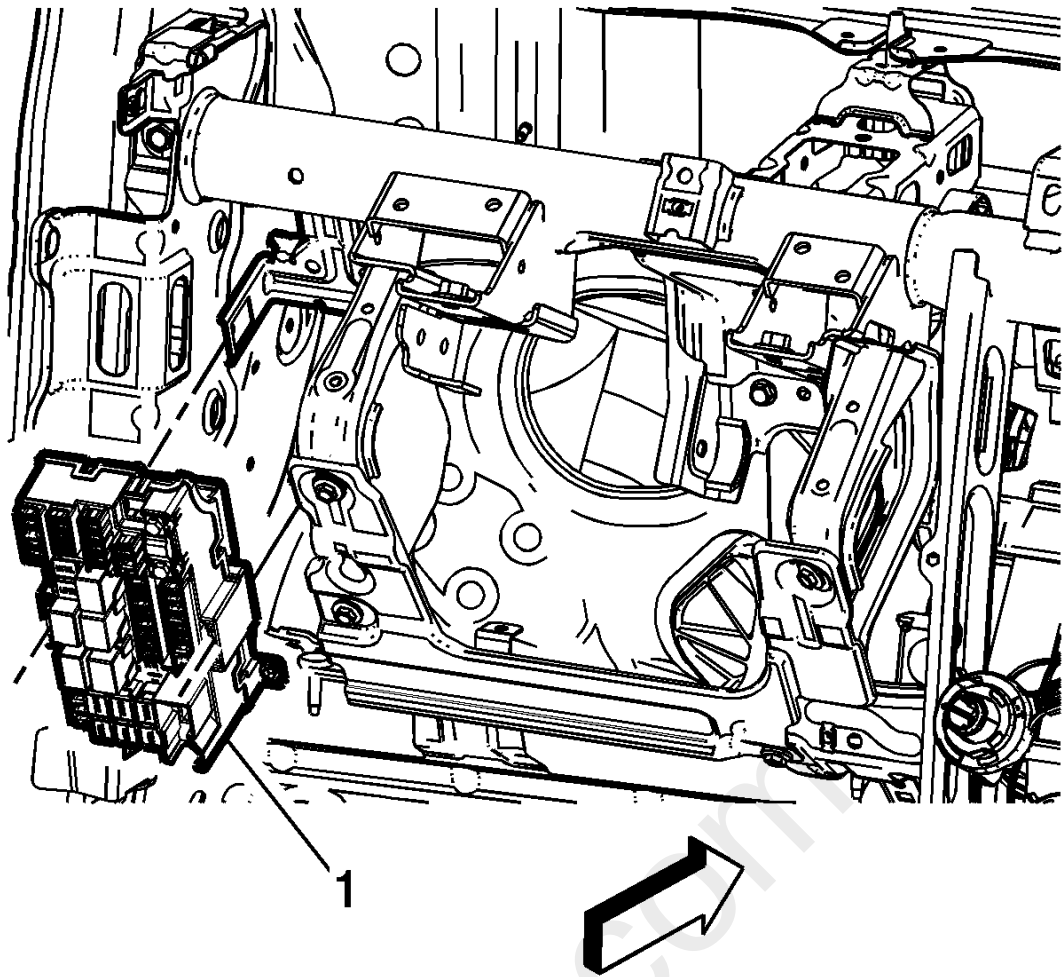


Fig. 117: Instrument Panel Fuse Block And Harness

Courtesy of GENERAL MOTORS COMPANY

4. Unsnap the instrument panel fuse block (1) and disconnect harness from the instrument panel tie bar assembly and position out of the way.

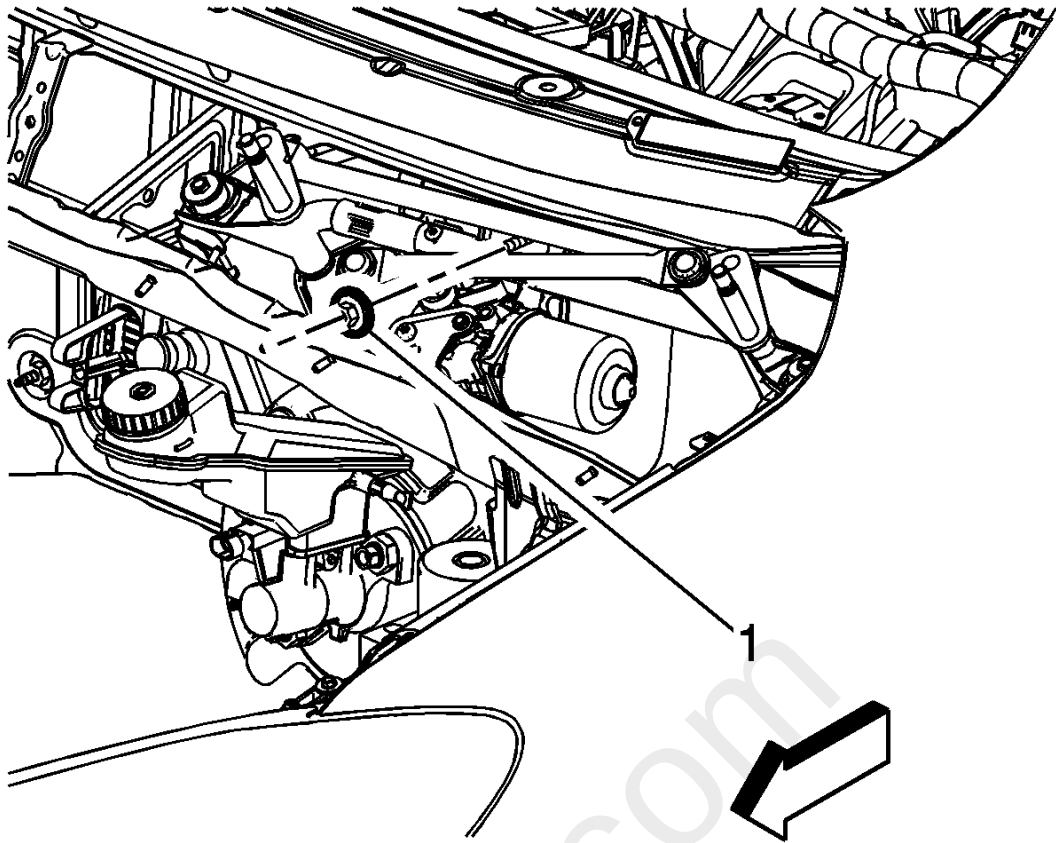


Fig. 118: Air Inlet Grille Panel

Courtesy of GENERAL MOTORS COMPANY

5. Remove the air inlet grill panel. Refer to [Air Inlet Grille Panel Replacement \(Buick\)](#) .
6. Remove the nut (1) securing the instrument panel tie bar assembly to the cowl panel.

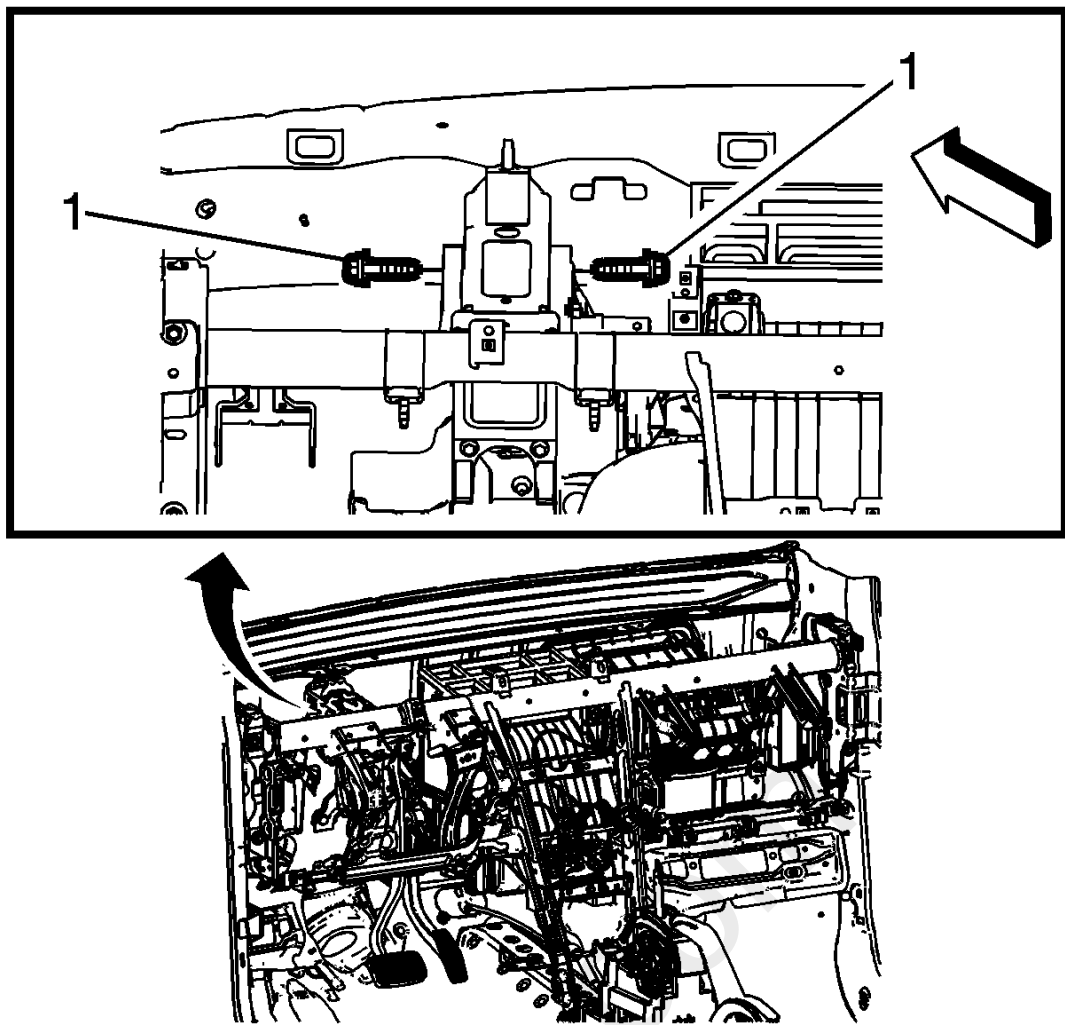


Fig. 119: Instrument Panel Tie Bar Assembly And Brake Pedal Bracket
Courtesy of GENERAL MOTORS COMPANY

7. Remove the bolts (1) securing the instrument panel tie bar assembly to the brake pedal bracket.

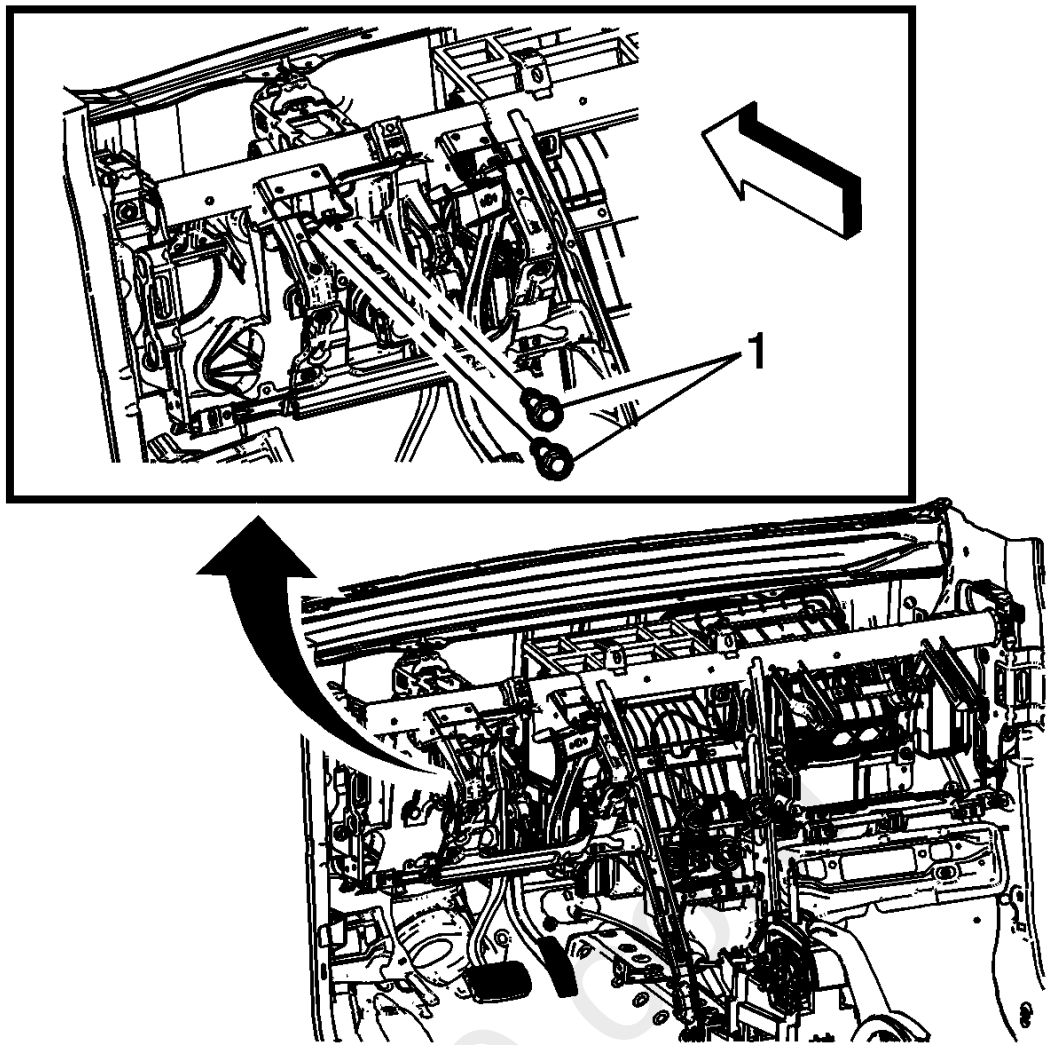


Fig. 120: Brake Pedal Mounting Bracket

Courtesy of GENERAL MOTORS COMPANY

8. Remove bolt (1) securing the instrument panel tie bar to the brake pedal mounting bracket.

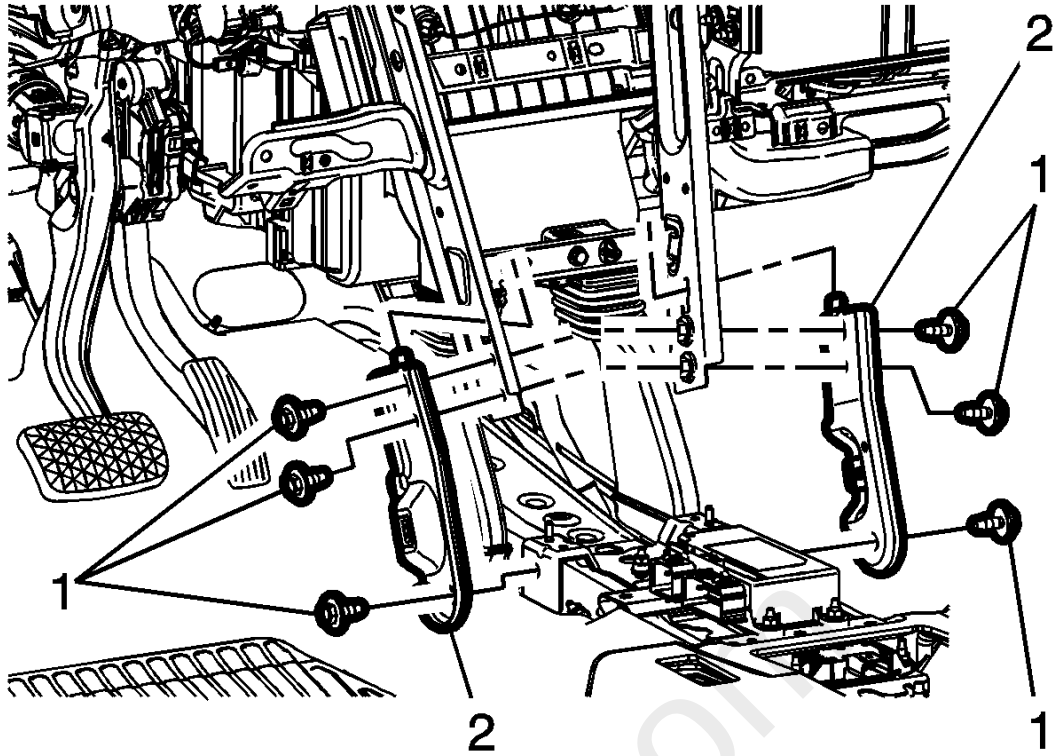


Fig. 121: Instrument Panel Tie Bar Lower Support Brackets

Courtesy of GENERAL MOTORS COMPANY

9. Remove the bolts (1) securing the right and left instrument panel tie bar lower support brackets (2) to the front floor tunnel panel.

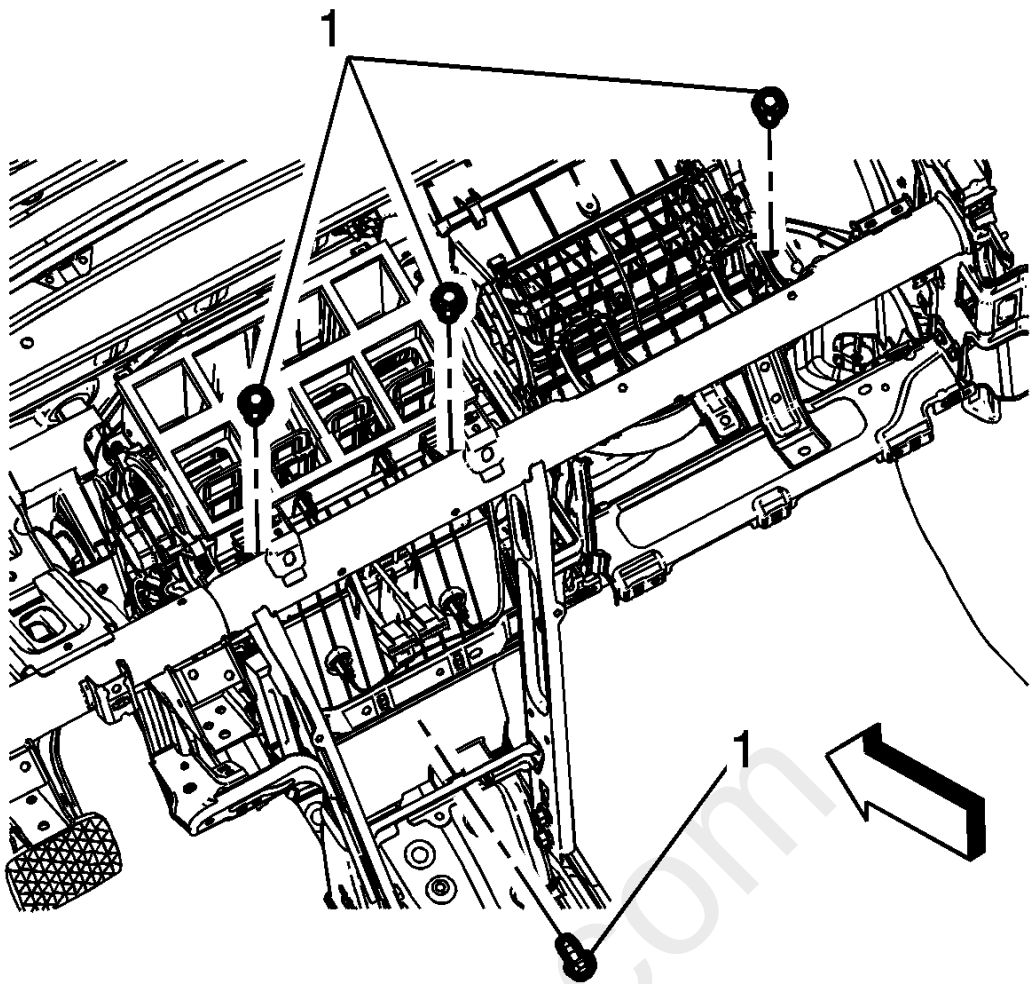


Fig. 122: Instrument Panel Tie Bar Assembly And HVAC Module
Courtesy of GENERAL MOTORS COMPANY

10. Remove the fasteners (1) securing the instrument panel tie bar assembly to the HVAC module.

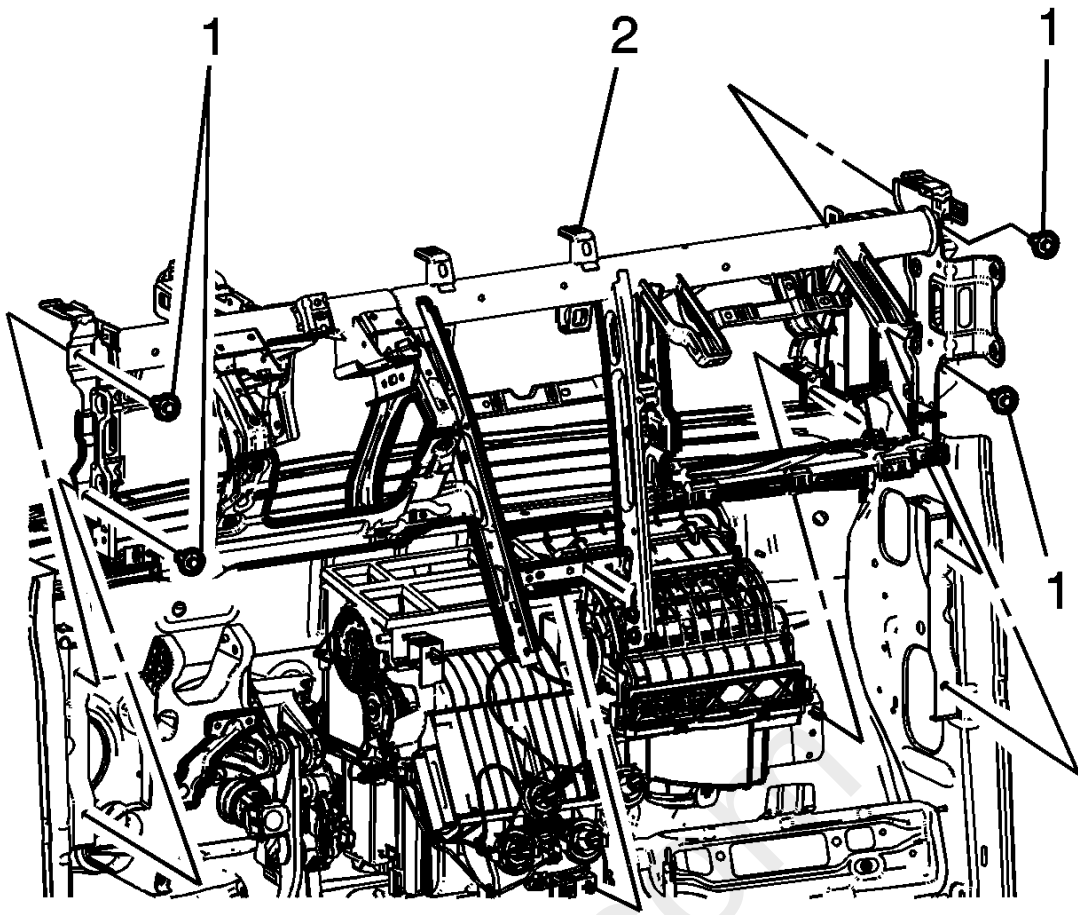


Fig. 123: Instrument Panel Tie Bar Assembly Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Remove the bolts (1) securing the instrument panel tie bar assembly to the vehicle body.
12. Note the location and routing of the instrument panel wiring harness in order to ensure proper installation.
13. Support the HVAC module in order to prevent damage.
14. With the aid of an assistant remove the instrument panel tie bar assembly from the vehicle.

Installation Procedure

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

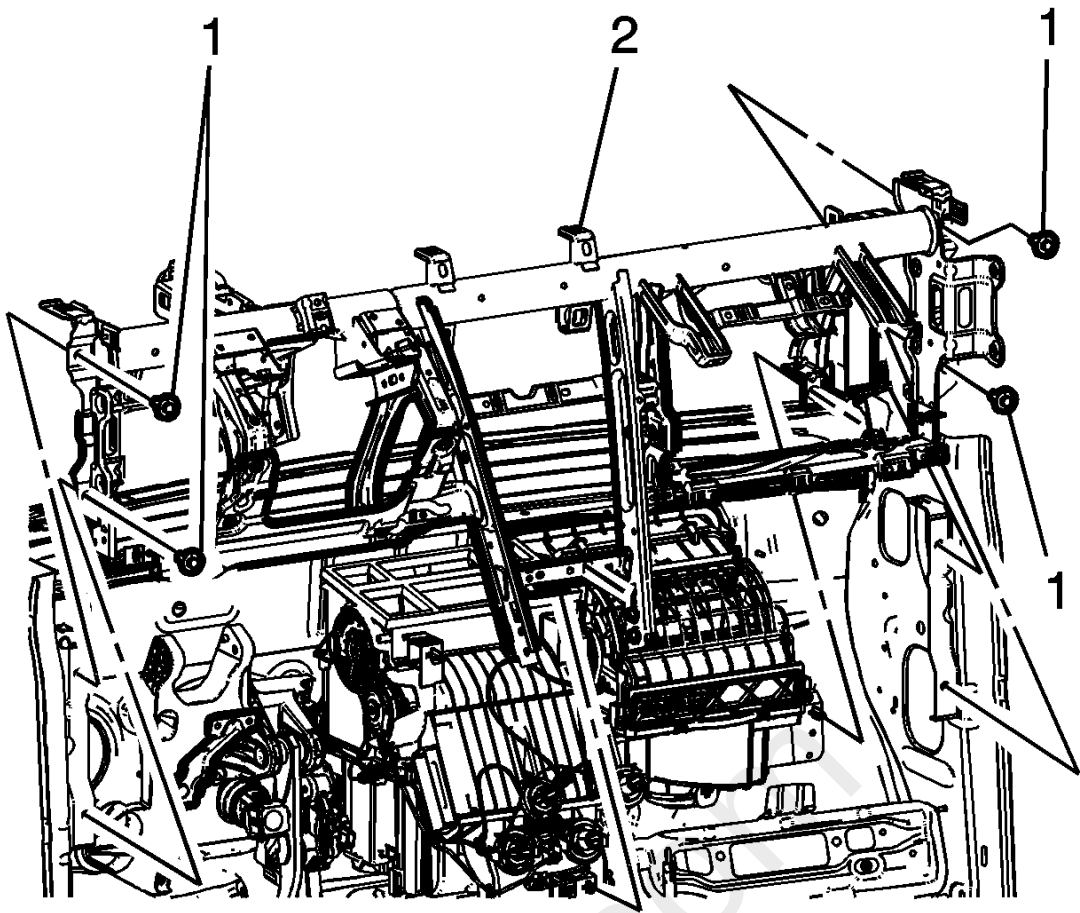


Fig. 124: Instrument Panel Tie Bar Assembly Bolts

Courtesy of GENERAL MOTORS COMPANY

3. Loosely install the bolts (1) securing the instrument panel tie bar assembly to the vehicle body.

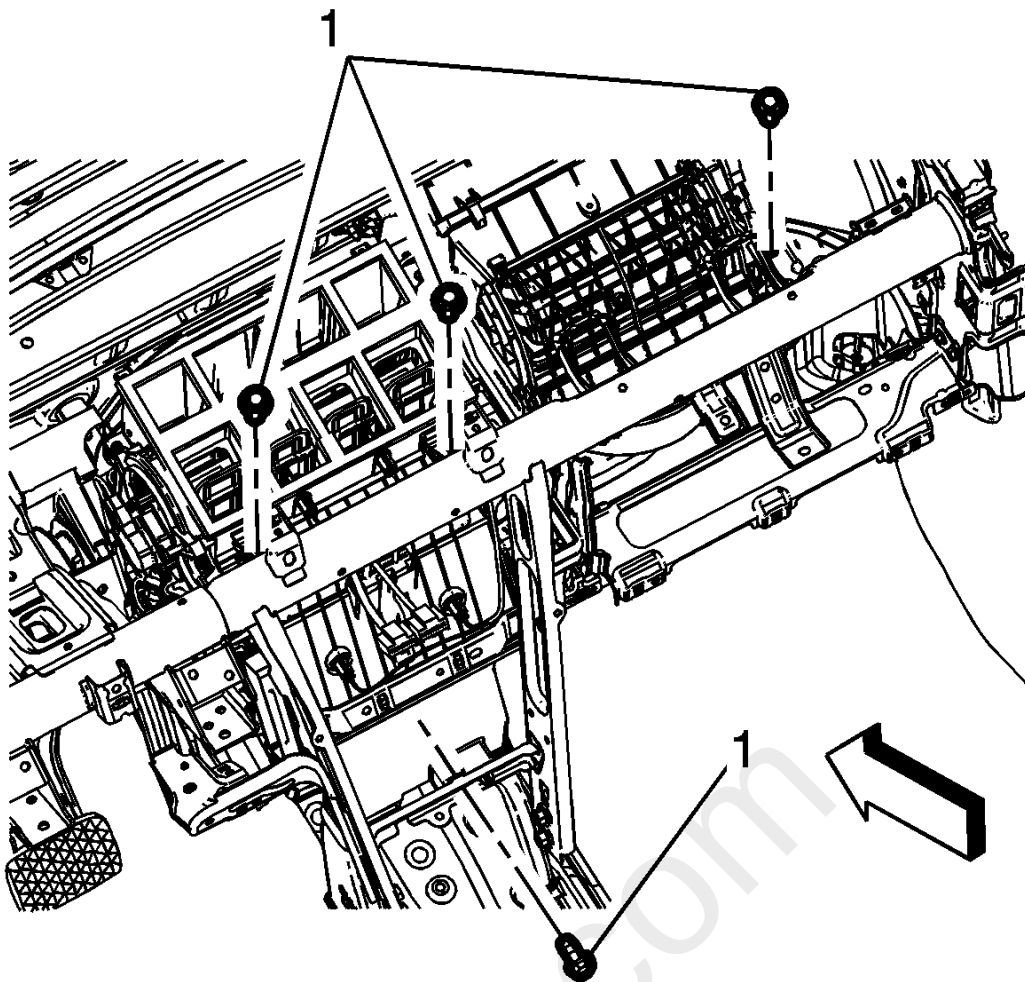


Fig. 125: Instrument Panel Tie Bar Assembly And HVAC Module

Courtesy of GENERAL MOTORS COMPANY

4. Loosely install the fasteners (1) securing the instrument panel tie bar assembly to the HVAC module.

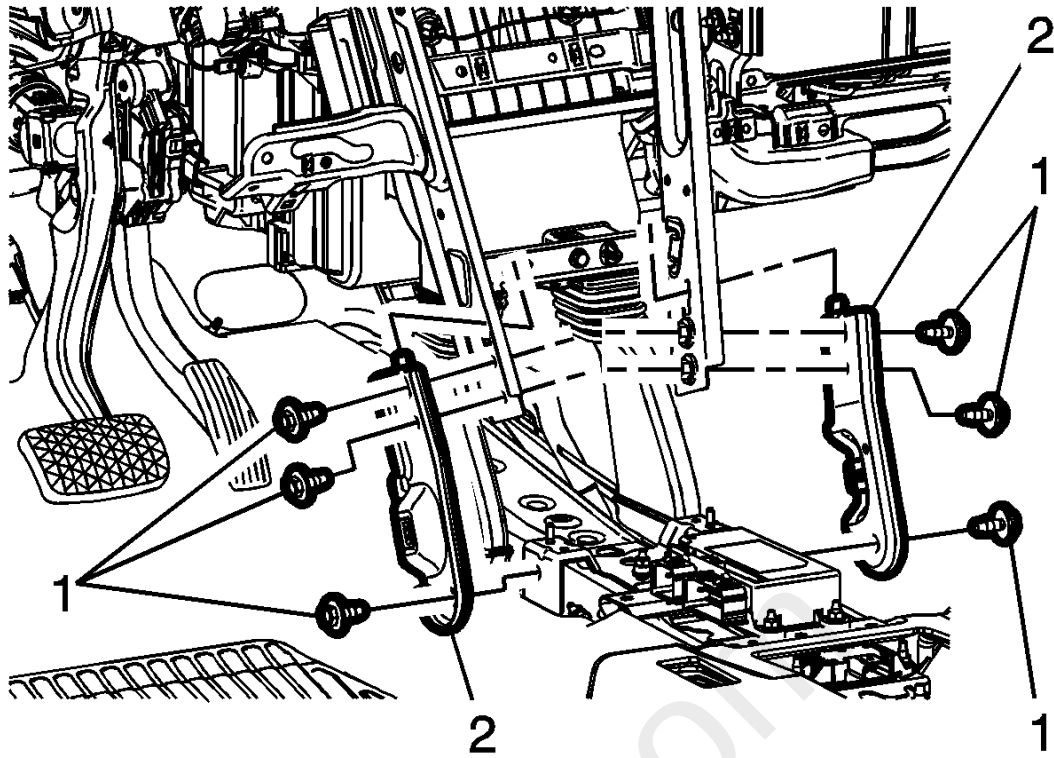


Fig. 126: Instrument Panel Tie Bar Lower Support Brackets

Courtesy of GENERAL MOTORS COMPANY

5. Loosely install the bolts (1) securing the right and left instrument panel tie bar lower support brackets (2) to the front floor tunnel panel.

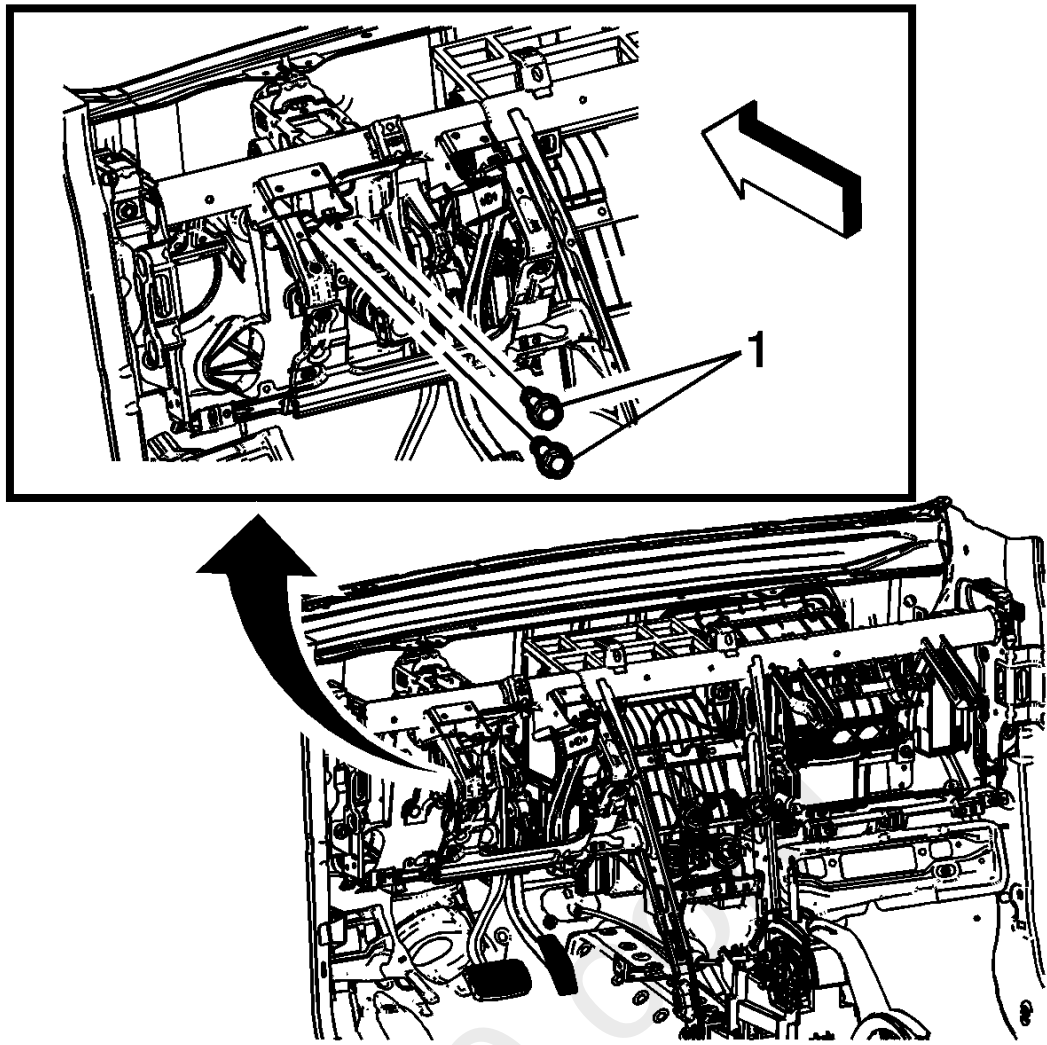


Fig. 127: Brake Pedal Mounting Bracket

Courtesy of GENERAL MOTORS COMPANY

6. Loosely install the bolt (1) securing the instrument panel tie bar to the brake pedal mounting bracket.

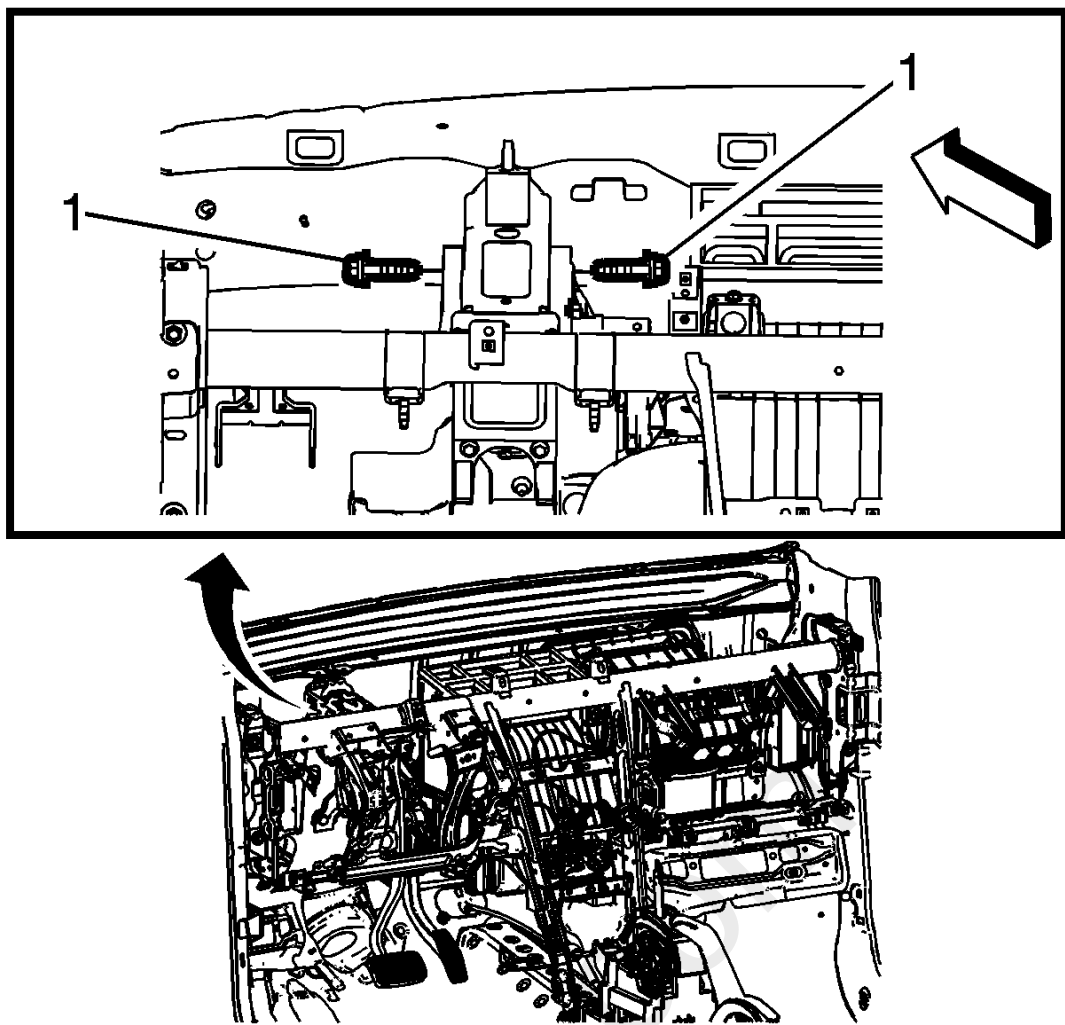


Fig. 128: Instrument Panel Tie Bar Assembly And Brake Pedal Bracket
Courtesy of GENERAL MOTORS COMPANY

7. Loosely install the bolts (1) securing the instrument panel tie bar assembly to the brake pedal bracket.

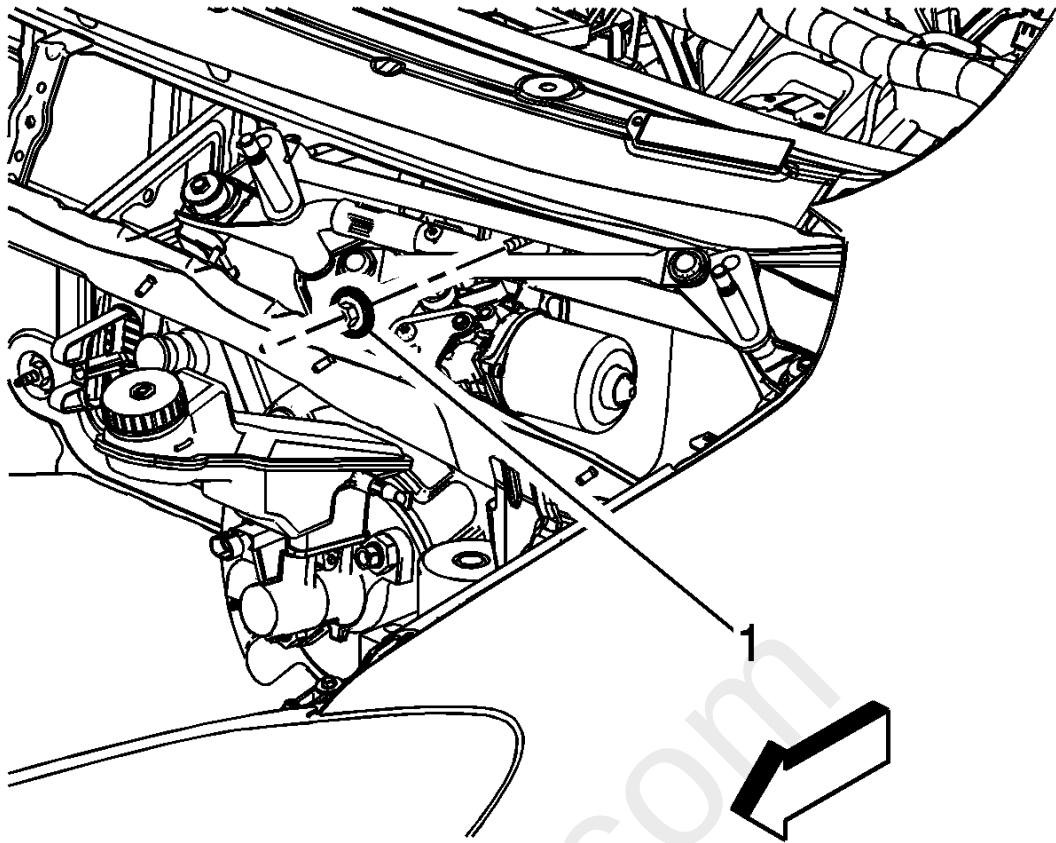


Fig. 129: Air Inlet Grille Panel

Courtesy of GENERAL MOTORS COMPANY

8. Loosely install the nut (1) securing the instrument panel tie bar assembly to the cowl panel.

CAUTION: Refer to **Fastener Caution** .

9. Tighten the instrument panel tie bar to vehicle body bolts to 22 N.m (16 lb ft).
10. Tighten the instrument panel tie bar to HVAC module fasteners to 9 N.m (80 lb in).
11. Tighten the instrument panel tie bar lower support bracket to front floor tunnel panel bolts to 22 N.m (16 lb ft).
12. Tighten the instrument panel tie bar to brake pedal mounting bracket bolt to 22 N.m (16 lb ft).
13. Tighten the instrument panel tie bar assembly to the brake pedal bracket bolts to 9 N.m (80 lb in).
14. Tighten the instrument panel tie bar assembly to the cowl panel nut to 22 N.m (16 lb ft).

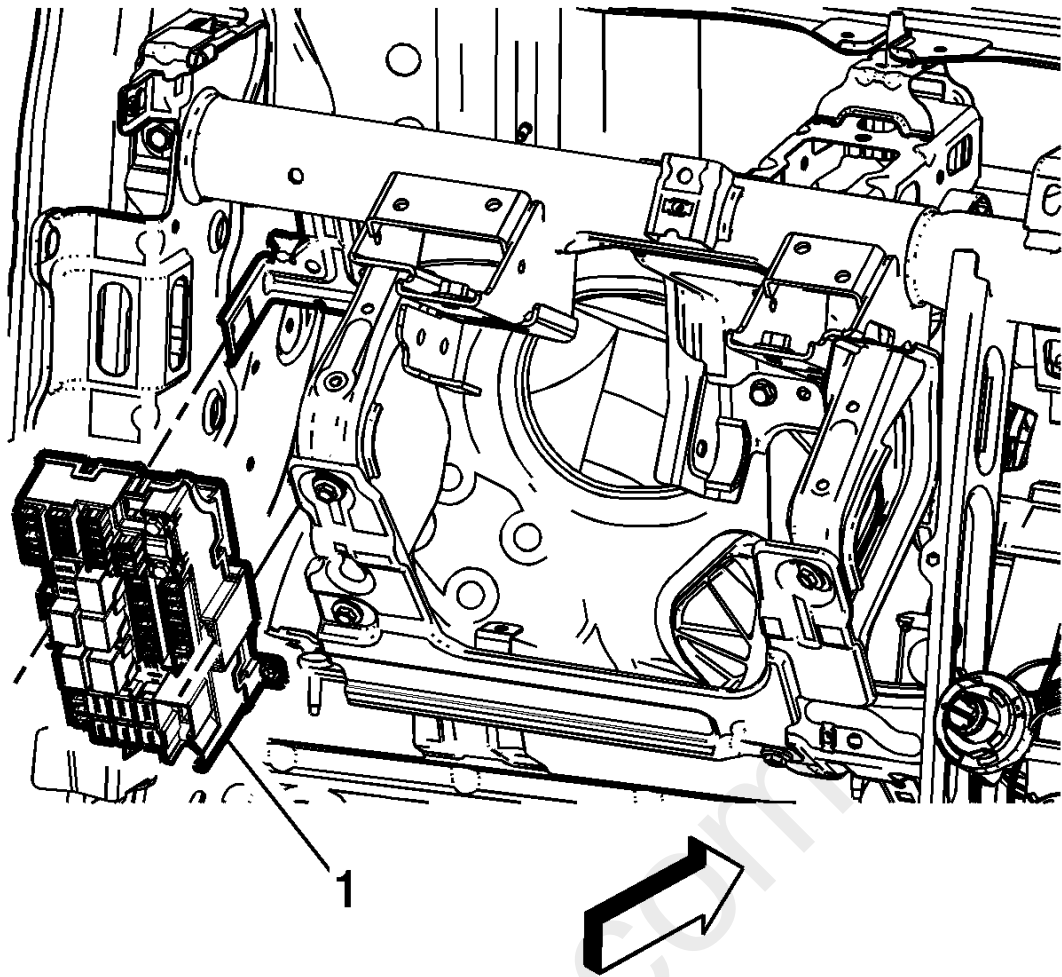


Fig. 130: Instrument Panel Fuse Block And Harness

Courtesy of GENERAL MOTORS COMPANY

15. Install the instrument panel fuse block (1) onto the instrument panel tie bar assembly.
16. Install the air inlet grille panel. Refer to [Air Inlet Grille Panel Replacement \(Chevrolet\)](#), [Air Inlet Grille Panel Replacement \(Buick\)](#).
17. Install the passenger side inflatable restraint instrument panel lower module, if equipped. Refer to [Instrument Panel Lower Airbag Replacement - Passenger Side \(AYF\)](#).
18. Install the instrument panel lower trim panel insulator. Refer to [Instrument Panel Lower Trim Panel Insulator Replacement \(Buick\)](#).
19. Install the Instrument panel assembly. Refer to [Instrument Panel Assembly Replacement \(Buick\)](#).

INSTRUMENT PANEL TIE BAR REPLACEMENT (CHEVROLET)

Removal Procedure

1. Remove the Instrument panel assembly. Refer to [Instrument Panel Assembly Replacement \(Chevrolet\)](#).
2. Remove the instrument panel lower trim panel insulator. Refer to [Instrument Panel Lower Trim Panel Insulator Replacement \(Chevrolet\)](#).
3. Remove the left floor front air outlet duct. Refer to [Floor Front Air Outlet Duct Replacement - Left Side \(Chevrolet\)](#).

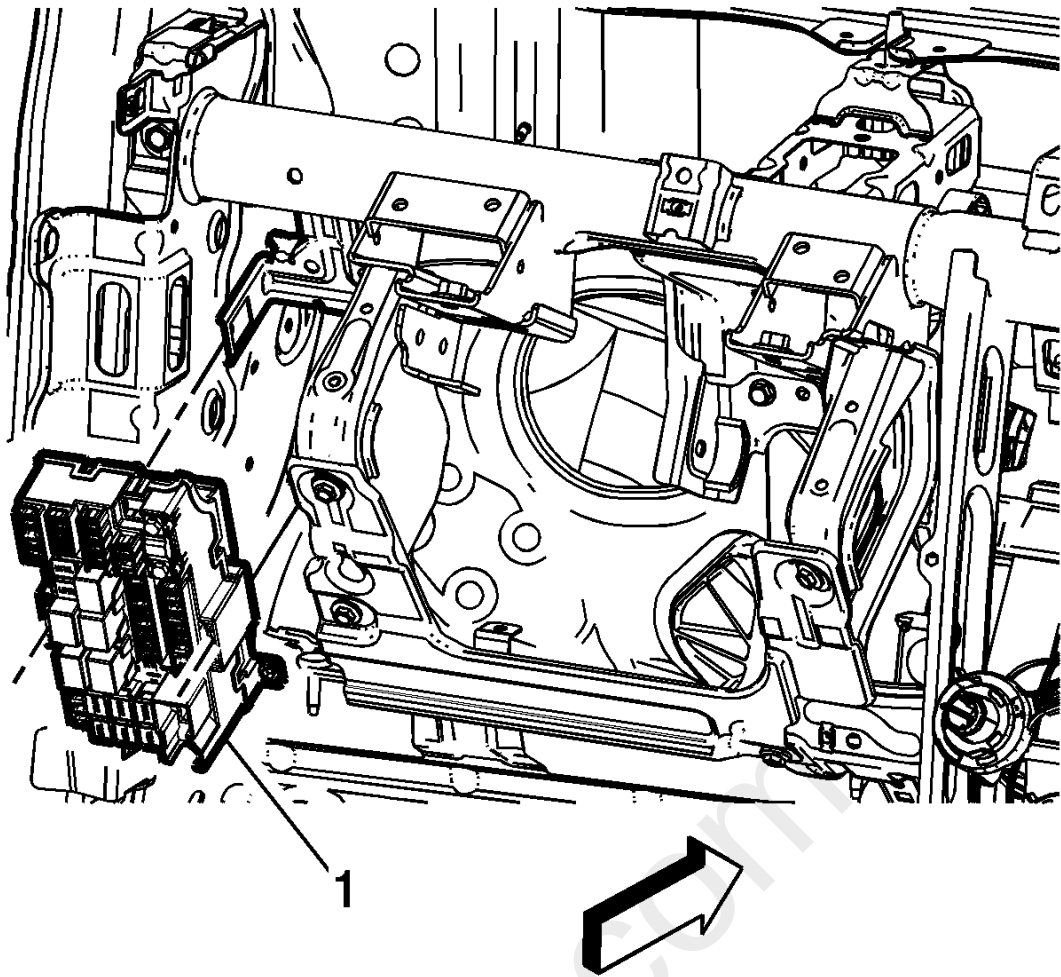


Fig. 131: Instrument Panel Fuse Block And Harness

Courtesy of GENERAL MOTORS COMPANY

4. Unsnap the instrument panel fuse block (1) and disconnect harness from the instrument panel tie bar assembly and position out of the way.

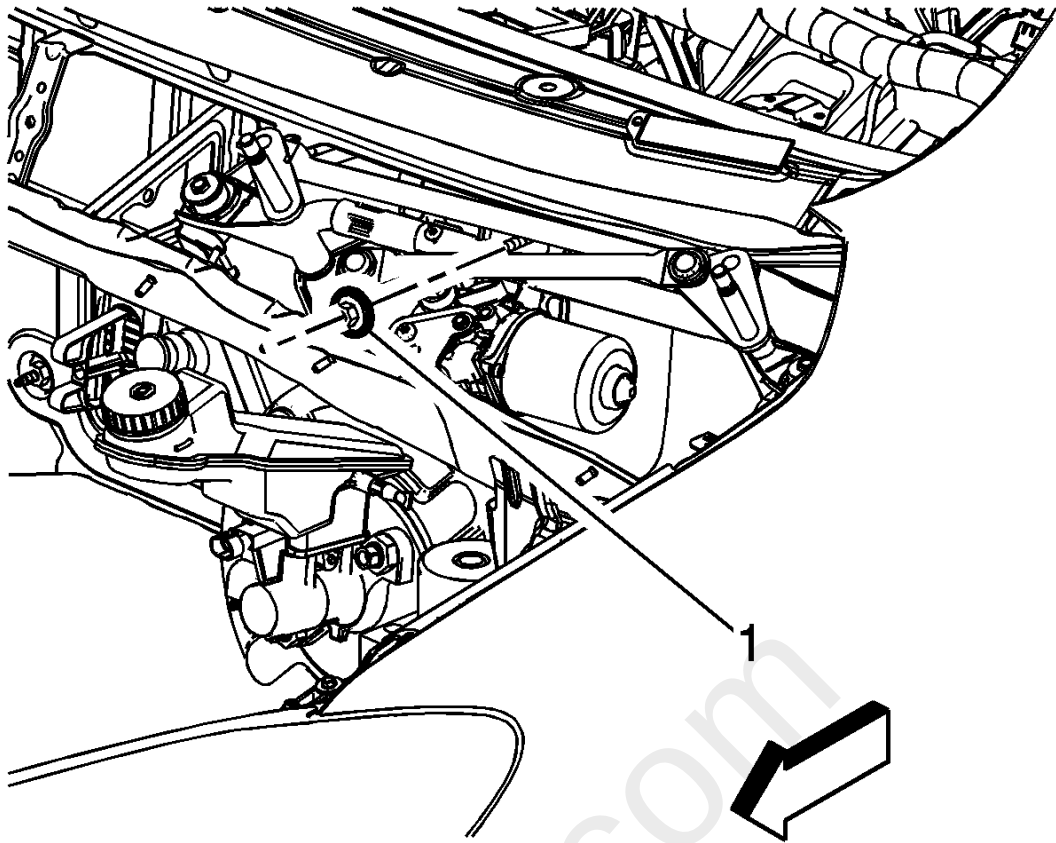


Fig. 132: Air Inlet Grille Panel

Courtesy of GENERAL MOTORS COMPANY

5. Remove the air inlet grill panel. Refer to [Air Inlet Grille Panel Replacement \(Chevrolet\)](#).
6. Remove the nut (1) securing the instrument panel tie bar assembly to the cowl panel.

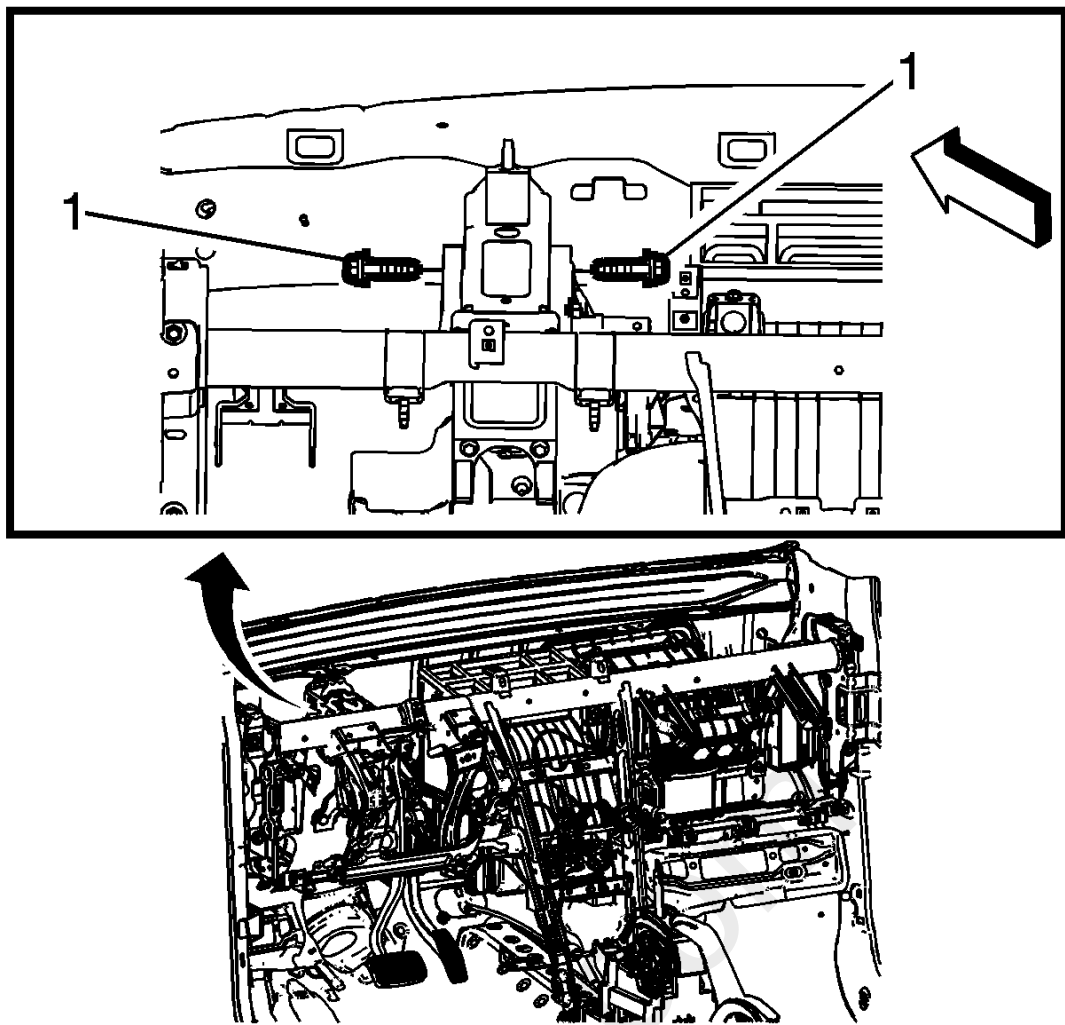


Fig. 133: Instrument Panel Tie Bar Assembly And Brake Pedal Bracket
Courtesy of GENERAL MOTORS COMPANY

7. Remove the bolts (1) securing the instrument panel tie bar assembly to the brake pedal bracket.

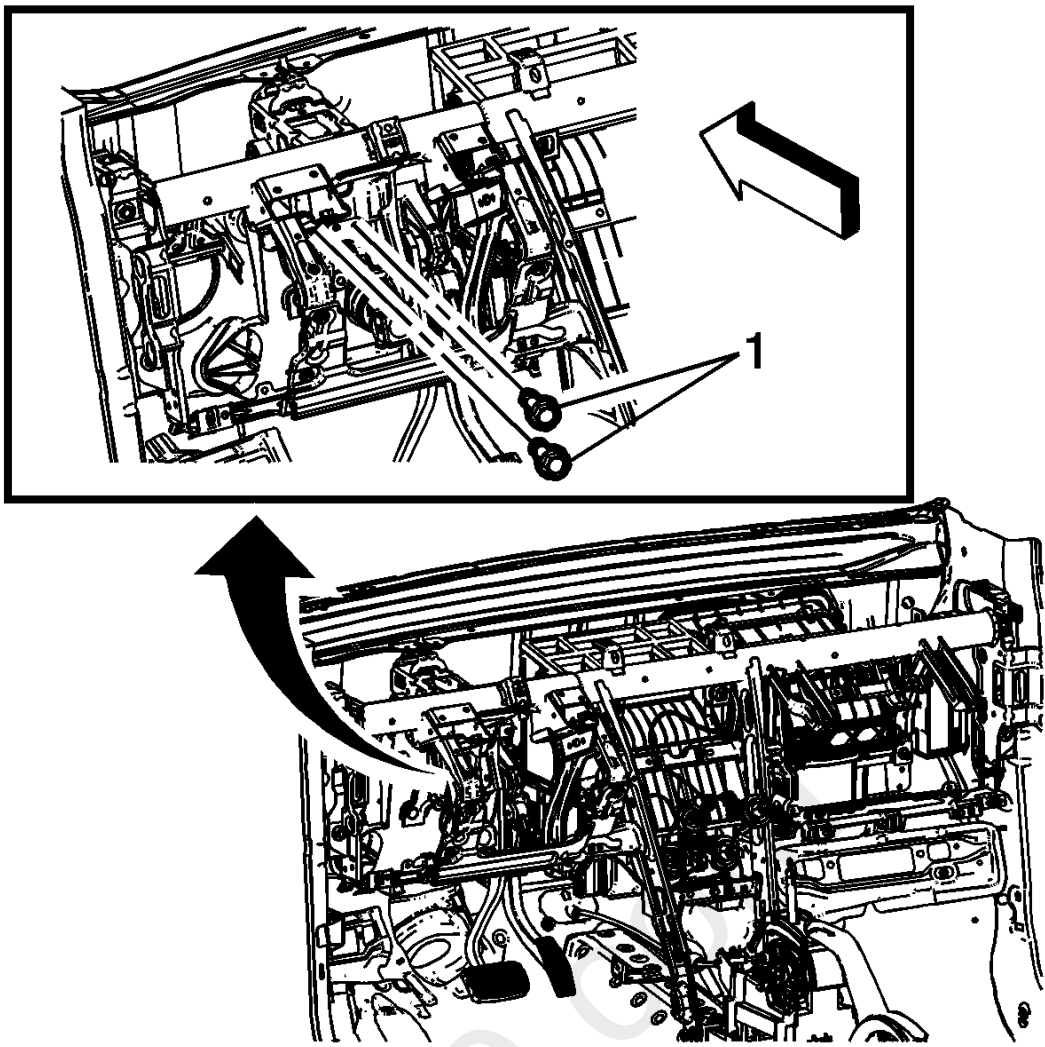


Fig. 134: Brake Pedal Mounting Bracket

Courtesy of GENERAL MOTORS COMPANY

8. Remove bolt (1) securing the instrument panel tie bar to the brake pedal mounting bracket.

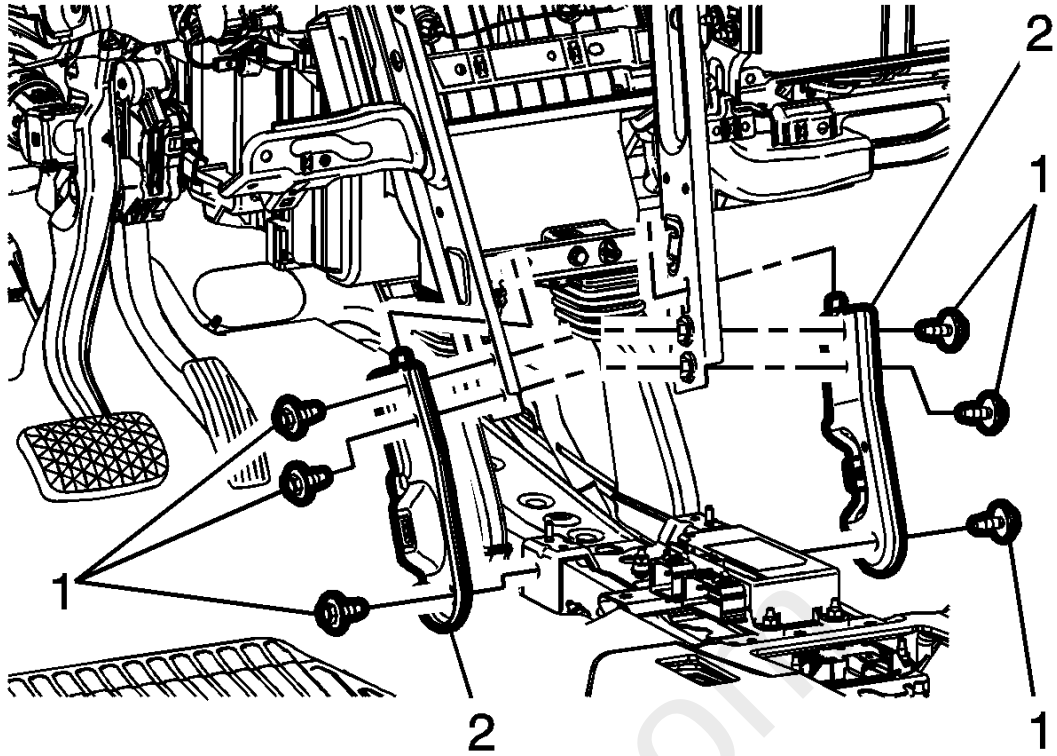


Fig. 135: Instrument Panel Tie Bar Lower Support Brackets

Courtesy of GENERAL MOTORS COMPANY

9. Remove the bolts (1) securing the right and left instrument panel tie bar lower support brackets (2) to the front floor tunnel panel.

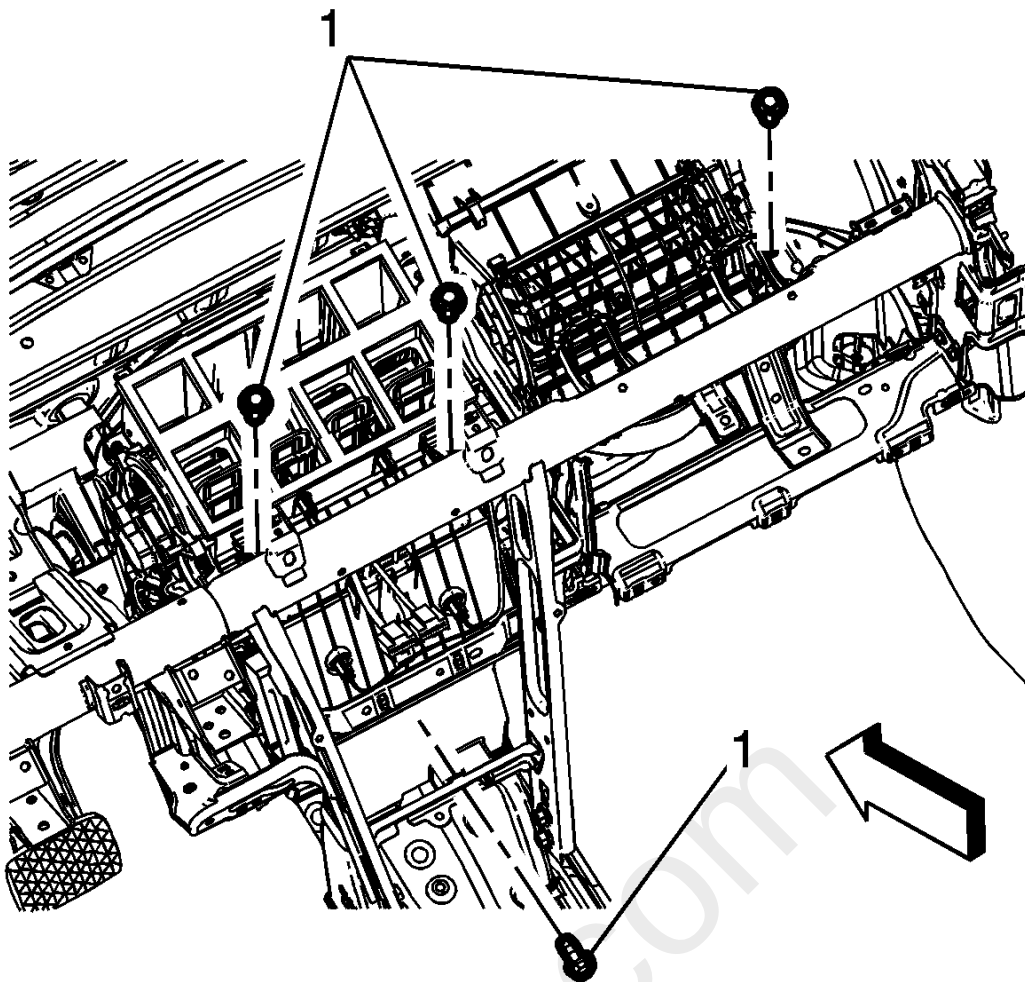


Fig. 136: Instrument Panel Tie Bar Assembly And HVAC Module
Courtesy of GENERAL MOTORS COMPANY

10. Remove the fasteners (1) securing the instrument panel tie bar assembly to the HVAC module.

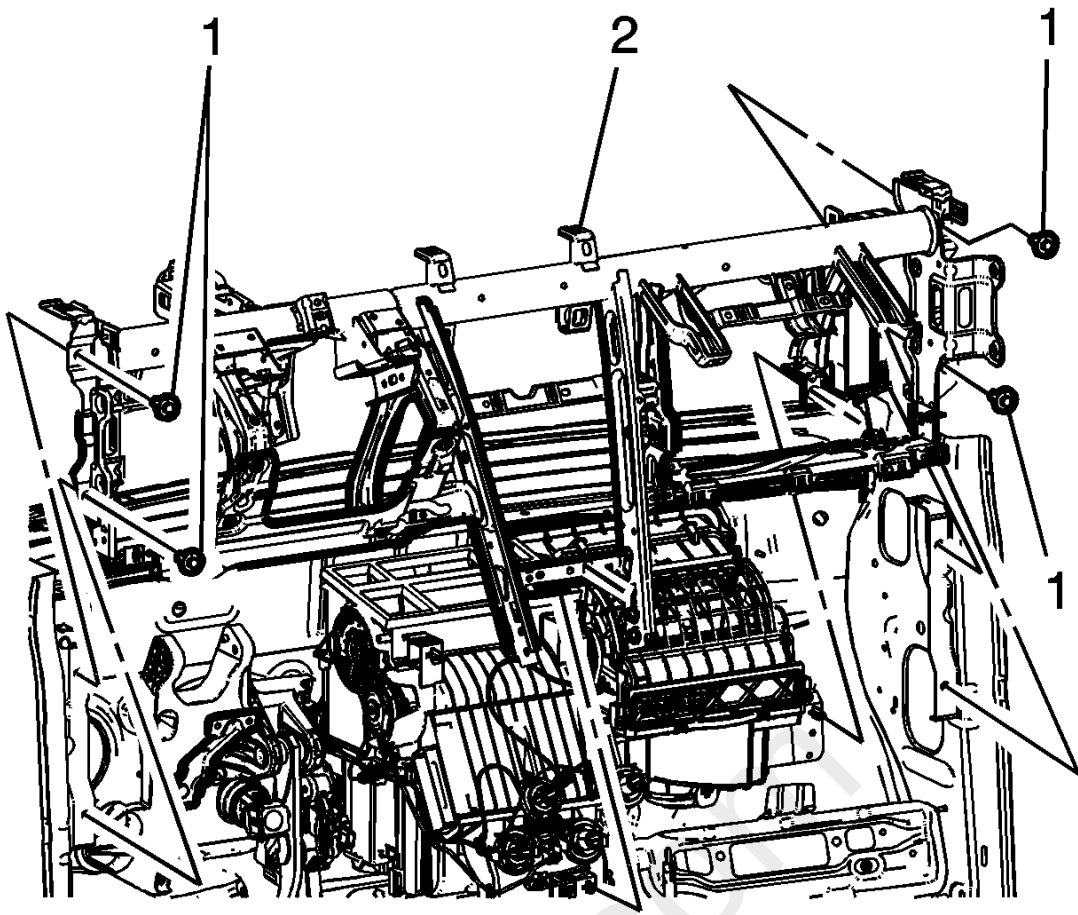


Fig. 137: Instrument Panel Tie Bar Assembly Bolts

Courtesy of GENERAL MOTORS COMPANY

11. Remove the bolts (1) securing the instrument panel tie bar assembly to the vehicle body.
12. Note the location and routing of the instrument panel wiring harness in order to ensure proper installation.
13. Support the HVAC module in order to prevent damage.
14. With the aid of an assistant remove the instrument panel tie bar assembly from the vehicle.

Installation Procedure

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

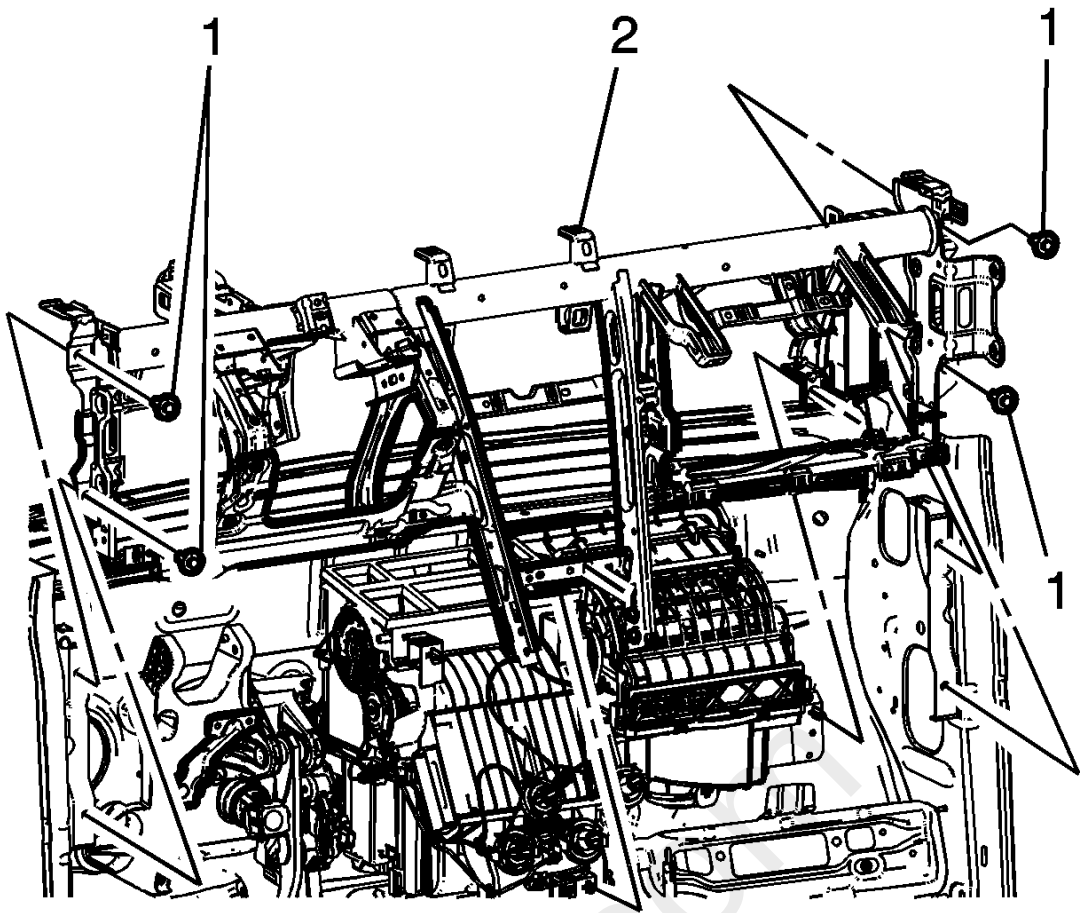


Fig. 138: Instrument Panel Tie Bar Assembly Bolts

Courtesy of GENERAL MOTORS COMPANY

3. Loosely install the bolts (1) securing the instrument panel tie bar assembly to the vehicle body.

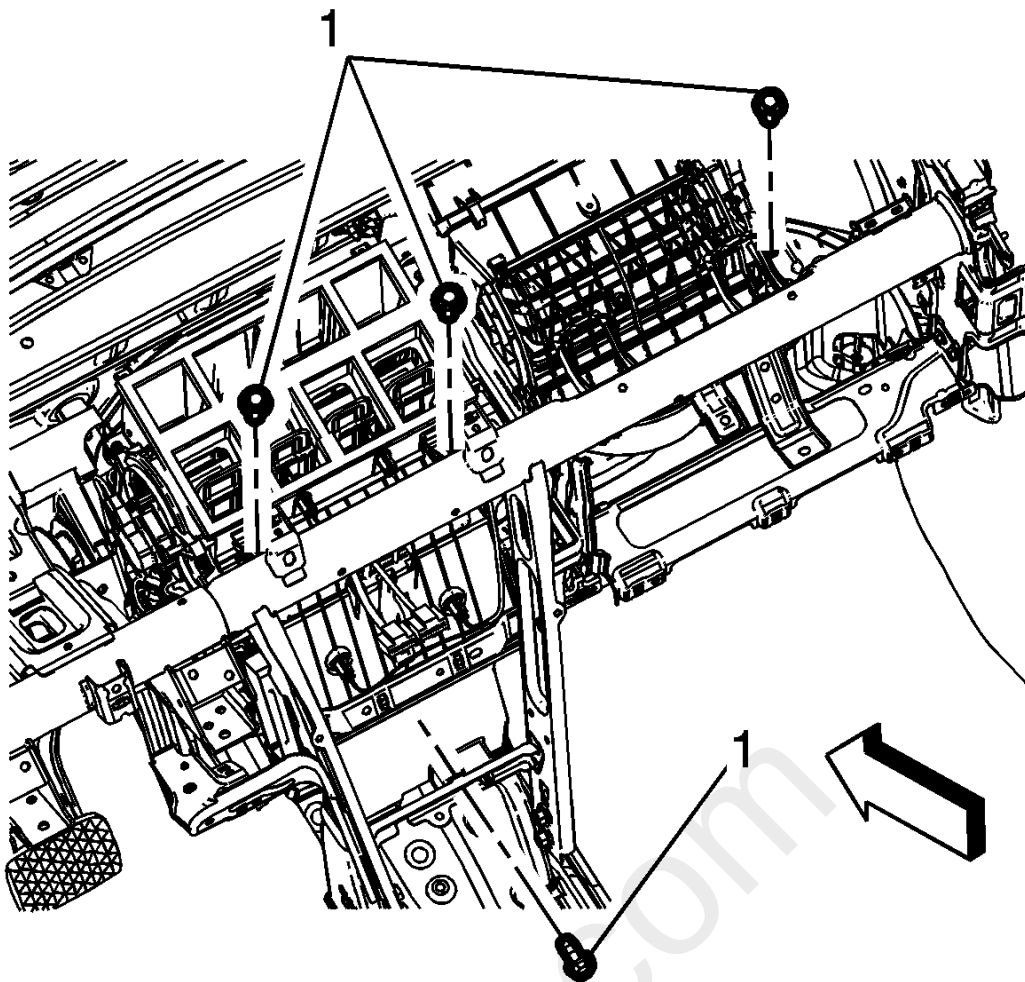


Fig. 139: Instrument Panel Tie Bar Assembly And HVAC Module

Courtesy of GENERAL MOTORS COMPANY

4. Loosely install the fasteners (1) securing the instrument panel tie bar assembly to the HVAC module.

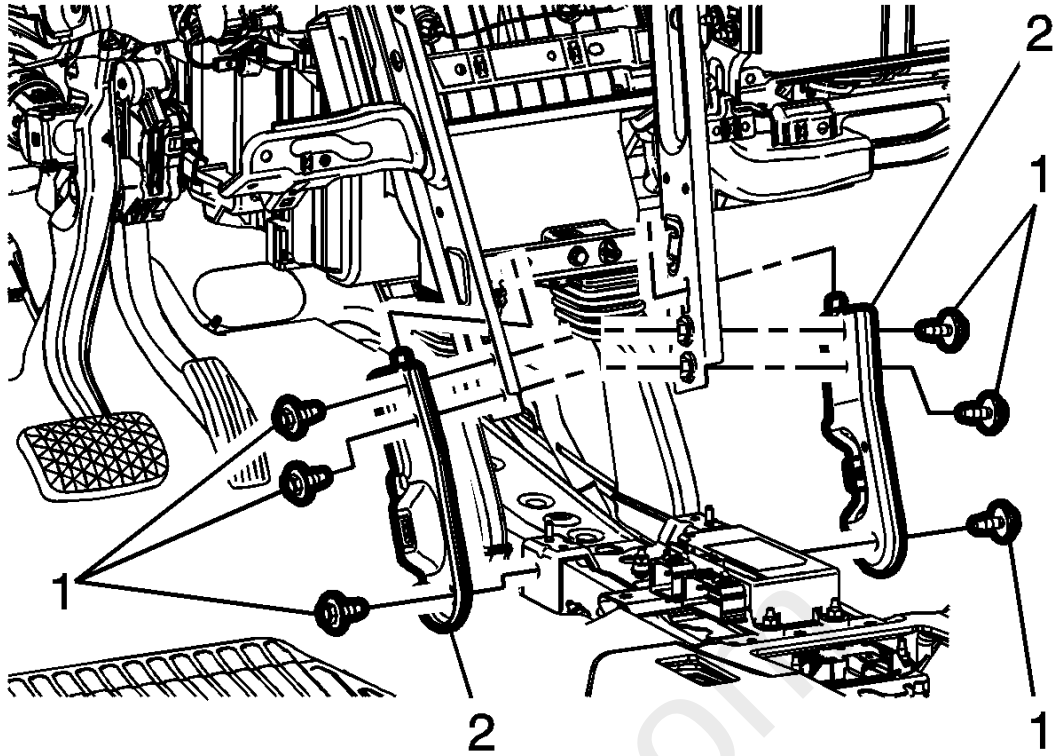


Fig. 140: Instrument Panel Tie Bar Lower Support Brackets

Courtesy of GENERAL MOTORS COMPANY

5. Loosely install the bolts (1) securing the right and left instrument panel tie bar lower support brackets (2) to the front floor tunnel panel.

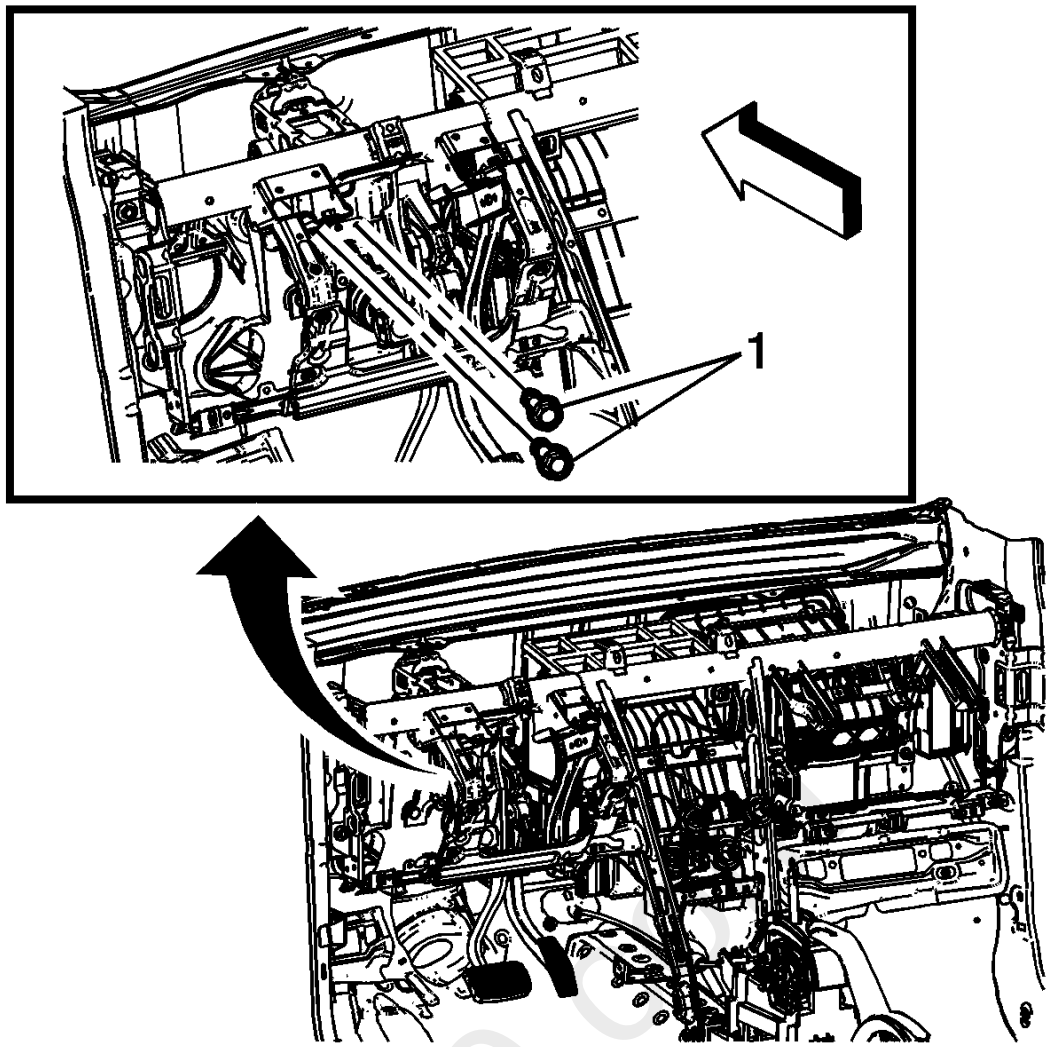


Fig. 141: Brake Pedal Mounting Bracket

Courtesy of GENERAL MOTORS COMPANY

6. Loosely install the bolt (1) securing the instrument panel tie bar to the brake pedal mounting bracket.

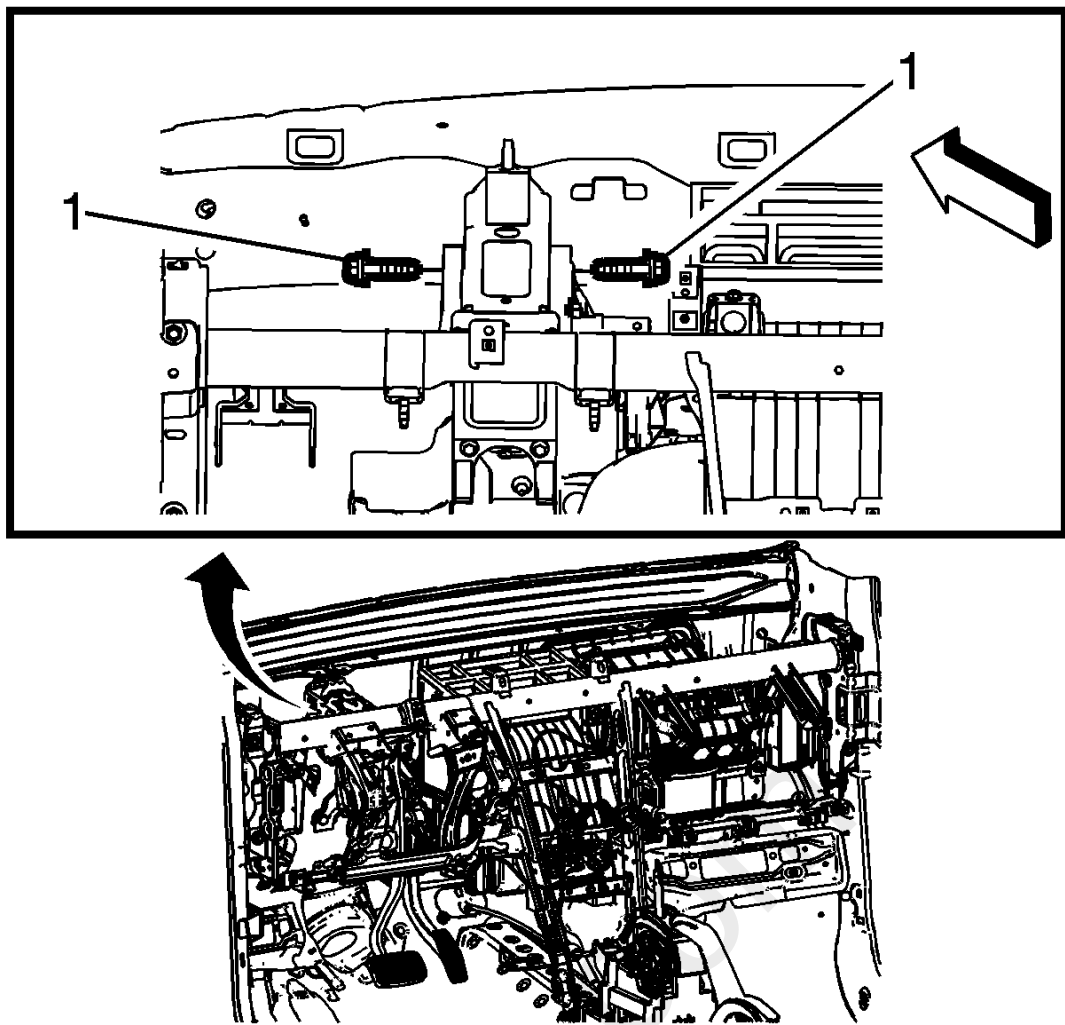


Fig. 142: Instrument Panel Tie Bar Assembly And Brake Pedal Bracket
Courtesy of GENERAL MOTORS COMPANY

7. Loosely install the bolts (1) securing the instrument panel tie bar assembly to the brake pedal bracket.

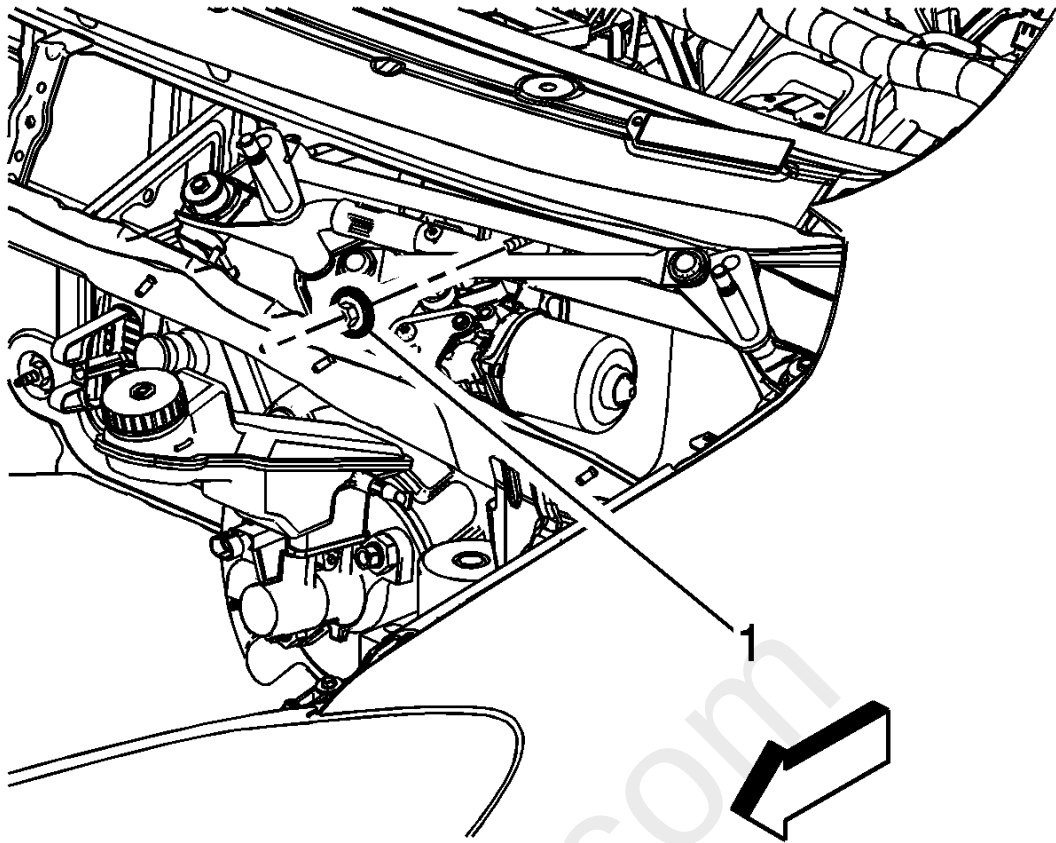


Fig. 143: Air Inlet Grille Panel

Courtesy of GENERAL MOTORS COMPANY

8. Loosely install the nut (1) securing the instrument panel tie bar assembly to the cowl panel.

CAUTION: Refer to **Fastener Caution** .

9. Tighten the instrument panel tie bar to vehicle body bolts to 22 N.m (16 lb ft).
10. Tighten the instrument panel tie bar to HVAC module fasteners to 9 N.m (80 lb in).
11. Tighten the instrument panel tie bar lower support bracket to front floor tunnel panel bolts to 22 N.m (16 lb ft).
12. Tighten the instrument panel tie bar to brake pedal mounting bracket bolt to 22 N.m (16 lb ft).
13. Tighten the instrument panel tie bar assembly to the brake pedal bracket bolts to 9 N.m (80 lb in).
14. Tighten the instrument panel tie bar assembly to the cowl panel nut to 22 N.m (16 lb ft).

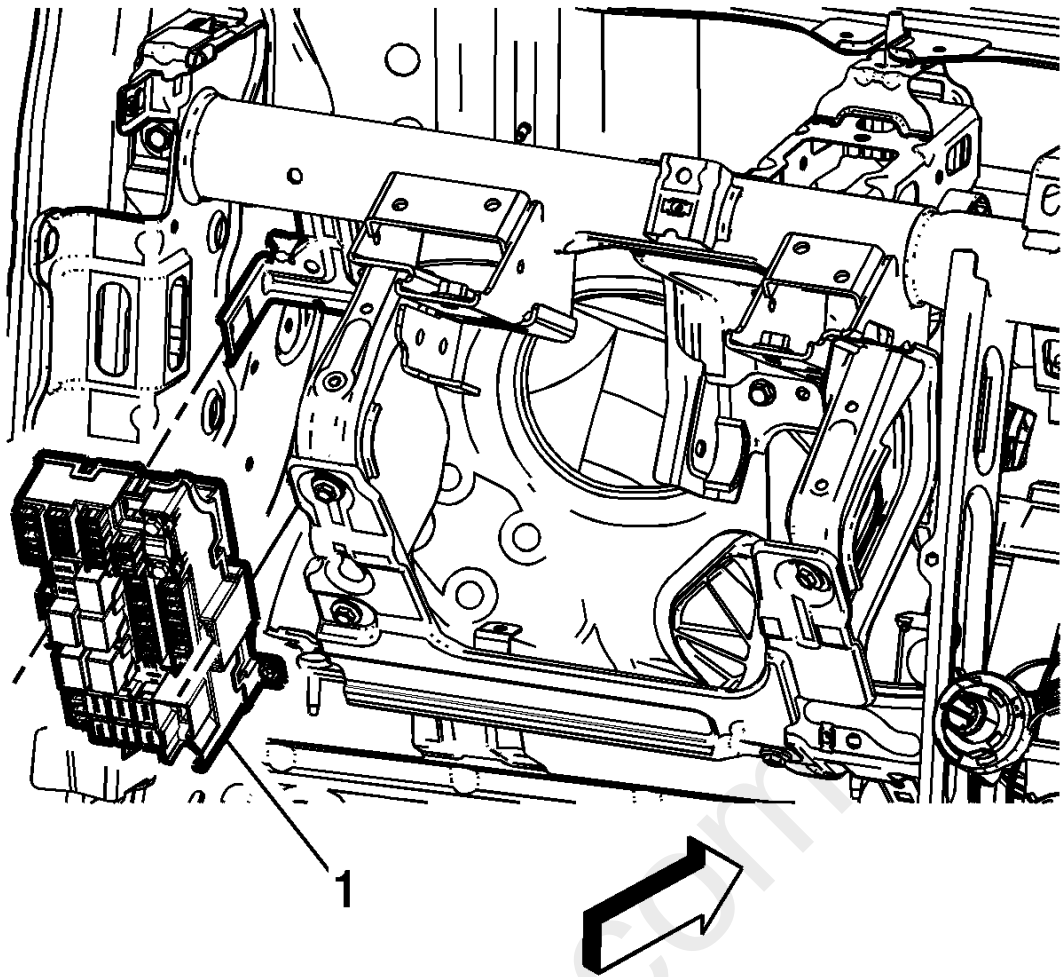


Fig. 144: Instrument Panel Fuse Block And Harness

Courtesy of GENERAL MOTORS COMPANY

15. Install the instrument panel fuse block (1) onto the instrument panel tie bar assembly.
16. Install the air inlet grill panel. Refer to [Air Inlet Grille Panel Replacement \(Chevrolet\)](#).
17. Install the left floor front air outlet duct. Refer to [Floor Front Air Outlet Duct Replacement - Left Side \(Chevrolet\)](#).
18. Install the instrument panel lower trim panel insulator. Refer to [Instrument Panel Lower Trim Panel Insulator Replacement \(Chevrolet\)](#).
19. Install the Instrument panel assembly. Refer to [Instrument Panel Assembly Replacement \(Chevrolet\)](#).

INSTRUMENT PANEL RADIO FRONT TRIM PLATE REPLACEMENT (RPO IP1, CHEVROLET)

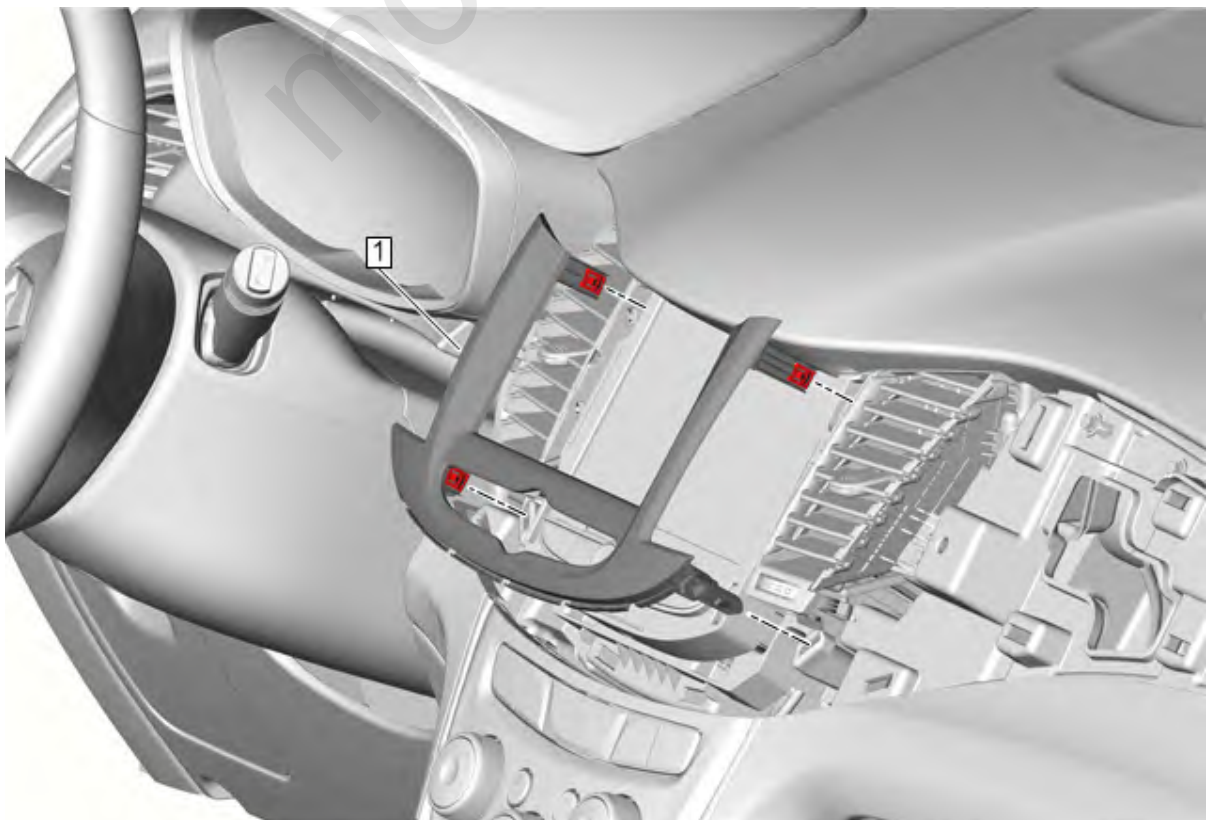


Fig. 145: Instrument Panel Radio Front Trim Plate (RPO IP1, Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Instrument Panel Upper Trim Panel Replacement - Right Side (Chevrolet)</u>	
1	Instrument Panel Radio Front Trim Plate Procedure Use a flat bladed plastic trim tool.

INSTRUMENT PANEL RADIO FRONT TRIM PLATE REPLACEMENT (RPO IOA, CHEVROLET)



Callout	Component Name
Preliminary Procedure <u>Instrument Panel Upper Trim Panel Replacement - Right Side (Chevrolet)</u>	
1	Instrument Panel Radio Front Trim Plate Procedure Use a flat bladed plastic trim tool.

WIRE TO WIRE REPAIR - INSTRUMENT PANEL AND CONSOLE

Special Tools

- **EL-38125-10** Splice Sleeve Crimping Tool (non GMNA)
- **J-38125-5A** Ultra Torch Special Tool
- **J-38125-8** Splice Sleeve Crimping Tool (GMNA)

For equivalent regional tools, refer to **Special Tools**.

WARNING: In order to reduce the risk of personal injury, loss of high voltage isolation to ground and higher system impedance, do not attempt to repair any HV wiring, connector, or terminal that is damaged. High voltage coaxial type cables are not repairable. Never attempt to repair a coaxial type cable. The entire cable/harness or component must be replaced. In order to maintain system integrity and personal safety, never attempt to repair any high voltage wiring, cables, or terminals. Performing this procedure on high voltage circuits may result in serious injury or death.

NOTE: If the wiring harness internal to the transmission is damaged, the wiring harness must be replaced. The use of splice sleeves in an attempt to repair the internal transmission wires, connectors, or terminals could result in performance issues.

NOTE: Do not splice wires in Door Harness Grommets.

NOTE: The DuraSeal splice sleeves have the following 2 critical features:

- A special heat shrink sleeve environmentally seals the splice. The heat shrink sleeve contains a sealing adhesive inside.
- A cross hatched (knurled) core crimp provides the necessary low resistance contact integrity for these sensitive, low energy circuits.

Use only DuraSeal splice sleeves to form a one-to-one splice on all types of insulation except high voltage and specialty cables. Use DuraSeal splice sleeves where there are special requirements such as moisture sealing. Follow the instructions below in order to splice copper wire using DuraSeal splice sleeves.

Splice Sleeve Selection

Splice Sleeve Color	Crimp Tool Nest Color		Wire Gauge mm ² / (AWG)
	3 Crimp Nests	4 Crimp Nests	
Salmon (Yellow-Pink) 19300089	Red (1) or Red/Green (1)	Red (2)	0.22-0.8/(18-26)
Blue 19168447	Blue (2)	Blue (3)	1.0-2.0/(14-16)
Yellow 19168448	Yellow (3)	Yellow (4)	3.0-5.0/(10-12)

NOTE:

You must perform the following procedures in the listed order. Repeat the procedure if any wire strands are damaged. You must obtain a clean strip with all of the wire strands intact.

1. Open the harness by removing any tape:

- Use a sewing seam ripper, available from sewing supply stores, in order to cut open the harness in order to avoid wire insulation damage.
- Use the DuraSeal splice sleeves on all types of insulation except Tefzel and coaxial.
- Do not use the crimp and DuraSeal splice sleeve to form a splice with more than 2 wires coming together.

2. Cut as little wire off the harness as possible. You may need the extra length of wire in order to change the location of a splice.

Adjust splice locations so that each splice is at least 40 mm (1.5 in) away from the other splices, harness branches, or connectors.

3. Strip the insulation:

- When adding a length of wire to the existing harness, use the same size wire as the original wire.
- Perform one of the following items in order to find the correct wire size:
 - Find the wire on the schematic and convert to regional wiring gauge size.
 - If you are unsure of the wire size, begin with the largest opening in the wire stripper and work down until achieving a clean strip of the insulation.
- Strip approximately 5.0 mm (0.20 in) of insulation from each wire to be spliced.
- Do not nick or cut any of the strands. Inspect the stripped wire for nicks or cut strands.
- If the wire is damaged, repeat this procedure after removing the damaged section.

4. For high temperature wiring, slide a section of high temperature SCT1 shrink tubing down the length of wire to be spliced. Ensure that the shrink tubing will not interfere with the splice procedure.

5. Select the proper DuraSeal splice sleeve according to the wire size. Refer to the above table at the beginning of the repair procedure for the color coding of the DuraSeal splice sleeves and the crimp tool nests.

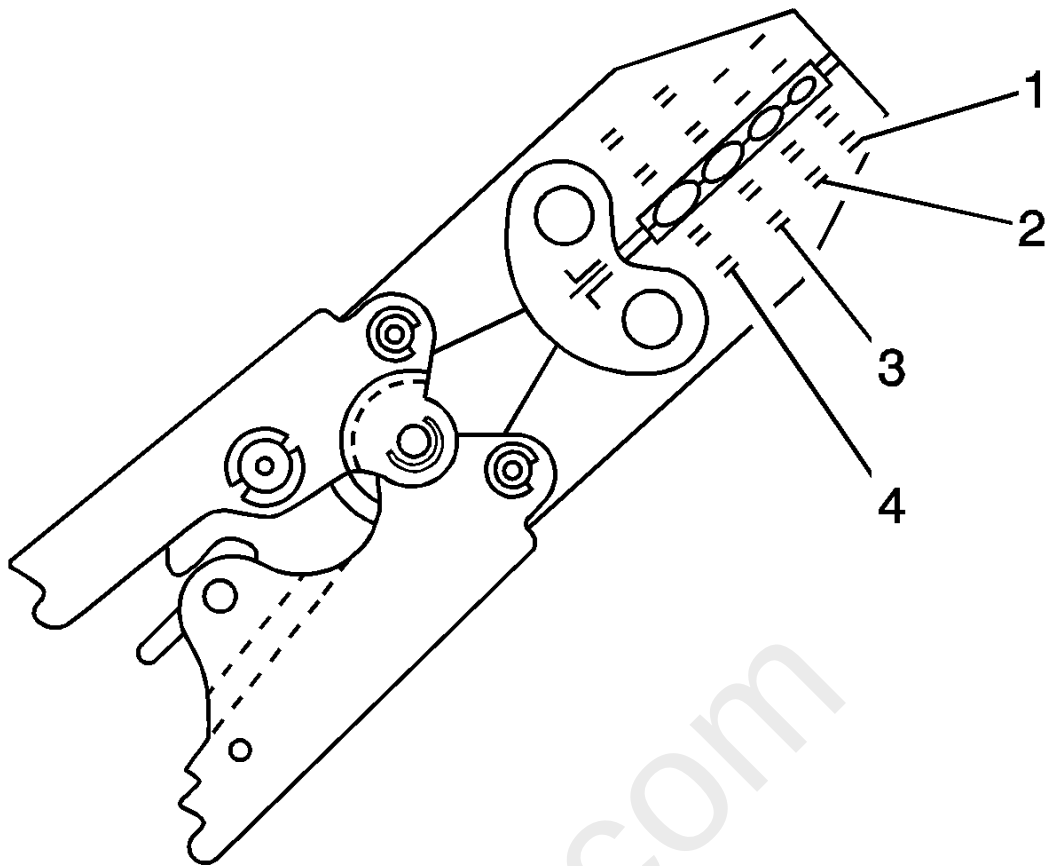


Fig. 147: Splice Sleeve Crimping Tool With 4 Crimp Nests
Courtesy of GENERAL MOTORS COMPANY

6. The **EL-38125-10** splice sleeve crimping tool has four crimp nests. The largest crimp nest (4) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (3) is used for crimping 14 and 16 gauge wires. The third largest crimp nest (2) is used for crimping 18 and 20 gauge wires. The smallest crimp nest (1) is used for crimping 22 to 26 gauge wires. The crimp nests are referenced in the table (farther above) under the crimp tool nest color.

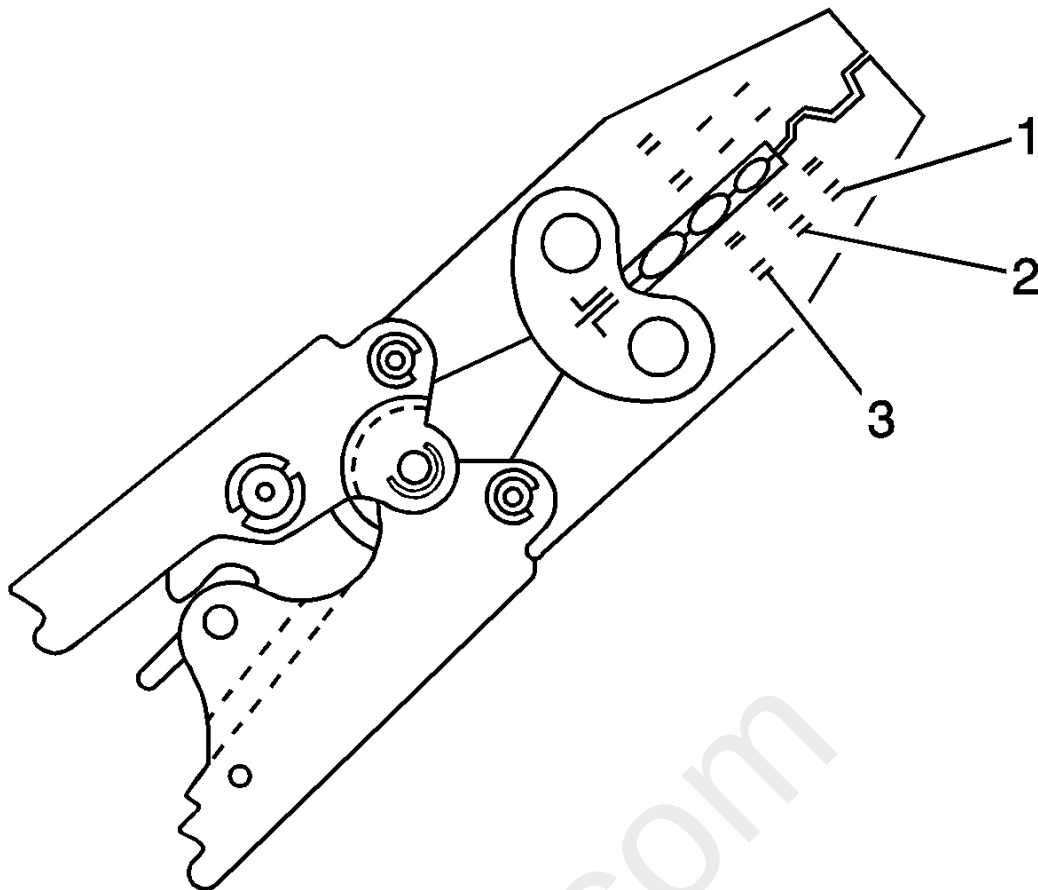


Fig. 148: Splice Sleeve Crimping Tool With 3 Crimp Nests
Courtesy of GENERAL MOTORS COMPANY

7. The **J-38125-8** splice sleeve crimping tool has three crimp nests. The largest crimp nest (3) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (2) is used for crimping 14 and 16 gauge wires. The smallest crimp nest (1) is used for crimping 18 to 20 gauge wires. The crimp nests are referenced in the table (farther above) under the crimp tool nest color.
8. Use the splice sleeve crimp tool in order to position the DuraSeal splice sleeve in the proper color nest of the splice sleeve crimp tool. For the four crimp nest tool, use the three largest crimp nests to crimp the splice sleeves. For the three crimp nest tool, use all three crimp nests to crimp the splice sleeves. Use the four and three crimp tool diagrams (above) and the table (farther above) to match the splice sleeve with the correct crimp nest. The crimp tool diagram callout numbers match the numbers in the table (under crimp tool nest color).

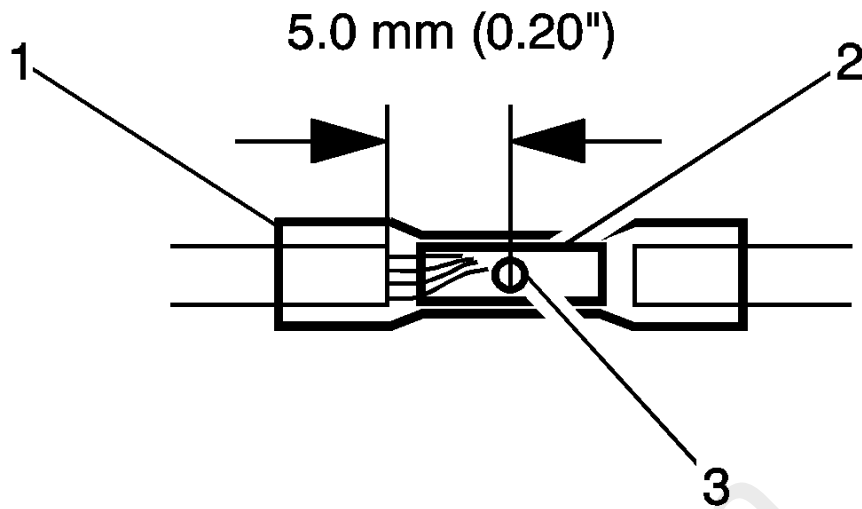


Fig. 149: Identifying Duraseal Splice Sleeve

Courtesy of GENERAL MOTORS COMPANY

9. Place the DuraSeal splice sleeve in the nest. Ensure that the crimp falls midway between the end of the barrel and the stop. The sleeve has a stop (3) in the middle of the barrel (2) in order to prevent the wire (1) from going further. Close the hand crimper handles slightly in order to firmly hold the DuraSeal splice sleeve in the proper nest.



Fig. 150: Crimped Duraseal Splice Sleeve

Courtesy of GENERAL MOTORS COMPANY

10. Insert the wire into the splice sleeve barrel until the wire hits the barrel stop. Refer to **Folded-Over Wire Repair** for splicing wires of 0.35 mm or less (22, 24, 26 gauge sizes) and for splicing wires of different gauges.
11. Tightly close the handles of the crimp tool until the crimper handles open when released.

The crimper handles will not open until you apply the proper amount of pressure to the DuraSeal splice sleeve. Repeat steps 4 and 6 for the opposite end of the splice.



Fig. 151: Crimped Duraseal Splice Sleeve
Courtesy of GENERAL MOTORS COMPANY

12. Using the heat torch, apply heat to the crimped area of the barrel.
13. Start in the middle and gradually move the heat barrel to the open ends of the tubing:
 - The tubing will shrink completely as the heat is moved along the insulation.
 - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

Weatherpack™ Wiring Repair

NOTE: Some replacement pigtail connectors may be delivered without the terminated leads installed into the connector. For Weatherpack™ connectors, all terminated leads included in the package should to be installed into the connector. If the connector end view shows that a terminal is not occupied, the extra terminated lead(s) need to be installed and the end(s) sealed using a DuraSeal splice sleeve and taped back into the harness.

1. Insert the wire into the splice sleeve barrel until the wire hits the barrel stop. Refer to **Folded-Over Wire Repair** for splicing wires of 0.35 mm or less (22, 24, 26 gauge sizes) and for splicing wires of different gauges.

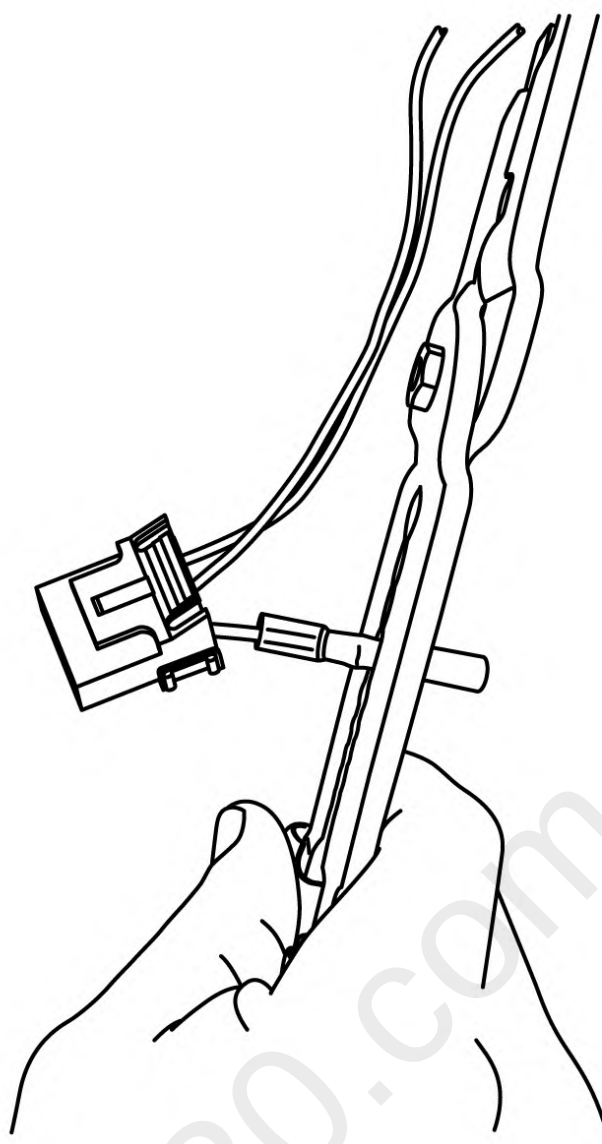


Fig. 152: Tightly Close Handles Of Crimp Tool
Courtesy of GENERAL MOTORS COMPANY

2. Tightly close the handles of the crimp tool until the crimper handles open when released.

The crimper handles will not open until you apply the proper amount of pressure to the DuraSeal splice sleeve. Holding the DuraSEAL with one hand gently tug on the wire to ensure it is crimped in the DuraSeal.

3. Using the heat torch, apply heat to the crimped area of the barrel.

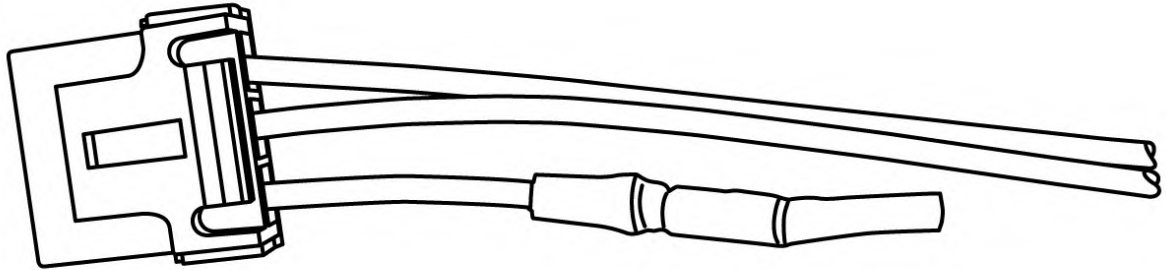


Fig. 153: Heat To Crimped Area Of Barrel
Courtesy of GENERAL MOTORS COMPANY

4. Start in the middle and gradually move the heat barrel to the open ends of the tubing:
 - The tubing will shrink completely as the heat is moved along the insulation.
 - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

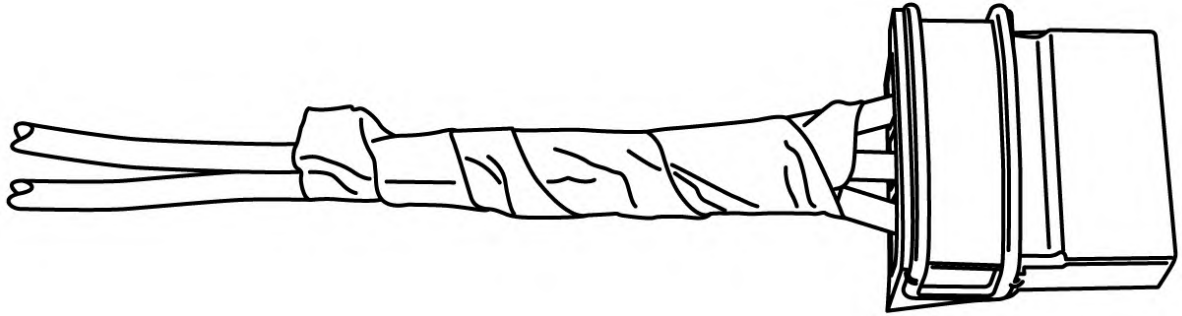


Fig. 154: Taping Extra Terminated Leads Back Into Harness
Courtesy of GENERAL MOTORS COMPANY

5. Tape the extra terminated lead(s) back into the harness.

High Temperature Wiring Repairs

Use the following procedures to perform high temperature wiring repairs:

1. Center the high temperature SCT1 shrink tube over the DuraSeal splice sleeve.
2. Using the heat torch, apply heat to the high temperature heat shrink tubing.
3. Gradually move the heat from the center to the open end of the tubing:
 - The tubing will shrink completely as the heat is moved along the insulation.
 - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.
4. Replace any reflective tape and clips that may have been removed during the repair.

CONNECTOR RECONNECTION - INSTRUMENT PANEL AND CONSOLE

Special Tools

EL-35616 Terminal Test Probe Kit

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

When the condition is not currently present, but is indicated in DTC history, the cause may be intermittent. An intermittent may also be the cause when there is a customer complaint, but the symptom cannot be duplicated. Refer to the Symptom Table of the system that is suspect of causing the condition before trying to locate an intermittent condition.

Most intermittent conditions are caused by faulty electrical connections or wiring. Inspect for the following items:

- Loose, corroded, or painted terminal stud/fastener
- Wiring broken inside the insulation
- Poor connection between the male and female terminal at a connector
- A terminal not seated all the way into the connector body
- Poor terminal to wire connection - Some conditions which fall under this description are poor crimps, poor solder joints, crimping over the wire insulation rather than the wire itself, and corrosion in the wire to terminal contact area, etc.
- Pierced or damaged insulation can allow moisture to enter the wiring causing corrosion. The conductor can corrode inside the insulation, with little visible evidence. Look for swollen and stiff sections of wire in the suspect circuits.
- Wiring which has been pinched, cut, or its insulation rubbed through may cause an intermittent open or short as the bare area touches other wiring or parts of the vehicle.
- Wiring that comes in contact with hot or exhaust components
- Refer to [**Inducing Intermittent Fault Conditions**](#) in order to duplicate the conditions required, in order to verify the customer concern.
- Refer to [**Testing for Electrical Intermittents**](#) for test procedures to detect intermittent open, high resistance, short to ground, and short to voltage conditions.
- Refer to [**Scan Tool Snapshot Procedure**](#) for advanced intermittent diagnosis and Vehicle Data Recorder operation.

Testing for Terminal Fretting

Some intermittent conditions can be caused by wire terminal fretting corrosion. Fretting corrosion is a build-up of insulating, oxidized wear debris that can form when there is a small motion between electrical contacts. The oxidized wear debris can pile up enough at the electrical contact spots that the electrical resistance across the connection increases. Movement between the contacting surfaces as small as 10 to 100 microns can cause fretting. To put this in perspective, a sheet of paper is about 100 microns thick, so fretting motion is small and hard to see. Vibration and thermal expansion/contraction are the main sources that create fretting motion. Since vehicles vibrate and can experience large temperature swings, they are a good source for fretting motion. Tin, copper, nickel, and iron surfaces are all susceptible to fretting corrosion. Fretting corrosion can be difficult to see but it looks like small, dark smudges on the terminals contact surface.

To correct a fretting condition disconnect the suspect connector and add dielectric grease / lubricant (Nyogel 760G or equivalent, meeting GM specification 9986087) to both sides of the connector terminals. Then reconnect the connector and wipe away any excess lubricant. This will correct the additional terminal contact resistance due to the terminal fretting corrosion.

Testing for Proper Terminal Contact

It is important to test terminal contact at the component and any inline connectors before replacing a suspect component. Mating terminals must be inspected to ensure good terminal contact. A poor connection between the male and female terminal at a connector may be the result of contamination or deformation.

Contamination may be caused by the connector halves being improperly connected. A missing or damaged connector seal, damage to the connector itself, or exposing the terminals to moisture and dirt can also cause contamination. Contamination, usually in the underhood or underbody connectors, leads to terminal corrosion, causing an open circuit or intermittently open circuit.

Deformation is caused by probing the mating side of a connector terminal without the proper adapter. Always use the **EL-35616** kit when probing connectors. Other causes of terminal deformation are improperly joining the connector halves, or repeatedly separating and joining the connector halves. Deformation, usually to the female terminal contact tang, can result in poor terminal contact causing an open or intermittently open circuit.

Testing for Proper Terminal Contact in Bussed Electrical Centers

It is very important to use the correct test adapter when testing for proper terminal contact of fuses and relays in a bussed electrical center. Use the **EL-35616** kit to test for proper terminal contact. Failure to use the **EL-35616** kit can result in improper diagnosis of the bussed electrical center.

Follow the procedure below in order to test terminal contact:

1. Separate the connector halves.
2. Visually inspect the connector halves for contamination. Contamination may result in a white or green build-up within the connector body or between terminals. This causes high terminal resistance, intermittent contact, or an open circuit. An underhood or underbody connector that shows signs of contamination should be replaced in its entirety: terminals, seals, and connector body.
3. Using an equivalent male terminal/terminated lead, verify that the retention force is significantly different between a known good terminal and the suspect terminal. Replace the female terminal in question.

Flat Wire Connectors

There are no serviceable parts for flat wire connectors on the harness side or the component side.

Follow the procedure below in order to test terminal contact:

1. Remove the component in question.
2. Visually inspect each side of the connector for signs of contamination. Avoid touching either side of the connector as oil from your skin may be a source of contamination as well.
3. Visually inspect the terminal bearing surfaces of the flat wire circuits for splits, cracks, or other imperfections that could cause poor terminal contact. Visually inspect the component side connector to ensure that all of the terminals are uniform and free of damage or deformation.
4. Insert the appropriate adapter into the flat wire harness connector in order to test the circuit in question.

Control Module/Component Voltage and Grounds

Poor voltage or ground connections can cause widely varying symptoms.

- Test all control module voltage supply circuits. Many vehicles have multiple circuits supplying voltage to a control module. Other components in the system may have separate voltage supply circuits that may also need to be tested. Inspect connections at the module/component connectors, fuses, and any intermediate connections between the voltage source and the module/component. A test lamp or a DMM may indicate that voltage is present, but neither tests the ability of the circuit to carry sufficient current. Operate the component to test the ability of the circuit to carry sufficient current. Refer to [Circuit Testing](#) , and [Power Distribution Schematics \(Buick\)](#) , [Power Distribution Schematics \(Chevrolet\)](#) .
- Test all control module ground and system ground circuits. The control module may have multiple ground circuits. Other components in the system may have separate grounds that may also need to be tested. Inspect grounds for clean and tight connections at the grounding point (screw or stud). Inspect the connections at the component and in splice packs, where applicable. Operate the component to test the ability of the circuit to carry sufficient current. Refer to [Circuit Testing](#) , and [Ground Distribution Schematics \(Buick\)](#) , [Ground Distribution Schematics \(Chevrolet\)](#) .

Temperature Sensitivity

- An intermittent condition may occur when a component/connection reaches normal operating temperature. The condition may occur only when the component/connection is cold, or only when the component/connection is hot.
- Freeze Frame, Failure Records, Snapshot, or Vehicle Data Recorder data may help with this type of intermittent condition, where applicable.
- If the intermittent is related to heat, review the data for a relationship with the following:
 - High ambient temperatures
 - Underhood/engine generated heat

- Circuit generated heat due to a poor connection, or high electrical load
- Higher than normal load conditions, towing, etc.
- If the intermittent is related to cold, review the data for the following:
 - Low ambient temperatures - In extremely low temperatures, ice may form in a connection or component. Inspect for water intrusion.
 - The condition only occurs on a cold start.
 - The condition goes away when the vehicle warms up.
- Information from the customer may help to determine if the trouble follows a pattern that is temperature related.
- If temperature is suspected of causing an intermittent fault condition, attempt to duplicate the condition. Refer to [Inducing Intermittent Fault Conditions](#) in order to duplicate the conditions required.

Electromagnetic Interference and Electrical Noise

Some electrical components/circuits are sensitive to electromagnetic interference or other types of electrical noise. Inspect for the following conditions:

- A mis-routed harness that is too close to high voltage/high current devices such as secondary ignition components, motors, generator etc. - These components may induce electrical noise on a circuit that could interfere with normal circuit operation.
- Electrical system interference caused by a malfunctioning relay, or a control module driven solenoid or switch - These conditions can cause a sharp electrical surge. Normally, the condition will occur when the malfunctioning component is operating.
- Installation of non-factory or aftermarket add on accessories such as lights, 2-way radios, amplifiers, electric motors, remote starters, alarm systems, cell phones, etc. - These accessories may create interference in other circuits while operating and the interference would disappear when the accessory is not operating. Refer to [Checking Aftermarket Accessories](#).
- Test for an open diode across the A/C compressor clutch and for other open diodes. Some relays may contain a clamping diode.
- The generator may be allowing AC noise into the electrical system.

Incorrect Control Module

- There are only a few situations where reprogramming a control module is appropriate:
 - A new service control module is installed.
 - A control module from another vehicle is installed.
 - Revised software/calibration files have been released for this vehicle.

NOTE: **DO NOT re-program the control module with the SAME software/calibration files that are already present in the control module. This is not an effective repair for any type of concern.**

- Verify that the control module contains the correct software/calibration. If incorrect programming is found, reprogram the control module with the most current software/calibration. Refer to [Control Module References](#) for replacement, setup, and programming.

FRONT FLOOR CONSOLE WIRING HARNESS REPLACEMENT (BUICK)

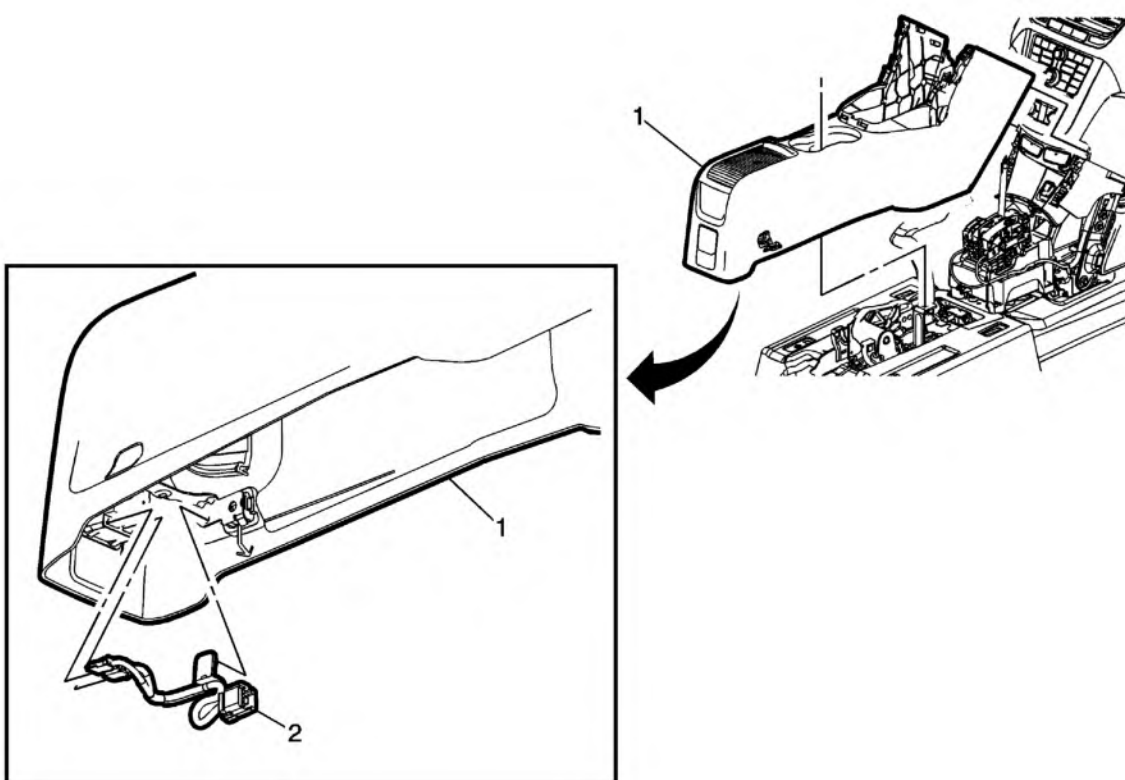


Fig. 155: Front Floor Console Wiring Harness (Encore).
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Refer to Front Floor Console Replacement (Buick) .
2	Front Floor Console Wiring Harness

FRONT FLOOR CONSOLE WIRING HARNESS REPLACEMENT (CHEVROLET)

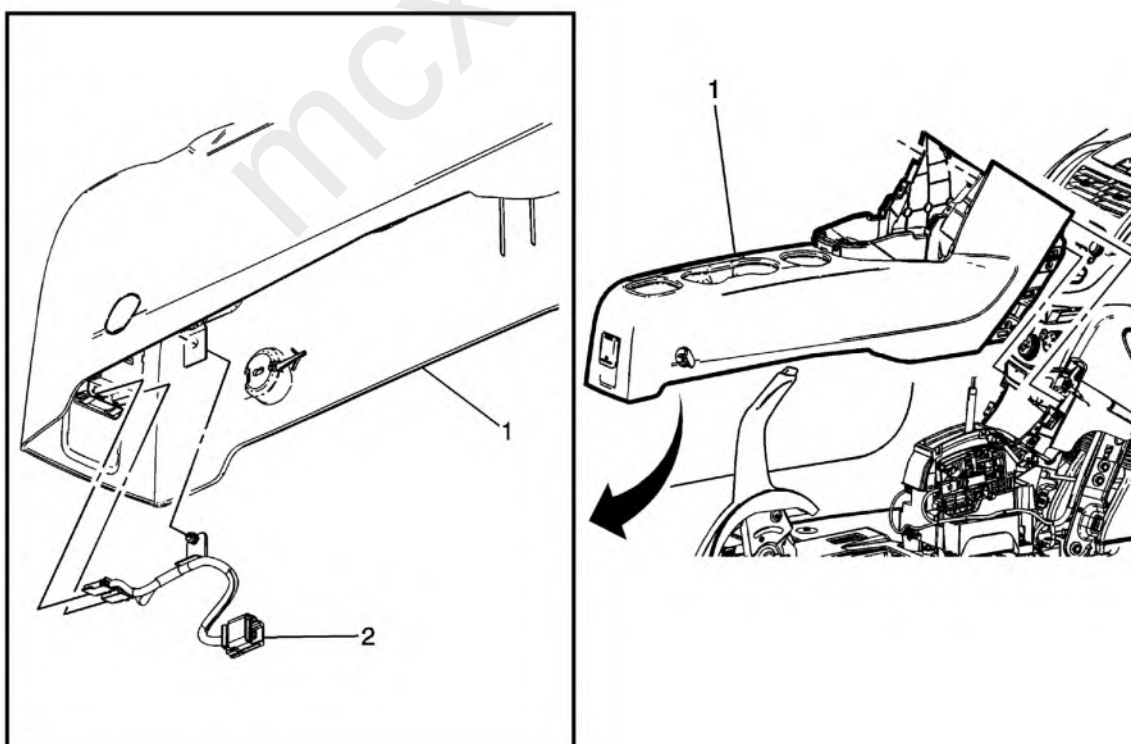


Fig. 156: Front Floor Console Wiring Harness (Trax).
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

Callout	Component Name
1	Front Floor Console Refer to Front Floor Console Replacement (Chevrolet) .
2	Front Floor Console Wiring Harness

FRONT FLOOR CONSOLE STOWAGE TRAY REPLACEMENT (BUICK)

Removal Procedure

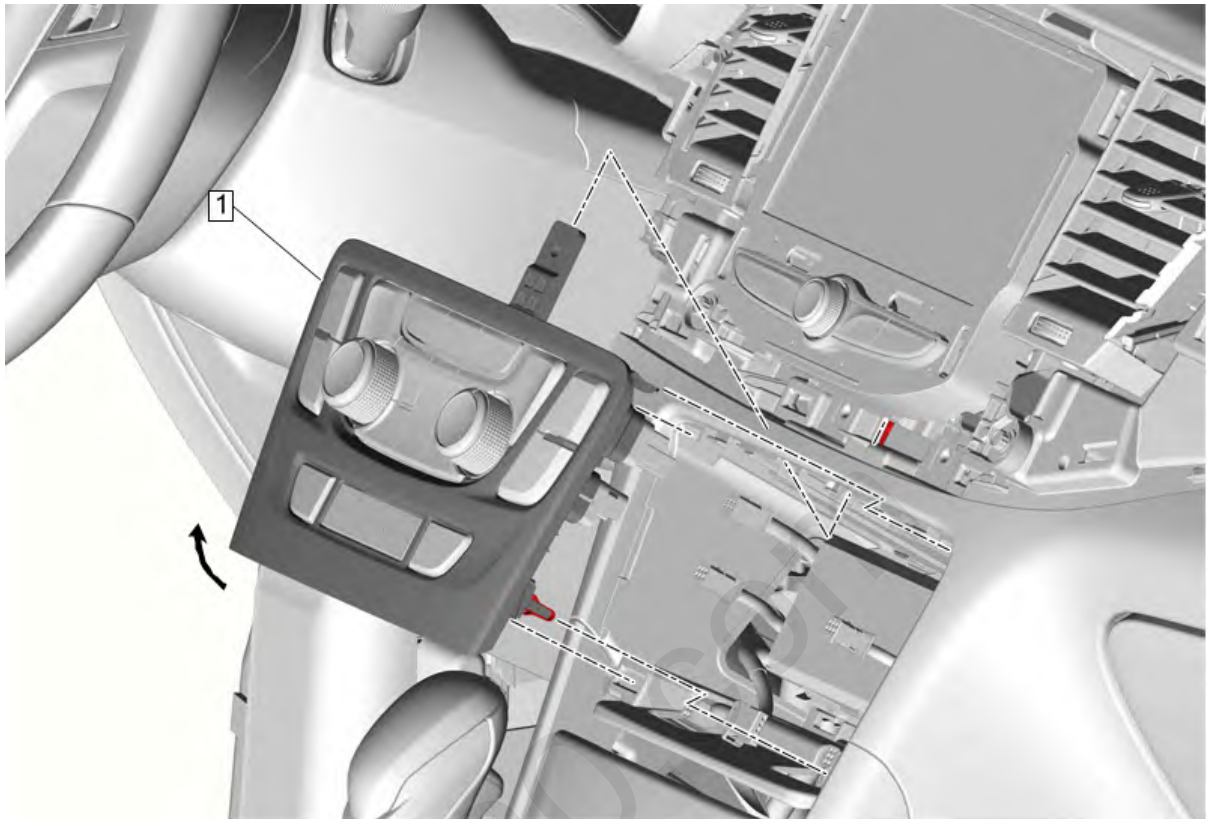
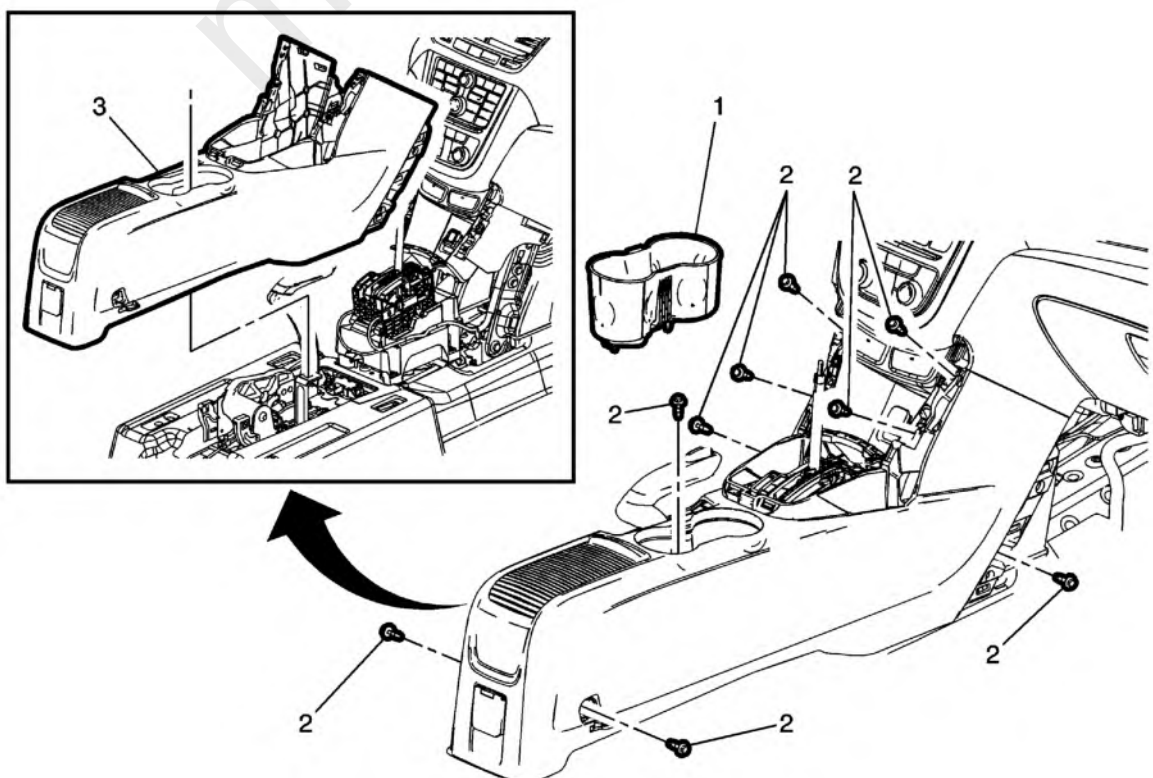


Fig. 157: Instrument Panel Accessory Bezel

Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Accessory Bezel (1) - [Instrument Panel Accessory Bezel Replacement \(Buick\)](#).



2. Remove Front Floor Console (3) - **Front Floor Console Replacement (Buick)**

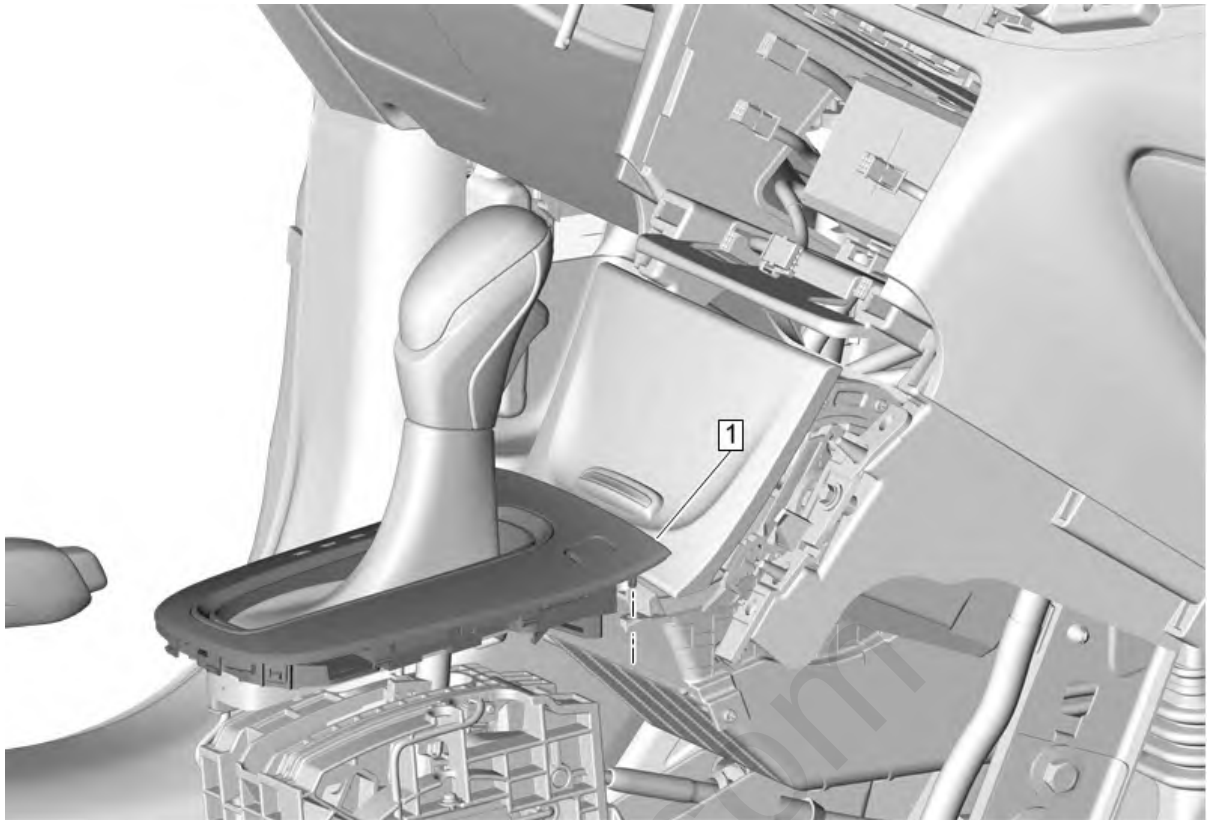


Fig. 159: Automatic Transmission Control Indicator Bezel
Courtesy of GENERAL MOTORS COMPANY

3. Remove Automatic Transmission Control Indicator Bezel (1)

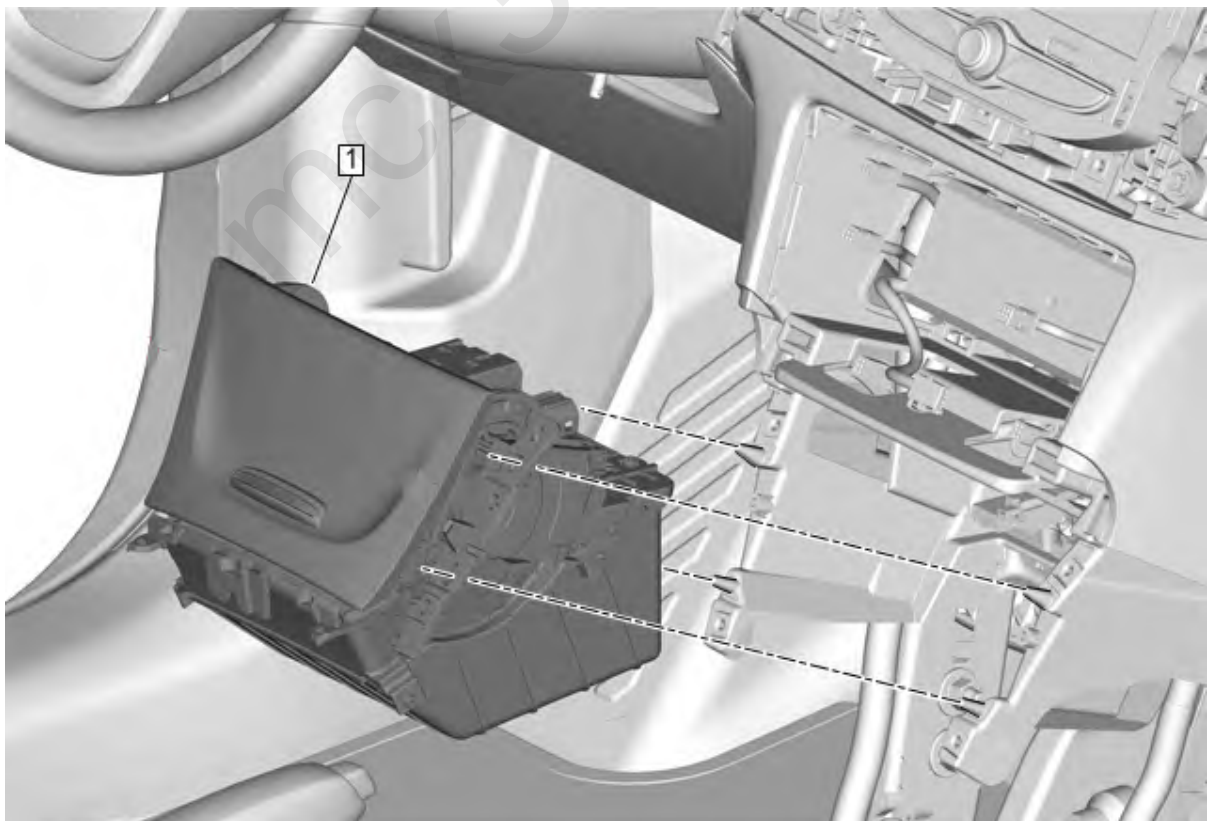


Fig. 160: Front Floor Console Stowage Tray
Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Stowage Tray (1)
5. Disconnect the electrical connectors.

6. Transfer components as necessary.

Installation Procedure

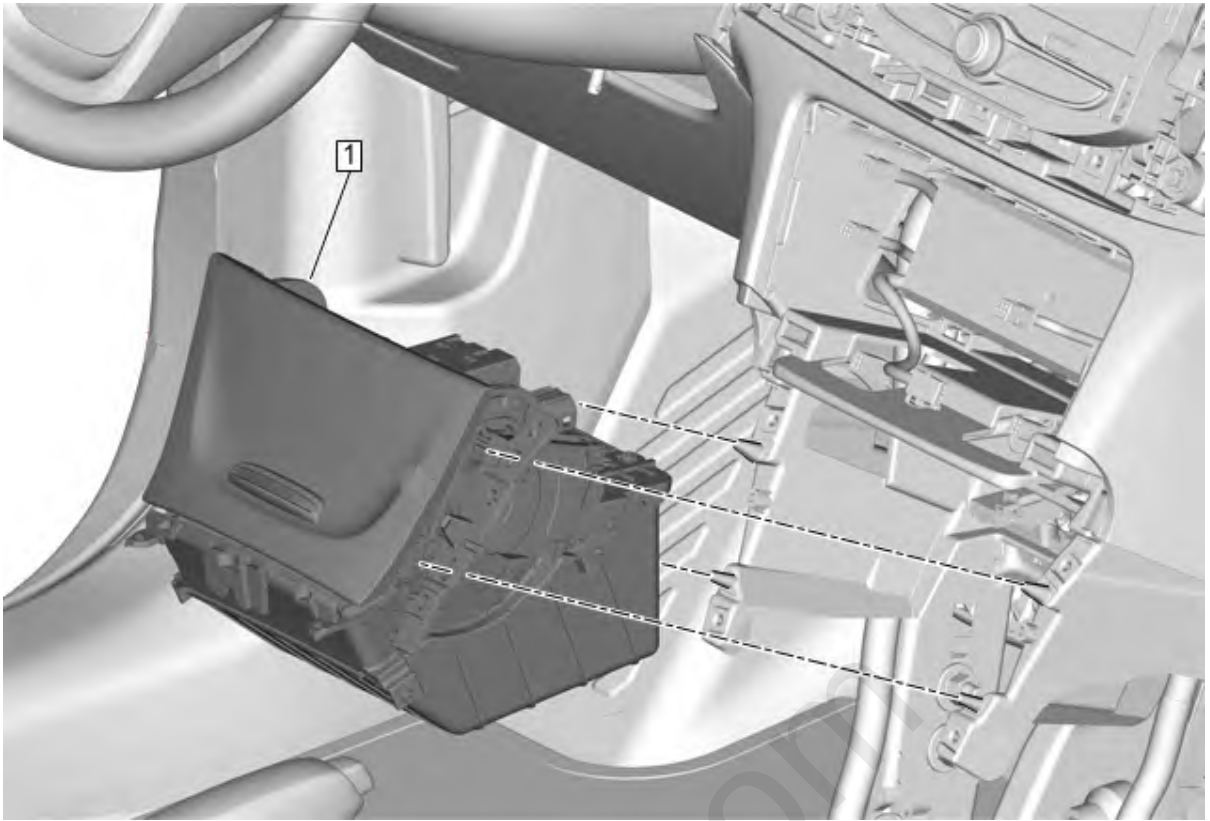


Fig. 161: Front Floor Console Stowage Tray.
Courtesy of GENERAL MOTORS COMPANY

1. Connect the electrical connectors.
2. Install Front Floor Console Stowage Tray (1)

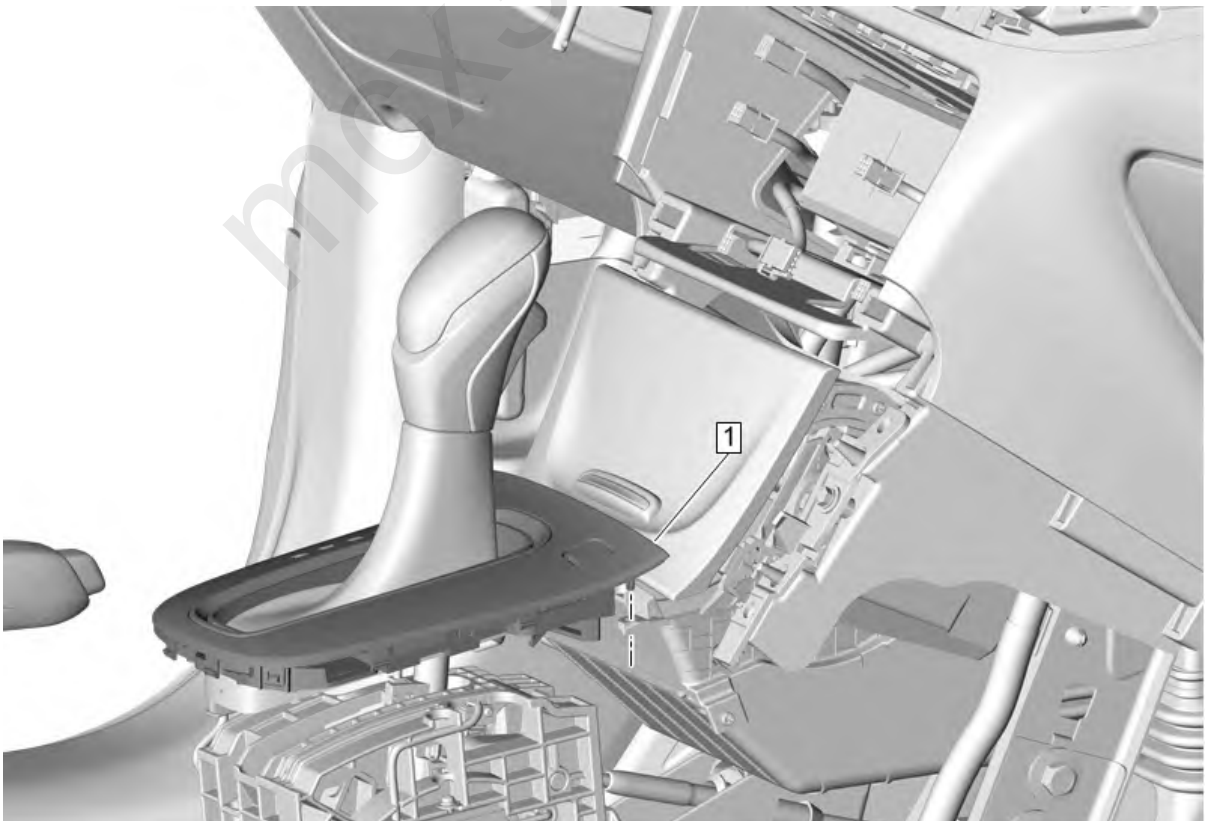


Fig. 162: Automatic Transmission Control Indicator Bezel
Courtesy of GENERAL MOTORS COMPANY

3. Install Automatic Transmission Control Indicator Bezel (1)

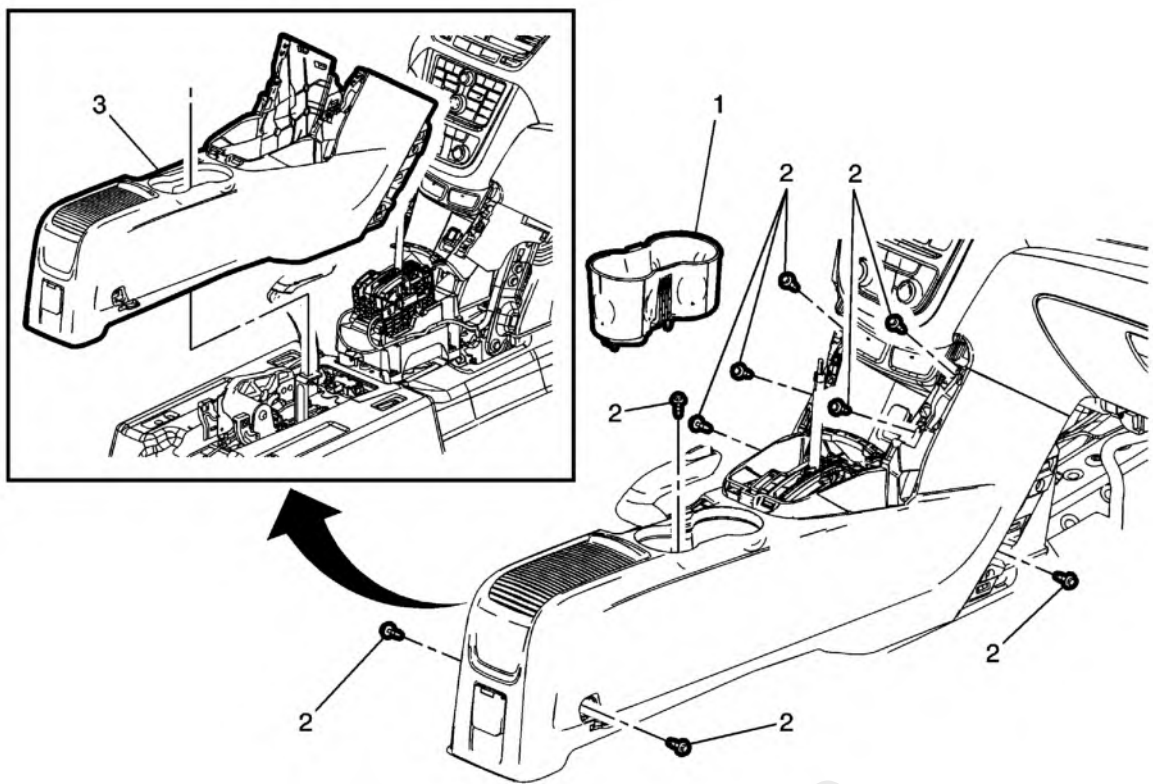


Fig. 163: Front Floor Console (Encore)
 Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console (3) - [**Front Floor Console Replacement \(Buick\)**](#).

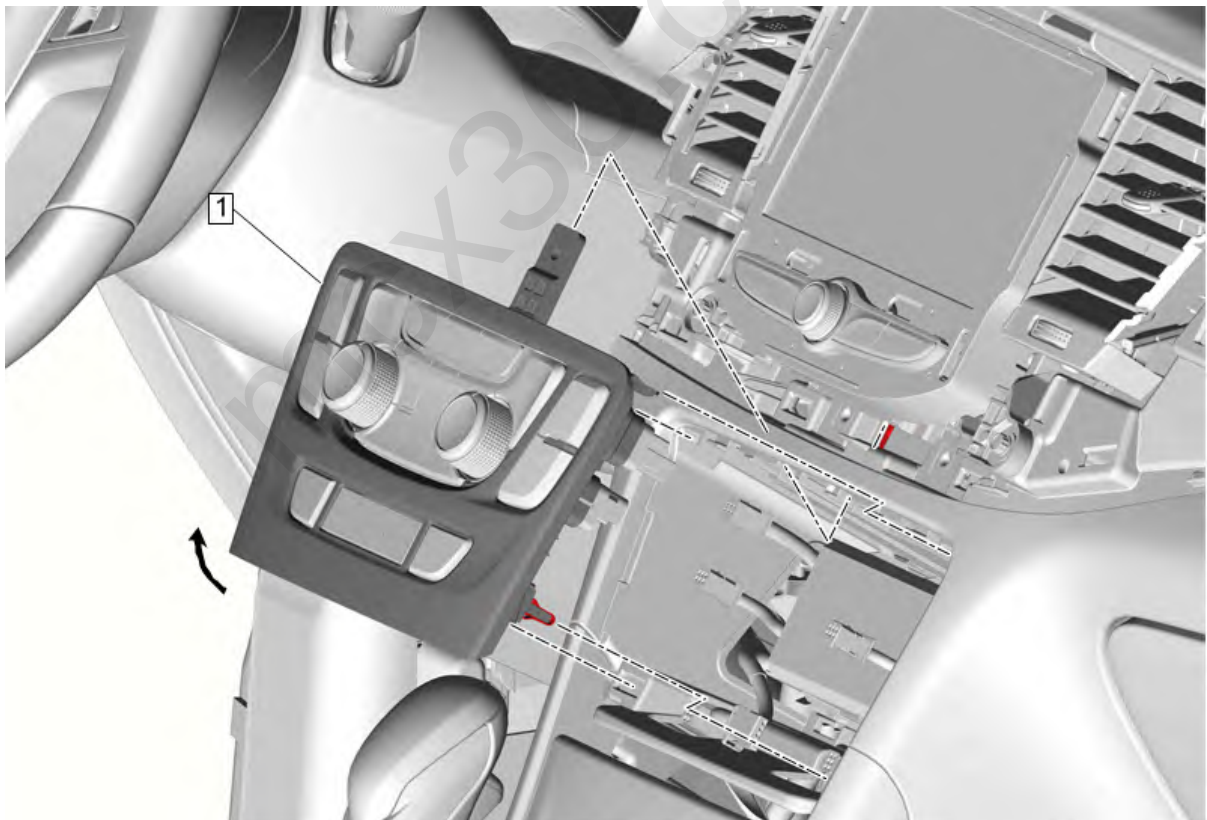


Fig. 164: Instrument Panel Accessory Bezel
 Courtesy of GENERAL MOTORS COMPANY

5. Install Instrument Panel Accessory Bezel (1) - [**Instrument Panel Accessory Bezel Replacement \(Buick\)**](#).

FRONT FLOOR CONSOLE STOWAGE TRAY REPLACEMENT (CHEVROLET)

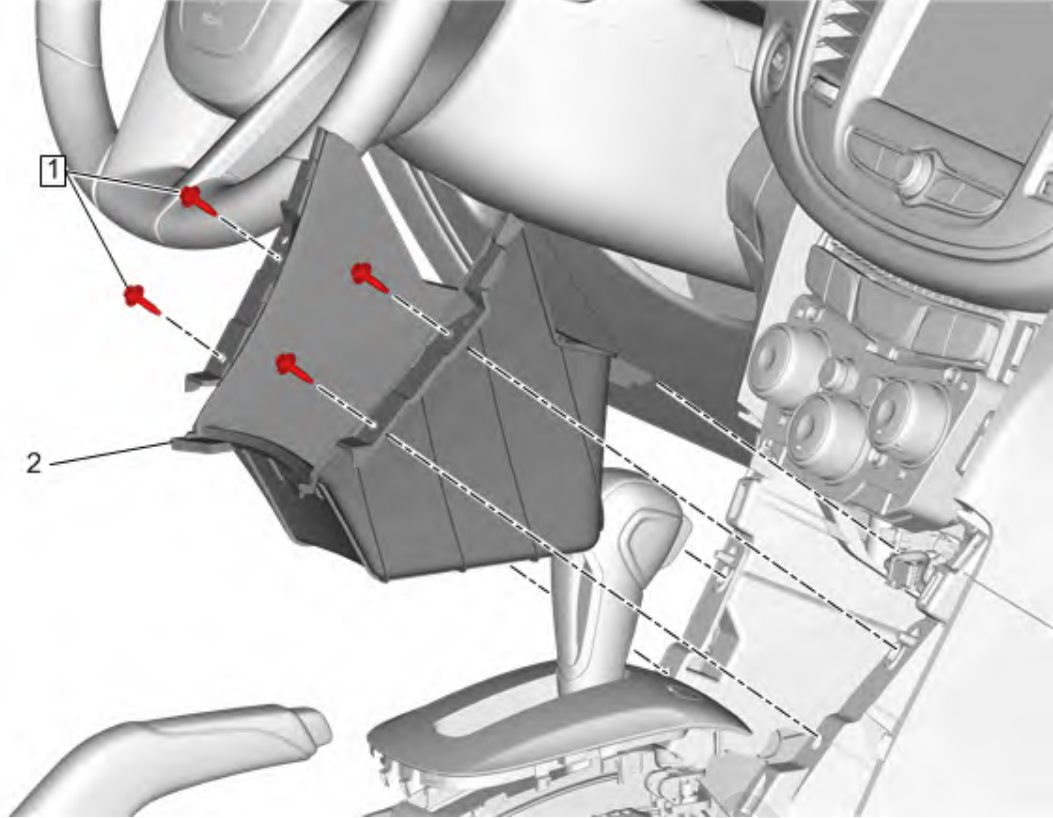


Fig. 165: Front Floor Console Stowage Tray
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Front Floor Lower Console Replacement (Chevrolet)</u>	
1	Front Floor Console Bolt (Qty: 4) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Front Floor Console Stowage Tray Procedure Reposition the automatic transmission control indicator bezel in order to clear the stowage tray from the front floor console assembly.

FRONT FLOOR CONSOLE CUP HOLDER REPLACEMENT (BUICK)

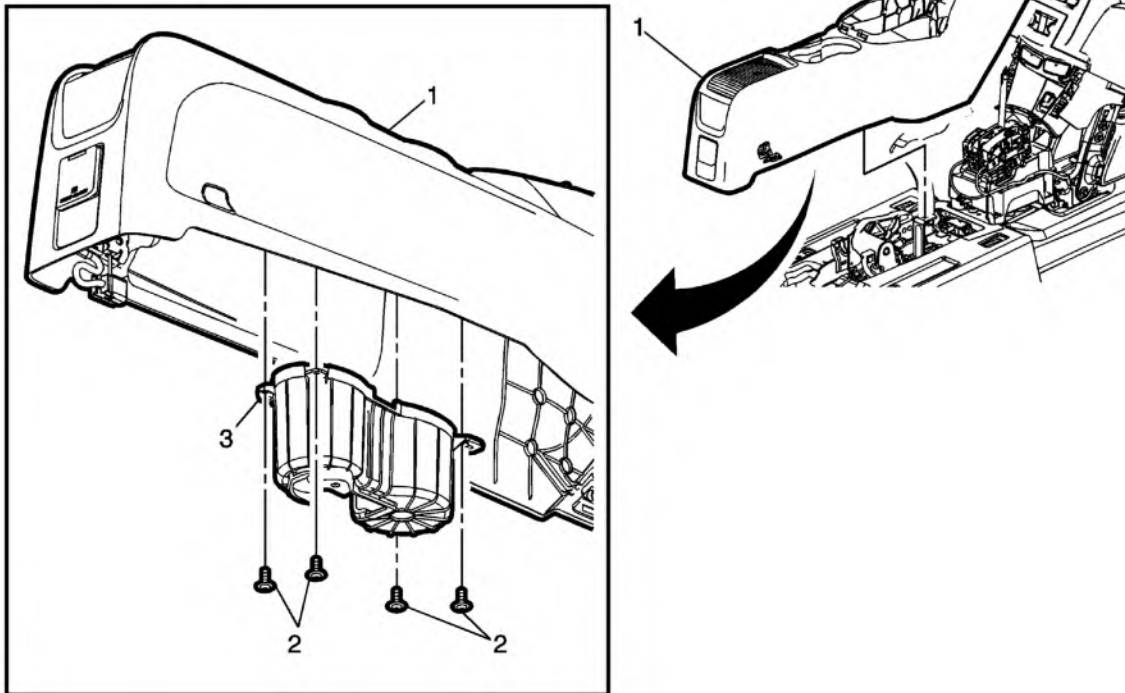


Fig. 166: Front Floor Console Cup Holder (Encore).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Refer to Front Floor Console Replacement (Buick) .
2	Front Floor Console Cup Holder Fastener (Qty: 4) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
3	Front Floor Console Cup Holder

FRONT FLOOR CONSOLE CUP HOLDER REPLACEMENT (CHEVROLET)

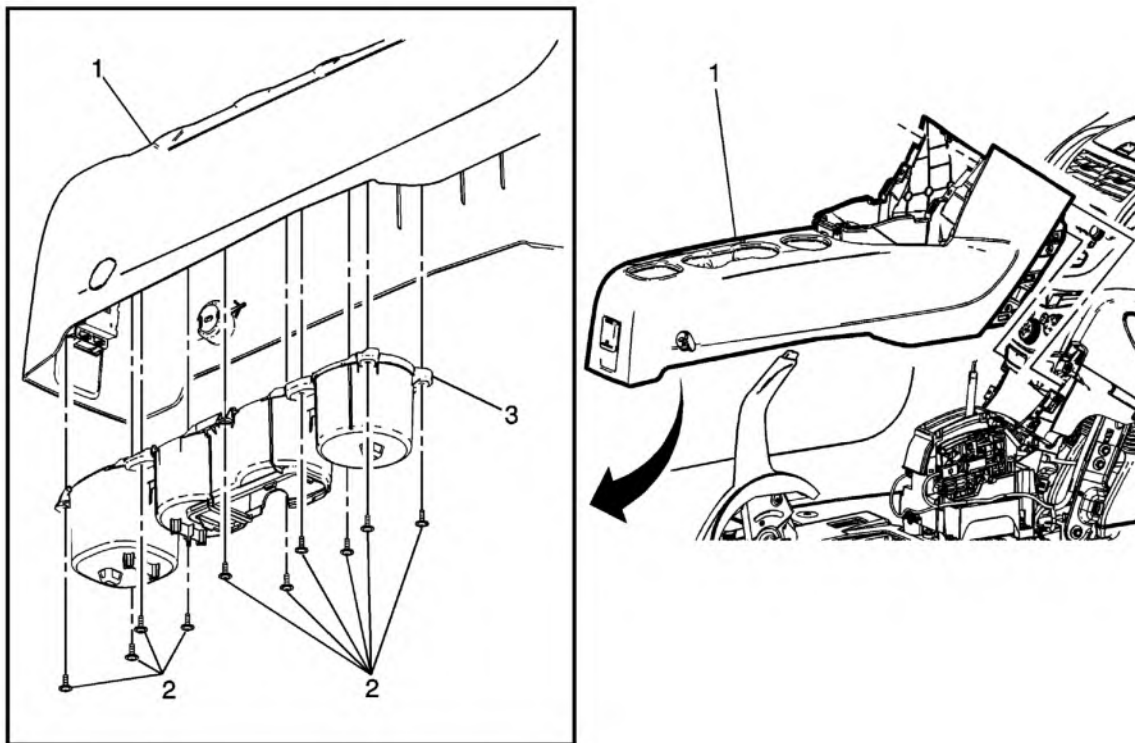


Fig.167: Front Floor Console Cup Holder (Trax).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Bracket Refer to Front Floor Console Bracket Replacement (Chevrolet) .
2	Front Floor Console Cup Holder Fasteners (Qty: 10) CAUTION: Refer to Fastener Caution .
3	Front Floor Console Cup Holder Procedure Transfer components as necessary.

FRONT FLOOR CONSOLE CENTER COMPARTMENT REPLACEMENT (BUICK)

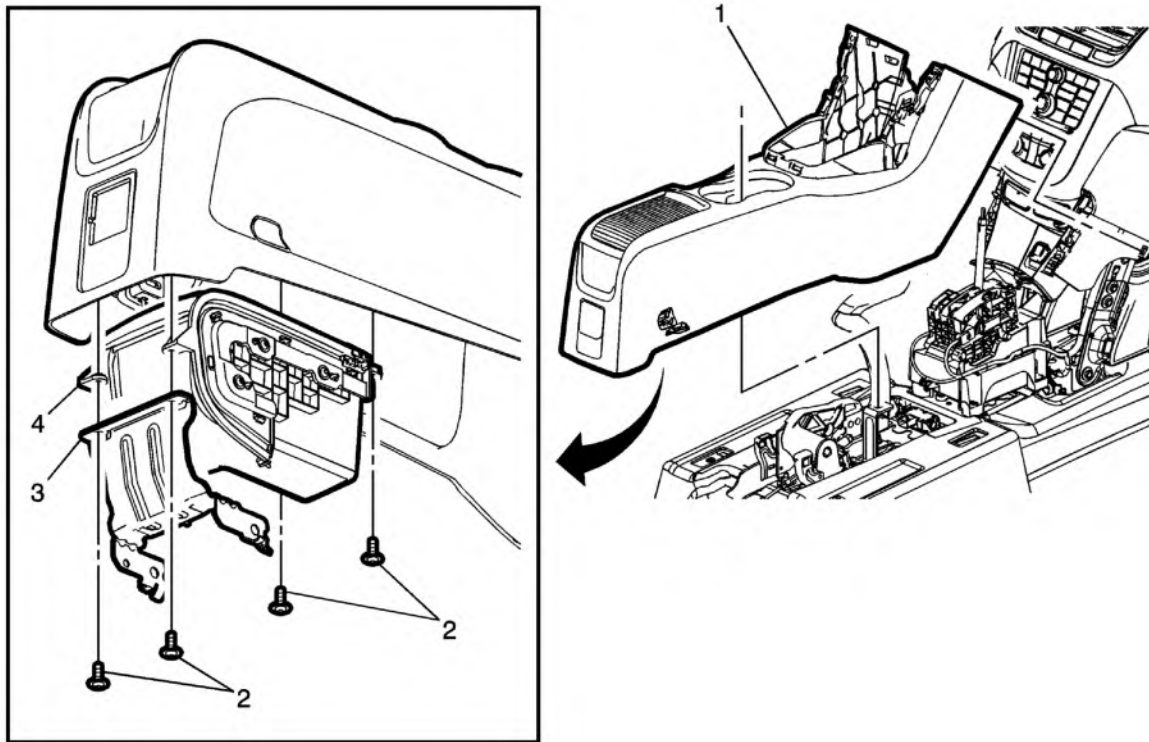


Fig.168: Front Floor Console Center Compartment (Encore).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the front floor console wiring harness. Refer to Front Floor Console Wiring Harness Replacement (Buick). 2. Remove the accessory power receptacle. Refer to Accessory Power Receptacle Replacement.	
1	Front Floor Console Refer to Front Floor Console Replacement (Buick) .
2	Front Floor Console Center Compartment Fasteners (Qty: 4) CAUTION: Refer to Fastener Caution .
3	Front Floor Console Bracket
4	Front Floor Console Center Compartment

FRONT FLOOR CONSOLE EXTENSION REPLACEMENT - RIGHT SIDE

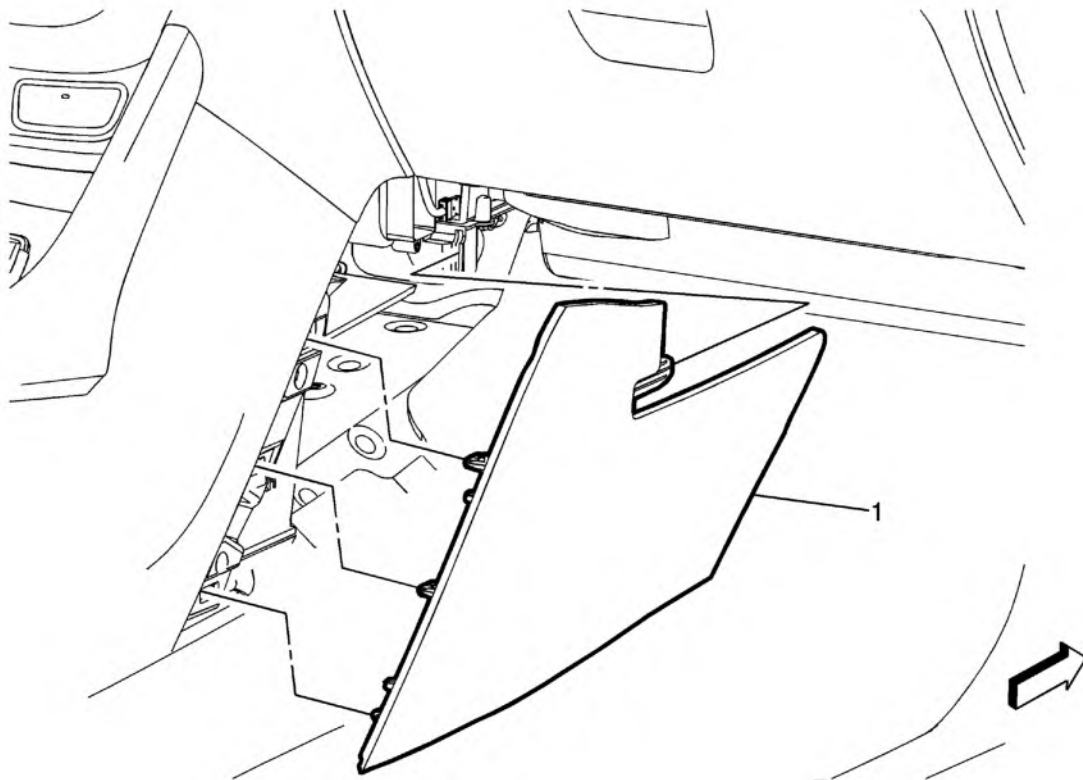


Fig. 169: Front Floor Console Extension - Right Side

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Extension Panel Procedure Use a flat bladed plastic trim tool in order to release the retainers securing the extension panel to the front floor console assembly.

FRONT FLOOR CONSOLE EXTENSION REPLACEMENT - LEFT SIDE

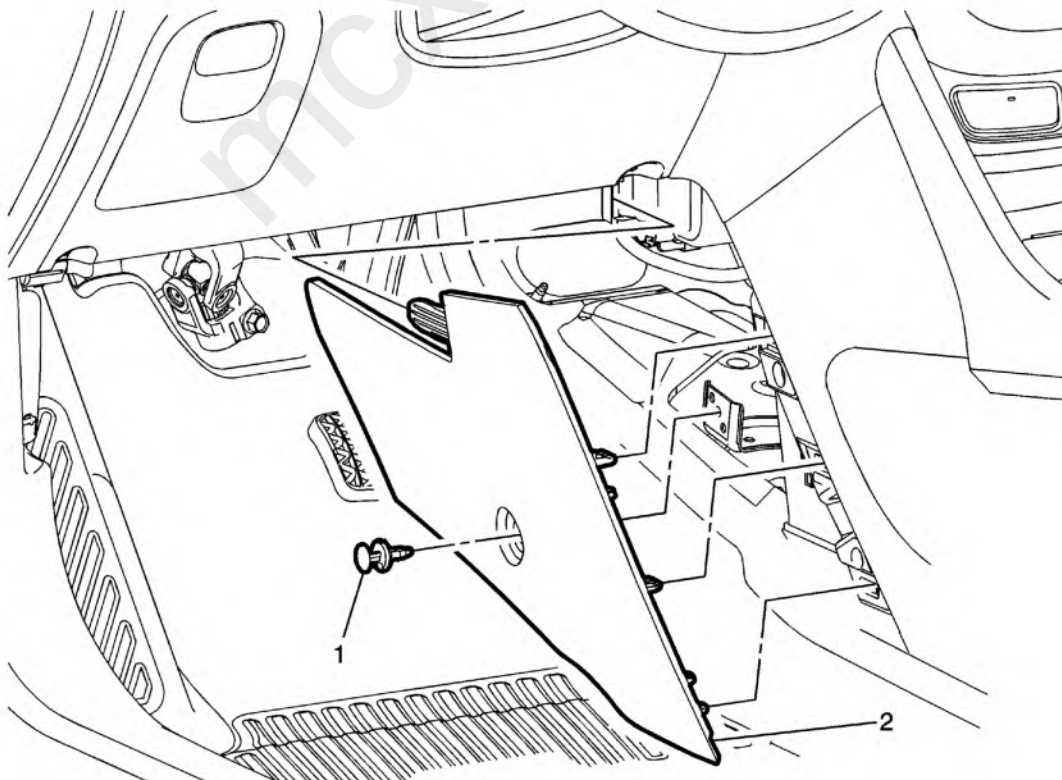


Fig. 170: Front Floor Console Extension - Left Side

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
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Callout	Component Name
1	Front Floor Console Clip
2	Front Floor Console Extension Panel Procedure Use a flat bladed plastic trim tool in order to release the retainers securing the extension panel to the front floor console assembly.

FRONT FLOOR CONSOLE PARKING BRAKE LEVER OPENING COVER REPLACEMENT (BUICK)

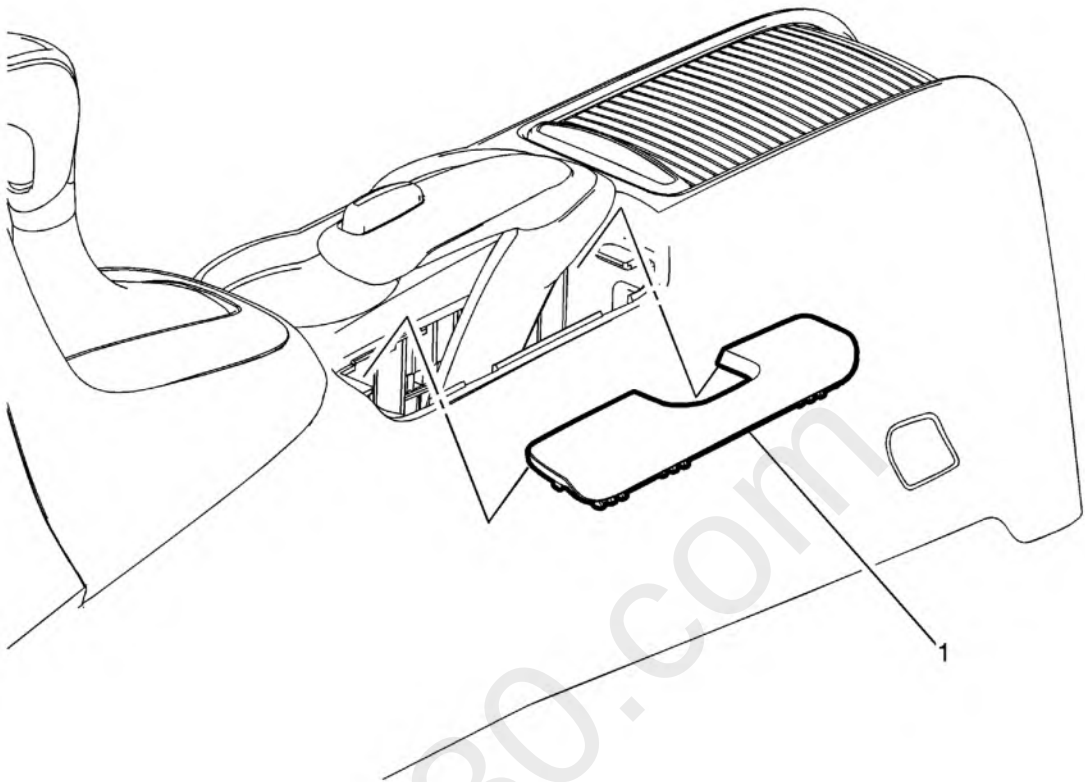


Fig. 171: Front Floor Console Parking Brake Lever Opening Cover (Encore).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Parking Brake Lever Opening Cover Procedure 1. Pull upward on the parking brake lever to provide access for removal of the cover. 2. Use a flat bladed plastic trim tool on the outside edge of the cover and lift the cover up and out from the floor console.

FRONT FLOOR CONSOLE REPLACEMENT (BUICK)

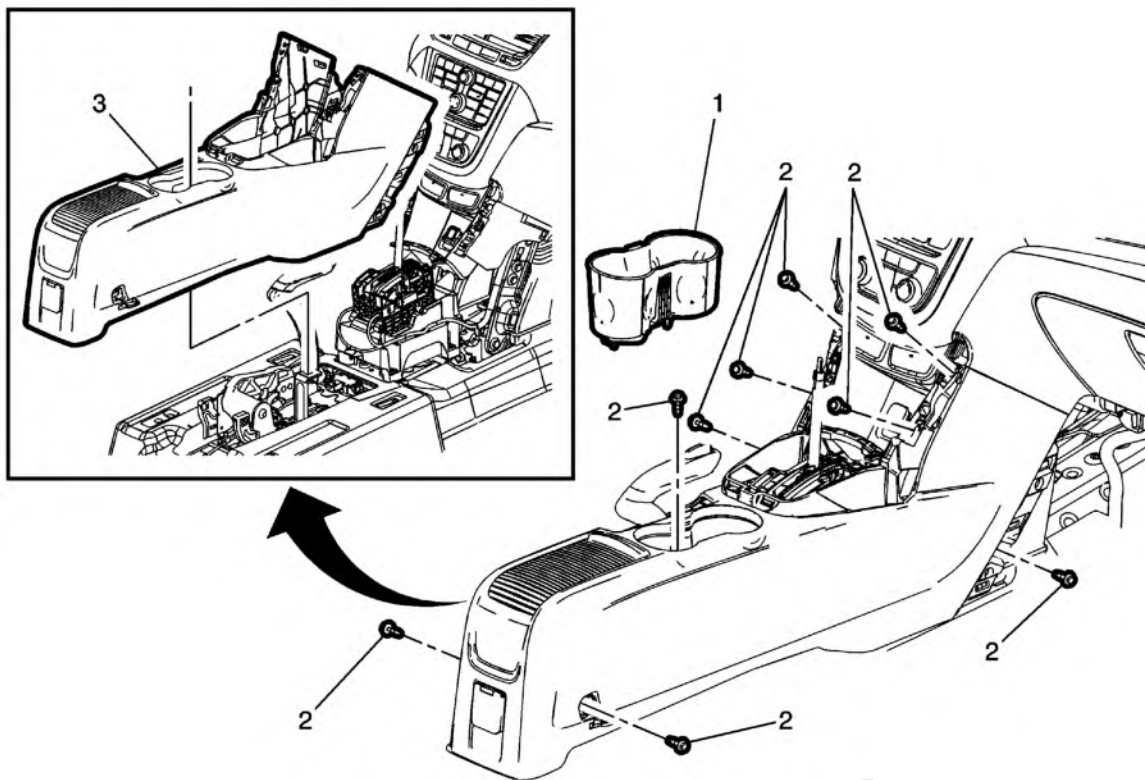


Fig. 172: Front Floor Console (Encore)
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove both front floor console extension panels. Refer to Front Floor Console Extension Replacement - Left Side, and Front Floor Console Extension Replacement - Right Side. 2. Remove the front floor console trim plate. Refer to Front Floor Console Trim Plate Replacement (Buick). 3. Remove the front floor console parking brake lever opening cover. Refer to Front Floor Console Parking Brake Lever Opening Cover Replacement (Buick).	
1	Front Floor Console Cup Holder Procedure Lift up the cup holder liner and trim plate to access the fastener from the floor console.
2	Front Floor Console Fasteners (Qty: 9) CAUTION: Refer to Fastener Caution . Procedures 1. Position the front seats as necessary to access the console bolt access hole covers and fasteners. 2. Use a flat bladed plastic trim tool to open the front floor console bolt access hole cover to access the fasteners from the rear of the floor console. Tighten 2.5 N.m (22 lb in)

Callout	Component Name
3	Front Floor Console Procedures 1. Set the park brake lever. 2. Place the shift control rearward. 3. Disconnect electrical connections. 4. With the aid of an assistant lift the floor console forward and over the park brake handle, then away from the instrument panel assembly.

FRONT FLOOR CONSOLE REPLACEMENT (CHEVROLET)

Removal Procedure

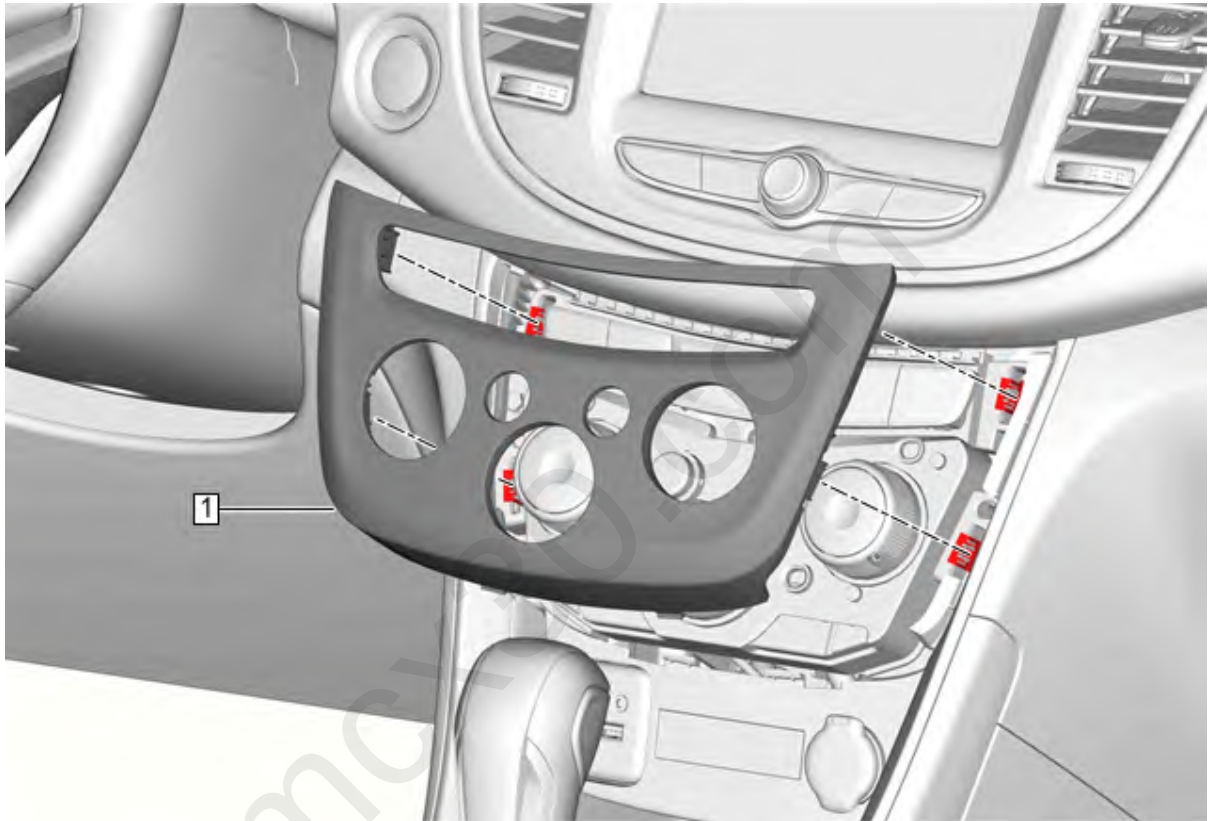


Fig. 173: Instrument Panel Switch Trim Plate

Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Switch Trim Plate (1) - **Instrument Panel Switch Trim Plate Replacement (Chevrolet)**

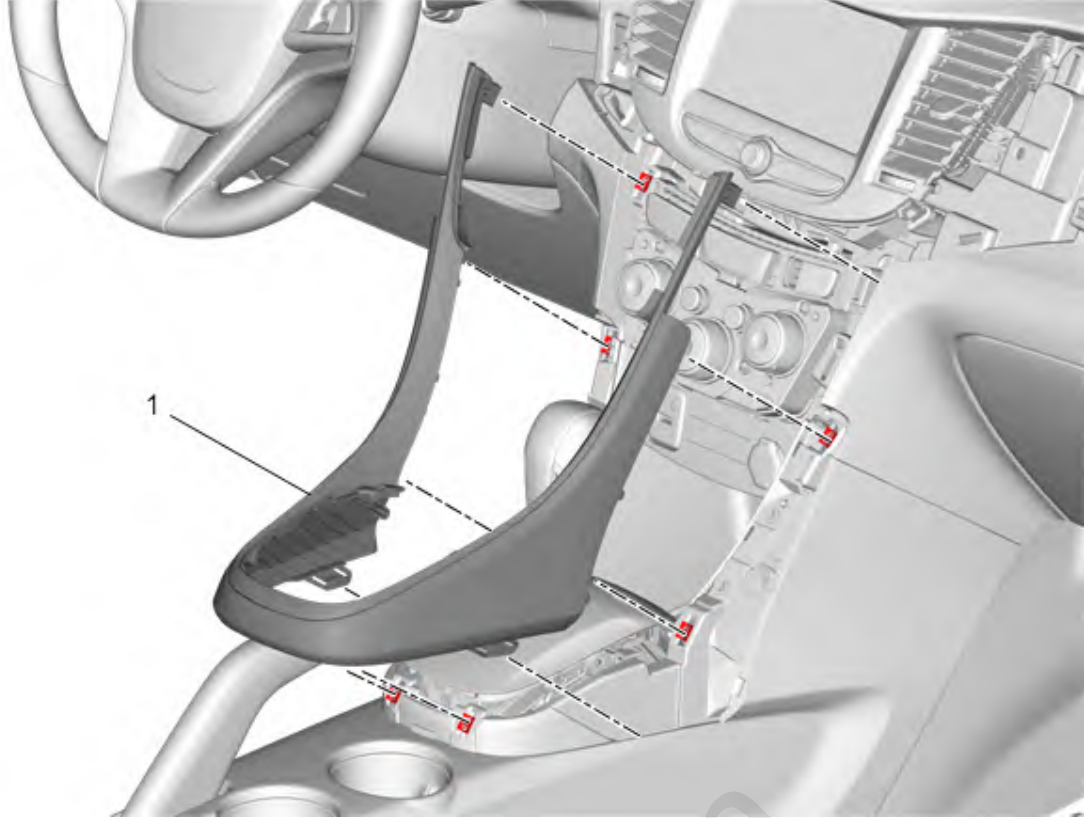


Fig. 174: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

2. Remove Front Floor Console Applique (1) - [Front Floor Console Applique Replacement \(Chevrolet\)](#)

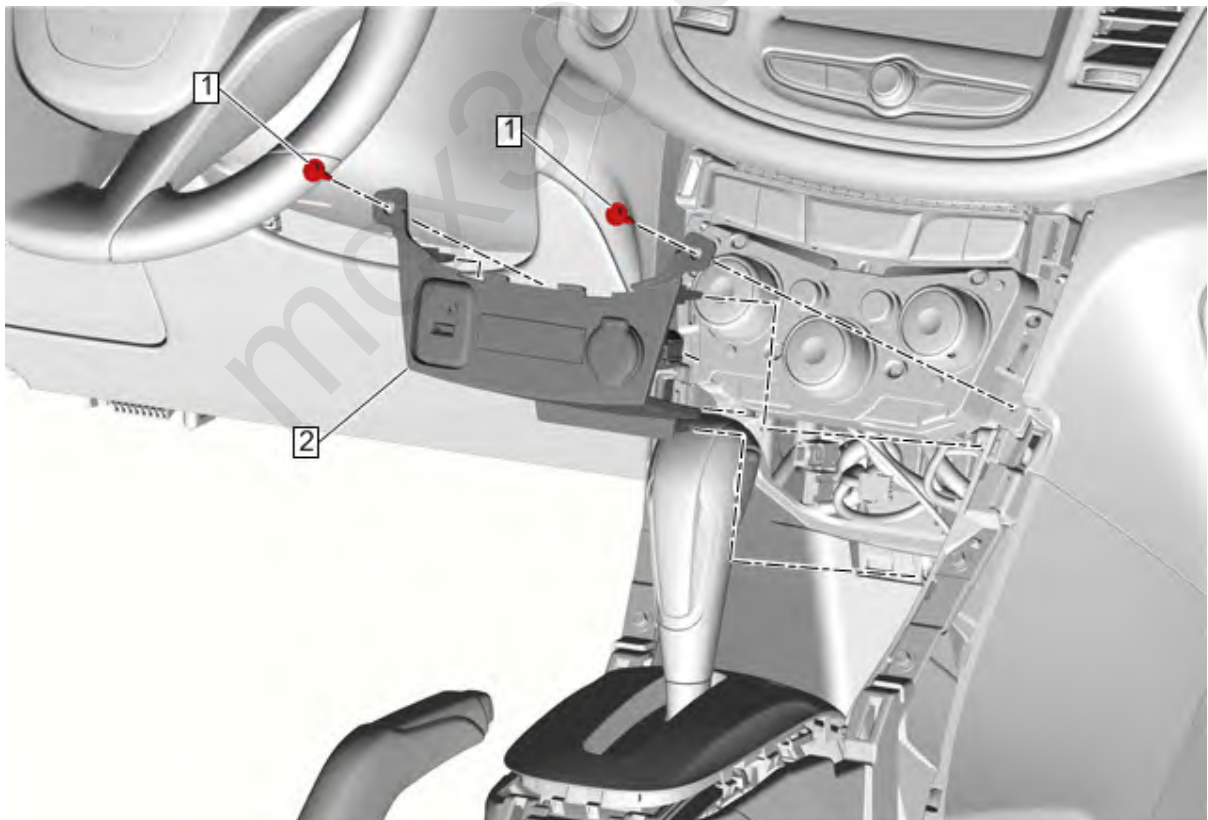


Fig. 175: Front Floor Lower Console (Chevrolet)

Courtesy of GENERAL MOTORS COMPANY

3. Remove Front Floor Lower Console (2) - [Front Floor Lower Console Replacement \(Chevrolet\)](#)

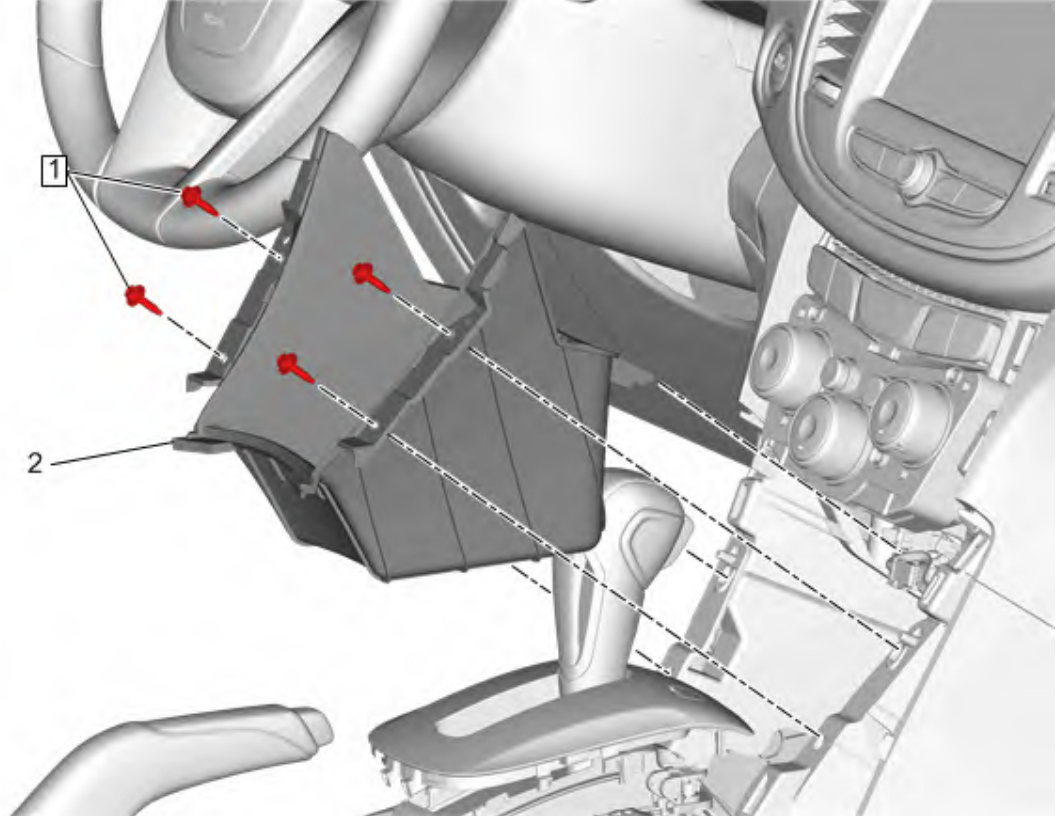


Fig.176: Front Floor Console Stowage Tray.
 Courtesy of GENERAL MOTORS COMPANY

4. Remove Front Floor Console Stowage Tray (2) - **Front Floor Console Stowage Tray Replacement (Chevrolet)**

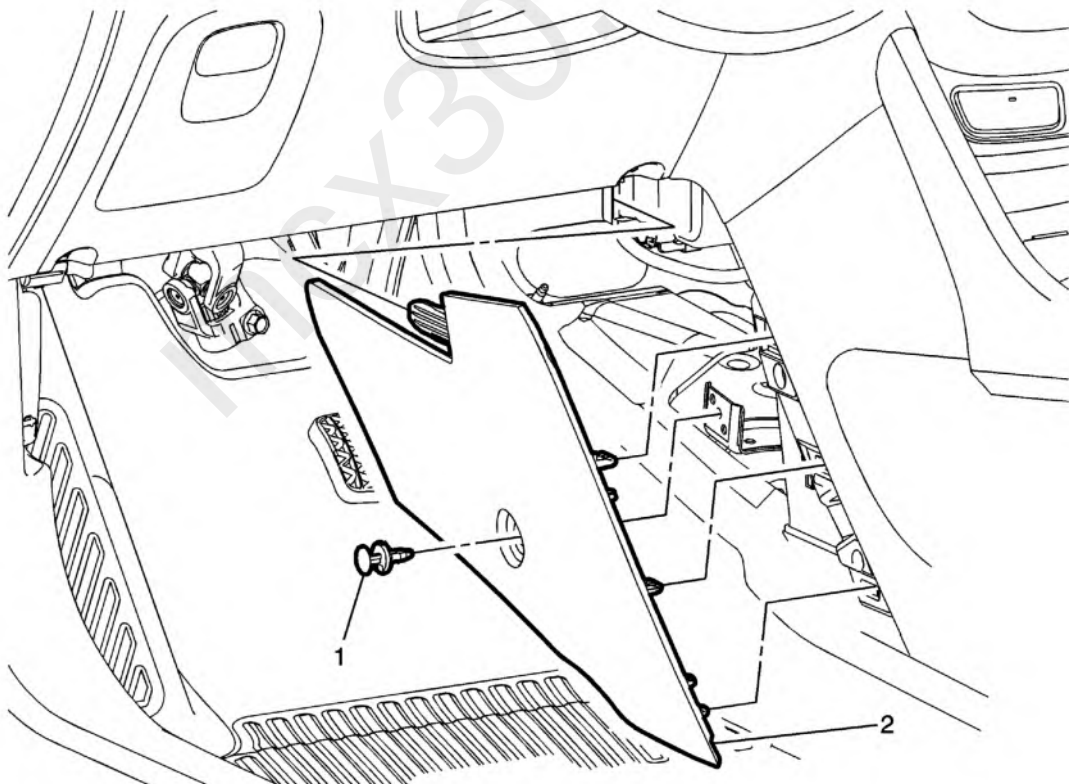


Fig.177: Front Floor Console Extension - Left Side
 Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Extension Panel - Left (2) - **Front Floor Console Extension Replacement - Left Side**

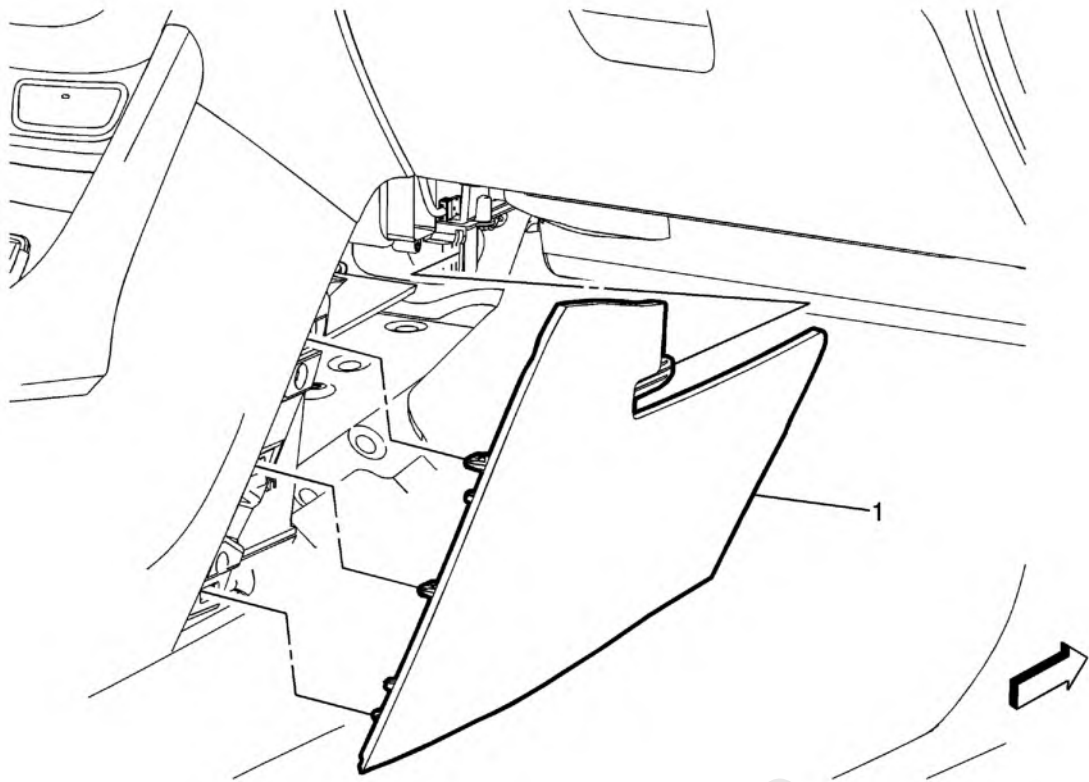


Fig. 178: Front Floor Console Extension - Right Side
 Courtesy of GENERAL MOTORS COMPANY

6. Remove Front Floor Console Extension Panel - Right (1) - **Front Floor Console Extension Replacement - Right Side**
7. Position seats as necessary to access hole covers and fasteners.

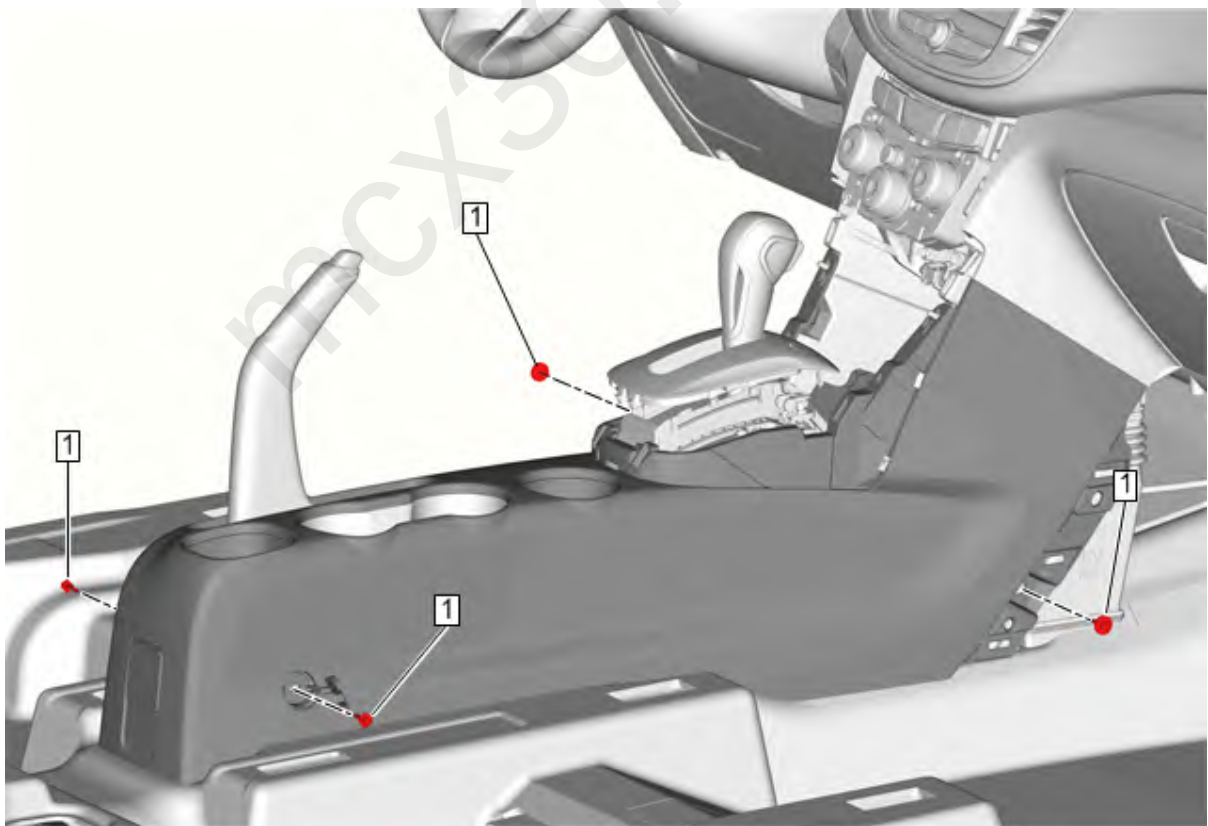


Fig. 179: Front Floor Console Bolt
 Courtesy of GENERAL MOTORS COMPANY

8. Remove Front Floor Console Bolt (1)

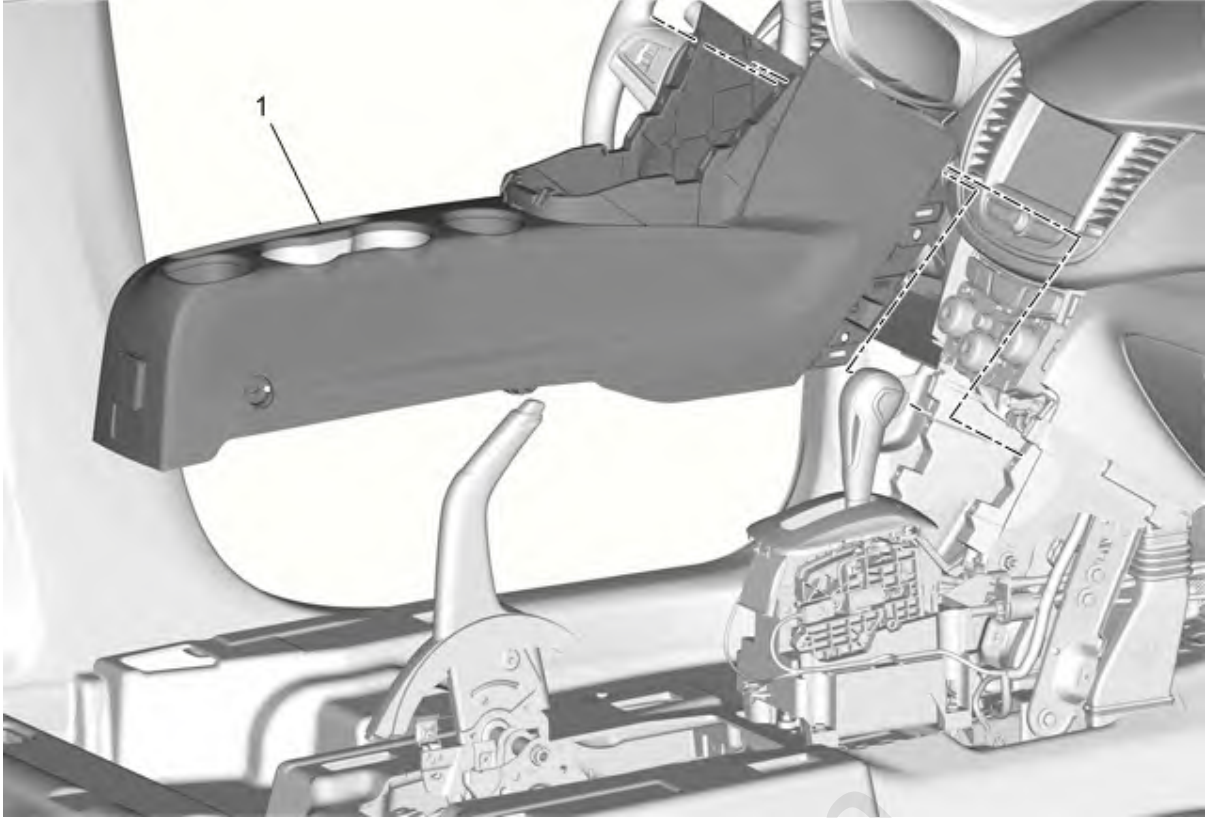


Fig. 180: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

9. Remove Front Floor Console (1)
10. Disconnect the electrical connectors.
11. Apply the parking brake.
12. With the aid of an assistant, remove the console from the vehicle.

Installation Procedure

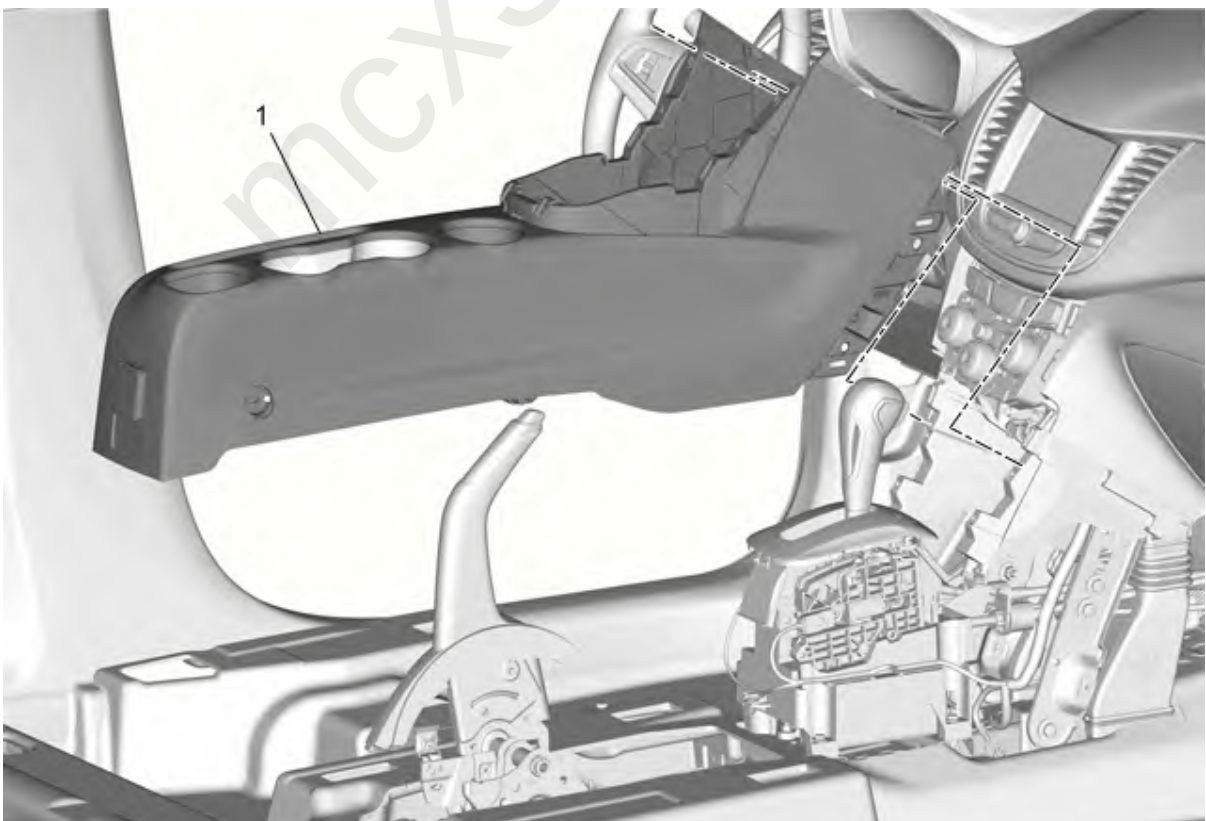


Fig. 181: Front Floor Console
 Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console (1)

2. Connect the electrical connectors.

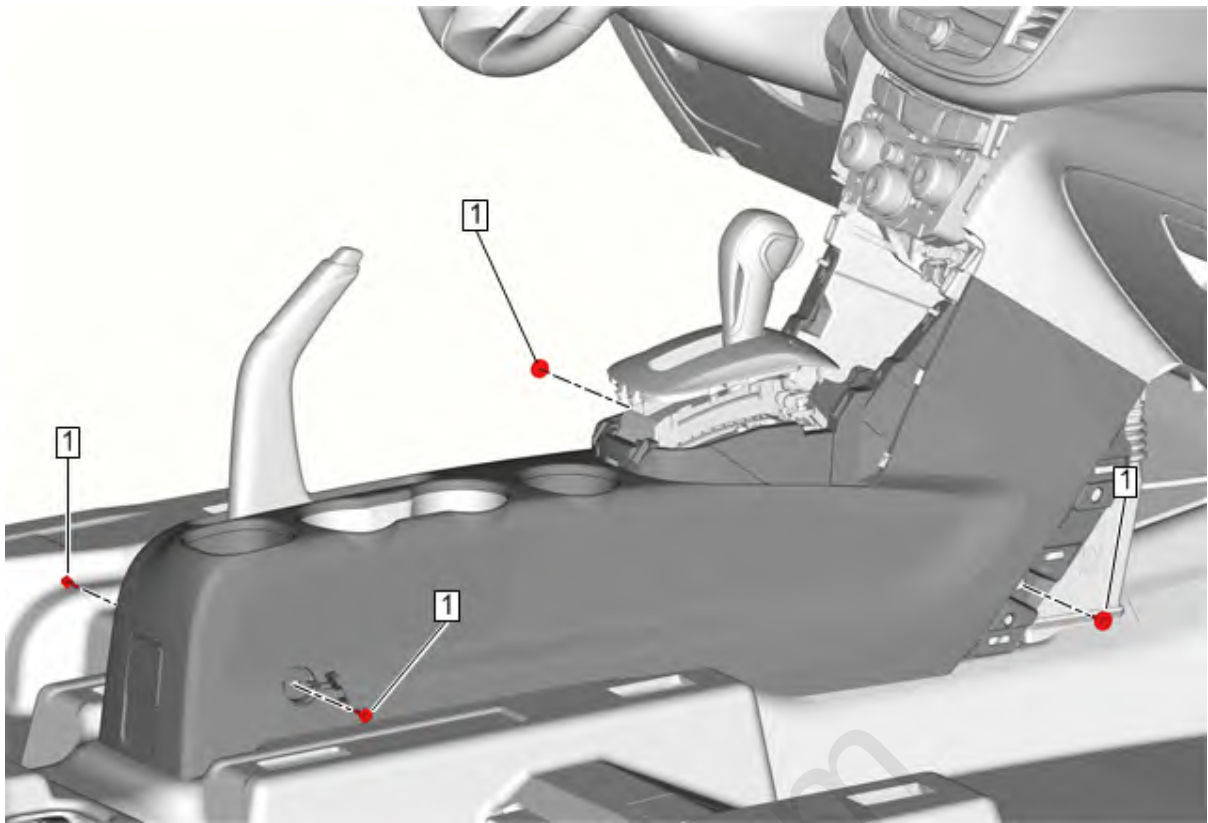


Fig. 182: Front Floor Console Bolt
Courtesy of GENERAL MOTORS COMPANY

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

3. Install Front Floor Console Bolt (1) and tighten 2.5 N.m (22 lb in)

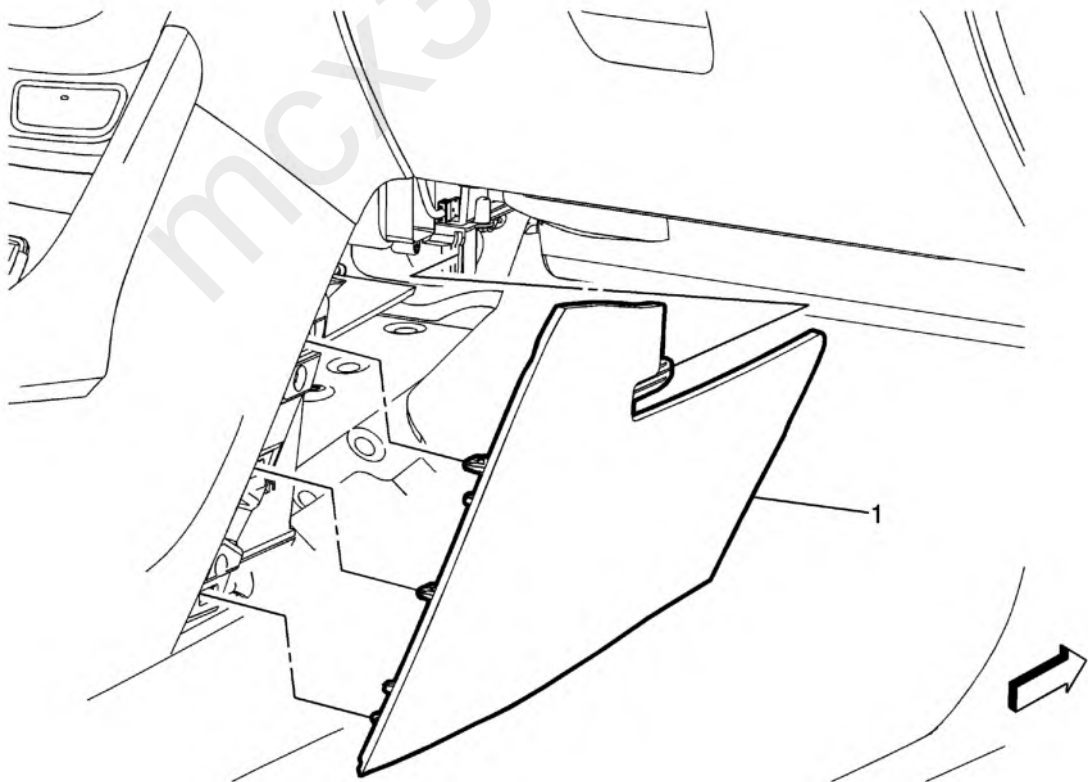


Fig. 183: Front Floor Console Extension - Right Side
Courtesy of GENERAL MOTORS COMPANY

4. Install Front Floor Console Extension Panel - Right (1) - [Front Floor Console Extension Replacement - Right Side](#)

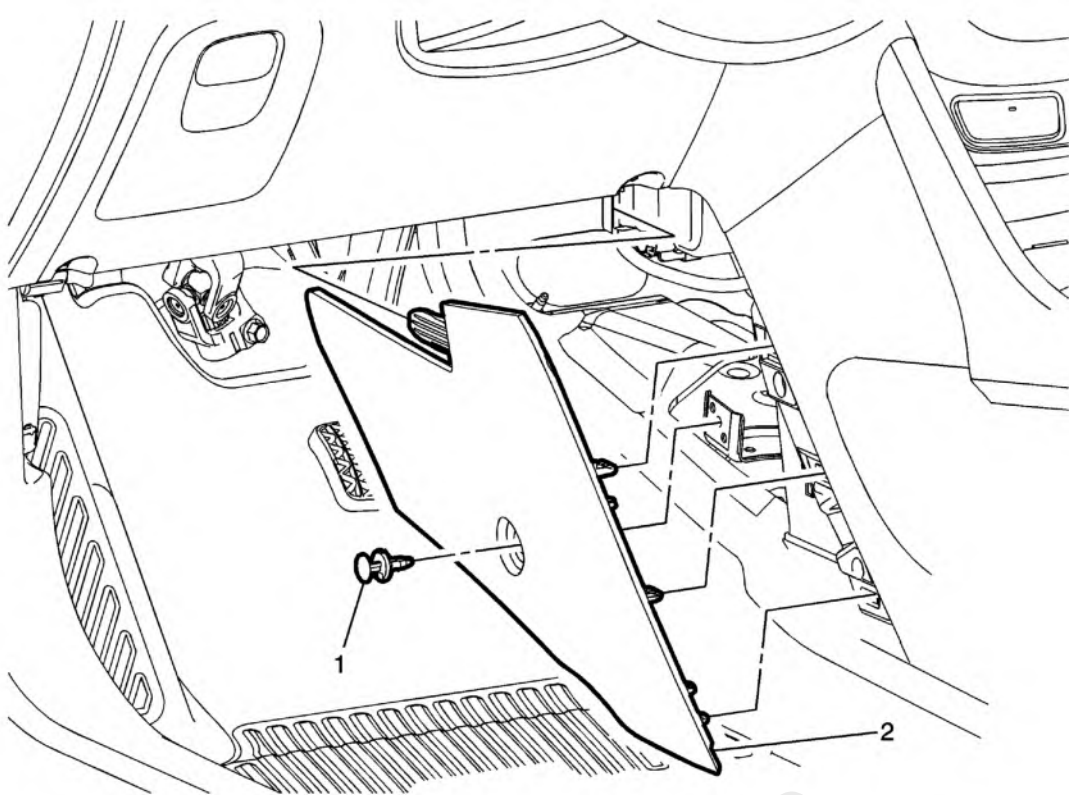


Fig. 184: Front Floor Console Extension - Left Side
 Courtesy of GENERAL MOTORS COMPANY

5. Install Front Floor Console Extension Panel - Left (2) - [Front Floor Console Extension Replacement - Left Side](#)

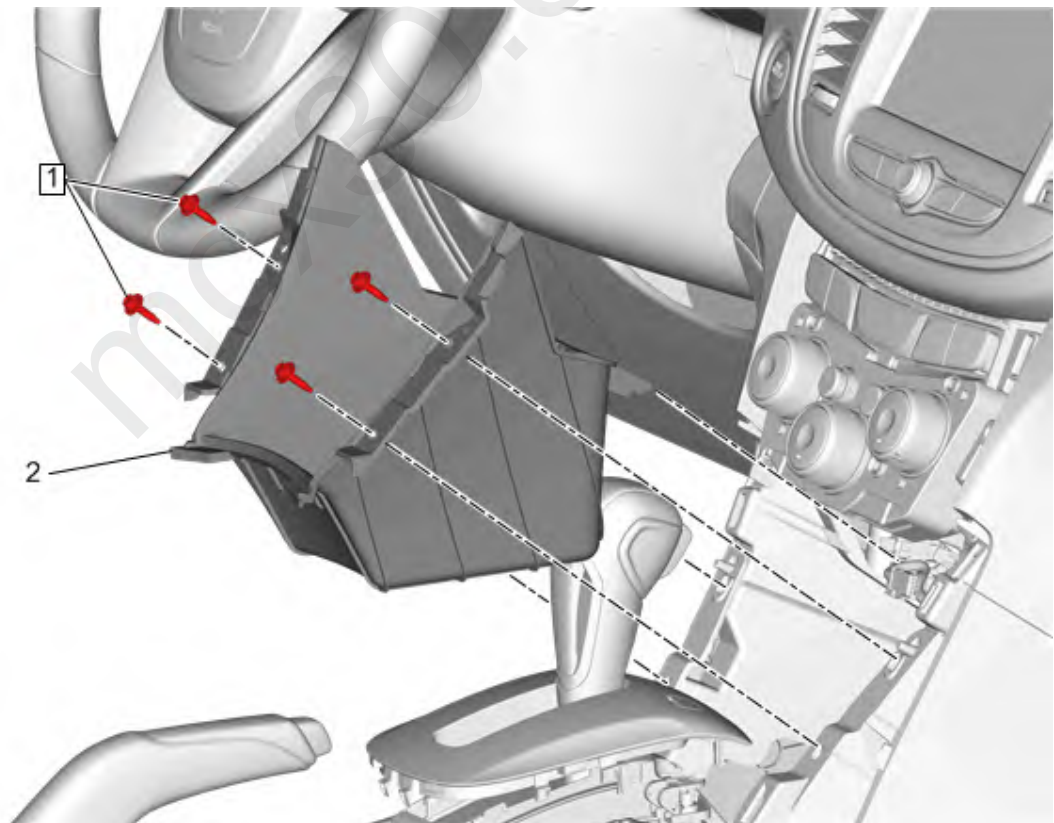


Fig. 185: Front Floor Console Stowage Tray
 Courtesy of GENERAL MOTORS COMPANY

6. Install Front Floor Console Stowage Tray (2) - [Front Floor Console Stowage Tray Replacement \(Chevrolet\)](#)

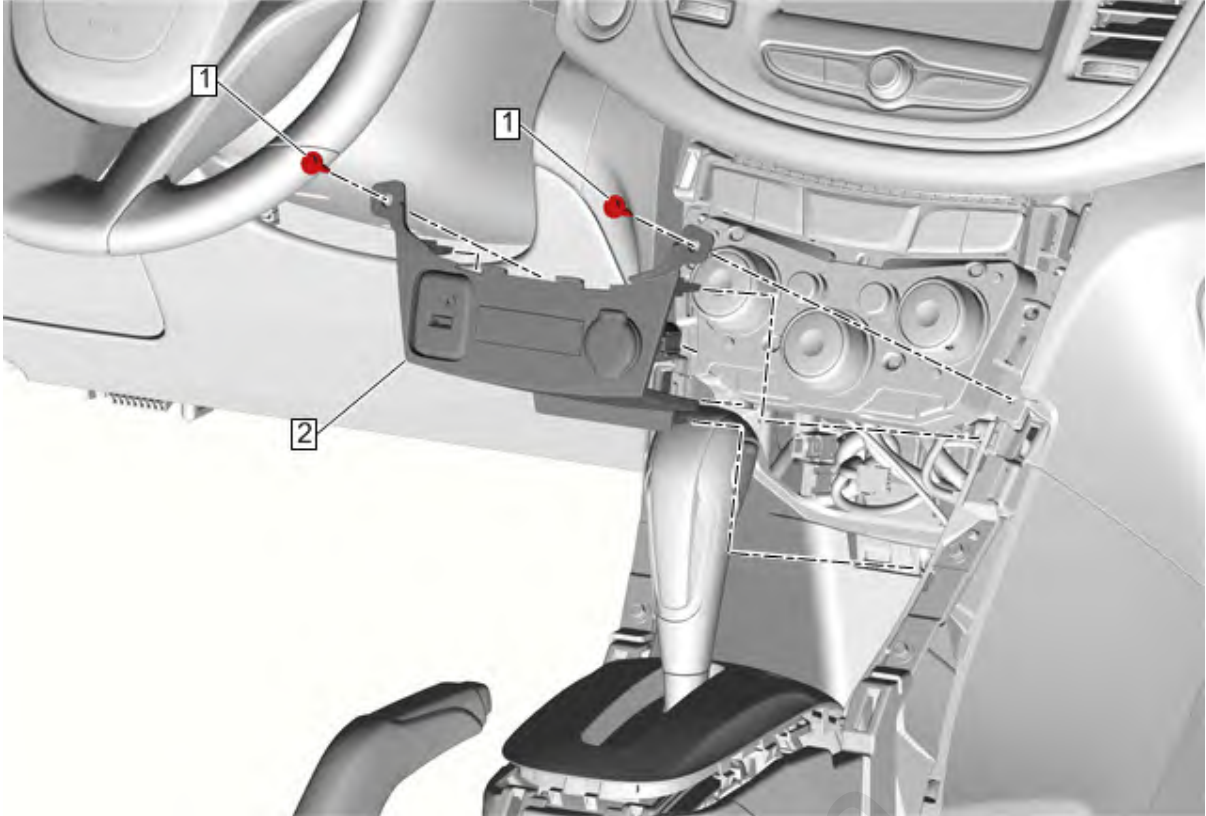


Fig. 186: Front Floor Lower Console (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

7. Install Front Floor Lower Console (2) - **Front Floor Lower Console Replacement (Chevrolet)**

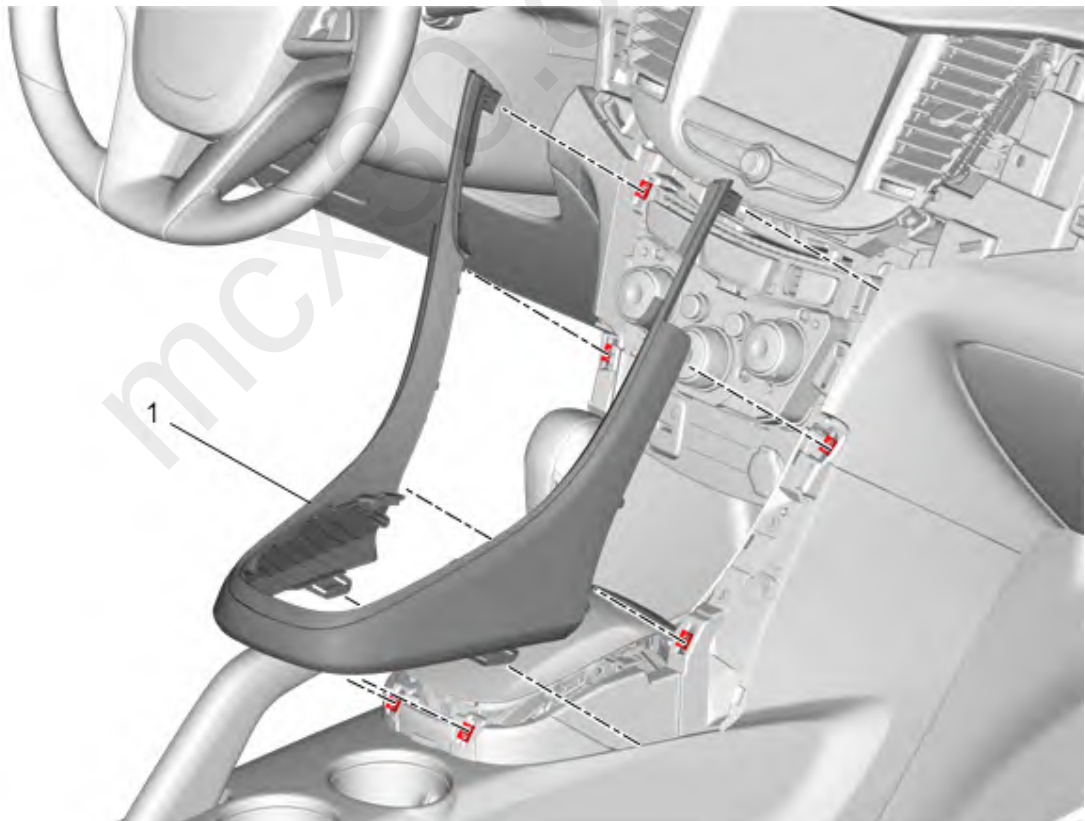


Fig. 187: Front Floor Console Applique
 Courtesy of GENERAL MOTORS COMPANY

8. Install Front Floor Console Applique (1)

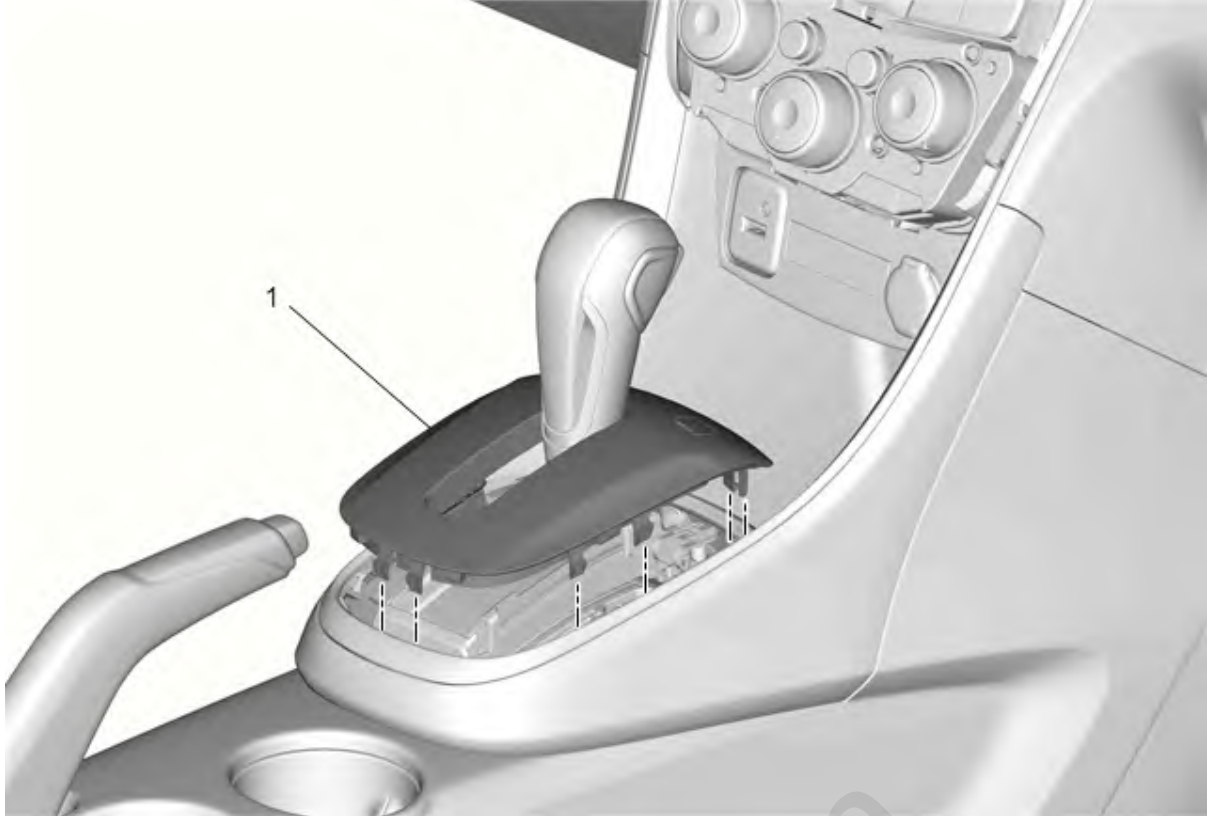


Fig. 188: Automatic Transmission Control Indicator Bezel
 Courtesy of GENERAL MOTORS COMPANY

9. Install Automatic Transmission Control Indicator Bezel (1)

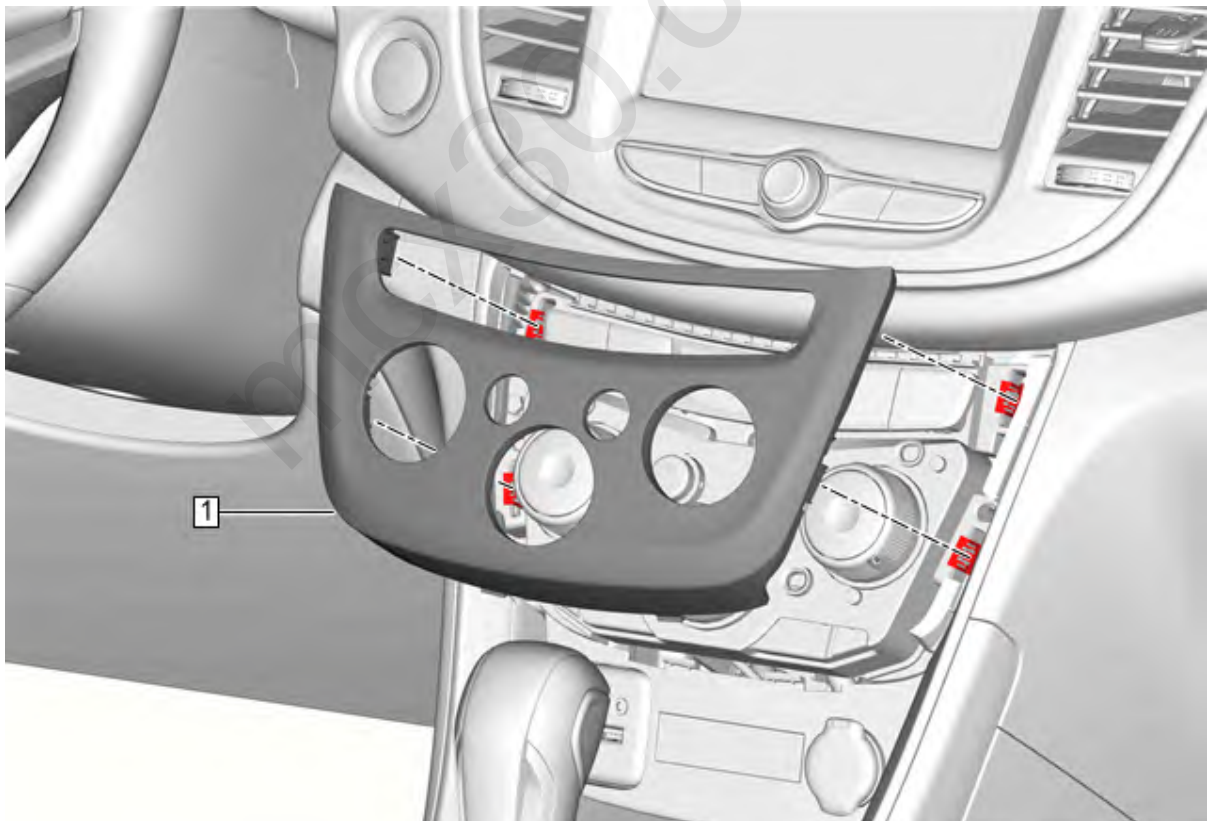


Fig. 189: Instrument Panel Switch Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

10. Install Instrument Panel Switch Trim Plate (1) **Instrument Panel Switch Trim Plate Replacement (Chevrolet)**

FRONT FLOOR LOWER CONSOLE REPLACEMENT (CHEVROLET)

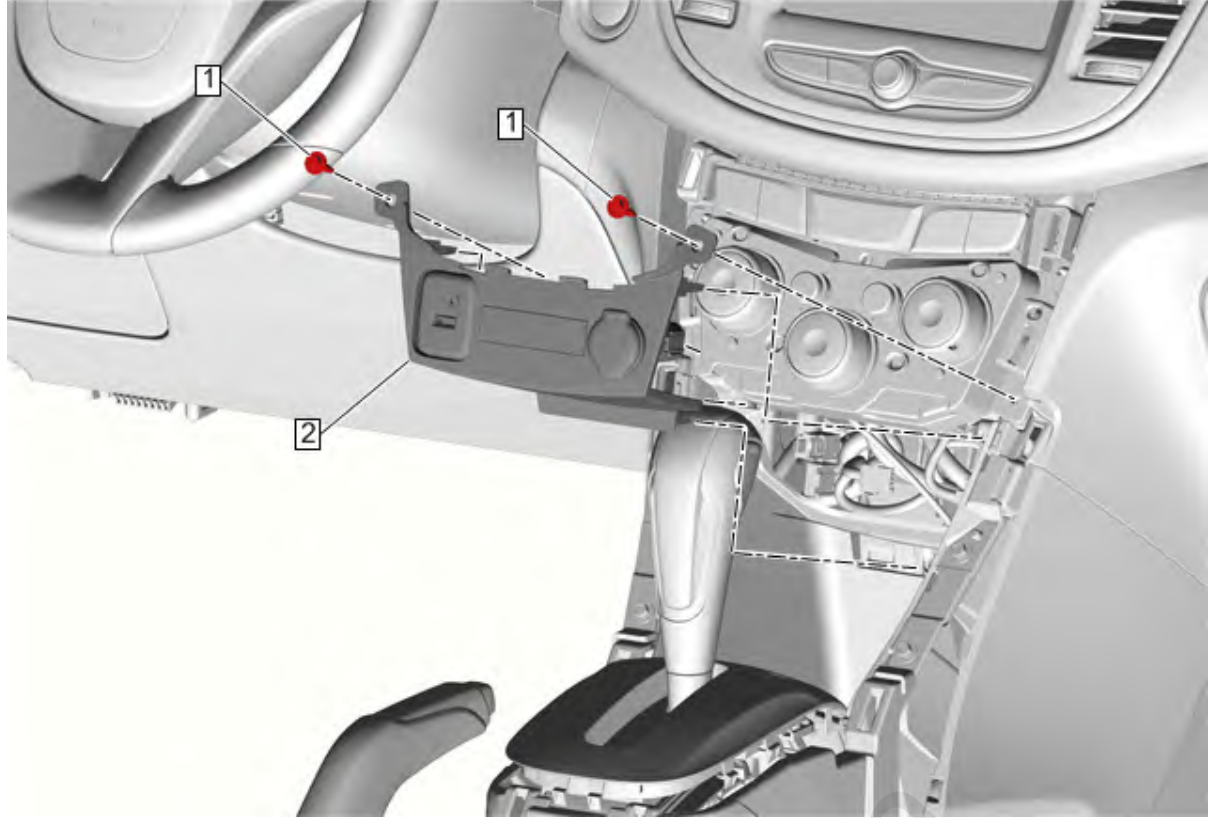


Fig. 190: Front Floor Lower Console (Chevrolet)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure <u>Front Floor Console Applique Replacement (Chevrolet).</u>	
1	Front Floor Lower Console Bolt (Qty: 2) CAUTION: Refer to <u>Fastener Caution</u> . Tighten 2.5 N.m (22 lb in)
2	Front Floor Lower Console Procedure 1. Use a flat bladed plastic trim tool. 2. Disconnect the electrical connectors. 3. Transfer components as necessary.

FRONT FLOOR CONSOLE BRACKET REPLACEMENT (BUICK)

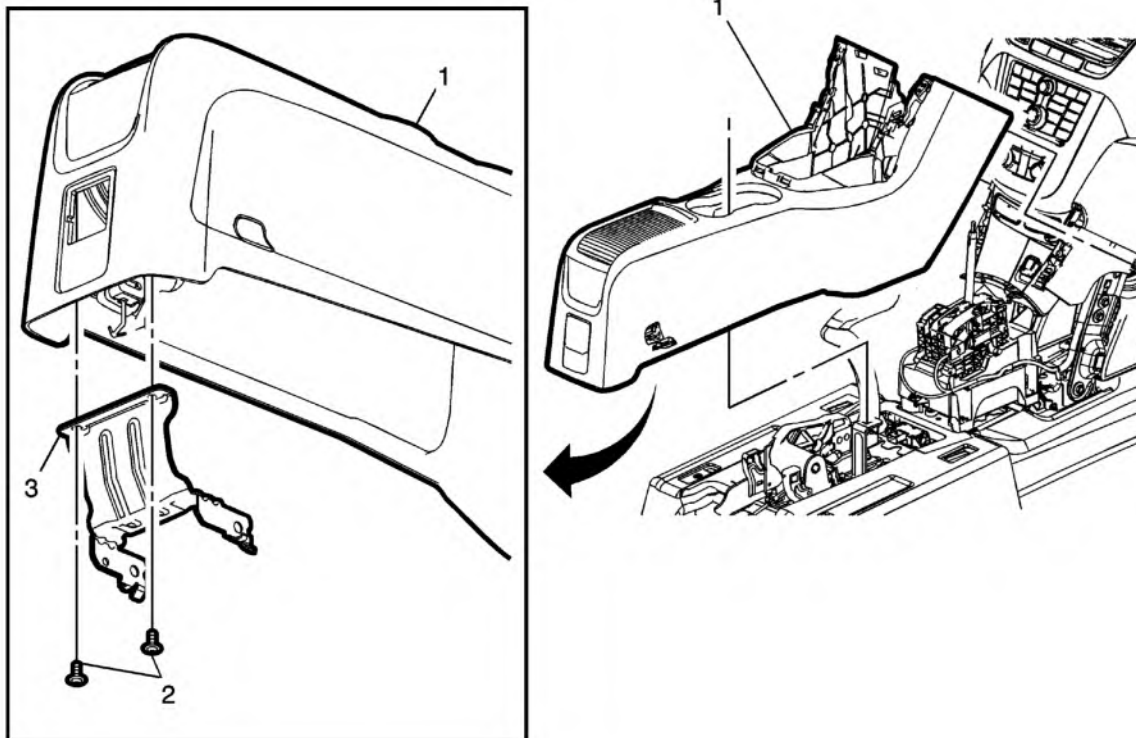


Fig. 191: Front Floor Console Bracket (Encore).
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Remove the front floor console wiring harness. Refer to Front Floor Console Wiring Harness Replacement (Buick). 2. Remove the accessory power receptacle. Refer to Accessory Power Receptacle Replacement.	
1	Front Floor Console Refer to Front Floor Console Replacement (Buick) .
2	Front Floor Console Bracket Fasteners (Qty: 2) CAUTION: Refer to Fastener Caution .
3	Front Floor Console Bracket

FRONT FLOOR CONSOLE BRACKET REPLACEMENT (CHEVROLET)

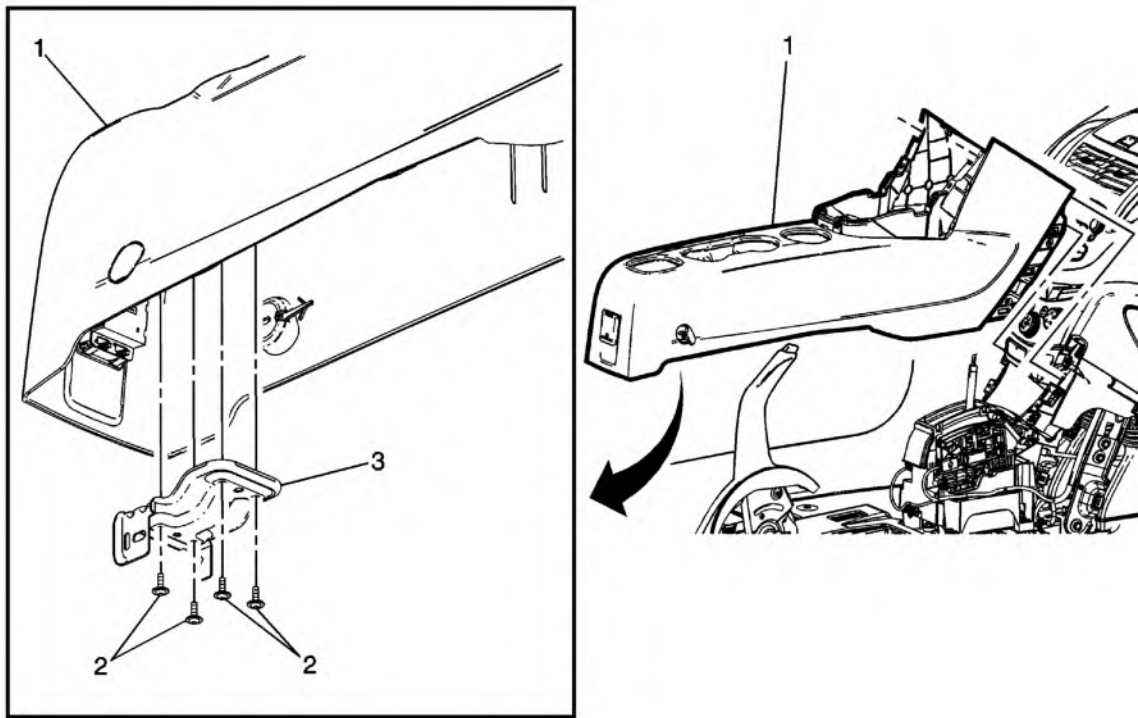


Fig. 192: Front Floor Console Bracket (Trax)
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Front Floor Console Refer to Front Floor Console Replacement (Chevrolet) .
2	Front Floor Console Bracket Fasteners (Qty: 4) CAUTION: Refer to Fastener Caution .
3	Front Floor Console Bracket Procedure Disconnect the electrical connection.

FRONT FLOOR CONSOLE TRIM PLATE REPLACEMENT (BUICK)

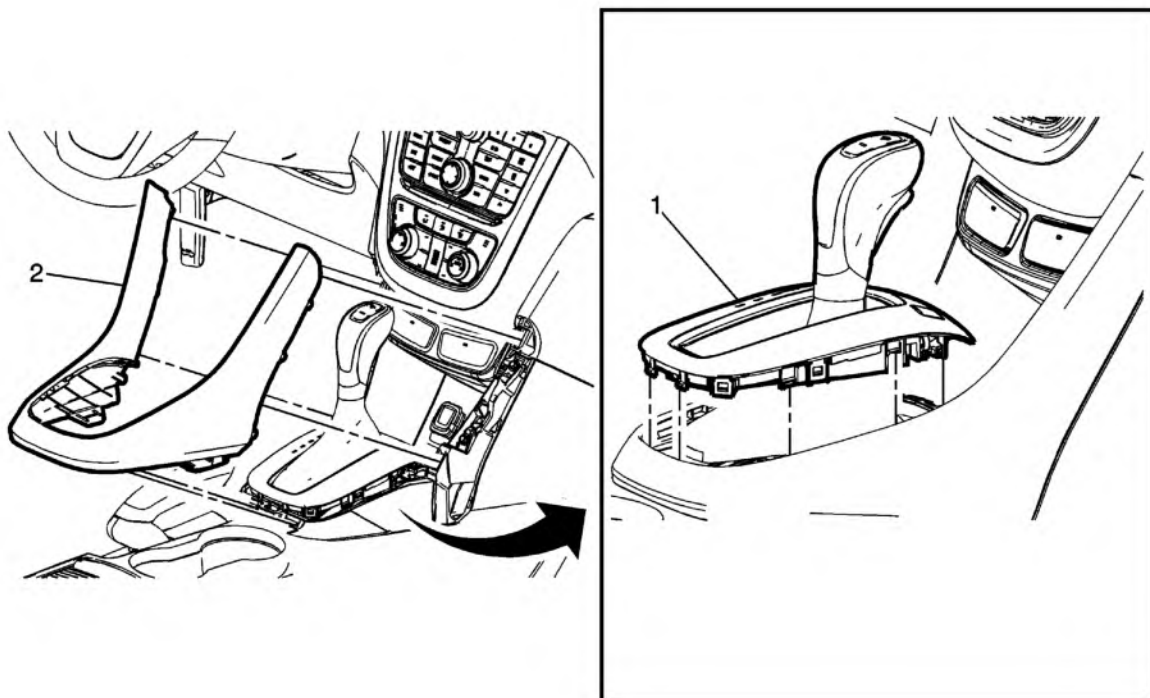


Fig. 193: Front Floor Console Trim Plate (Encore)

Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Automatic Transmission Control Indicator Bezel Procedure Use a flat bladed plastic trim tool to aid in the release of the indicator bezel from the transmission control assembly.
2	Front Floor Console Trim Plate Procedure Use a flat bladed plastic trim tool to aid in the removal of the trim plate from the front floor console assembly.

FRONT FLOOR CONSOLE APPLIQUE REPLACEMENT (CHEVROLET)

Removal Procedure

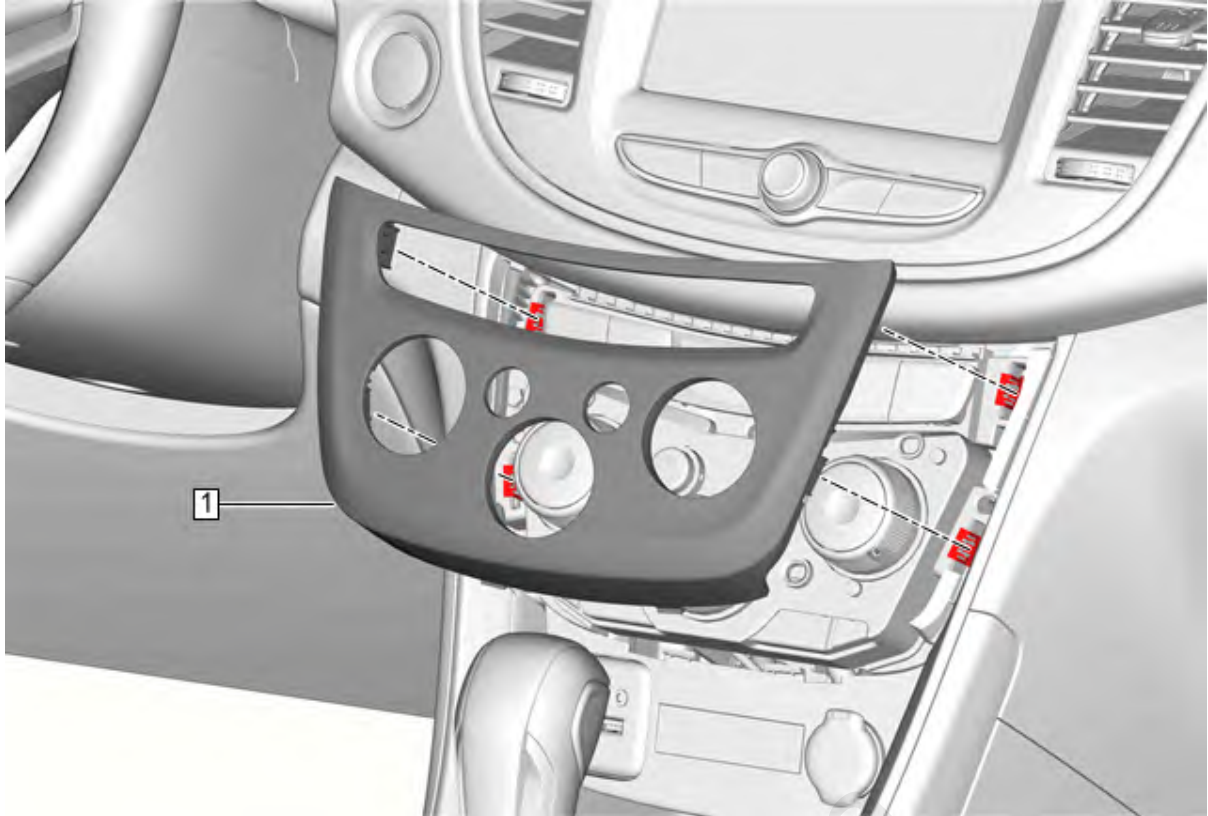


Fig. 194: Instrument Panel Switch Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

1. Remove Instrument Panel Switch Trim Plate (1) - [Instrument Panel Switch Trim Plate Replacement \(Chevrolet\)](#)

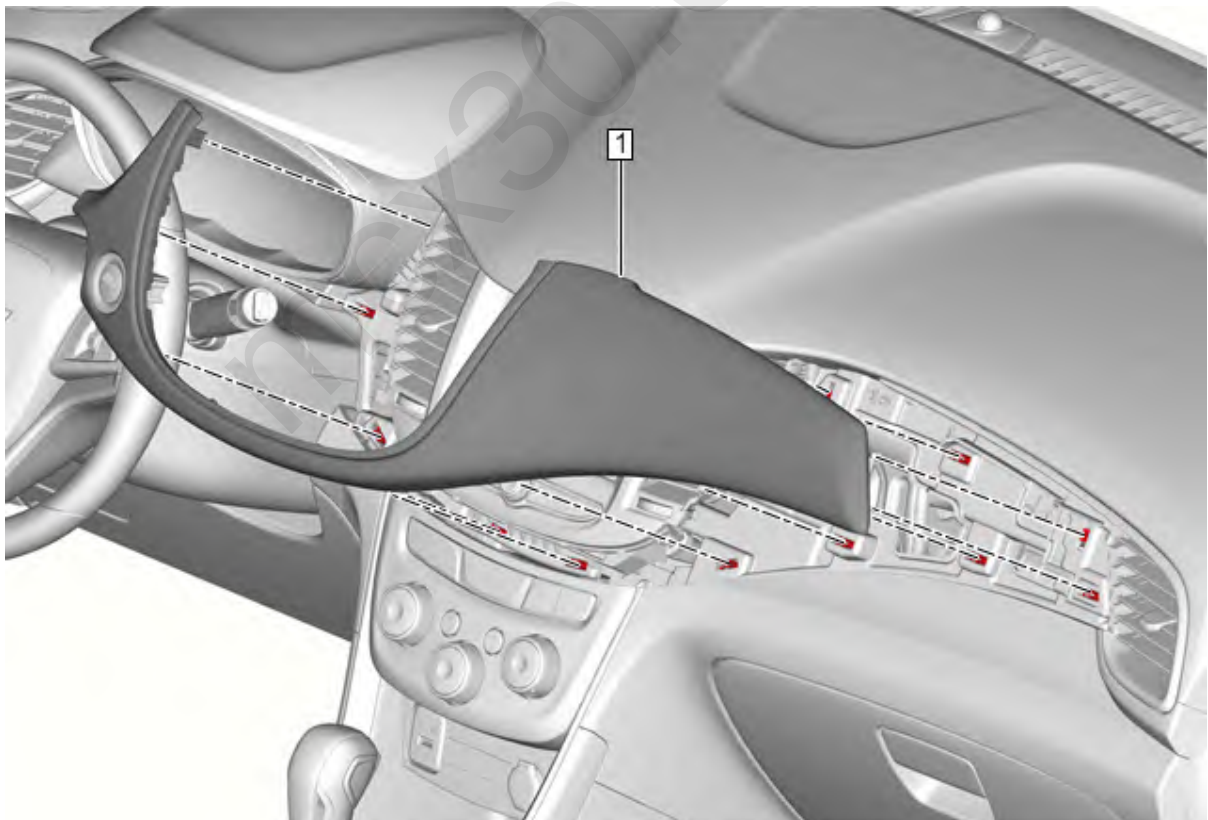


Fig. 195: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

2. Remove Instrument Panel Upper Trim Panel - Right Side (1) - [Instrument Panel Upper Trim Panel Replacement - Right Side \(Chevrolet\)](#)

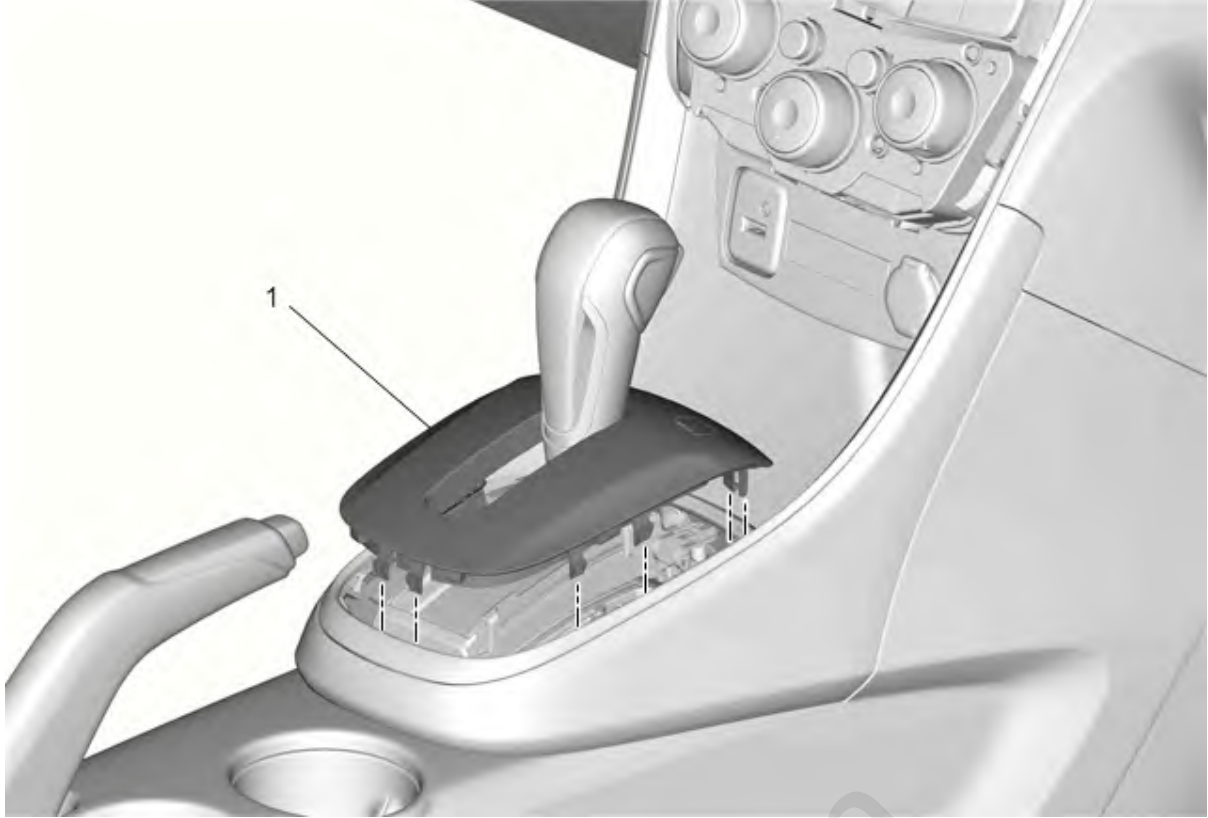


Fig. 196: Automatic Transmission Control Indicator Bezel

Courtesy of GENERAL MOTORS COMPANY

3. Release Automatic Transmission Control Indicator Bezel (1)
4. Use a flat bladed plastic trim tool to aid in the release of the indicator bezel from the transmission control assembly.

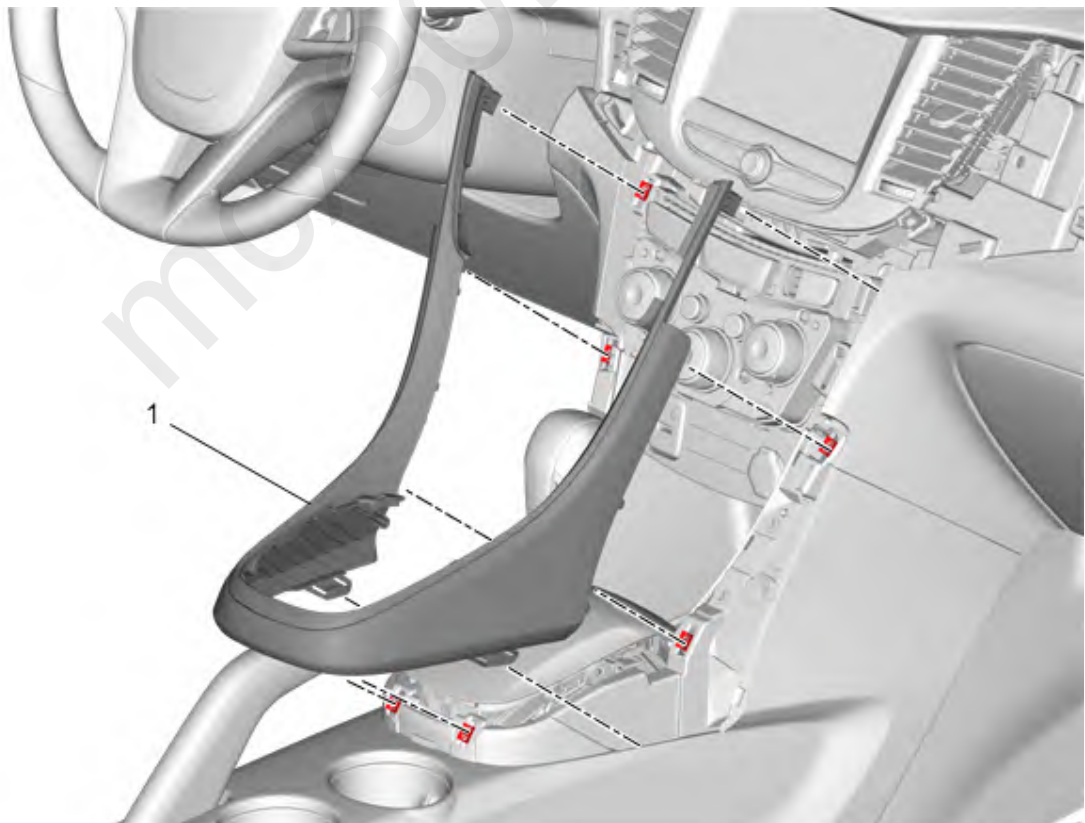


Fig. 197: Front Floor Console Applique

Courtesy of GENERAL MOTORS COMPANY

5. Remove Front Floor Console Applique (1)
6. Use a flat bladed plastic trim tool.

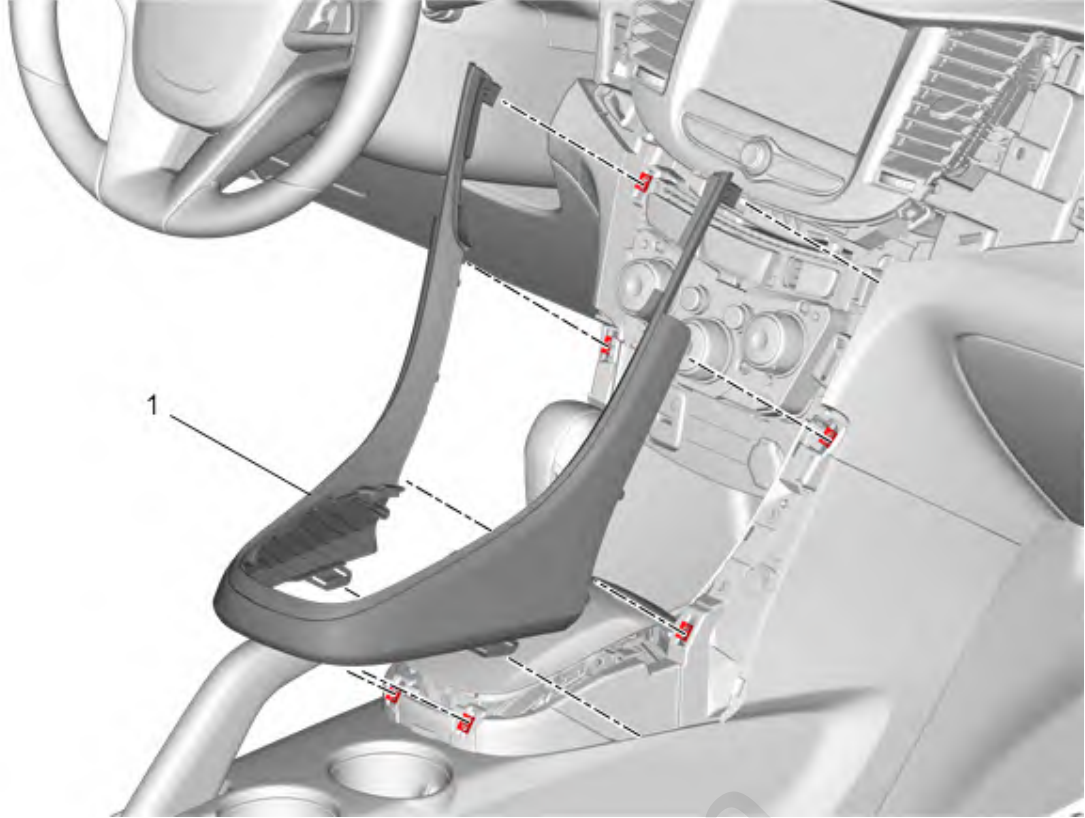


Fig. 198: Front Floor Console Applique
Courtesy of GENERAL MOTORS COMPANY

1. Install Front Floor Console Applique (1)

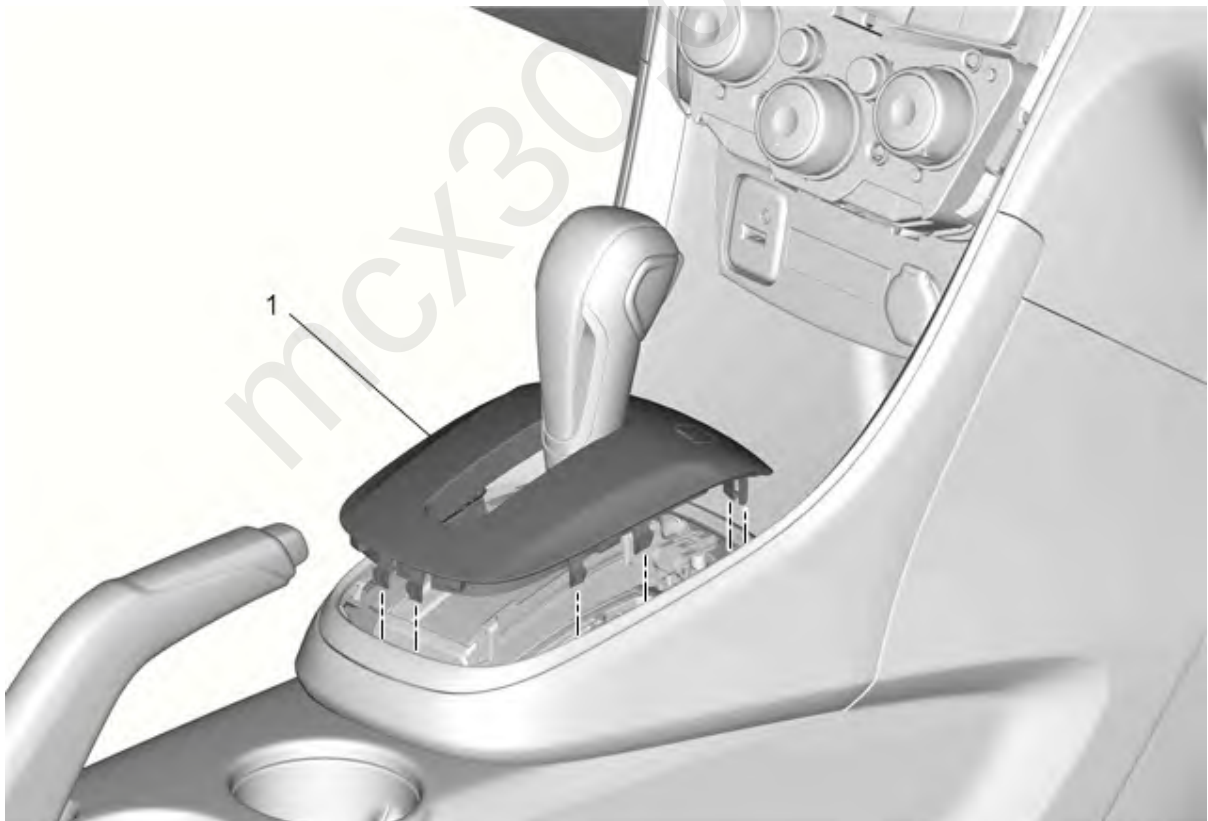


Fig. 199: Automatic Transmission Control Indicator Bezel
Courtesy of GENERAL MOTORS COMPANY

2. Install Automatic Transmission Control Indicator Bezel (1)

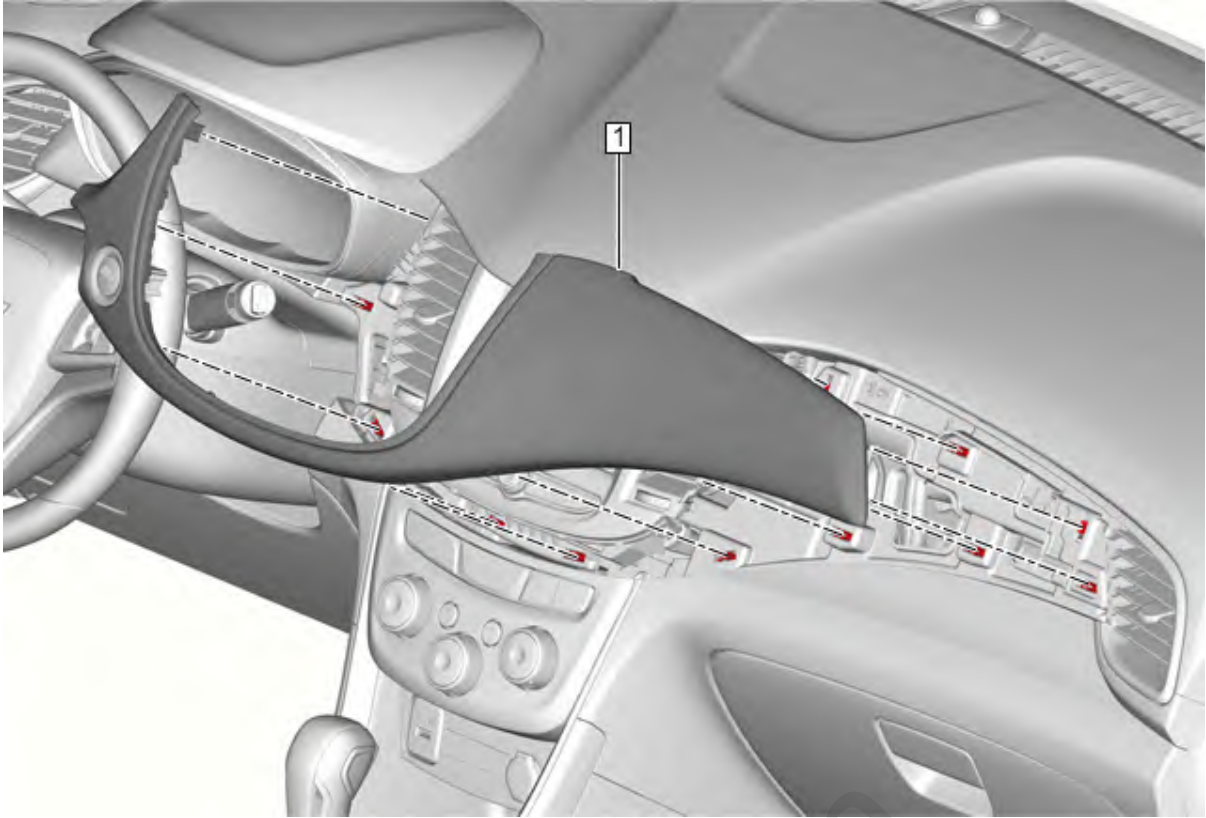


Fig. 200: Instrument Panel Upper Trim Panel
 Courtesy of GENERAL MOTORS COMPANY

3. Install Instrument Panel Upper Trim Panel - Right Side (1) - **Instrument Panel Upper Trim Panel Replacement - Right Side (Chevrolet)**.

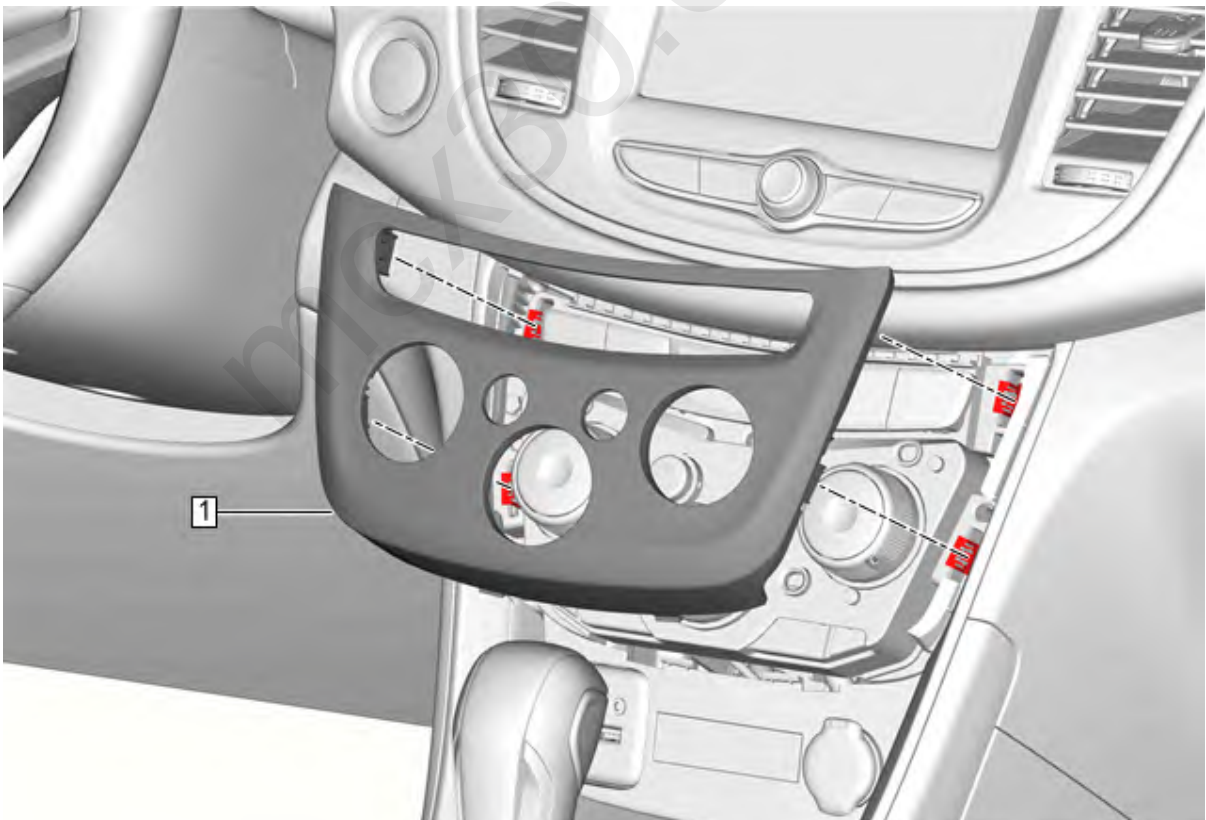


Fig. 201: Instrument Panel Switch Trim Plate
 Courtesy of GENERAL MOTORS COMPANY

4. Install Instrument Panel Switch Trim Plate (1) - **Instrument Panel Switch Trim Plate Replacement (Chevrolet)**.

ROOF CONSOLE REPLACEMENT

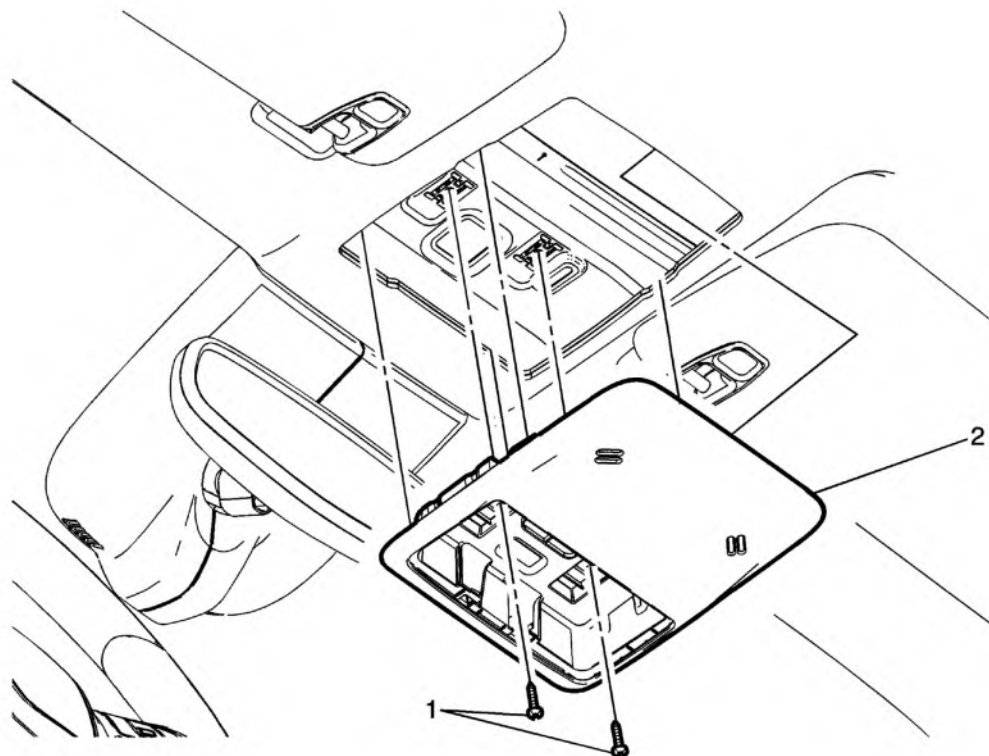


Fig. 202: Roof Console Assembly
 Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Remove the center reading lamp. Refer to Center Reading Lamp Replacement .	
1	Roof Console Fasteners (Qty: 2) CAUTION: Refer to Fastener Caution . Tighten 2.5 N.m (22 lb in)
2	Roof Console Assembly Procedure 1. Grasp the roof console assembly and pull downward releasing the retainer clips securing the roof console assembly to the headlining assembly. 2. Disconnect the electrical connections. 3. When replacing the roof console assembly, transfer all necessary components.