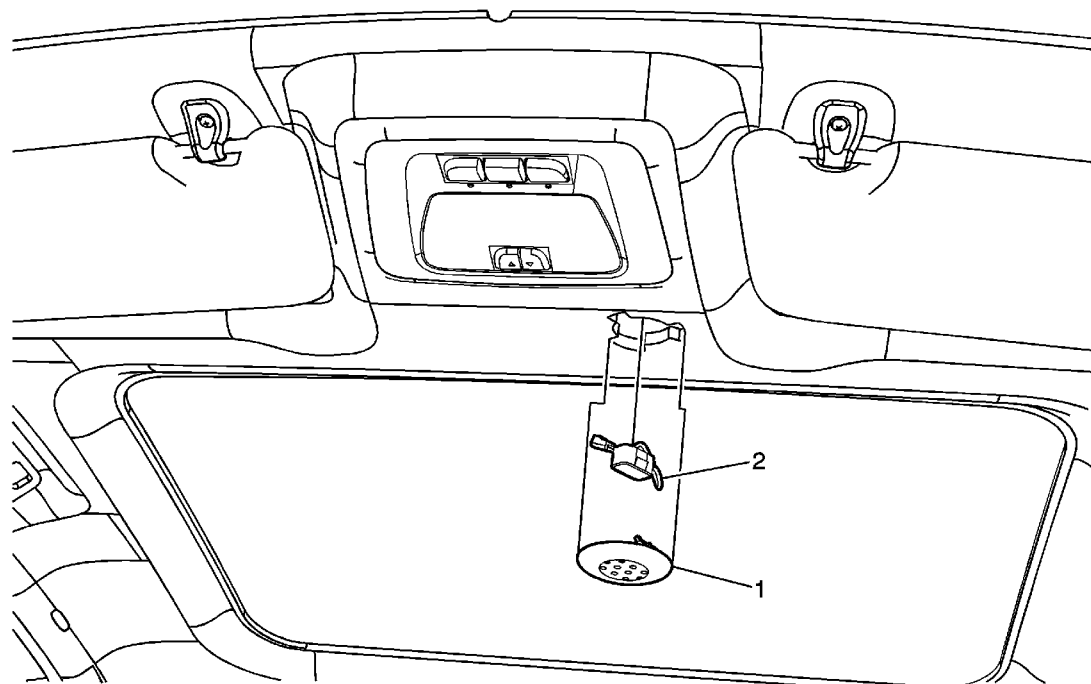


Fastener Tightening Specifications

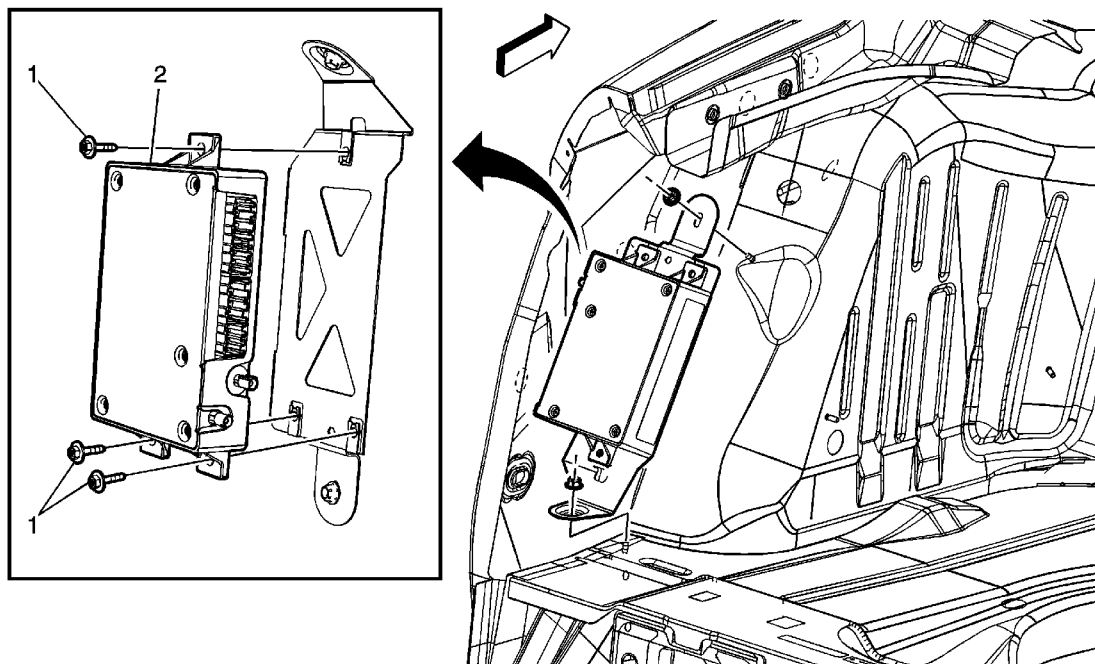
Application	Specification	
	Metric	English
Antenna Amplifier Fastener	3 N·m	27 lb in
Antenna Module Ground Bolt	10 N·m	89 lb in
Audio Amplifier Fasteners	2.5 N·m	22 lb in
Cellular Communication Antenna Base Fastener	9 N·m	80 lb in
Communication Interface Module Battery Fastener	2.5 N·m	22 lb in
Communication Interface Module Bracket to Body Fastener	3.5 N·m	27 lb in
Communication Interface Module to Mounting Bracket Fastener	5 N·m	44 lb in
Digital Radio Receiver Mounting Bracket to Body Fasteners	5 N·m	44 lb in
Digital Radio Receiver to Mounting Bracket Fasteners	5 N·m	44 lb in
Radio Fasteners	2 N·m	18 lb in
Speaker Grille Fasteners	2 N·m	18 lb in

Mobile Telephone Microphone Replacement



Callout	Component Name
1	Mobile Telephone Microphone Bezel Procedure Snap the bezel out of the headliner.
2	Mobile Telephone Microphone Procedure Disconnect the electrical connector.

Communication Interface Module Replacement

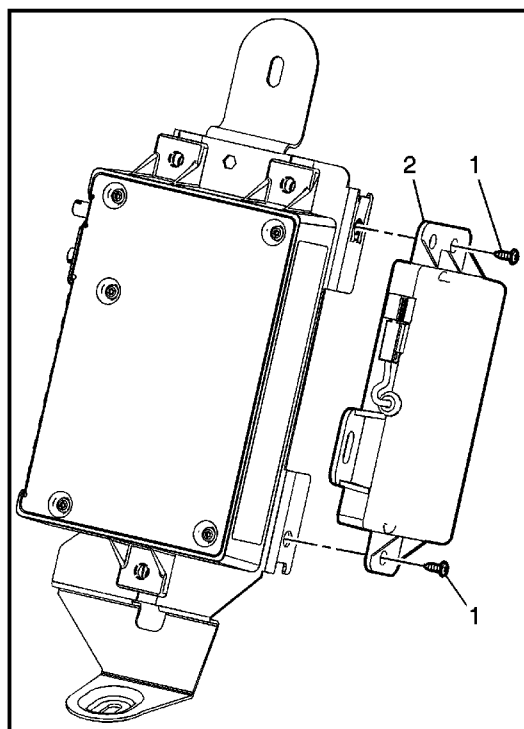
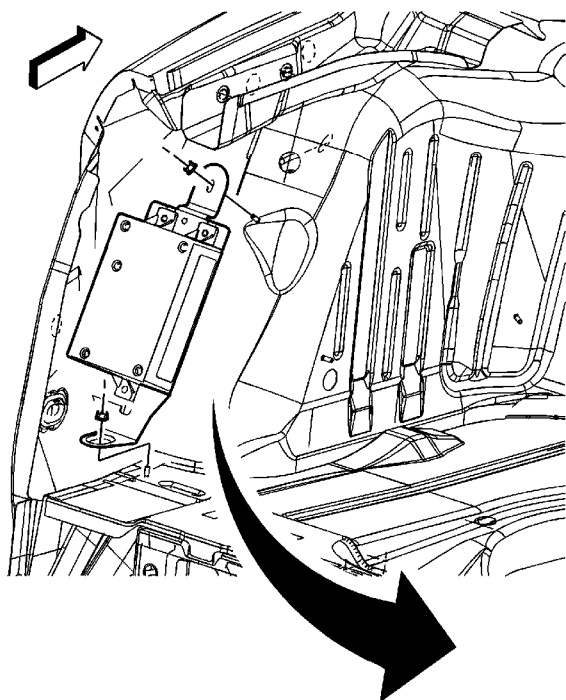


Callout	Component Name
Preliminary Procedures 1. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection. 2. Pull back the left rear compartment trim panel in order to expose the communication interface module. 3. For programming and set up, Refer to Control Module References.	
1	Communication Interface Bolt/Screw (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tip • The vehicle communication interface module (VCIM) has a specific set of unique numbers that tie the module to each vehicle. These numbers, the 10-digit station identification and the 11-digit electronic serial number, are used by the National Cellular Network and OnStar® to identify the specific vehicle. Because these numbers are tied to the vehicle identification number of the vehicle, you must never exchange these parts with those of another vehicle. • After replacing the vehicle communication interface module, you must

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	reconfigure the OnStar® system. Failure to reconfigure the system will result in an additional customer visit for repair. In addition, pressing and holding the white dot button on the keypad will NOT reset this version of the OnStar® system. This action will cause a DTC to set. • When replacing the VCIM be sure to transfer Bluetooth Antenna, if equipped. Tighten 5 N·m (44 lb in)
2	Communication Interface Module Procedure For programming and set up information, refer to Control Module References.

Communication Interface Module Battery Replacement

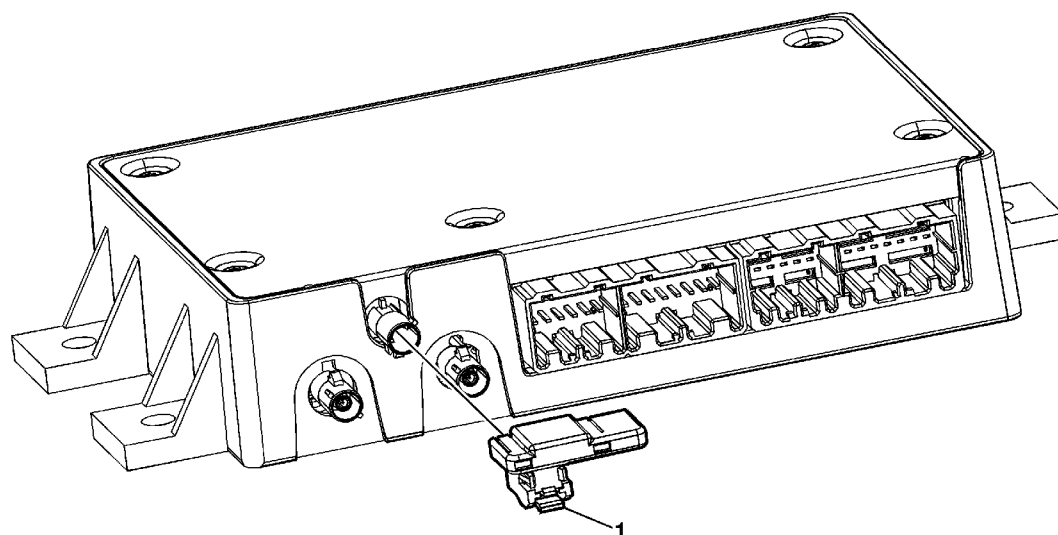


Callout	Component Name
Preliminary Procedures 1. Remove the left side rear compartment trim. 2. Program the communication interface module (OnStar®) after replacement. Refer to Control Module References.	
1	Communication Interface Module Battery Screw (Qty: 2) Caution: Refer to Fastener Caution in the Preface section. Tighten 2.5 N·m (22 lb in)
	Communication Interface Module Battery Tip The vehicle communication interface module (VCIM) has a specific set of unique numbers that tie the module to each vehicle. These numbers, the 10-digit station identification and the 11-digit electronic serial number, are used by the National Cellular Network and OnStar® to identify the specific vehicle. Because these numbers are tied to the vehicle identification number of the

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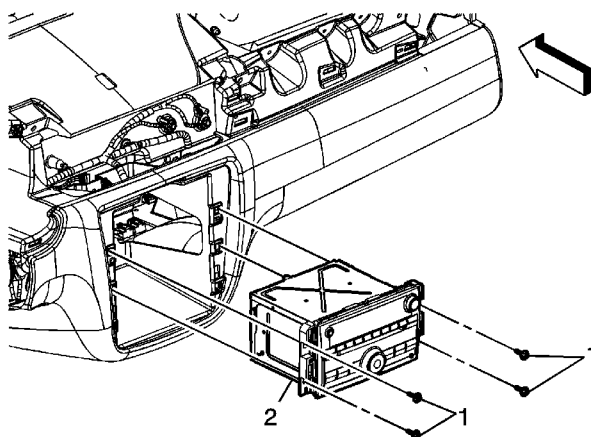
2	vehicle, you must never exchange these parts with those of another vehicle. • Replacement of the back-up battery (BUB) does not require reconfiguration of the VCIM. If a trouble code is indicated before the battery is replaced, the DTC must be cleared following the installation of the new battery. The OnStar® system does not need to be reconfigured unless the VCIM is replaced. • When the VCIM is replaced, the OnStar® system must be reconfigured. Failure to reconfigure the system will result in an additional customer visit for repair. In addition, pressing and holding the white dot button on the keypad will NOT reset this version of the OnStar® system. This action will cause a DTC to set.
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Wireless Communication Interface Antenna Replacement



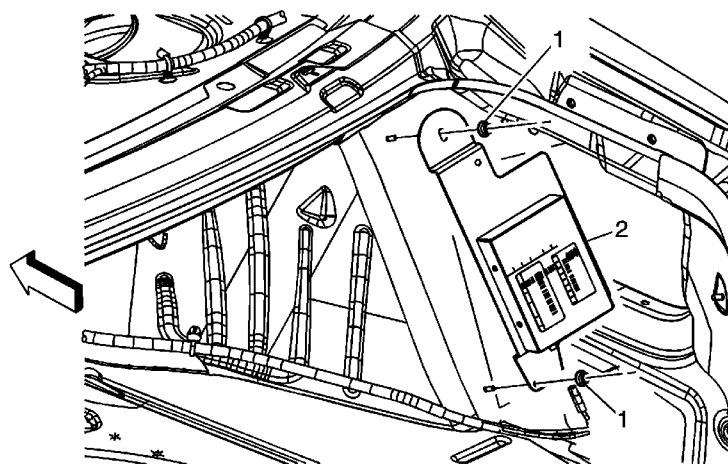
Callout	Component Name
Preliminary Procedure	
Remove the communication interface module. Refer to Communication Interface Module Replacement	
1	Wireless Communication Interface Antenna Bluetooth Module
Procedure	
Unsnap the Antenna from Communication Module.	

Radio Replacement



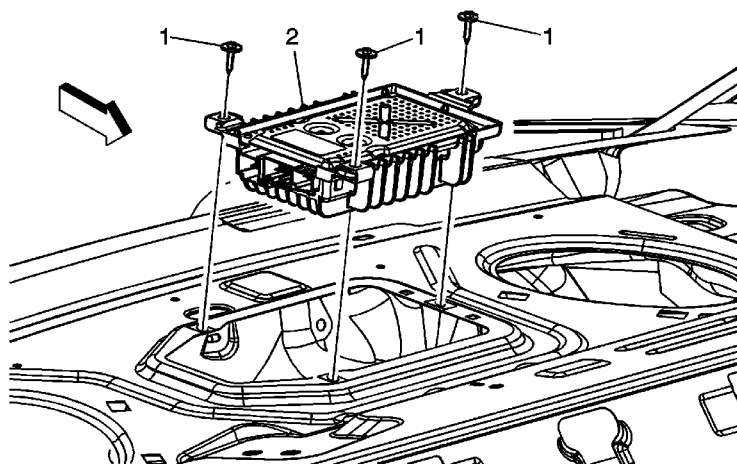
Callout	Component Name
Preliminary Procedure	
1. Remove the instrument panel accessory trim plate. Refer to Instrument Panel Accessory Trim Plate Replacement 2. Remove the heating and air conditioning control module. Refer to Heater and Air Conditioning Control Replacement 3. Slightly push the antenna lead toward the radio to relieve tension on the internal fingers. Pull back on the spring-loaded locking ring and remove the connector from the radio. 4. To install the antenna lead, plug the antenna lead into the socket until it clicks. 5. Program the radio after replacement. Refer to Control Module References	
1	Radio Bolt/Screw (Qty: 4) Caution: Refer to Fastener Caution in the Preface section. Tighten 2 N·m (18 lb in)
2	AM/FM Stereo Radio

Digital Radio Receiver Replacement



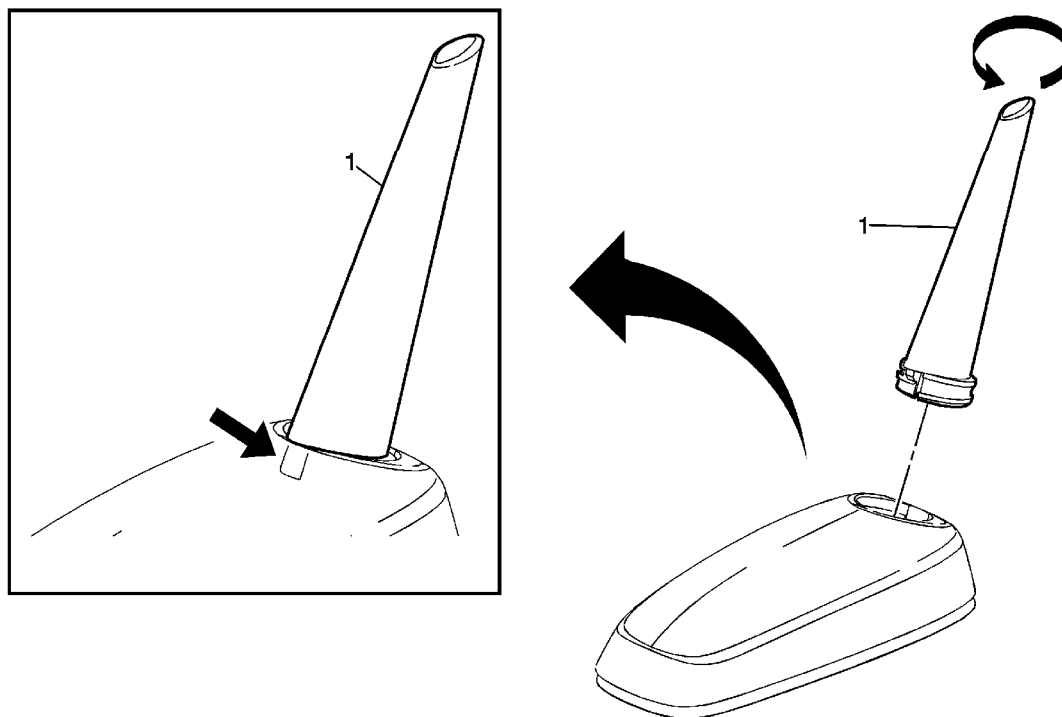
Callout	Component Name
Note: Do not swap digital radio receivers between vehicles. Swapping digital receivers between vehicles will activate the digital radio Theftlock. "XM Theftlock" will be displayed.	
Preliminary Procedure Remove the right rear compartment trim. Refer to Rear Compartment Side Trim Replacement - Right Side.	
1	Digital Radio Receiver Bracket Nut (Qty: 2) Caution: Refer to Fastener Caution in the Preface section. Tip Disconnect the antenna and electrical connectors from the module. Tighten 3.5 N·m (31 lb in)
2	Digital Radio Receiver Assembly Tip - Remove the nuts that retain the receiver to the bracket. - If a replacement receiver is installed, perform the Digital Radio Receiver Setup. Refer to Control Module References. Tighten 5 N·m (44 lb in)

Radio Speaker Amplifier Replacement



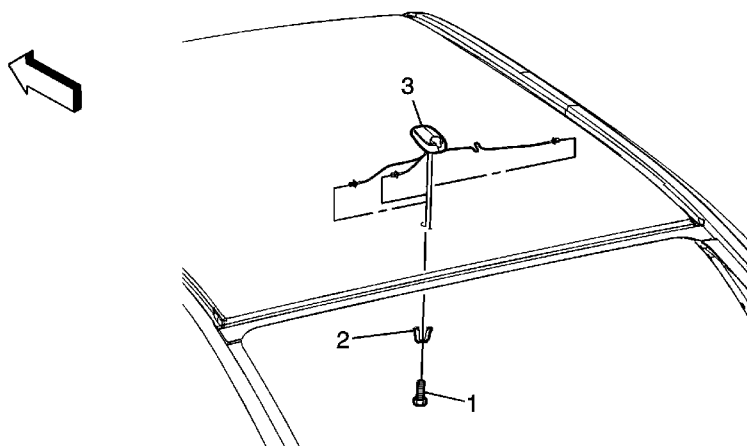
Callout	Component Name
Preliminary Procedure	
Remove the rear window shelf trim panel. Refer to Rear Window Shelf Trim Panel Replacement .	
1	Low Frequency Audio Amplifier Bolt (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tighten 2.5 N·m (22 lb in)
2	Low Frequency Audio Amplifier Assembly Refer to Control Module References for programming and setup information.

Mobile Telephone Digital Antenna Replacement (Convertible)



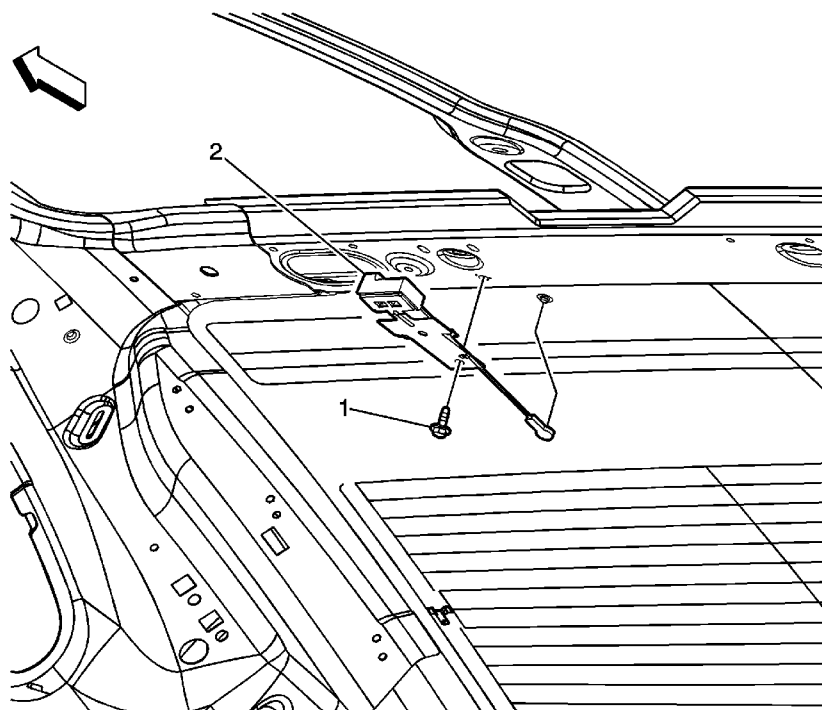
Callout	Component Name
1	Mobile Telephone Digital Antenna Assembly Tip • The release tab is not visible with the mast assembled to the antenna base. • Using a small flat-bladed tool, push in and hold the release tab, then rotate the mast counterclockwise in order to release the mast from the antenna base.

Cellular Communications / Digital Radio Antenna Replacement



Callout	Component Name
Preliminary Procedure	
Lower the rear of the headliner. Refer to Headlining Trim Panel Replacement .	
1	Mobile Telephone and Vehicle Location Antenna Base Bolt Caution: Refer to Fastener Caution in the Preface section. Tip Disconnect the electrical connections. Tighten 9 N·m (80 lb in)
2	Mobile Telephone and Vehicle Location Antenna Base Expansion Sleeve
3	Mobile Telephone and Vehicle Location Antenna Base Assembly

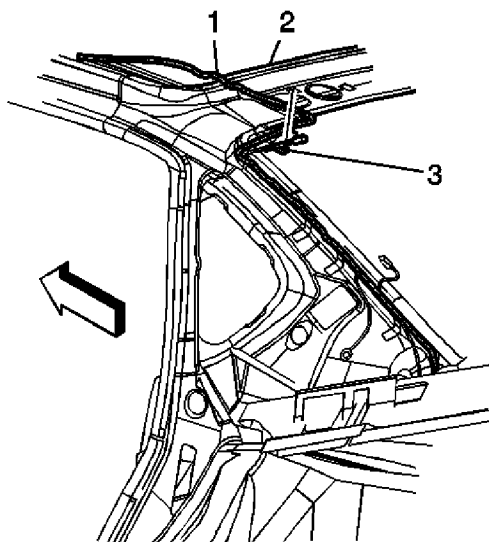
Radio Antenna Module Replacement



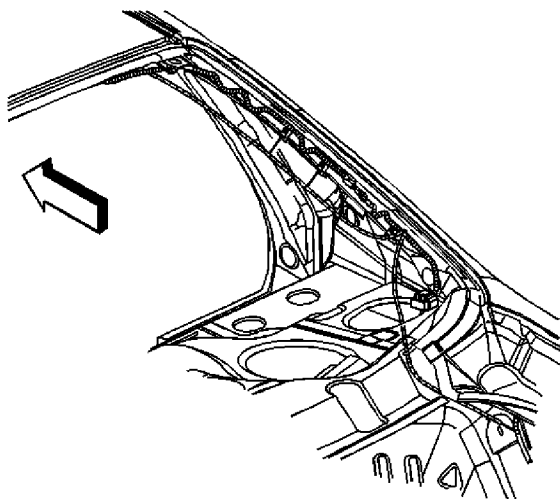
Callout	Component Name
Preliminary Procedure	
Lower the rear of the headliner. Refer to Headlining Trim Panel Replacement .	
1	Radio Antenna Module Bolt (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tighten 10 N·m (89 lb in)
2	Radio Antenna Module Assembly Tip • Disconnect the antenna lead from the rear window. • Disconnect the electrical connector.

Digital Radio Antenna Cable Replacement

Removal Procedure



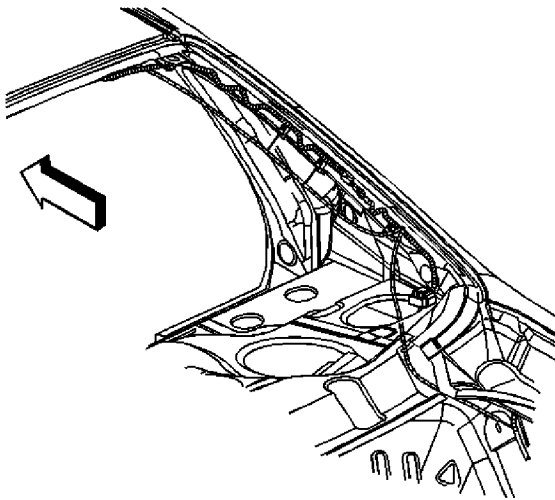
1. Remove the right rear upper quarter trim panel. Refer to [Quarter Upper Trim Panel Replacement](#).
2. Lower the rear of the headliner for access to the antenna/cable attachment. Refer to [Headlining Trim Panel Replacement](#).
3. Adjust the antenna cable mastic patch/tape at the roof.
4. Disconnect the antenna cable from the antenna base cable connector.
5. Remove the antenna cable retainer (3) from the rear header (2).



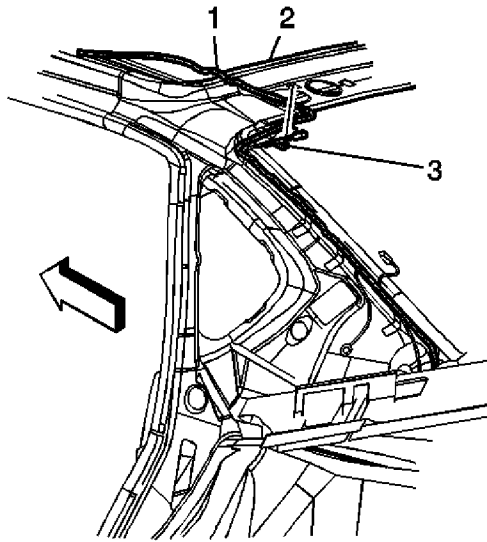


6. Remove the antenna cable from the dome lamp harness clips.
7. Remove the antenna cable from between the dome lamp harness and the upper quarter panel.
8. Attach a piece of wire or string to the end of the antenna cable.
9. Route the antenna cable through the rear shelf and along the rear wheel house.
10. Adjust the right rear compartment trim panel.
11. Disconnect the antenna cable from the digital radio receiver.
12. Remove the antenna cable retainers from the receiver bracket.
13. Remove the wire or string from the antenna cable.
14. Remove the antenna cable.

Installation Procedure



1. Install the antenna cable retainers to the receiver bracket.
2. Connect the antenna cable to the digital radio receiver.
3. Attach the wire or string used in the removal procedure to the cable being installed.
4. Carefully pull the antenna cable through the rear shelf into the passenger compartment.
5. Install the right rear compartment trim panel.
6. Remove the wire or string from the antenna cable.
7. Route the antenna cable between the dome lamp harness and the upper quarter panel.
8. Install the antenna cable to the dome lamp harness clips.

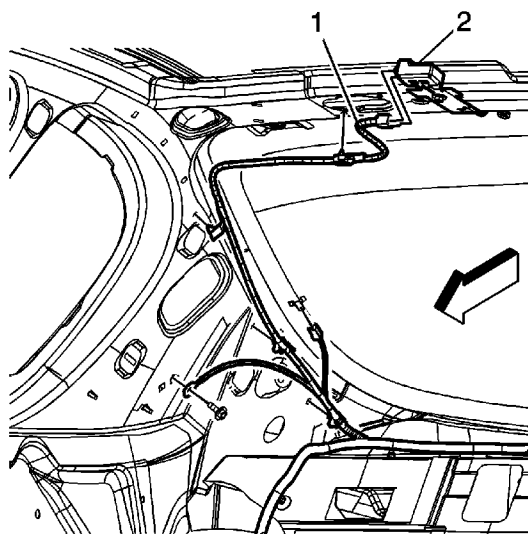


9. Install the antenna cable retainer (3) to the rear header (2).
10. Connect the antenna cable to the antenna base cable connector.
11. Install the antenna cable mastic patch/tape at the roof.
12. Install the rear of the headliner. Refer to [Headlining Trim Panel Replacement](#).
13. Install the right rear upper quarter trim panel. Refer to [Quarter Upper Trim Panel Replacement](#).

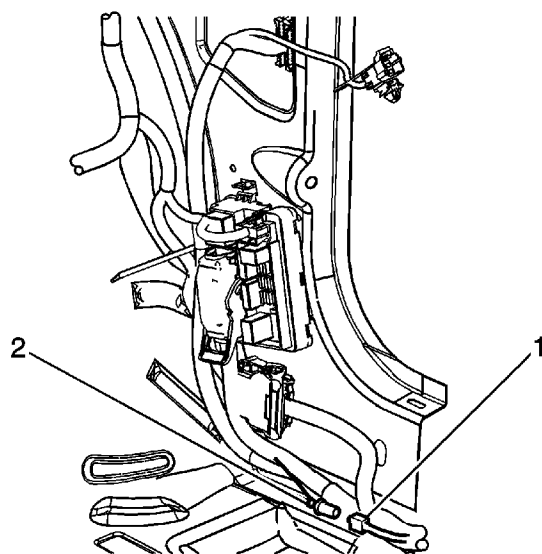
Antenna Cable Replacement

Removal Procedure

1. Remove the rear upper quarter trim panel. Refer to [Quarter Upper Trim Panel Replacement](#).



2. Disconnect the antenna cable (1) from the radio antenna module (2).
3. Remove the rear seat cushion. Refer to [Rear Seat Cushion Replacement](#).
4. Remove the rear seat back. Refer to [Rear Seat Back Replacement](#).



5. Remove the right carpet retainers. Refer to [Front Carpet Retainer Replacement](#).
6. Remove the right lower center pillar trim panel. Refer to [Center Pillar Lower Trim Panel](#).

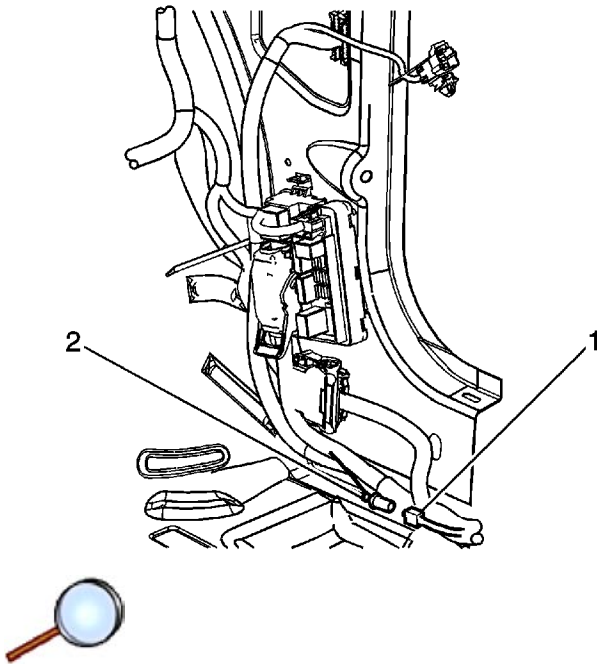
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[Replacement](#) .

7. Adjust the carpet for access to the antenna cable as required.
8. Disconnect the antenna cable (1) from the antenna extension cable (2).
9. Cut off the visible end of the antenna cable from the wiring harness in the following locations:
 - The kick panel area
 - The rear shelf area

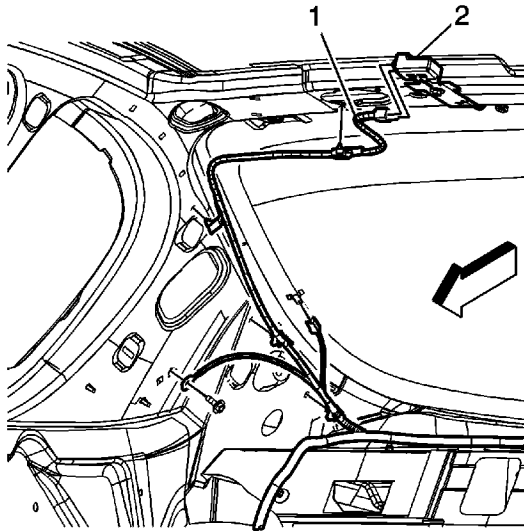
Installation Procedure

1. Install the antenna cable to the vehicle. Use electrical tape in order to secure the antenna extension cable to the top of the wiring harness. Secure the cable to the harness at least every 150 mm (6 in).



Important: The antenna cable uses a sliding snap-lock. Holding the sliding lock feature will prevent installation.

2. Connect the antenna extension cable (2) from the radio to the antenna cable (1) near the kick panel:
 - 2.1. Position the antenna extension cable behind the sliding lock feature.
 - 2.2. Install the antenna extension cable to the sliding lock feature.
3. Install the carpet.
4. Install the right lower center pillar trim panel. Refer to [Center Pillar Lower Trim Panel Replacement](#) .
5. Install the right carpet retainers. Refer to [Front Carpet Retainer Replacement](#) .



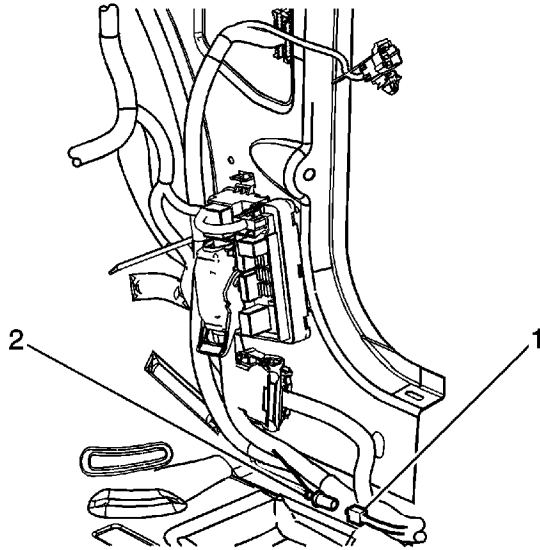
6. Install the rear seat back. Refer to [Rear Seat Back Replacement](#) .
7. Install the rear seat cushion. Refer to [Rear Seat Cushion Replacement](#).

Important: The antenna cable uses a sliding snap-lock. Holding the sliding lock feature will prevent installation.

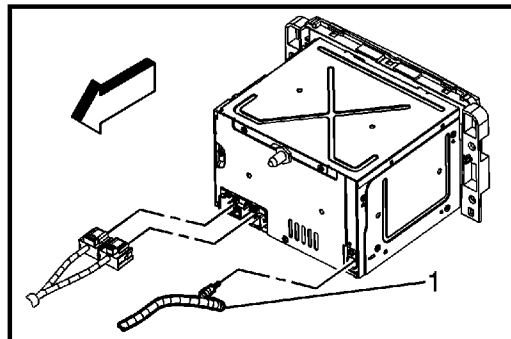
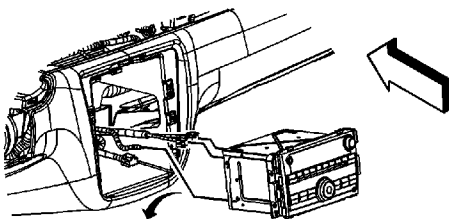
8. Connect the antenna cable (1) to the radio antenna module (2):
 - 8.1. Position the antenna cable behind the sliding lock feature.
 - 8.2. Install the antenna cable to the sliding lock feature.
9. Install the rear upper quarter trim panel. Refer to [Quarter Upper Trim Panel Replacement](#).

Radio Antenna Cable Extension Cable Replacement

Removal Procedure

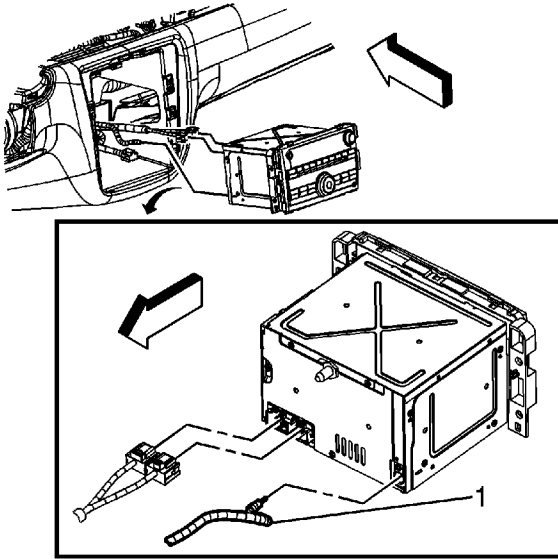


1. Remove the right carpet retainer. Refer to [Front Carpet Retainer Replacement](#) .
2. Adjust the carpet for access.
3. Disconnect the antenna extension cable (2) from the antenna cable (1).
4. Remove the right instrument panel insulator. Refer to [Instrument Panel Insulator Panel Replacement - Right Side](#) .

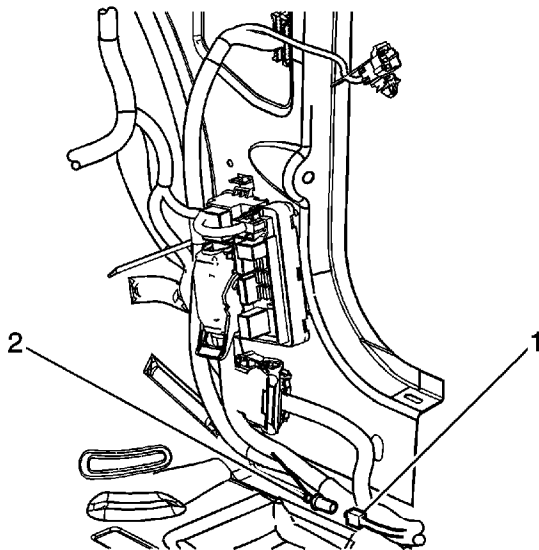


5. Adjust the radio for access. Disconnect the antenna extension cable (1) from the radio. Refer to [Radio Replacement](#).
6. Cut off the visible ends of the antenna extension cable.

Installation Procedure



1. Route the antenna extension cable. Secure the cable.
2. Connect the antenna extension cable (1) to the radio. Install the radio. Refer to [Radio Replacement](#).

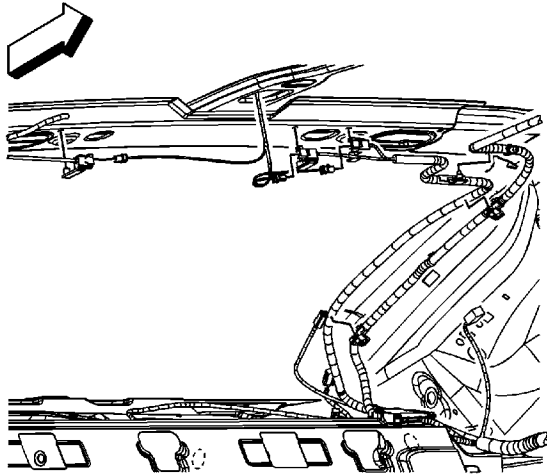


Important: The antenna cable uses a sliding snap-lock. Holding the sliding lock feature will prevent installation.

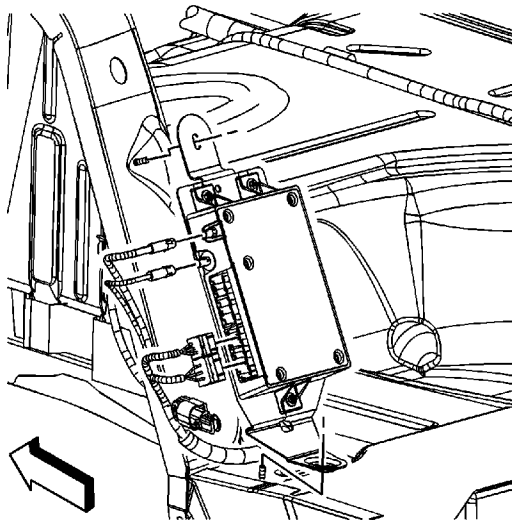
3. Connect the antenna extension cable (2) from the radio to the antenna cable (1) near the kick panel:
 - 3.1. Position the antenna extension cable behind the sliding lock feature.
 - 3.2. Install the antenna extension cable to the sliding lock feature.
4. Install the right instrument panel insulator. Refer to [Instrument Panel Insulator Panel Replacement - Right Side](#) .
5. Install the carpet.
6. Install the right carpet retainer. Refer to [Front Carpet Retainer Replacement](#) .

Mobile Telephone and Navigation Antenna Coaxial Cable Replacement (Impala)

Removal Procedure



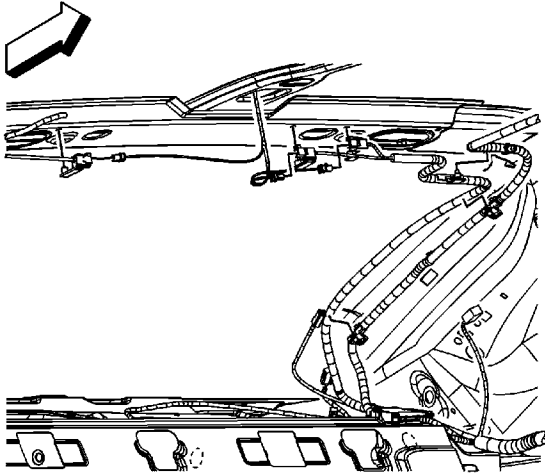
1. Lower the rear of the headliner to access the digital antenna connection. Refer to [Headlining Trim Panel Replacement](#).
2. Disconnect the digital antenna connection and cut the connector on the harness side off.
3. Remove the left rear compartment side trim. Refer to [Rear Compartment Side Trim Replacement - Left Side](#).



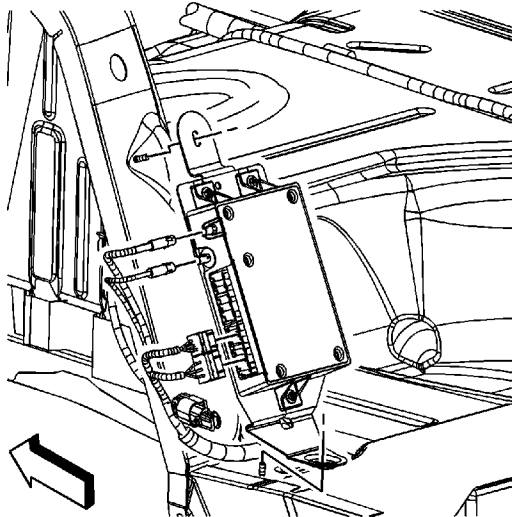


4. Disconnect the antenna cable connector and cut the end off on the harness side.

Installation Procedure



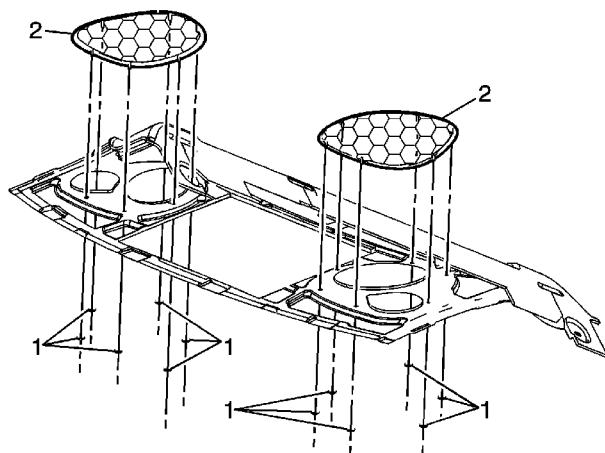
1. Route the new cellular antenna cable from the interior of the vehicle to the rear compartment area following the same path as the old cable. A piece of mechanic's wire may be used as needed to assist in the procedure. Secure the new cable as needed with tie straps.



2. Connect the new cable to the ONSTAR module and install the left rear compartment side trim. Refer to [Rear Compartment Side Trim Replacement - Left Side](#).

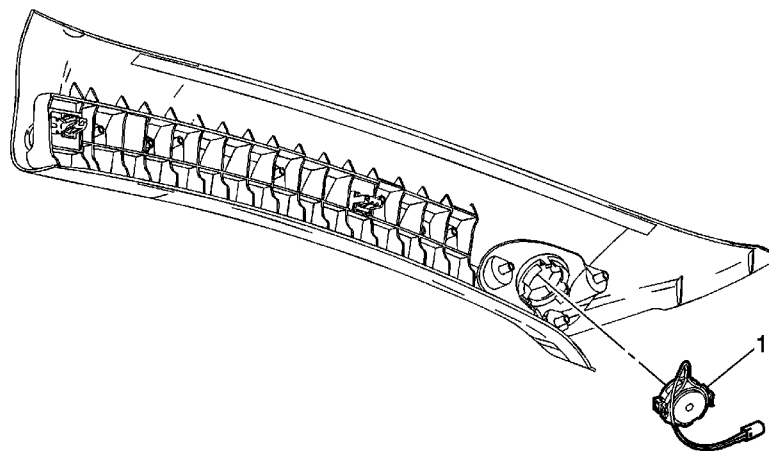
3. Connect the new cable to the digital antenna and secure the headliner. Refer to [Headlining Trim Panel Replacement](#) .

Radio Rear Speaker Grille Replacement



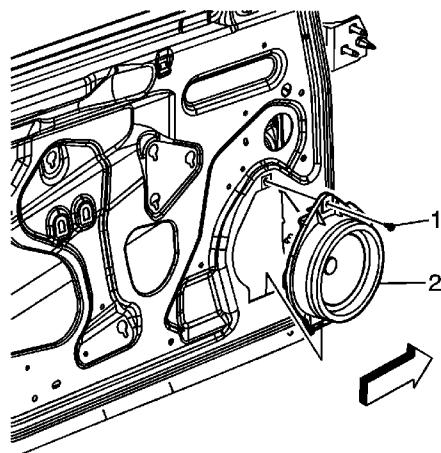
Callout	Component Name
Preliminary Procedure	
Remove the rear window shelf trim panel. Refer to Rear Window Shelf Trim Panel Replacement .	
1	Radio Rear Speaker Grille Nut Caution: Refer to Fastener Caution in the Preface section. Tighten 2 N·m (18 lb in)
2	Radio Rear Speaker Grille

Front Upper Speaker Replacement



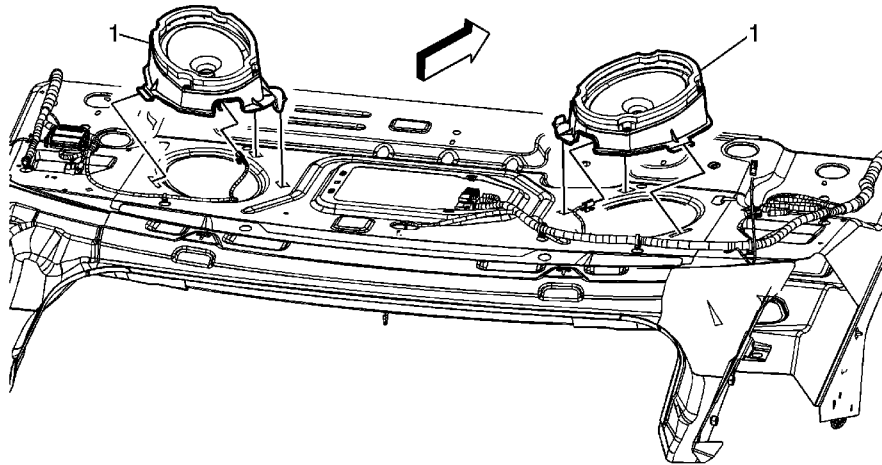
Callout	Component Name
Preliminary Procedure	
1. Remove the instrument panel (I/P) outer trim cover. Refer to Instrument Panel Outer Trim Cover Replacement - Right Side or Instrument Panel Outer Trim Cover Replacement - Left Side. 2. Remove the windshield pillar garnish molding. Refer to Windshield Pillar Garnish Molding Replacement.	
1	Radio Windshield Side Garnish Molding Speaker Assembly Tip Release the tabs on the windshield pillar speaker carrier to remove the speaker from the molding.

Radio Front Side Door Speaker Replacement



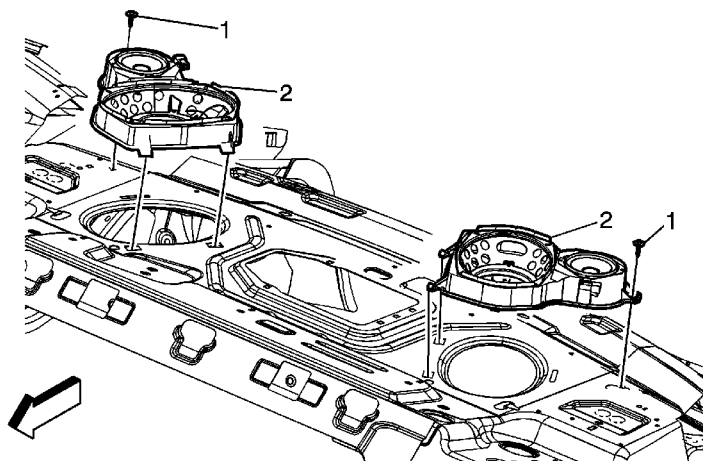
Callout	Component Name
Preliminary Procedure	
Remove the front door trim panel. Refer to Front Side Door Trim Panel Replacement	
1	Radio Front Side Door Speaker Housing Bolt/Screw Caution: Refer to Fastener Caution in the Preface section. Tighten 2 N·m (18 lb in)
2	Radio Front Side Door Speaker Assembly

Radio Rear Speaker Replacement (Impala w / UW6)



Callout	Component Name
Preliminary Procedure	
Remove the rear window shelf trim panel. Refer to Rear Window Shelf Trim Panel Replacement .	
1	Radio Rear Speaker Assembly (Qty: 2) Tip • Push in on the tabs on the speaker in order to release. • Disconnect the electrical connector.

Radio Rear Speaker Replacement (Impala w /UQ3)



Callout	Component Name
Preliminary Procedure	
Remove the rear window shelf trim panel. Refer to Rear Window Shelf Trim Panel Replacement .	
1	Radio Rear Speaker Bolt/Screw Caution: Refer to Fastener Caution in the Preface section. Tip Disconnect the electrical connector. Tighten 2.5 N·m (22 lb in)
2	Radio Rear Speaker Assembly